

# Appendix E1

## Transport Assessment (SLR Consulting)

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# Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

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## Basis of Report

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## 1.0 Introduction

- 1.1 SLR Consulting Limited (SLR) has been appointed by Taylor Wimpey UK Ltd (TW) to provide highways and transportation advice in relation to development proposals on land to the south of Dog Kennel Lane, Solihull.
- 1.2 The proposed development is to comprise of up to 700 homes, including a self-build area of 0.77ha, a care home of up to 66-beds, a primary school, a local centre and public open space provision. The homes will be a mix of 1-to-5 bedroom houses and apartments, of which 40% minimum will be affordable.
- 1.3 The description of the proposed development is as follows:

*Outline planning application (with all matters reserved except access) for phased residential development including affordable housing and self-build homes (Class C3); a care or retirement home (Use Class C2); a primary school (Class F1); retail and commercial uses (Classes F2 and E); vehicular access from Dog Kennel Lane and Tanworth Lane; public open space; and associated infrastructure.*

- 1.4 The proposed development site is located to the south-west of Solihull town centre and the south of the urban area of Shirley. The site is in an accessible location, with good access to existing active travel and public transport networks, and local facilities. With regards to the development proposals, the intention is to create a sustainable, socially inclusive community with these overriding principles embodied within the illustrative masterplan for the site.

### Solihull Local Plan Update

- 1.5 The site, along with land to the east controlled by Richborough, was allocated in the Solihull Draft Submission Plan (2020) as part of BL2 'South of Dog Kennel Lane' for the delivery of 1,000 dwellings (increased to 1,100 homes through the Examination in Public process). The Draft Local Plan was withdrawn by Solihull in October 2024 following a letter from the Inspectors in September 2024.
- 1.6 In a report to Full Council on 8<sup>th</sup> October 2024, officers confirmed that: *"with the Plan being withdrawn, planning applications for the proposed allocation sites can no longer be described as in accordance with an emerging Plan. However, the evidence base underpinning the draft Submission Plan and the Inspectors correspondence in relation to the 'in principle' suitability of the draft sites can still have weight as material considerations in determining applications..."*
- 1.7 It follows that the evidence base which underpins the draft Submission Plan and the Inspectors' correspondence (6 March 2023 letter) in relation to the 'in principle' suitability of the site allocations, including BL2, remain important material considerations to the determination of this planning application.
- 1.8 The BL2 site is divided between land owned by TW and that being promoted by Richborough. Connectivity between the two sites is a key consideration of the overall masterplan and there will be pedestrian, cycle and vehicular connections between the two sites.



## Modelling Work for Solihull Local Plan Review Sites

- 1.9 Prior to the Local Plan being withdrawn, SMBC issued a letter in August 2023 to site promoters in the Blythe ward (including TW / the Applicant) regarding modelling work for the Solihull Local Plan Review sites. The letter sets out that the Council have agreed a process to assess any relevant planning applications ahead of the (now withdrawn) Plan's adoption, having regard to Very Special Circumstances and principles of Sustainable Development. This letter is included at **Appendix A**.
- 1.10 The letter stated that, in order to understand the cumulative impacts of the allocated sites in the Local Plan Review and how these may be mitigated, the Council consider that the most appropriate approach would be for promoters to work together by settlement areas and undertaken a joint commission of the modelling work. This would provide a single cumulative scenario that could inform each individual Transport Assessment.
- 1.11 In light of this, the SLR Microsimulation Modelling Team has been commissioned by a consortium of transport consultancies and site promoters within the Blythe ward to assess the forecast impacts of draft allocations of BL1, BL2 and BL3 as set out within the (now withdrawn) Solihull Draft Local Plan.
- 1.12 Whilst the Solihull Draft Local Plan has been withdrawn, the VISSIM local area traffic model is still considered to be a robust and appropriate method of assessing the cumulative impact of the Blythe ward sites (which includes the Proposed Development) on the local highway network, some of which currently have live planning applications. The VISSIM base model, along with Local Model Validation Report (LMVR), and an initial set of results has been issued to SMBC for review and approval.
- 1.13 The SLR Microsimulation Modelling Team has also been engaging with National Highways (NH) with regards to the model extent, particularly in relation to M42, J4. NH has agreed to the model extent and it is therefore considered that the VISSIM model is also fit for purpose from NH's perspective, with regards to assessing the cumulative impacts at M42, J4.

## The Site

- 1.14 The site currently comprises an area of open agricultural land, which lies adjacent to the built area of Solihull. The site is bound to the north by Dog Kennel Lane, to the east and the south by agricultural land and to the west by B4102 Tanworth Lane.
- 1.15 Development of this site would be designed to encourage trips to be made by sustainable modes, including active travel (walking and cycling), by car sharing and on public transport in an effort to maximise social inclusion and minimise the number of single occupancy private car trips. The location of the site is well suited to the promotion of sustainable travel.
- 1.16 This Transport Assessment (TA) considers the access and transport matters relating to the development, including the provision for pedestrians, cyclists, and public transport users in order to demonstrate the site is suitable for the proposed development.



- 1.17 A Scoping Note was submitted to Solihull Metropolitan Borough Council (SMBC) in March 2022 and is included at **Appendix B** along with a response received from SMBC in December 2022.

## Report Structure

- 1.18 The structure of this report is as follows:
- **Chapter 2 – Existing Situation** – sets out the current accessibility of the site by all modes of travel, and the proximity to local services and facilities;
  - **Chapter 3 – Policy and Guidance Review** – reviews the local, regional and national policy and guidance applicable to the site;
  - **Chapter 4 – Transportation / Active Travel Improvements** – sets out future improvements as contained with SMBC strategy and policy documents;
  - **Chapter 5 – Development Proposals** – details the proposed scheme and the Mobility Strategy;
  - **Chapter 6 – Mobility Strategy and Travel Trends** – sets out the mobility strategy and current travel trends;
  - **Chapter 7 – Trip Generation and Distribution** – sets out the expected trip generation and distribution of the proposed development;
  - **Chapter 8 – Highway Network Assessment** – sets out the impact of the proposed vehicular trip generation on the local highway network;
  - **Chapter 9 – Summary and Conclusion** – summarises and concludes the report.
- 1.19 This TA provides the conclusion that the proposed development will be accessible by foot, cycle and public transport services. It also concludes that the access is appropriate and vehicular traffic associated with the proposed development can be accommodated without detriment to future safety or operation of the surrounding highway network.



## 2.0 Existing Situation

### Introduction

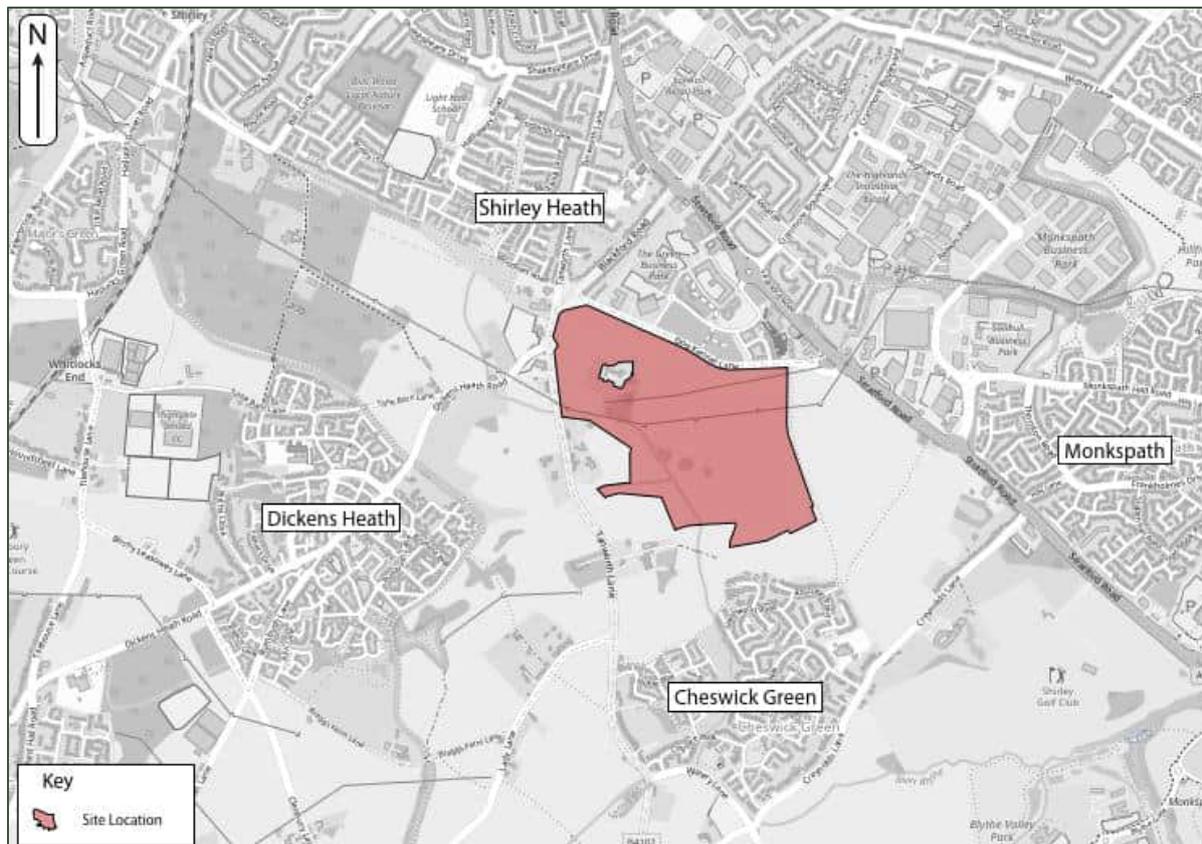
2.1 This chapter of the report describes the site and reviews the existing conditions of the proposed development having regard to a range of transport opportunities, including active travel, public transport, and the local highway network in the surrounding area.

### Site Location

2.2 The site currently comprises an area of agricultural land, which lies adjacent to the built area of Solihull. The site is located approximately 3.7km from Solihull town centre and 2.4km from Shirley (as the crow flies).

2.3 The site is bound to the north by Dog Kennel Lane, to the east and the south by agricultural land and to the west by B4102 Tanworth Lane. The location of the site is shown in **Figure 2.1**. Land to the east of the proposed development is controlled by Richborough Estates and is currently subject to a live planning application for residential development (ref. PL/2024/00598/PPOL).

**Figure 2.1 Site Location**



## Historic Travel Behaviour

- 2.4 Travel trends are changing rapidly, with these changes being accelerated by the Covid-19 pandemic. Attitudinal flexibility to movement is increasing and there is a renewed emphasis on the desire for local living and healthy lifestyles.
- 2.5 To gain an understanding of historic travel behaviour in the local area, the travel patterns for journeys to work have been investigated for the Solihull 022 Middle Layer Super Output Area (MSOA) obtained from the 2011 Census. This data is now some 11 years old and is only representative of journeys to work at that time.
- 2.6 With the recent release of the 2021 Census data, this most recent set of data has been appraised by the Office for National Statistics (ONS). The ONS has examined the results of the 2021 census and concluded:
- The ONS collected Census 2021 responses during the coronavirus (COVID-19) pandemic, a period of unparalleled and rapid change; the national lockdown, associated guidance and furlough measures will have affected the travel to work topic;
  - ONS provided extra guidance to respondents affected by the pandemic on how to respond to travel to work questions, but it is not clear how this guidance was followed;
  - Large numbers of people were still being supported by government furlough schemes, and it is not clear how the questions' guidance provided was followed by respondents;
  - some people may have provided travel information for the last time they worked, or they may have answered based on their behaviours on Census Day;
  - Restrictions on travel ended later in 2021, and while there will have been a shift back towards some behaviours from before COVID-19, hybrid and home working remain commonplace;
  - At the moment, ONS advise users to continue to make use of the 2011 Travel to Work Areas for analytical and statistical work, and they will continue to update users on future developments.
- 2.7 With this conclusion from the ONS, the assessment to understand existing mode share was undertaken using the 2011 census data which represents a worst-case scenario in travel assumptions and mode splits given the recent changes in travel behaviour relating to working from home and commuter trips. As such, the use of the 2011 Census is considered to be robust.
- 2.8 **Table 2.1** shows the mode splits for the journey to work from this MSOA, taken from the 2011 Census data.



**Table 2.1 – Method of Travel to Work – Solihull 022 MSOA**

Method of Travel to Work	Percentage
Train	6%
Bus	8%
Taxi	0%
Motorcycle	1%
Driving a Car	70%
Car Passenger	5%
Cycling	2%
Walking	8%
Other	1%
Total*	100%

\* may not sum to total due to rounding

- 2.9 As shown in **Table 2.1**, in 2011 there was a relatively high mode share of the population within Solihull 022 MSOA driving to a workplace (70%) with 5% travelling to work as a passenger of a private vehicle. A smaller proportion (14%) travelled to work by public transport with 10% travelling to work on foot or by bicycle.
- 2.10 It should be noted that the data contained within **Table 2.1** relates only to journeys to work and does not include journeys for the purposes of education, shopping, or leisure.
- 2.11 Furthermore, the data does not consider multi-modal trips to work (the census asks for method of travel to work for the longest part of the journey) i.e. park and ride or cycle and ride. However, it does provide an indication of existing travel patterns in the area.

## Accessibility by Sustainable Travel Modes

- 2.12 Contemporary local and national transport policy states that new developments should be designed to minimise travel through providing for virtual mobility, and where travel does occur, encourage more trips to be made by sustainable modes including walking, cycling or on shared/public transport. This approach maximises social inclusion and helps to minimise the number of single occupancy private car trips. Providing travel choice is policy compliant and essential in terms of today’s modern and dynamic society, particularly where policy seeks to achieve the Net Zero Carbon target for the UK by 2050.

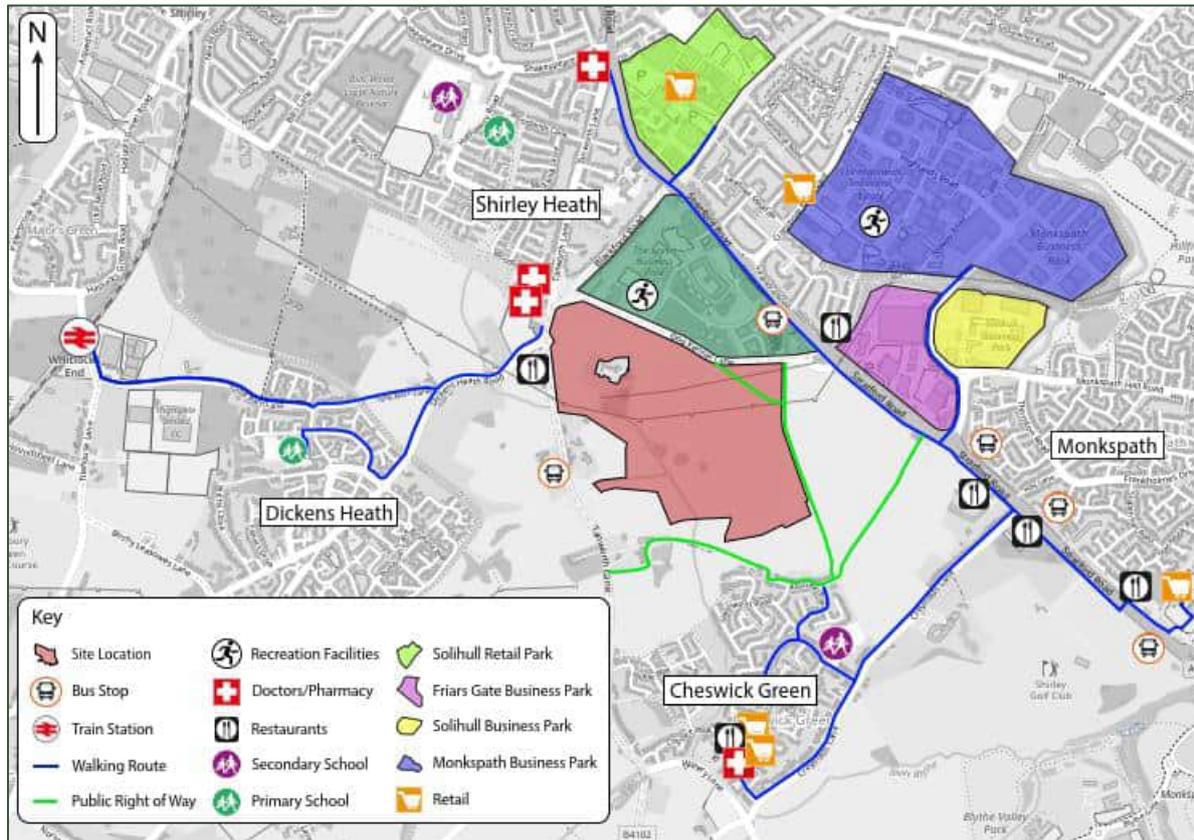
## Local Facilities

- 2.13 One of the primary factors to be considered when considering the suitability of a new development is its proximity, accessibility, and connectivity in relation to key local facilities by non-car modes. The development site is already established as suitably located for residential development through its allocation in the draft Solihull Local Plan (now withdrawn).
- 2.14 The site is well located to access the nearby local facilities and services within this area of Solihull. A summary of the local facilities is provided in **Table 2.2** and the location of these



facilities relative to the site is shown in **Figure 2.2**, with approximate walking and cycling journey times provided. Additional local facilities located further afield are also shown. It should be noted that the distances and walking/cycling times shown in **Table 2.2** are based on the existing highway/pedestrian/cycle networks but utilising the proposed access points to the site on Dog Kennel Lane and Tanworth Lane.

**Figure 2.2 Local Facilities Plan**



2.15 The walking and cycling distances and journey times to each local facility from the centre of the site are indicated in **Table 2.2**. Walking and cycling journey times are based on an average speed of 5km/hour for walking, and 15km/hour for cycling.



**Table 2.2 – Proximity to Local Facilities**

Local Facility	Distance (metres)	Walking Time (mins) based on 5km/h	Cycling Time (mins) based on 15km/h
<b>Public Transport</b>			
Tanworth Lane Bus Stops	650	8	3
A34 Stratford Road Bus Stops	750	9	3
Whitlocks End rail station	2,500	30	10
<b>Education</b>			
Light Hall School (Secondary School)	1,600	19	6
Dicken's Heath Community Primary School	1,700	20	7
Cheswick Green Primary School	2,600	31	10
<b>Employment</b>			
Friars Gate Business Park	800	10	3
Monkspath Business Park	2,000	24	8
<b>Restaurants</b>			
Miller and Carter	650	8	3
Costa Coffee	900	11	4
Harvester Monkspath	1,400	17	6
The Plough Beefeater	1,600	19	6
McDonald's Stratford Road	2,200	26	9
The Saxon Public House	2,500	30	10
<b>Lifestyle/Healthcare Facilities</b>			
The Village Hotel/Gym	300	4	1



Tanworth Lane Pharmacy	550	7	2
Tanworth Lane Surgery (GP)	600	7	2
The Hair Lounge	1,100	13	4
David Lloyd Solihull Cranmore	1,300	16	5
Shakespeare Drive Dental Centre	1,500	18	6
The Village Surgery (GP)	2,600	31	10
<b>Retail</b>			
Solihull Retail Park	1,400	17	6
Costcutter	1,400	17	6
Sainsbury's	1,600	19	6
Post Office	2,200	26	9
Lifestyle Express	2,600	31	10
Tesco Extra	2,600	31	10

- 2.16 **Table 2.2** demonstrates that the site is well connected and accessible by foot (15-30 minute) or by bicycle (under 15 minutes) to a wide range of local amenities in the surrounding area including bus stops, local primary and secondary schools, local food shops and employment centres.
- 2.17 As highlighted above, the site is well located with regard to local facilities within a convenient walk and cycle time based on existing infrastructure, such that future residents will have the opportunity to access key services via active travel modes.

### Active Travel

- 2.18 Active travel encompasses walking and cycling journeys. Whilst these are innately healthy activities that are to be encouraged, it is when they displace car journeys that they deliver significant benefits for the health and well-being of residents; increasing active travel contributes to the UK's carbon neutral and health-oriented goals.
- 2.19 The health benefits are seen as a key part of the reasoning behind encouraging active travel, with Sustrans describing walking and cycling as the 'most effective ways to promote routine physical activity' amongst people.



- 2.20 Future residents at the proposed development will be encouraged to undertake shorter journeys on foot or by bicycle where appropriate. The location of the site is suited for the promotion of active travel journeys to the local facilities in the area.
- 2.21 Furthermore, the Covid-19 pandemic has seen a substantial rise in the desire to live locally, thus many people are now travelling shorter distances for essential journeys, often within their local communities rather than further afield. There has also been an exponential take-up of active modes of travel for both short purpose driven trips, as well as leisure trips.
- 2.22 The following section provides an overview of the existing sustainable active travel infrastructure in the vicinity of the site.

### Active Travel Route Audit

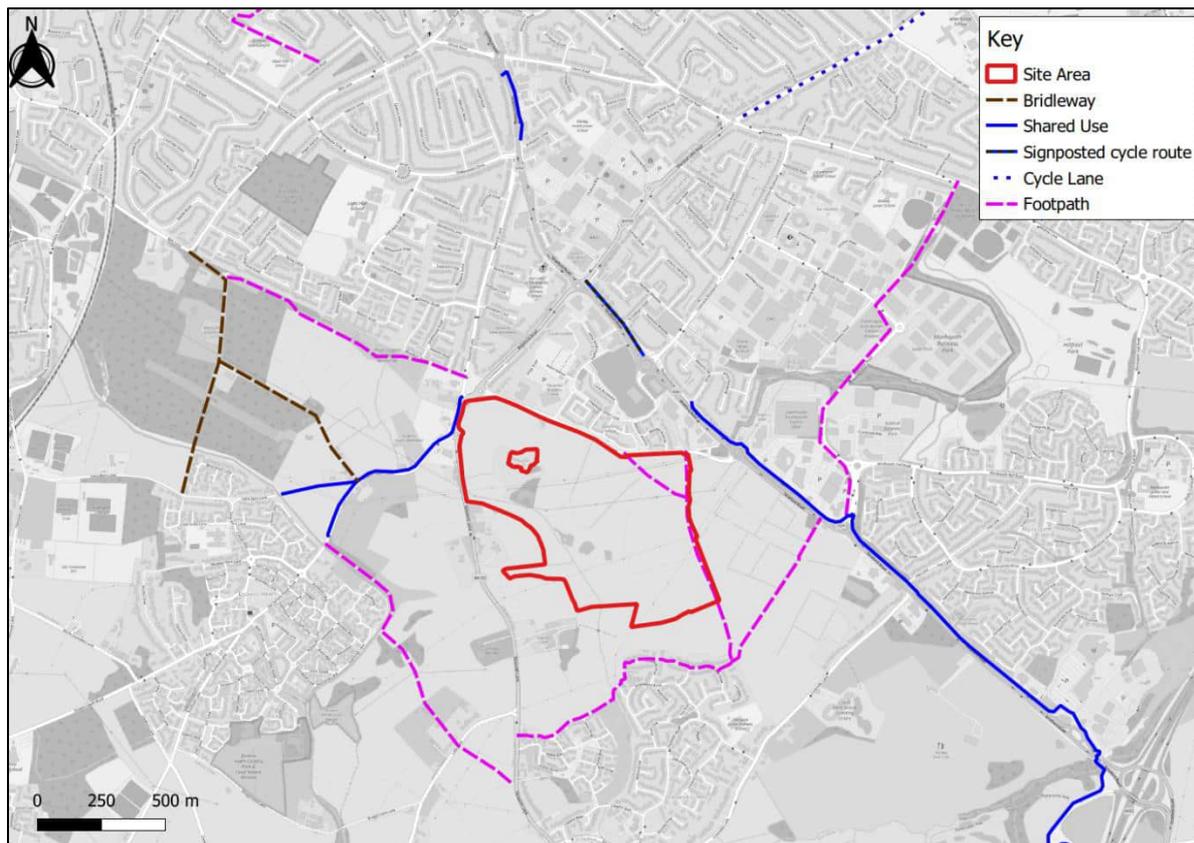
- 2.23 An Active Travel Route Audit has been undertaken based on the Active Travel England (ATE) planning application toolkit which is used by ATE to assess the active travel merits of a development proposal.
- 2.24 The audit was undertaken on the key active travel routes between the proposed development and local facilities in the area, as shown in the Local Facilities plan at **Figure 2.2**.
- 2.25 The purpose of the Active Travel Audit is to determine if the current active travel networks are acceptable and identify if any areas where offsite improvements could be made.
- 2.26 A copy of the Active Travel Audit which sets out the results of the audit and suggested off-site improvements, is provided at **Appendix C**.
- 2.27 The Active Travel Audit concluded that, in general, active travel provision in the vicinity of the site is of a reasonable standard and there are a number of local amenities located within comfortable walking distance of the site. The Audit has highlighted that there are some gaps in provision, particularly in relation to cycle facilities, which should be remedied. However, any contributions towards the local active travel network should be proportional to the scale and impact of the development.
- 2.28 The recommendations will be taken into consideration as part of wider discussions with ATE and SMBC in relation to an appropriate mitigation package to mitigate the impacts of the proposed and cumulative developments.

### Walking

- 2.29 The area is served by good quality pedestrian routes, through attractive and active environments. Existing pedestrian facilities in the vicinity of the site include formal footways, shared footway/cycleways, and Public Rights of Way (PRoW).
- 2.30 There are a number of PRoWs located through the site and also in the vicinity of the site which will be retained and improved (if necessary). The PRoWs provide links to A34 Stratford Road, Dog Kennel Lane and into Dickens Heath. The location of the site in relation to the existing PRoWs is shown in **Figure 2.3**.



**Figure 2.3 Existing PRowS in the Vicinity of the Site**



2.31 In the vicinity of the site there is a footway on the northern edge of Dog Kennel Lane and the northern edge of Creynolds Lane. These lit footways are in good condition and of sufficient width to comfortably accommodate pedestrian movement. On some sections of Creynolds Lane, the footway is segregated from the carriageway by a grass verge.

**Existing Footway on Dog Kennel Lane**



**Existing Footway on Creynolds Lane**



2.32 Dog Kennel Lane provides a link to A34 Stratford Road to the east and the B4102 to the west. Creynolds Lane provides a link to Cheswick Green Primary School.

2.33 There is a shared footway/cycleway provided on both sides of A34 Stratford Road. There is a signalised pedestrian crossing at the junction with Creynolds Lane. A34 Stratford Road provides a pedestrian route to a number of local facilities, including Tesco Extra, McDonalds, Notcutts Garden Centre, Beefeater and Harvester restaurants, The Plough public house, Sainsbury's supermarket and Solihull Retail Park.

**Signalised Pedestrian Crossing on Stratford Road**



**Shared Footway/Cycleway on Stratford Road**



2.34 There is a footway provided on the western edge of Tanworth Lane which is segregated from the carriageway by a grass verge for some sections. Tanworth Lane provides pedestrian access into Shirley Heath to the north, and Cheswick Green to the south as well as the Miller and Carter restaurant near the Dickens Heath / Tanworth Lane junction.

**Footway Provision on Tanworth Lane**

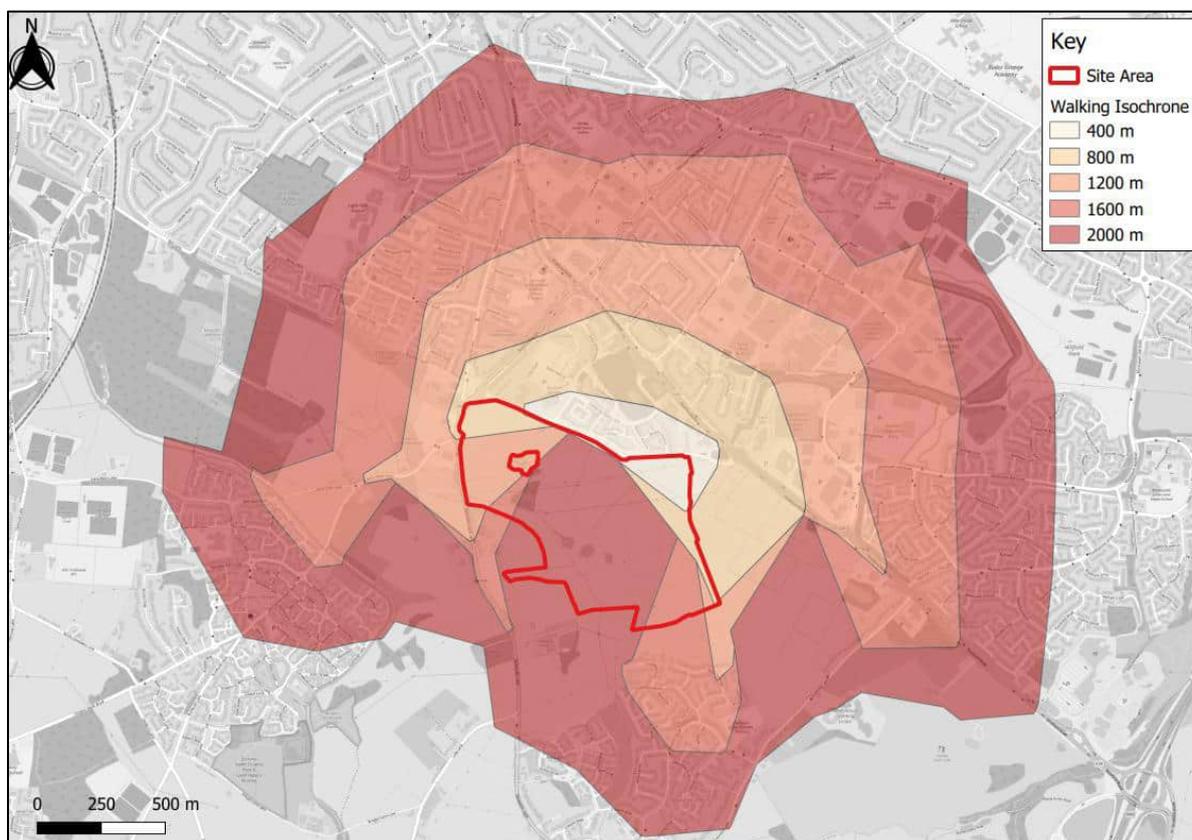


**Dickens Heath / Tanworth Lane Junction**



- 2.35 As part of 'The Green' development to the north of Dog Kennel Lane, a network of pedestrian footpaths is provided within the site, providing a connection to A34 Stratford Road. As part of the development proposals, pedestrian crossings will be provided on Dog Kennel Lane to ensure pedestrian connectivity between the two sites.
- 2.36 An individual's propensity to walk depends on a range of individual preferences and circumstances. These may include journey purpose, the attractiveness of an activity, the weather, and the cost of alternatives.
- 2.37 In practice, the distance that any individual is likely to choose to walk depends on individual circumstances, however, it is fair that over time, given current policies to encourage community, health and wellbeing, as well as good design, tendency and inclination to walk more often and further will increase.
- 2.38 **Figure 2.4** shows reasonable walking distances for walking within 2km (25 mins) of the site. These are based on a comfortable walking speed of 5km/hour and are based on the extent of the existing pedestrian network.

**Figure 2.4 2km Walking Isochrone**



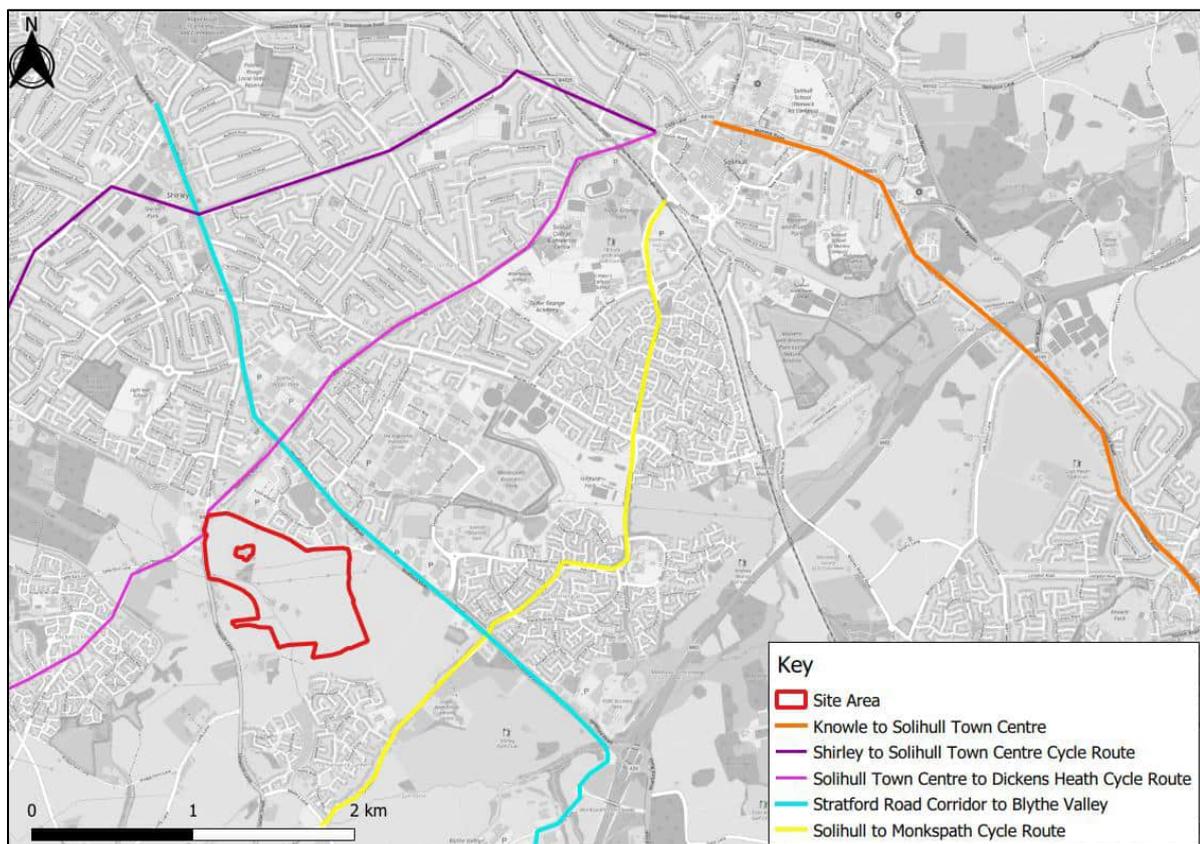
- 2.39 The 2km isochrones shown in **Figure 2.4** highlight the extent of the residential areas and local facilities that can be reached from the site in just a short (25min) walk.



## Cycling

- 2.40 There are good cycle facilities in the vicinity of the site which include a shared footway/cycleway on both sides of A34 Stratford Road. This shared facility provides a cycle link to Shirley Heath, in the north and to Hockley Heath, in the south. In addition, there is a signposted, on road cycle route on Hay Lane which provides a link to Widney Manor Railway Station.
- 2.41 Both Dog Kennel Lane and Creynolds Road are categorised as ‘advisory cycle routes’ according to the Solihull Cycling and Walking Map, which is included at **Appendix D**. The existing cycle routes in the vicinity of the site are shown in **Figure 2.5**.

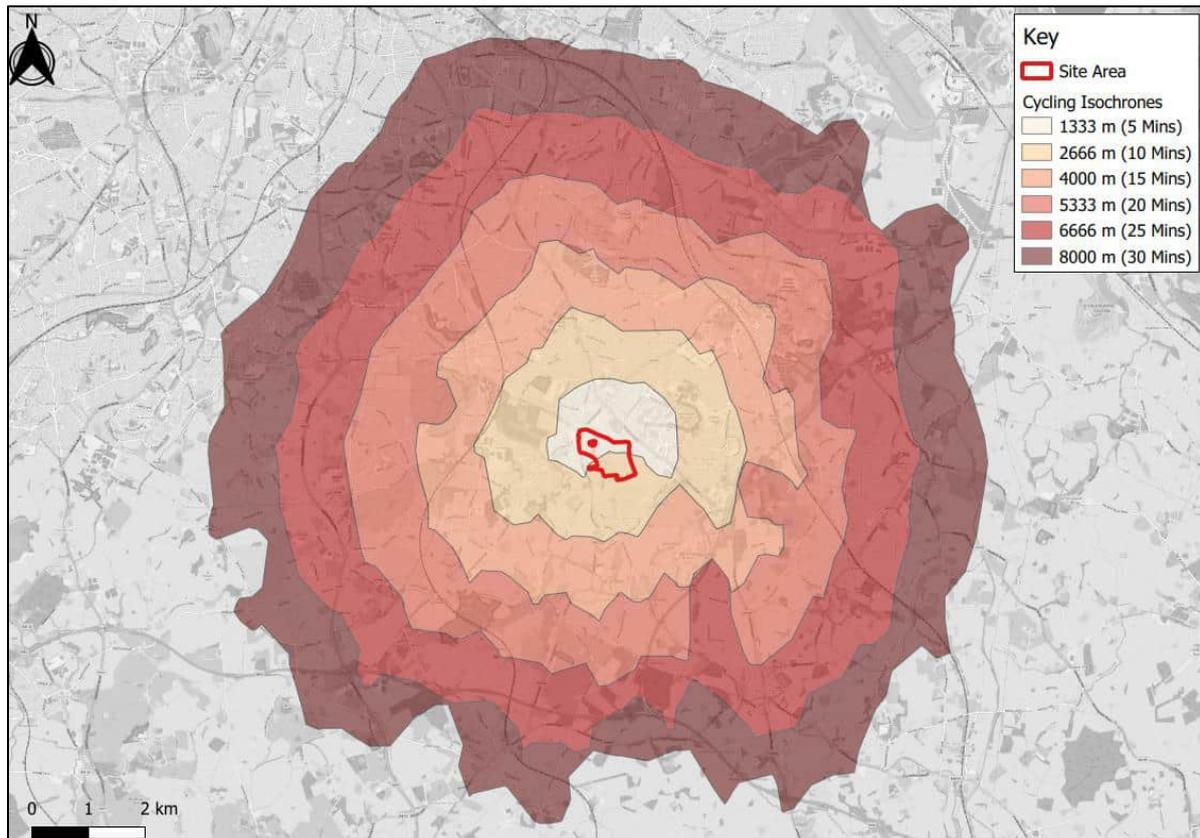
**Figure 2.5 Existing Cycle Routes in Vicinity of the Site**



- 2.42 As demonstrated in **Figure 2.5**, there are opportunities in the local area to enable residents to travel to work and also for shopping and leisure purposes by bicycle. Cycling can also be used as part of a multi-modal journey i.e. cycle and ride to/from Whitlocks End Railway Station.
- 2.43 In practice, the distance that any individual is likely to choose to cycle, depends on that individual and their circumstances, but it is fair to assume that over time, given policies to encourage community wellbeing, health and active travel, the propensity for individuals to cycle, and to cycle further will increase.
- 2.44 **Figure 2.6** shows the reasonable cycling distances within 8km of the site, which relates to a 30 minute cycle ride.



**Figure 2.6 8km Cycling Isochrones**



- 2.45 As shown in **Figure 2.6**, a number of areas are located within a 30 minute cycle of the site. Solihull town centre is shown to be located within a 20 minute cycle of the site.
- 2.46 The rise in popularity of e-bikes has led people to be more likely to travel further and for longer periods of time. Therefore, it is fair to assume that people would be willing to travel further than illustrated in **Figure 2.6** if they were travelling on an e-bike. Additionally, e-bikes attract users that otherwise may not consider using a bike in replacement of a car trip for shorter (or medium) length journeys.

## Public Transport

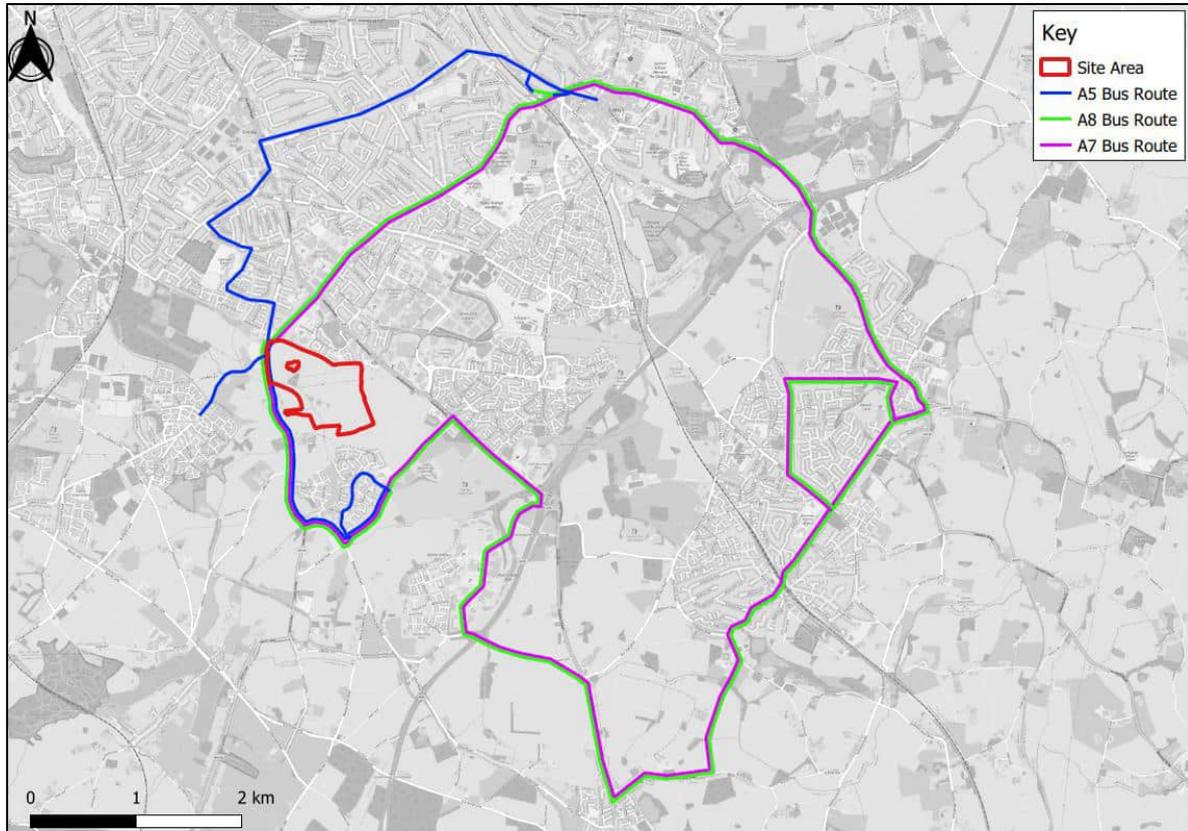
### Bus

- 2.47 The nearest bus stops to the site are located on B4102 Tanworth Lane and are served by the A5 and A7/8 bus routes. The A5 service provides an hourly service between Solihull and Cheswick Green (via Shirley and Dickens Heath). The A7/8 service is a circular route for south Solihull with an hourly frequency (half hourly frequency during weekday peak periods).
- 2.48 The existing bus stops on Tanworth Lane are located approximately 55m from the proposed site access on Tanworth Lane, and approximately 470m from the centre of the site. The bus stops are equipped with a flag pole and timetable information.
- 2.49 Additional bus stops are also located on Dickens Heath Road, A34 Stratford Road and Creynolds Lane. These bus stops are served by the A4, A5, A8, A9 and X20 bus services.



2.50 The routes for the local bus services which call at the Tanworth Lane bus stops are shown in **Figure 2.7**.

**Figure 2.7 Local Bus Routes Plan (Services from Tanworth Lane)**



2.51 A summary of the local bus routes that serve the site is provided in **Table 2.3**.



**Table 2.3 – Summary of Existing Bus Services from Tanworth Lane Bus Stops**

Route Number	Route	First/Last Bus		Daytime Frequency			Operator	Nearest Bus Stop
		First Bus	Last Bus	M-F	Sat	Sun		
A5	The Saxon - Solihull Station Interchange	0641	2008	60	60	60	LandFlight	Three Maypoles, before Dickens Heath Rd
	Solihull Station Interchange - The Saxon	0722	2048	60	60	60	LandFlight	Three Maypoles, after Dickens Heath Rd
A7	Station Road - Station Road	0748	2207	60	60	60	LandFlight	Three Maypoles, before Dickens Heath Rd
A8	Station Road - Station Road	0628	2157	60	60	60	LandFlight	Three Maypoles, after Dickens Heath Rd

2.52 As shown in **Table 2.3**, there are a number of services each hour in each direction serving the local area to the site, with services provided to Solihull.

2.53 The quality, frequency and affordability of bus services are important factors which people evaluate as part of their selection process for mode of travel for day-to-day activities.

### Community Transport

2.54 Community Transport Solihull also provides bus services in the area. The services provide 4 wheelchair accessible minibuses in order to provide to enable non-profit making groups in Solihull to access health, social and recreational opportunities otherwise unavailable through conventional transport. This includes self-drive and driver hire services to access 16 seat minibuses.

2.55 The service acts as an option for minibus hire for It is aimed at voluntary and community organisations, sports clubs, faith groups, schools, and health groups. Additional services include:

- Group hire;
- Shopping services;



- Travel to school;
- Bus services;
- Patient transport; and
- A travel club.

## Rail

2.56 The closest railway station to the site is Whitlocks End Railway Station which is located approximately 2.5km from the site and considered a comfortable cycling distance from the site. There is a shared footway/cycleway on Dickens Heath Road and quiet residential roads along Tythe Barn Lane and Tilehouse Lane. Whitlocks End Railway Station is equipped with 20 bicycle storage spaces covered with CCTV.

