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Great Abington Parish Council

Land Settlement Estate, Great Abington

Transport Statement

February 2018

Project Code: 03197

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Version Control and Approval

| Version | Date | Main Contributor | Issued by | Approved by |
|---------|------------------|------------------|-----------|-------------|
| A | 31 January 2018 | JH/MF | JH | CR |
| B | 07 February 2018 | JH | JH | CR |
| C | 21 February 2018 | JH | JH | CR |

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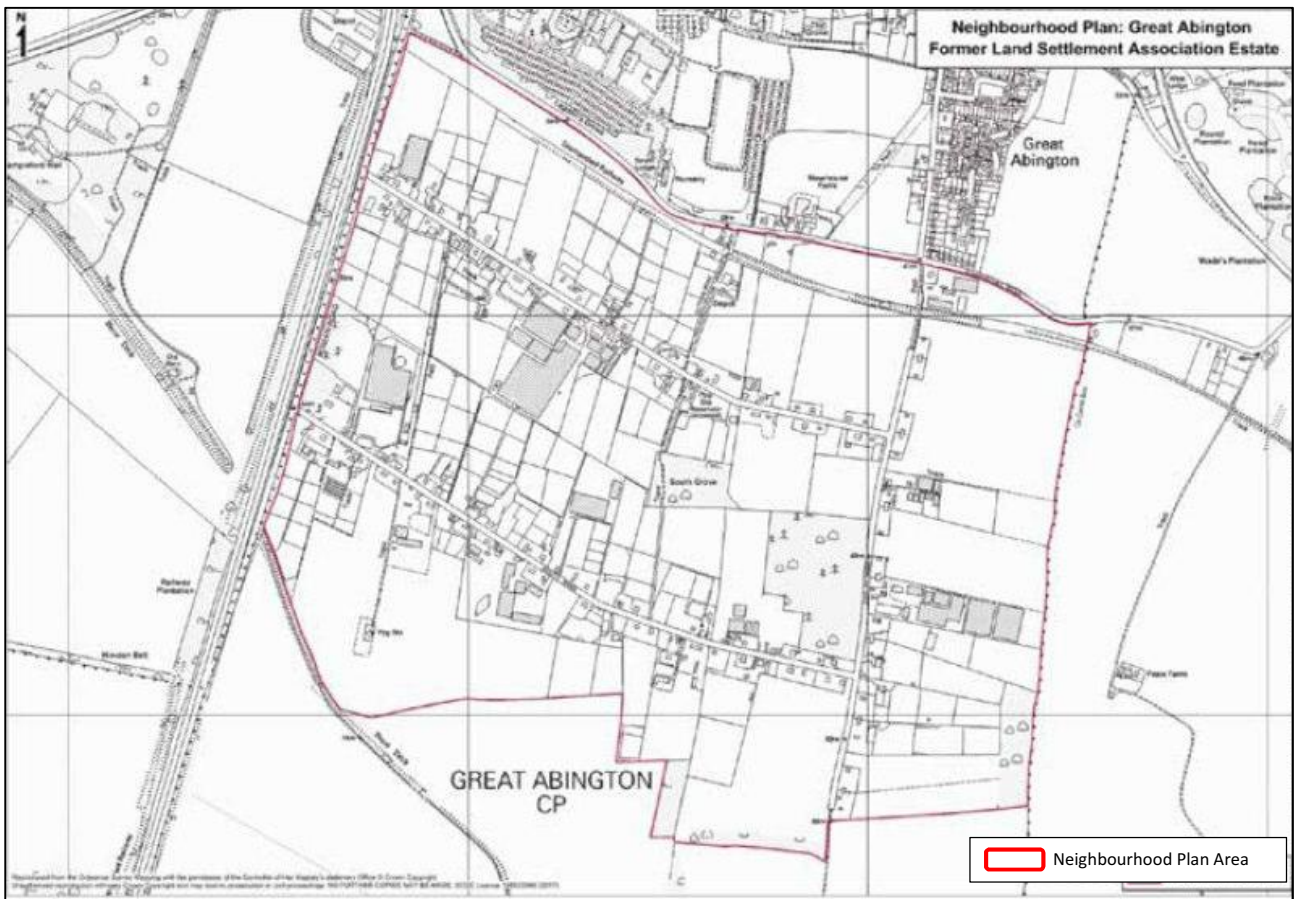
I Introduction

I.1 Background

1.1.1 Phil Jones Associates (PJA) have been commissioned by Great Abington Parish Council to prepare a Transport Statement (TS) in support of the emerging Neighbourhood Plan for the Land Settlement Estate (LSE) located to the south of Great Abington, Cambridgeshire.

1.1.2 Great Abington Parish Council have gained support from South Cambridgeshire District Council (SCDC) to develop a Neighbourhood Plan that sets out a spatial planning policy for the former Land Settlement Association estate. The Neighbourhood Plan area comprises 62 existing dwellings and some commercial units of the LSE and is located south to the village of Great Abington within the SCDC area. The location of the Neighbourhood Plan area is shown on Figure 1-1 below.

Figure 1-1: Neighbourhood Plan Area¹



¹ Source: Pre-Submission Neighbourhood Plan for the former Land Settlement Association’s Estate at Great Abington 2017 to 2031 (June 2017)



1.1.3 The Neighbourhood Plan will provide a framework against which all future applications in this area can be assessed and planning decisions made. The essential aim of the Neighbourhood Plan is to retain the special character of the Land Settlement while allowing limited development.

1.1.4 Policy 2 of the emerging Neighbourhood Plan proposes that one additional dwelling for each of the 62 plots would be allowed with Policy 3 stipulating that developments which would result in a substantial increase in traffic on the Land Settlement estate would not be permitted.

I.2 Scoping Discussion

1.2.1 A consultation response received from Highways Officers at Cambridgeshire County Council (CCC) suggested that a TS is prepared to consider the transport implications of the worst-case scenario in terms of the number (and locations) of additional dwellings that could be built within the Neighbourhood Plan area. In addition, concern was expressed regarding Policy 3 and the ability to quantify what would constitute a substantial increase in traffic.

I.3 Scope of the Report

1.3.1 The impact of the forecast increase in vehicle movements on the internal estate roads will be assessed with regard to the limited width of the estate roads and availability of passing places. This assessment hereby considers vehicle trips associated with additional residential units that form part of Policy 1 of the Neighbourhood Plan. Any future transport impact on the estate roads associated with development not envisaged as part of the Neighbourhood Plan would need to be subject to a separate assessment.

1.3.2 To respond to CCC's concerns about the ability to quantify what would constitute a substantial increase in traffic, the severity of impact has been defined as the point at which the increase in journey time delay becomes unpredictable as the performance of nearby junctions changes to an extent that it does not match the expectations of the road users.

1.3.3 This assessment has been informed by a desk study as well as information obtained from a site visit on Monday 20th November 2017 and a meeting with Great Abington Parish Council on the day of visit.

I.4 Aim and Purpose

1.4.1 The Neighbourhood Plan has now reached pre-submission stage which is a formal consultation stage required by government regulations. The aim of this TS is to assess the likely transport impact associated with the worst-case scenario of 62 additional dwellings that could be built within the Neighbourhood Plan area.



1.4.2 This Transport Statement will be submitted by Great Abington Parish Council to CCC acting as Highways Authority, who will review the document and determine if, when and what transport improvements would be required should all the additional dwellings be built.

1.4.3 In addition, this report will be made available to Abington Estate Management Limited (AEML) which is a limited company that owns and maintains the private, un-adopted estate roads. The company collects financial contributions from all property owners within the estate to improve and maintain the private roads. As the company has a legal obligation to ensure the continued maintenance of the roads, this report will inform the company's future work.

1.5 Structure of the Report

1.5.1 The remainder of the report is structured as follows:

- **Chapter 2** – Existing Conditions;
- **Chapter 3** – Travel Demand;
- **Chapter 4** – Traffic Impact Assessment; and
- **Chapter 5** – Summary and Conclusion.



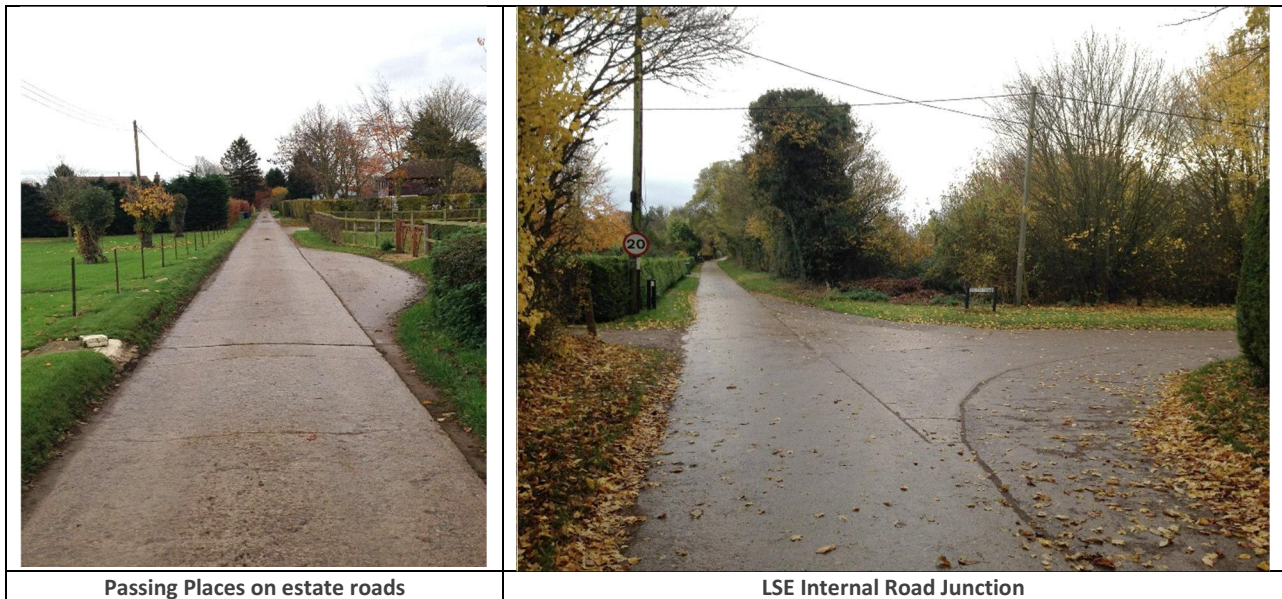
2 Existing Conditions

2.1 Internal LSE Road Network

- 2.1.1 The LSE comprises of 62 plots of land that are bounded by a network of unadopted roads which are owned and maintained by Abington Estate Management Limited (AEML).
- 2.1.2 As shown on Figure 2-1, North Road and South Road run in a west-east alignment through the estate and provide access to the individual land plots within the Neighbourhood Plan area. The two roads adjoin Newmarket Road at their western extent and Chalky Road at their eastern extent via priority junctions (see Figure 2-3).
- 2.1.3 North Road and South Road are single lane unadopted roads. Cutting Road forms and additional access road to and from the LSE as it links North Road with Pampisford Road.
- 2.1.4 The road network within the LSE is subject to a speed limit of 20mph and speed humps are provided at irregular intervals.

Figure 2-1: LSE Road Network



Figure 2-2: LSE Internal Road Network

- 2.1.5 The estate roads are approximately 3m in width and, hence, are restricted to one-way operation. As shown in Figure 2-2, passing bays are provided at irregular intervals to allow opposing vehicles to pass one-another. During the site visit it was confirmed that the few commercial land uses operating within the estate do generate HGV movements and larger delivery vans. However, the number of passing places as well as road widenings at junctions within the estate, allow for drivers to safely pass each other at these locations.
- 2.1.6 At the junction between North Road and Newmarket Road, recorded visibility splays along Newmarket Road are restricted to 60m to the north and south of the junction due to overhanging trees and overgrown hedges on either side of the junction. Newmarket Road is subject to the national speed limit and, hence, recommended visibility splays of 200m in each direction are required for vehicles exiting the estate as set out in Manual for Streets (MfS). There are 'SLOW' road markings present on Newmarket Road approximately 150m north and south of the junction with North Road to warn drivers of the approaching junction.
- 2.1.7 Similar observations have been made during the site visit at the junction between South Road and Newmarket Road where overgrown hedges and tree covers restrict visibility to approximately 100m north along Newmarket Road. Again, 'SLOW' road markings present on Newmarket Road approximately 75m north and south of the junction with South Road to warn drivers of the approaching junction.