2.57 A summary of the rail services from Whitlocks End Railway Station is included at **Table 2.4**.

**Table 2.4 – Local Rail Services from Whitlocks End**

Destination	Frequency	Average Journey Time	Direct Service
Birmingham Moor Street (City Centre)	30 minutes	25 minutes	Yes
Stratford-upon-Avon	60 minutes	35 minutes	Yes
Kidderminster	30 minutes	70 minutes	Yes
Marston Green	20-40 minutes	60 minutes	No
Worcester (Foregate Street or Shrub Hill)	30 minutes	105 minutes	Yes
London Marylebone	30 minutes	150 minutes	No

2.58 Whitlocks End Station offers a diverse number of destinations with quick and frequent journeys into Birmingham City Centre and Stratford-upon-Avon whilst also providing the possibility of reaching further destinations including London Marylebone Station, which can be reached within single change via Birmingham Moor Street.

## Summary

2.59 The above review demonstrates that the site is well located regarding accessing a range of transport networks including the active travel and public transport networks, such that future residents would not have to rely on the private car to access day-to-day facilities. The site forms a natural extension to this part of Solihull and could capture the existing accessibility features and enhance them, to the benefit of new and future residents of the area alike.

## Local Highway Network

2.60 This section covers the transport and highway conditions in the local area surrounding the proposed development and provides a description of the local highway network, a summary of existing traffic flows within the vicinity of the site and a review of recorded personal injury collisions (PICs) on the highway network.



## **Dog Kennel Lane**

- 2.61 Dog Kennel Lane is a single carriageway road that runs along the northern boundary of the site. It connects to the A34 Stratford Road to the west on a roundabout with Stratford Road and the access road to Friars Gate. This connection to A34 Stratford Road provides access to the M42 and to Birmingham.
- 2.62 To the west, Dog Kennel Lane connects to Blackford Road via a 3 arm roundabout junction. Tanworth Lane is also accessed from this junction which runs along the site's western boundary towards Cheswick Green.
- 2.63 A footway is provided on the northern side of the carriageway, it is fully lit and is subject to a 40mph speed limit.

## **B4102 Tanworth Lane**

- 2.64 B4102 Tanworth Lane is a two-lane single carriageway that runs along some of the site's western boundary, connecting to Cheswick Green to the south. At the north west corner of the site, Tanworth Lane links with B4102 Blackford Road via a 3 arm roundabout junction. Blackford Road provides a route to A34 Stratford Road via the A34 Stratford Road/Blackford Road/Marshall Lane Road roundabout.
- 2.65 At the proposed site access junction to the site from Tanworth Lane, the road connects to Dickens Heath Road via a 3 arm roundabout junction.
- 2.66 A footway is provided on the western edge of the carriageway, it is fully illuminated and is subject to a 40mph speed limit.

## **A34 Stratford Road**

- 2.67 A34 Stratford Road is a dual carriageway road, with two lanes in each direction, segregated with a grass verge. The A34 corridor is between the Solihull/Birmingham border near Robin Hood Island and the M42. The A34 is subject to a 40mph speed limit.
- 2.68 A34 Stratford Road provides several important links throughout its extent including through the Monkspath interchange which links onto the M42 and Blythe Valley Park, a business park by the M42 junction. As mentioned, Dog Kennel Lane and Stratford Road also link at a roundabout. Additionally, A34 Stratford Road links to Monkspath Hall Road via another roundabout.
- 2.69 Footways and shared footway/cycleways are provided along the A34. The routes are lit and there are signalised crossings along the route to enable pedestrians and cyclists to access facilities on both sides of the carriageway.

## **B4102 Blackford Road**

- 2.70 B4102 Blackford Road is a two lane single carriageway that is accessed from the Blackford Road/Dog Kennel Lane roundabout in the north western corner of the site.



- 2.71 Footways are provided on both sides of the carriageway and there are speed humps present on the carriageway, at 150m intervals.

### **Dickens Heath Road**

- 2.72 Dickens Heath Road connects with Tanworth Lane at a roundabout junction. Dickens Heath Road travels through Dickens Heath and connects to Tidbury Green, connecting to Tilehouse Lane in a priority junction.
- 2.73 A footway is provided on the northern side of the carriageway, it is fully illuminated and is subject to a 40mph speed limit.

### **Creynolds Lane**

- 2.74 Creynolds Lane is a two-lane single carriageway, around one kilometre to the south of the centre of the site. It links to Cheswick Green via A34 Stratford Road at a priority T-junction.
- 2.75 It is subject to a 40mph speed limit and is illuminated throughout.

### **M42**

- 2.76 The M42 motorway is a three lane carriageway accessible 3km from the site via A34 Stratford Road and the Monkspath Interchange to link onto the M42 at junction 4.

### **Observed Traffic Flows and Speeds**

- 2.77 Baseline traffic data has been obtained for the study area surrounding the site and is summarised in the following section. The full traffic data is included at **Appendix E**.
- 2.78 Manual Classified Count (MCC) traffic surveys were undertaken on Tuesday 10th May 2022 between the hours of 07:00 and 10:00 and 16:00 to 19:00, at the following junctions:
- A34 Stratford Road / Monkspath Hall Road;
  - A34 Stratford Road / Dog Kennel Lane / Friars Gate;
  - A34 Stratford Road / Shepherds Green Road / Cranmore Boulevard;
  - A34 Stratford Road / B4102;
  - Tanworth Lane / B4102 Tanworth Lane / B4102 Blackford Road; and
  - B4102 Tanworth Lane / Dickens Heath Road.
- 2.79 A flow diagram showing the baseline traffic flows is provided at **Appendix F**.
- 2.80 Three week-long Automatic Traffic Count (ATC) surveys were also undertaken on A34 Stratford Road, Dog Kennel Lane and B4102 Tanworth Lane between the 7<sup>th</sup> and 13<sup>th</sup> May 2022, to record existing speeds and flows.
- 2.81 **Table 2.5, 2.6 and 2.7** shows the recorded traffic flows recorded on A34 Stratford Road, Dog Kennel Lane and B4102 Tanworth Lane respectively.



**Table 2.5 – Existing Traffic Flows on A34 Stratford Road**

Time Period	N-bound traffic flow (vehicles)	S-bound traffic flow (vehicles)	Two-way vehicle flow
0700-0800	610	1007	1616
0800-0900	1039	1279	2318
0900-1000	981	1074	2055
1600-1700	1407	1148	2555
1700-1800	1472	1138	2610
1800-1900	1116	942	2058
Average 24-hour (weekday)	15958	16504	32462

2.82 Two-way traffic flows on Stratford Road were recorded as 32,462 vehicles per day, with peak hour flows recorded as 2,318 two-way flows in the AM peak hour (08:00-09:00) and 2,610 in the PM peak hour (17:00-18:00).

**Table 2.6 – Existing Traffic Flows on Dog Kennel Lane**

Time Period	E-bound traffic flow (vehicles)	W-bound traffic flow (vehicles)	Two-way vehicle flow
0700-0800	430	128	558
0800-0900	635	286	921
0900-1000	355	228	584
1600-1700	328	499	828
1700-1800	299	586	886
1800-1900	251	387	638
Average 24-hour (weekday)	4878	4837	9715

2.83 Two-way traffic flows on Dog Kennel Lane were recorded as 9,715, with peak flows recorded as 921 two-way flows in the AM peak hour (08:00-09:00) and 886 in the PM peak hour (17:00-18:00).

**Table 2.7 – Existing Traffic Flows on Tanworth Lane**

Time Period	N-bound traffic flow (vehicles)	S-bound traffic flow (vehicles)	Two-way vehicle flow
0700-0800	166	265	431
0800-0900	265	425	690
0900-1000	246	267	513
1600-1700	373	331	704
1700-1800	426	347	772
1800-1900	273	259	532



Time Period	N-bound traffic flow (vehicles)	S-bound traffic flow (vehicles)	Two-way vehicle flow
Average 24-hour (weekday)	4096	4211	8307

- 2.84 Two-way traffic flows on Tanworth Lane were recorded as 9,715, with peak flows recorded as 921 two-way flows in the AM peak hour (08:00-09:00) and 886 in the PM peak hour (17:00-18:00).
- 2.85 Average and 85<sup>th</sup> percentile vehicle speeds were also recorded by the ATCs under free flow conditions, with no exceptional weather conditions reported. These are summarised in **Table 2.8, 2.9 and 2.10**.

**Table 2.8 – Existing Traffic Speeds on Stratford Road**

Time Period	Average (mph)		85 <sup>th</sup> ile	
	N-bound	S-bound	N-bound	S-bound
0700-0800	41.8	38.9	48.2	45.5
0800-0900	40.3	35.0	46.3	43.2
0900-1000	39.5	37.4	45.5	44.1
1600-1700	39.0	37.7	45.2	44.5
1700-1800	38.8	38.0	45.1	44.9
1800-1900	40.0	38.9	46.5	46.1
24-hour weekday	39.7	37.5	46.2	44.8

- 2.86 The posted speed limit on Stratford Road is 40mph. The average speed of traffic on Stratford Road is 38.6mph in both directions (24hr weekday).
- 2.87 The northbound average speed is between 38.8mph and 41.8mph, and the 85<sup>th</sup>ile is between 45.1mph and 48.2mph. The southbound average speed is between 35.0mph and 38.9mph, and the 85<sup>th</sup>ile is between 43.2mph and 46.1mph.

**Table 2.9 – Existing Traffic Speeds on Dog Kennel Lane**

Time Period	Average (mph)		85 <sup>th</sup> ile	
	E-bound	W-bound	E-bound	W-bound
0700-0800	38.7	38.9	44.0	45.0
0800-0900	36.9	36.9	41.7	43.0
0900-1000	37.4	37.3	42.6	43.2
1600-1700	37.5	36.9	42.6	42.1
1700-1800	37.7	34.7	43.2	41.5
1800-1900	38.0	37.8	43.2	43.4
24-hour weekday	37.5	37.1	43.2	43.3



- 2.88 The posted speed limit on Dog Kennel Lane is 40mph. The average speed of traffic on Dog Kennel Lane is 37.3mph in both directions (24hr weekday).
- 2.89 The eastbound ATC average speed is between 36.9mph and 38.7mph, and the 85th%ile is between 41.7mph and 44.0mph. The westbound average speed is between 34.7mph and 37.8mph and the 85th%ile is between 41.5mph and 45.0mph.

**Table 2.10 – Existing Traffic Speeds on Tanworth Lane**

Time Period	Average (mph)		85 <sup>th</sup> %ile	
	N-bound	S-bound	N-bound	S-bound
0700-0800	37.8	38.5	44.0	46.7
0800-0900	36.5	38.3	42.0	46.0
0900-1000	36.6	38.4	41.9	45.8
1600-1700	35.8	38.9	41.3	45.7
1700-1800	35.8	38.9	42.0	46.6
1800-1900	37.2	39.7	43.1	47.2
24-hour weekday	36.2	38.7	42.4	46.2

- 2.90 The posted speed limit on this section of Tanworth Lane is 40mph. The average speed of traffic on Tanworth Lane is 37.5mph in both directions.
- 2.91 The northbound ATC average speed is between 35.8mph and 37.8mph, and the 85th%ile is between 41.3mph and 44.0mph. The southbound average speed is between 38.3mph and 39.7mph and the 85th%ile is between 45.7mph and 47.2mph.

**Personal Injury Collision (PIC) Data**

- 2.92 A review of Personal Injury Collision (PIC) data for the site has been undertaken using data acquired from Transport for West Midlands Road Traffic Collision, an official database of PIC records. The records relate to PICs on public roads that are reported to the police and subsequently recorded. The most recently available five-year period has been analysed which was between 1 January 2019 – 13 August 2024.
- 2.93 A copy of the West Midlands Collision Report is attached as **Appendix G**.
- 2.94 In the search area (attached in **Appendix G**) there have been a total of 82 collisions in the latest 5-year period. Of these, 68 were classified as ‘slight’ in severity and 14 were ‘serious’ in severity, no collisions were fatal. 13 collisions involved pedestrians, 9 collisions involved pedal cycles and 6 collisions involved motorcycles.
- 2.95 There have been two collisions along Dog Kennel Lane, along the northern frontage of the site. Both of these collisions were slight in severity, with one of these collisions involving a pedestrian.



- 2.96 At the western end of Dog Kennel Lane, at the roundabout with the B4102/Blackford Road there has been a single collision that was slight in severity to the south of this junction, on Tanworth Lane.
- 2.97 At the eastern end of Dog Kennel Lane, there have been three collisions recorded at the roundabout in the latest five year period. Two of these were classified as serious in severity and one was slight in severity. None of these collisions involved pedestrians or pedal cyclists.
- 2.98 Further to the north of the site, there is a junction between the B4102 and the A34. There has been a cluster of 6 collisions at this junction, all of which were slight in severity. One collision involved a pedal cycle. There are no causation factors that are cause for concern, with most causation factors being attributed to drivers failing to look properly and is not attributed to poor highway design.
- 2.99 The analysis of the collision data does not identify any abnormal trends or patterns in the collisions recorded, nor does it identify any specific highway safety issues in the vicinity of the site.

## Summary

- 2.100 The above review demonstrates that the site is well located regarding accessing a range of transport networks including the active travel and public transport networks, such that future residents would not have to rely on the private car to access day-to-day facilities.
- 2.101 Considering the above, the site is well placed in terms of existing, and certainly future visitors. The site is well placed in terms of accessibility to pedestrian, cycle, and public transport networks.



## 3.0 Policy and Guidance

### Overview

3.1 This TA will consider and be prepared in accordance with the following policy and guidance documents:

- National Planning Policy Framework (NPPF), December 2023;
- National Planning Policy Framework (NPPF) Consultation, September 2024;
- Planning Policy Guidance – Travel Plans, Transport Assessments and Statements, March 2014;
- Decarbonising Transport, A Better Greener Britain, June 2021;
- Manual for Streets (MfS, 2007);
- Manual for Streets 2 (MfS 2, 2010);
- West Midlands Local Transport Plan (2011 – 2026);
- Adopted Solihull Local Plan 2011 – 2018 (December 2013);
- Solihull Local Plan 2020 to 2036 – Draft Submission Plan (October 2020) (now withdrawn);
- Solihull Connected Transport Strategy (2023);
- Solihull Walking and Cycling Strategy (2021); and
- Solihull Local Cycling and Walking Infrastructure Plan (February 2021).

### National Policy

#### National Planning Policy Framework (NPPF), December 2023

3.2 The NPPF was revised in response to the Levelling-up and Regeneration Bill: reforms to national planning policy consultation, on 19 December 2023 and sets out the government's planning policies for England and how these are expected to be applied.

3.3 The NPPF refers to the promotion of sustainable transport, with chapter 9 stating that the transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. Paragraph 114 states that:

*"In assessing site that may be allocated for development in plans, or specific application 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;*
- c) The design of streets, parking areas, other transport elements and the content of associated standards reflect current national guidance, including the National Design Guide and the National Model Design Code; and*



d) *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.”*

3.4 Paragraph 109 states that:

*“Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making”.*

3.5 Paragraph 115 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”.*

3.6 Paragraph 116 states that:

*“Within this context, applications for development should:*

*Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

*Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

*Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*

*Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*

*Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.”*

**NPPF – Proposed reforms to the National Planning Policy Framework and other changes to the planning system (24 September 2024)**

3.7 The draft document was open to consultation between 30th July 2024 and 24th September 2024 to seek views on the Ministry of Housing, Communities and Local Government’s proposed approach to revising the NPPF in order to achieve sustainable growth in the planning system. The revisions relating to ‘Promoting Sustainable Transport’ have been revised to include an emphasis on a vision led approach.

3.8 A revision is proposed to items a) and d) at Paragraph 112 (previously 114) which states that:

*In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:*



- a) *A vision led approach to promoting sustainable transport modes is taken, taking account of the type of development and its location; and*
- d) *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 through a vision led approach.*

3.9 A revision is also proposed for Paragraph 113 (previously Paragraph 115) which states that:

*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or on the residual cumulative impacts on the road network would be severe, in all tested scenarios.*

**Planning Policy Guidance – Travel Plans, Transport Assessments and Statements, March 2014**

3.10 Paragraph 117 of the NPPF sets out that all developments that generate significant amounts of transport movement should be supported by a Transport Statement or Transport Assessment.

3.11 Key issues to consider at the start of preparing a Transport Assessment or Statement are covered in Paragraph 014, and may include:

- The context of the development proposal;
- Appropriate study parameters;
- Assessments of public transport networks, Walking and cycling capacity, and road network capacity;
- Road trip generation and trip distribution methodologies;
- measures to promote sustainable travel;
- safety implications of development; and mitigation measures.

3.12 The scope and level of detail in a Transport Assessment or Statement will vary from site to site but Paragraph 015 suggests the following should be considered when settling the scope of the proposed assessment:

- Site layout;
- information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;
- data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;
- a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;
- an assessment of trips from all directly relevant committed development in the area;
- data about current traffic flows on links and at junctions within the study area and identification of critical links and junctions on the highways network;



- an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area;
- an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);
- measures to improve the accessibility of the location (such as provision/enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;
- a description of parking facilities in the area and the parking strategy of the development;
- ways of encouraging environmental sustainability by reducing the need to travel; and
- measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads.

### **Decarbonising Transport, a Better Greener Britain, June 2021**

- 3.13 This plan sets out the government's commitments and the actions needed to decarbonise the entire transport system in the UK.
- 3.14 It includes:
- Our pathway to net zero transport in the UK;
  - The wider benefits net zero transport can deliver; and
  - The principles that underpin our approach to delivering net zero transport.
- 3.15 The plan follows on from Decarbonising transport: setting the challenge, published in March 2020, which laid out the scale of additional reductions needed to deliver transport's contribution to legally binding carbon budgets and delivering net zero by 2050.
- 3.16 4.15 Priority 1: – 'Accelerating modal shift to public transport and active transport' seeks to reduce the need for the car and instead make active travel and public transport the number one choice of travel by:
- Providing zero emission buses which will link communities with each other, town centres and the wider transport network;
  - Providing a modern, net zero rail network to connect the country and regions, serving commuters, holidaymakers and business travellers with a faster, cleaner, and more reliable rail service;
  - Providing affordable bus and train tickets;
  - Creating a high-speed decarbonised rail and zero emission coaches as an affordable alternative to the car for longer journeys;
  - and embracing new ways of sustainable travel, such as e-cycles and other emerging technologies.



### **Manual for Streets (MfS, 2007);**

- 3.17 The Department for Transport's 'Manual for Streets' replaced their general road and street design guidance manual 'DB32' in 2007 and specifically focuses on lightly trafficked residential streets and highways.

*'A key consideration for achieving sustainable development is how the design can influence how people choose to travel. Designers and engineers need to respond to a wide range of policies aimed at making car use a matter of choice rather than habit or dependence. Local transport plans and movement strategies can directly inform the design process as part of the policy implementation process.'*

*'By creating linkages between new housing and local facilities and community infrastructure, the public transport network and established walking and cycling routes are fundamental to achieving more sustainable patterns of movement and to reducing people's reliance on the car.'*

*Applying the hierarchy will lead to a design that increases the attractiveness of walking, cycling and the use of public transport*

*Connected, or 'permeable', networks encourage walking and cycling, and make places easier to navigate through.*

### **Manual for Streets 2 (MfS 2, 2010);**

- 3.18 Set out design various standards and that strategies and schemes should:
- Minimise the impact of transport on the natural environment;
  - Encourage more sustainable and healthy patterns of travel behaviour; and that
  - This achieved by provision for cycling and walking to encourage modal shift from private car.
- 3.19 The manual for streets also recommends that urban extensions should be situated in sustainable so that new residents and workers in the urban extension can benefit from the existing facilities in a town or city.
- 3.20 In addition to this those pedestrians and cyclists are sensitive to traffic conditions which include maintain reasonable traffic speeds, and that cyclists are accounted for either on the on or off the street as appropriate.

## **Regional Policy**

### **West Midlands Local Transport Plan (WMLTP) (2011 – 2026);**

- 3.21 The WMLTP sets out the transport strategy and policies for the West Midlands Metropolitan Area to the year 2026.
- 3.22 The vision of the WMLTP is:

*"To make the West Midlands Metropolitan Area more prosperous, healthier and safer, offering a high quality and attractive environment where people will choose to live, work and visit, and where businesses thrive and attract inward investment."*



3.23 In terms of achieving this vision, there are five main goals, which are:

- To support economic growth, reflecting the Area's major contribution to the regional and national economies
- To tackle climate change
- To improve safety, security and health
- Is accessible to all, in an area of wide cultural and ethnic diversity, and
- Enhances quality of life and the built environment.

3.24 The WMLTP sets out the following key transport priorities:

- Improved asset management of minor roads - Local highway maintenance programmes in line with highway authorities Highway Asset Management Plans (HAMPs).
- Local Cycle Network Development – Cycle Coventry network further phases, Birmingham Cycle Revolution, Solihull Connected schemes, Black Country Sustainable Transport projects.
- Key Walking Routes – Improvements for walking as integral elements of schemes for city, town and suburban district centres, including proposals for Wolverhampton, Walsall, Sutton Coldfield and Solihull.
- Area Wide residential road 20 mph speed limits - Birmingham 20 mph zones phases A and B.
- Smarter Choice Initiatives – ongoing marketing and promotion initiatives.
- Local Bus Network Improvements – a wide variety of measures from the West Midlands Bus Alliance, covering infrastructure to assist bus reliability and speed, new vehicle investment, enhanced swiftcard ticketing, reduced fares for younger people and improved information to help the ease of understanding the bus network.

## Local Policy

### Adopted Solihull Local Plan 2011 – 2018 (December 2013)

3.25 The adopted Solihull Local Plan sets out a series of challenges that exist within the Borough and the objectives that will address these challenges.

3.26 Challenge H is specifically addressed increasing accessibility and encouraging sustainable travel. The listed objectives are:

- Improve accessibility and ease of movement for all users to services, facilities, jobs and green infrastructure.
- Reduce the need to travel.
- Manage transport demand and reduce car reliance.
- Enable and increase the modal share of all forms of sustainable transport.
- De-couple economic growth and increase in car use.



### **Solihull Local Plan 2020 to 2036 – Draft Submission Plan (October 2020) (Withdrawn as of October 2024)**

- 3.27 The Solihull Local Plan Draft Submission document (now withdrawn) sets out a series of challenges similar to the current adopted plan, that exist within the Borough and the objectives that will address these challenges.
- 3.28 Once again, Challenge H is specifically addressed increasing accessibility and encouraging sustainable travel. The listed objectives are the same as the existing plan:
- Enable and increase the modal share of all forms of sustainable transport, including the ability to use different modes (e.g. train & cycle) for one journey;
  - Concentrate development in areas with high existing, or potential for improved public transport access, and of critical mass to support the long-term viability of public transport provision;
  - Increase the amount of EV charging points; and
  - Appropriate measures to promote and enhance sustainable modes of transport including bus services improvements and pedestrian and cycle connectivity towards Dickens Heath, the Stratford Road and Shirley Town Centre, in accordance with the Council's LCWIP.
- 3.29 The proposed development, along with land to the east controlled by Richborough Estates, was proposed to be allocated in the Draft Local Plan as BL2 'South of Dog Kennel Lane' for the delivery of 1,000 dwellings (which was increased to 1,100 dwellings through the EIP process).
- 3.30 It should be noted that a planning application was submitted in March 2024 for up to 550 dwellings on the Richborough land (planning application reference: PL/2024/00598/PPOL). This application is yet to be determined by SMBC.
- 3.31 The transport considerations associated with BL2 included:
- Multi-modal access routes from Dog Kennel Lane that respond to those already established at the development at the Green.
  - Enhancement of bridleway access from Cheswick Green through the site as a pedestrian route and key green infrastructure link.
  - Highway improvements as required including and access improvements along Dog Kennel lane.
  - Appropriate measures to promote and enhance sustainable modes of transport including bus services improvements and pedestrian and cycle connectivity towards Dickens Heath, the Stratford Road and Shirley Town Centre, in accordance with the Council's LCWIP.

### **Solihull Connected Transport Strategy (2023)**

- 3.32 Solihull Connected Transport Strategy, published in 2023 sets out Council's approach to transport over the next decade, sitting alongside the council's Draft Local Plan (now withdrawn) that goes up until 2037. The vision of 'Solihull Connected is:



*“Solihull will have a multi-modal transport system that accesses all parts of the Borough, supports our economy, is safe to use and makes the Borough healthier and fairer for communities, businesses, and visitors.”*

3.33 The Transport Strategy has 4 objectives, each of which have three outcomes, which are:

- **Objective 1** – To make the transport network accessible to all people.
  - **Outcomes:** Our transport system will offer access for our residents including those with disabilities, it will be simple and comfortable to use, and it will use new products, services, and technology and will add diversity of modal choices
- **Objective 2** – To help the economy grow in a way that is equal and fair for everyone.
  - **Outcomes:** Our transport system will get people and goods to where they need to be, provide access to new housing and employment sites, and will support regeneration of our town, local and district centres
- **Objective 3** – To be safe and secure for all users; and
  - **Outcomes:** People of all backgrounds will be confident travelling in the Borough. Transport will support steps to improve equality whilst accident and crime rates on the transport network in the Borough will fall.
- **Objective 4** – Transport will contribute to improving the quality of life in our borough.
  - **Outcomes:** Our transport system will make it easier for residents to travel around the Borough, offer a choice of travel modes to allow us to reach net zero carbon and will make our communities great places to live.

### **Solihull Cycling and Walking Strategy (March 2021)**

3.34 Solihull Cycling and Walking Strategy, published in March 2021, sets out the policy to Develop Solihull into a Borough where cycling and walking are the most convenient modes of travel for local journeys. Developing a network of safe, attractive and direct cycle and walking routes, improving physical activity and wellbeing. The objectives of this document are to:

- Increase the number of people cycling and walking in Solihull; contributing towards the national target of 50% of short distance journeys undertaken by cycling and walking within the town centre;
- Improve the provision of cycling and walking infrastructure, increasing the number of segregated cycle routes, making active travel more convenient for short distance journeys thus supporting the local economy;
- Improve cycling capability throughout the borough by providing cycle training and initiatives; including Bikeability for children across the borough;
- Make cycling and walking ‘the norm’ through a major campaign and targeted;
- New developments to include high quality cycle and walking infrastructure and facilities;
- Increase leisure journeys through improved cycling and walking provision connecting to green spaces and targeted programmes to encourage physical activity.



## **Solihull Local Cycling and Walking Infrastructure Plan (LCWIP) (February 2021)**

- 3.35 Solihull Local Cycling and Walking Infrastructure Plan sets out the plans for walking and cycling infrastructure around Solihull. There are two active travel corridors mentioned that are in the vicinity of the site.
- 3.36 Route A runs between Solihull and Monkspath, and potentially further on to Cheswick Green to the south of the site. There are recommendations to improve this route to include a high quality cycle route.
- 3.37 Route B runs between Shirley and Blythe Valley Park along A34 Stratford Road, passing to the east of the site. The condition of this route is currently poor, with plans for a high quality cycle route to encourage modal shift from the car.
- 3.38 Further details of these routes are provided in the following Chapter.

## **Summary**

- 3.39 The development proposals have been development with consideration given to the relevant national, and local policies, and guidance. The following chapters will demonstrate that the proposed development complies with the relevant policy and guidance documents, particularly in relation to the transport considerations associated with the draft BL2 allocation (now withdrawn).
- 3.40 While the application proposals have been tested against the adopted Local Plan policies, regard has also been given to the policies of the more recent, but now withdrawn Local plan. These are based on more up to date evidence base or national policy, that can be given weight in the consideration of the application as a material consideration.



## 4.0 Transportation / Active Travel Improvements

### Introduction

4.1 This Chapter provides a brief overview of the future active travel and highway network improvements in and around the area surrounding the site, as set out in the following documents:

- Transport for West Midlands, Bus Service Improvement Plan (November 2021);
- Solihull Connected 2023 Delivery Plan (2023); and
- Solihull Local Cycling and Walking Infrastructure Plan (February 2021).

### Transport for West Midlands Bus Service Improvement Plan

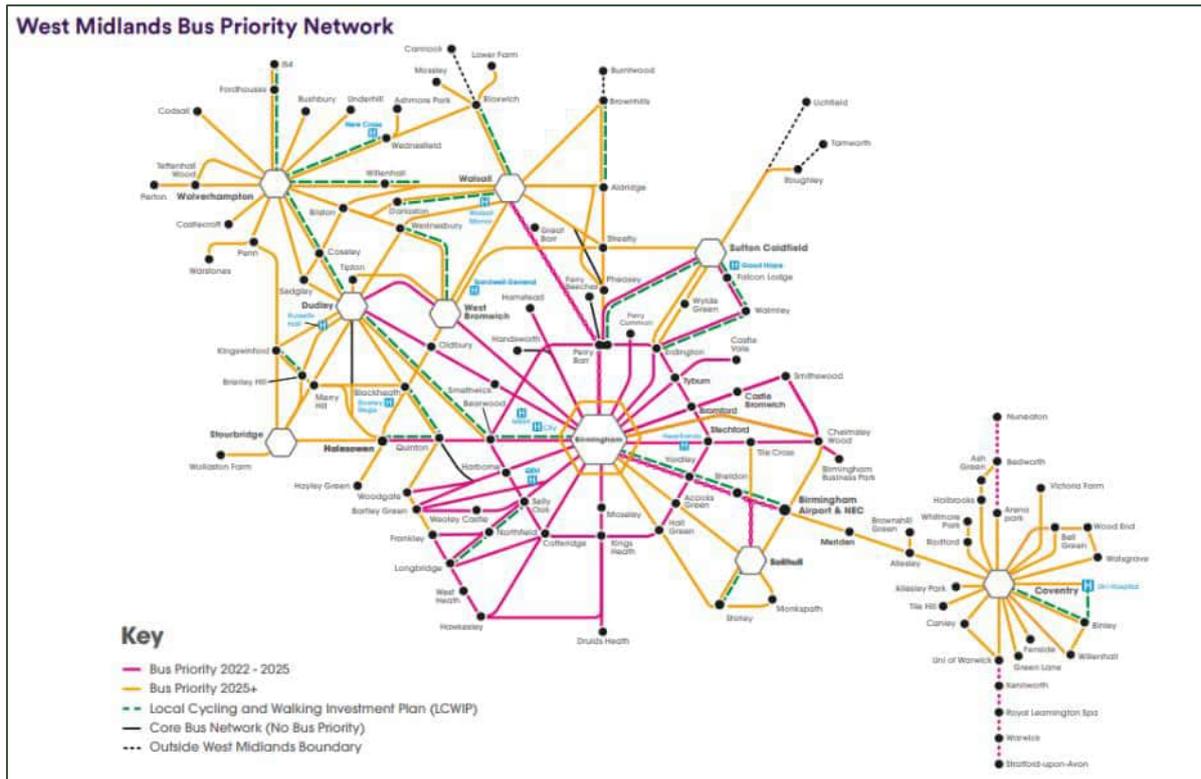
4.2 This document sets out the West Midlands Combined Authority's (WMCA) proposed Bus Service Improvement Plan (BSIP) programme of bus investment. It sets out the current plans for continued investment to level up the West Midlands and includes:

- Better buses to cut carbon dependency to reach 100% zero emission bus fleet;
- Create better journeys to tackle congestion with a 106km increase in bus priority; and
- Remove complication in ticketing to deliver better fares whilst simplifying the ticket range and keeping the lowest fares in England.

4.3 The West Midlands Bus Priority Network is shown in **Figure 4.1** and demonstrates that bus priority is planned for routes between Birmingham city centre and Shirley from 2025.



**Figure 4.1 West Midlands Bus Priority Network**



### Solihull Connected 2023 Delivery Plan

4.4 The Solihull Connected Delivery Plan sets out SMBC’s priorities for spending and outlines the activities the Council intends to undertake over the plan period.

### Solihull MBC City Region Sustainable Transport Settlement Scheme Allocations

4.5 Under the Solihull MBC City Region Sustainable Transport Settlement Scheme Allocations, capital funding is allocated for the Solihull Town Centre to Dickens Heath Permanent Cycle Scheme.

4.6 This scheme is for the delivery of 6.4km of LTN 1/20 compliant two-way segregated cycle infrastructure along a priority corridor as identified within both the West Midlands and Solihull Local Cycle and Walking Implementation Plans (LCWIPs). The anticipated delivery date for this scheme is 2024/25.

### UK Central Solihull Programme

4.7 Under the UK Central Solihull Programme, the Council will continue development work on a number of projects over the next 5 years and secure further capital funding. The projects of relevance to the proposed development are described below.



### A34 Stratford Road Enhancements

- 4.8 The A34 Stratford Road Enhancements project includes the development of multi-modal proposals along the A34 Stratford Road Corridor, adopting a ‘link and place’ approach that recognises the dual function of the corridor for strategic and local traffic, whilst also supporting Shirley centre regeneration.

### Local Cycling and Walking Infrastructure Plan (LCWIP)

- 4.9 The Council has started work to sequentially develop the priority strategic schemes set out within the LCWIP to sufficiently develop schemes to capitalise on funding opportunities as and when they arise.

### Future of Mobility Programme

- 4.10 The Council will continue its work in taking a leading role in trialling future transport technology. Further opportunities will be taken to deploy the Council’s Connected Autonomous Vehicle, and the Council will seek to make the best use of future funding opportunities to further its knowledge and understanding of such technologies.

### Local Strategic Network Resilience

- 4.11 A phased programme of technology-based solutions will be trialled to reduce traffic congestion, improve asset management, deliver highways maintenance measures, and manage traffic.

### Solihull Local Cycling and Walking Infrastructure Plan (LCWIP) (February 2021)

- 4.12 The Solihull LCWIP provides a strategic approach to identify a long term Cycling Network Plan and a number of core walking zones (CWZs) within major district centres and employment zones.
- 4.13 As part of the LCWIP, existing walking and cycling routes along key corridors within the borough have been assessed to understand their condition and to identify potential improvements. A number of priority cycle corridors have been determined and a summary of the corridors of relevance to the proposed development is provided in **Table 4.1**.

**Table 4.1 – Solihull Priority Cycle Corridors**

Route Label	Route Description	Rationale
A	Solihull Town Centre to Monkspath (additional link to Cheswick Green)	<ul style="list-style-type: none"> <li>In absence of local data, PCT analysis shows that usage is focused on Monkspath Hall Road. Likely rise of up to 5% cyclist mode share through full segregation of Monkspath Hall Road, and mode filtering of Hay Lane.</li> <li>The corridor provides access from Solihull Town Centre to Monkspath and Cheswick Green. The corridor has the potential to provide a high quality leisure and commuter route.</li> </ul>



Route Label	Route Description	Rationale
		<ul style="list-style-type: none"> <li>The scheme connects to the proposed Stratford Road corridor and therefore offers a potential link to Shirley High Street and Blythe Valley.</li> </ul>
B	Stratford Road Corridor / Blythe Valley	<ul style="list-style-type: none"> <li>The corridor currently has low to moderate levels of cycling. Shirley High Street has moderate to high propensity for cycling. In absence of local data, the likely hotspots are on certain stretches of Stratford Road (especially through Shirley Town Centre).</li> <li>Likely rise of up to 5% mode share as scheme is transformative; full segregation is possible along the whole corridor.</li> <li>Shirley has significant growth plans via the Local Plan. Enabling more cycle journeys will be required to facilitate the extra demand placed on the local network. Blythe Valley is a major employment site with future development opportunities identified in the Local Plan</li> <li>The route also provides links to major retail sites, major employers, and Shirley Town Centre</li> </ul>

4.14 The following funding opportunities will be explored to deliver the improvements set out in the LCWIP:

- Department for Transport Funding – Opportunity to attract long term investment through the Department for Transport £2bn Cycling and Walking Programme.
- Incorporating cycling and walking infrastructure into other works programmes – Cycling and walking infrastructure, relative to other infrastructure items, is not necessarily expensive and can often be readily incorporated into other works.
- Developer funded schemes/agreements (such as S106) – Opportunity to use future developments (regardless of scale) to implement high quality cycling and walking infrastructure within new developments. S106 agreements could be utilised to encourage improvements to existing and proposed offsite improvements.
- Funding through Local Economic Partnerships (LEP) – The Solihull LCWIP is an opportunity to promote the regional and local benefits of cycling and walking to the Greater Birmingham and Solihull LEP.
- Integrated Transport Block.
- West Midlands Combined Authority Funding

4.15 As part of the LCWIP prioritisation process, the following three primary cycle corridors have been identified as the short term priorities for implementation

- Priority Corridor 1 – Dickens Heath to Solihull Town Centre
- Priority Corridor 2 – Knowle to Solihull Town Centre
- Priority Corridor 3 – Castle Bromwich/Chelmsley Wood to UKC Hub Area

4.16 These priority corridors will be subject to a business case analysis which will select the necessary changes and produce plans in the future for these routes.



## 5.0 Development Proposals

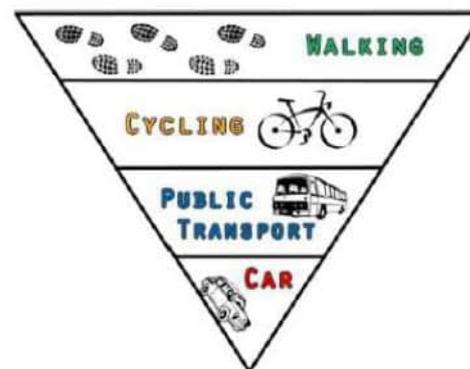
- 5.1 The site is well located with a variety of opportunities to integrate itself with the existing surrounding residential areas in terms of active travel and sustainable transport. This chapter of the TA will demonstrate how the site's proposals comply with relevant national and local policies.
- 5.2 The proposed development is to comprise of up to 700 homes, including a self-build area of 0.77ha, a care home of up to 66-beds, a primary school, a local centre and public open space provision. The homes will be a mix of 1-to-5 bedroom houses and apartments, of which 40% minimum will be affordable.

### Masterplan & Mobility Strategy

- 5.3 The site is well located in terms of access and connectivity to local facilities (see Chapter 2) and will be designed to link with existing transport infrastructure in this area of Solihull. The site will be developed in line with the guidance and principles of Manual for Streets and Manual for Streets 2.
- 5.4 The proposed development will be designed with a clear hierarchical approach in respect of transport modes, with pedestrians and cyclists at the top of this hierarchy. The emphasis being to create a sustainable development which links to the surrounding neighbourhoods and existing facilities with safe, direct and convenient pedestrian and cycle connections, as demonstrated in the Access and Movement parameter plan. The proposed design code sets out the parameters and principles for site wide design, and is submitted for detailed approval. A Design and Access Statement (DAS) has also been prepared as a supporting document to the development proposals.
- 5.5 The site is designed to connect and interact with existing transport networks to the north, east and west of the site, connecting to the wider area. There will be a comprehensive network of walking and cycling routes provided within the site to connecting with existing external active travel networks.
- 5.6 There are four key stages to creating a socially inclusive community that encourages community interaction (within and neighbouring the scheme) in such a way to promote non-motorised modes of travel, prioritising walking and cycling, followed by the use of public transport. The four key stages are;
- Design;
  - Choice;
  - Behaviour; and
  - Network Management.
- 5.7 **Design** is in terms of creating communities, where public interaction, outdoor and indoor, is the norm. Where friends and day to day activities are nearby and easy to get to, and where it is not an automatic reaction when leaving home to get into a car. The site is well-placed to take advantage of the proximity of plethora of day-to-day facilities, as set out in Chapter 2.



- 5.8 The proposed development for the site has been designed to a pedestrian scale, with walking and cycling as an easy and attractive option and vehicle intimidation kept to a minimum.
- 5.9 The proposed development will also have community facilities on site including a primary school and local centre, to encourage internalisation of trips throughout the day.
- 5.10 **Choice** is in terms of providing infrastructure and facilities to minimise reliance on any single option. This widens social inclusion, and for instance, makes contributing to commuter car congestion on average more of a choice and less of a necessity.
- 5.11 Through increased choices, a definite change in behaviour can be affected. The proposals will introduce and maintain any sustainable transport options and seek to encourage a net behavioural change.
- 5.12 The spine road has been designed to accommodate two way bus movement and there is an opportunity (confirmed in discussions with Transport for West Midlands) to divert existing bus services through the site. Doing this will enable all residents to be in comfortable walking distance of a regular bus service.
- 5.13 **Behaviour** is in terms of educating people in the options and consequences. It brings together awareness, health, environment, and personal convenience.
- 5.14 Finally, one of the 'By-design' aims is to create an environment where fewer people automatically choose to use their cars when leaving their homes, therefore decreasing the impact on the highway network. These proposals strive not only to influence the traffic impact of the proposed development, but also the surrounding community of Solihull.
- 5.15 **Network Management** is in terms of managing the road network in accord with a user hierarchy. Car travel is the lowest capacity network in terms of space occupied per person. It also occupies the lowest priority in the user hierarchy. This means, for instance, prioritising the reliability and speed of bus and cycle movements over that of cars during the commuter peaks.
- 5.16 Development at this site will therefore be vision-led through the masterplan based on these themes and design principles. It has the potential to form an extension to the thriving town of Solihull and can further grasp and drive forward the key aspirations of current transport, placemaking and health policies within Solihull Borough, West Midlands and the UK.
- 5.17 As set out in the DAS, a proposed Illustrative Masterplan has been prepared for indicative purposes only. The Illustrative Masterplan demonstrates one way in which the proposed development could be laid out but it does not preclude alternative layouts as part of subsequent Reserved Matters or detailed planning applications. The Illustrative Masterplan is shown in **Figure 5.1** and is included at **Appendix H**.



**Figure 5.1 Illustrative Masterplan**

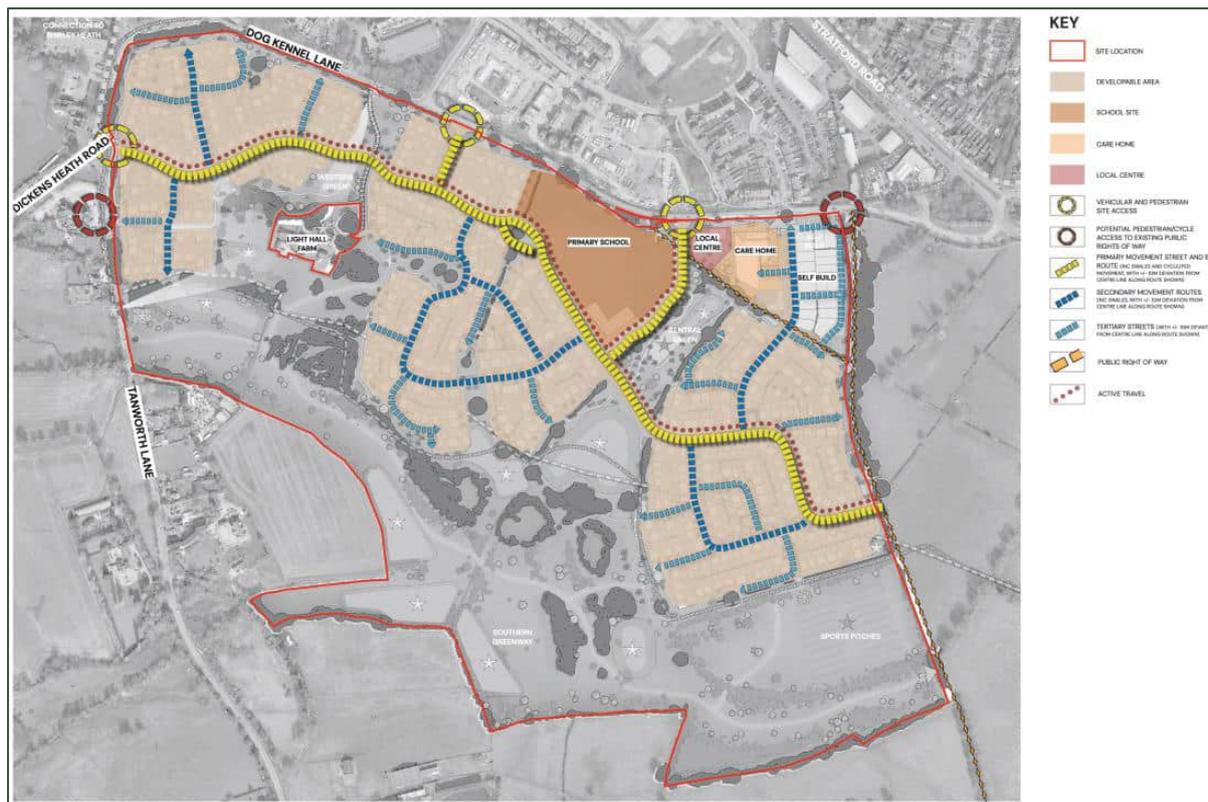


### Pedestrian and Cycle Access

5.18 The proposed development is also supported by a number of parameter plans which will be subject to approval as part of the planning application, one of which is an Access and Movement Parameter Plan, as shown in **Figure 5.2** (and also included at **Appendix H**).



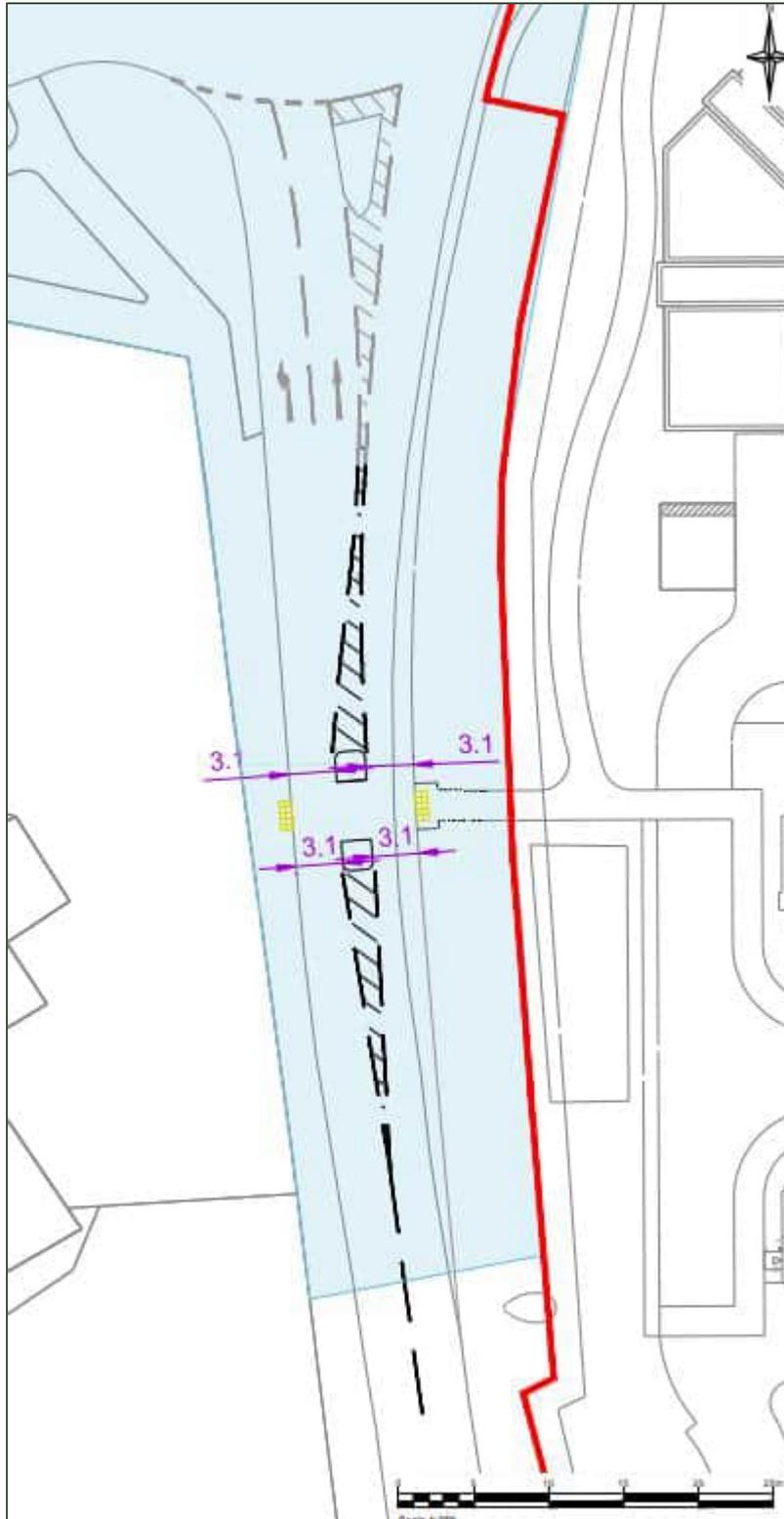
**Figure 5.2 Access and Movement Parameter Plan**



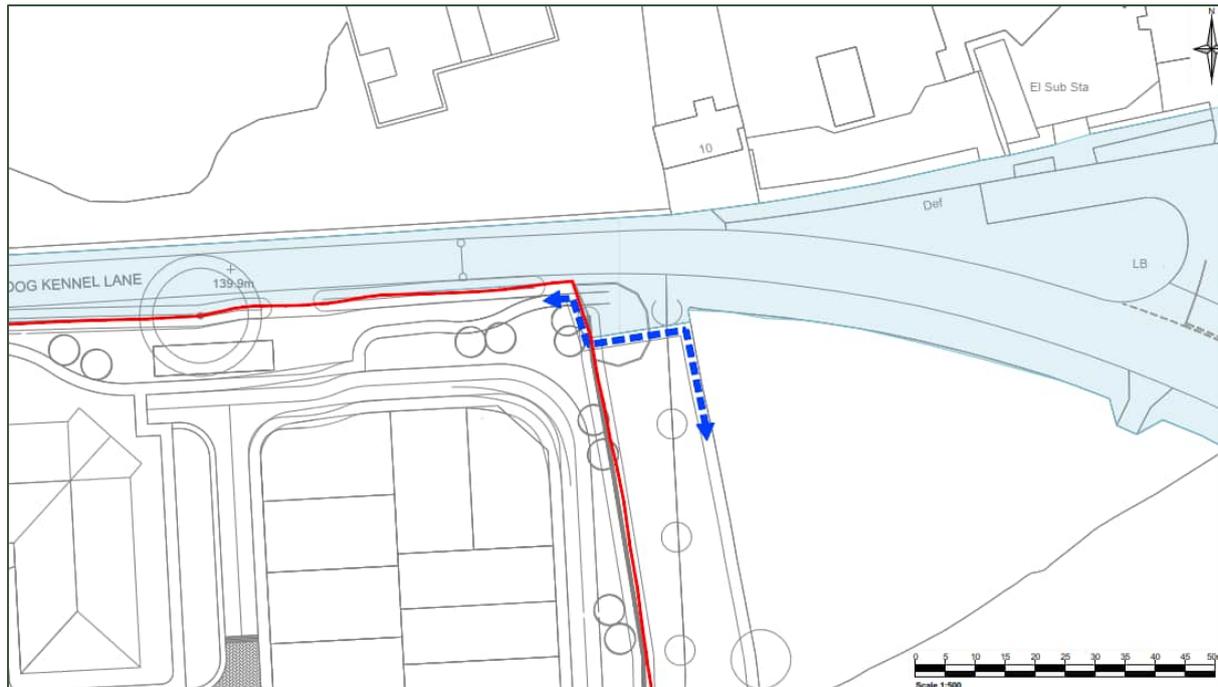
- 5.19 The aim is to create an environment in which pedestrians and cyclists feel as though they are afforded highest priority. The proposals aim to create direct, convenient, and attractive active travel links from the site to the existing network and will seek to maximise and enhance the permeability of the site to pedestrians and cyclists to encourage these modes for shorter trips.
- 5.20 As shown in **Figure 5.2** there are a number of opportunities for pedestrians and cyclists to access the site from B4102 Tanworth Lane and Dog Kennel Lane. **Figure 5.3** and **Figure 5.4** shows the potential pedestrian connections from the site to Tanworth Lane and to PRoW (ref: SL69). Scale drawings are included at **Appendix I**. It should be noted that these proposals are indicative at this stage and are not being submitted for detailed approval.



**Figure 5.3 Indicative Proposed Pedestrian Connection to Tanworth Lane**



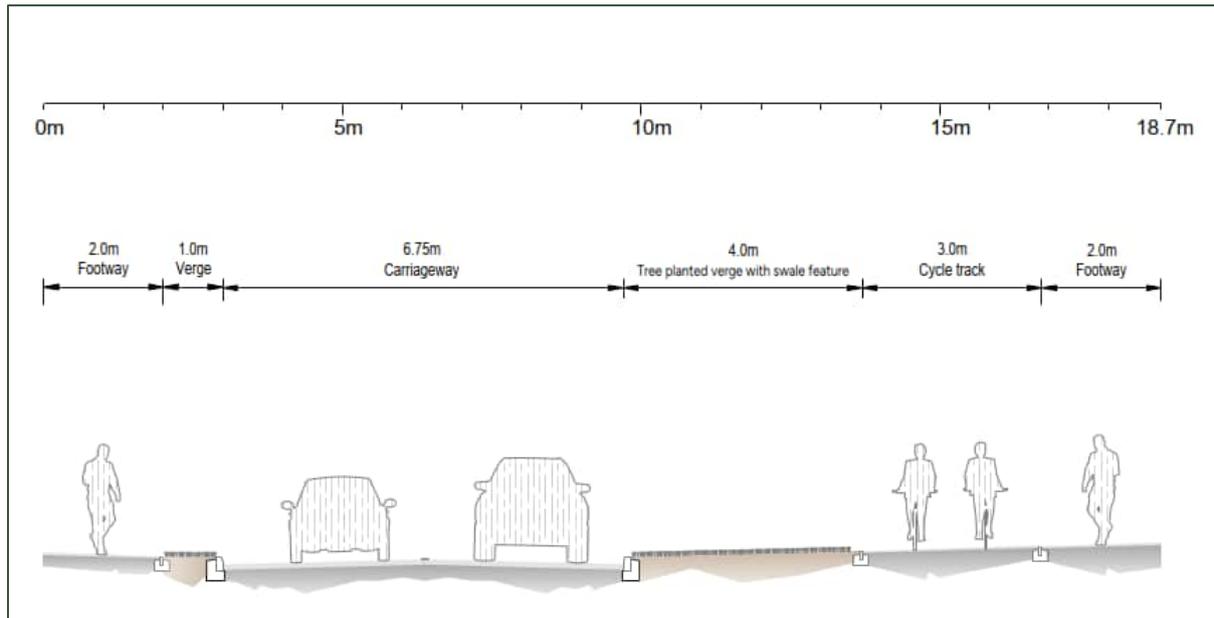
**Figure 5.4 Indicative Proposed Pedestrian Connection to PRow SL69**



- 5.21 Due to the lack of existing pedestrian infrastructure on the southern side of Dog Kennel Lane (along the site frontage) and the Council's request to retain the hedge boundary, an active travel route will be provided within the site boundary. This is shown indicatively on the Illustrative Masterplan at **Figure 5.1**.
- 5.22 Pedestrian facilities are provided at the site access junctions on Dog Kennel Lane from the proposed site access junctions, to enable future residents to access the facilities to the north of Dog Kennel Lane, and the existing active travel network through 'The Green' development.
- 5.23 A comprehensive network of footpaths and cycleways will be provided to enable access between residential development parcels, the primary school, local centre and to the areas of open space. As shown in **Figure 5.5**, the primary movement street and bus route runs through the site which includes cycle and pedestrian facilities. An indicative cross section of the spine road is shown in **Figure 5.5**.



**Figure 5.5 Indicative Spine Road Cross Section**



- 5.24 A pedestrian/cycle connection will also be provided to the neighbouring Richborough site to provide access to/from this development parcel and onto A34 Stratford Road. The existing bridleway into Cheswick Green to the south of the site will be enhanced to facilitate pedestrian/cycle trips into Cheswick Green.
- 5.25 Designing the site to a pedestrian scale allows for the maximum opportunity to provide social inclusion. Pedestrian and cycle routes are designed to ensure full permeability through the site.
- 5.26 The design specifications for each adopted street typology is set out within the design code in the DAS. The design intent is to create a walkable and low speed environment. The design speed for the primary boulevard and the secondary residential streets is 20mph and 15mph for the tertiary streets.
- 5.27 Enhancement of bridleway access from Cheswick Green through the site as a pedestrian route and key green infrastructure link was required as part of the site considerations in the withdrawn Draft Local Plan.
- 5.28 Currently, PRow (ref: SL69) takes the form of a trodden path through the field and there is no formalised route provided.
- 5.29 At grade crossings will be provided within the proposed development where the spine road crosses the PRow, if required.

### **Public Transport Access**

- 5.30 It is proposed that the spine road will be designed to accommodate two way bus movement through the site (based on a 9.795m single deck bus). Initial discussions have taken place



with Transport for West Midlands (TfWM) who are supportive of the proposal to divert and re-route existing buses through the site.

- 5.31 The exact details of which bus route to be diverted through the site is currently unknown due to the uncertainty of the bus network once the proposed development is fully built out i.e. contracts for current services would be subject to review and may not continue.
- 5.32 SLR will continue to have discussions with TfWM with regards to bus movement through the site.
- 5.33 Bus stops will be provided along the spine road to ensure that residents are within a comfortable walking distance to a regular bus service. The facilities provided at the bus stops will meet the requirements of TfWM design standards. The locations of the bus stops along the spine road will be confirmed at detailed planning application stage.

## **Vehicular Access**

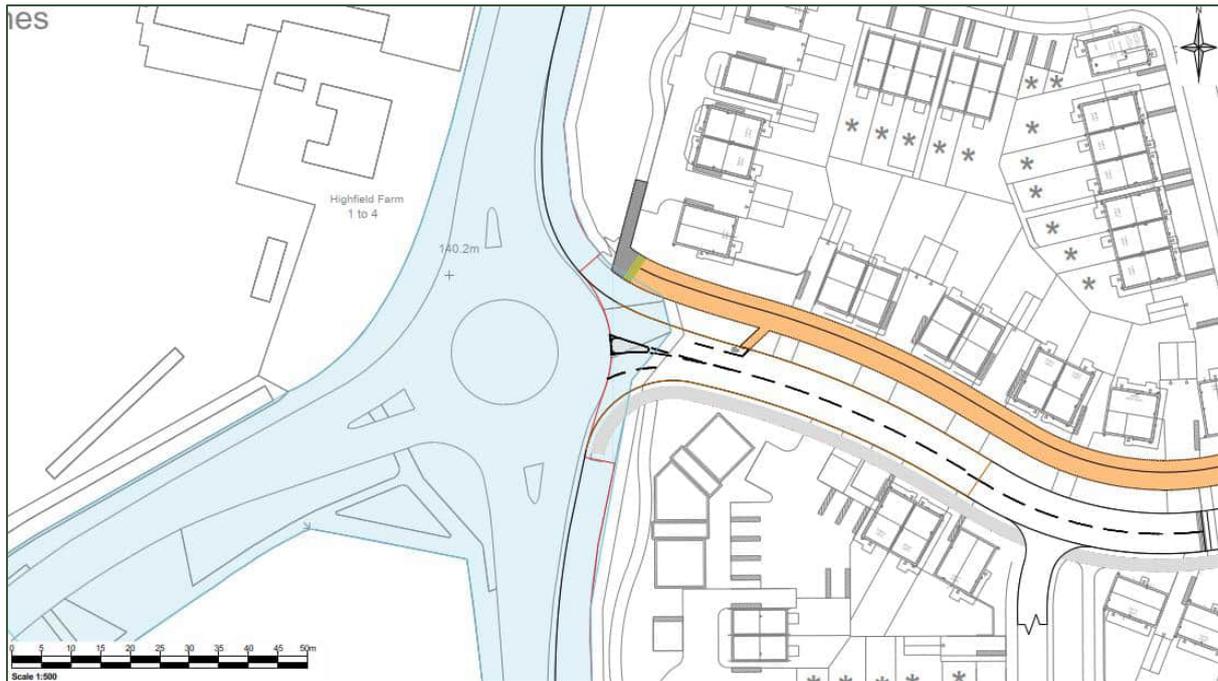
- 5.34 It is proposed to provide vehicular access into the site at 3 locations, one from B4102 Tanworth Lane and two junctions on Dog Kennel Lane. The three site access junctions have been subject to a Stage 1 Road Safety Audit (RSA). The Stage 1 RSA found no issues with the design and safety of three proposed site access junctions. The Stage 1 RSA and Designer's Response is included at **Appendix J**.
- 5.35 The locations of the vehicular site access points are in line with the locations shown on the Access and Movement parameter plan.

### **B4102 Tanworth Lane**

- 5.36 It is proposed to provide an access to the site from B4102 Tanworth Lane at the existing Tanworth Lane/Dickens Heath roundabout. An additional arm from the roundabout will be provided to access the site.
- 5.37 The proposed access design for the Tanworth Lane site access is shown in **Figure 5.6** and a scale drawing is provided in **Appendix K**, as well as submitted separately with the planning application.



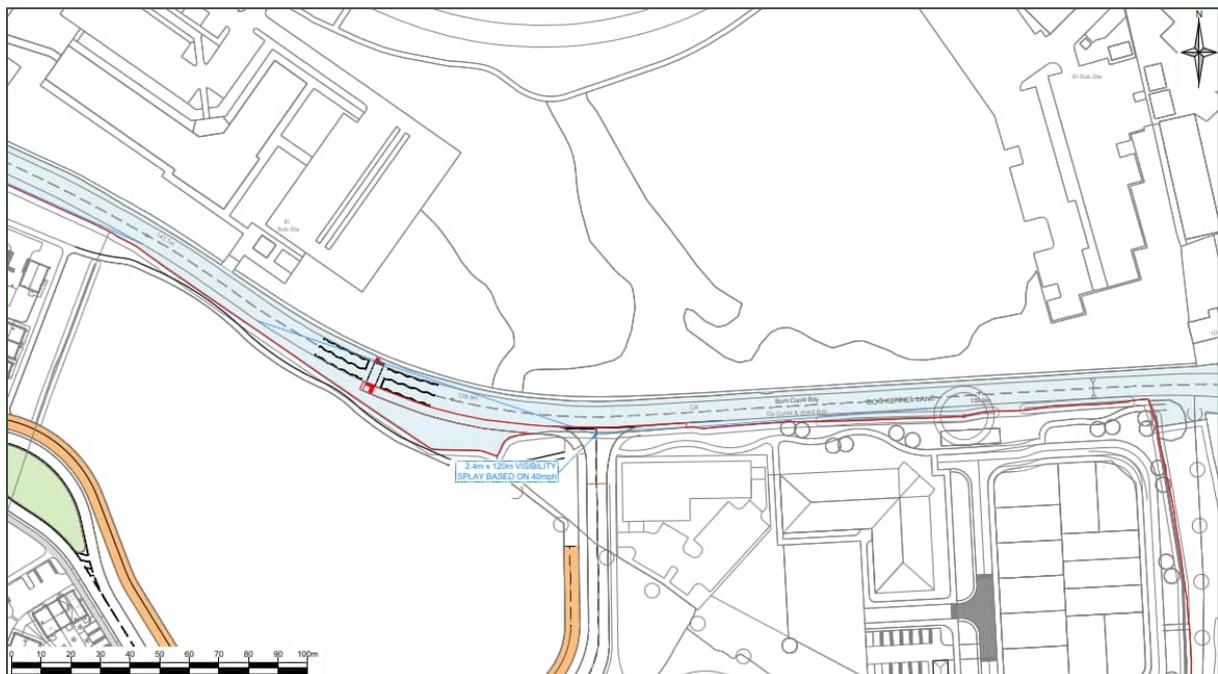
**Figure 5.6 Tanworth Lane Vehicular Site Access**



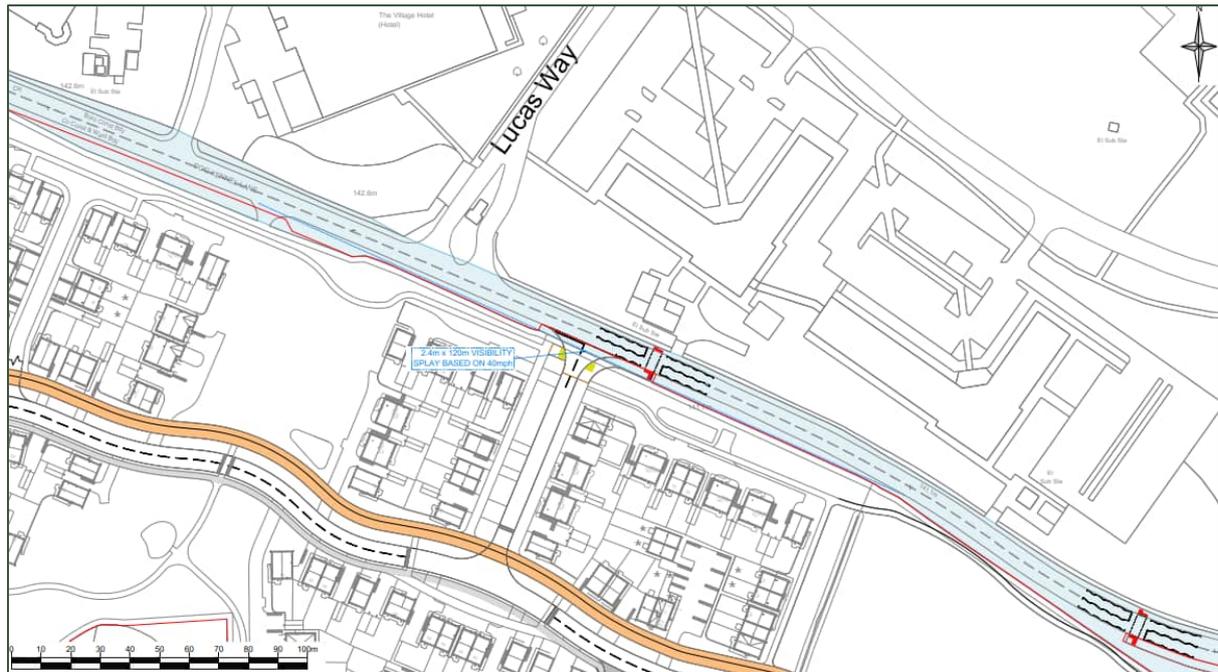
**Dog Kennel Lane**

5.38 The proposed access design for access from Dog Kennel Lane comprises two priority junctions into the site. The proposed access junction arrangements are shown in **Figure 5.7** and **Figure 5.8** and a scale drawing is provided in **Appendix K**.

**Figure 5.7 Dog Kennel Lane Vehicular Site Access (east)**



**Figure 5.8 Dog Kennel Lane Vehicular Site Access (west)**



## Travel Plan

- 5.39 A site-wide Travel Plan has been prepared in support of the development proposals at this site, and is provided at Appendix E2 of the ES chapter. The primary objective of a Travel Plan is to set out a long-term strategy to facilitate and encourage modes of travel to the site by sustainable means, which reflects current central and local government policy as well as the objectives behind this development.
- 5.40 As per SMBC's Travel Planning Guidance for Developers, TW will provide a financial contribution to SMBC to manage the implementation of the Travel Plan. The financial contribution will fund a Travel Plan Coordinator (TPC) for a 5 year period. The funding would also cover monitoring the outcomes of the Travel Plan and reporting back to SMB on progress towards targets.
- 5.41 At this stage, it has not been agreed who will take responsibility for the TPC role. This will follow as detailed design of the scheme is progressed. It may be that a separate management company or suitably qualified transport consultant, or similar, is appointed to take on this role.
- 5.42 As part of the TP, a sustainable travel voucher will be provided to each household (first occupiers only) which can be used towards bus/rail travel or walking/cycling equipment.

## Car Parking

- 5.43 The Solihull Parking Standards SPD (June 2006) has adopted maximum car parking standards with appropriate consideration to the local context of each site. The standards are summarised in **Table 5.1** for each proposed land use.



**Table 5.1 Summary of Maximum Car Parking Standards**

Type	Car Parking Standards
A1 Shops (Food Retail)	1 space per 14m <sup>2</sup> (*over 1000m <sup>2</sup> )
C3 Dwelling Houses	An average of 2 spaces per dwelling unit (excluding integral garages), unless at accessible locations where only one space per unit will be permitted. Exceptionally, for sites in an accessible location but with a main road frontage, two spaces per unit may be required on road safety grounds.
D1 Education (Primary School including nursery units)	2 spaces per classroom, plus whatever additional provision may be deemed necessary to ensure the operation of the approved Travel Plan.

5.44 Car parking for each land use will be provided in line with the maximum car parking standards as set out in **Table 5.1**.

## Cycle Parking

5.45 The Solihull Parking Standards SPD does not provide specific cycle parking standards. Instead, the SPD (page 2) states that:

*'In developing and implementing vehicle parking standards the Council will:*

- *Normally require provision for safe; secure cycle parking in developments and appropriate provision for motorcycle parking.'*

5.46 Cycle parking will be available for all residential plots within sheds or garages, within the curtilage of properties, as part of the development. An appropriate level of long stay and visitor cycle parking will also be provided for the primary school and local centre.

## Electric Vehicle (EV) Charging

5.47 Provision for EV parking will be provided within the development for each dwelling, to ensure that residents are able to charge their vehicles at their homes.

## Delivery and Servicing

5.48 The site will require access by a range of delivery and servicing vehicles.

5.49 The functionality of the proposed site access junctions has been tested through swept path analysis for the range of vehicles that are routinely expected to access the site as well as emergency vehicles. Swept path analysis has been undertaken for the following:

- Refuse collection vehicle;
- Fire Tender and Aerial Ladder Platform;
- Standard Design Vehicle (SDV) and 7.5t panel van (two way passing);
- Public bus.



5.50 Copies of these drawings are provided in **Appendix L**.

## Summary

- 5.51 The development proposals are supported by a set of parameter plans, a DAS, and a design code for the site design. The Access and Movement parameter plan sets out the locations of the proposed site access junctions on Dog Kennel Lane and Tanworth Lane, plans of which are being submitted for detailed approval, and also shows potential locations for pedestrian and cycle access on Tanworth Lane and Dog Kennel Lane.
- 5.52 The proposed development has been designed to promote travel choice where possible, and to encourage sustainable travel for short journeys, and shared or public transport for longer journeys.
- 5.53 The site is conveniently connected to local services and connections to the existing pedestrian infrastructure will be provided to facilitate use of these amenities. The development proposals seek to enhance this connectivity to ensure that, where short journeys occur, undertaking them by active travel modes is the first choice.
- 5.54 The development proposals will also encourage the use of public transport for residents of the site, through the provision of a bus route through the site and bus stops located at convenient locations along the spine road.



## 6.0 Mobility Strategy and Travel Trends

- 6.1 Mobility is a function of placemaking and is about accessing day to day facilities such as schools, shops, family and friends, healthcare, and the workplace. Strategic sites such as the proposed site allow for a planned and coordinated approach to development, ensuring provision of effective mobility infrastructure. The aim of this approach is first and foremost to reduce the need to travel and offering a range of choice in how to travel. The site does all of these things.
- 6.2 The 'predict and provide' (P&P) approach to assessment and development is now outdated and discredited, and policy dictates that designing communities centred around the private car or judging developments based on the ease at which the private car commuter passes through a highway network during peak periods cannot continue. Instead, a 'vision and validate' (V&V), as per Paragraph 112 in the draft NPPF consultation, approach should be adopted to create the places which stand the passage of time for years to come, are not car dominated and break the chain with respect to mobility. National and local policy with respect to movement, health and wellbeing and working from home is now starting to reinforce the V&V approach to placemaking, and these are an essential part of meeting the UK's carbon reduction goals to tackle the declared climate emergency.

### Shift in Trends

- 6.3 As set out earlier in paragraph 2.4 and paragraph 2.21, the Covid-19 crisis has focused minds and brought issues, such as working from home, health, community, internet shopping, deliveries to the forefront. This means that there is no certainty of the future traffic or travel situation beyond the immediate short to medium term.
- 6.4 The requirement for access to local shops and services has been amplified by the Covid-19 pandemic with an increased level of dependence on neighbourhoods and neighbourhood centres, rather than larger urban centres traditionally relied upon for access to jobs, shops and other community-based services.
- 6.5 This change in attitude towards travel and mobility has been facilitated by a number of factors including the rapid growth in smart phones with internet access, combined with location services enabling users to access, order and pay for transport services in an integrated way, as well as the recent Covid-19 pandemic and a renewed desire for local living.
- 6.6 The Covid-19 pandemic has provided a step-change in working habits when it comes to revealing to employers and employees alike, that working from home or from a 'Third-Place' is a viable and attractive option for every-day life. During the first Covid-19 pandemic in the UK, every worker who had the ability to work from home did so.
- 6.7 More than working habits however, the Covid-19 pandemic has shown people the benefits of local living and taking an active part in their local communities. It has never been more important to build for communities where residents can visit friends and family within their local neighbourhood, get a coffee, or pop to a shop for milk all within a walk or cycle from their home.



6.8 The V&V approach for the proposed development at Dog Kennel Lane embraces a place-based solution that supports the changing needs of residents post Covid-19, by demonstrating that many of the needs for day-to-day living are available within a walkable neighbourhood, thereby minimising the need for individual wider travel. This supports not only prevailing transport principles, but also key health and wellbeing aspirations, as well as aiding in working towards reduced carbon emissions.

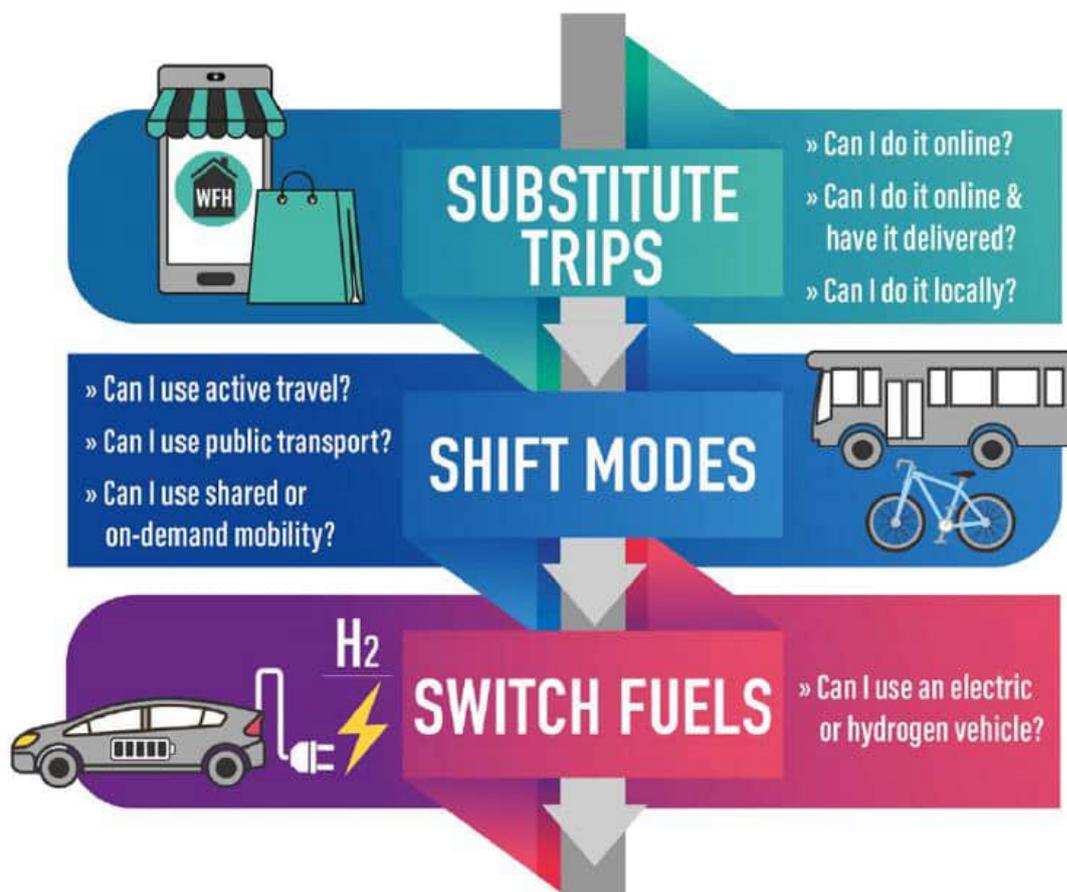
### Sustainable Accessibility and Mobility (SAM) Framework

6.9 Within the Royal Town and Planning Institute (RTPI) report on Net Zero Transport, research was undertaken on how places can reduce their surface transport emissions by 2030, as part of measures to achieve net zero by 2050. It recognises that a decisive break for the conventional approach of creating additional road capacity to meet predicted changes is needed.

6.10 To achieve this, there is a need to create a place-based approach with solutions that create better communities. A focus on the role of place in reducing trips should be the priority, followed by maximising the remaining trips to use sustainable transport modes.

6.11 This hierarchy is summarised within the Sustainable Accessibility and Mobility (SAM) Framework, shown in **Figure 6.1**.

**Figure 6.1 Sustainable Accessibility and Mobility Framework**



- 6.12 The SAM Framework advocates designing new and extended communities in the most sustainable way whilst reducing the need to travel, supporting uptake in shared and active travel whilst advancing low emission vehicles; as follows:
- Substitute Trips (minimise trips): Minimise travel demand by applying 20-minute neighbourhood principles to site design. Maximise opportunities for living local with safe streets, amenities, superfast broadband, and work-hubs.
  - Shift Modes (minimise least sustainable modes): Make shared mobility the natural choice over private car with public transport enabled by Mobility as a Service applications.
  - Switch Fuels (minimise most polluting fuels): Future-proofed charging infrastructure to enable growth in electric vehicles.
- 6.13 The Mobility Strategy supports the vision by following the SAM (sustainable accessibility and mobility) Framework<sup>1</sup>. The first stage is a substitution of trips, this is minimising travel demand first through facilitating virtual mobility. This includes working from home, online shopping etc. Secondly, this refers to where travel needs to occur, ensuring it can be done locally by making certain that key needs are available within a walkable environment.
- 6.14 Shifting modes is making active and shared mobility the natural choice over the private car, with MaaS (mobility as a service) enabled transport options.
- 6.15 Finally, switching fuels refers to minimising the most polluting fuels. Future-proofing of the proposal to provide charging infrastructure is crucial.

## Millennials & Gen Z

- 6.16 “The millennials don’t value cars and car ownership, they value technology – they care about what kinds of devices you own.” – Mimi Sheller, a sociology professor at Drexel University and Director of the Centre for Mobilities Research and Policy<sup>2</sup>.
- 6.17 In 1992/94 almost 50% of people aged 17-20 possessed a car license. In 2021 the proportion had reduced to under 25%, reflecting the change of priorities of young people. The graph below shows that the trend has remained stagnant when considering the average over the last decade or more, although the most recent decrease between 2019 and 2021 may be in part due to Covid-19. The change in car license possession is summarised in **Chart 6.1**.

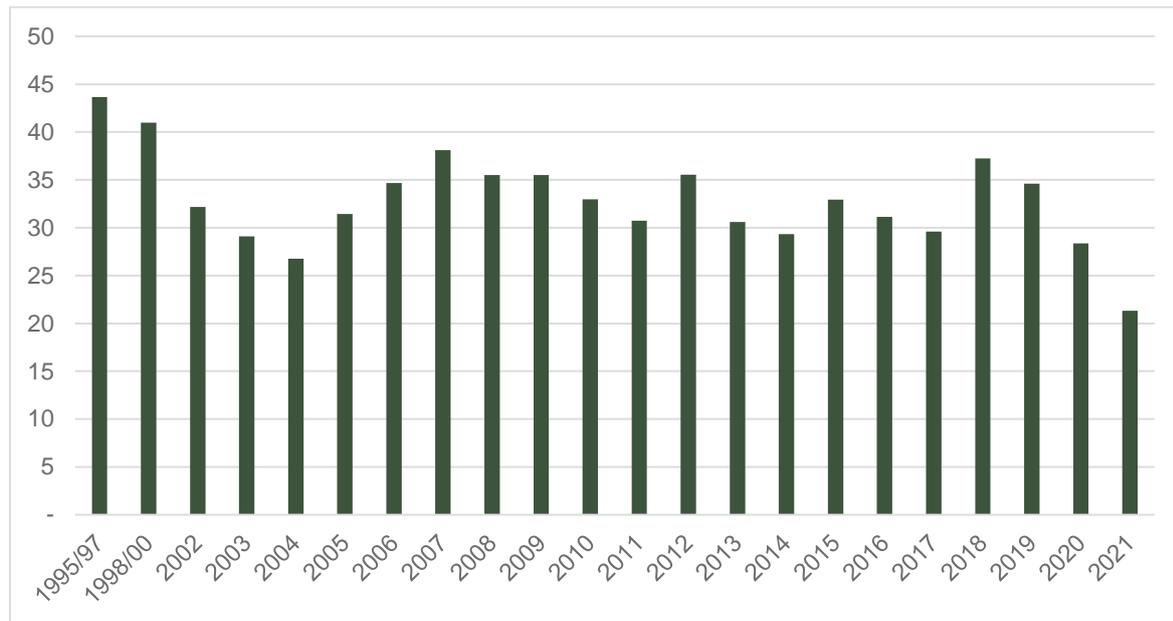
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<sup>1</sup> RTP1, Net Zero Transport: the role of spatial planning and place-based solutions, January 2021

<sup>2</sup> <http://drexel.edu/coas/faculty-research/faculty-directory/sheller-mimi/>



**Chart 6.1 Full Car Driving License Holders Aged 17-20 Years (ONS 2021)**



6.18 The travel patterns and behaviour of young people is critical given the timescales for the proposed development, and the need to address and accommodate the needs of the people who will be living at the proposed development in the future in line with V&V rather than design and forecast based on historic travel patterns and behaviour.

## Mobility

6.19 Transport policy, which promotes active travel and places single occupancy car use at the bottom of the movement hierarchy, is intrinsically linked to health policy. Rising obesity is caused by sedentary lifestyles, and there is now a cross over between transport and health in prioritising investment in, and use of, active (walking and cycling) travel corridors to deliver transport objectives and health objectives.

6.20 The common threads through local and national policy are:

- Mobility, access to day to day and other facilities, is fundamental to ‘liveability’;
- Mobility must be provided through a plethora of realistic choices; and,
- The highest priority travel choices are ‘those which are most space efficient, most energy efficient, are likely to result in good community integration, and those which combat a sedentary lifestyle.’

6.21 Less reliance on the private car is largely delivered by a shift in culture. It is a shift in the way in which people choose to live, work and expect to be able to travel.

6.22 This is people exercising choice in minimising their own inconvenience. It is people choosing healthier lifestyles. By and large the result is more interactive communities and a greater capacity for movements without building more and bigger roads.



- 6.23 The opportunities for mobility, where mobility includes accessibility of friends, services, facilities, workplace, school and other places, includes these in hierarchical order (highest priority first).
- Using technology at homes (video calls, internet shopping etc)
  - Walking and cycling
  - Public transport
  - Multi-occupancy cars
  - Single-occupancy cars
- 6.24 Through the proposed initiatives, beginning with design and including the Travel Plan, a new residential development to the south of Dog Kennel Lane will manage behaviour. It can provide travel education, travel help, and the means of encouragement to travel sustainably from the outset. In doing so, it will accentuate interaction within the community.
- 6.25 Mobility measures applied from the outset at this site will deliver an excellent foundation in new residents' travel from that of existing residents, which in turn will be influenced by changing attitudes and changing policies. The masterplan design supports this behavioural change, providing people with the flexibility to choose how they travel where possible, and how they plan their journeys.
- 6.26 Pedestrian connectivity in the area will be enhanced through the development proposals which will benefit new residents at the site as well as residents within the existing communities.

## Local Living

- 6.27 Local living or 'liveability' is currently at the forefront of people's minds, and 20-minute neighbourhoods are based upon a design ethos of creating complete, compact, and connected neighbourhoods where people can meet their everyday needs within a short walk or cycle. Many of the existing local facilities within this area of Solihull are within a 20-minute walk or cycle of the proposed development site.
- 6.28 It is stated in the DfT Active Travel: Local Authority Toolkit (13<sup>th</sup> April 2022) that:
- 'Research shows that people are happy to walk for 20 minutes to get to the places they need to go. Eighty percent of journeys under a mile are made on foot, which usually equates to around a 20-minute walk.'*
- 6.29 This is not a new concept and historically many towns and cities have evolved around walkable neighbourhoods, and thus model similar to a 20-minute community. The emergence of these walkable places to live has grown around the world, and the need for them has only been quickened by the Covid-19 pandemic which has put a spotlight on the importance of the liveability of where we live.
- 6.30 This idea presents multiple benefits including boosting local economies, improving people's health and wellbeing, increasing social connections in communities, and tackling the climate change emergency.



**Figure 6.2 20 Minute Neighbourhood Concept**



6.31 **Figure 6.2** illustrates examples of the types of facilities provided within towns and cities, and in the case of the development site many of these facilities are situated within the surrounding area and are not required on site.

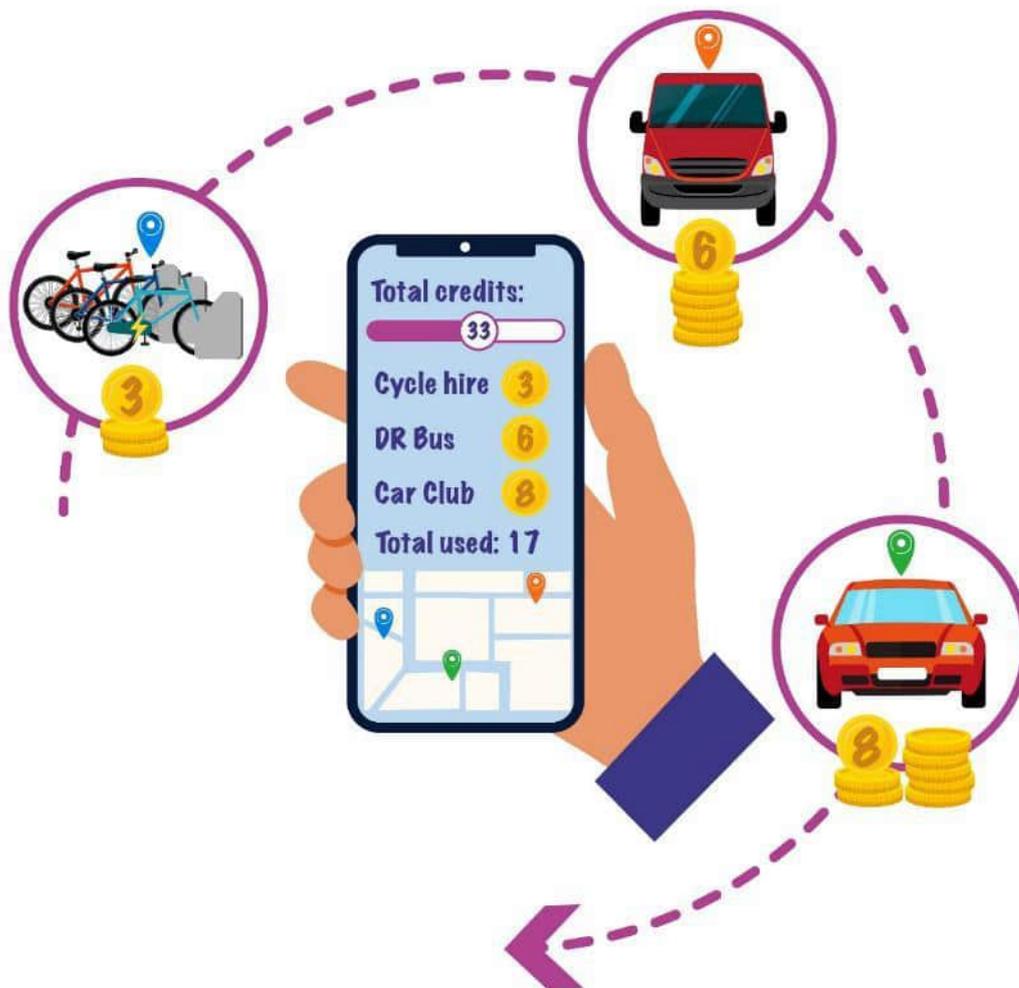
6.32 As shown in the Local Facilities Plan in Chapter 2, a number of local facilities are located within a 20 minute walk (round trip) from the centre of the site. These include bus stops, employment sites, restaurant and lifestyle/healthcare services. A primary school, open space, play, sports fields, and a local centre will also be provided on site to ensure that these facilities are located in close proximity to future residents of the site.

### Mobility as a Service

6.33 Mobility-as-a-Service (MaaS) is at the forefront of change, and is a concept of combining services from public and private transport providers in one place which allows users to create and manage trips, which they can then pay for from a single account, typically a single app.



**Figure 6.3 Example of Mobility as a Service (MaaS)**



6.34 MaaS can be delivered by a range of innovative new mobility services complimenting more established transport modes, and can include:

- Active Travel Corridors;
- Car clubs/carpooling;
- Virtual mobility; and
- Personalised Travel Planning.

6.35 One single initiative will not deliver mobility, but the combination of these services and the collection of access to each service in a single location (or app) will provide people with the mobility and choice they desire.

6.36 It is anticipated that the site can provide for MaaS through many of these initiatives.



## Car Clubs and Carpooling

- 6.37 A car club is where several people access and drive the same vehicle. For example, several people in the same community would drive the car on different days of the week.
- 6.38 A community car club is a local, member-based initiative that provides access to self-service, pay as you drive, low-carbon vehicles. Often community car clubs are run by local groups to support their communities. It is a convenient and affordable way of using a car, without the expense of owning one.
- 6.39 Access without ownership is becoming more common in modern-day living particularly in areas which are accessible and have good access to public transport – i.e. travel choice.
- 6.40 Related to the observed trend in car ownership and driving licenses, car clubs are becoming more prominent in towns and cities across the UK, and car club spaces can be located strategically at key destinations, major employment sites, transport hubs, and town and city centres. The membership of car clubs is increasing, reflecting people’s changing attitudes towards Mobility.
- 6.41 Formal car clubs include Enterprise Car Club and Co-Cars. Enterprise Car Club has numerous cars across the UK and most notably there is a vehicle located at Blythe Valley Park and at Planet Ice within Solihull.
- 6.42 Carpooling or car sharing is where a car driver will use their own personal vehicle to give lifts to other passengers, usually whose origins and destinations are similar to their own.
- 6.43 App-based carpooling has now very much taken-off (i.e. Bla Bla Car and Liftshare), and lifts can be booked on demand, reflecting modern lifestyles, removing the requirement to plan journeys well in advance to participate in an effective carpooling system. Carpooling is also available through apps such as Uber and Lyft.
- 6.44 There are several benefits to car clubs/carpooling:
- Cost savings (i.e. travel costs and the costs of owning a vehicle);
  - Less congestion and fewer cars on the road;
  - Reduces parking issues; and
  - Networking/making friends.
- 6.45 Carpooling will be encouraged within the development through the Travel Information Pack which will be prepared by the TPC and disseminated to residents.