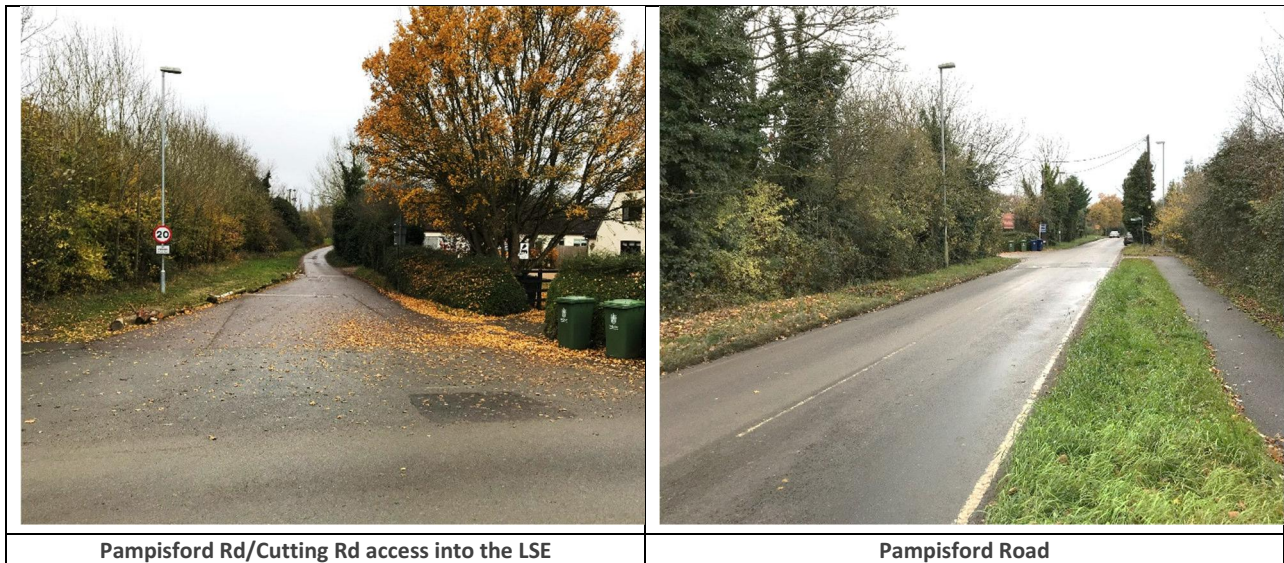
2.2 Surrounding Road Network

- 2.2.1 Newmarket Road is a single two-way carriageway subject to the national speed limit. The road runs along the western boundary of the LSE, parallel to the A11 and adjoins the A11 approximately 800m south of the junction with South Road.
- 2.2.2 At its northern extent, Newmarket Road forms the southern arm of a five-arm roundabout, hereafter referred to as Granta Park Roundabout. Granta Park Roundabout provides access to the Granta Business Park as well as the wider highway network and the village of Great Abington. The western arm of the roundabout provides direct access to the north/southbound slip roads of the A505 and northbound slip road of the A11.

Figure 2-3: Access Junctions off Newmarket Road



- 2.2.3 To the north, the LSE is bounded by Pampisford Road which is a two-way single carriageway subject to a speed limit of 30mph. Routing eastbound from Granta Park Roundabout, Pampisford Road provides access to a range of residential as well as commercial units and forms the major arm of junctions with a number of local distributor roads. At its eastern extent, Pampisford Road adjoins the A1307 Cambridge Road via a priority junction.
- 2.2.4 As shown on Figure 2-4, the estate can be accessed from Pampisford Road via a priority junction with Cutting Road located approximately 450m west to the junction with High Street. A pedestrian crossing point with tactile pavement is present at this location. Based on a vehicle speed of 30mph on Pampisford Road, the required visibility splays of 43m can be achieved at this location as set out in Manual for Streets (MfS).

Figure 2-4: Access Junction off Pampisford Road

2.3 Sustainability

2.3.1 As set out in Section 6.11 of the Pre-Submission Neighbourhood Plan, there is limited provision of community infrastructure within the Neighbourhood Plan area. Nonetheless, the LSE is situated south of Great Abington village centre, which provides access to a range of local amenities including a village store, post office, Great Abington Primary School as well as Great Abington Recreation Ground. A public house and open green space with sports facilities are also located within the village centre. The business park and employment centre 'Granta Park' is located at the junction between Pampisford Road and Newmarket Road and offers a wide range of employment opportunities.

2.4 Pedestrian & Cycle Infrastructure

Walking

2.4.1 There currently are no footways or pedestrian crossing points present along Newmarket Road with pedestrian access to the estate gained via Chalky Road, a narrow private path that forms a crossroads with Pampisford Road and High Street. A refuge crossing point is present at this location and allows pedestrians to safely cross the road and continue their journey on High Street to and from Great Abington village centre.



Figure 2-5: Pedestrian Access at Pampisford Rd / High St



- 2.4.2 Residents can also access the estate via Cutting Road, with an informal crossing point in the form of dropped kerbs provided at the junction with Pampisford Road. A footway stretches along the northern edge of Pampisford Road and is segregated from the road through a grass verge. The footway provides access to a public footpath that links to Great Abington village centre.
- 2.4.3 At the southern extent of Chalky Road, a public footpath extends beyond the Neighbourhood Plan area and provides links to rural lanes and residential outskirts of surrounding villages.

Cycling

- 2.4.4 The residential character of South Road and North Road encourage cycling across the estate. Cycle access to the site can be gained via the three vehicular access points into the LSE. There is no designated cycle infrastructure present on Newmarket Road with high vehicle speeds discouraging journeys to be undertaken by bike along this section of road. It is expected that access by bike to and from the estate will be via Cutting Road as well as the shared cycle/footpath off Chalky Road that adjoins the junction with Pampisford Road and High Street. A refuge crossing point allows cyclists to safely cross Pampisford Road at this location and continue their journey towards Abington village centre.
- 2.4.5 There is a dedicated off-road cycle route along the A505 that can be accessed from Station Road, which forms the western arm of the Granta Park Roundabout. The cycle path provides direct access to Whittlesford Parkway station and adjoins a range of other on-road and off-road cycleways along its stretch. In the vicinity of Whittlesford Parkway station, cyclists can access Route 11 of the National Cycle Network. Once completed the route will connect Harlow in Essex with Wigginhall St Germans (south of King's Lynn) in Norfolk via Cambridge and Ely.

2.5 Public Transport

Bus Services

2.5.1 The nearest bus stop for services to and from the LSE is located at the junction between High Street / Pampisford Road. The stop for northbound services routing along High Street takes the form of a bus shelter with seating provided for waiting passengers. On the opposite side of the carriageway, adjacent existing residential driveways, a flag post indicates the bus stop for eastbound services routing along Pampisford Road. The stops are served by routes 13, 13A, 13B and 13C, which run between Haverhill and Cambridge. The details of the services are summarised in Table 2-1.

Table 2-1: Existing Bus Services in the vicinity of the LSE

| Route | Destination | Peak Hour Frequency | Operating Hours | Days of Operation |
|-------|-----------------------|----------------------|-----------------|-------------------|
| 13 | Haverhill – Cambridge | One service per hour | 06:46 – 22:04 | Mo – Sun |
| | Cambridge – Kedington | | 07:25 – 23:49 | |
| 13A | Haverhill – Cambridge | One service per hour | 06:16 – 17:09 | Mo – Sun |
| | Cambridge – Haverhill | | 07:55 – 18:55 | |
| 13B | Haverhill – Cambridge | One service per day | 07:36 | Mo – Fr |
| 13C | Haverhill – Cambridge | One service per day | 08:08 | Mo – Fr |

2.5.2 Cambridgeshire County Council has indicated that the Cambridge-Haverhill corridor has the potential for improvement to enhance bus services. This includes a proposal for an off-road busway to Cambridge partly along the old Haverhill railway line, via Sawston as well as options to create or enhance new off-road cycle and pedestrian routes crossing the A11, connecting the village of Babraham with Great Abington as well as key employment sites at Babraham Research Campus and Granta Park. These proposals are part of a wider package of major public transport improvements across South Cambridgeshire, based on a corridor approach, as set out in the SCDC's adopted Transport Strategy for Cambridge and South Cambridgeshire (TSCSC).

Rail Services

2.5.3 Whittlesford Parkway is located approximately 5km to the south-west of the LSE and can be accessed by bike via the dedicated off-road cycle route along the A505. The station is operated by Greater Anglia and offers two peak hour services between Cambridge and London Liverpool Street. The station provides 48 sheltered bicycle parking spaces and has a car park with a total of 383 spaces.

2.5.4 In addition, Cambridge Station can be accessed via local bus service 13 with a journey time of approximately 40 minutes. Cambridge station is within 10km cycle distance from the LSE and provides 2,850 secure cycle parking spaces at the station. The station is operated by Greater Anglia



with regular peak hour services to strategic destinations such as Birmingham New Street, London Liverpool Street, London Kings Cross and Stansted Airport.

2.6 Road Safety

- 2.6.1 Accident data has been obtained from Cambridgeshire County Council for the most recent five-year period between and including 2012 – 2016. The results show that there have been two accidents recorded on the road network surrounding the LSE, both of which resulted in slight injuries. One accident occurred in December 2012 on Pampisford Road in the vicinity of the junction with Cutting Road and was caused by a collision between a goods vehicle and car. The other accident was recorded at the Granta Park Roundabout and occurred in March 2012 as a result of a collision between a motorcyclist and car.
- 2.6.2 Based on the most recent data available, no accidents were recorded at the junction between Pampisford Road / High Street from where pedestrian and cycle access to the site is taken. Thus, the low number of accidents and level of severity suggests that there are no highway safety issues on the surrounding road network that would be exacerbated by the potential development of additional 62 residential dwellings within the estate.

3 Travel Demand

3.1.1 This chapter provides an overview of the methodology used to calculate existing and forecast travel demand as well as likely distributions of trips to and from the estate.

3.2 Existing Traffic Patterns

3.2.1 To establish the existing traffic conditions on the surrounding road network, four 24-hr Automatic Traffic Count (ATC) surveys were undertaken on the following road sections for a week-long period between and including 11th January 2018 and 17th January 2018:

- Pampisford Road (West to the junction with High Street);
- North Road;
- South Road; and
- Newmarket Road (between the junctions with North Road and South Road).

3.2.2 The surveys were undertaken outside of school holidays to record neutral conditions. The surveys identified weekday AM (08:00 – 09:00) and PM (17:00 – 18:00) peak hour flows as shown in in Table 3-1. The ATC also recorded vehicle speeds at the respective locations and an overview of the weekday 85th percentile speed for each road segment is provided in Table 3-1. The traffic survey outputs including are provided in full in **Appendix A**.

Table 3-1: Existing Traffic Flows

| | North Road | | South Road | | Cutting Road | | Newmarket Road | | Pampisford Road | |
|------------------------------------|------------|---------|------------|---------|--------------|---------|----------------|---------|-----------------|---------|
| | West | East | West | East | North | South | North | South | West | East |
| AM Peak Hour | 11 | 16 | 15 | 19 | 14 | 16 | 19 | 108 | 289 | 50 |
| PM Peak Hour | 8 | 11 | 8 | 19 | 14 | 16 | 10 | 173 | 81 | 113 |
| 85 th percentile speeds | 13.4mph | 14.8mph | 13.3mph | 13.9mph | 13.5mph | 16.6mph | 60.5mph | 65.3mph | 29.0mph | 29.7mph |

3.2.3 Based on the information presented in Table 3-1, arrivals at and departures from the LSE were identified at the access points on North Road, South Road and Cutting Road. As such, the LSE currently generates an average of 91 two-way car trips during the weekday AM Peak Hour and 76 two-way car trips during the weekday PM Peak Hour.

3.2.4 As noted previously, there are a range of commercial units operating on site that are expected to generate a number of Heavy Goods Vehicles (HGVs) on a daily basis. Table 3-2 shows the average number of recorded weekday HGV movements during the respective AM and PM peak hour periods.



Table 3-2: Existing Trip Generation LSE – HGV Trips (AM and PM Peak Hour)

| | AM Peak (08:00 – 09:00) | | PM Peak (16:00 – 17:00) | |
|------------------------|-------------------------|------------|-------------------------|------------|
| | Arrivals | Departures | Arrivals | Departures |
| Access to North Road | 0 | 1 | 0 | 2 |
| Access to South Road | 0 | 3 | 0 | 1 |
| Access to Cutting Road | 0 | 1 | 1 | 0 |

3.2.5 The results in Table 3-2 show that a total of five HGV two-way trips were recorded in the AM Peak hour and four HGV two-way trips were recorded in the PM Peak hour. Information obtained from the traffic survey results attached in **Appendix A** show that a total of 24 HGVs trips arrive at the LSE on an average weekday via the three access points. Thus, the results in Table 3-2 suggest that the majority of HGV movements as well as deliveries to and from the commercial land uses occur outside of network peak hours.

3.3 Forecast Trip Generation

3.3.1 As a result of the commercial units operating on-site, it is expected that a large proportion of vehicles arriving at the estate in the AM Peak Hour are not linked to the existing 62 plots and residential dwellings within the NP area. A similar assumption has been made about the recorded number of vehicles departing from the estate in the PM Peak Hour. In the absence of information about the split between residential and commercial vehicle trips to and from the estate, the existing transport conditions at the LSE as displayed in Table 3-1 are therefore considered to be not representative of the forecast travel patterns associated with 62 additional residential dwellings.

3.3.2 Thus, to identify the likely vehicle trip generation associated with the proposed development of 62 additional dwellings across the Neighbourhood Plan area, the TRICS database has been interrogated to identify trip rates from comparable sites. The following criteria have been used to interrogate the TRICS database:

- 'Houses privately owned' category;
- All sites in England excluding Greater London;
- Dwelling range: 6 – 150 units;
- 'Edge of Town' & 'Suburban location';
- 'Weekday Surveys' only; and
- Population with 5 miles: <125,000.

3.3.3 The resultant trip rates and vehicle trips are identified in Table 3-3 below and the full TRICS outputs are included within **Appendix B** for reference.

Table 3-3: TRICS Vehicle Trip Rates and Vehicle Trips – ‘Privately Owned Houses’

| | TRICS Vehicle Trip Rates (per dwelling) | | | Vehicle Trips (62 Dwellings) | | |
|------------------------------|---|------------|---------|------------------------------|------------|---------|
| | Arrivals | Departures | Two-way | Arrivals | Departures | Two-way |
| AM Peak Hour (08:00 - 09:00) | 0.145 | 0.380 | 0.525 | 9 | 24 | 33 |
| PM Peak hour (17:00 -18:00) | 0.365 | 0.168 | 0.533 | 23 | 10 | 33 |

3.3.4 The results in Table 3-3 show that the worst-case scenario in terms of the 62 additional dwellings that could be built within the Neighbourhood Plan area would result in 33 additional two-way trips in the AM Peak Hour and 33 additional two-way trips in the PM Peak Hour.

3.3.5 It is expected that there will be no increase in HGV movements to and from the LSE as a result of the development of the additional 62 dwellings.

Trip Distribution

3.3.6 Taking into consideration the opportunity to access the LSE at three separate location, the forecast traffic associated with the additional dwelling within the NP area has been distributed across all three access points. As mentioned in Section 3.3.1 of this report, the existing pattern of arrivals and departures includes residential as well as commercial trips currently generated by the estate. A review of the survey data suggests a relatively even split of vehicle movements across all three access points, with the majority of two-way trips forecast to route along South Road (38%) in the AM Peak Hour and along Cutting Road (39%) in the PM Peak Hour. To provide a robust assessment, the distribution of forecast vehicle trips has therefore been adjusted to reflect existing travel patterns and resultant vehicle movements on each access road is shown in Table 3-4.

Table 3-4: Forecast Distribution of Development Trips

| | North Road | | South Road | | Cutting Road | | Total |
|--------------|------------|------|------------|------|--------------|-------|-----------|
| | West | East | West | East | North | South | |
| AM Peak Hour | 7 | 3 | 9 | 3 | 8 | 3 | 33 |
| PM Peak Hour | 3 | 5 | 3 | 9 | 5 | 8 | 33 |



4 Traffic Impact Assessment

4.1.1 This chapter assesses the cumulative transport impact associated with the potential development of 62 additional dwellings within the Neighbourhood Plan area.

4.2 Committed Developments

4.2.1 The following presents a summary of likely traffic impact associated with committed development schemes in the vicinity of the LSE. Information regarding the likely number of vehicles movements generated by the relevant scheme as well as contributions to infrastructure improvements on the surrounding road network has been obtained from Transport Assessment reports submitted as part of the respective planning applications.

Granta Park

4.2.2 Located between the A11 and Great Abington, full planning permission has been granted in December 2015 for the development of new B1(b) Research and Development floorspace (21,243sq.m GFA) known as the Array Multiplex Building (S/1109/15/FL). In addition, an outline planning application has also been granted in December 2015 for the erection of research and development buildings with a combined floor area up to 34,220sq.m (S/1365/10). The two schemes will be served by the existing access at the western end of Granta Park. A Transport Assessment prepared by Glanville Consultants concluded that the schemes will generate:

- 1,791 two-way vehicle trips in the AM Peak Hour; and
- 2,120 two-way vehicle trips in the PM Peak Hour.

4.2.3 The TA concluded that nearby junctions, and especially Granta Park Roundabout will be *“constrained by the ‘without development’ traffic impact”* and that *“capacity constraints in the base year are matters for the Highway Authority to address.”*

4.2.4 Moreover, it should be noted that in relation to a previous outline application S/2495/04/0, an associated S106 agreement committed Granta Park Ltd to improve pedestrian and cycle links between the main Great Abington village and the Land Settlement Estate. Granta Park Ltd has also provided a contribution towards the construction of a strategic cycle path linking Cambridge with Granta Park. In addition, a scheme of traffic calming along Pampisford Road has been implemented.

Land off Linton Road

4.2.5 The site is located to the east of Great Abington on the south side of Linton Road. Full planning application has been submitted in December 2016 for the erection of 45 homes comprising a mix of flats, bungalows and houses (S/3543/16/FL). A Transport Statement prepared by Transport Planning Associates (dated November 2016) forecasts a total of 44 two-way vehicle trips in the AM



Peak Hour and 26 two-way vehicle trips during the PM Peak Hour as a result of the development proposals. The report concludes that the cumulative transport impacts of the development are deemed not to be severe.

Strawberry Farm

- 4.2.6 In September 2017 outline planning application was granted for the re-development of parts of Strawberry Farm and the erection of eight residential dwellings (S/1433/16/OL). On land off Pampisford Road. A Transport Statement prepared by Glanville Consultants in May 2016 estimated a total of five two-way vehicles trips in the AM Peak Hour period and four two-way vehicle trips in the PM Peak Hour period. The report concluded that the forecast development traffic will not have a perceptible impact on the surrounding road network in terms of capacity and safety.

4.3 Development Traffic Impact

- 4.3.1 Policy 3 of the Pre-Submission Neighbourhood Plan states that *“any development proposals that would individually or cumulatively lead to substantial increases in traffic would not be appropriate in the Neighbourhood Plan area due to the limited capacity of the road network.”*
- 4.3.2 The following sections summarise the methodology used to assess the transport impact associated with the potential development of 62 additional dwellings within the Neighbourhood Plan area.

Internal LSE Network

- 4.3.3 As set out in Section 1.3 of this report, the impact of the forecast increase in vehicle movements on the estate roads has been assessed with regard to the limited width of the estate roads and availability of passing places. During the site visit the location of 33 passing places along the estate roads has been recorded and subsequently mapped using ArcGIS software.
- 4.3.4 These passing places include 26 formal and seven informal passing places. Formal passing places are those that have been provided and maintained by AEML and consist of tarmacked road widenings at key locations. Informal passing places are natural road widenings resulting from overrun or removed grass verges as well as concrete road widenings that form part of access arrangements into driveways or commercial units.
- 4.3.5 The location of both the formal and informal passing places is shown in Figure 4-1.



Figure 4-1: Location of Passing Places – Land Settlement Estate



North Road

Passing Places

- 4.3.6 As shown in Figure 4-1, there are 12 formal and three informal passing places, along North Road, not including the widening of road junction at the eastern extent of the estate road which was observed to be occupied by on-street parking during the day of visit. North Road is approximately 1.5km long, which means that on average there is an opportunity for opposing traffic to pass each other every 100m. Based on the vehicle speed limit of 20mph within the LSE, it would take a vehicle 11 seconds to travel on a road section on North Road that is restricted to one-way operation.
- 4.3.7 Taking into consideration the existing westbound and eastbound traffic during the peak hours (Table 3-1) and distribution of forecast development traffic (Table 3-4), there will be 18 westbound trips opposed by 19 eastbound trips during the AM Peak Hour, which presents an increase in ten two-way trips compared to the existing situation. Assuming a worst case that vehicles travel through the narrow sections individually rather than in groups, this means there would be a vehicle



travelling westbound for 198 seconds of the AM Peak Hour and a vehicle travelling westbound for 209 seconds, leaving almost 53 minutes when no vehicles will travel along the narrow road sections, which equates to 88% of the entire AM Peak Hour period.

- 4.3.8 In the PM Peak Hour, it is predicted that 11 westbound trips will be opposed by 16 eastbound trips on North Road as a result of 62 additional dwellings within the LSE. This means there would be a vehicle travelling westbound for 121 seconds of the PM Peak Hour and a vehicle travelling westbound for 176 seconds, leaving almost 55 minutes when no vehicles will travel along the narrow road sections, which equates to 91% of the entire PM Peak Hour period.
- 4.3.9 The frequency and quality of passing places provided along North Road provide opportunities for vehicles to safely pass each other. This has been confirmed during observations during the site visit. It is important to note that the three informal passing places are within ownership of the respective landowner and, hence, are not within control of AEML. Any future changes to individual land plots within the LSE might therefore affect the availability of these passing places – removing or adding additional opportunities for drivers to pass each other.
- 4.3.10 The formal passing places on North Road have been observed to be in good condition with the occasional erosion recorded during the day of visit. It is acknowledged that AEML will continue to monitor the quality of existing formal passing places and maintain them accordingly to ensure safety for all road users.

Visibility Splays

- 4.3.11 As illustrated on the images in Figure 4-2 on the next page, the forward visibility along North Road is not restricted for the majority of its length, which allows drivers of all vehicles to identify opposing traffic in time. Vehicles turning out of private properties as well as HGVs manoeuvring the estate road benefit from good visibility along the estate roads and low vehicle speeds.
- 4.3.12 As mentioned in Chapter 2 of this report, visibility splays at the junction with Newmarket Road are restricted to 60m to the north and south of the junction due to overhanging trees and overgrown hedges on either side of the junction. Given that the existing situation has not resulted in any accidents at this location during the most recent five-year period, it is expected that forecast development traffic will not exacerbate the road safety issues at this location. However, to achieve the recommended visibility splays of 200m in each direction as set out in Manual for Streets (MfS), it is recommended that AEML investigated opportunities to cut back hedgerows and trees to allow all road users to safely enter and exit the estate via North Road.