## Personalised Travel Planning

- 6.46 Personalised Travel Planning (PTP) can have a significant impact on travel behaviour and travel patterns, helping to achieve more sustainable travel practices and healthier lifestyles, which in turn contribute to a more socially inclusive community and help protect the environment. PTP can be effective both amongst existing residents and communities and in new developments.



- 6.47 PTP provides tailored information directly to the individual on sustainable mobility options through a one-to-one discussion with a PTP Adviser. The personal approach and specifically tailored information can lead to a greater propensity for behavioural change than a one-size-fits-all approach.
- 6.48 PTP will be put in place at the proposed site by the Travel Plan Coordinator to enable residents to make the most of the wide range of travel choices that will be available, and to contribute to instilling sustainable travel behaviour from the outset (See the Travel Plan).

## Summary

- 6.49 To ensure the sustainability of the site, the Mobility Strategy has defined what current travel trends will impact the site and how the development will both adapt to this and ensure that journeys are undertaken in the most sustainable way possible.
- 6.50 The site, by design, will deliver many of these benefits within the site in terms of mobility, and being located close to local facilities including schools, employment, shopping, and public transport facilities, will deliver growth in that coordinated and sustainable manner. It will be one of the catalysts for the uptake of the increasing realistic travel choices within the community, in accordance with national and local policy.
- 6.51 This development has the opportunity to facilitate changes in attitudes towards new residential development in terms of sustainability and accessibility of services, and will provide measures to ensure that choice is provided so that travel behaviour is enabled to change. In this respect, the measures proposed, either embedded within the development proposals through site design, or through the Travel Plan measures, will provide betterment to the existing community and hence have a more far-reaching effect on travel behaviour, choice, and modal split.
- 6.52 One single initiative will not deliver mobility, but the combination of these services will provide people with the mobility and choice they desire for the various trips they make.



## 7.0 Trip Generation and Distribution

### Trip Generation

- 7.1 To understand the potential demand from the proposed development, trip rates have been derived from TRICS. TRICS is an industry-wide recognised database containing trip rate information, and interrogating the TRICS database to calculate trip rates by land use, represents an established and accepted methodology. It is widely used as part of the planning process by both developer consultants and local authorities.
- 7.2 To calculate residential trip rates for the site the following parameters have been set:
- Land Use: House Privately Owned
  - Location: (UK Excluding Greater London and Ireland)
  - Location Type: Edge of Town
  - Date: 01/01/2023 to 14/11/2023 (excluding surveys undertaken during the Covid-19 Pandemic).
- 7.3 This resulted in a total of 10 surveys, all of which are post-COVID and representative of the change in travel habits (i.e. working from home). The TRICS output files for all land uses at the site are included at **Appendix M**.
- 7.4 The total person trip rate for the AM (7-10) and PM (16-19) peak periods are shown in **Table 7.1**.
- 7.5 The total person trip rates for the AM and PM peak periods are shown in **Table 7.1** below.

**Table 7.1 Total Person Trips – Housing**

Time Period	Total People Trip Rates – Per Unit			Total People Trip Generation		
	Arrivals	Departures	Total	Arrivals	Departures	Total
07:00 – 08:00	0.086	0.519	0.605	62	373	435
08:00 – 09:00	0.204	0.757	0.961	147	544	691
09:00 – 10:00	0.173	0.274	0.447	124	197	321
16:00 – 17:00	0.477	0.249	0.726	343	179	522
17:00 – 18:00	0.553	0.233	0.786	398	168	565
18:00 – 19:00	0.391	0.161	0.552	281	116	397

### Journey Purpose

- 7.6 The National Travel Survey, which consists of a face-to-face interviews and a seven day self-completed written travel diary, allows us to understand trips by journey purpose, and the mode split of trips for each purpose. The 2021 dataset has been used as the latest data available at the time of assessment, however more recent data has been released subsequently in 2022 which demonstrates a lower proportion of trips for commuting purposes than used in this assessment. This supports the direction of trends towards less travel associated with



commuting and supports the application of increased working from home used later on for commuting trips.

7.7 A summary of trips by journey purpose in the AM and PM peak periods is provided in **Table 7.2**.

**Table 7.2 National Travel Survey – Trips by Journey Purpose**

Start Time	Commuting	Education	Leisure/Recreation
07:00 – 07:59	53%	20%	27%
08:00 – 08:59	23%	51%	26%
09:00 – 09:59	16%	10%	74%
16:00 – 16:59	26%	11%	63%
17:00 – 17:59	36%	5%	59%
18:00 – 18:59	24%	2%	74%
24hr AADT	22%	17%	62%

7.8 It is clear from the table above that most trips in the AM peak period are made for education purposes.

7.9 These journey purposes have then been internalised where there are local facilities on-site i.e. primary school and local centre. The provision of a primary school onsite results in a large proportion of trips in the AM peak period being internalised.

7.10 The internalisation assumptions are summarised in **Table 7.3**.

**Table 7.3 Internalisation of Residential Trips**

Journey Purpose	Internalisation	Notes
Commuting Trips	0%	
Primary School Trips	90%	2 FE Primary School
Secondary School Trips	0%	
Leisure Trips	10%	Small Local Centre and Sports Pitches

7.11 The external trips for each journey purpose have been applied against a mode split based on the most appropriate data and is summarised in **Table 7.4**. The source of the mode split data is also shown in the table below for each journey purpose.

**Table 7.4 Mode Split by Journey Purpose**

Journey Purpose	Commuting	Primary Education	Secondary Education	Leisure
Train	6%	0%	0%	6%
Bus	8%	3%	12%	8%
Taxi	0%	0%	0%	0%



Journey Purpose	Commuting	Primary Education	Secondary Education	Leisure
Motorcycle	1%	0%	0%	1%
Driving a Car	70%	78%	19%	70%
Car Passenger	5%	0%	0%	5%
Cycling	2%	2%	7%	2%
Walker	8%	18%	62%	8%
Other	1%	0%	0%	1%
Total	100%	100%	100%	100%
Source	2011 Census – Method of Travel to Work – Solihull 2022	2022 NTS – Table 6124a –1 to 2 miles	2022 NTS – Table 614a – 1 to 2 miles	2011 Census – Method of Travel to Work – Solihull 022

### Care Home Trip Generation

7.12 To calculate care home trip rates for the proposed up to 66-bed care home, the following parameters have been set within TRICS:

- Land Use: Health/Care Home (Elderly Residential)
- Location: UK (excluding London and Ireland)
- Location type: Suburban Area, Edge of Town
- Date: 01/01/2016 to 18/06/2023

7.13 The vehicular trip generation for the AM (7-10) and PM (16-19) peak periods are shown in **Table 7.5**.

**Table 7.5 Vehicular Trip Generation – Care Home**

Time Period	Vehicular Trip Rates – per resident			Vehicular Trip Generation – 66 beds		
	Arrivals	Departures	Total	Arrivals	Departures	Total
07:00 – 08:00	0.098	0.081	0.179	6	5	12
08:00 – 09:00	0.073	0.060	0.133	5	4	9
09:00 – 10:00	0.073	0.047	0.120	5	3	8
16:00 – 17:00	0.038	0.056	0.094	3	4	6
17:00 – 18:00	0.034	0.043	0.077	2	3	5
18:00 – 19:00	0.034	0.038	0.072	2	3	5



## Primary School Staff

- 7.14 It has been assumed that 50 staff will be required for the primary school. The assumed profile of arrivals and departures are shown in **Table 7.6**.

**Table 7.6 School Staff Profile**

Time Period	Arrivals	Departures
07:00 – 08:00	20%	0%
08:00 – 09:00	80%	0%
09:00 – 10:00	0%	0%
16:00 – 17:00	0%	80%
17:00 – 18:00	0%	20%
18:00 – 19:00	0%	0%

- 7.15 Then similarly, the 2011 census method of travel to work has been applied to the school staff trips as per the census mode split proportions set out in **Table 7.4**.

## Total Vehicular Trip Generation

- 7.16 Combining all of the above, a summary of the total vehicular trip generation before any mode shift is applied is shown in **Table 7.7**.

**Table 7.7 Total Vehicular Trip Generation (no mode shift applied)**

Time Period	Arrivals	Departures	Total
07:00 – 08:00	41	205	246
08:00 – 09:00	83	205	288
09:00 – 10:00	74	118	192
16:00 – 17:00	199	132	331
17:00 – 18:00	246	111	357
18:00 – 19:00	177	73	250

- 7.17 However, with the implementation of Travel Planning and other sustainable incentives, a 10% mode shift has been applied to all trips, excluding care home trips. The vehicular trip generation with this mode shift is summarised in **Table 7.8**.

**Table 7.8 Total Vehicular Trip Generation (with 10% mode shift applied)**

Time Period	Arrivals	Departures	Total
07:00 – 08:00	37	184	221
08:00 – 09:00	75	184	259
09:00 – 10:00	67	106	173
16:00 – 17:00	179	119	298



Time Period	Arrivals	Departures	Total
17:00 – 18:00	222	100	322
18:00 – 19:00	159	66	225

7.18 The multi-modal trip generation associated with the development proposals is shown in **Table 7.9**.

**Table 7.9 Multi-Modal Trip Generation**

Mode	AM (0800-0900)		PM (1700-1800)	
	Arrivals	Departures	Arrivals	Departures
Train	4	14	20	8
Bus, minibus, coach	10	36	29	12
Taxi	0	1	2	1
Motorcycle, scooter or moped	0	1	2	1
Driving a car or van	55	205	246	104
Passenger in a car or van	3	12	17	7
Bicycle	4	16	8	3
On foot	30	113	37	16
Other method of travel to work	0	1	2	1
Total	107	398	362	153

7.19 It should be noted that the multi-modal trip generation shown in **Table 7.9** is based on existing mode split data for the area and a conservative 10% mode shift to other modes. With the provision of a bus service through the site, it is likely that the proportion of residents travelling to/from the site by bus will be higher than shown in **Table 7.9**.

## Trip Distribution and Access Assignment

7.20 The vehicle trip distribution has been based on the 2011 Census - WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level) for Solihull 022.

7.21 A summary of the distribution is shown in **Table 7.10**. The full trip distribution is attached as **Appendix N**.

**Table 7.10 Trip Distribution**

Time Period	Proportion (%)
M42 (N)	30.2
Stratford Road (N)	23.9



Time Period	Proportion (%)
B4102 Marshall Lake Road	15.2
M42 (S)	11.7
Cranmore Blvd	6.3
Dickens Heath Road	3.6
Monkspath Hall Road	3.3
Blythe Gate	2.4
B4102 Tanworth Lane (S)	1.9
A3400 Stratford Road (S)	0.9
Tanworth Lane (N)	0.6
Total	100

7.22 Each route from **Table 7.10** has been assigned a respective access, and where applicable, a route has been split over each access. This includes the A34 access where there will be a vehicular connection between the Richborough (planning application ref: PL/2024/00598/PPOL) and TW land (i.e. the application site). The assignment of development traffic for each site access is summarised in **Table 7.11**.

**Table 7.11 Site Access Trip Assignment**

Time Period	Total	Tanworth Lane Access	Dog Kennel Lane – West Access	Dog Kennel Lane – East Access	A34 Access
M42 (N)	30.20%	-	-	-	30.20%
Stratford Road (N)	23.90%	8.00%	8.00%	8.00%	-
B4102 Marshall Lake Road	15.20%	5.10%	5.10%	5.10%	-
M42 (S)	11.70%	-	-	-	11.70%
Cranmore Blvd	6.30%	-	3.10%	3.10%	-
Dickens Heath Road	3.60%	3.60%	-	-	-
Monkspath Hall Road	3.30%	-	-	-	3.30%
Blythe Gate	2.40%	-	-	-	2.40%
B4102 Tanworth Lane (S)	1.90%	1.90%	-	-	-
A3400 Stratford Road (S)	0.90%	-	-	-	0.90%
Tanworth Lane (N)	0.60%	0.20%	0.20%	0.20%	-



Time Period	Total	Tanworth Lane Access	Dog Kennel Lane – West Access	Dog Kennel Lane – East Access	A34 Access
Total	100%	18.80%	16.40%	16.40%	48.50%

## Committed Developments

- 7.23 As mentioned in Chapter 1, a VISSIM Microsimulation Model is being development to assess the impact of the cumulative developments of the now withdrawn Solihull Draft Submission Local Plan allocations ‘BL1, BL2 and BL3’ on the local highway network.
- 7.24 As part of the development of the microsimulation model, the ‘reference case’ scenario includes committed development trips have been included as per the PRISM uncertainty log provided by SMBC. A total of 44 committed development sites are included within the model. Only ‘near certain’, ‘more than likely’ and ‘reasonably foreseeable’ sites have been selected and considered. The location and details of the committed development sites are included at **Appendix O**.
- 7.25 In the 2036 future year scenario, all committed sites are assumed to have a 100% build out rate.
- 7.26 As the committed development trips included in the model are already higher than the TEMPro growth trips, no TEMPro growth has been added over and above the committed development, to avoid double counting within the model.



## 8.0 Highway Network Assessment

- 8.1 This chapter determines the impact of the proposed vehicular trip generation at the site access junctions.
- 8.2 As previously mentioned, a VISSIM local area traffic model is being developed to assess the impacts of the proposed development and other cumulative developments on the wider highway network.

### Site Access Junctions

- 8.3 To understand the capacity and potential future performance of the proposed access junctions, these junctions have been assessed using ARCADY and PICADY within the Junctions 10 modelling software. The assessments have been undertaken for the following scenarios:
- 2036 (2023 observed traffic + TEMPro growth) + Proposed Development; and
  - 2036 Cumulative Scenario (derived from the VISSIM model).
- 8.4 The site access junctions have been modelled using modelled flows derived from the VISSIM model for the 2036 cumulative scenario. It should be noted that the cumulative scenario currently includes all cumulative development sites but does not account for any improvements, interventions or mode shift assumptions. This therefore represents a worst case scenario.
- 8.5 It should also be noted that, whilst the spine road for the proposed development will provide a link from Dog Kennel Lane to Dickens Heath Road, the spine road is not intended to be used as a bypass or rat run and will be designed in such a way as to deter background traffic using it. The VISSIM traffic model has been updated to reflect this and only traffic from the Blythe ward developments is to use the proposed development spine road.
- 8.6 The junctions have also been modelled to assess the impact of the proposed development without the cumulative developments included. In this scenario, the development is assessed as a standalone development with no access provided through the Richborough site to A34 Stratford Road.
- 8.7 Once the VISSIM traffic model has been reviewed and validated by SMBC and NH, the traffic model will form the basis of future traffic capacity analysis on the local highway network.
- 8.8 It should be noted that traffic modelling is not an exact science, and therefore traffic models should not be treated as a black box, providing a picture of the future position on the highway network.
- 8.9 They can however act as a useful tool in making a judgement to be made on the likely effects of the proposed development but this needs to be balanced against the overall movement picture and matters pertaining to travel choice, sustainability and behavioural change which are fully policy compliant.



## B4102 Tanworth Lane

- 8.10 The existing junction layout for B4102 has been assessment for the 2036 + Committed Development scenario (2023 observed traffic + TEMPro growth. This is useful to compare the impacts on the roundabout as a result of the additional site access arm to the TW site and the proposed development. The results of the ARCADY assessment for the current junction layout is shown in **Table 8.1** and the full modelling outputs are included at **Appendix P**.

**Table 8.1 ARCADY Results Summary – B4102 Tanworth Lane Site Access (existing layout)**

Junction Arm	2036 + Committed Development			
	AM Peak		PM Peak	
	RFC	Queue	RFC	Queue
B4102 N	0.50	1	0.86	7
B4102 S	0.74	3	0.65	2
Dickens Heath Road	0.99	21	0.50	1

- 8.11 The proposed site access at B4102 Tanworth Lane has been assessed using ARCADY for the assessment scenarios set out above in the AM and PM peak hours. The results of the ARCADY assessment are summarised in **Table 8.2** and the full modelling outputs are included at **Appendix P**.

**Table 8.2 ARCADY Results Summary – B4102 Tanworth Lane Site Access (proposed layout)**

Junction Arm	2036 + Development				2036 Cumulative Development (from VISSIM)			
	AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
B4102 N	0.49	1	0.88	7	0.78	4	0.81	5
Site Access	0.05	1	0.06	1	0.33	1	0.42	1
B4102 S	0.75	3	0.65	2	0.63	2	0.76	3
Dickens Heath Road	0.99	23	0.51	1	0.41	1	0.58	2

- 8.12 The results shown in **Table 8.1** demonstrates that Dickens Heath Road is approaching capacity in the 2036 + Committed Development scenario. The results in **Table 8.2** demonstrate that queuing on Dickens Heath Road worsens as a result of the proposed development, however, this is only by 2 vehicles. Therefore, the level of queuing and delay on this link is as a result of general traffic growth on the network and not as a result of the proposed development.



8.13 Once the VISSIM model has been reviewed and approved by SMBC, this traffic model will form the basis of future assessments of the local highway network and the site access junctions.

### Dog Kennel Lane / Site Access Junction (east)

8.14 The proposed site access from Dog Kennel Lane (east) has been assessed using PICADY in the AM and PM peak periods for the development scenarios as listed above (given that the junction will not exist in the Base scenario).

8.15 The PICADY results are summarised in **Table 8.3** and the full modelling outputs are included at **Appendix P**.

**Table 8.3 PICADY Results Summary – Dog Kennel Lane Site Access (east)**

Junction Arm	2036 + Development				2036 Cumulative Development (from VISSIM) Scenario			
	AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
B-C	0.0	0	0.00	0	0.09	1	0.01	0
B-A	0.4	1	0.24	1	0.13	1	0.05	1
C-AB	0.0	0	0.00	0	0.11	1	0.18	1

\*A = Dog Kennel Lane East, B = Site Access, C = Dog Kennel Lane West

8.16 As shown in **Table 8.3**, the site access junction will operate well within its theoretical design capacity in all assessment scenarios, with minimal queuing on the site access arm of the junction and a maximum RFC of 0.24 in the AM peak period.

### Dog Kennel Lane / Site Access Junction (west)

8.17 The proposed site access from Dog Kennel Lane (west) has been assessed using PICADY in the AM and PM peak periods for the development scenarios as listed above (given that the junction will not exist in the Base scenario).

8.18 The PICADY results are summarised in **Table 8.4** and the full modelling outputs are included at **Appendix P**.

**Table 8.4 PICADY Results Summary – Dog Kennel Lane Site Access (west)**

Junction Arm	2036 + Development				2036 Cumulative Development (from VISSIM) Scenario			
	AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
B-C	0.06	1	0.04	0	0.05	0	0	0



Junction Arm	2036 + Development				2036 Cumulative Development (from VISSIM) Scenario			
	AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
B-A	0.18	1	0.10	1	0.12	1	0.02	0
C-AB	0.06	1	0.13	1	0.03	0	0.03	0

\*A = Dog Kennel Lane east, B = Site Access, C = Dog Kennel Lane west

8.19 As shown in **Table 8.4**, the site access junction will operate well within its theoretical design capacity in all assessment scenarios, with minimal queuing on the site access arm of the junction and a maximum RFC of 0.48 in the AM peak period.

### VISSIM Modelling

8.20 As mentioned in the introduction in Chapter 1, SMBC has requested that a VISSIM microsimulation model be developed to support the development proposals through the planning process and to provide evidence of the future year conditions that may be expected following delivery of the proposed development.

8.21 The SLR Microsimulation Modelling team has therefore been commissioned by a consortium of transport consultancies and site promoters to assess the forecast traffic impacts of former draft site allocations BL1: Land West of Dickens Heath, BL2: Land South of Dog Kennel Lane and BL3: Land at Whitlock’s End Farm as set out within the SMBC Draft Local Plan (now withdrawn).

8.22 The objective of the cumulative impact modelling assessment is to create a suitable tool upon which to base the assessment of traffic impacts pertaining to the delivery of development proposals BL1, BL2 and BL3. The expectation is that the assessment will be able to consider the traffic impacts on a junction and corridor basis and aid the identification of any mitigation measures necessary to limit the development impacts on the local transport network.

8.23 The model extent has been agreed with SMBC and therefore it is considered that the VISSIM model proposed is fit for the purpose of assessing the impacts of the proposed Blythe allocations on the local highway network as well as the approaches to M42 J4. NH has also agreed to the model extent and therefore it is considered that the VISSIM model is also fit for purpose from NH’s perspective, with regards to assessing the cumulative development impacts at M42, J4.

8.24 At the time of submission of the planning application, the VISSIM base model, LMVR and an initial set of modelling results has been issued to SMBC for review and discussion.



## Summary

- 8.25 The impact of the proposed development at the site access junctions is demonstrated to be minimal, with mostly imperceptible increases to delay and queuing at the site access junctions. Equally, the findings from the junction modelling and existing traffic behaviour will not result in any detrimental impact to highway safety and would not give rise to any unacceptable safety impacts.
- 8.26 The cumulative assessment has been undertaken as part of the VISSIM local area model and assesses the impact of the cumulative sites and other committed developments on the wider highway network. These results have been issued to SMBC for review and validation. The results have also been summarised in the Transport ES chapter.
- 8.27 Further discussions will be undertaken with SMBC and NH with regards to the model and the results of the cumulative assessment. Further assessment will then be undertaken to assess the impact of just the proposed development on the local highway network.
- 8.28 The assessment will also include a scenario to assess just the impact of the proposed development on the network.



## 9.0 Summary and Conclusions

### Summary

- 9.1 SLR Consulting Limited (SLR) has been appointed by Taylor Wimpey UK Ltd (TW) to provide highways and transportation advice in relation to development proposals on land to the south of Dog Kennel Lane, Solihull.
- 9.2 The proposed development is to comprise of up to 700 homes, including a self-build area of 0.77ha, a care home of up to 66-beds, a primary school, a local centre and public open space provision. The homes will be a mix of 1-to-5 bedroom houses and apartments, of which 40% minimum will be affordable.
- 9.3 The site currently comprises an area of agricultural land, which lies adjacent to the built area of Solihull. The site is bound to the north by Dog Kennel Lane, to the east and the south by agricultural land and to the west by B4102 Tanworth Lane.
- 9.4 The relevant national and local planning policy and guidance has been referenced in the preparation of this TA. The National Planning Policy Framework (NPPF) sets out a presumption in favour of sustainable development.
- 9.5 The site, along with land to the east controlled by Richborough, was allocated in the Solihull Draft Submission Plan (2020). The Draft Local Plan was withdrawn by Solihull in October 2024 following a letter from the Inspectors in September 2024. The evidence base which underpins the draft Submission Plan and the Inspectors' correspondence in relation to the 'in principle' suitability of the site allocations, including BL2, remain important material considerations to the determination of this planning application.
- 9.6 The development promotes travel choice from the outset where possible by providing links to existing residential areas and the established pedestrian routes. The accompanying Travel Plan will aid in encouraging sustainable travel for short journeys and shared or public travel for longer journeys.
- 9.7 First and foremost, the development is designed to reduce the need to travel in the first instance which takes advantage of rapidly accelerating attitudes to home working and local living. This is achieved through the provision of a primary school and local centre on site which will internalise a proportion of trips to/from the development, particularly education trips during the AM peak period.
- 9.8 The site is in a sustainable location and in close proximity to nearby local facilities and services, with access achievable by active modes of travel as well as by public transport. The development proposals include connections to the existing pedestrian and cycle networks in the vicinity of the site and off-site pedestrian improvements to provide continuous pedestrian routes between the site and local facilities.
- 9.9 Vehicular access to the site is proposed from the Dickens Heath Road / B4102 Tanworth Lane roundabout and from two locations on Dog Kennel Lane. These junctions have been demonstrated to be safe and fit for purpose to cater to the capacity of the proposed development.



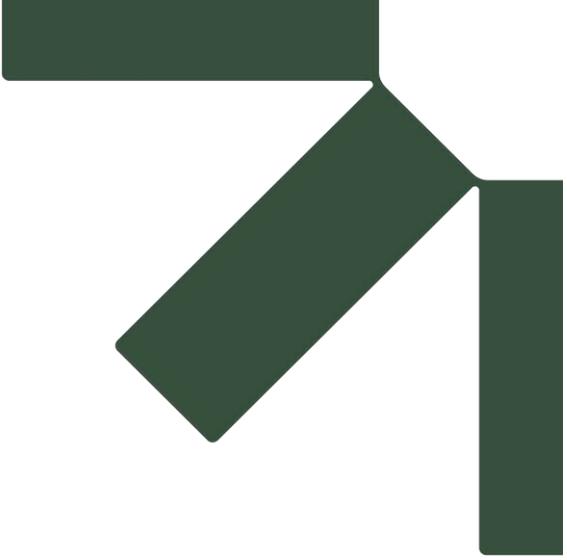
- 9.10 A VISSIM traffic model has been developed with the objective of undertaking a cumulative impact modelling assessment to assess traffic impacts pertaining to the delivery of development proposals BL1, BL2 and BL3. The assessment considers the traffic impacts on a junction and corridor basis and aid the identification of any mitigation measures necessary to limit the development (and cumulative development) impacts on the local transport impact.
- 9.11 At the time of submission of this planning application, the VISSIM Base Model (including LMVR) and an initial set of modelling results has been issued to SMBC and NH. Further discussions will be undertaken with SMBC and NH regarding the validation of the model, modelling results and any required mitigation.

## Conclusion

- 9.12 The site is well located for a residential-led development of this scale, with opportunities to connect to the existing active travel network and the local public transport options.
- 9.13 The development of this site offers an opportunity to create a sustainable community from the outset, through the ancillary land uses proposed on site (primary school and local centre), proposed bus service provision, comprehensive network of pedestrian and cycle routes, and sustainable travel offer through the Travel Plan.
- 9.14 The development accords with the key policy test at Paragraph 115 of the NPPF in that the development proposals would not cause an unacceptable impact on highway safety, and the residual cumulative impacts on the road network would not be severe.

In conclusion, this is a well located and sustainable site which, in transport terms, is policy compliant and hence is acceptable from a transport and highways perspective. The proposals allow for delivery of much needed housing in the borough, whilst working towards the UK's target for Carbon Net Zero by 2050.





# **Appendix A SMBC Cumulative Assessment Letter**

## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

SLR Project No.: 425.000418.0001

December 2024



**ECONOMY & INFRASTRUCTURE  
DIRECTORATE**

**Council House, Manor Square,  
Solihull, West Midlands B91 3QB**

Tel: 0121 704 6598

Email: [gurdip.nagra@solihull.gov.uk](mailto:gurdip.nagra@solihull.gov.uk)

[www.solihull.gov.uk](http://www.solihull.gov.uk)

Please ask for: Gurdip Nagra

Date: 11<sup>th</sup> August 2023

Ref: Modelling work for Solihull Local Plan Review Sites

Dear Sirs,

The Council's Local Plan Review includes a number of strategic housing and employment allocations to contribute towards meeting the development needs for the Borough during the Plan period. As you will no doubt be aware, the examination of the Local Plan Review has paused pending the publication of the new NPPF. The Council recognises however that work remains ongoing on the proposed allocations and that a number of planning applications have been submitted and are intended to be submitted in the coming months. In this respect, the Council have agreed a process whereby it will help it assess any relevant applications ahead of the Plans adoption, having regard to Very Special Circumstances and principles of Sustainable Development<sup>1</sup>.

Whilst the Council has undertaken a range of transport assessment work as part of its Local Plan evidence base<sup>2</sup> this has focussed on strategic matters (e.g. the PRISM modelling). As schemes move towards the Development Management phase the applicant will need to ensure they provide the necessary detailed transport assessments to support any applications they chose to submit and evidence the impacts and opportunities for mitigation (including strategic infrastructure requirements).

This will mean the level of detail needed to support applications will increase. Whilst PRISM has been useful to consider the high-level cumulative impacts of all the proposed developments, this is not considered the appropriate tool needed to assess detailed impact. It will also still be necessary to have a single scenario understanding of relevant cumulative impact.

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<sup>1</sup> [Agenda for CPH Climate Change & Planning Decision Session on Tuesday 25th July 2023, 6.00 pm | Solihull City and District Council](#)

<sup>2</sup> This can be found at <https://eservices.solihull.gov.uk/LocalPlan/> using "Evidence Base – Transport" as the Document Type.

One of the key areas when undertaking the detailed transport assessments for any new development is understanding the impacts the additional trips generated will have on the transport network both now and in the future. This often uses a 'vision-led decide and provide' approach<sup>3</sup> along with identifying the mitigation measures needed to minimise congestion (including the need for strategic infrastructure provisions) and offer a range of sustainable transport choices.

In order to understand the cumulative impacts of the allocated sites in the Local Plan Review and how these may be mitigated, the Council consider that the most appropriate approach would be for promoters to work together by settlement areas<sup>4</sup> and undertake a joint commission of the modelling work. This would provide a single cumulative scenario view that could then (subject to review by the Council) inform each of the individual Transport Assessments.

In the event applicants would prefer to carry out the modelling work on an isolated individual basis to be submitted to the Council through the planning application process, this will need to include an assessment of cumulative impact with the other local plan sites. This may not be considered favourable as it would include duplication of work and poses the risk of conflicting results. The resultant assessment could mean that the likely impacts of the proposal cannot be suitably assessed, and there will be insufficient evidence that the residual cumulative impacts on the road network would not be severe.

The Council would like to work with site promoters in delivering the homes and jobs the Borough needs and would therefore welcome your support on the joint approach led by promoters by settlement area outlined here. Please respond using the contact details at the top of this letter.

Yours sincerely

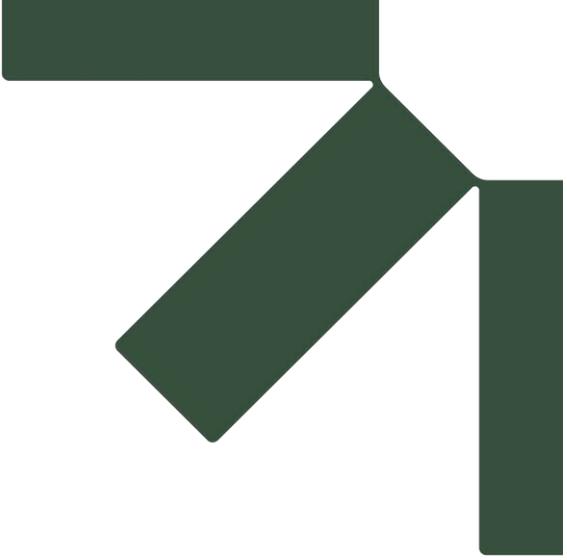
A handwritten signature in blue ink that reads "M. Andrews". The signature is written in a cursive style and is positioned above the printed name and title.

Mark Andrews  
Head of Planning Design and Engagement  
Economy & Infrastructure Directorate

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<sup>3</sup> <https://www.trics.org/decideandprovideguidance.html>

<sup>4</sup> The principal clusters of allocations for this purpose would be sites BC1-6 (Balsall Common), BL1-3 (Blythe) KN1-2 (Knowle), and UK1-3 (UK Central (using UK3 as reference to the NEC). In the case of the Knowle, there is some additional Local Plan evidence at the detailed level provided through the Knowle Transport Study. Site SO1 is expected to be considered in the context of the modelling work being undertaken for Solihull Town Centre.



# Appendix B TA Scoping Note and SMBC Response

## Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024

# Land at Lighthall Farm, Solihull

## Transport Assessment Scoping Note

162088C-TA Scoping Note-V1

February 2022

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### Introduction

1. Vectos has been appointed by Taylor Wimpey (TW) to provide highways and transportation advice in relation to development proposals on land to the south of Dog Kennel Lane, Solihull.
2. The site is allocated as site BL2 in the Solihull Local Plan (Draft Submission Plan) and therefore the principle of housing development in this location has been accepted by Solihull Metropolitan Borough Council (SMBC). The site has capacity for 1,000 dwellings.
3. It is proposed to develop the site (within TW's ownership) to provide circa 700 residential dwellings containing a mix of house types and tenures. The intention is to create a sustainable, socially inclusive community with these overriding principles embodied within the indicative masterplan for the site.
4. It is also proposed to provide the following land uses on the site:
  - 2 form entry primary school;
  - Changing rooms for the sports pitches; and
  - Small local centre.
5. This Scoping Note sets out the scope and proposed approach of the Transport Assessment (TA) that will be prepared in support the proposed development.

### Transport Strategy

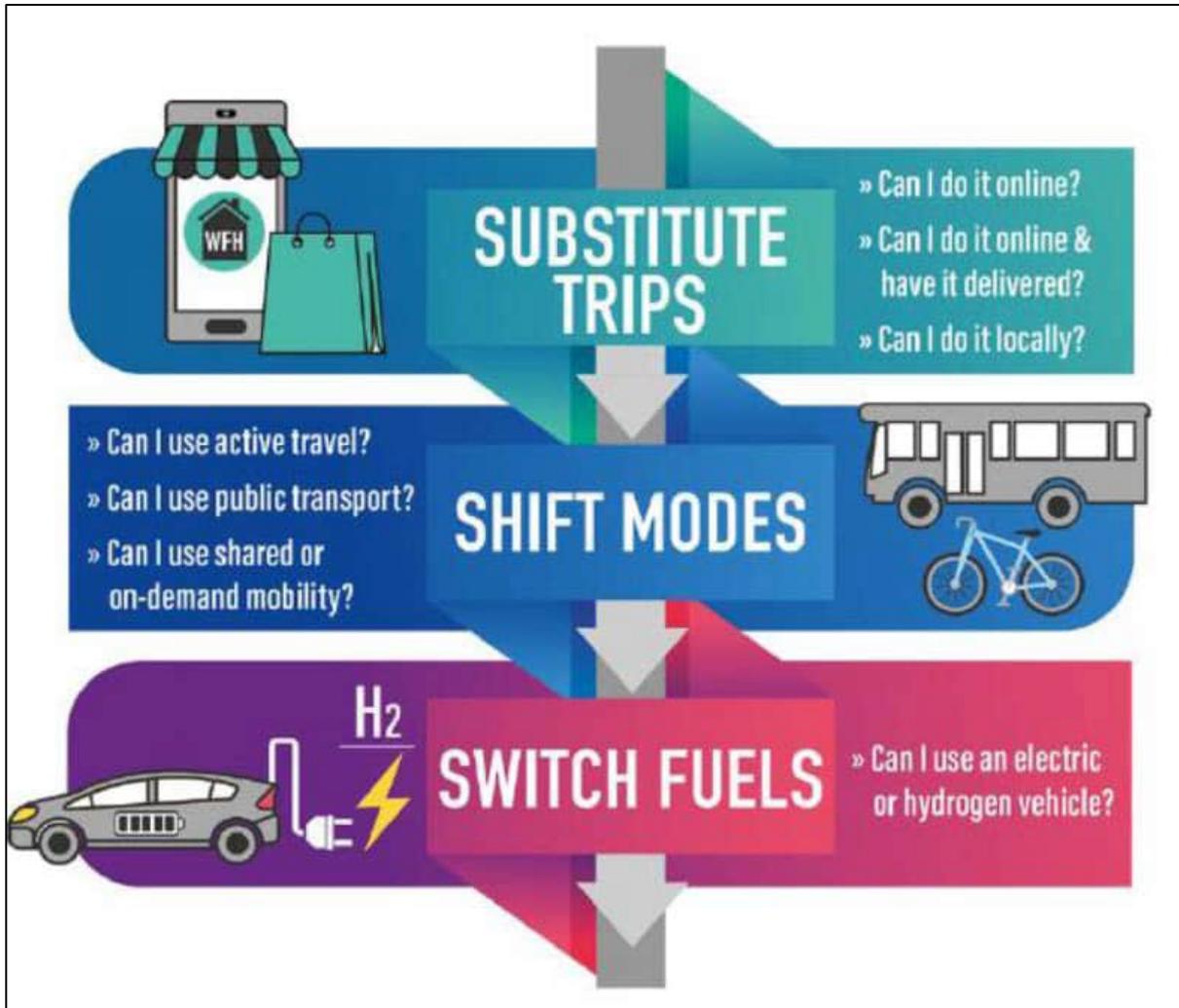
6. The site is already well located in terms of access/connectivity to local amenities and facilities and the transport strategy will be to build on the existing sustainability of the site to create a development which is designed around walking, cycling and public transport before the private car. In doing so, this will be policy compliant, particularly to National Planning Policy Framework (NPPF) and hence reducing/mitigating any severe effect.
7. Large strategic sites allow planned coordinated development and provide effective mobility infrastructure. They are based on achieve all of these aims and are substantially more effective than the alternative of smaller ad hoc and unplanned schemes.

8. The site, by design, will deliver all of these benefits within the site, and being located close to other local facilities including employment, shopping, and public transport facilities, will deliver growth in that coordinated and sustainable manner. It will be one of the catalysts for the uptake of the increasing realistic travel choices within the wider community, in accordance with national and local policy.
9. This development has the opportunity to provide a step-change in the attitude towards large scale residential development in terms of sustainability, accessibility, and Mobility as a Service (MaS) and will provide a Section 106 package to ensure that choice is provided and so that travel behaviour can change. In this respect, the measures proposed will provide betterment to the existing community and hence have a more far-reaching effect on travel behaviour, choice, and modal split.
10. The Transport Vision for the site will include the following:
  - Active Travel Corridors – links to local facilities, employment, and public transport interchanges;
  - Bike sharing/electric bike schemes;
  - Technology (Virtual Mobility);
  - Car clubs/Carpooling; and
  - Safe Routes to School/School Travel Planning.
11. One single initiative will not deliver mobility, but the combination of these services will provide people with the mobility and choice they desire.
12. Our suggested approach for the site will be a ‘vision and validate’ approach rather than a ‘predict and provide’ approach which does little to create a sense of place and seeks to make it more convenient for the car commuter i.e., the antithesis of transport policy.
13. The vision and validate approach at Lighthall Farm will embrace a place-based solution with provision of everything communities need in a 15-minute neighbourhood, thereby minimising the need for individual travel.
14. The Mobility Strategy supports the vision by following the SAM (sustainable accessibility and mobility) Framework<sup>1</sup>. The first stage is a substitution of trips, this is minimising travel demand by applying 15-minute neighbourhood principles to site design.
15. Shifting modes is making active and shared mobility the natural choice over the private car, with Maas (mobility as a service) enabled transport options.

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<sup>1</sup> RTPI, Net Zero Transport: the role of spatial planning and place-based solutions, January 2021

16. Finally switching fuels refers to minimising the most polluting fuels. Future-proofing of proposal to provide charging infrastructure is crucial.



## The Transport Assessment

17. The application will be supported by a Transport Assessment (TA).
18. The TA will be prepared in accordance with the National Guidance on Transport Assessments (March 2007) Delivering Travel Plans Through the Planning Process Research Report DfT and DCLG (2008), and Manual for Streets (MfS) and Manual for Streets 2 (MfS2) which are all widely regarded as providing best practice guidance within the UK.
19. MfS and MfS2 will be used as a framework for the design philosophy, encompassing a comprehensive movement strategy which will inform the shape and layout of the streets serving the development.

20. In particular, the movement strategy will focus on the movement hierarchy within MfS2 with priority given to pedestrians, cyclists, and other vulnerable road users.
21. The scope and extent of the TA will be as follows;

### **Introduction**

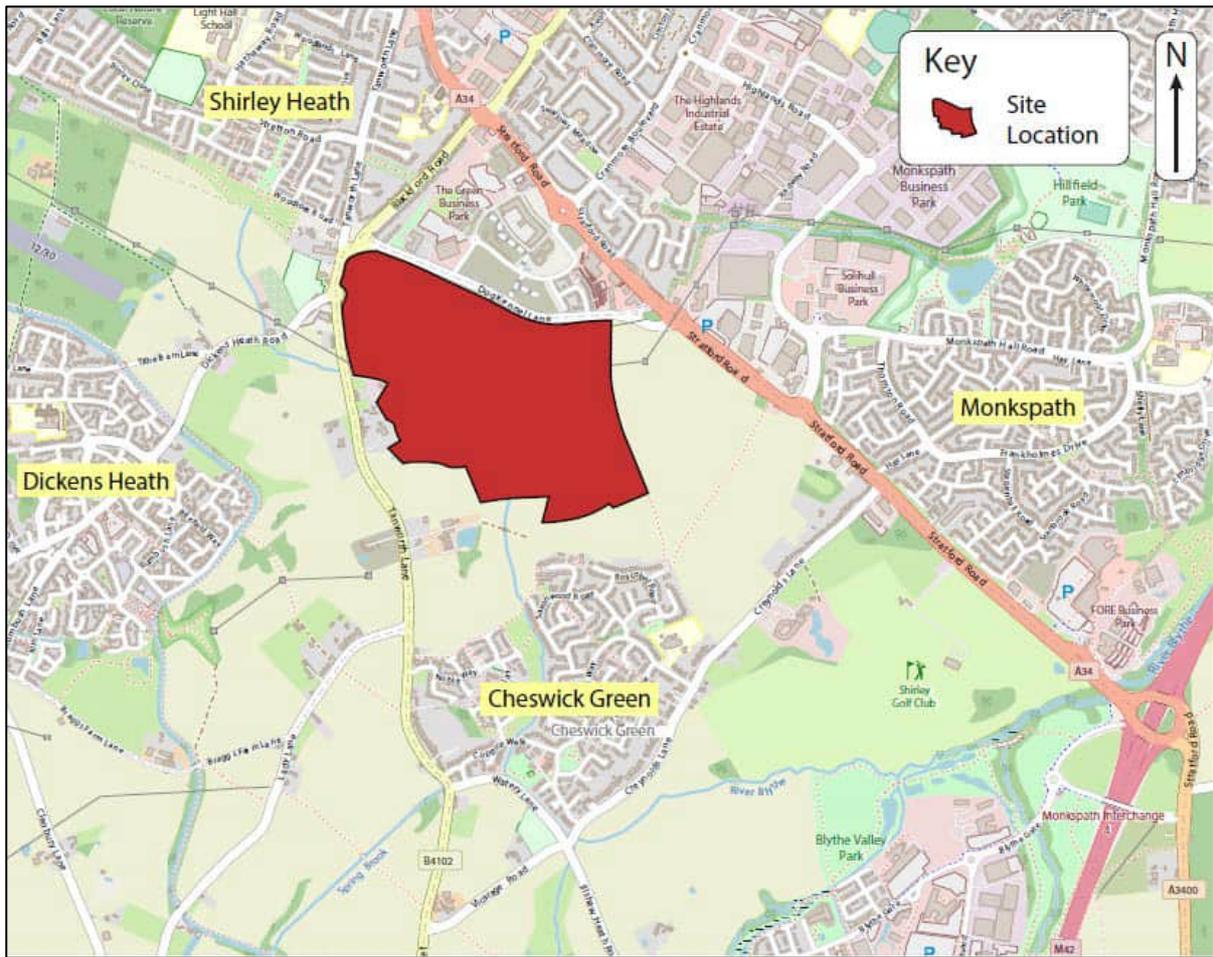
22. This chapter will set out the purpose of the report and will describe the scope of the issues to be covered.

### **Existing Situation**

23. This section of the report will consider the existing accessibility of the site having regard to a range of transport opportunities, including active travel, public transport, and the local highway network in the surrounding area. Existing transport conditions pertaining to the site will be established to provide baseline data against which the potential impacts of the development proposals can effectively be assessed. Baseline observations are to be informed by desktop investigations, site visits and traffic survey data.
24. A high-level review of the existing accessibility of the site is provided below and a more comprehensive review will be contained within the TA. It should be noted that where reference is made to the 'site', this refers to the land controlled by TW.

### Site Location

25. The site currently comprises an area of open agricultural land, which lies adjacent to the built area of Solihull. The site is bound to the north by Dog Kennel Lane, to the east and the south by agricultural land and to the west by B4102 Tanworth Lane. The location of the site is shown in **Figure 1**.



**Figure 1 – Site Location Plan**

26. Development of this site would be designed to encourage trips to be made by sustainable modes, including active travel (walking and cycling), by car sharing and on public transport in an effort to maximise social inclusion and minimise the number of single occupancy private car trips. The location of the site is well suited to the promotion of sustainable travel.

Active Travel

- 27. The area is served by good quality pedestrian routes, through attractive and active environments. Existing pedestrian facilities in the vicinity of the site include formal footways, shared footway/cycleways, and Public Rights of Way (PRoW).
- 28. There are a number of PRoWs located through the site and also in the vicinity of the site which will be retained and improved (if necessary). The PRoWs provide links to A34 Stratford Road, Dog Kennel Lane and into Dickens Heath.
- 29. There are excellent cycle facilities in the vicinity of the site which include a shared footway/cycleway on both sides of A34 Stratford Road. This shared facility provides a cycle link to Shirley Heath in the

north and to Hockley Heath in the south. In addition, there is a signposted, on road cycle route on Hay Lane which provides a link to Widney Manor rail station.

30. Both Dog Kennel Lane and Creynolds Road are categorised as ‘advisory cycle routes’ according to the Solihull Cycling and Walking Map<sup>2</sup>.

Local Facilities

31. The local active travel network provides existing and future residents with access to a wide range of local facilities, including education, retail, healthcare, and leisure facilities. A summary of the local facilities is provided in **Table 1** and the location of these facilities relative to the site are shown in **Figure 2**, along with walking and cycling times. It should be noted that the distances and walking/cycling times shown in **Table 1** are based on the existing highway/pedestrian/cycle networks.