Figure 4-2: Examples of Passing Place on North Road



South Road

Passing Places

- 4.3.13 South Road is also approximately 1.5km long and provides nine formal and two informal passing places along its stretch, not including the widening of road at the priority junctions at the western and eastern extent of the estate road. This means that on average there is an opportunity for opposing traffic to pass each other every 136m. Based on the vehicle speed limit of 20mph within the LSE, it would take a vehicle 15 seconds to travel on a road section that prevents safe passing manoeuvres. The addition of traffic associated with the proposed development of 62 dwellings to existing vehicle flows on South Road would result in 24 westbound trips opposed by 22 eastbound trips during the AM Peak Hour, which presents an increase in 12 two-way trips compared to the existing situation. This means there would be a vehicle travelling westbound for 360 seconds of the AM Peak Hour and a vehicle travelling westbound for 330 seconds, leaving almost 49 minutes when no vehicles will travel along the narrow road sections, which equates to 81% of the entire AM Peak Hour period.
- 4.3.14 In the PM Peak Hour, it is predicted that 11 westbound trips will be opposed by 28 eastbound trips on North Road as a result of 61 additional dwellings within the LSE. This means there would be a vehicle travelling westbound for 165 seconds of the PM Peak Hour and a vehicle travelling westbound for 420 seconds, leaving approximately 50 minutes when no vehicles will travel along the narrow road sections, which equates to 84% of the entire PM Peak Hour period.

4.3.15 The frequency and quality of passing places provided along North Road provide opportunities for vehicles to safely pass each other. This has been confirmed during observations during the site visit. Again, the recorded informal passing places are within ownership of the respective landowner and, hence, are not within control of AEML. Any future changes to individual land plots might therefore affect the availability of these passing places – removing or adding additional opportunities for drivers to pass each other.

4.3.16 The formal passing places on South Road have been observed to be in good condition with the occasional erosion recorded during the day of visit. It is acknowledged that AEML will continue to monitor the quality of existing passing places and maintain them accordingly to ensure safety for all road users.

Visibility Splays

4.3.17 As with North Road, the frequency and quality of passing places provided along South Road provide opportunities for vehicles to safely pass each other. This has been confirmed during the site visit. As illustrated on the images in Figure 4-3, the forward visibility along North Road is not restricted, which allows drivers of all vehicles to identify opposing traffic in time.

Figure 4-3: Examples of Passing Places on South Road



4.3.18 As mentioned in Chapter 2 of this report, visibility splays at the junction with Newmarket Road are restricted to 100m to the north of the junction due to overhanging trees and overgrown hedges. A review of the accident data on the surrounding road network demonstrates that there have been no accidents at this location and, hence, there is no reason to suggest that traffic associated with additional dwellings within the NP area would exacerbate an existing situation. However, to achieve



the recommended visibility splays of 200m as set out in Manual for Streets (MfS) it is again recommended that AEML investigates opportunities to cut back hedgerows and trees along Newmarket Road to allow all road users to safely enter and exit the estate via North Road.

Cutting Road

Passing Places

- 4.3.19 Cutting Road is approximately 400m long and provides two formal passing places along its stretch. One of the passing points is used by the commercial 'Anagram' unit as a site entrance in the vicinity of the junction with Pampisford Road and allows HVGs to turn safely in and out of the site.

Visibility Splays

- 4.3.20 As shown in Figure 4-4, the straight layout of the road ensures forward visibility along the entire length of Cutting Road and, hence, drivers will be able to identify oncoming traffic when turning into Cutting Road and make use of passing places available to them. At the junction with Pampisford Road, required visibility splays of 43m in both directions can be achieved.

Figure 4-4: Passing Place on Cutting Road





Chalky Road

- 4.3.21 As shown on Figure 4-1 there are four formal and one informal passing places on Chalky Road between the junctions with North Road and South Road, providing an opportunity for drivers to pass each other at an interval of approximately 120m. Based on the current location of seven plots fronting onto that particular road section, it is concluded that the forecast increase in traffic associated with seven additional dwellings on that road section can be safely accommodated by the existing layout.

Conclusion - Internal LSE Network

- 4.3.22 Given the numerous opportunities along all estate roads for drivers to safely pass each other, the potential for conflicting vehicle movements to occur along the single tracks is limited. The availability of passing places at key locations therefore does not result in a need to provide additional passing places or for any related road developments on the LSE.
- 4.3.23 It is important to note that AEML have no control over the informal passing places. In the case that one of these is lost as a result of alterations carried out by the property owner, it could trigger a need for AEML to invest in additional formal passing bays. This is in accordance with Section 6.23 of the Pre-Submission Neighbourhood Plan, which states that: *“Whilst it may be possible to increase the number of passing places it will not be possible and it is not considered appropriate to increase the road capacity through road widening.”*
- 4.3.24 Nonetheless, the analysis has shown that there remain sufficient formal opportunities to safely pass each other. Given that the number of forecast residential vehicle trips is not expected to exceed the assessed worst-case scenario, the likely number of conflicts between opposing vehicle during peak hour periods remains limited. It is however noted that changes of circumstances, property use, level of vehicle use, or development not envisaged as part of the Neighbourhood Plan could result in a need for investment in minor road improvements on the LSE roads (such as formal passing bays as mentioned in paragraph 4.3.23). This need would however have to be identified in a separate assessment based on circumstances at the time.
- 4.3.25 It is acknowledged that this report will inform future work of AEML, which is expected to monitor the quality of existing passing places and maintain them accordingly to ensure safety for all road users.

Construction Traffic Impact

- 4.3.26 It is expected that a number of daily construction vehicle movements will be generated as a result of future development of 62 individual to be delivered within the NP area. To assess the capability



of existing estate roads to accommodate these movements, the following assumptions have been made:

- There currently are a number of HGV movements routing to and from the estate as a result of existing commercial units operating within the LSE. This confirms that the existing roads are capable of accommodating HGV movements of 3-axle trucks as well as 4-axle rigid trucks that are up to 14.5m long and can weigh up to 30 tonnes;
- During the site visit, no sign of pavement deformation such as rutting as a result of HGV movements was observed;
- As the number and location of dwellings to be constructed at any given time are not known at this stage, the total number of daily construction vehicle trips impacting on the estate roads will need to be assessed separately.

4.3.27 It is evident that each of the additional 62 dwellings could be delivered at different times and, hence, the impact of construction traffic on the existing estate roads would need to be assessed on a case-to-case basis. In the absence of detailed information about the substructure of the existing estate roads, it is therefore recommended that a pavement core test shall be undertaken prior to construction works undertaken within the NP area and results to be assessed in relation to predicted volume and size of construction vehicles.

Wider Road Network

4.3.28 As set out in Table 3-2 of this report, the forecast trip generation associated with the delivery of up to 62 additional dwellings will result in 33 additional two-way trips during the AM Peak Hour and 33 additional two-way trips during the PM Peak Hour. This forecast increase in traffic presents a 35% increase in vehicle trips during the AM Peak Hour and 42% increase during the PM Peak Hour respectively compared to the exiting traffic generation at the estate. Taking into consideration the three separate access points to the LSE and the strategic location of the LSE, it is expected that vehicle trips will dissipate quickly across the surrounding road network. That is, the largest increase in traffic at any point of the network is forecast to be 22 vehicle movements at the two access junctions with Newmarket Road during AM peak hours, which equates to approximately one additional vehicle every three minutes. Taking account of the low volume of existing two-way traffic flows on Newmarket Road (Table 3-1), this presents only a 17% increase compared to the existing situation and is therefore considered to be unperceivable.

Severity of Impact

4.3.29 To further address concerns expressed by CCC regarding Policy 3 of the Neighbourhood Plan and the ability to quantify what would constitute a substantial increase in traffic, the impact of forecast development traffic on nearby junctions has been assessed with regard to Paragraph 32 of the



National Planning Policy Framework (NPPF) which states that *“development should only be prevented or refused on transport grounds where the residual impacts of the development are severe.”*

- 4.3.30 Traffic congestion is an inherently difficult concept to define as it has both physical and relative dimensions. For the purpose of this assessment, severity of impact has been defined as the point at which the increase in journey time delay becomes unpredictable as set out in the 'Department for Transport's 'Introduction to Road Congestions Statistics' (dated May 2016).
- 4.3.31 Section 2.1 of the DfT report states that *“regardless of whether it is defined physically or relatively, the effects of increased congestion are typically characterised by longer, and less predictable journey times.”* However, a longer journey as a result of an increase in congestion does not by default mean that one's journey time becomes less predictable. This is confirmed in section 1.3 of DfT's report, which states that *“congestion can mean very different things to different people.”*

Granta Park Roundabout

- 4.3.32 It is expected that a proportion of the 33 vehicle trips generated during the peak hours will route across Granta Park Roundabout, which already experiences congestion during the network peak hours. A Transport Assessment prepared by Glanville Consultants (dated April 2015) concluded that Granta Park Roundabout is constrained by the existing background traffic during the PM Peak Hour and that these capacity constraints are matters for the Highway Authority to address. The congestion hereby concerned queuing traffic on the Granta Park approach and hence, it is expected that these queues are to be contained within the Granta Park site and does not impact on the highway.
- 4.3.33 Information regarding the 2017 baseline flows at Granta Park Roundabout has been obtained from the Transport Assessment by Glanville Consultants (dated April 2015). The flow diagrams are attached in **Appendix C** for reference. Assuming a worst-case scenario in which all forecast development trips route via Granta Park Roundabout during the peak hour periods, this would result in an increase in traffic of less than 2% in the AM and PM Peak Hour respectively as a result of the proposed additional dwellings within the NP area. This is considered not to be a significant impact on the existing junction in accordance with TD41/95 of the Design Manual for Road and Bridges (DMRB), which states that: *“Generally, a material increase is considered to be if the turning traffic flows, as a result of the new development, would increase by 5% or more, although there may be cases when it is important to consider smaller increases.”*
- 4.3.34 The severity of impact defined as the point at which the increase in journey time delay becomes unpredictable has been assessed within the context of an already congested road network. Thus, in line with the DfT guidance on road congestion as well as guidance set out in DMRB, the impact of development traffic associated with the development of 62 residential dwellings is not



considered to be severe as the proposals will not result in a significant increase in traffic and the performance of the surrounding junctions will not change to an extent that it does not match the expectations of the users of the road network.

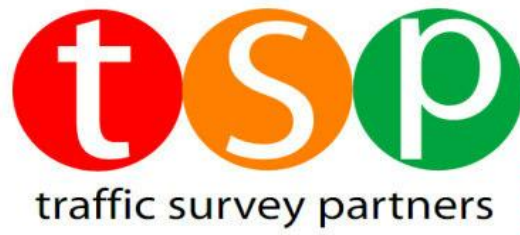


5 Summary and Conclusion

- 5.1.1 Phil Jones Associates (PJA) has been commissioned by Great Abington Parish Council to prepare a Transport Statement (TS) in support of the emerging Neighbourhood Plan for the Land Settlement Estate (LSE) located to the south of Great Abington, Cambridgeshire.
- 5.1.2 Policy 2 of the emerging Neighbourhood Plan proposes that one additional dwelling for each of the 62 plots would be allowed with Policy 3 stipulating that developments that would result in a substantial increase in traffic on the Land Settlement estate would not be permitted. The aim of this TS is to assess the likely transport impact associated with the worst-case scenario of 62 additional dwellings that could be built within the Neighbourhood Plan area.
- 5.1.3 The LSE is located within walking and cycling distance of Great Abington village, which provides access to a range of local amenities. Pedestrian and cycle crossing points at the junction between Pampisford Road / High Street allow for safe access to Great Abington village centre. Local bus services are available within walking distance of the estate and connect residents with strategic destinations such as Cambridge, Haverhill and Whittlesford Parkway station.
- 5.1.4 Current travel patterns to and from the estate have been identified. A travel demand review based on an interrogation of the TRICS database indicate that the proposed development of 62 additional dwellings would generate up to 33 two-way vehicle trips during AM peak hours and 33 two-way vehicle trips during PM peak hours. This equates to approximately one additional vehicle movement every two minutes over the peak hours.
- 5.1.5 Given the numerous opportunities along all estate roads for drivers to safely pass each other, this TS demonstrates the potential for conflicting vehicle movements to occur along the estate roads is limited. In addition, the low volume of traffic generated by the development, and its distribution across several routes will not have a significant impact on the operation of the surrounding highway network.
- 5.1.6 The likely impact of construction vehicles on the estate roads has been considered. It is recommended that a pavement core test is undertaken prior to construction works within the NP area and results about substructure of the roads are assessed against predicted volume and size of construction vehicles operating at the estate.
- 5.1.7 Based on the information provided in this TS, it is concluded that the likely transport impact associated with the worst-case scenario of 62 additional dwellings that could be built within the NP area is acceptable. Any transport impact associated with development not envisaged as part of the NP would need to be subject to a separate assessment.



Appendix A Traffic Survey Results



Client: Phil Jones Associates

Project Number: TSP13612

Project Name: Great Abington NP, Cambridgeshire

Survey Type: ATC Site 1

Location: North Road

Survey Date: 11/01/2018 to 17/01/2018

Survey Time: 24 hours x 7 days

TSP Class Profile All Days 15 Mins

Report Id - CustomList-146
Site Name - TSP13612-01
Description - NORTH ROAD [20M]
Direction - East

Virtual Day (7)

Table with 28 columns: Time, Total, Cts 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 24 ACPO, JSL1% 24 ACPO, JSL2 35 DFT, JSL2% 35 DFT, Fix1. Rows show data for times from 0000 to 06-00.

Virtual Week (1)

Table with 28 columns: Time, Total, Cts 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 24 ACPO, JSL1% 24 ACPO, JSL2 35 DFT, JSL2% 35 DFT, Fix1. Rows show data for days Mon to --.

Grand Total

Table with 28 columns: Time, Total, Cts 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 24 ACPO, JSL1% 24 ACPO, JSL2 35 DFT, JSL2% 35 DFT, Fix1. Shows overall summary data.

Virtual Day (5)

Table with 28 columns: Time, Total, Cts 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 24 ACPO, JSL1% 24 ACPO, JSL2 35 DFT, JSL2% 35 DFT, Fix1. Rows show data for times from 0000 to 06-00.

TSP Class Profile All Days 15 Mins

Report Id - CustomList-146
Site Name - TSP13612-01
Description - NORTH ROAD [20M]
Direction - West

Virtual Day (7)

Table with 30 columns (Cls 1-10, Fix1, Time, Vbin 5-15, Vbin 20-35, Vbin 40-60, Mean, Vpp 85, JPSL 20, JPSL 20, JSL 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1) and rows for times 0000 to 2300, and summary rows for 07-19, 06-22, 06-00, and 00-00.

Virtual Week (1)

Table with 30 columns (Cls 1-10, Fix1, Time, Vbin 5-15, Vbin 20-35, Vbin 40-60, Mean, Vpp 85, JPSL 20, JPSL 20, JSL 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1) and rows for days Mon to Sun, and a Grand Total row.

Grand Total

Summary table with 30 columns (Cls 1-10, Fix1, Time, Vbin 5-15, Vbin 20-35, Vbin 40-60, Mean, Vpp 85, JPSL 20, JPSL 20, JSL 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1) and one row for Grand Total.

Virtual Day (5)

Table with 30 columns (Cls 1-10, Fix1, Time, Vbin 5-15, Vbin 20-35, Vbin 40-60, Mean, Vpp 85, JPSL 20, JPSL 20, JSL 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1) and rows for times 0000 to 2300, and summary rows for 07-19, 06-22, 06-00, and 00-00.



Client: Phil Jones Associates

Project Number: TSP13612

Project Name: Great Abington NP, Cambridgeshire

Survey Type: ATC Site 2

Location: Newmarket Road

Survey Date: 11/01/2018 to 17/01/2018

Survey Time: 24 hours x 7 days



Client: Phil Jones Associates

Project Number: TSP13612

Project Name: Great Abington NP, Cambridgeshire

Survey Type: ATC Site 3

Location: South Road

Survey Date: 11/01/2018 to 17/01/2018

Survey Time: 24 hours x 7 days

TSP Class Profile All Days 15 Mins

Report Id - CustomList-146
Site Name - TSP13612-03
Description - SOUTH ROAD [20M]
Direction - West

Virtual Day (7)

Table with columns: Time, Total, C1s 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1. Rows include time intervals from 0000 to 06-00.

Virtual Week (1)

Table with columns: Time, Total, C1s 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1. Rows include days of the week (Mon, Tue, etc.) and time intervals.

Grand Total

Summary table with columns: Time, Total, C1s 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1.

Virtual Day (5)

Table with columns: Time, Total, C1s 1-10, Fix1, Time, Vbin 5-60, Mean, Vpp 85, JPSL 20, JPSL% 20, JSL1 20, JSL1% 20, JSL2 20, JSL2% 20, Fix1. Rows include time intervals from 0000 to 06-00.



Client: Phil Jones Associates

Project Number: TSP13612

Project Name: Great Abington NP, Cambridgeshire

Survey Type: ATC Site 4

Location: Cutting Road

Survey Date: 11/01/2018 to 17/01/2018

Survey Time: 24 hours x 7 days

TSP Class Profile All Days 15 Mins

Report Id - CustomList-146
Site Name - TSP13612-04
Description - CUTTING ROAD, [20M]
Direction - North

Virtual Day (7)

| 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 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 130 | Mean | Vpp 85 | JPSL 20 | JPSL% 20 | JSL1 20 | JSL1% 20 | JSL2 20 | JSL2% 20 | Fix1 | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------|--------|---------|----------|---------|----------|---------|----------|------|---|
| 0000 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.7- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7.2- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0500 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0500 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.7- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0600 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0600 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.1- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0700 | 10 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0700 | 0 | 1 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.3 | 15.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0800 | 13 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0800 | 0 | 2 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12.8 | 15.3 | 1 | 1.136 | 0 | 0 | 0 | 0 | 0 | |
| 0900 | 8 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0900 | 0 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1000 | 13 | 0 | 10 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1000 | 0 | 1 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12.8 | 15.8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1100 | 11 | 0 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1100 | 0 | 1 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 16.6 | 0 | 1.262 | 0 | 0 | 0 | 0 | 0 | |
| 1200 | 9 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1200 | 0 | 1 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.1- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1300 | 10 | 0 | 8 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1300 | 0 | 1 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.2- | 0 | 1.449 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1400 | 10 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1400 | 0 | 2 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1500 | 10 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1500 | 0 | 1 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.6- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1600 | 10 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1600 | 0 | 1 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 17 | 0 | 1.37 | 0 | 0 | 0 | 0 | 0 | |
| 1700 | 15 | 0 | 13 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1700 | 0 | 1 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.9 | 16.2 | 0 | 0.98 | 0 | 0 | 0 | 0 | 0 | |
| 1800 | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1800 | 0 | 1 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.1- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 1900 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1900 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.2- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2000 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2000 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.2- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2100 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2100 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.1- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2200 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2200 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12.8- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 2300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 07-19 | 128 | 3 | 114 | 0 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 07-19 | 1 | 14 | 77 | 35 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.4 | 16.1 | 1 | 0.558 | 0 | 0 | 0 | 0 | 0 | |
| 06-22 | 142 | 3 | 127 | 0 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 06-22 | 1 | 14 | 85 | 41 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.5 | 16.1 | 1 | 0.503 | 0 | 0 | 0 | 0 | 0 | |
| 06-49 | 143 | 3 | 128 | 0 | 5 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 06-49 | 1 | 14 | 86 | 41 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.5 | 16.1 | 1 | 0.489 | 0 | 0 | 0 | 0 | 0 | |
| 06-00 | 146 | 3 | 131 | 0 | 5 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 06-00 | 1 | 15 | 88 | 42 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.5 | 16.1 | 1 | 0.489 | 0 | 0 | 0 | 0 | 0 | |

Virtual Week (1)

| 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 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 130 | Mean | Vpp 85 | JPSL 20 | JPSL% 20 | JSL1 20 | JSL1% 20 | JSL2 20 | JSL2% 20 | Fix1 | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|------|--------|---------|----------|---------|----------|---------|----------|------|---|
| Mon | 139 | 0 | 124 | 0 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | Mon | 4 | 35 | 87 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11.4 | 14.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Tue | 167 | 0 | 149 | 0 | 2 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | Tue | 0 | 19 | 100 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.4 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Wed | 170 | 2 | 152 | 0 | 2 | 7 | 7 | 0 | 0 | 0 | 0 | 0 | Wed | 0 | 6 | 89 | 74 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.6 | 16.8 | 1 | 0.588 | 0 | 0 | 0 | 0 | 0 |
| Thu | 155 | 2 | 141 | 0 | 9 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | Thu | 0 | 11 | 101 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.6 | 15.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fri | 173 | 5 | 157 | 1 | 8 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | Fri | 3 | 15 | 115 | 41 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.4 | 15.7 | 2 | 1.117 | 0 | 0 | 0 | 0 | 0 |
| [Sat | 127 | 2 | 114 | 0 | 1 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | [Sat | 2 | 9 | 76 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.9 | 16.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| [Sun | 85 | 2 | 78 | 0 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | [Sun | 0 | 8 | 43 | 32 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.1 | 16.5 | 2 | 2.353 | 0 | 0 | 0 | 0 | 0 |
| -- | 1022 | 22 | 915 | 1 | 37 | 25 | 22 | 0 | 0 | 0 | 0 | 0 | -- | 9 | 103 | 614 | 291 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.5 | 16.1 | 5 | 0.489 | 0 | 0 | 0 | 0 | 0 | |

Grand Total

| 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 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 130 | Mean | Vpp 85 | JPSL 20 | JPSL% 20 | JSL1 20 | JSL1% 20 | JSL2 20 | JSL2% 20 | Fix1 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|------|--------|---------|----------|---------|----------|---------|----------|------|
| -- | 1022 | 22 | 915 | 1 | 37 | 25 | 22 | 0 | 0 | 0 | 0 | 0 | -- | 9 | 103 | 614 | 291 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.5 | 16.1 | 5 | 0.489 | 0 | 0 | 0 | 0 | 0 |

Virtual Day (5)

| 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 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 130 | Mean | Vpp 85 | JPSL 20 | JPSL% 20 | JSL1 20 | JSL1% 20 | JSL2 20 | JSL2% 20 | Fix1 | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-------|--------|---------|----------|---------|----------|---------|----------|------|---|
| 0000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14.7- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0500 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0500 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.7- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0600 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0600 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14- | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0700 | 13 | 0 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0700 | 0 | 1 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13.3 | 15.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0800 | 15 | 0 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0800 | 0 | 2 | 5 | 2 | 0 | | | | | | | | | | | | | | | | | | |



Client: Phil Jones Associates

Project Number: TSP13612

Project Name: Great Abington NP, Cambridgeshire

Survey Type: ATC Site 5

Location: Pampisford Road

Survey Date: 11/01/2018 to 17/01/2018

Survey Time: 24 hours x 7 days

TSP Class Profile All Days 15 Mins

Report Id - CustomList-146
Site Name - TSP13812-05
Description - PAMPHISFORD RD [30M]
Direction - East