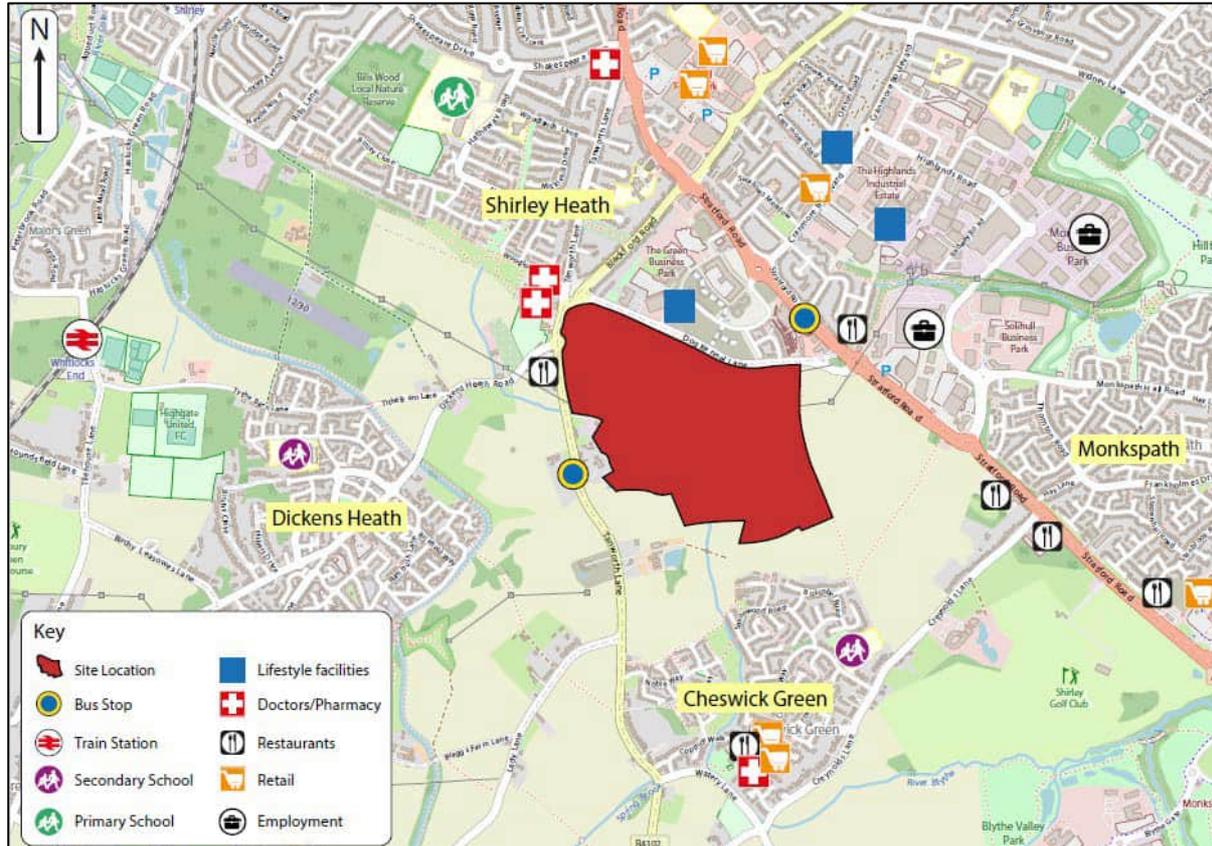
**Table 1 – Local Facilities**

Local Facility	Distance (metres)	Walking Time (mins) based on 5km/h	Cycling Time (mins) based on 15km/h
<b>Public Transport</b>			
Tanworth Lane Bus Stops	650	8	3
A34 Stratford Road Bus Stops	750	9	3
Whitlock’s End rail station	2500	30	10
<b>Education</b>			
Light Hall School (Secondary School)	1600	19	6
Dicken’s Heath Community Primary School	1700	20	7
Cheswick Green Primary School	2600	31	10
<b>Employment</b>			

<sup>2</sup> [https://www.solihull.gov.uk/sites/default/files/migrated/LeisureParksEvents\\_Cycling\\_and\\_Walking\\_foldout\\_map.pdf](https://www.solihull.gov.uk/sites/default/files/migrated/LeisureParksEvents_Cycling_and_Walking_foldout_map.pdf)

Friars Gate Business Park	800	10	3
Monkspath Business Park	2000	24	8
<b>Restaurants</b>			
Miller and Carter	650	8	3
Costa Coffee	900	11	4
Harvester Monkspath	1400	17	6
The Plough Beefeater	1600	19	6
McDonald's Stratford Road	2200	26	9
The Saxon Public House	2500	30	10
<b>Lifestyle/Healthcare Facilities</b>			
The Village Hotel/Gym	300	4	1
Tanworth Lane Pharmacy	550	7	2
Tanworth Lane Surgery (GP)	600	7	2
The Hair Lounge	1100	13	4
David Lloyd Solihull Cranmore	1300	16	5
Shakespeare Drive Dental Centre	1500	18	6
The Village Surgery (GP)	2600	31	10
<b>Retail</b>			
Solihull Retail Park	1400	17	6
Costcutter	1400	17	6
Sainsbury's	1600	19	6
Post Office	2200	26	9
Lifestyle Express	2600	31	10

Tesco Extra	2600	31	10
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**Figure 2 – Local Facilities Plan**

32. As highlighted above, the site is well located with regard to local facilities within a convenient walk and cycle time such that future residents will have the opportunity to access key services via active travel modes.

Local Bus Routes

33. The nearest bus stops to the site are located on B4102 Tanworth Lane and are served by the A5 and A7/8 bus routes. The A5 service provides an hourly service between Solihull and Cheswick Green (via Shirley and Dickens Heath). The A7/8 service is a circular route for south Solihull with an hourly frequency (half hourly frequency during weekday peak periods).

Local Rail Services

34. The nearest rail station to the site is Whitlock’s End rail station which is located approximately 2.5km from the site, which is a comfortable cycling distance from the site. There is a shared footway/cycleway on Dickens Heath Road and quiet residential roads along Tythe Barn Lane and Tilehouse Lane. Whitlock’s End rail station is equipped with 20 bicycle storage spaces with CCTV.

35. A summary of the rail services from Whitlock’s End rail station is included at **Table 2**.

**Table 2 – Local Rail Services**

Destination	Frequency	Average Journey Time
Worcester Foregate Street	60 – 120 minutes	90 minutes
Stratford-upon-Avon	60 minutes	35 minutes
Kidderminster	20 – 40 minutes	60 minutes

Local Highway Network

36. Primary vehicle access to the site will be provided from Dog Kennel Lane. An additional vehicular access will be provided from B4102 Tanworth Lane.
37. The local road network provides a link to the wider strategic highway network including the A34 and the M42, connecting the site to the wider area.

Summary

38. The above review demonstrates that the site is well located with regard to accessing a range of transport networks including the active travel and public transport networks, such that future residents would not have to rely on the private car.

**Policy Review**

39. The TA will consider and be prepared in accordance with the following policy documents:
- National Planning Policy Framework (NPPF), July 2021
  - Manual for Streets (MfS, 2007);
  - Manual for Streets 2 (MfS 2, 2010);
  - West Midlands Local Transport Plan (2011 – 2026);
  - Adopted Solihull Local Plan 2011 – 2018 (December 2013); and
  - Solihull Local Plan 2020 to 2036 – Draft Submission Plan (October 2020).

**Proposed Scheme**

40. This section will set out the development proposals in detail, which will include:
- Development composition;

- Mobility Strategy:
- Active Travel & Vehicular Access:
- Off site mobility network improvements;
- Parking Details including EV provision;
- Internal Highway Layout; and
- Servicing Arrangements.

### The Masterplan

41. The overarching objectives of the masterplan are set out in current transport and planning policy as:
  - Design for community. Putting people, and their quality of live now and in the future at the centre of decision making;
  - Minimising the need to travel, providing choice in transport, and where travel occurs, encouraging greater use of more sustainable and healthy forms of travel; and
  - Establishing priorities so that development and day to day facilities are accessible in the first instance by walking and cycling, then by public transport, then by motor vehicles.
42. Hence, the approach to masterplanning will be based on the following:
  - Design;
  - Choice;
  - Behaviour; and
  - Network Management.
43. The draft illustrative Masterplan is shown in **Figure 3** and is included at **Appendix A**.



**Figure 3 – Draft Illustrative Masterplan**

Mobility Strategy

- 44. The TA will contain a detailed Mobility Strategy which will demonstrate the approach to exemplary design for mobility, and sustainable travel.
- 45. A Mobility Hub, complete with a Work Hub will be proposed on site to act as a central point for travel and community integration with the existing communities of Shirley, Monkspath, Cheswick Green and Dickens Heath. Details of bus services, pedestrian routes, and safe cycling routes will be provided as well as a home delivery collection point.

Active Travel and Vehicular Access Arrangements

- 46. The overarching strategy will be to reduce the effect of new car trips from the proposed development. Hence, the TA will be focused on significantly enhancing existing pedestrian, cycle and public transport connectivity to local amenities and providing travel choice to future and existing residents.

### Site Access

47. Access to the site by all modes is achievable from a number of locations on Dog Kennel Lane and Tanworth Lane. **Figure 3** shows the locations of the access arrangements to the site from Dog Kennel Lane and Tanworth Lane.
48. It is proposed to provide 2 priority T-junctions on Dog Kennel Lane (subject to traffic modelling) to access the site. The spine road will link these two junctions. It is also proposed to provide an access from B4102 Tanworth Road by construction a new arm of the B4102 Tanworth Road/Dickens Heath Road roundabout.
49. There will be pedestrian and cycle facilities at each vehicular access junction to enable pedestrian/cycle access into the site. There will also be numerous opportunities for pedestrians to access the site along the site frontage on Dog Kennel Lane and Tanworth Road. The spine road will also have a 3m shared footway/cycleway along the route to facilitate pedestrian and cycle movement within the site. There will also be comprehensive network of pedestrian and cycle paths through the site.
50. The site access junctions on Dog Kennel Lane and the spine road will also be designed to facilitate bus movement within the site.

### Parking Details

51. Car and cycle parking for the site will be provided in accordance with parking standards as contained within SMBC's Vehicle Parking Standards and Travel Plans SPD (2006).
52. Parking provision across the site will also support electric vehicle charging and other low emission technology, in line with SMBC guidance.

### Phasing

53. It is anticipated that the proposed development will be phased at a build out rate of around 100 dwellings per year, resulting in an 7-9 year total build out.

## **Assessment Methodology**

54. The TA will consider the effect of the development proposals on the local movement networks. This section of the Scoping Note details the key parameters of the highway assessment of the development proposals including the scope of junctions to be assessed, committed developments, traffic growth and trip attraction.

### Traffic Growth

55. Historic ATC data will be examined (if available) to ascertain growth (if any) on the local and strategic highway network.

56. Traffic growth factors will be obtained from NTM (with comparison to TEMPro local factors undertaken) and applied to the baseline year and future year assessment data.
57. Standalone traffic modelling will be undertaken for the 'Opening Year' and 'Future Year' scenarios.

#### Committed Development

58. The TA will explore any committed development that has been agreed in proximity of the site and these will be included in the TA as part of the traffic analysis.

#### Trip Rates

59. The TRICS database will be interrogated to derive appropriate total people trip rates as a starting point for the trip generation exercise.
60. It is generally acknowledged that trip generation associated with private housing is greater than that associated with affordable housing and as such, whilst the proposals will likely include a proportion of affordable housing, trip rates associated with private housing will be used to provide a robust assessment.
61. This section of the TA will explain the methodology used for the determination of the traffic flows associated with the proposed development.
62. The TRICS database will be interrogated to derive appropriate total people trip rates as a starting point for the trip generation exercise.
63. It is generally acknowledged that trip generation associated with private housing is greater than that associated with affordable housing and as such, whilst the proposals will include a proportion of affordable housing, trip rates associated with private housing will be used to provide a robust assessment.
64. The provision of a primary school on site means that a large proportion of traffic, particularly during the AM peak period, will be internalised.
65. The proposed trip generation methodology is included at **Appendix B**.

#### Trips by Mode

66. The trip generation methodology in the TA will disaggregate the total person trips by journey purpose using National Travel Survey data to determine the proportion of trips in each peak hour that relate to education, commuting, and leisure/recreation purposes.
67. This allows a bespoke mode split to be applied to each set of trips to ultimately determine a realistic trip demand for the site, for all modes. Within this assessment an element of working from home will be considered to account for the self-sustaining nature of the site.

68. For commuting trips 2011 Census data for journeys to work will be used as a starting point, this will also be applied to recreation/leisure trips. Data associated with the method of travel to work of residents of the Solihull 029 super output area (middle layer), within which the site is located, has been obtained and is summarised in **Table 3**.

**Table 3 – 2011 Census Mode Share for Solihull 029 MSOA**

	Census Mode Share
Work from Home	6%
Underground	0%
Train	6%
Bus	2%
Taxi	0%
Motorcycle	0%
Car Driver	77%
Car Passenger	4%
Bicycle	1%
Foot	3%
Other	1%
<b>Total</b>	<b>100%</b>

69. **Table 3** demonstrates that in 2011 it could be expected that 77% of trips would be undertaken by car, with 10% via public transport and 4% via the active travel modes of bicycle and foot, in addition, 6% of residents could be expected to work from home.
70. It should be noted that this data presented in **Table 3** is representative of a situation now 10 years ago, and prior to the Covid-19 pandemic which has accelerated changes to typical travel patterns. It also only represents journeys to work and is not reflective of mode split for trips to school or other journey purposes. For this reason, the trip generation methodology within the TA will include a reasonable mode shift from these observed splits to reflect a move towards active travel as well as working from home.
71. Mode split for education trips will be based on the NTS Table NTS0614 which sets out mode by distance to schools.

Trip Distribution

72. The distribution of vehicle trips on the local highway network for employment purposes will be determined with reference to the 2011 Census with data obtained for the place of work for the resident population of Solihull 029 output area, within which the site is located. A journey planning tool will be utilised to assign trips on the local highway network.

73. Trip distribution for other journey purposes i.e. education and leisure will be determined based on the locations of these facilities and the likely route from the site.
74. A more detailed analysis of trip distribution will be set out in the TA.

#### Highway Assessment

75. In the context of national and local transport policy, the focus should not be on traffic impact rather than accommodating people movement and providing safe and efficient active travel routes to key local amenities.
76. The scope of the highway assessment will be considered in the context of the sustainable location of the site, the mobility benefits this site could provide and the sustainable transport strategy for the site.
77. In the first instance, a percentage impact assessment will be undertaken at the junctions within the study area. Junctions with a percentage impact of more than 5% will be subject to more detailed junction modelling assessments.
78. The results of the highway network assessment will be reviewed in the context of NPPF which is the senior policy document.
79. Highway networks on car travel is a material matter, but not the highest priority in the context of policy. For instance, there is no expression of policy that sets nil detriment to the highway network as a test, and to do so would be the antithesis of policy.
80. The Secretary of State endorsed interpretation of NPPF in the context of commuter periods is that it is not the aim of policy to protect the convenience of car commuters.

#### Strategic Modelling

81. Through discussions with SMBC, it has been identified that there is a VISSIM microsimulation model of the A34 and local transport network close to the site proposals. It is proposed to use this model to inform the assessment of the development impacts.
82. A Modelling Methodology note has been prepared and sets out the proposed approach to assessing the development proposals using SMBC's VISSIM model. This note is included at **Appendix C**.

#### **Summary and Conclusion**

83. This section will provide a summary of the report and will set out the recommendations and conclusions based on the analysis undertaken as detailed above.

## Traffic Surveys

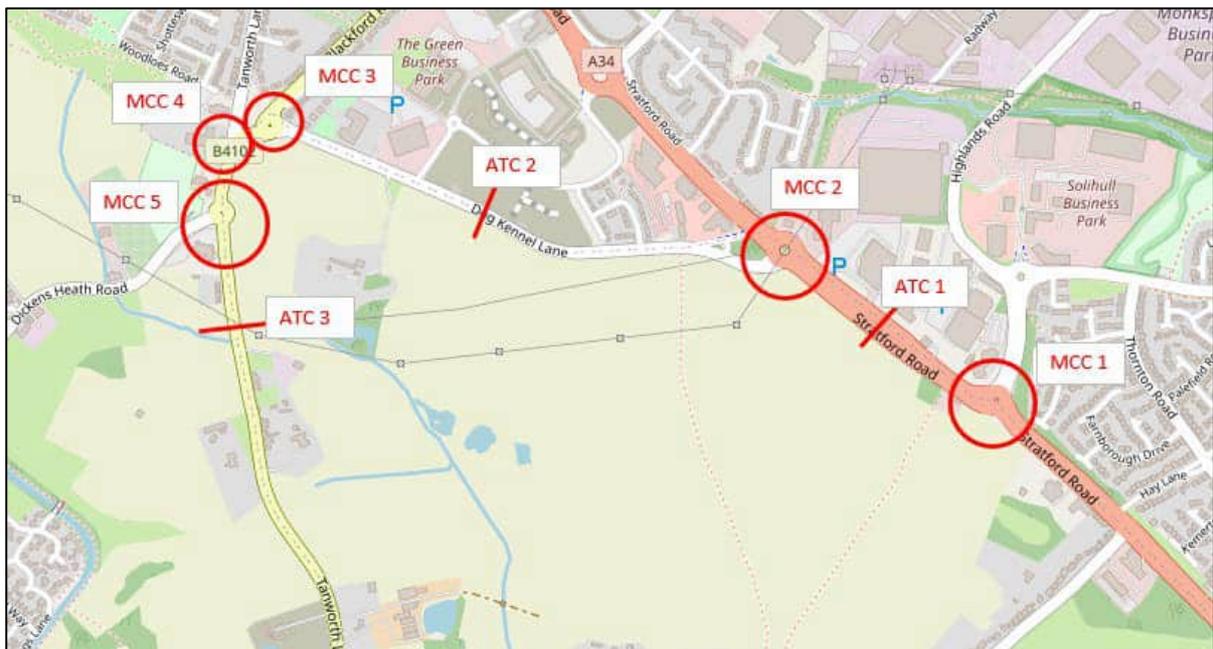
84. Manual Classified Turning Count (MCC) and queue length surveys will be undertaken for a typical weekday (Tuesday, Wednesday, or Thursday) during school term time at the following junctions between 07:00-10:00 in the AM peak and 15:30-18:30 in the PM peak:

- **MCC 1** – A34 Stratford Road/Monkspath Hall Road;
- **MCC 2** – A34 Stratford Road/Dog Kennel Lane;
- **MCC 3** – B4102/Dog Kennel Lane/Blackford Road;
- **MCC 4** – B4102 Blackford Road/Tanworth Lane; and
- **MCC 5** – B4102 Tanworth Lane/Dickens Heath Road.

85. In addition, an Automatic Traffic Count (ATC) survey will be undertaken at the following locations to ascertain the traffic volumes and speeds:

- **ATC 1** – A34 Stratford Road;
- **ATC 2** – Dog Kennel Lane; and
- **ATC 3** – Tanworth Lane.

86. The proposed survey area is shown in **Figure 4**.



**Figure 4 – Proposed Survey Area**

87. Subject to agreement with SMBC, it is proposed to undertake the surveys as soon as possible in a neutral survey month. It is noted that consideration of fluctuations in traffic levels due to Covid-19 may be required.
88. It is also noted that National Highways (NH) require an assessment of M42 Junction 4. Existing traffic data will be sourced for this junction, if possible. If existing data is unavailable, a survey will also be undertaken for this junction.

## **Travel Plan**

89. The TA will be supported by an Interim Travel Plan which will set out the overarching strategy to promote sustainable travel to and from the site and limit the number of single occupancy car trips to and from the proposed development.
90. In terms of School Travel Planning, the Travel Plan will adopt sustainable measures such as walking buses, cycle trains and scoot to school initiatives. As a result of the primary school provision on site, there should be little need to any school child from the development to travel by car to the primary school under normal circumstances. There will also be opportunities, through the Travel Plan, to encourage sustainable travel to the nearest secondary school.

## **Appendix A**



	Gross area (ha)	Net developable area (ha)	Remaining land (spine road, LHF, POS, landscape buffers etc)	Density			Units
				42 dph (high)	36 dph (medium)	30 dph (low)	
TW Land	48.1	14.0	34.1	3.7	7.1	2.0	471
TRW Land	18.0	9.3	8.7	4.6	3.7	2.3	395
Land NW of LHF	7.2	4.0	3.2	-	2.9	1.0	134
<b>Total</b>	<b>73.3</b>	<b>27.3</b>	<b>46.0</b>	<b>8.3</b>	<b>13.7</b>	<b>5.3</b>	<b>1000</b>

## Appendix B

## **Land at Lighthall Farm, Solihull Trip Generation Methodology Note**

162088C-Trip Generation Methodology Note-V1

February 2022

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### **Introduction**

1. Vectos has been appointed to provide highways and transportation advice in relation to development proposals on land to the south of Dog Kennel Lane, Solihull.
2. The site is allocated as site BL2 in the Solihull Local Plan (Draft Submission Plan) and therefore the principle of housing development in this location has been accepted by Solihull Metropolitan Borough Council (SMBC). The site has capacity for 1,000 dwellings.
3. It is proposed to develop the site (within TW's ownership) to provide circa 700 residential dwellings containing a mix of house types and tenures. The intention is to create a sustainable, socially inclusive community with these overriding principles embodied within the indicative masterplan for the site.
4. It is also proposed to provide the following land uses on the site:
  - 2 form entry primary school;
  - Changing rooms for the sports pitches; and
  - Small local centre.
5. This note provides a forecast of the likely trip generation from the residential development, considering trips by journey purpose (education, employment, leisure) and the potential for internalisation of trips within the site.

### **Residential Development**

#### **Trip Rates**

6. To start, understanding the potential demand from the proposed residential development is to provide a total people trip rate. To achieve this, the TRICS database has been interrogated, selecting the appropriate parameters as below:
  - Residential – Housing Privately Owned;

- All regions excluding Greater London and Ireland;
- Edge of Town – All Zones;
- Monday – Friday;
- 01/01/13 – 23/09/2021; and
- 207 – 984 units

7. In total, 9 sites fell within these parameters, and produced an average total people trip rate as shown in **Table 1** for the AM and PM peak hours. The full TRICS data is located in **Appendix A**.

**Table 1 – Average Total People Trip Rates (per unit)**

Time Period	Arrivals	Departures	Totals
08:00 – 09:00	0.219	0.777	0.996
17:00 – 18:00	0.624	0.259	0.883

8. Applying the trip rates in **Table 1** to the proposed residential development of 716 dwellings, results in a total people trip demand shown in **Table 2**. Some of this will be contained within the site and local area, and some will be external.

**Table 2 – Total People Trip Demand – 716 Dwellings**

Time Period	Arrivals	Departures	Totals
08:00 – 09:00	157	556	716
17:00 – 18:00	447	185	432

9. To understand the mode split of these trips, we first need to understand journey purpose.

### Journey Purpose

10. The National Travel Survey, which consists of face-to-face interviews and a seven-day self-completed written travel diary, allows us to understand trips by journey purpose, and the mode split of trips for each purpose.

11. A summary of trips by journey purpose in the AM and PM peak periods is provided in **Table 3**.

**Table 3 – Total People Trip Demand – 716 Dwellings**

Start Time	Commuting / Business	Education	Leisure / Recreation
08:00 – 09:00	18%	51%	31%
17:00 – 18:00	33%	4%	63%

12. Distributing the total number of trips summarised in Table 2 by the journey purpose summarised in **Table 3**, results in a breakdown of trips by journey purposes as summarised in **Table 4**.

**Table 4 – Total Residential Trips by Journey Purpose**

Start Time	Commuting / Business		Education		Leisure / Recreation	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
08:00 – 09:00	29	102	80	284	48	170
17:00 – 18:00	147	61	19	8	281	116

Commuting Trips

13. Using the data available from the NTS, a judgement has been made that in the AM peak period, 18% of trips are for the purpose of commuting, increasing to 33% of trips in the PM peak period.
14. Due to COVID and the rise of working from home (WfH), an assumption has been applied of 30% (1.5 days a week) of commuters are now WfH. This is based on statistics from Office of National Statistics (14<sup>th</sup> Feb 2022), where 36% of people worked from home at least one day per week. It is not clear from this data what the total average days per week spent at home, however an average of 1.5 days per week is considered realistic and is in line with the Welsh government target of 30% as well.
15. Based on TRICS not accounting for existing WfH trips, in which the 2011 census indicates is 6% for MSOA Solihull 022. Therefore, considering the existing WfH trips and the target 30%, the proportion calculates as 26% of the TRICS commuters’ trips, as shown in **Table 4**, will WfH.
16. In order to estimate an appropriate mode split for the external employment trips, the ‘Method of Travel to Work’ (excluding WfH) Census data for 2011 for the Mid Layer Super Output Area (MSOA)

Solihull 022, which borders the site, has been analysed. The recorded mode split from the Census data is shown in **Table 5**. To account for the existing train trips (6%), the car driver and cycling trips have been uplifted using a 60:40 split (or 4% and 2% respectively).

**Table 5 – Method of Travel to Work (Solihull 022 MSOA)**

Method of Travel to Work	Percentage
<b>Bus, Minibus or Coach</b>	8%
<b>Taxi</b>	0%
<b>Motorcycle, Scooter or Moped</b>	1%
<b>Driving a Car or Van</b>	73%
<b>Passenger in a Car or Van</b>	5%
<b>Cycling</b>	4%
<b>Walking</b>	8%
<b>Other method of travel to work</b>	1%
<b>Total</b>	100%

17. Further to this, to account for the sustainable travel initiatives and the sitewide Travel Plan, a mode shift reduction of 10% has been applied to car driver and added equally onto sustainable travel modes (bus, car passenger, cycling and walking).
18. The updated mode split for commuting trips is shown in **Table 6**.

**Table 6 – Updated Mode Split for Commuting Trips**

Method of Travel to Work	Percentage
<b>Bus, Minibus or Coach</b>	10%
<b>Taxi</b>	0%

<b>Motorcycle, Scooter or Moped</b>	1%
<b>Driving a Car or Van</b>	66%
<b>Passenger in a Car or Van</b>	7%
<b>Cycling</b>	6%
<b>Walking</b>	10%
<b>Other method of travel to work</b>	1%
<b>Total</b>	100%

Education

19. The NTS data demonstrates that in the AM peak, 51% of journeys are undertaken for the purpose of education, reducing to 4% in the PM peak. Of these journeys, it is assumed that approximately 50% relate to primary education, and 50% to secondary education.
20. The nearest primary schools to the site are Dickens Heath Primary School and Cheswick Green Primary School. However, the site has proposed to provide a two-form entry primary school. To account for a few external trips to the existing schools and other private schools, only 90% of primary school trips have been internalised.
21. The NTS (National Travel Survey) mode split for 5-10 year olds for all distances will be applied as shown in **Table 7**.

**Table 7 – NTS Mode Splits – 5-10 Year Olds – All Distances**

<b>Method of Travel to Work</b>	<b>Percentage</b>
<b>Walk</b>	50%
<b>Bicycle</b>	1%
<b>Car / van</b>	47%
<b>Bus</b>	2%

<b>Other transport</b>	1%
<b>All modes</b>	100%

22. Then to account for the sustainable travel initiatives and Travel Plan etc, a mode shift reduction of 10% has been applied to car driver and added equally onto sustainable travel modes (bus, cycling and walking).
23. The updated mode split is shown in **Table 8**.

**Table 8 – Updated NTS Mode Splits – 5-10 Year Olds – All Distances**

<b>Method of Travel to Work</b>	<b>Percentage</b>
<b>Walk</b>	51%
<b>Bicycle</b>	3%
<b>Car / van</b>	42%
<b>Bus</b>	3%
<b>Other transport</b>	1%
<b>All modes</b>	100%

24. For secondary school trips, the nearest school is Light Hall School and all secondary trips from the site will be external. Therefore, the NTS (National Travel Survey) mode split for 11-16 year olds for all distances will be applied as shown in **Table 9**.

**Table 9 – NTS Mode Splits – 11-16 Year Olds – All Distances**

<b>Method of Travel to Work</b>	<b>Percentage</b>
<b>Walk</b>	44%
<b>Bicycle</b>	4%

<b>Car / van</b>	28%
<b>Bus</b>	20%
<b>Other transport</b>	5%
<b>All modes</b>	100%

- 25. Then to account for the sustainable travel initiatives and Travel Plan etc, a mode shift reduction of 10% has been applied to car driver and added equally onto sustainable travel modes (bus, cycling and walking).
- 26. The updated mode split is shown in **Table 10**.

**Table 10 – Updated NTS Mode Splits – 11-16 Year Olds – All Distances**

<b>Method of Travel to Work</b>	<b>Percentage</b>
<b>Walk</b>	45%
<b>Bicycle</b>	5%
<b>Car / van</b>	25%
<b>Bus</b>	20%
<b>Other transport</b>	5%
<b>All modes</b>	100%

Leisure/Recreational Trips

- 27. Using the data available from the NTS, a judgement has been made that in the AM peak period, 31% of trips are for the purpose of leisure/recreation, increasing to 63% of trips in the PM peak period.
- 28. There is a small local centre and sports pitches proposed for the site, and therefore 10% of trips are assumed to stay internal to the site.

29. Then the same mode split as **Table 6** for commuting has been applied to the external leisure/recreational trips.

**School Staff**

30. To account for school staff at the primary school, it is assumed that 50 staff will work at the school. Then it is assumed that 20% will arrive between 0700-0800 and 80% will arrive between 0800-0900 and 80% will depart between 1600-1700 and 20% will depart between 1700-1800.
31. Then the same mode split as **Table 6** for commuting has been applied.

**Total External Trips**

32. Based on the various journey purposes and school staff, the total external trips generation is shown below in **Table 11**.

**Table 11 – Total External Trip Generation – 716 units**

Mode	AM (0800-0900)		PM (1700-1800)	
	Arrivals	Departures	Arrivals	Departures
<b>Bus</b>	18	52	37	16
<b>Taxi</b>	1	1	2	1
<b>Motorcycle</b>	1	1	2	1
<b>Driving a car or van</b>	80	192	240	106
<b>Passenger in a car or van</b>	7	15	24	11
<b>Bicycle</b>	8	21	22	10
<b>On foot</b>	31	95	42	19
<b>Other</b>	3	8	2	1
<b>Total</b>	149	385	372	164

**Total External Trips – Site Allocation of 1,000 units**

33. Using the total site allocation of 1,000 units and the same methodology as above, the total external trips generation for the site is shown below in **Table 12**.

**Table 12 – Total External Trip Generation – 1,000 units**

Mode	AM (0800-0900)		PM (1700-1800)	
	Arrivals	Departures	Arrivals	Departures
<b>Bus</b>	24	72	52	22
<b>Taxi</b>	1	2	2	1
<b>Motorcycle</b>	1	2	3	1
<b>Driving a car or van</b>	102	268	336	146
<b>Passenger in a car or van</b>	9	21	34	15
<b>Bicycle</b>	11	29	31	13
<b>On foot</b>	41	132	59	25
<b>Other</b>	3	11	3	1
<b>Total</b>	192	538	520	226

**Distribution**

34. Commuting and leisure/recreational trips have been assigned based on 2011 census origin/destination data for place of work and is summarised in **Table 13**.

**Table 13 – Commuting and Leisure/Recreational Distribution – 2011 Census Data**

Route	Proportion
<b>A34 (S)</b>	45%
<b>Monkspath Hall Road</b>	3%
<b>A34 (N) / B4102 (N)</b>	45%
<b>Tanworth Lane (N)</b>	1%
<b>Dickens Heaths Road</b>	4%

<b>Tanworth Lane (S)</b>	2%
--------------------------	----

- 35. The external primary school trips have been split 50:50 between Dickens Heath Community Primary School and Cheswick Green Primary School.
- 36. The secondary school trips have all been assigned to Light Hall School.
- 37. The school distributions have been summarised in **Table 14**.

**Table 14 – School Distribution**

Route	Proportion
<b>Primary Schools</b>	
<b>Dickens Heath Community Primary School</b>	50%
<b>Cheswick Green Primary School</b>	50%
<b>Secondary Schools</b>	
<b>Light Hall School</b>	100%

- 38. Due to the various accesses and destinations, a few assumptions have been applied to account for the development trips making use of the site accesses. These are shown in **Table 15**.

**Table 15 – Site Access Assignment**

Routes	Site Access		
	West	Middle	East
<b>East / South-East</b>		40%	60%
<b>North</b>	33%	33%	33%
<b>West / South-West</b>	100%		

## Appendix A

Calculation Reference: AUDIT-152302-220125-0120

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : A - HOUSES PRIVATELY OWNED  
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	KC KENT	1 days
	SC SURREY	1 days
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	NF NORFOLK	3 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days

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

## Primary Filtering selection:

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

Parameter: No of Dwellings  
 Actual Range: 207 to 984 (units: )  
 Range Selected by User: 200 to 1817 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 23/09/21

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

Selected survey days:

Monday	3 days
Tuesday	3 days
Wednesday	2 days
Thursday	1 days

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

Selected survey types:

Manual count	9 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town 9

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

Selected Location Sub Categories:

Residential Zone 9

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

Secondary Filtering selection:

Use Class:

C3 9 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	4 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
125,001 to 250,000	4 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	5 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	5 days
No	4 days

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

PTAL Rating:

No PTAL Present	9 days
-----------------	--------

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

LIST OF SITES relevant to selection parameters

1	DS-03-A-02 RADBOURNE LANE DERBY	MIXED HOUSES		DERBYSHIRE
	Edge of Town Residential Zone Total No of Dwellings:		371	
	<i>Survey date: TUESDAY</i>		<i>10/07/18</i>	<i>Survey Type: MANUAL</i>
2	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS		EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:		212	
	<i>Survey date: MONDAY</i>		<i>11/07/16</i>	<i>Survey Type: MANUAL</i>
3	KC-03-A-07 RECULVER ROAD HERNE BAY	MIXED HOUSES		KENT
	Edge of Town Residential Zone Total No of Dwellings:		288	
	<i>Survey date: WEDNESDAY</i>		<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
4	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		275	
	<i>Survey date: MONDAY</i>		<i>23/09/19</i>	<i>Survey Type: MANUAL</i>
5	NF-03-A-09 ROUND HOUSE WAY NORWICH CRINGLEFORD	MIXED HOUSES & FLATS		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		984	
	<i>Survey date: TUESDAY</i>		<i>24/09/19</i>	<i>Survey Type: MANUAL</i>
6	NF-03-A-30 BRANDON ROAD SWAFFHAM	MIXED HOUSES		NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:		266	
	<i>Survey date: THURSDAY</i>		<i>23/09/21</i>	<i>Survey Type: MANUAL</i>
7	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES		SURREY
	Edge of Town Residential Zone Total No of Dwellings:		207	
	<i>Survey date: MONDAY</i>		<i>01/04/19</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	DETACHED & SEMI -DETACHED      248 <i>22/11/17</i>	STAFFORDSHIRE        <i>Survey Type: MANUAL</i>
9	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	MIXED HOUSES      918 <i>02/04/19</i>	WEST SUSSEX        <i>Survey Type: MANUAL</i>

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

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

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.76

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	9	419	0.077	9	419	0.312	9	419	0.389
08:00 - 09:00	9	419	0.142	9	419	0.368	9	419	0.510
09:00 - 10:00	9	419	0.129	9	419	0.166	9	419	0.295
10:00 - 11:00	9	419	0.099	9	419	0.117	9	419	0.216
11:00 - 12:00	9	419	0.115	9	419	0.120	9	419	0.235
12:00 - 13:00	9	419	0.131	9	419	0.132	9	419	0.263
13:00 - 14:00	9	419	0.133	9	419	0.123	9	419	0.256
14:00 - 15:00	9	419	0.150	9	419	0.152	9	419	0.302
15:00 - 16:00	9	419	0.217	9	419	0.153	9	419	0.370
16:00 - 17:00	9	419	0.257	9	419	0.154	9	419	0.411
17:00 - 18:00	9	419	0.357	9	419	0.152	9	419	0.509
18:00 - 19:00	9	419	0.307	9	419	0.147	9	419	0.454
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>2.114</b>			<b>2.096</b>			<b>4.210</b>

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

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

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#### Parameter summary

Trip rate parameter range selected:	207 - 984 (units: )
Survey date date range:	01/01/13 - 23/09/21
Number of weekdays (Monday-Friday):	9
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
Surveys manually removed from selection:	0

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

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.76

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	9	419	0.116	9	419	0.522	9	419	0.638
08:00 - 09:00	9	419	0.219	9	419	0.777	9	419	0.996
09:00 - 10:00	9	419	0.191	9	419	0.272	9	419	0.463
10:00 - 11:00	9	419	0.159	9	419	0.207	9	419	0.366
11:00 - 12:00	9	419	0.181	9	419	0.203	9	419	0.384
12:00 - 13:00	9	419	0.212	9	419	0.204	9	419	0.416
13:00 - 14:00	9	419	0.212	9	419	0.197	9	419	0.409
14:00 - 15:00	9	419	0.245	9	419	0.240	9	419	0.485
15:00 - 16:00	9	419	0.490	9	419	0.258	9	419	0.748
16:00 - 17:00	9	419	0.516	9	419	0.262	9	419	0.778
17:00 - 18:00	9	419	0.624	9	419	0.259	9	419	0.883
18:00 - 19:00	9	419	0.539	9	419	0.289	9	419	0.828
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			3.704			3.690			7.394

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

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

## Appendix C

# Light Hall Farm VISSIM Modelling Model Scoping Note

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VM200318.TN01

## Introduction

1. Vectos has been commissioned by Taylor Wimpey (TW) to assess the impacts of the Light Hall Farm development proposals which falls within Site BL2 of the current Solihull Metropolitan Borough Council (SMBC) Local Plan.
2. Through discussions with SMBC it has been identified that there is a VISSIM microsimulation model of the A34 and local transport network close to the site proposals which Vectos propose will be used to inform the assessment of the development impacts.

## Purpose of this Note

3. The purpose of this note is to set out our proposed approach to assessing the development proposals using SMBCs VISSIM model.

## Background

4. The Base VISSIM model was developed using traffic data collected in 2019 and so is representative of average network conditions.
5. The base model was developed for the purpose of assessing the impacts of future network improvements as well as being able to support business case submissions for the corridor.
6. The model is based on static assignment conditions and so it is not possible for additional routing to be added into the model network and, additionally, this may also constrain how development trips are assigned within the model network.
7. Future year models have been developed using the West Midlands Policy Responsive Integrated Strategy Model (PRISM) for 2026 and 2036. Traffic forecasts predict an increase in traffic volumes of around 4% in the 2026 model and up to circa 13% within the 2036 model. As a result of the increase in traffic volumes the results derived from the current 2036 model are not considered to be realistic and most of the historic reporting has focussed on the operation of the 2026 model as a result.
8. The extent of the model network and the proposed area of the Light Hall Farm development proposals (part of the BL2 allocation) are illustrated within **Figure 1** overleaf.

## Approach

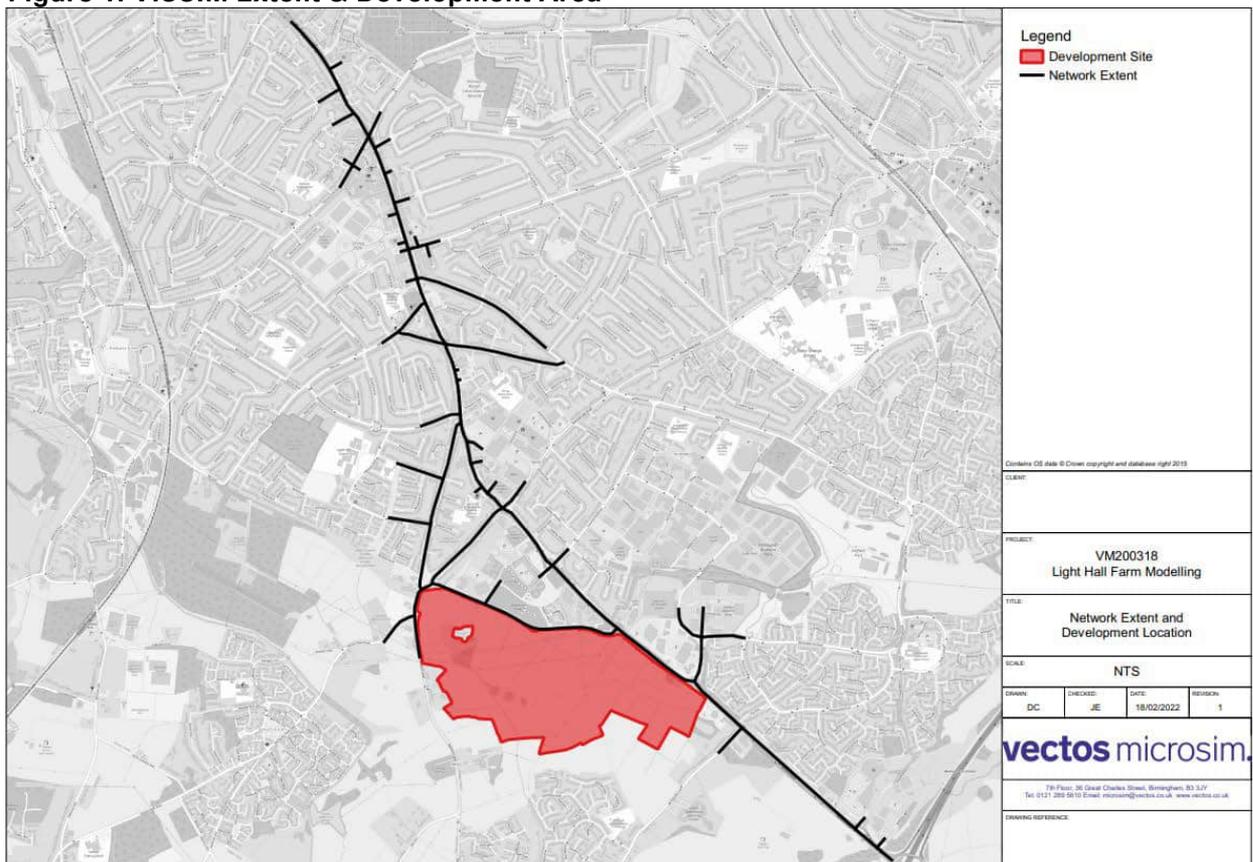
9. It is proposed that the assessment of the development proposals will make use of the 2026 VISSIM forecast model in the first instance to inform the assessment via the following steps:

- The initial forecast assumptions will be reviewed to ensure that the change in OD patterns is sensible and that there are no instances of large levels of reassignment on to minor entry links that would impact upon the optimisation of the signal control junctions along the corridor.
- Through engagement with SMBC, the level of development assumed within the allocation in the 2026 PRISM model scenario will be determined.
- Development specific inputs will be established comprising the agreed trip generation and distribution to inform the development OD patterns within the model network.
- The agreed inputs will be used to predict the level of demand that could reasonably have been assumed, pertaining to this development, within the PRISM matrices. These assumptions will be removed from the 2026 model to create a '2026 Reference Case' for this assessment.
- The agreed development inputs, representing the full quantum of development, will be included within the Reference Case alongside key access and network adjustments to create the '2026 Development Do Minimum' scenario.

10. The '2026 Reference Case' and '2026 Development Do Minimum' would comprise the core test scenarios for this assessment.

11. The impacts identified within the '2026 Development Do Minimum' could then be reviewed to determine an accompanying transport mitigation strategy to support the development proposals.

**Figure 1: VISSIM Extent & Development Area**



## Mitigation Testing

12. It is understood that there are already aspirations for the delivery of enhancements to the existing Public Transport network within the area and therefore these assumptions would likely form any initial assumptions around mitigation testing.
13. Initially it is proposed that SMBCs aspirations for the corridor should be included within the modelling and an appropriate level of intercept assumed to inform a reduction in car based trips in response to the inclusion of the new measures. It is assumed that this would involve reductions in both the development trip generation and the background trips.
14. Testing can consider a range of shifts in response to differing improvements in the level of service along the corridor. Having completed an initial round of testing on this basis (i.e. prioritisation of sustainable transport modes) then it is anticipated that one or more additional '2026 Development PT Do Something' scenarios would be created.
15. The operation of the 'PT Do Something' network will be reviewed to determine any opportunities for further enhancement of the network through delivery of capacity improvements or network adjustments. Any potential adjustments will be tested within the model network and, if beneficial, will be reported within a final set of '2026 Development Do Something All Modes' scenarios.

## Sensitivity Testing

16. Through discussions with SMBC it has been established that sensitivity tests would be beneficial to establish how the development may impact upon the operation of the corridor inclusive of wider traffic growth considerations.
17. Subject to agreement from SMBC, and confirmation of the necessary additional development inputs, the following additional sensitivity tests could be derived from one or more of the development scenarios:
  - **Full BL2 Allocation Testing** – Whereby the full allocation is tested on the same basis as the Taylor Wimpey Development.
  - **Wider Allocation Testing** – Whereby the other major allocations within the area (e.g. BL1 and BL3) are included alongside the full BL2 allocation to determine how the network will function with all developments in place.
  - **2036 Assessment** – Cognisant of the stated issues with the 2036 model scenario, a sensitivity test could be undertaken whereby the development proposals are refined per the previous stages of assessment and then testing undertaken inclusive of the proposed mitigation measures to determine how that may affect the corridor operation relative to the previous testing where it was simply a case of forecasts being added into the model.
18. The development assumptions and distribution for each of the wider allocations will be derived through discussions with SMBC and in a manner which is consistent with the approach to including the specific Light Hall Farm development inputs within the modelling.

## Auditing

19. It is understood that SMBC will require the models to be audited and therefore it is assumed that the initial Reference Case would be provided in the first instance (to ensure the changes made to the

2026 VISSIM model are in line with those set out within this Note) and then, subsequently, the final model scenarios and key development files will be made available alongside the reporting within the TA.

## Reporting

20. Reporting will include the network wide statistics for each scenario which normally comprises (amongst other statistics):
  - Average Delay per Vehicle (seconds)
  - Average Speed per Vehicle (mph)
  - Vehicles Active, Vehicle Trips Completed, and Vehicles Unable to Access the Network
  - Latent Delay (seconds)
21. Level of Service values for key junctions, which provides a high-level analysis of the junction performance on a scale of A to F, will also be provided to enable a simple review of junction betterment or worsening following inclusion of demands in the future year.
22. Results will be reported in spreadsheet format for Journey Times along key routes, Queue Lengths for all major approaches across the network extent, and Turn Counts which will inform any changes to routing through the model extent as we move into the future year scenarios. As well as being reported within the TA, these spreadsheets can be made available to SMBC for further interrogation if desirable.
23. Additionally, a Future Year Methodology Note will be produced to detail the adjustments and assumptions made in creating the future year models, including any committed development and/or growth to be included, as well as assumptions made for the inclusion of development trips and site access arrangements.

## CONSULTATION UNDER TOWN AND COUNTRY PLANNING ACT 1990

<b>Application Number</b>	<b>PL/2022/01907/PREAPC</b>
<b>Address</b>	<b>Land At Light Hall Farm Dog Kennel Lane Shirley Solihull</b>
<b>Proposal</b>	<b>Pre-application advice regarding a major residential-led redevelopment.</b>
<b>Case Officer</b>	<b>Becky Matravers</b>

<b>Date comments sent</b>	<b>12/12/22</b>
<b>Name of consultee department</b>	<b>Highways</b>
<b>Consultation response author</b>	<b>Duncan Cartwright</b>

Pre App Comments	<input checked="" type="checkbox"/>
No Objection	<input type="checkbox"/>
No Objection Subject to Conditions	<input type="checkbox"/>
Objection	<input type="checkbox"/>
Further information Requested	<input type="checkbox"/>

<p><b>Comments:</b> (Please explain the reason for your response)</p>
<p>The site is identified as being part of BL2: South of Dog Kennel Lane in the Solihull Local Plan – Draft Submission (October 2020).</p> <p>In line with the National Planning Policy Framework (NPPF), allocated sites identified in the Solihull Local Plan – Draft Submission (October 2020) are likely to generate significant amounts of movement therefore the Highway Authority will require a Transport Assessment (TA) and a Travel Plan (TP) to be submitted in support of any future planning application.</p> <p>The TA will need to demonstrate that the development proposals comply with National and Local planning policies, particularly Chapter 9 (Promoting Sustainable Transport) of the NPPF, and Policies P7 and P8 of the Solihull Local Plan 2013 and Local Plan Review.</p> <p>In terms of NPPF, particular attention should be given to cumulative impacts, noting the proximity of the other proposals which form the overall allocation site, along with other nearby Local Plan allocation sites and any material impact from any committed development.</p> <p>Given that the site forms part of a wider allocation, careful consideration is required for both the cumulative scenario (with whole allocation), development phasing and impacts of the site in isolation, identifying when mitigation would be required, and how the site will contribute towards the constituent parts of the overall package of measures required for the overall Local Plan allocation site/cluster. In cases where there is a concentration of site allocations nearby, the TA should also take account of those other sites, so that an understanding of how the local highway network and its junctions would perform against this change. Sustainable travel options and the sites</p>

contribution to achieving carbon reduction should be considered from the outset and clearly set out in the TA and accompanying Travel Plan. Scoping discussions for the Transport Assessment will allow the LHA to help identify where on the local network testing should be undertaken. Highways England are a statutory consultee, and their views will be sought at planning application submission stage where necessary.

The supporting information for the Local Plan Review includes the Solihull Traffic Impact Assessment which assesses the impact of Local Plan Review sites on the highway network. The Traffic Impact Assessment does not seek to replicate the level or type of assessment that would be required as and when a planning application may come forward in relation to Local Plan preferred site allocations, or to prescriptively define specific mitigation measures associated with each.

The Solihull Traffic Impact Assessments makes use of the PRISM model. Applicants are required to undertake a scoping exercise to demonstrate how they will assess cumulative and standalone impacts of their development. The PRISM model can be used to derive traffic demands and make use of traffic growth factors and distribution from the model to inform individual Transport Assessments for assessment years of 2026 and 2036.

Existing VISSIM models are available for Solihull Town Centre, the A34 Stratford Road corridor, and Balsall Common. Given the complex interactions between allocation sites, the relevant VISSIM models will need to be further developed by applicants to assess their impacts. Proposed mitigation is also required to be assessed in the relevant VISSIM model. As applicant, your own development team would be welcome to make use of the Council's VISSIM models, for a fee.

Applicants for the constituent parcels within the allocation sites will be required to work collaboratively with the other promoters of their overall allocation site to establish a common cumulative scenario. SMBC will seek to facilitate these discussions, but the applicants will be responsible for proposing an overall package of mitigation measures and demonstrating that the residual cumulative impacts on the transportation network are mitigated to an appropriate level and agreed by Officers.

On the 13th May 2021, the Local Plan Review was submitted (via the Planning Inspectorate) to the Secretary of State for independent examination. This marks the next state in the preparation and adoption of the plan. In accordance with Paragraph 48 of the NPPF (July 2021), weight can be given to relevant policies in the emerging plans. Therefore, Policies P7 and P8 of the Local Plan Review should also be taken into consideration.

Policy BL2 of the Local Plan Review notes that the site should be designed to provide multi-modal access routes from Dog Kennel Lane that respond to those already established at the development at the Green. Enhancement of bridleway access from Cheswick Green through the site as a pedestrian route and key green infrastructure link will be required. Highway improvements as required including and access improvements along Dog Kennel Lane.

The policy goes on to note the requirement for appropriate measures to promote and enhance sustainable modes of transport including bus services improvements and pedestrian and cycle connectivity towards Dickens Heath, the Stratford Road and Shirley Town Centre, in accordance with the Council's LCWIP.

In terms of existing sustainable transport infrastructure, proximity needs to be considered alongside quality- it is important that safe, suitable, direct, and convenient links are provided throughout the site that also link in with existing and proposed

cycle and walking networks. The TA will need to demonstrate the suitability (and improvements required to) walking and cycling routes to amenities. Assessment and design of improvements will need to reflect current guidance (e.g. LTN 1/20 and LCWIP).

**Travel Plan**

The Travel Plan will need to be prepared in accordance with relevant national and local guidance – it is noted that the SMBC Travel Plan SPD is currently going through consultation, and this will replace previous travel planning guidance from 2006.

**Further information required (if applicable):**

(Please explain the reason for your response)

**Amendments recommended (if applicable):**

(Please explain the reason for your response)

**Recommended conditions (if applicable):**

(Please provide justification for any pre-commencement conditions)

**If the application is to DISCHARGE CONDITIONS, please confirm the list of documents you are approving below:**

**If the application requires a S106 contribution/ requirement, please include the following information:**

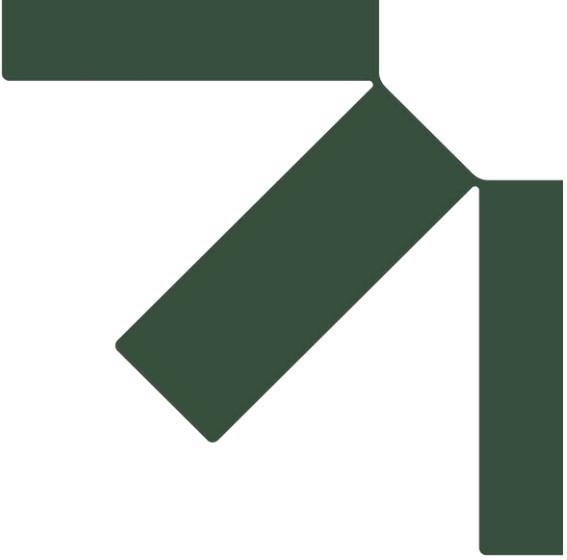
Please note: The legal tests for when a S106 contribution can be requested are set out in regulation 122 and 123 of the Community Infrastructure Levy Regulations 2010 (as amended). The regulations and guidance can be viewed here: <https://www.legislation.gov.uk/ukdsi/2010/9780111492390/regulation/122> and <https://www.legislation.gov.uk/ukdsi/2010/948/contents/made> and <https://www.gov.uk/guidance/planning-obligations> and

The tests are:

1. Necessary to make the development acceptable in planning terms;
2. Directly related to the development; and
3. Fairly and reasonably related in scale and kind to the development.

- Contribution description
- Contribution amount £ (if applicable). Please provide justification.

<ul style="list-style-type: none"><li>• Trigger point for payment (i.e. upon commencement of development, upon first occupation, upon 50% occupation...)</li></ul>	
<ul style="list-style-type: none"><li>• Trigger point for works to be undertaken (if applicable)</li></ul>	



# Appendix C Active Travel Route Audit

## Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024



# Active Travel Audit

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

## Taylor Wimpey

2 Trinity Court  
Broadlands  
Wolverhampton  
WV10 6UH

Prepared by:

### SLR Consulting Limited

7th Floor, 36 Great Charles Street, Birmingham ,  
B3 3JY

SLR Project No.: 425.000418.00001

11 October 2024

Revision: V2

## Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
02	11 October 2024	EA	TC	
	Click to enter a date.			
	Click to enter a date.			
	Click to enter a date.			
	Click to enter a date.			

## Basis of Report

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<b>Appendix D</b>	<b>Cycling Level of Service Results</b>



## 1.0 Introduction

### Background

- 1.1 This Active Travel Audit has been prepared by SLR Consulting in relation to a proposal for the development of up to 700 homes, including a self-build area of 0.77ha, a care home of up to 66-beds, a primary school, a local centre and public open space provision. The homes will be a mix of 1-to-5 bedroom houses and apartments, of which 40% minimum will be affordable. The site is located on land to the south of Dog Kennel Lane.
- 1.2 The report is comprised of an audit of existing walking and cycling routes in the vicinity of the Site and will also outline some opportunities for improvements to the local active travel network, to be discussed and agreed with SMBC as part of a wider mitigation package for the Blythe draft allocations in the SMBC Local Plan Review (now withdrawn).

### Study Area

- 1.3 When deciding upon a suitable study area, consideration was given to the amenities and services that are local to the Site and the likely routes that future residents would take to reach them. The local amenities identified are listed below along with the links that residents would be most likely to utilise en route.
- Whitlock's End railway station via Dickens Heath Road and Tythe Barn Lane;
  - Light Hall School via Tanworth Lane and Stretton Road;
  - Solihull and Sears Retail Parks via Stratford Road; and
  - Highlands Industrial Estate/Monkspath Business Park via Cranmore Boulevard.
- 1.4 In addition, the following routes were also assessed as they provide useful links to and from the Site:
- Dog Kennel Lane; and
  - Various routes through The Green Business Park development opposite the Site.
- 1.5 The audited routes are illustrated on a map presented in **Appendix A**.

### Site Visit

- 1.6 The Site visit was undertaken on Thursday 19th of September 2024 between 08:30 and 15:00hrs. Weather conditions throughout the day were overcast but dry.
- 1.7 The visit involved walking along the routes identified above, observing the operation of the existing facilities, and observing pedestrian and cycling movements.

### Route Assessment

- 1.8 As per the guidance provided by Active Travel England, the Department for Transport's 'Walking Route Audit Tool' (WRAT) has been used to provide a framework for considering the

suitability of each route for walking whilst the 'Cycling Level of Service' (CLoS) tool presented in Appendix A of LTN 1/20 has been used to assess the suitability of each route for cycling.

- 1.9 Blank versions of each auditing tool are presented below for reference. It should be noted that, due to its length, the CLoS tool has been abbreviated for presentation below. The original CLoS tool as found in LTN 1/20 is presented in **Appendix B**.

### DFT: Walking Route Audit Tool (WRAT)

Audit Categories	2 (Green)	1 (Amber)	0 (Red)
<b>1. ATTRACTIVENESS</b> - maintenance	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.
<b>2. ATTRACTIVENESS</b> - fear of crime	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).
<b>3. ATTRACTIVENESS</b> - traffic noise and pollution	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise
<b>4. ATTRACTIVENESS</b> - other			
<b>ATTRACTIVENESS</b>			
<b>5. COMFORT</b> - condition	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.
<b>6. COMFORT</b> - footway width	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.
<b>7. COMFORT</b> - width on staggered crossings/ pedestrian islands/refuges	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.
<b>8. COMFORT</b> - footway parking	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.
<b>9. COMFORT</b> - gradient	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).
<b>10. COMFORT</b> - other			
<b>COMFORT</b>			
<b>11. DIRECTNESS</b> - footway provision	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.
<b>12. DIRECTNESS</b> - location of crossings in relation to desire lines	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.
<b>13. DIRECTNESS</b> - gaps in traffic	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).
<b>14. DIRECTNESS</b> - impact of controlled crossings on journey time	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.
<b>15. DIRECTNESS</b> - green man time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.
<b>16. DIRECTNESS</b> - other			
<b>DIRECTNESS</b>			
<b>17. SAFETY</b> - traffic volume	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.
<b>18. SAFETY</b> - traffic speed	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.
<b>19. SAFETY</b> - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.
<b>SAFETY</b>			
<b>20. COHERENCE</b> - dropped kerbs and tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.
<b>COHERENCE</b>			

## LTN 1/20: Cycling Level of Service (CLOs) tool

Key Requirement	Indicators
Cohesion	1. Ability to join/leave route safely and easily: consider left and right turns
	2. Provision for cyclists throughout the whole length of the route
	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network
Directness	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative
	5. Stopping and giving way frequently
	6. Delay at junctions
	7. Ability to maintain own speed on links
Safety	8. Gradient
	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction
	10. Motor traffic speed on sections of shared carriageway
	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour
	12. Segregation to reduce risk of collision alongside or from behind
	13. Conflicting movements at junctions
	14. Legible road markings and road layout
15. Conflict with kerbside activity	
Comfort	16. Evasion room and unnecessary hazards
	17. Major and minor defects
	18. Surface type
	19. Desirable minimum widths according to volume of cyclists and route type.
Attractiveness	20. Signing
	21. Lighting
	22. Isolation
	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London
	24. Signs informative and consistent but not overbearing or of inappropriate size
	25. Evidence of bicycles parked to street furniture or cycle stands

## Report Structure

- 1.10 Following this introduction, Chapter 2 will discuss each route in turn, summarising the results of the WRAT and the CLOs tool and identifying any areas for improvement. Chapter 3 will then highlight opportunities for the provision of new walking and cycling infrastructure.

## 2.0 Existing Facilities

### Preamble

- 2.1 In this section, each route identified in Chapter 2 will be discussed in turn; first summarising the findings of the WRAT and then the CLoS tool. It should be noted that the WRAT is scored out of 40 with a score of 28 (70%) regarded as a minimum level of overall provision.
- 2.2 It should be further noted that the maximum attainable score on the CLoS tool is 50 with no guidance provided in LTN 1/20 as to what constitutes an acceptable score. Instead, the emphasis of the CLoS tool is on identifying any significant defects in a cycle route and it includes some factors that are considered to be ‘Critical Fails’ – results that represent unsafe conditions for cycling which must be addressed.
- 2.3 The full results of the WRAT and the CLoS tool for each route are presented in Appendix C and D respectively.

### Dickens Heath Road

- 2.4 Extending westwards from the Site’s western boundary, Dickens Heath Road is one of two roads (the other being The Barn Lane) that cyclists from the Site would use to reach Whitlock’s End railway station.
- 2.5 It is accepted that, at 1.7km, the journey from the Site to Whitlock’s End is likely further than most would be willing to walk to a railway station. Nevertheless, given the frequency and short journey time of services from the station to Birmingham Moor Street, it is anticipated that the combined walk and train journey would result in a total journey time of circa one hour for site residents travelling to Birmingham city centre which is not an unreasonable time for leisure or commuting, especially if done as part of a hybrid or part-time working pattern.

#### WRAT: Dickens Heath Road

Criterion	Maximum Score	Performance Scores
Attractiveness	8	6
Comfort	12	10
Directness	12	9
Safety	6	6
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>33</b>

- 2.6 The above demonstrates that this route has an acceptable level of provision for pedestrians across its length, scoring strongly across all criteria. A shared use path is provided in the western verge of Dickens Heath Road which, on the day of the Site visit, was observed to be in good condition. A grass verge separating the path from the carriageway affords the user ample distance from vehicular traffic. Staggered crossings facilitated with dropped kerbs and tactile paving are provided at the roundabout junction with Tanworth Lane, although the refuge island may be slightly too small to be comfortable for wheelchair users or somebody pushing a pram.

### CLoS: Dickens Heath Road

Key Requirement	Max Score	Route Score
Cohesion	6	5
Directness	10	7
Safety	16	11
Comfort	8	8
Attractiveness	10	6
<b>Total</b>	<b>50</b>	<b>37</b>

- 2.7 Due to the shared use path provided along the length of the studied section of the road, Dickens Heath Road scores well across all of the Clos tool's key requirements. On the day of the Site visit, the shared use path was observed to be well signed and in good condition with ample room for cyclists and pedestrians to use the path concurrently. Several cyclists were seen using the path in the vicinity of the Site.
- 2.8 The shared use path is well connected to other shared paths on Tanworth Lane, enabling cyclists to continue their journey without being required to share the carriageway. However, no shared use path is provided in the eastern verge. Therefore, cyclists travelling from Dog Kennel Lane may find it difficult accessing the shared use path on Dickens Heath Road, potentially forcing them to share the carriageway with high traffic volumes.
- 2.9 Nevertheless, the route scores well on the CLoS tool with the high quality cycle infrastructure considered to facilitate a good cycle connection towards Whitlock's End. On the day of the Site visit, ample sheltered cycle storage was available at the railway station.

### Tythe Barn Lane

- 2.10 Extending for circa 1.4km from Dickens Heath Road, Tythe Barn Lane is the second road that comprises the route to Whitlock's End railway station from the Site. Circa 300m from its junction with Dickens Heath Road, Tythe Barn Lane bridges over the Stratford-upon-Avon canal where wooden bollards form a pedestrian/cycle only path, preventing through access from Dickens Heath Road to Whitlock's End via Tythe Barn Lane.

### WRAT: Tythe Barn Lane

Criterion	Maximum Score	Performance Scores
Attractiveness	8	4
Comfort	12	8
Directness	12	10
Safety	6	3
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>27</b>

- 2.11 Tythe Barn Lane fails to score the generally accepted 70% on the WRAT. This is largely owed to the combination of narrow footways, which were observed to be made worse by overgrown vegetation, and high traffic volumes during peak hours. The road also has very limited natural

surveillance along circa 500m of its length which is likely to make it feel unsafe for some users, particularly during the winter months. Traffic calming is provided on the road, taking the form of speed humps, footpath widening and bollards.

- 2.12 Circa 100m south of the railway station, dropped kerbs and tactile paving are provided at the Tythe Barn Lane/Tilehouse Lane priority controlled junction. However, pedestrians crossing the road at the junction can face lengthy crossing times owing to the high traffic volumes during peak hours.

**CLoS: Tythe Barn Lane**

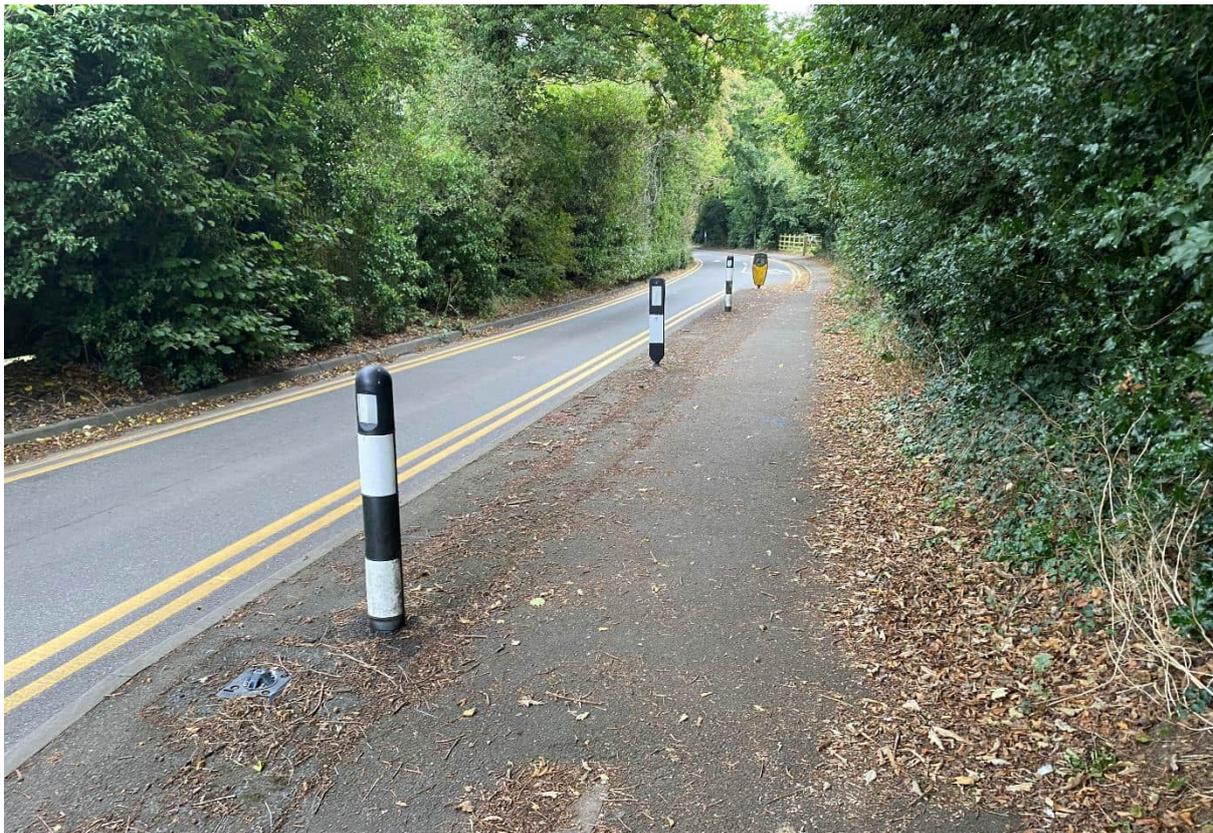
Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	2
<b>Directness</b>	10	6
<b>Safety</b>	16	8
<b>Comfort</b>	8	5
<b>Attractiveness</b>	10	5
<b>Total</b>	<b>50</b>	<b>26</b>

- 2.13 Due to the pedestrian/cycle only path at the canal bridge, vehicular traffic from the Site would be required to travel to Whitlock’s End via Dickens Heath village, resulting in comparable journey times for cyclists and drivers travelling between the Site and the railway station.
- 2.14 Despite this potential, however, Tythe Barn Lane scores poorly on the CLoS tool. This is largely owed to the lack of any formal cycling infrastructure, with cyclists required to share the carriageway with vehicles on a road which experiences reasonably high traffic volumes during peak hours. There is one section of traffic calming on the road which is provided as a widened footway and is designated as shared use, allowing cyclists to continue their journey without having to give way to oncoming traffic as cars do. However, the signage is partly obscured by vegetation and may cause confusion to less experienced cyclists.
- 2.15 It should be noted that, although cyclists are required to share the carriageway, the lane widths on Tythe Barn Lane are outside of what LTN 1/20 calls ‘critical range’ - 3.2m to 3.9m - and 85th%ile speeds are unlikely to exceed 30mph. Therefore, the road is deemed acceptable for on-road cycling. However, due to the fairly high traffic volumes during peak hours, it is expected that only more experienced cyclists would be likely to use the route. No cyclists were observed on Tythe Barn Lane on the day of the Site visit.

### Shared use path on Dickens Heath Road



### Traffic calming on Tythe Barn Lane



### Pedestrian/cycle only path on Tythe Barn Lane



### Dog Kennel Lane

- 2.16 Dog Kennel Lane measures circa 600m long and forms the frontage of the Site. It is a 40mph road providing a connection between the B4102 and the A34 Stratford Road and is facilitated with a single footway located in the verge opposite the Site.

#### WRAT: Dog Kennel Lane

Criterion	Maximum Score	Performance Scores
Attractiveness	8	7
Comfort	12	9
Directness	12	10
Safety	6	4
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>32</b>

- 2.17 The above demonstrates that the route has an acceptable level of provision for pedestrians, scoring well across all criteria. During the Site visit, the footway was observed to cater for pedestrian desire lines and to tie in well with the recently upgraded footways delivered as part of The Green development opposite the Site.

### CLoS: Dog Kennel Lane

Key Requirement	Max Score	Route Score
Cohesion	6	4
Directness	10	7
Safety	16	8
Comfort	8	4
Attractiveness	10	7
<b>Total</b>	<b>50</b>	<b>30</b>

- 2.18 Despite being delineated as an advisory route on Solihull MBC’s online map ([Where to cycle in Solihull | solihull.gov.uk](#)), cycling provision on Dog Kennel Lane was observed to be poor with the route scoring ‘critical fails’ on Indicators no. 10 and 12 of the CLoS tool.
- 2.19 It is acknowledged in LTN 1/20 that it is often not feasible to deliver off-road cycle infrastructure and so an acceptance is generally made for cyclists sharing the carriageway with motorists where traffic speeds and volumes are low. Indicator no. 10 of the CLoS tool, ‘Motor traffic speed on sections of shared carriageway’, therefore states that 85th%ile speeds of over 37mph are unacceptable for shared carriageways and constitute a ‘critical fail’. Whilst traffic speeds were not observed to be particularly high on the day of the site visit, due to the 40mph speed limit on Dog Kennel Lane it is likely that 85th%ile speeds will exceed 37mph.
- 2.20 The other notable area for concern is Indicator no.12 of the CLoS, ‘Segregation to reduce risk of collision’, which states that cyclists should not have to share the carriageway where lane widths are within what LTN 1/20 calls the ‘critical range’ of 3.2m to 3.9m. Lane widths on Dog Kennel Lane appear to be within the critical range, constituting a critical fail on Indicator no. 12 of the CLoS tool, although it is advised that the lane widths more accurately measured using a topographic survey or OS mapping.
- 2.21 Despite a need for improvement, a small number of cyclists were observed using Dog Kennel Lane on the day of the Site visit. At each end of the road, the route provides connections to shared use paths (on Tanworth Lane to the west and Stratford Road to the east) and it also provides a connection to ‘The Village’ in The Green development opposite the Site which features a number of amenities and employment opportunities (including a restaurant, a gym and a hotel). Sheltered bicycle storage is provided in ‘The Village’.
- 2.22 It should be noted that an active travel route will be provided as part of the development proposals which will be located within the site boundary and will travel parallel to Dog Kennel Lane, thus providing an active travel route along this corridor.

### The Green Development

- 2.23 The ongoing development of The Green Business Park opposite the Site has seen the delivery of a large scale residential development, co-working and office spaces, and various local amenities.

- 2.24 Access to the development from Dog Kennel Lane is primarily taken from Webster Avenue and Shepherds Green Road, although signage indicates that the latter is a private street which may preclude Site residents from using the development as a cut through to Stratford Road.

**WRAT: The Green Development**

Criterion	Maximum Score	Performance Scores
Attractiveness	8	8
Comfort	12	11
Directness	12	12
Safety	6	6
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>39</b>

- 2.25 The above demonstrates a near perfect score for pedestrian provision through The Green development. During the Site visit, footways were observed to be in excellent condition with several footpaths deviating from the road to better cater for pedestrian desire lines. Street lighting is provided throughout and the majority of the dwellings front immediately onto the footway, providing excellent natural surveillance. Traffic volumes and speeds were observed to be very low, allowing pedestrians to cross the street without the need for controlled crossings. The only minor negative observed was some kerbside parking, requiring some minor give and take between pedestrians.
- 2.26 The number 5 bus, which provides a regular service to Birmingham Moor Street Station, can be accessed from a pair of bus stops (*Stratford RD adjacent Connaught House, Three Maypoles* and *Stratford RD opposite Connaught House, Three Maypoles*) which are located on Stratford Road and can be conveniently accessed from the Site by cutting through The Green development.

**CLoS: The Green Development**

Key Requirement	Max Score	Route Score
Cohesion	6	3
Directness	10	7
Safety	16	13
Comfort	8	8
Attractiveness	10	9
<b>Total</b>	<b>50</b>	<b>40</b>

- 2.27 Whilst no formal cycle provision is provided in The Green development, the streets are spacious and experience low traffic volumes, making them conducive to cycling for all age groups and abilities. Traffic volumes were observed to be low during the Site visit and traffic calming and a 20mph speed limit help to keep vehicular speeds low.
- 2.28 As the route is not a formal cycle route, it does not contribute to the local cycle network density (Indicator no. 3 of the CLoS tool) hence the lower Cohesion score. However, it does provide

a connection onto the shared use path on Stratford Road and cyclists were observed travelling through The Green development on the day of the Site visit.

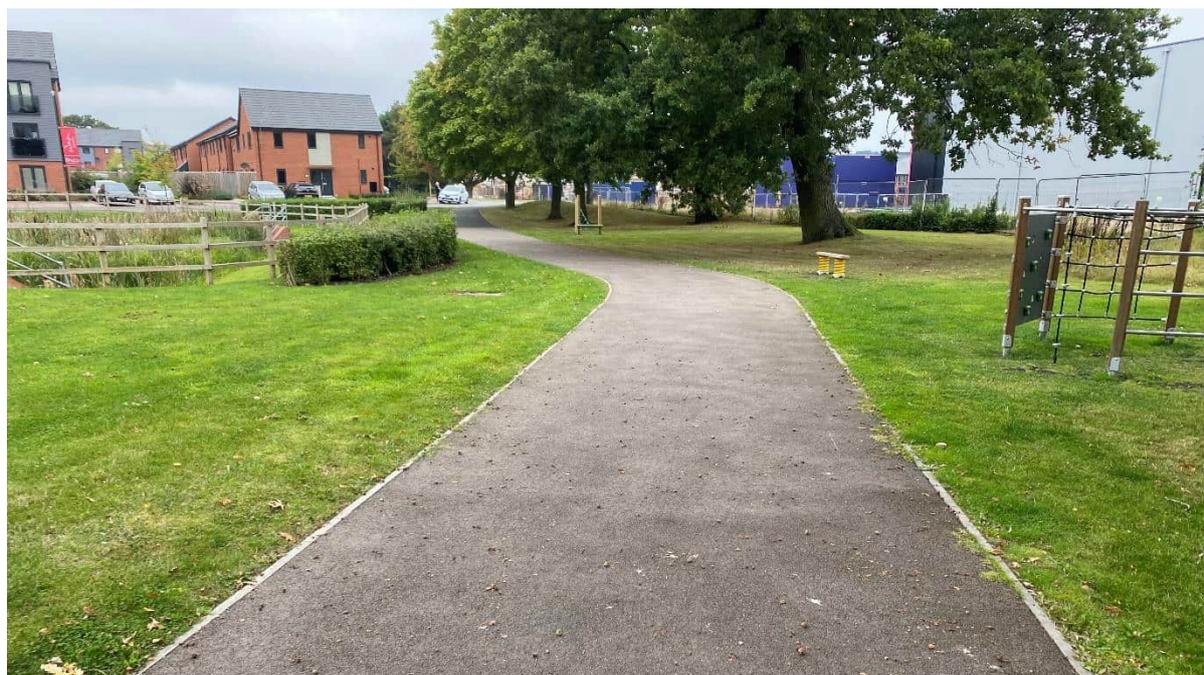
### Looking eastbound on Dog Kennel Lane



### Private street signage at Shepherds Green Road



## Pedestrian/cycle path through The Green Development



### Tanworth Lane/Stretton Road

- 2.29 The Light Hall School catchment area encompasses the entire Site and so it is anticipated that most secondary school aged children living at the Site will attend that school. Located circa 900m from the Site 'as the crow-flies', the quickest route to the school from the Site by all transport modes is via Tanworth Lane and Stretton Road, a distance of circa 1.1km.

#### WRAT: Tanworth Lane/Stretton Road

Criterion	Maximum Score	Performance Scores
Attractiveness	8	7
Comfort	12	9
Directness	12	10
Safety	6	6
Coherence	2	1
<b>Total</b>	<b>40</b>	<b>33</b>

- 2.30 The WRAT for this route indicates generally strong provision for pedestrians across all criteria. During the Site visit it was observed that the residential nature of Tanworth Lane, the provision of footways in both verges and the provision of traffic calming (speed humps) to regulate vehicular speeds make Tanworth Lane a reasonable route.
- 2.31 Stretton Road is a side road to Tanworth Lane and was observed to experience significantly lower traffic volumes and low speeds on account of a 20mph speed limit and further traffic calming (speed humps). A single phase zebra crossing is provided to facilitate pedestrian crossings.

- 2.32 Aside from the fairly busy nature of Tanworth Lane, the only significant issue observed with the walking route was the prevalence of kerbside parking. Whilst footways are generally wide enough for this not to pose a safety problem for most pedestrians, footways can be reduced to an effective width of less than 1.5m by kerbside parking which would pose difficulties to wheelchair users or people pushing prams. There are also instances where a combination of kerbside parking and the overhanging trees/hedgerows of residents' gardens necessitates give and take between pedestrians.

#### CLoS: Tanworth Lane/Stretton Road

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	1
<b>Directness</b>	10	7
<b>Safety</b>	16	8
<b>Comfort</b>	8	7
<b>Attractiveness</b>	10	9
<b>Total</b>	<b>50</b>	<b>32</b>

- 2.33 The above demonstrates that cycling provision along the route to the school from the Site is generally fairly poor with particular shortfalls across the Cohesion and Safety requirements. The main reason for the low Cohesion score is that, despite being designated as an 'advisory' cycle route on SMBC's online map, neither Tanworth Lane or Stretton Road feature any formal cycle infrastructure, with cyclists required to share the carriageway with vehicles.

#### A34 Stratford Road

- 2.34 Stratford Road, which forms a section of the A34, provides an arterial route into Birmingham city centre and experiences the highest traffic volumes of all of the roads in the vicinity of the Site. For the purposes of this Active Travel Audit, the assessment has concentrated on a circa 2km long section of Stratford Road from its junction with Tanworth Lane to its roundabout junction with Monkspath Hall Road.

#### WRAT: Stratford Road

Criterion	Maximum Score	Performance Scores
<b>Attractiveness</b>	8	7
<b>Comfort</b>	12	12
<b>Directness</b>	12	7
<b>Safety</b>	6	6
<b>Coherence</b>	2	2
<b>Total</b>	<b>40</b>	<b>34</b>

- 2.35 Stratford Road generally scores well for walking provision with shared use paths provided in the northern verge along the entire length of the route. At junctions, staggered toucan crossings are provided although crossing times were observed to be fairly long. Footways were observed generally to cater to desire lines and to be in good condition whilst the provision of a grass verge provided ample distance from the busy carriageway.

- 2.36 Some minor negatives were observed during the Site visit. Firstly, whilst the footway in the northern verge is continuous, in the southern verge it terminates at the roundabout junction with Cranmore Boulevard/Shepherds Green Road. Secondly, although the grass verge separates pedestrians from vehicular traffic, the strategic nature of the road and the high traffic volumes it experiences do not make for a particularly pleasant walking route.

#### CLoS: Stratford Road

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	5
<b>Directness</b>	10	8
<b>Safety</b>	16	15
<b>Comfort</b>	8	8
<b>Attractiveness</b>	10	7
<b>Total</b>	<b>50</b>	<b>43</b>

- 2.37 The provision of shared use paths along Stratford Road ensures that the route achieves a strong score on the CLoS tool. On the day of the Site visit a small number of cyclists were observed using the route.
- 2.38 Whilst provision is generally good, the lack of a shared use path in the southern verge of the road to the west of the Cranmore Boulevard/Shepherds Green Road roundabout prevents the route from achieving a higher score.

#### Cranmore Boulevard

- 2.39 Extending northwards from Stratford Road, Cranmore Boulevard provides a useful link to Monkspath Business Park. It should be noted that the quickest route to Cranmore Boulevard from the Site is via The Green development. However, given the uncertainty over the private road status of Shepherds Green Road, the route may not be viable for future Site residents.

#### WRAT: Cranmore Boulevard

Criterion	Maximum Score	Performance Scores
<b>Attractiveness</b>	8	8
<b>Comfort</b>	12	11
<b>Directness</b>	12	12
<b>Safety</b>	6	5
<b>Coherence</b>	2	1
<b>Total</b>	<b>40</b>	<b>37</b>

- 2.40 The shared use path in Stratford Road links to another shared use path provided in Cranmore Boulevard. The path is initially provided in the western verge before switching to the eastern verge at a shared use zebra crossing.
- 2.41 A row of shops and takeaway restaurants are located along Cranmore Boulevard and, despite the provision of layby parking, some kerbside parking does occur, although the footway is

generally wide enough to limit the need to give and take between pedestrians. Junctions are facilitated with dropped kerbs, although tactile paving is often absent.

**CLoS: Cranmore Boulevard**

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	5
<b>Directness</b>	10	8
<b>Safety</b>	16	14
<b>Comfort</b>	8	7
<b>Attractiveness</b>	10	9
<b>Total</b>	<b>50</b>	<b>43</b>

- 2.42 The provision of a shared use path ensures that the route scores well on the CLoS tool. At the southern end of the road, this cycle infrastructure ties in with the shared use path on Stratford Road which would provide cyclists from the Site with a connection to the industrial estate.
- 2.43 Bollards and double yellow lines help to prevent kerbside parking in the shared use path although there is a tendency for residents to leave their collection bins in the shared path, creating an unnecessary hazard.

**Kerbside parking on Tanworth Lane**



### Zebra crossing at Stretton Road

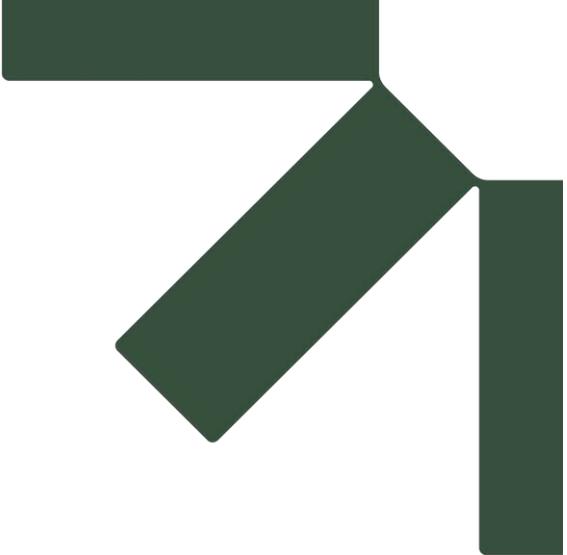


### Shared use path on Stratford Road

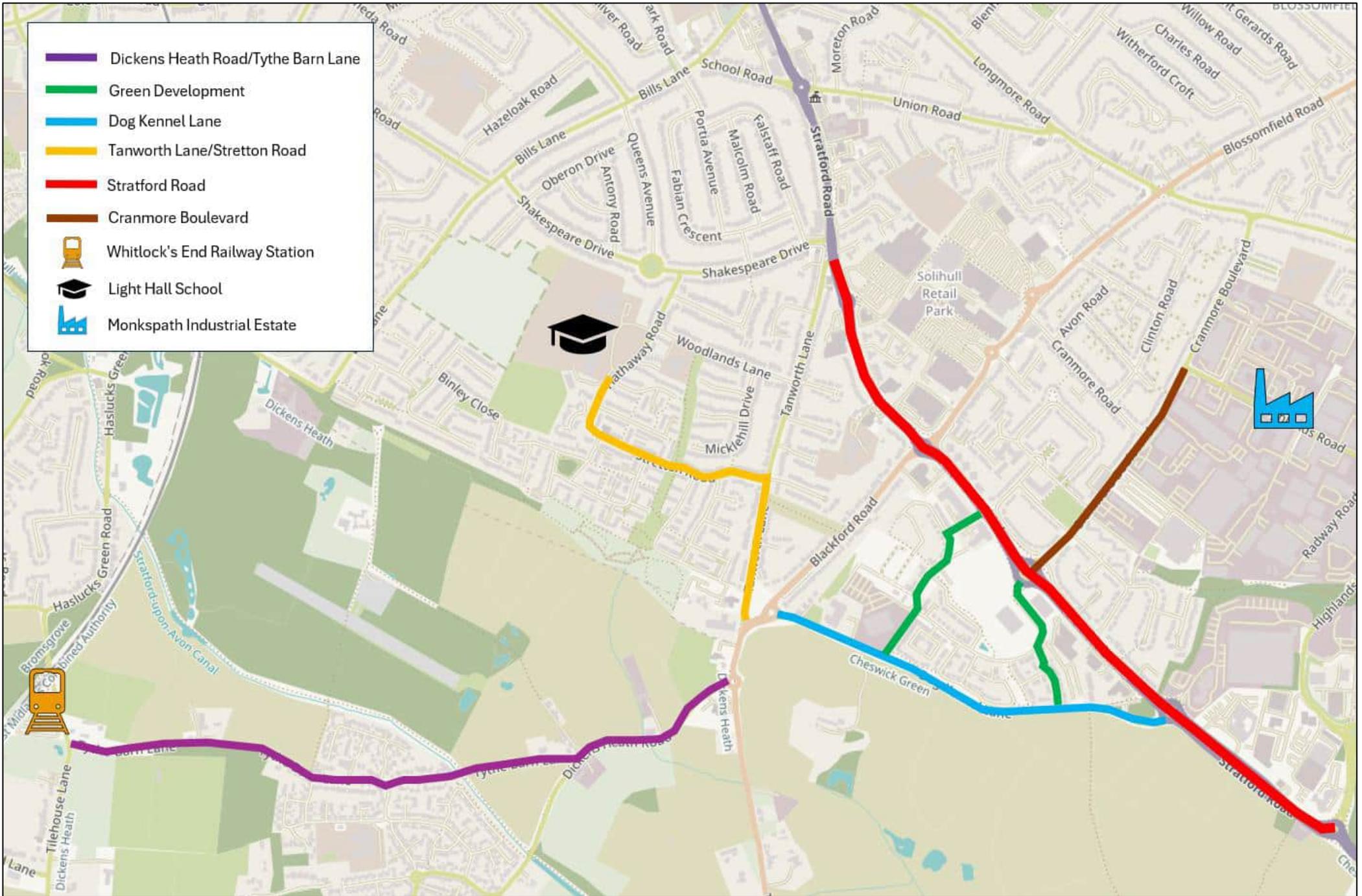


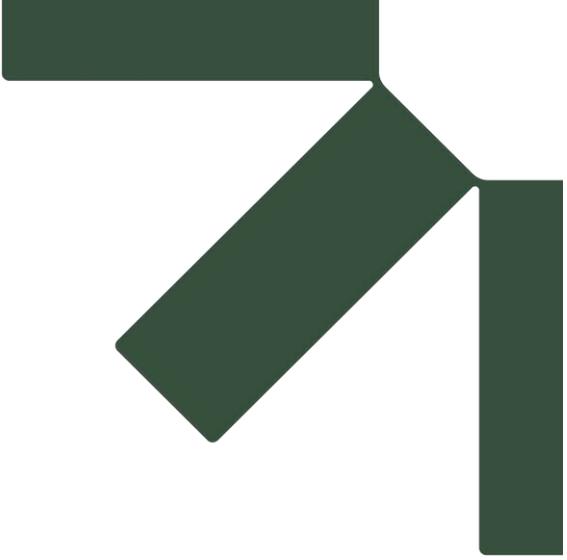
## 3.0 Summary and Next Steps

- 3.1 In general, the active travel provision in the vicinity of the Site is of a reasonable standard. Footpaths are in good condition and walking routes are usually pleasant despite the high traffic volumes on some roads. There are a number of local amenities within walking distance of the Site. Perhaps most significantly, Light Hall School is well within the CIHT's preferred maximum walking distance of 2000m for school/commuting journeys.
- 3.2 Several key links in the vicinity of the Site are facilitated with shared use paths and these were observed to be reasonably well used by cyclists during the Site visit. A greater number of local destinations are within convenient cycling distance of the Site, notably Whitlock's End railway station and Monkspath Industrial Estate. However, gaps in the network require cyclists to share the carriageway with vehicles on several roads in the vicinity of the Site.
- 3.3 Any contributions towards the local active travel network should be proportional to the scale of the development. Given the findings of this report, we would suggest consideration of the following.
- Signage at Shepherds Green Road indicates that the road is private which may preclude Site residents from using The Green development as a cut through. It would be prudent to further investigate whether or not future Site residents would be able to walk/cycle through The Green development to reach Stratford Road;
  - Slightly to the west of the Stratford Road/Dog Kennel Lane roundabout, there is a footpath which extends northwards from Stratford Road to Monkspath Industrial Estate. In the event that The Green development is not accessible to Site residents, Cranmore Boulevard is unlikely to be an attractive option for residents travelling to the industrial estate. In this case the footpath at the Stratford Road/Dog Kennel Lane roundabout could be a good alternative. The path is not marked as a Public Right of Way on SMBC's website and so there may be potential to upgrade it to a shared use path; and
  - Investigate the possibility of delivering a shared use path along Tythe Barn Lane extending from its junction with Dickens Heath Road towards Whitlock's End Railway Station.
- 3.4 It should be noted that Route C within SMBC's Local Cycling and Walking Infrastructure Plan (LCWIP) is identified as a priority route between Dickens Heath to Solihull Town Centre. The route is also intended to provide a connection to Whitlock's End Railway Station. A significant traffic-free section of the route will be delivered by the proposed residential development to the west of Dickens Heath (site BL1 and planning application ref: PL/2023/02656/PPOL) along and to the north of Tythe Barn Lane.
- 3.5 These potential improvements will be discussed with SMBC as part of a wider mitigation package based on the results of the cumulative assessment of all Blythe sites in the VISSIM traffic model.