Virtual Day (7)

| Time | Total | Cl 1 | Cl 2 | Cl 3 | Cl 4 | Cl 5 | Cl 6 | Cl 7 | Cl 8 | Cl 9 | Cl 10 | Fixt | Time | Vbin 0 | Vbin 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 65 | Vbin 70 | Mean | Vpp 85 | JSL 30 | JSL% 30 | JSL 35 | JSL% 35 | JSL 40 | JSL% 40 | Fixt |
|-------|-------|------|------|------|------|------|------|------|------|------|-------|------|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|--------|--------|---------|--------|---------|--------|---------|------|
| 0000 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0000 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.2 | 0 | 18.18 | 0 | 5.01 | 0 | 0 | 0 | 0 |
| 0100 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0100 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0300 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0300 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.4 | 0 | 14.29 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0400 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0400 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30.2 | 0 | 33.33 | 0 | 22.22 | 0 | 22.22 | 0 | 0 | |
| 0500 | 4 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0500 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26.6 | 2 | 39.29 | 1 | 14.29 | 0 | 3.57 | 1 | 14.29 | |
| 0600 | 6 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0600 | 0 | 0 | 1 | 2 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.1 | 0 | 44.44 | 0 | 2.22 | 0 | 0 | 0 | 0 | |
| 0700 | 26 | 0 | 23 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0700 | 0 | 0 | 1 | 7 | 9 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23.3 | 30 | 4 | 14.53 | 1 | 2.23 | 0 | 0 | 0 | |
| 0800 | 40 | 1 | 34 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0800 | 0 | 0 | 4 | 10 | 14 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22.8 | 30.4 | 6 | 15.71 | 2 | 4.28 | 0 | 0 | 0 | |
| 0900 | 36 | 1 | 27 | 1 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0900 | 0 | 0 | 4 | 9 | 9 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22.7 | 29.4 | 5 | 12.85 | 1 | 2.81 | 0 | 0 | 0 | |
| 1000 | 36 | 1 | 28 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1000 | 0 | 0 | 4 | 10 | 10 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22.3 | 29 | 5 | 13.2 | 1 | 3.6 | 0 | 0 | 0 | |
| 1100 | 36 | 1 | 28 | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1100 | 0 | 0 | 3 | 9 | 11 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23.2 | 30.6 | 6 | 17.67 | 2 | 4.81 | 0 | 0 | 0 | |
| 1200 | 39 | 1 | 34 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1200 | 0 | 1 | 2 | 10 | 13 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 29.3 | 5 | 15.7 | 1 | 2.22 | 0 | 0.37 | 0 | |
| 1300 | 34 | 0 | 29 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1300 | 0 | 0 | 2 | 7 | 11 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23.2 | 29.5 | 5 | 13.45 | 1 | 2.94 | 0 | 0 | 0 | |
| 1400 | 44 | 1 | 39 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1400 | 0 | 1 | 2 | 10 | 12 | 10 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 23.6 | 31 | 8 | 18.63 | 2 | 3.92 | 0 | 0 | 0 | |
| 1500 | 47 | 1 | 42 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1500 | 0 | 1 | 4 | 11 | 16 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22.7 | 29.1 | 6 | 12.54 | 1 | 2.72 | 0 | 0.306 | 0 | |
| 1600 | 70 | 1 | 63 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1600 | 0 | 0 | 4 | 17 | 22 | 16 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 23.4 | 29.8 | 10 | 14.08 | 2 | 3.26 | 0 | 0.812 | 0 | |
| 1700 | 86 | 1 | 83 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1700 | 0 | 0 | 5 | 20 | 33 | 21 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 23.1 | 28.4 | 8 | 18.63 | 2 | 2.43 | 0 | 0.323 | 0 | |
| 1800 | 58 | 2 | 54 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1800 | 0 | 0 | 3 | 15 | 17 | 14 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23.5 | 30.2 | 9 | 14.99 | 1 | 2.98 | 0 | 0 | 0 | |
| 1900 | 28 | 1 | 26 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1900 | 0 | 0 | 3 | 6 | 7 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23.6 | 29.9 | 4 | 14.29 | 1 | 5.102 | 0 | 1.02 | 0 | |
| 2000 | 18 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2000 | 0 | 0 | 1 | 5 | 6 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23.4 | 29.4 | 2 | 13.71 | 1 | 6.452 | 0 | 0 | 0 | |
| 2100 | 15 | 0 | 14 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2100 | 0 | 0 | 1 | 4 | 5 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24.3 | 31.4 | 3 | 17.76 | 1 | 9.346 | 0 | 0 | 0 | |
| 2200 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2200 | 0 | 0 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21.4 | 1 | 9.302 | 0 | 4.651 | 0 | 0 | 0 | 0 | |
| 2300 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2300 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 26.1 | 1 | 23.81 | 1 | 19.05 | 0 | 0 | 0 | 0 | |
| 07-19 | 552 | 11 | 484 | 3 | 47 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 07-19 | 0 | 4 | 38 | 138 | 178 | 119 | 59 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 23.1 | 29.6 | 76 | 13.85 | 17 | 3.131 | 1 | 0.181 | 0 | |
| 06-22 | 619 | 12 | 546 | 3 | 50 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 06-22 | 0 | 5 | 42 | 152 | 198 | 136 | 64 | 17 | 3 | 1 | 0 | 0 | 0 | 0 | 23.2 | 29.6 | 86 | 13.86 | 21 | 3.499 | 1 | 0.288 | 0 | |
| 06-06 | 629 | 13 | 554 | 3 | 50 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 06-06 | 0 | 5 | 44 | 154 | 201 | 138 | 65 | 16 | 3 | 1 | 0 | 0 | 0 | 0 | 23.2 | 29.6 | 87 | 13.86 | 22 | 3.546 | 1 | 0.288 | 0 | |
| 06-00 | 639 | 13 | 563 | 3 | 51 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 06-00 | 0 | 5 | 44 | 156 | 204 | 139 | 66 | 18 | 3 | 1 | 0 | 0 | 0 | 0 | 23.2 | 29.7 | 88 | 14.02 | 23 | 3.646 | 2 | 0.268 | 0 | |

Virtual Week (1)

| Time | Total | Cl 1 | Cl 2 | Cl 3 | Cl 4 | Cl 5 | Cl 6 | Cl 7 | Cl 8 | Cl 9 | Cl 10 | Fixt | Time | Vbin 0 | Vbin 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 65 | Vbin 70 | Mean | Vpp 85 | JSL 30 | JSL% 30 | JSL 35 | JSL% 35 | JSL 40 | JSL% 40 | Fixt |
|------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|--------|--------|---------|--------|---------|--------|---------|------|
| Mon | 704 | 12 | 622 | 1 | 61 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | Mon | 0 | 6 | 41 | 181 | 225 | 159 | 76 | 12 | 3 | 1 | 0 | 0 | 0 | 0 | 23.1 | 29.4 | 92 | 13.07 | 16 | 2.273 | 1 | 0.142 | 0 | |
| Tue | 769 | 12 | 681 | 2 | 59 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | Tue | 1 | 5 | 44 | 181 | 258 | 173 | 71 | 22 | 3 | 1 | 0 | 0 | 0 | 0 | 23.3 | 29.1 | 97 | 12.81 | 16 | 3.381 | 1 | 0.13 | 0 | |
| Wed | 763 | 10 | 670 | 6 | 57 | 13 | 4 | 1 | 1 | 1 | 0 | 0 | Wed | 0 | 4 | 48 | 160 | 243 | 191 | 87 | 22 | 5 | 2 | 1 | 0 | 0 | 0 | 23.9 | 30.4 | 117 | 15.33 | 30 | 3.932 | 3 | 0.393 | 0 | |
| Thu | 810 | 18 | 696 | 4 | 89 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | Thu | 0 | 7 | 54 | 186 | 287 | 161 | 93 | 28 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 23.2 | 30.1 | 125 | 15.43 | 32 | 3.951 | 1 | 0.123 | 0 |
| Fri | 770 | 15 | 676 | 5 | 67 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | Fri | 0 | 2 | 61 | 199 | 221 | 190 | 82 | 17 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 23.2 | 29.6 | 107 | 15.9 | 25 | 3.047 | 2 | 0.26 | 0 |
| [Sat | 369 | 8 | 334 | 0 | 23 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | [Sat | 0 | 6 | 31 | 89 | 123 | 61 | 31 | 22 | 3 | 2 | 1 | 0 | 0 | 0 | 23.1 | 30.5 | 59 | 15.99 | 28 | 7.588 | 3 | 0.813 | 0 | |
| [Sun | 286 | 14 | 262 | 4 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | [Sun | 0 | 4 | 30 | 88 | 64 | 60 | 24 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 21.7 | 28.5 | 30 | 10.49 | 6 | 2.098 | 1 | 0.35 | 0 | |
| -- | 4471 | 89 | 3943 | 22 | 359 | 43 | 12 | 1 | 1 | 1 | 0 | 0 | -- | 1 | 34 | 309 | 1094 | 1431 | 975 | 464 | 127 | 24 | 9 | 3 | 0 | 0 | 0 | 23.2 | 29.7 | 627 | 14.02 | 163 | 3.646 | 12 | 0.268 | 0 | |

Grand Total

| Time | Total | Cl 1 | Cl 2 | Cl 3 | Cl 4 | Cl 5 | Cl 6 | Cl 7 | Cl 8 | Cl 9 | Cl 10 | Fixt | Time | Vbin 0 | Vbin 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 65 | Vbin 70 | Mean | Vpp 85 | JSL 30 | JSL% 30 | JSL 35 | JSL% 35 | JSL 40 | JSL% 40 | Fixt |
|------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|--------|--------|---------|--------|---------|--------|---------|------|
| -- | 4471 | 89 | 3943 | 22 | 359 | 43 | 12 | 1 | 1 | 1 | 0 | 0 | -- | 1 | 34 | 309 | 1094 | 1431 | 975 | 464 | 127 | 24 | 9 | 3 | 0 | 0 | 0 | 23.2 | 29.7 | 627 | 14.02 | 163 | 3.646 | 12 | 0.268 | 0 | |

Virtual Day (5)

| Time | Total | Cl 1 | Cl 2 | Cl 3 | Cl 4 | Cl 5 | Cl 6 | Cl 7 | Cl 8 | Cl 9 | Cl 10 | Fixt | Time | Vbin 0 | Vbin 5 | Vbin 10 | Vbin 15 | Vbin 20 | Vbin 25 | Vbin 30 | Vbin 35 | Vbin 40 | Vbin 45 | Vbin 50 | Vbin 55 | Vbin 60 | Vbin 65 | Vbin 70 | Mean | Vpp 85 | JSL 30 | JSL% 30 | JSL 35 | JSL% 35 | JSL 40 | JSL% 40 | Fixt |
|------|-------|------|------|------|------|------|------|------|------|------|-------|------|------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|--------|--------|---------|--------|---------|--------|---------|------|
| 0000 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0000 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.8 | 0 | 16.67 | 0 | 16.67 | 0 | 16.67 | 0 | 0 | |
| 0100 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0100 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24.6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0200 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| 0300 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0300 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 25 | 0 | 25 | 0 | 25 | 0 | 0 | |
| 0400 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0400 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29.4 | 0 | 33.33 | 0 | 33.33 | 0 | 33.33 | 0 | 0 | |
| 0500 | 6 | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |

TSP Class Profile All Days 15 Mins

Report Id - CustomList-146
Site Name - TSP13612-05
Description - PAMPSIFORD RD [30M]
Direction - West

Virtual Day (7)

Table with columns: Time, Total, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, Fix1, Time, Vbin 0-60, Mean, Vpp 85, JPSL 30, JPSL 30, JSL 30, JSL 30, JSL 45, JSL 45, JSL 45, Fix1. Rows include time intervals from 0000 to 00-00.

Virtual Week (1)

Table with columns: Time, Total, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, Fix1, Time, Vbin 0-60, Mean, Vpp 85, JPSL 30, JPSL 30, JSL 30, JSL 30, JSL 45, JSL 45, JSL 45, Fix1. Rows include days of the week from Mon to Sun.

Grand Total

Summary table with columns: Time, Total, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, Fix1, Time, Vbin 0-60, Mean, Vpp 85, JPSL 30, JPSL 30, JSL 30, JSL 30, JSL 45, JSL 45, JSL 45, Fix1. Row shows overall totals.

Virtual Day (5)

Table with columns: Time, Total, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, Fix1, Time, Vbin 0-60, Mean, Vpp 85, JPSL 30, JPSL 30, JSL 30, JSL 30, JSL 45, JSL 45, JSL 45, Fix1. Rows include time intervals from 0000 to 00-00.



Appendix B TRICS Outputs

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLESSelected regions and areas:

| | | |
|-----------|---|--------|
| 02 | SOUTH EAST | |
| | ES EAST SUSSEX | 1 days |
| | HC HAMPSHIRE | 1 days |
| | KC KENT | 1 days |
| | SC SURREY | 1 days |
| 03 | SOUTH WEST | |
| | DV DEVON | 2 days |
| | SM SOMERSET | 1 days |
| 04 | EAST ANGLIA | |
| | NF NORFOLK | 2 days |
| | SF SUFFOLK | 2 days |
| 05 | EAST MIDLANDS | |
| | LN LINCOLNSHIRE | 1 days |
| 06 | WEST MIDLANDS | |
| | SH SHROPSHIRE | 4 days |
| | WK WARWICKSHIRE | 1 days |
| 07 | YORKSHIRE & NORTH LINCOLNSHIRE | |
| | NY NORTH YORKSHIRE | 6 days |
| 08 | NORTH WEST | |
| | CH CHESHIRE | 2 days |
| 09 | NORTH | |
| | CB CUMBRIA | 1 days |
| | DH DURHAM | 1 days |

Secondary Filtering selection:

Parameter: Number of dwellings
 Actual Range: 7 to 116 (units:)
 Range Selected by User: 6 to 150 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 27/11/17

Selected survey days:

| | |
|-----------|--------|
| Monday | 4 days |
| Tuesday | 7 days |
| Wednesday | 4 days |
| Thursday | 7 days |
| Friday | 5 days |

Selected survey types:

| | |
|-----------------------|---------|
| Manual count | 27 days |
| Directional ATC Count | 0 days |

Selected Locations:

| | |
|------------------------------------|----|
| Suburban Area (PPS6 Out of Centre) | 13 |
| Edge of Town | 14 |

Selected Location Sub Categories:

| | |
|------------------|----|
| Residential Zone | 22 |
| No Sub Category | 5 |

Secondary Filtering selection:Use Class:

| | |
|----|---------|
| C3 | 27 days |
|----|---------|

Population within 1 mile:

| | |
|------------------|--------|
| 1,001 to 5,000 | 5 days |
| 5,001 to 10,000 | 8 days |
| 10,001 to 15,000 | 8 days |
| 15,001 to 20,000 | 3 days |
| 20,001 to 25,000 | 3 days |

Secondary Filtering selection (Cont.):Population within 5 miles:

| | |
|--------------------|---------|
| 5,001 to 25,000 | 5 days |
| 25,001 to 50,000 | 5 days |
| 50,001 to 75,000 | 4 days |
| 75,001 to 100,000 | 11 days |
| 100,001 to 125,000 | 2 days |

Car ownership within 5 miles:

| | |
|------------|---------|
| 0.6 to 1.0 | 9 days |
| 1.1 to 1.5 | 18 days |

Travel Plan:

| | |
|-----|---------|
| Yes | 2 days |
| No | 25 days |

PTAL Rating:

| | |
|-----------------|---------|
| No PTAL Present | 27 days |
|-----------------|---------|

LIST OF SITES relevant to selection parameters

| | | | |
|----------|------------------------------------|-------------------------------------|---------------------|
| 1 | CB-03-A-04 | SEMI DETACHED | CUMBRIA |
| | MOORCLOSE ROAD | | |
| | SALTERBACK | | |
| | WORKINGTON | | |
| | Edge of Town | | |
| | No Sub Category | | |
| | Total Number of dwellings: | 82 | |
| | Survey date: FRIDAY | 24/04/09 | Survey Type: MANUAL |
| 2 | CH-03-A-08 | DETACHED | CHESHIRE |
| | WHITCHURCH ROAD | | |
| | BOUGHTON HEATH | | |
| | CHESTER | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 11 | |
| | Survey date: TUESDAY | 22/05/12 | Survey Type: MANUAL |
| 3 | CH-03-A-09 | TERRACED HOUSES | CHESHIRE |
| | GREYSTOKE ROAD | | |
| | HURDSFIELD | | |
| | MACCLESFIELD | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 24 | |
| | Survey date: MONDAY | 24/11/14 | Survey Type: MANUAL |
| 4 | DH-03-A-01 | SEMI DETACHED | DURHAM |
| | GREENFIELDS ROAD | | |
| | BISHOP AUCKLAND | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 50 | |
| | Survey date: TUESDAY | 28/03/17 | Survey Type: MANUAL |
| 5 | DV-03-A-02 | HOUSES & BUNGALOWS | DEVON |
| | MILLHEAD ROAD | | |
| | HONITON | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 116 | |
| | Survey date: FRIDAY | 25/09/15 | Survey Type: MANUAL |
| 6 | DV-03-A-03 | TERRACED & SEMI DETACHED | DEVON |
| | LOWER BRAND LANE | | |
| | HONITON | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 70 | |
| | Survey date: MONDAY | 28/09/15 | Survey Type: MANUAL |
| 7 | ES-03-A-02 | PRIVATE HOUSING | EAST SUSSEX |
| | SOUTH COAST ROAD | | |
| | PEACEHAVEN | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 37 | |
| | Survey date: FRIDAY | 18/11/11 | Survey Type: MANUAL |
| 8 | HC-03-A-19 | HOUSES & FLATS | HAMPSHIRE |
| | CANADA WAY | | |
| | LIPHOOK | | |
| | Suburban Area (PPS6 Out of Centre) | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 62 | |
| | Survey date: MONDAY | 27/11/17 | Survey Type: MANUAL |

LIST OF SITES relevant to selection parameters (Cont.)

| | | | | |
|----|---|----------------------------------|------------------------|----------------------------|
| 9 | KC-03-A-03 HYTHE ROAD WILLESBOROUGH ASHFORD Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 51 <i>Survey date: THURSDAY 14/07/16</i> | MIXED HOUSES & FLATS | KENT | <i>Survey Type: MANUAL</i> |
| 10 | LN-03-A-03 ROOKERY LANE BOULTHAM LINCOLN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 22 <i>Survey date: TUESDAY 18/09/12</i> | SEMI DETACHED | LINCOLNSHIRE | <i>Survey Type: MANUAL</i> |
| 11 | NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 27 <i>Survey date: TUESDAY 16/10/12</i> | SEMI DET. & BUNGALOWS | NORFOLK | <i>Survey Type: MANUAL</i> |
| 12 | NF-03-A-03 HALING WAY THETFORD Edge of Town Residential Zone Total Number of dwellings: 10 <i>Survey date: WEDNESDAY 16/09/15</i> | DETACHED HOUSES | NORFOLK | <i>Survey Type: MANUAL</i> |
| 13 | NY-03-A-06 HORSEFAIR BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 <i>Survey date: FRIDAY 14/10/11</i> | BUNGALOWS & SEMI DET. | NORTH YORKSHIRE | <i>Survey Type: MANUAL</i> |
| 14 | NY-03-A-07 CRAVEN WAY BOROUGHBRIDGE Edge of Town No Sub Category Total Number of dwellings: 23 <i>Survey date: TUESDAY 18/10/11</i> | DETACHED & SEMI DET. | NORTH YORKSHIRE | <i>Survey Type: MANUAL</i> |
| 15 | NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 <i>Survey date: MONDAY 16/09/13</i> | MIXED HOUSING | NORTH YORKSHIRE | <i>Survey Type: MANUAL</i> |
| 16 | NY-03-A-10 BOROUGHBRIDGE ROAD RIPON Edge of Town No Sub Category Total Number of dwellings: 71 <i>Survey date: TUESDAY 17/09/13</i> | HOUSES AND FLATS | NORTH YORKSHIRE | <i>Survey Type: MANUAL</i> |
| 17 | NY-03-A-11 HORSEFAIR BOROUGHBRIDGE Edge of Town Residential Zone Total Number of dwellings: 23 <i>Survey date: WEDNESDAY 18/09/13</i> | PRIVATE HOUSING | NORTH YORKSHIRE | <i>Survey Type: MANUAL</i> |

LIST OF SITES relevant to selection parameters (Cont.)

| | | | |
|-----------|---|---------------------------------|------------------------|
| 18 | NY-03-A-13 | TERRACED HOUSES | NORTH YORKSHIRE |
| | CATTERICK ROAD OLD HOSPITAL COMPOUND CATTERICK GARRISON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 10 Survey date: WEDNESDAY 10/05/17 | | Survey Type: MANUAL |
| 19 | SC-03-A-04 | DETACHED & TERRACED | SURREY |
| | HIGH ROAD BYFLEET Edge of Town Residential Zone Total Number of dwellings: 71 Survey date: THURSDAY 23/01/14 | | Survey Type: MANUAL |
| 20 | SF-03-A-04 | DETACHED & BUNGALOWS | SUFFOLK |
| | NORMANSTON DRIVE LOWESTOFT Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 7 Survey date: TUESDAY 23/10/12 | | Survey Type: MANUAL |
| 21 | SF-03-A-05 | DETACHED HOUSES | SUFFOLK |
| | VALE LANE BURY ST EDMUNDS Edge of Town Residential Zone Total Number of dwellings: 18 Survey date: WEDNESDAY 09/09/15 | | Survey Type: MANUAL |
| 22 | SH-03-A-03 | DETACHED | SHROPSHIRE |
| | SOMERBY DRIVE BICTON HEATH SHREWSBURY Edge of Town No Sub Category Total Number of dwellings: 10 Survey date: FRIDAY 26/06/09 | | Survey Type: MANUAL |
| 23 | SH-03-A-04 | TERRACED | SHROPSHIRE |
| | ST MICHAEL'S STREET SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category Total Number of dwellings: 108 Survey date: THURSDAY 11/06/09 | | Survey Type: MANUAL |
| 24 | SH-03-A-05 | SEMI-DETACHED/ TERRACED | SHROPSHIRE |
| | SANDCROFT SUTTON HILL TELFORD Edge of Town Residential Zone Total Number of dwellings: 54 Survey date: THURSDAY 24/10/13 | | Survey Type: MANUAL |
| 25 | SH-03-A-06 | BUNGALOWS | SHROPSHIRE |
| | ELLESMERE ROAD SHREWSBURY Edge of Town Residential Zone Total Number of dwellings: 16 Survey date: THURSDAY 22/05/14 | | Survey Type: MANUAL |
| 26 | SM-03-A-01 | DETACHED & SEMI | SOMERSET |
| | WEMBDON ROAD NORTHFIELD BRIDGWATER Edge of Town Residential Zone Total Number of dwellings: 33 Survey date: THURSDAY 24/09/15 | | Survey Type: MANUAL |

LIST OF SITES relevant to selection parameters (Cont.)

| | | | |
|-----------|----------------------------|------------------|---------------------|
| 27 | WK-03-A-02 | BUNGALOWS | WARWICKSHIRE |
| | NARBERTH WAY | | |
| | POTTERS GREEN | | |
| | COVENTRY | | |
| | Edge of Town | | |
| | Residential Zone | | |
| | Total Number of dwellings: | 17 | |
| | Survey date: THURSDAY | 17/10/13 | Survey Type: MANUAL |