# Appendix A Audited Routes Map





**Appendix B    Cycling Level of  
Service Tool (LTN  
1/20)**

## Appendix A: Cycling Level of Service Tool

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns		Cyclists cannot connect to other routes without dismounting	Cyclists can connect to other routes with minimal disruption to their journey	Cyclists have dedicated connections to other routes provided, with no interruption to their journey		
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route		Cyclists are 'abandoned' at points along the route with no clear indication of how to continue their journey.	The route is made up of discrete sections, but cyclists can clearly understand how to navigate between them, including through junctions.	Cyclists are provided with a continuous route, including through junctions		
	Density of network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width ie distances between primary and secondary routes within the network		Route contributes to a network density mesh width >1000	Route contributes to a network density mesh width 250 – 1000m	Route contributes to a network density mesh width <250m		
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as-the-crow-flies' distance as possible.	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative.		Deviation factor against straight line or shortest road alternative >1.4	Deviation factor against straight line or shortest road alternative 1.2 – 1.4	Deviation factor against straight line or shortest road alternative <1.2		

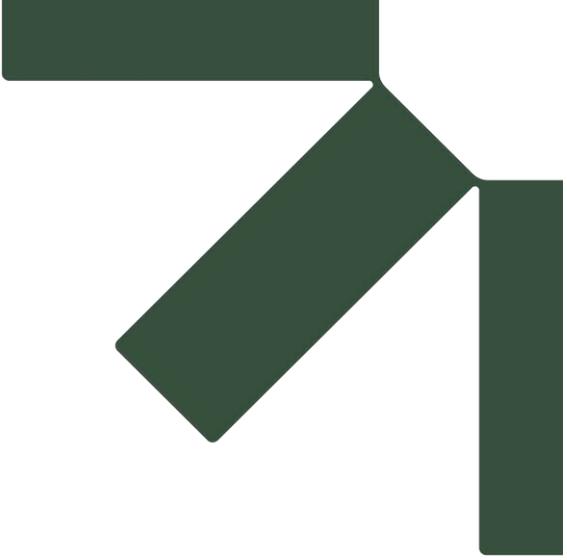
Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Directness	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and give way frequency		The number of stops or give ways on the route is more than 4 per km	The number of stops or give ways on the route is between 2 and 4 per km	The number of stops or give ways on the route is less than 2 per km		
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions		Delay for cyclists at junctions is greater than for motor vehicles	Delay for cyclists at junctions is similar to delay for motor vehicles	Delay is shorter than for motor vehicles or cyclists are not required to stop at junctions (eg bypass at signals)		
	Time: Delay on links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links		Cyclists travel at speed of slowest vehicle (including a cycle) ahead	Cyclists can usually pass slow traffic and other cyclists	Cyclists can always choose an appropriate speed.		
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient		Route includes sections steeper than the gradients recommended in Chapter 5	There are no sections of route steeper than the gradients recommended in Chapter 5	There are no sections of route which steeper than 2%		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph		
			10. Motor traffic speed on sections of shared carriageway	85th percentile > 37mph (60kph)	85th percentile >30mph	85th percentile 20mph-30mph	85th percentile <20mph		
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	>10000 AADT, or >5% HGV	5000-10000 AADT and 2-5%HGV	2500-5000 and <2% HGV	0-2500 AADT		
	Risk of collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	Cyclists sharing carriageway – nearside lane in critical range between 3.2m and 3.9m wide and traffic volumes prevent motor vehicles moving easily into opposite lane to pass cyclists.	Cyclists in unrestricted traffic lanes outside critical range (3.2m to 3.9m) or in cycle lanes less than 1.8m wide.	Cyclists in cycle lanes at least 1.8m wide on-carriageway; 85th percentile motor traffic speed max 30mph.	Cyclists on route away from motor traffic (off road provision) or in off-carriageway cycle track. Cyclists in hybrid/light segregated track; 85th percentile motor traffic speed max 30mph.		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Safety		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions		Side road junctions frequent and/ or untreated. Major junctions, conflicting cycle/ motor traffic movements not separated	Side road junctions infrequent and with effective entry treatments. Major junctions, principal conflicting cycle/ motor traffic movements separated.	Side roads closed or treated to blend in with footway. Major junctions, all conflicting cycle/motor traffic streams separated.		
	Avoid complex design	Avoid complex designs which require users to process large amounts of information. Good network design should be self-explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout		Faded, old, unclear, complex road markings/ unclear or unfamiliar road layout	Generally legible road markings and road layout but some elements could be improved	Clear, understandable, simple road markings and road layout		
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	Narrow cycle lanes <1.5m or less (including any buffer) alongside parking/loading	Significant conflict with kerbside activity (eg nearside cycle lane < 2m (including buffer) wide alongside kerbside parking)	Some conflict with kerbside activity – eg less frequent activity on nearside of cyclists, min 2m cycle lanes including buffer.	No/very limited conflict with kerbside activity or width of cycle lane including buffer exceeds 3m.		
	Reduce severity of collisions where they do occur	Wherever possible routes should include "evasion room" (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards		Cyclists at risk of being trapped by physical hazards along more than half of the route.	The number of physical hazards could be further reduced	The route includes evasion room and avoids any physical hazards.		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Comfort	Surface quality	Density of defects including non cycle friendly ironworks, raised/sunken covers/ gullies, potholes, poor quality carriageway paint (eg from previous cycle lane)	17. Major and minor defects		Numerous minor defects or any number of major defects	Minor and occasional defects	Smooth high grip surface		
		Pavement or carriageway construction providing smooth and level surface	18. Surface type		Any bumpy, unbound, slippery, and potentially hazardous surface.	Hand-laid materials, concrete pavements with frequent joints.	Machine laid smooth and non-slip surface – eg Thin Surfacing, or firm and closely jointed blocks undisturbed by turning heavy vehicles.		
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).		More than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum values.	No more than 25% of the route includes cycle provision with widths which are no more than 25% below desirable minimum	Recommended widths are maintained throughout whole route		
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing		Route signing is poor with signs missing at key decision points.	Gaps identified in route signing which could be improved	Route is well signed with signs located at all decision points and junctions		

Key requirement	Factor	Design principle	Indicators	Critical	0 (Red)	1 (Amber)	2 (Green)	Score	Comments
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting		Most or all of route is unlit	Short and infrequent unlit/ poorly lit sections	Route is lit to highway standards throughout		
			22. Isolation		Route is generally away from activity	Route is mainly overlooked and is not far from activity throughout its length	Route is overlooked throughout its length		
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)		Route impacts negatively on pedestrian provision, Pedestrian Comfort is at Level C or below.	No impact on pedestrian provision or Pedestrian Comfort Level remains at B or above.	Pedestrian provision enhanced by cycling provision, or Pedestrian Comfort Level remains at A		
	Minimise street clutter	Signing required to support scheme layout	24. Signs informative and consistent but not overbearing or of inappropriate size		Large number of signs needed, difficult to follow and/ or leading to clutter	Moderate amount of signing particularly around junctions.	Signing for wayfinding purposes only and not causing additional obstruction.		
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street	25. Evidence of bicycles parked to street furniture or cycle stands		No additional cycle parking provided or inadequate provision in insecure nonoverlooked areas	Some secure cycle parking provided but not enough to meet demand	Secure cycle parking provided, sufficient to meet demand		
<b>Audit Score Total</b>								<b>0</b>	<b>0</b>



# **Appendix C    Walking Route Audit Tool Results**

**Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool**  
**Walking Route Audit Tool**

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	2		
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	1	Limited natural surveillance.	
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	1	Fairly high traffic volume.	
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			2		
<b>ATTRACTIVENESS</b>				<b>6</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.	2		
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	1	Refuge islands possibly too small to be comfortable for wheelchair users or people pushing prams.	
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	2		
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	1	Gradual incline headed west to east.	
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			2		
<b>COMFORT</b>				<b>10</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	2		
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	0	Other than at controlled crossings, there is no opportunity to cross road owing to lack of footway in opposite verge.	
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	1		
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2	No signalised crossings.	
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.			2		
<b>DIRECTNESS</b>				<b>9</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	2	Fairly high traffic volume but pedestrians separated by grass verge.	
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	2	Fairly high traffic speeds but pedestrians separated by grass verge.	
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>6</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	2		
<b>COHERENCE</b>				<b>2</b>		
			<b>Total Score</b>	<b>33</b>		

**ROUTE SUMMARY**

<b>Route Name</b>	Dickens Heath Road
<b>Length</b>	Circa 450m
<b>Name of Assessor(s)</b>	Edward Atherton
<b>Date of Assessment</b>	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	6
Comfort	12	10
Directness	12	9
Safety	6	6
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>33</b>

<b>Comments</b>	
<b>Actions</b>	

Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool  
Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	1	Overgrown vegetation limits footway width.	
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	1	Limited street surveillance.	
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	1	Fairly high traffic volumes.	
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			1	Street lighting provided, but there are gaps in provision.	
<b>ATTRACTIVENESS</b>				<b>4</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsidised or fretted pavement, or significant uneven patching or trenching.	1	Some minor defects (patching, pot-holes, etc.).	
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	0	Footway widths generally circa 1.5m, although vegetation overgrowth causes narrowing of the footway in places which would pose difficulties to wheelchair users or people pushing prams.	
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2	No staggered crossings.	
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	2		
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	1	Generally a flat, level road. However, the canal bridge is fairly steep and may pose difficulties to some wheelchair users and people pushing prams.	
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			2		
<b>COMFORT</b>				<b>8</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to roads).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	2		
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	1	Tythe Barn Lane/Tilehouse Lane junction can get busy at peak times and can incur delays to crossing times.	
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	2	No staggered crossings.	
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2	No controlled crossings.	
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severe issues for users.			1	Bollards at the canal bridge create a modal filter to prevent vehicular access. The gaps between these bollards may pose difficulties to some wheelchair users and people pushing prams.	
<b>DIRECTNESS</b>				<b>10</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	0	Distance between pedestrians and vehicles generally sufficient. However, narrower sections of footway may pose a safety risk, especially during peak hours when traffic volumes along the road are high.	
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	1	Pedestrians in close proximity. However, traffic calming keeps speeds relatively low.	
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>3</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	2		
<b>COHERENCE</b>				<b>2</b>		
				<b>Total Score</b>	<b>27</b>	

ROUTE SUMMARY

Route Name	Tythe Barn Lane
Length	Circa 1.4km
Name of Assessor(s)	Edward Atherton
Date of Assessment	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	4
Comfort	12	8
Directness	12	10
Safety	6	3
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>27</b>

Comments	
Actions	

**Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool**  
Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	2		
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	2		
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	1	Fairly busy road including some HGVs.	
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			2	None.	
<b>ATTRACTIVENESS</b>				<b>7</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsidised or fretted pavement, or significant uneven patching or trenching.	1	Some unevenness in footway and some patching.	
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	1		
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	2		
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	2	None.	
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			1	Some evidence of ponding in footway.	
<b>COMFORT</b>				<b>9</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	2		
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossings)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	1		
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	1		
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2	No signalled crossings.	
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.			2	None.	
<b>DIRECTNESS</b>				<b>10</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	1		
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	1		
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>4</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	2		
<b>COHERENCE</b>				<b>2</b>		
			<b>Total Score</b>	<b>32</b>		

**ROUTE SUMMARY**

Route Name	Dog Kennel Lane
Length	Circa 1km
Name of Assessor(s)	Edward Atherton
Date of Assessment	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	7
Comfort	12	9
Directness	12	10
Safety	6	4
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>32</b>

<b>Comments</b>	
<b>Actions</b>	

## Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

### Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	2		
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	2		
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	2		
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			2	None.	
<b>ATTRACTIVENESS</b>				<b>8</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.	2		
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	1	Some footway parking observed, minor give and take necessary.	
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	2		
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			2	None.	
<b>COMFORT</b>				<b>11</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	2		
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	2		
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	2	No controlled crossings necessary due to low traffic volumes and slow speeds.	
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2	No signalised crossings.	
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.			2	None.	
<b>DIRECTNESS</b>				<b>12</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	2		
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	2		
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>6</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	2		
<b>COHERENCE</b>				<b>2</b>		
				<b>Total Score</b>	<b>39</b>	

### ROUTE SUMMARY

<b>Route Name</b>	Shortcut to Stratford Road via Green Development
<b>Length</b>	Circa 500m
<b>Name of Assessor(s)</b>	Edward Atherton
<b>Date of Assessment</b>	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	8
Comfort	12	11
Directness	12	12
Safety	6	6
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>39</b>

<b>Comments</b>	
<b>Actions</b>	

**Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool**  
Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	2		
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	2		
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	1	Reasonably high traffic volumes along Tanworth Lane.	
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			2	None.	
<b>ATTRACTIVENESS</b>				<b>7</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.	1	Some unevenness and minor patching along Tanworth Lane.	
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	0	Footway parking on Tanworth Lane is common and may result in an effective footway width of less than 1.5m, posing difficulties to wheelchair users and people pushing prams.	
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	2		
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			2	None.	
<b>COMFORT</b>				<b>9</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	2		
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	1	Fairly busy nature of Tanworth Lane may delay crossing if not using the pedestrian refuge island.	
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	1	Pedestrian refuge island provided on Tanworth Lane near Site. Some delays possible.	
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2	No signalised crossings.	
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.			2	None.	
<b>DIRECTNESS</b>				<b>10</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	2	Reasonably high traffic volumes along Tanworth Lane, although footways are usually sufficiently wide.	
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	2		
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>6</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	1	No tactile paving provided at the junction with Stretton Road.	
<b>COHERENCE</b>				<b>1</b>		
				<b>Total Score</b>	<b>33</b>	

**ROUTE SUMMARY**

<b>Route Name</b>	Tanworth Lane/Stretton Road
<b>Length</b>	Circa 1.1km
<b>Name of Assessor(s)</b>	Edward Atherton
<b>Date of Assessment</b>	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	7
Comfort	12	9
Directness	12	10
Safety	6	6
Coherence	2	1
<b>Total</b>	<b>40</b>	<b>33</b>
<b>Comments</b>		
<b>Actions</b>		

**Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool**  
Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	2		
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	2		
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	1		
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			2	None.	
<b>ATTRACTIVENESS</b>				<b>7</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.	2		
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	2		
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	2		
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			2	None.	
<b>COMFORT</b>				<b>12</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	1	Shared use path generally adjacent to road apart from where it deviates from the A34 at the Cranmore Boulevard roundabout.	
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	0	The road is a dual carriageway and crossing somewhere other than a controlled crossing would be ill-advised.	
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	0		
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2		
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.			2	None.	
<b>DIRECTNESS</b>				<b>7</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	2	High traffic volume but pedestrians able to keep a safe distance.	
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	2	Traffic speeds high but pedestrians able to keep a safe distance.	
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>6</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	2		
<b>COHERENCE</b>				<b>2</b>		
			<b>Total Score</b>	<b>34</b>		

**ROUTE SUMMARY**

<b>Route Name</b>	Stratford Road (from Tanworth Road to Dog Kennel Lane)
<b>Length</b>	Circa 2km
<b>Name of Assessor(s)</b>	Edward Atherton
<b>Date of Assessment</b>	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	7
Comfort	12	12
Directness	12	7
Safety	6	6
Coherence	2	2
<b>Total</b>	<b>40</b>	<b>34</b>

<b>Comments</b>	
<b>Actions</b>	

**Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool**  
Walking Route Audit Tool

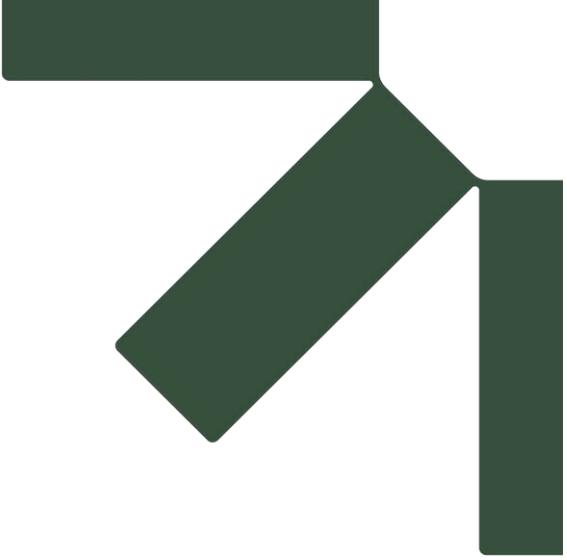
Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
<b>1. ATTRACTIVENESS - maintenance</b>	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.	2		
<b>2. ATTRACTIVENESS - fear of crime</b>	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).	2		
<b>3. ATTRACTIVENESS - traffic noise and pollution</b>	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise	2		
<b>4. ATTRACTIVENESS - other</b>	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards			2	None.	
<b>ATTRACTIVENESS</b>				<b>8</b>		
<b>5. COMFORT - condition</b>	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.	2		
<b>6. COMFORT - footway width</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2		
<b>7. COMFORT - width on staggered crossings/ pedestrian islands/refuges</b>	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.	2	None.	
<b>8. COMFORT - footway parking</b>	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.	1	Some kerbside parking, occasional need for give and take.	
<b>9. COMFORT - gradient</b>	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).	2		
<b>10. COMFORT - other</b>	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces			2	None.	
<b>COMFORT</b>				<b>11</b>		
<b>11. DIRECTNESS - footway provision</b>	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.	2		
<b>12. DIRECTNESS - location of crossings in relation to desire lines</b>	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.	2		
<b>13. DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)</b>	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).	2		
<b>14. DIRECTNESS - impact of controlled crossings on journey time</b>	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.	2		
<b>15. DIRECTNESS - green man time</b>	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.	2	No signalised crossings.	
<b>16. DIRECTNESS - other</b>	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.			2	None.	
<b>DIRECTNESS</b>				<b>12</b>		
<b>17. SAFETY - traffic volume</b>	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.	1		
<b>18. SAFETY - traffic speed</b>	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.	2		
<b>19. SAFETY - visibility</b>	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2		
<b>SAFETY</b>				<b>5</b>		
<b>20. COHERENCE - dropped kerbs and tactile paving</b>	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.	1	Dropped kerbs and tactile paving provided at some but not all junctions,	
<b>COHERENCE</b>				<b>1</b>		
				<b>Total Score</b>	<b>37</b>	

**ROUTE SUMMARY**

<b>Route Name</b>	Cranmore Boulevard
<b>Length</b>	Circa 600m
<b>Name of Assessor(s)</b>	Edward Atherton
<b>Date of Assessment</b>	19 September 2024

Criterion	Maximum Score	Performance Scores
Attractiveness	8	8
Comfort	12	11
Directness	12	12
Safety	6	5
Coherence	2	1
<b>Total</b>	<b>40</b>	<b>37</b>

<b>Comments</b>	
<b>Actions</b>	



# Appendix D    Cycling Level of Service Results

## Dickens Heath Road 1/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily; consider left and right turns	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	2	
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	1	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the-crow-flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	2	
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	1	Gradual incline headed west to east.
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	1	
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	0	No shared use path provided in eastern verge. If cyclists travelling westwards are unable to reach shared use path in western verge, they will be forced to share carriageway with high traffic volume.
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	1	High traffic volumes but cyclists not required to share carriageway.

Dickens Heath Road 2/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	2	
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	2	
	Reduce severity of collisions where they do occur	Wherever possible routes should include "evasion room" (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards	2	
Comfort	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	2	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	2	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signage	2	
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting	2	
			22. Isolation	0	Poor natural surveillance
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signage required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	2	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	1	Route not a destination in itself. No cycle parking provided

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	5
<b>Directness</b>	10	7
<b>Safety</b>	16	11
<b>Comfort</b>	8	8
<b>Attractiveness</b>	10	6
<b>Total</b>	<b>50</b>	<b>37</b>

Tythe Barn Lane/Dickens Heath Road 1/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily; consider left and right turns	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	0	No formal cycle provision appears to have been provided. One shared use path sign appears at short section of widened footway. It is unclear whether this sign refers specifically to the widened section of footway only or if it is a legacy of a now defunct cycle route.
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	0	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the crow flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	2	
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	1	Cyclists able to choose their own speed but would struggle to overtake another cyclists.
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	1	Generally flat and level road apart from at canal bridge.
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	1	
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	1	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	1	

Tythe Barn Lane/Dickens Heath Road 2/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	1	Cyclists sharing carriageway in lanes outside of critical width.
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	0	Unclear whether or not shared use signage is still valid. Likely to cause confusion.
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	2	
Comfort	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	2	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	1	Cyclists sharing carriageway in lanes outside of critical width.
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing	0	Unclear shared use path signage.
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting	1	Generally provided but gaps in provision.
			22. Isolation	1	Limited natural surveillance along some sections.
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signing required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	0	Unclear shared use path signage.
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	2	20 sheltered cycle spaces provided at Whitlock's End railway station.

Key Requirement	Max Score	Route Score
Cohesion	6	2
Directness	10	6
Safety	16	8
Comfort	8	5
Attractiveness	10	5
<b>Total</b>	<b>50</b>	<b>26</b>

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily; consider left and right turns	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	1	The road is an 'advisory route' rather than a formal cycle route. However, it provides a direct and easy to use cycle connection between to formal cycle routes.
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	1	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the crow flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	2	
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	1	The road is wide with plenty of room afforded for cyclists to choose their own speed. A lack of formal cycle infrastructure, however, may make it difficult for one cyclist to overtake another.
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	2	
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	0	40mph road.
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	C	40mph road.
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	1	

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	C	Cyclists sharing carriageway within critical range (circa 3.4m).
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	2	
Comfort	Reduce severity of collisions where they do occur	Wherever possible routes should include “evasion room” (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards	2	
	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	1	Minor defects in road surface, namely in eastbound carriageway.
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	0	No formal cycle infrastructure. Cyclists travelling on-carriageway within critical range.
Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing	1	Route is not a formal cycle route. However, the road is straight and direct with clear signage provided at either end which indicates available connections to formal cycle infrastructure.	
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used.	21. Lighting 22. Isolation	2 2	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signing required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	1	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	1	Sheltered cycle storage provided at 'The Village'.

Key Requirement	Max Score	Route Score
Cohesion	6	4
Directness	10	7
Safety	16	8
Comfort	8	4
Attractiveness	10	7
<b>Total</b>	<b>50</b>	<b>30</b>

Shortcut through Green Development 1/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily: consider left and right turns	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	1	Not a formal cycle route. However, roads within the development are residential with low speeds and are highly conducive to cycling.
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	0	Not a formal cycle route.
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the-crow-flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	0	Roads meander through the development. However, the development is small enough that cycling through it, all be it along an indirect route, will not constitute a significant detour.
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	2	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	2	
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	2	
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	2	
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	2	

Shortcut through Green Development 2/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	1	
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	1	
Comfort	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	2	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	2	Although not a formal cycle route, roads are wide and experience low volumes of slow moving traffic.
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing	2	
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting 22. Isolation	2 2	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signing required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	2	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	2	Sheltered cycle parking provided at 'The Village'.

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	3
<b>Directness</b>	10	7
<b>Safety</b>	16	13
<b>Comfort</b>	8	8
<b>Attractiveness</b>	10	9
<b>Total</b>	<b>50</b>	<b>40</b>

Tanworth Lane/Stretton Road 1/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily; consider left and right turns	1	Connection afforded at Dickens Heath Road junction.
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	0	No formal cycle infrastructure provided.
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	0	No formal cycle infrastructure provided.
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the crow flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	2	
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	1	Plenty of room afforded at Stretton Road for cyclists to choose their own speed. Cyclists may struggle to overtake one another along Tanworth Lane, however.
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	2	
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	1	
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	1	Tanworth Lane is 30mph. Stretton Road is slower (20mph).
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	1	

Tanworth Lane/Stretton Road 2/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	1	
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	0	Significant kerbside parking on Tanworth Lane.
Comfort	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	2	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	1	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing	2	
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well	21. Lighting 22. Isolation	2 2	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signing required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	2	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	2	Cycle parking appears to be provided at Lighthall School.

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	1
<b>Directness</b>	10	7
<b>Safety</b>	16	8
<b>Comfort</b>	8	7
<b>Attractiveness</b>	10	9
<b>Total</b>	<b>50</b>	<b>32</b>

Stratford Road 1/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily; consider left and right turns	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	2	
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	1	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the-crow-flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	2	
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	2	
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	2	Only section of shared carriageway is where Stratford Road deviates from A34. These sections of the road are residential with low traffic volumes and speeds.
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	2	As above.
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	2	As above.

Stratford Road 2/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	2	
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	2	
	Reduce severity of collisions where they do occur	Wherever possible routes should include "evasion room" (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards	2	
Comfort	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	2	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	2	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing	2	
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting	2	
			22. Isolation	2	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signing required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	1	
	Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	1	Some parking provided at the various amenities accessed from the road (e.g., Solihull Retail Park).

Key Requirement	Max Score	Route Score
<b>Cohesion</b>	6	5
<b>Directness</b>	10	8
<b>Safety</b>	16	15
<b>Comfort</b>	8	8
<b>Attractiveness</b>	10	7
<b>Total</b>	<b>50</b>	<b>43</b>

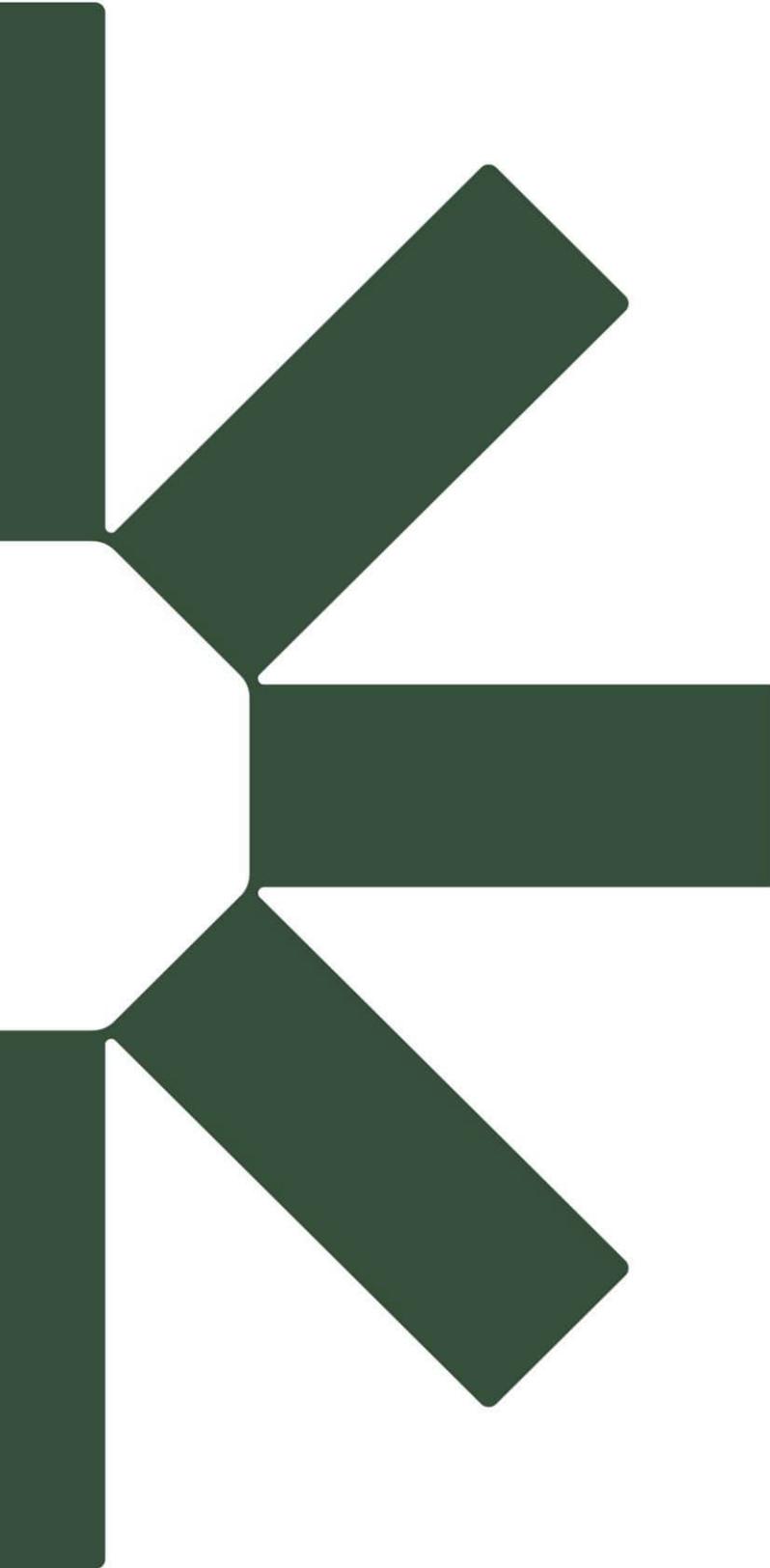
## Cranmore Boulevard 1/2

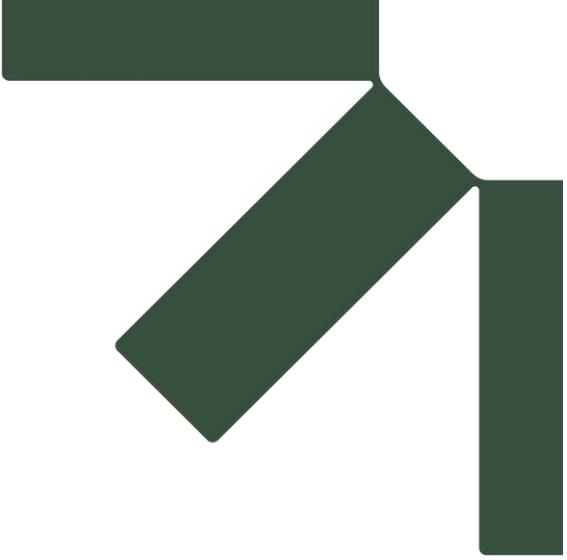
Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Cohesion	Connections	Cyclists should be able to easily and safely join and navigate along different sections of the same route and between different routes in the network.	1. Ability to join/leave route safely and easily; consider left and right turns	2	
	Continuity and Wayfinding	Routes should be complete with no gaps in provision. 'End of route' signs should not be installed – cyclists should be shown how the route continues. Cyclists should not be 'abandoned', particularly at junctions where provision may be required to ensure safe crossing movements.	2. Provision for cyclists throughout the whole length of the route	2	
	Density of Network	Cycle networks should provide a mesh (or grid) of routes across the town or city. The density of the network is the distance between the routes which make up the grid pattern. The ultimate aim should be a network with a mesh width of 250m.	3. Density of routes based on mesh width i.e. distances between primary and secondary routes within the network	1	
Directness	Distance	Routes should follow the shortest option available and be as near to the 'as the-crow-flies' distance as possible	4. Deviation of route Deviation Factor is calculated by dividing the actual distance along the route by the straight line (crow-fly) distance, or shortest road alternative	2	
	Time: Frequency of required stops or give ways	The number of times a cyclist has to stop or loses right of way on a route should be minimised. This includes stopping and give ways at junctions or crossings, motorcycle barriers, pedestrian-only zones etc.	5. Stopping and giving way frequently	1	
	Time: Delay at junctions	The length of delay caused by junctions should be minimised. This includes assessing impact of multiple or single stage crossings, signal timings, toucan crossings etc.	6. Delay at junctions	1	
	Time: Delay on Links	The length of delay caused by not being able to bypass slow moving traffic.	7. Ability to maintain own speed on links	2	
	Gradients	Routes should avoid steep gradients where possible. Uphill sections increase time, effort and discomfort. Where these are encountered, routes should be planned to minimise climbing gradient and allow users to retain momentum gained on the descent.	8. Gradient	2	
Safety	Reduce/ remove speed differences where cyclists are sharing the carriageway	Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	9. Motor traffic speed on approach and through junctions where cyclists are sharing the carriageway through the junction	2	No sections of shared carriageway.
		Where cyclists and motor vehicles are sharing the carriageway, the key to reducing severity of collisions is reducing the speeds of motor vehicles so that they more closely match that of cyclists. This is particularly important at points where risk of collision is greater, such as at junctions.	10. Motor traffic speed on sections of shared carriageway	2	As above.
	Avoid high motor traffic volumes where cyclists are sharing the carriageway	Cyclists should not be required to share the carriageway with high volumes of motor vehicles. This is particularly important at points where risk of collision is greater, such as at junctions.	11. Motor traffic volume on sections of shared carriageway, expressed as vehicles per peak hour	2	As above.

Cranmore Boulevard 2/2

Key Requirement	Factor	Design Principle	Indicators	Site Score	Comments
Safety cont.	Risk of Collision	Where speed differences and high motor vehicle flows cannot be reduced cyclists should be separated from traffic – see Figure 4.1. This separation can be achieved at varying degrees through on-road cycle lanes, hybrid tracks and off-road provision. Such segregation should reduce the risk of collision from beside or behind the cyclist.	12. Segregation to reduce risk of collision alongside or from behind	2	
		A high proportion of collisions involving cyclists occur at junctions. Junctions therefore need particular attention to reduce the risk of collision. Junction treatments include: Minor/side roads – cyclist priority and/or speed reduction across side roads Major roads – separation of cyclists from motor traffic through junctions.	13. Conflicting movements at junctions	1	
	Avoid complex Design	Avoid complex designs which require users to process large amounts of information. Good network design should be self explanatory and self-evident to all road users. All users should understand where they and other road users should be and what movements they might make.	14. Legible road markings and road layout	2	
	Consider and reduce risk from kerbside activity	Routes should be assessed in terms of all multi-functional uses of a street including car parking, bus stops, parking, including collision with opened door.	15. Conflict with kerbside activity	1	Some residents leave their collection bins in the shared use path.
	Reduce severity of collisions where they do occur	Wherever possible routes should include "evasion room" (such as grass verges) and avoid any unnecessary physical hazards such as guardrail, build outs, etc. to reduce the severity of a collision should it occur.	16. Evasion room and unnecessary hazards	2	Shared use path generally wide enough to allow cyclists to evade obstacles such as residents' collection bins.
Comfort	Surface quality	Pavement or carriageway construction providing smooth and level surface.	17. Major and minor defects	2	
		Pavement or carriageway construction providing smooth and level surface	18. Surface type	2	
	Effective width without conflict	Cyclists should be able to comfortably cycle without risk of conflict with other users both on and off road.	19. Desirable minimum widths according to volume of cyclists and route type (where cyclists are separated from motor vehicles).	2	
	Wayfinding	Non-local cyclists should be able to navigate the routes without the need to refer to maps.	20. Signing	1	Route could benefit from shared use path signage.
Attractiveness	Social safety and perceived vulnerability of user	Routes should be appealing and be perceived as safe and usable. Well used, well maintained, lit, overlooked routes are more attractive and therefore more likely to be used.	21. Lighting	2	
			22. Isolation	2	
	Impact on pedestrians, including people with disabilities	Introduction of dedicated on-road cycle provision can enable people to cycle on-road rather than using footways which are not suitable for shared use. Introducing cycling onto well used footpaths may reduce the quality of provision for both users, particularly if the shared use path does not meet recommended widths.	23. Impact on pedestrians, Pedestrian Comfort Level based on Pedestrian Comfort guide for London (Section 6.1)	1	
	Minimise street clutter	Signing required to support scheme layout.	24. Signs informative and consistent but not overbearing or of inappropriate size	2	
Secure cycle parking	Ease of access to secure cycle parking within businesses and on-street.	25. Evidence of bicycles parked to street furniture or cycle stands	2	Some on-street cycle parking is provided adjacent to the shops on Cranmore Boulevard. It is assumed that parking will also be provided at the various businesses that occupy the industrial estate.	

Key Requirement	Max Score	Route Score
Cohesion	6	5
Directness	10	8
Safety	16	14
Comfort	8	7
Attractiveness	10	9
<b>Total</b>	<b>50</b>	<b>43</b>





# Appendix D Solihull Cycling and Walking Map

## Transport Assessment

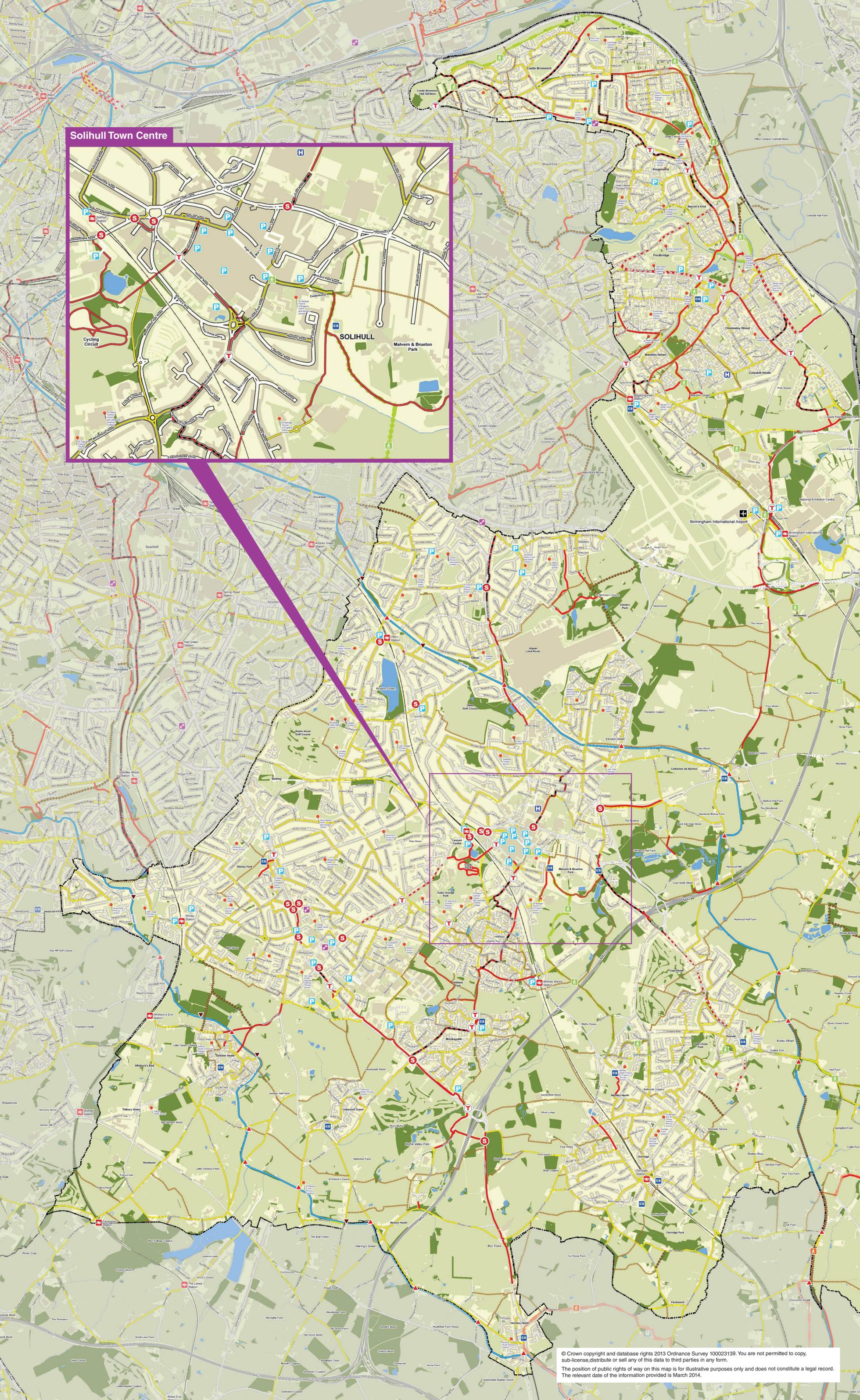
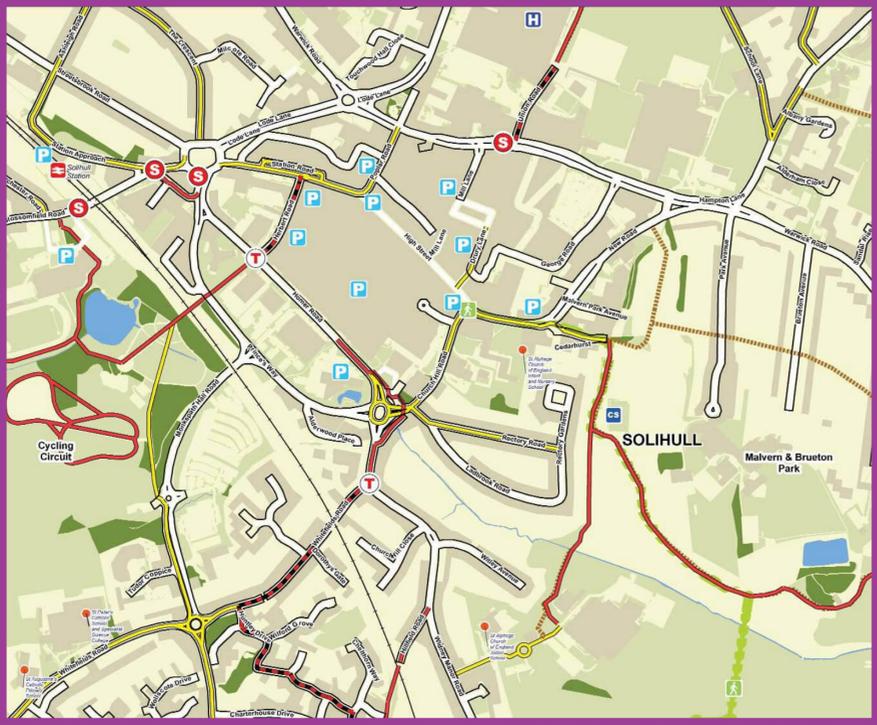
Land South of Dog Kennel Lane 'Hare's Croft', Solihull

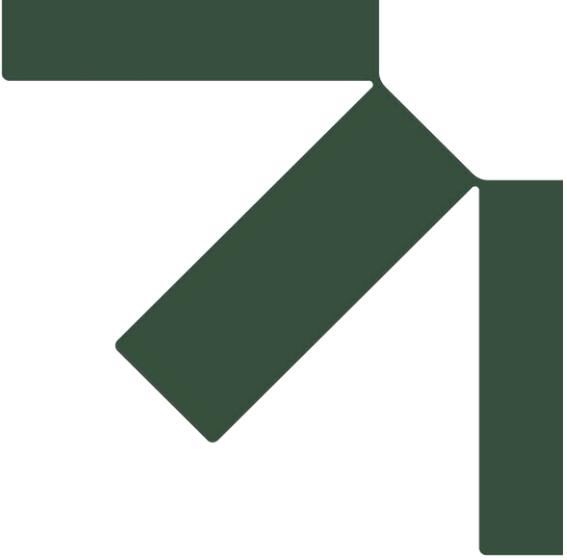
Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024

Solihull Town Centre





# Appendix E Observed Traffic Flows

## Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024

# Solihull, Tuesday 10th May 2022



Junction: 1  
Approach: A34 Stratford Road North

Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Monkspath Hall Road					Ahead to A34 Stratford Road (South)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	19	0	0	19	19.0	231	11	1	243	258.3	0	0	0	0	0.0
07:15 - 07:30	22	1	0	23	24.3	233	6	0	239	246.8	0	0	0	0	0.0
07:30 - 07:45	26	0	0	26	26.0	285	9	1	295	307.7	0	0	0	0	0.0
07:45 - 08:00	21	1	0	22	23.3	393	5	1	399	406.5	0	0	0	0	0.0
08:00 - 08:15	25	1	0	26	27.3	412	6	1	419	427.8	0	0	0	0	0.0
08:15 - 08:30	31	1	0	32	33.3	366	6	0	372	379.8	1	0	0	1	1.0
08:30 - 08:45	19	0	0	19	19.0	341	11	0	352	366.3	0	0	0	0	0.0
08:45 - 09:00	27	0	1	28	29.0	335	8	0	343	353.4	0	0	0	0	0.0
09:00 - 09:15	22	0	0	22	22.0	277	5	1	283	290.5	1	0	0	1	1.0
09:15 - 09:30	19	1	0	20	21.3	261	7	0	268	277.1	0	0	0	0	0.0
09:30 - 09:45	23	0	1	24	25.0	212	8	0	220	230.4	1	0	0	1	1.0
09:45 - 10:00	16	1	0	17	18.3	207	4	0	211	216.2	0	0	0	0	0.0

15:30 - 15:45	19	0	0	19	19.0	266	7	0	273	282.1	0	0	0	0	0.0
15:45 - 16:00	22	1	1	24	26.3	266	6	0	272	279.8	0	0	0	0	0.0
16:00 - 16:15	23	0	0	23	23.0	255	5	0	260	266.5	1	0	0	1	1.0
16:15 - 16:30	17	0	1	18	19.0	287	4	0	291	296.2	0	0	0	0	0.0
16:30 - 16:45	19	1	0	20	21.3	277	4	0	281	286.2	2	0	0	2	2.0
16:45 - 17:00	24	2	0	26	28.6	285	5	0	290	296.5	1	0	0	1	1.0
17:00 - 17:15	26	0	0	26	26.0	299	1	1	301	303.3	0	0	0	0	0.0
17:15 - 17:30	21	0	0	21	21.0	295	0	1	296	297.0	1	0	0	1	1.0
17:30 - 17:45	23	0	1	24	25.0	277	2	0	279	281.6	1	0	0	1	1.0
17:45 - 18:00	19	0	0	19	19.0	256	2	0	258	260.6	2	0	0	2	2.0
18:00 - 18:15	20	0	0	20	20.0	273	2	1	276	279.6	0	0	0	0	0.0
18:15 - 18:30	14	0	0	14	14.0	212	1	0	213	214.3	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	105	1486	1
erved AM (08:00-09:00) - Lights	102	1454	1
erved AM (08:00-09:00) - HGVs	3	32	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	109	1527	1
erved PM (16:45-17:45) - Total Vehicles	97	1166	3
erved PM (16:45-17:45) - Lights	94	1156	3
erved PM (16:45-17:45) - HGVs	3	10	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	101	1178	3