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

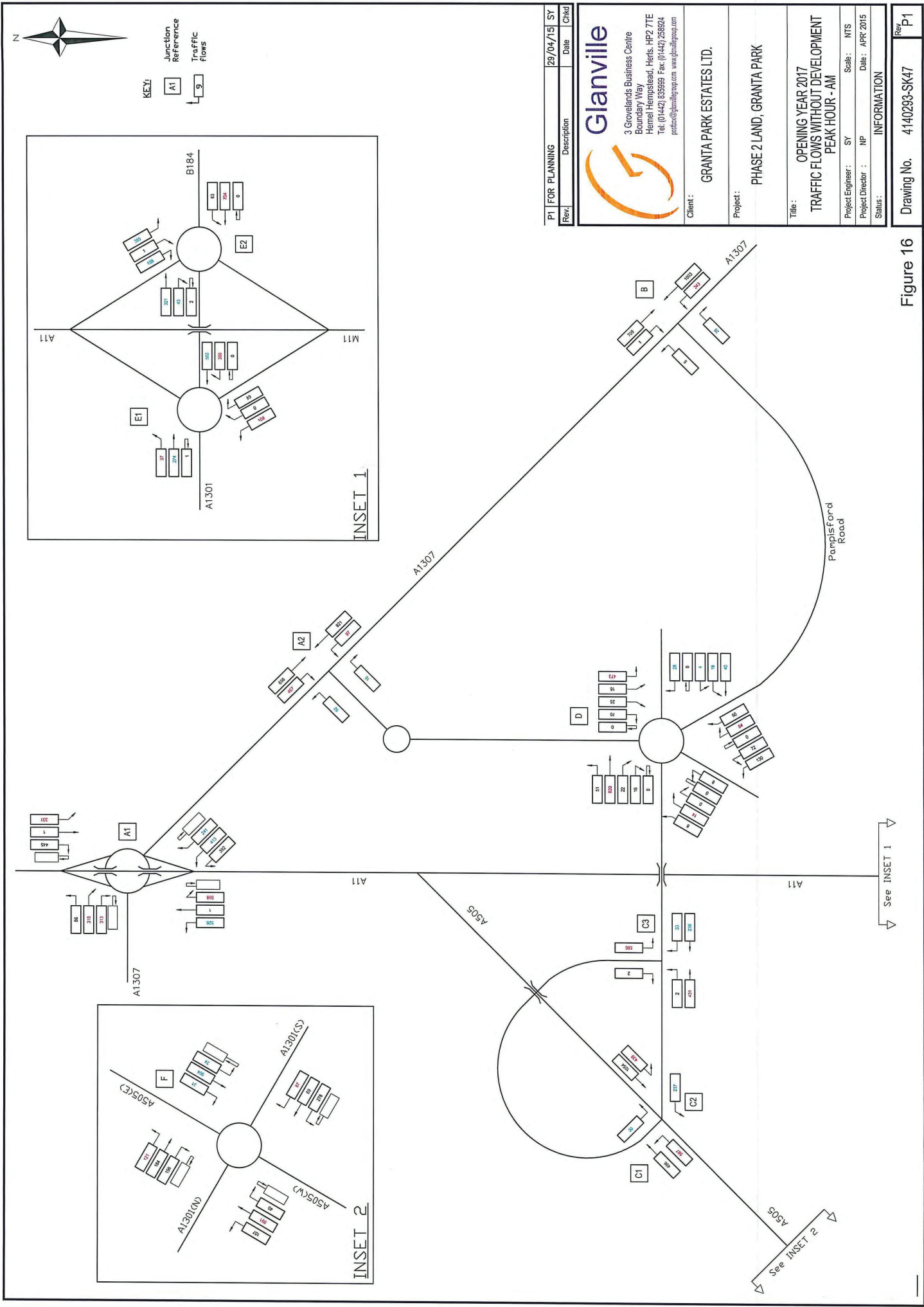
Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

| Time Range | ARRIVALS | | | DEPARTURES | | | TOTALS | | |
|---------------------|-----------|-------------|--------------|------------|-------------|--------------|-----------|-------------|--------------|
| | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate | No. Days | Ave. DWELLS | Trip Rate |
| 00:00 - 01:00 | | | | | | | | | |
| 01:00 - 02:00 | | | | | | | | | |
| 02:00 - 03:00 | | | | | | | | | |
| 03:00 - 04:00 | | | | | | | | | |
| 04:00 - 05:00 | | | | | | | | | |
| 05:00 - 06:00 | | | | | | | | | |
| 06:00 - 07:00 | | | | | | | | | |
| 07:00 - 08:00 | 27 | 44 | 0.075 | 27 | 44 | 0.281 | 27 | 44 | 0.356 |
| 08:00 - 09:00 | 27 | 44 | 0.145 | 27 | 44 | 0.380 | 27 | 44 | 0.525 |
| 09:00 - 10:00 | 27 | 44 | 0.164 | 27 | 44 | 0.180 | 27 | 44 | 0.344 |
| 10:00 - 11:00 | 27 | 44 | 0.156 | 27 | 44 | 0.176 | 27 | 44 | 0.332 |
| 11:00 - 12:00 | 27 | 44 | 0.152 | 27 | 44 | 0.170 | 27 | 44 | 0.322 |
| 12:00 - 13:00 | 27 | 44 | 0.176 | 27 | 44 | 0.171 | 27 | 44 | 0.347 |
| 13:00 - 14:00 | 27 | 44 | 0.166 | 27 | 44 | 0.155 | 27 | 44 | 0.321 |
| 14:00 - 15:00 | 27 | 44 | 0.158 | 27 | 44 | 0.182 | 27 | 44 | 0.340 |
| 15:00 - 16:00 | 27 | 44 | 0.246 | 27 | 44 | 0.176 | 27 | 44 | 0.422 |
| 16:00 - 17:00 | 27 | 44 | 0.271 | 27 | 44 | 0.160 | 27 | 44 | 0.431 |
| 17:00 - 18:00 | 27 | 44 | 0.365 | 27 | 44 | 0.168 | 27 | 44 | 0.533 |
| 18:00 - 19:00 | 27 | 44 | 0.224 | 27 | 44 | 0.149 | 27 | 44 | 0.373 |
| 19:00 - 20:00 | | | | | | | | | |
| 20:00 - 21:00 | | | | | | | | | |
| 21:00 - 22:00 | | | | | | | | | |
| 22:00 - 23:00 | | | | | | | | | |
| 23:00 - 24:00 | | | | | | | | | |
| Total Rates: | | | 2.298 | | | 2.348 | | | 4.646 |



Appendix C Granta Park Roundabout (Glenville Consultant TA)



| Rev. | Description | Date | Chkd |
|------|--------------|----------|------|
| P1 | FOR PLANNING | 29/04/15 | SY |

Glanville
 3 Grovelands Business Centre
 Boundary Way
 Hemel Hempstead, Herts. HP2 7TE
 Tel: (01442) 835939 Fax: (01442) 258924
 info@glanville.co.uk www.glanville.co.uk

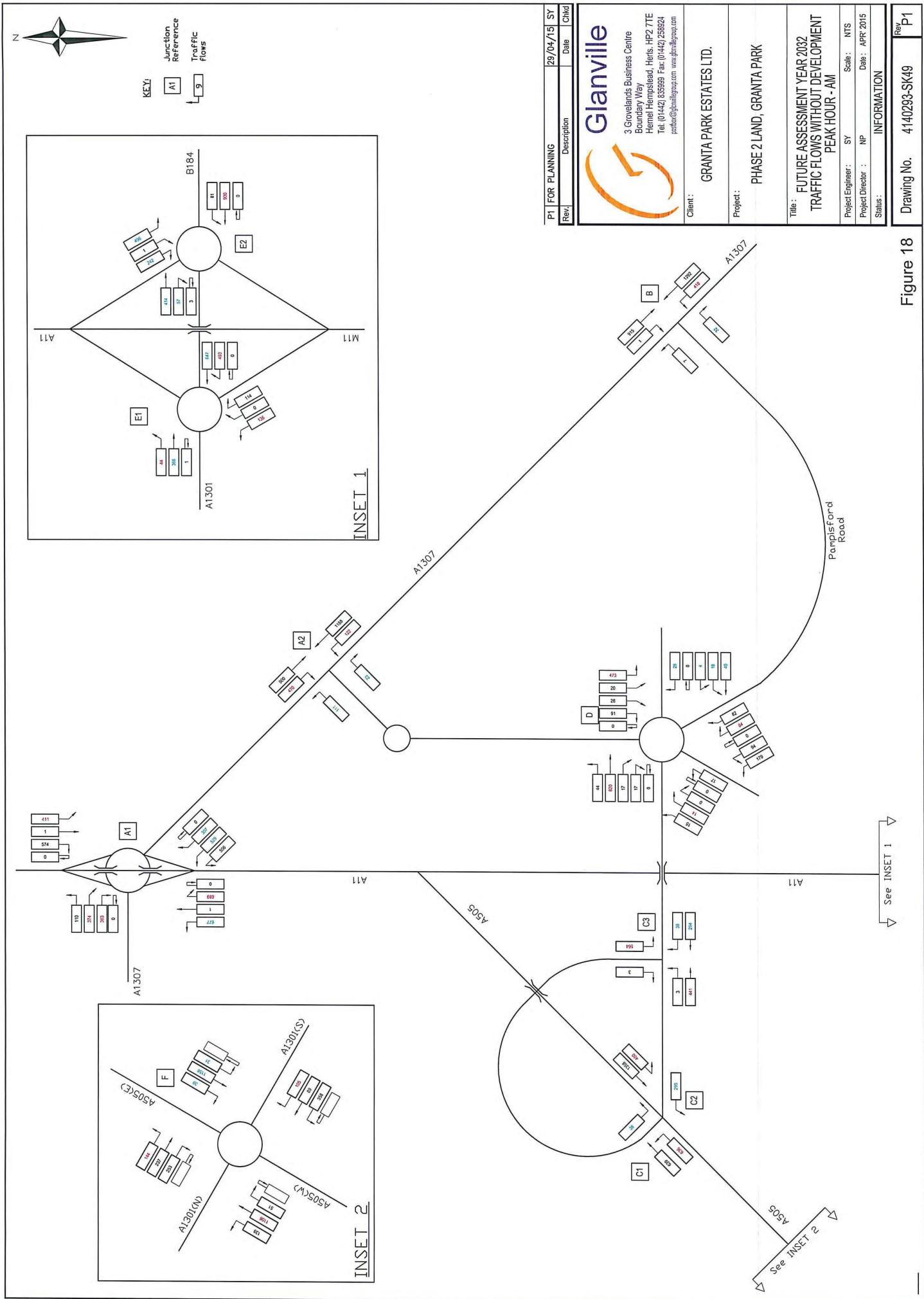
Client: GRANTITA PARK ESTATES LTD.
 Project: PHASE 2 LAND, GRANTITA PARK

Title: OPENING YEAR 2017
 TRAFFIC FLOWS WITHOUT DEVELOPMENT
 PEAK HOUR - AM

Project Engineer: SY Scale: NTS
 Project Director: NP Date: APR 2015
 Status: INFORMATION

Drawing No. 4140293-SK47
 Rep P1

Figure 16



| | | | |
|------|--------------|----------|------|
| Rev. | Description | Date | Chkd |
| P1 | FOR PLANNING | 29/04/15 | SY |

Glanville
 3 Grovelands Business Centre
 Boundary Way
 Hemel Hempstead, Herts. HP2 7TE
 Tel: (01442) 835999 Fax: (01442) 258924
 postbox@glanville.co.uk www.glanville.co.uk

Client: GRANTA PARK ESTATES LTD.
 Project: PHASE 2 LAND, GRANTA PARK

Title: FUTURE ASSESSMENT YEAR 2032
 TRAFFIC FLOWS WITHOUT DEVELOPMENT
 PEAK HOUR - AM

Project Engineer: SY Scale: NTS
 Project Director: NP Date: APR 2015
 Status: INFORMATION

Drawing No. 4140293-SK49 Ref: P1

Figure 18