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	2
710	0
715	2
720	2
725	3
730	2
735	0
740	0
745	0
750	3
755	0
800	2
805	0
810	2
815	2
820	3
825	2
830	0
835	0
840	2
845	2
850	3
855	2
900	0
905	2
910	2
915	2
920	0
925	2
930	0
935	2
940	4
945	2
950	2
955	0

TIME	Queue Lengths (Vehicles)
1530	4
1535	0
1540	0
1545	2
1550	2
1555	3
1600	0
1605	4
1610	2
1615	4
1620	0
1625	2
1630	2
1635	3
1640	4
1645	2
1650	5
1655	2
1700	0
1705	3
1710	3
1715	4
1720	2
1725	0
1730	2
1735	2
1740	3
1745	4
1750	2
1755	0
1800	2
1805	0
1810	2
1815	2
1820	3
1825	0

# Solihull, Tuesday 10th May 2022



Junction: 1  
Approach: Monkspath Hall Road

Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (South)					Right to A34 Stratford Road (North)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	60	9	0	69	80.7	16	1	0	17	18.3	0	0	0	0	0.0
07:15 - 07:30	70	6	0	76	83.8	20	1	0	21	22.3	0	0	0	0	0.0
07:30 - 07:45	83	5	0	88	94.5	13	1	0	14	15.3	0	0	0	0	0.0
07:45 - 08:00	89	3	0	92	95.9	19	0	0	19	19.0	1	0	0	1	1.0
08:00 - 08:15	134	3	0	137	140.9	28	0	1	29	30.0	0	0	0	0	0.0
08:15 - 08:30	142	3	0	145	148.9	22	1	1	24	26.3	0	0	0	0	0.0
08:30 - 08:45	110	2	1	113	116.6	21	0	1	22	23.0	0	0	0	0	0.0
08:45 - 09:00	140	6	0	146	153.8	26	0	0	26	26.0	0	0	0	0	0.0
09:00 - 09:15	118	3	0	121	124.9	14	0	0	14	14.0	0	0	0	0	0.0
09:15 - 09:30	100	6	0	106	113.8	12	2	1	15	18.6	1	0	0	1	1.0
09:30 - 09:45	108	7	0	115	124.1	13	0	0	13	13.0	0	0	0	0	0.0
09:45 - 10:00	112	6	0	118	125.8	14	0	0	14	14.0	0	0	0	0	0.0

15:30 - 15:45	135	5	0	140	146.5	15	2	0	17	19.6	0	0	0	0	0.0
15:45 - 16:00	134	8	0	142	152.4	14	0	0	14	14.0	0	0	0	0	0.0
16:00 - 16:15	199	3	0	202	205.9	29	0	1	30	31.0	0	0	0	0	0.0
16:15 - 16:30	203	2	0	205	207.6	17	0	0	17	17.0	0	0	0	0	0.0
16:30 - 16:45	226	5	2	233	241.5	26	0	0	26	26.0	0	0	0	0	0.0
16:45 - 17:00	203	2	1	206	209.6	22	4	0	26	31.2	0	0	0	0	0.0
17:00 - 17:15	229	3	0	232	235.9	24	4	0	28	33.2	0	0	0	0	0.0
17:15 - 17:30	285	2	0	287	289.6	35	0	0	35	35.0	1	0	0	1	1.0
17:30 - 17:45	240	1	0	241	242.3	27	1	0	28	29.3	0	0	0	0	0.0
17:45 - 18:00	180	1	0	181	182.3	11	0	0	11	11.0	0	0	0	0	0.0
18:00 - 18:15	216	0	0	216	216.0	24	0	0	24	24.0	0	0	0	0	0.0
18:15 - 18:30	90	1	0	91	92.3	9	0	0	9	9.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	541	101	0
erved AM (08:00-09:00) - Lights	526	97	0
erved AM (08:00-09:00) - HGVs	15	4	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	560	105	0
erved PM (16:45-17:45) - Total Vehicles	966	117	1
erved PM (16:45-17:45) - Lights	957	108	1
erved PM (16:45-17:45) - HGVs	9	9	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	977	129	1

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	4
705	3
710	7
715	6
720	7
725	8
730	5
735	5
740	7
745	5
750	6
755	6
800	7
805	7
810	7
815	8
820	4
825	8
830	8
835	6
840	5
845	6
850	6
855	7
900	4
905	6
910	6
915	7
920	4
925	5
930	6
935	6
940	5
945	6
950	5
955	7

TIME	Queue Lengths (Vehicles)
1530	6
1535	8
1540	5
1545	4
1550	6
1555	6
1600	5
1605	5
1610	6
1615	7
1620	6
1625	6
1630	7
1635	7
1640	7
1645	8
1650	4
1655	6
1700	5
1705	9
1710	9
1715	8
1720	5
1725	7
1730	6
1735	7
1740	4
1745	6
1750	7
1755	7
1800	7
1805	6
1810	7
1815	5
1820	5
1825	6

# Solihull, Tuesday 10th May 2022



Junction: 1  
 Approach: A34 Stratford Road South

Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Ahead to A34 Stratford Road (North)					Right to Monkspath Hall Road					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	134	8	1	143	154.4	82	2	0	84	86.6	0	0	0	0	0.0
07:15 - 07:30	114	5	0	119	125.5	135	1	1	137	139.3	0	0	0	0	0.0
07:30 - 07:45	172	9	1	182	194.7	186	1	0	187	188.3	1	0	0	1	1.0
07:45 - 08:00	231	3	0	234	237.9	236	6	3	245	255.8	0	0	0	0	0.0
08:00 - 08:15	266	8	0	274	284.4	261	4	1	266	272.2	0	0	0	0	0.0
08:15 - 08:30	312	5	0	317	323.5	287	3	0	290	293.9	0	0	0	0	0.0
08:30 - 08:45	297	6	1	304	312.8	232	7	0	239	248.1	0	0	0	0	0.0
08:45 - 09:00	314	5	1	320	327.5	250	5	0	255	261.5	0	0	0	0	0.0
09:00 - 09:15	267	5	1	273	280.5	186	15	0	201	220.5	0	0	0	0	0.0
09:15 - 09:30	287	9	1	297	309.7	167	7	0	174	183.1	0	0	0	0	0.0
09:30 - 09:45	233	11	1	245	260.3	133	13	1	147	164.9	0	0	0	0	0.0
09:45 - 10:00	233	8	0	241	251.4	123	7	0	130	139.1	0	0	0	0	0.0

15:30 - 15:45	308	3	0	311	314.9	132	3	0	135	138.9	0	0	0	0	0.0
15:45 - 16:00	290	1	1	292	294.3	145	3	0	148	151.9	0	0	0	0	0.0
16:00 - 16:15	304	8	0	312	322.4	137	3	0	140	143.9	0	0	0	0	0.0
16:15 - 16:30	381	8	0	389	399.4	115	3	0	118	121.9	0	0	0	0	0.0
16:30 - 16:45	355	5	2	362	370.5	132	3	1	136	140.9	0	0	0	0	0.0
16:45 - 17:00	403	3	2	408	413.9	143	0	0	143	143.0	0	0	0	0	0.0
17:00 - 17:15	399	3	1	403	407.9	127	2	0	129	131.6	0	0	0	0	0.0
17:15 - 17:30	422	8	0	430	440.4	133	0	0	133	133.0	0	0	0	0	0.0
17:30 - 17:45	434	6	0	440	447.8	129	0	0	129	129.0	0	0	0	0	0.0
17:45 - 18:00	401	8	0	409	419.4	144	2	0	146	148.6	0	0	0	0	0.0
18:00 - 18:15	398	4	1	403	409.2	138	5	0	143	149.5	0	0	0	0	0.0
18:15 - 18:30	402	2	0	404	406.6	109	2	0	111	113.6	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	1215	1050	0
erved AM (08:00-09:00) - Lights	1189	1030	0
erved AM (08:00-09:00) - HGVs	26	20	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	1248	1076	0
erved PM (16:45-17:45) - Total Vehicles	1681	534	0
erved PM (16:45-17:45) - Lights	1658	532	0
erved PM (16:45-17:45) - HGVs	23	2	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	1710	537	0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	3
720	0
725	0
730	3
735	0
740	5
745	3
750	3
755	3
800	5
805	0
810	3
815	3
820	0
825	0
830	3
835	4
840	0
845	0
850	4
855	4
900	4
905	0
910	3
915	4
920	2
925	3
930	0
935	4
940	2
945	3
950	3
955	3

TIME	Queue Lengths (Vehicles)
1530	4
1535	3
1540	5
1545	0
1550	3
1555	3
1600	2
1605	6
1610	5
1615	6
1620	0
1625	7
1630	8
1635	10
1640	9
1645	10
1650	7
1655	6
1700	9
1705	10
1710	7
1715	7
1720	7
1725	6
1730	5
1735	3
1740	3
1745	4
1750	5
1755	2
1800	2
1805	3
1810	4
1815	2
1820	3
1825	2

Solihull, Tuesday 10th May 2022

Junction: 2  
Approach: A34 Stratford Road North



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Friars Gate					Ahead to A34 Stratford Road (South)					Right to Dog Kennel Lane					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	5	0	0	5	5.0	144	10	1	155	169.0	31	0	0	31	31.0	0	0	0	0	0.0
07:15 - 07:30	5	0	0	5	5.0	144	5	0	149	155.5	22	3	0	25	28.9	0	0	0	0	0.0
07:30 - 07:45	7	0	0	7	7.0	174	9	1	184	196.7	28	0	0	28	28.0	2	0	0	2	2.0
07:45 - 08:00	8	0	0	8	8.0	241	5	0	246	252.5	27	0	0	27	27.0	0	0	0	0	0.0
08:00 - 08:15	4	1	0	5	6.3	233	4	0	237	242.2	21	0	0	21	21.0	3	0	0	3	3.0
08:15 - 08:30	6	0	0	6	6.0	209	6	0	215	222.8	44	0	0	44	44.0	3	0	0	3	3.0
08:30 - 08:45	4	0	0	4	4.0	178	10	0	188	201.0	46	2	0	48	50.6	1	0	0	1	1.0
08:45 - 09:00	6	0	0	6	6.0	186	3	0	189	192.9	36	2	0	38	40.6	0	0	0	0	0.0
09:00 - 09:15	12	0	0	12	12.0	156	5	0	161	167.5	31	1	1	33	35.3	4	0	0	4	4.0
09:15 - 09:30	3	1	0	4	5.3	164	4	1	169	175.2	23	1	1	25	27.3	1	0	0	1	1.0
09:30 - 09:45	4	0	0	4	4.0	155	7	0	162	171.1	27	0	0	27	27.0	2	0	0	2	2.0
09:45 - 10:00	3	0	0	3	3.0	144	3	0	147	150.9	30	0	0	30	30.0	2	0	0	2	2.0
15:30 - 15:45	2	0	0	2	2.0	184	6	0	190	197.8	19	1	0	20	21.3	0	0	0	0	0.0
15:45 - 16:00	4	1	0	5	6.3	203	8	1	212	223.4	21	0	0	21	21.0	2	0	0	2	2.0
16:00 - 16:15	2	0	0	2	2.0	189	3	1	193	197.9	16	1	0	17	18.3	1	0	0	1	1.0
16:15 - 16:30	0	0	0	0	0.0	212	4	0	216	221.2	15	1	0	16	17.3	0	0	0	0	0.0
16:30 - 16:45	3	0	0	3	3.0	191	1	0	192	193.3	21	0	0	21	21.0	5	0	0	5	5.0
16:45 - 17:00	3	1	0	4	5.3	212	5	0	217	223.5	17	0	0	17	17.0	1	0	0	1	1.0
17:00 - 17:15	2	0	0	2	2.0	223	0	0	223	223.0	21	0	0	21	21.0	2	0	0	2	2.0
17:15 - 17:30	9	0	0	9	9.0	255	1	0	256	257.3	15	1	0	16	17.3	4	0	0	4	4.0
17:30 - 17:45	1	0	0	1	1.0	223	0	1	224	225.0	19	0	0	19	19.0	0	0	0	0	0.0
17:45 - 18:00	3	0	0	3	3.0	193	3	0	196	199.9	16	0	0	16	16.0	3	0	0	3	3.0
18:00 - 18:15	3	0	0	3	3.0	221	0	1	222	223.0	21	2	0	23	25.6	1	0	0	1	1.0
18:15 - 18:30	1	0	0	1	1.0	166	0	0	166	166.0	20	0	0	20	20.0	0	0	0	0	0.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	2
710	0
715	4
720	0
725	2
730	3
735	2
740	5
745	7
750	5
755	8
800	9
805	10
810	5
815	4
820	5
825	3
830	6
835	4
840	4
845	3
850	2
855	4
900	5
905	6
910	3
915	3
920	2
925	4
930	0
935	0
940	2
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	2
1540	0
1545	0
1550	2
1555	3
1600	0
1605	3
1610	4
1615	2
1620	5
1625	3
1630	6
1635	4
1640	9
1645	6
1650	6
1655	3
1700	3
1705	5
1710	3
1715	2
1720	0
1725	3
1730	4
1735	3
1740	2
1745	0
1750	0
1755	0
1800	0
1805	0
1810	0
1815	0
1820	0
1825	0

erved AM (08:00-09:00) - Total Vehicles	21	829	151	7
erved AM (08:00-09:00) - Lights	20	806	147	7
erved AM (08:00-09:00) - HGVs	1	23	4	0
erved AM (08:00-09:00) - HGV %				
served AM (08:00-09:00) - PCU	22	859	156	7
erved PM (16:45-17:45) - Total Vehicles	16	920	73	7
erved PM (16:45-17:45) - Lights	15	913	72	7
erved PM (16:45-17:45) - HGVs	1	7	1	0
erved PM (16:45-17:45) - HGV %				
served PM (16:45-17:45) - PCU	17	929	74	7

# Solihull, Tuesday 10th May 2022

Junction: 2  
Approach: Friars Gate



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (South)					Ahead to Dog Kennel Lane					Right to A34 Stratford Road (North)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	11	0	0	11	11.0	1	0	0	1	1.0	6	0	0	6	6.0
07:15 - 07:30	11	0	0	11	11.0	0	0	0	0	0.0	7	0	0	7	7.0
07:30 - 07:45	14	0	0	14	14.0	1	0	0	1	1.0	3	0	0	3	3.0
07:45 - 08:00	10	0	0	10	10.0	0	0	0	0	0.0	7	0	0	7	7.0
08:00 - 08:15	15	0	0	15	15.0	1	0	0	1	1.0	4	0	0	4	4.0
08:15 - 08:30	15	0	0	15	15.0	0	0	0	0	0.0	4	0	0	4	4.0
08:30 - 08:45	12	0	0	12	12.0	2	0	0	2	2.0	8	0	0	8	8.0
08:45 - 09:00	9	0	0	9	9.0	1	0	0	1	1.0	3	0	0	3	3.0
09:00 - 09:15	16	0	0	16	16.0	2	0	0	2	2.0	8	0	0	8	8.0
09:15 - 09:30	10	0	0	10	10.0	5	0	0	5	5.0	9	0	0	9	9.0
09:30 - 09:45	14	0	0	14	14.0	1	0	0	1	1.0	2	0	0	2	2.0
09:45 - 10:00	11	0	0	11	11.0	2	0	0	2	2.0	9	0	0	9	9.0

15:30 - 15:45	12	0	0	12	12.0	1	0	0	1	1.0	3	0	0	3	3.0
15:45 - 16:00	10	0	0	10	10.0	2	0	0	2	2.0	4	0	0	4	4.0
16:00 - 16:15	18	0	0	18	18.0	2	0	0	2	2.0	8	0	0	8	8.0
16:15 - 16:30	16	0	0	16	16.0	2	0	0	2	2.0	3	0	0	3	3.0
16:30 - 16:45	15	0	0	15	15.0	5	0	0	5	5.0	6	0	0	6	6.0
16:45 - 17:00	17	0	0	17	17.0	4	0	0	4	4.0	5	0	0	5	5.0
17:00 - 17:15	26	0	0	26	26.0	8	0	0	8	8.0	9	0	0	9	9.0
17:15 - 17:30	18	0	0	18	18.0	4	0	0	4	4.0	4	0	0	4	4.0
17:30 - 17:45	12	0	0	12	12.0	2	0	0	2	2.0	3	0	0	3	3.0
17:45 - 18:00	13	0	0	13	13.0	5	0	0	5	5.0	4	0	0	4	4.0
18:00 - 18:15	12	0	0	12	12.0	3	0	0	3	3.0	2	0	0	2	2.0
18:15 - 18:30	9	0	0	9	9.0	3	0	0	3	3.0	2	0	0	2	2.0

erved AM (08:00-09:00) - Total Vehicles	51	4	19
erved AM (08:00-09:00) - Lights	51	4	19
erved AM (08:00-09:00) - HGVs	0	0	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	51	4	19
erved PM (16:45-17:45) - Total Vehicles	73	18	21
erved PM (16:45-17:45) - Lights	73	18	21
erved PM (16:45-17:45) - HGVs	0	0	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	73	18	21

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	2
720	0
725	3
730	2
735	0
740	4
745	3
750	2
755	0
800	3
805	4
810	5
815	2
820	5
825	5
830	7
835	3
840	2
845	6
850	0
855	4
900	0
905	2
910	0
915	0
920	0
925	0
930	2
935	0
940	0
945	0
950	3
955	0

TIME	Queue Lengths (Vehicles)
1530	2
1535	0
1540	0
1545	4
1550	0
1555	2
1600	3
1605	2
1610	3
1615	3
1620	5
1625	2
1630	0
1635	2
1640	3
1645	4
1650	2
1655	4
1700	2
1705	4
1710	3
1715	4
1720	3
1725	2
1730	3
1735	0
1740	0
1745	0
1750	2
1755	0
1800	0
1805	0
1810	0
1815	0
1820	0
1825	0

Solihull, Tuesday 10th May 2022

Junction: 2  
Approach: A34 Stratford Road South



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Dog Kennel Lane					Ahead to A34 Stratford Road (North)					Right to Friars Gate					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	6	0	0	6	6.0	133	9	1	143	155.7	6	0	0	6	6.0	0	0	0	0	0.0
07:15 - 07:30	1	0	0	1	1.0	132	5	0	137	143.5	7	0	0	7	7.0	2	0	0	2	2.0
07:30 - 07:45	28	0	0	28	28.0	145	11	0	156	170.3	12	0	0	12	12.0	1	0	0	1	1.0
07:45 - 08:00	30	0	0	30	30.0	216	3	0	219	222.9	19	0	0	19	19.0	0	0	0	0	0.0
08:00 - 08:15	45	0	1	46	47.0	222	7	0	229	238.1	21	0	0	21	21.0	0	0	0	0	0.0
08:15 - 08:30	56	0	0	56	56.0	251	6	1	258	266.8	16	0	0	16	16.0	0	0	0	0	0.0
08:30 - 08:45	45	0	0	45	45.0	245	6	2	253	262.8	17	0	0	17	17.0	2	0	0	2	2.0
08:45 - 09:00	51	1	0	52	53.3	266	2	0	268	270.6	22	0	0	22	22.0	2	1	0	3	4.3
09:00 - 09:15	36	1	1	38	40.3	231	6	0	237	244.8	17	0	0	17	17.0	1	0	0	1	1.0
09:15 - 09:30	44	1	1	46	48.3	217	11	0	228	242.3	21	0	0	21	21.0	0	0	0	0	0.0
09:30 - 09:45	34	0	0	34	34.0	193	12	1	206	222.6	16	0	0	16	16.0	3	0	0	3	3.0
09:45 - 10:00	32	2	0	34	36.6	192	7	0	199	208.1	21	0	0	21	21.0	1	0	0	1	1.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

15:30 - 15:45	99	1	0	100	101.3	212	4	0	216	221.2	16	0	0	16	16.0	1	0	0	1	1.0
15:45 - 16:00	75	0	1	76	77.0	212	3	0	215	218.9	14	0	0	14	14.0	0	0	0	0	0.0
16:00 - 16:15	105	0	0	105	105.0	215	8	0	223	233.4	12	0	0	12	12.0	4	0	0	4	4.0
16:15 - 16:30	129	1	0	130	131.3	251	7	0	258	267.1	12	0	0	12	12.0	2	0	0	2	2.0
16:30 - 16:45	130	0	0	130	130.0	234	6	2	242	251.8	19	0	0	19	19.0	0	0	0	0	0.0
16:45 - 17:00	123	0	0	123	123.0	289	2	2	293	297.6	21	0	0	21	21.0	4	0	0	4	4.0
17:00 - 17:15	125	2	0	127	129.6	277	5	1	283	290.5	12	0	0	12	12.0	3	0	0	3	3.0
17:15 - 17:30	168	1	0	169	170.3	276	7	0	283	292.1	12	0	0	12	12.0	1	0	0	1	1.0
17:30 - 17:45	176	0	0	176	176.0	287	6	0	293	300.8	8	0	0	8	8.0	1	0	0	1	1.0
17:45 - 18:00	140	0	0	140	140.0	266	8	0	274	284.4	8	0	0	8	8.0	0	0	0	0	0.0
18:00 - 18:15	121	0	0	121	121.0	287	3	0	290	293.9	10	0	0	10	10.0	2	0	0	2	2.0
18:15 - 18:30	144	0	0	144	144.0	266	3	1	270	274.9	7	0	0	7	7.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	199	1008	76	5
erved AM (08:00-09:00) - Lights	197	984	76	4
erved AM (08:00-09:00) - HGVs	2	24	0	1
erved AM (08:00-09:00) - HGV %				
erved AM (08:00-09:00) - PCU	201	1038	76	6
erved PM (16:45-17:45) - Total Vehicles	595	1152	53	9
erved PM (16:45-17:45) - Lights	592	1129	53	9
erved PM (16:45-17:45) - HGVs	3	23	0	0
erved PM (16:45-17:45) - HGV %				
erved PM (16:45-17:45) - PCU	599	1181	53	9

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	4
720	0
725	2
730	4
735	2
740	6
745	4
750	8
755	4
800	9
805	12
810	3
815	4
820	2
825	7
830	5
835	8
840	4
845	6
850	2
855	7
900	5
905	7
910	3
915	5
920	2
925	6
930	4
935	5
940	2
945	0
950	3
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	0
1540	0
1545	4
1550	2
1555	3
1600	0
1605	5
1610	6
1615	2
1620	6
1625	4
1630	7
1635	5
1640	8
1645	4
1650	6
1655	3
1700	5
1705	4
1710	7
1715	3
1720	5
1725	3
1730	6
1735	3
1740	5
1745	3
1750	6
1755	2
1800	4
1805	3
1810	0
1815	2
1820	0
1825	0

# Solihull, Tuesday 10th May 2022

Junction: 2  
Approach: Dog Kennel Lane



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (North)					Ahead to Friars Gate					Right to A34 Stratford Road (South)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	12	0	0	12	12.0	3	0	0	3	3.0	96	1	0	97	98.3
07:15 - 07:30	16	0	0	16	16.0	7	0	0	7	7.0	109	2	0	111	113.6
07:30 - 07:45	19	0	0	19	19.0	7	0	0	7	7.0	123	1	2	126	129.3
07:45 - 08:00	23	0	0	23	23.0	8	0	0	8	8.0	166	1	0	167	168.3
08:00 - 08:15	27	0	0	27	27.0	4	0	0	4	4.0	198	2	0	200	202.6
08:15 - 08:30	30	0	0	30	30.0	9	0	0	9	9.0	184	2	0	186	188.6
08:30 - 08:45	24	0	0	24	24.0	4	0	0	4	4.0	159	3	0	162	165.9
08:45 - 09:00	19	0	0	19	19.0	7	0	0	7	7.0	175	4	0	179	184.2
09:00 - 09:15	15	0	0	15	15.0	11	0	0	11	11.0	128	1	0	129	130.3
09:15 - 09:30	12	0	0	12	12.0	3	0	0	3	3.0	102	2	1	105	108.6
09:30 - 09:45	9	0	0	9	9.0	2	0	0	2	2.0	64	2	0	66	68.6
09:45 - 10:00	9	0	0	9	9.0	1	0	0	1	1.0	51	0	0	51	51.0

15:30 - 15:45	12	0	0	12	12.0	1	0	0	1	1.0	89	1	0	90	91.3
15:45 - 16:00	15	0	0	15	15.0	2	0	0	2	2.0	71	0	0	71	71.0
16:00 - 16:15	17	0	0	17	17.0	2	0	0	2	2.0	67	0	0	67	67.0
16:15 - 16:30	17	0	0	17	17.0	1	0	0	1	1.0	73	1	0	74	75.3
16:30 - 16:45	22	0	0	22	22.0	3	0	0	3	3.0	71	3	0	74	77.9
16:45 - 17:00	20	0	0	20	20.0	3	0	0	3	3.0	85	2	0	87	89.6
17:00 - 17:15	24	0	0	24	24.0	3	0	0	3	3.0	66	0	0	66	66.0
17:15 - 17:30	19	0	0	19	19.0	1	0	0	1	1.0	58	0	0	58	58.0
17:30 - 17:45	18	0	0	18	18.0	6	0	0	6	6.0	72	1	0	73	74.3
17:45 - 18:00	14	0	0	14	14.0	1	0	0	1	1.0	83	0	0	83	83.0
18:00 - 18:15	12	0	0	12	12.0	0	0	0	0	0.0	57	3	0	60	63.9
18:15 - 18:30	11	0	0	11	11.0	2	0	0	2	2.0	60	0	0	60	60.0

erved AM (08:00-09:00) - Total Vehicles	100	24	727
erved AM (08:00-09:00) - Lights	100	24	716
erved AM (08:00-09:00) - HGVs	0	0	11
erved AM (08:00-09:00) - HGV %			
served AM (08:00-09:00) - PCU	100	24	741
erved PM (16:45-17:45) - Total Vehicles	81	13	284
erved PM (16:45-17:45) - Lights	81	13	281
erved PM (16:45-17:45) - HGVs	0	0	3
erved PM (16:45-17:45) - HGV %			
served PM (16:45-17:45) - PCU	81	13	288

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	4
715	2
720	3
725	6
730	4
735	7
740	8
745	3
750	7
755	12
800	6
805	12
810	5
815	8
820	6
825	5
830	7
835	3
840	5
845	9
850	3
855	4
900	5
905	2
910	4
915	6
920	2
925	3
930	5
935	4
940	2
945	4
950	3
955	2

TIME	Queue Lengths (Vehicles)
1530	4
1535	2
1540	0
1545	4
1550	3
1555	0
1600	3
1605	2
1610	4
1615	3
1620	5
1625	8
1630	4
1635	2
1640	5
1645	4
1650	7
1655	5
1700	5
1705	8
1710	4
1715	7
1720	3
1725	5
1730	3
1735	0
1740	4
1745	3
1750	2
1755	0
1800	2
1805	0
1810	0
1815	0
1820	0
1825	0

Solihull, Tuesday 10th May 2022

Junction: 3  
Approach: A34 Stratford Road North



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Cranmore Boulevard					Ahead to A34 Stratford Road (South)					Right to Shepherds Green Road					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	25	3	1	29	33.9	165	3	1	169	173.9	2	0	0	2	2.0	0	0	0	0	0.0
07:15 - 07:30	71	1	0	72	73.3	118	4	0	122	127.2	4	0	0	4	4.0	0	0	0	0	0.0
07:30 - 07:45	60	0	1	61	62.0	155	3	1	159	163.9	3	0	0	3	3.0	0	0	0	0	0.0
07:45 - 08:00	115	2	0	117	119.6	228	0	0	228	228.0	5	0	0	5	5.0	0	0	0	0	0.0
08:00 - 08:15	137	1	1	139	141.3	203	3	0	206	209.9	4	0	0	4	4.0	0	0	0	0	0.0
08:15 - 08:30	128	2	0	130	132.6	198	4	0	202	207.2	6	0	0	6	6.0	1	0	0	1	1.0
08:30 - 08:45	96	0	1	97	98.0	156	8	0	164	174.4	5	0	0	5	5.0	0	0	0	0	0.0
08:45 - 09:00	92	1	2	95	98.3	175	3	0	178	181.9	3	0	0	3	3.0	0	0	0	0	0.0
09:00 - 09:15	94	4	2	100	107.2	151	6	1	158	166.8	1	0	0	1	1.0	0	0	0	0	0.0
09:15 - 09:30	88	2	0	90	92.6	154	3	1	158	162.9	3	0	0	3	3.0	2	0	0	2	2.0
09:30 - 09:45	61	2	2	65	69.6	152	4	1	157	163.2	3	0	0	3	3.0	2	1	0	3	4.3
09:45 - 10:00	61	1	0	62	63.3	121	2	0	123	125.6	3	0	0	3	3.0	1	0	0	1	1.0
15:30 - 15:45	44	1	0	45	46.3	166	9	0	175	186.7	3	0	0	3	3.0	0	0	0	0	0.0
15:45 - 16:00	54	3	2	59	64.9	177	7	0	184	193.1	2	0	0	2	2.0	3	0	0	3	3.0
16:00 - 16:15	57	2	1	60	63.6	136	3	1	140	144.9	1	0	0	1	1.0	2	0	0	2	2.0
16:15 - 16:30	71	1	0	72	73.3	164	3	0	167	170.9	3	0	0	3	3.0	0	0	0	0	0.0
16:30 - 16:45	65	1	1	67	69.3	156	1	0	157	158.3	2	0	0	2	2.0	0	0	0	0	0.0
16:45 - 17:00	62	0	0	62	62.0	162	5	1	168	175.5	2	0	0	2	2.0	3	0	0	3	3.0
17:00 - 17:15	64	0	1	65	66.0	178	0	0	178	178.0	3	0	0	3	3.0	5	0	0	5	5.0
17:15 - 17:30	49	0	0	49	49.0	200	2	0	202	204.6	5	0	0	5	5.0	0	0	0	0	0.0
17:30 - 17:45	50	0	1	51	52.0	174	0	1	175	176.0	3	0	0	3	3.0	2	0	0	2	2.0
17:45 - 18:00	63	0	0	63	63.0	146	3	0	149	152.9	2	0	0	2	2.0	1	0	0	1	1.0
18:00 - 18:15	42	1	1	44	46.3	175	2	1	178	181.6	2	0	0	2	2.0	0	0	0	0	0.0
18:15 - 18:30	38	0	0	38	38.0	154	0	0	154	154.0	2	0	0	2	2.0	0	0	0	0	0.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	3
720	4
725	0
730	2
735	5
740	3
745	6
750	4
755	0
800	3
805	4
810	2
815	6
820	5
825	3
830	4
835	5
840	0
845	3
850	5
855	2
900	0
905	0
910	5
915	0
920	3
925	4
930	3
935	0
940	0
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	2
1540	0
1545	0
1550	5
1555	3
1600	0
1605	0
1610	6
1615	3
1620	7
1625	4
1630	8
1635	5
1640	3
1645	7
1650	3
1655	5
1700	4
1705	0
1710	3
1715	5
1720	0
1725	4
1730	0
1735	3
1740	2
1745	0
1750	6
1755	0
1800	4
1805	4
1810	0
1815	0
1820	0
1825	0

erved AM (08:00-09:00) - Total Vehicles	461	750	18	1
erved AM (08:00-09:00) - Lights	453	732	18	1
erved AM (08:00-09:00) - HGVs	8	18	0	0
erved AM (08:00-09:00) - HGV %				
served AM (08:00-09:00) - PCU	470	773	18	1
erved PM (16:45-17:45) - Total Vehicles	227	723	13	10
erved PM (16:45-17:45) - Lights	225	714	13	10
erved PM (16:45-17:45) - HGVs	2	9	0	0
erved PM (16:45-17:45) - HGV %				
served PM (16:45-17:45) - PCU	229	734	13	10

# Solihull, Tuesday 10th May 2022

Junction: 3  
Approach: Cranmore Boulevard



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (South)					Ahead to Shepherds Green Road					Right to A34 Stratford Road (North)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	23	3	0	26	29.9	0	0	0	0	0.0	29	0	0	29	29.0
07:15 - 07:30	51	5	0	56	62.5	0	0	0	0	0.0	31	0	0	31	31.0
07:30 - 07:45	49	6	0	55	62.8	1	0	0	1	1.0	33	0	0	33	33.0
07:45 - 08:00	51	5	0	56	62.5	0	0	0	0	0.0	34	0	0	34	34.0
08:00 - 08:15	63	3	0	66	69.9	1	0	0	1	1.0	29	2	0	31	33.6
08:15 - 08:30	58	2	0	60	62.6	1	0	0	1	1.0	34	0	0	34	34.0
08:30 - 08:45	64	4	0	68	73.2	0	0	0	0	0.0	36	1	0	37	38.3
08:45 - 09:00	46	1	0	47	48.3	0	0	0	0	0.0	39	3	0	42	45.9
09:00 - 09:15	45	0	0	45	45.0	2	0	0	2	2.0	33	0	0	33	33.0
09:15 - 09:30	35	3	0	38	41.9	1	0	0	1	1.0	42	1	0	43	44.3
09:30 - 09:45	30	3	0	33	36.9	3	0	0	3	3.0	37	2	0	39	41.6
09:45 - 10:00	39	1	0	40	41.3	0	0	0	0	0.0	34	0	0	34	34.0

15:30 - 15:45	40	0	0	40	40.0	0	0	0	0	0.0	56	0	0	56	56.0
15:45 - 16:00	57	3	1	61	65.9	1	0	0	1	1.0	66	2	0	68	70.6
16:00 - 16:15	58	2	0	60	62.6	0	0	0	0	0.0	73	1	0	74	75.3
16:15 - 16:30	52	1	0	53	54.3	1	0	0	1	1.0	77	0	0	77	77.0
16:30 - 16:45	68	1	0	69	70.3	2	0	0	2	2.0	109	0	0	109	109.0
16:45 - 17:00	63	0	0	63	63.0	0	0	0	0	0.0	92	1	0	93	94.3
17:00 - 17:15	65	0	0	65	65.0	3	0	0	3	3.0	87	0	0	87	87.0
17:15 - 17:30	84	0	0	84	84.0	2	0	0	2	2.0	85	0	0	85	85.0
17:30 - 17:45	54	0	0	54	54.0	1	0	0	1	1.0	72	0	0	72	72.0
17:45 - 18:00	57	0	0	57	57.0	0	0	0	0	0.0	95	0	0	95	95.0
18:00 - 18:15	60	0	0	60	60.0	1	0	0	1	1.0	61	0	0	61	61.0
18:15 - 18:30	31	0	0	31	31.0	0	0	0	0	0.0	48	0	0	48	48.0

erved AM (08:00-09:00) - Total Vehicles	241	2	144
erved AM (08:00-09:00) - Lights	231	2	138
erved AM (08:00-09:00) - HGVs	10	0	6
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	254	2	152
erved PM (16:45-17:45) - Total Vehicles	266	6	337
erved PM (16:45-17:45) - Lights	266	6	336
erved PM (16:45-17:45) - HGVs	0	0	1
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	266	6	338

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	0
720	0
725	2
730	0
735	0
740	0
745	3
750	0
755	0
800	0
805	5
810	0
815	0
820	4
825	0
830	0
835	0
840	0
845	0
850	4
855	0
900	0
905	0
910	0
915	2
920	0
925	0
930	0
935	0
940	0
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	0
1540	0
1545	0
1550	0
1555	0
1600	0
1605	0
1610	6
1615	0
1620	0
1625	0
1630	0
1635	3
1640	5
1645	0
1650	0
1655	0
1700	4
1705	0
1710	3
1715	0
1720	2
1725	0
1730	4
1735	0
1740	0
1745	3
1750	0
1755	0
1800	0
1805	0
1810	0
1815	0
1820	0
1825	0

Solihull, Tuesday 10th May 2022

Junction: 3  
Approach: A34 Stratford Road South



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Shepherds Green Road					Ahead to A34 Stratford Road (North)					Right to Cranmore Boulevard					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	4	0	0	4	4.0	121	11	0	132	146.3	16	0	0	16	16.0	3	0	0	3	3.0
07:15 - 07:30	8	0	0	8	8.0	129	1	0	130	131.3	21	1	0	22	23.3	0	0	0	0	0.0
07:30 - 07:45	5	1	0	6	7.3	133	9	0	142	153.7	28	0	0	28	28.0	2	0	0	2	2.0
07:45 - 08:00	11	0	0	11	11.0	181	3	0	184	187.9	58	1	0	59	60.3	1	0	0	1	1.0
08:00 - 08:15	6	1	0	7	8.3	198	6	0	204	211.8	47	0	0	47	47.0	2	0	0	2	2.0
08:15 - 08:30	13	0	0	13	13.0	232	4	2	238	245.2	43	1	0	44	45.3	0	0	0	0	0.0
08:30 - 08:45	9	1	0	10	11.3	238	6	2	246	255.8	43	0	0	43	43.0	0	0	0	0	0.0
08:45 - 09:00	5	0	0	5	5.0	253	2	0	255	257.6	30	0	0	30	30.0	0	0	0	0	0.0
09:00 - 09:15	2	0	0	2	2.0	225	6	0	231	238.8	35	0	0	35	35.0	3	0	0	3	3.0
09:15 - 09:30	7	1	0	8	9.3	217	6	0	223	230.8	15	3	0	18	21.9	0	0	0	0	0.0
09:30 - 09:45	13	0	0	13	13.0	178	13	0	191	207.9	14	0	0	14	14.0	1	0	0	1	1.0
09:45 - 10:00	11	0	0	11	11.0	194	9	0	203	214.7	11	1	0	12	13.3	0	0	0	0	0.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

15:30 - 15:45	4	0	0	4	4.0	218	7	0	225	234.1	17	0	0	17	17.0	0	0	0	0	0.0
15:45 - 16:00	15	0	0	15	15.0	209	0	0	209	209.0	12	0	0	12	12.0	1	0	0	1	1.0
16:00 - 16:15	2	0	0	2	2.0	216	6	0	222	229.8	19	2	0	21	23.6	2	0	0	2	2.0
16:15 - 16:30	7	0	0	7	7.0	244	8	0	252	262.4	22	0	0	22	22.0	1	0	0	1	1.0
16:30 - 16:45	4	0	0	4	4.0	231	8	4	243	257.4	17	0	0	17	17.0	0	0	0	0	0.0
16:45 - 17:00	3	0	0	3	3.0	293	2	1	296	299.6	13	0	0	13	13.0	3	0	0	3	3.0
17:00 - 17:15	12	0	0	12	12.0	278	5	0	283	289.5	24	0	0	24	24.0	1	0	0	1	1.0
17:15 - 17:30	8	1	0	9	10.3	276	5	0	281	287.5	25	0	0	25	25.0	1	0	0	1	1.0
17:30 - 17:45	12	1	0	13	14.3	267	4	0	271	276.2	28	0	0	28	28.0	2	0	0	2	2.0
17:45 - 18:00	4	0	0	4	4.0	255	7	0	262	271.1	20	1	0	21	22.3	1	0	0	1	1.0
18:00 - 18:15	4	0	0	4	4.0	283	3	0	286	289.9	21	0	0	21	21.0	5	0	0	5	5.0
18:15 - 18:30	2	0	0	2	2.0	266	2	1	269	272.6	12	1	0	13	14.3	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	35	943	164	2
erved AM (08:00-09:00) - Lights	33	921	163	2
erved AM (08:00-09:00) - HGVs	2	22	1	0
erved AM (08:00-09:00) - HGV %				
served AM (08:00-09:00) - PCU	38	970	165	2
erved PM (16:45-17:45) - Total Vehicles	37	1131	90	7
erved PM (16:45-17:45) - Lights	35	1114	90	7
erved PM (16:45-17:45) - HGVs	2	17	0	0
erved PM (16:45-17:45) - HGV %				
served PM (16:45-17:45) - PCU	40	1153	90	7

TIME	Queue Lengths (Vehicles)
700	0
705	3
710	0
715	2
720	4
725	3
730	6
735	0
740	3
745	5
750	0
755	4
800	3
805	0
810	7
815	0
820	3
825	5
830	3
835	6
840	0
845	4
850	3
855	5
900	3
905	0
910	4
915	2
920	5
925	0
930	3
935	0
940	0
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	3
1540	2
1545	5
1550	3
1555	6
1600	3
1605	0
1610	4
1615	2
1620	0
1625	4
1630	0
1635	3
1640	5
1645	0
1650	2
1655	4
1700	0
1705	2
1710	4
1715	0
1720	3
1725	5
1730	0
1735	2
1740	4
1745	0
1750	3
1755	0
1800	4
1805	0
1810	3
1815	0
1820	0
1825	0

# Solihull, Tuesday 10th May 2022

Junction: 3  
Approach: Shepherds Green Road



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (North)					Ahead to Cranmore Boulevard					Right to A34 Stratford Road (South)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	3	0	0	3	3.0	0	0	0	0	0.0	0	1	0	1	2.3
07:15 - 07:30	2	0	0	2	2.0	0	0	0	0	0.0	2	0	0	2	2.0
07:30 - 07:45	9	0	0	9	9.0	0	0	0	0	0.0	6	0	0	6	6.0
07:45 - 08:00	5	0	0	5	5.0	1	0	0	1	1.0	4	0	0	4	4.0
08:00 - 08:15	4	1	0	5	6.3	3	0	0	3	3.0	5	1	0	6	7.3
08:15 - 08:30	5	0	0	5	5.0	2	0	0	2	2.0	10	0	0	10	10.0
08:30 - 08:45	9	1	0	10	11.3	1	0	0	1	1.0	8	0	0	8	8.0
08:45 - 09:00	3	0	0	3	3.0	1	0	0	1	1.0	7	0	0	7	7.0
09:00 - 09:15	2	1	0	3	4.3	1	0	0	1	1.0	4	0	0	4	4.0
09:15 - 09:30	8	0	0	8	8.0	0	0	0	0	0.0	4	0	0	4	4.0
09:30 - 09:45	3	0	0	3	3.0	0	0	0	0	0.0	4	0	0	4	4.0
09:45 - 10:00	5	0	0	5	5.0	0	0	0	0	0.0	8	0	0	8	8.0

15:30 - 15:45	10	0	0	10	10.0	1	0	0	1	1.0	1	0	0	1	1.0
15:45 - 16:00	3	0	0	3	3.0	0	0	0	0	0.0	5	0	0	5	5.0
16:00 - 16:15	7	0	0	7	7.0	1	0	0	1	1.0	12	0	0	12	12.0
16:15 - 16:30	7	0	0	7	7.0	0	0	0	0	0.0	6	0	0	6	6.0
16:30 - 16:45	3	0	0	3	3.0	0	0	0	0	0.0	6	0	0	6	6.0
16:45 - 17:00	4	0	0	4	4.0	0	0	0	0	0.0	7	0	0	7	7.0
17:00 - 17:15	15	0	0	15	15.0	1	0	0	1	1.0	8	0	0	8	8.0
17:15 - 17:30	6	0	0	6	6.0	1	0	0	1	1.0	10	0	0	10	10.0
17:30 - 17:45	5	0	0	5	5.0	0	0	0	0	0.0	10	0	0	10	10.0
17:45 - 18:00	5	1	0	6	7.3	1	0	0	1	1.0	9	0	0	9	9.0
18:00 - 18:15	10	0	0	10	10.0	1	0	0	1	1.0	8	0	0	8	8.0
18:15 - 18:30	3	0	0	3	3.0	0	0	0	0	0.0	3	0	0	3	3.0

erved AM (08:00-09:00) - Total Vehicles	23	7	31
erved AM (08:00-09:00) - Lights	21	7	30
erved AM (08:00-09:00) - HGVs	2	0	1
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	26	7	32
erved PM (16:45-17:45) - Total Vehicles	30	2	35
erved PM (16:45-17:45) - Lights	30	2	35
erved PM (16:45-17:45) - HGVs	0	0	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	30	2	35

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	0
720	0
725	0
730	0
735	0
740	0
745	0
750	0
755	0
800	0
805	0
810	0
815	0
820	0
825	0
830	0
835	0
840	0
845	0
850	0
855	0
900	0
905	0
910	0
915	0
920	0
925	0
930	0
935	0
940	0
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	0
1540	0
1545	0
1550	0
1555	0
1600	0
1605	0
1610	0
1615	0
1620	0
1625	0
1630	0
1635	0
1640	0
1645	0
1650	0
1655	0
1700	0
1705	0
1710	0
1715	0
1720	0
1725	0
1730	0
1735	0
1740	0
1745	0
1750	0
1755	0
1800	0
1805	0
1810	0
1815	0
1820	0
1825	0

Solihull, Tuesday 10th May 2022

Junction: 4  
Approach: A34 Stratford Road North



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to B4102 (East)					Ahead to A34 Stratford Road (South)					Right to B4102 (West)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	22	2	2	26	30.6	144	8	1	153	164.4	19	0	1	20	21.0	0	0	0	0	0.0
07:15 - 07:30	34	0	2	36	38.0	140	4	0	144	149.2	14	1	0	15	16.3	0	0	0	0	0.0
07:30 - 07:45	32	0	4	36	40.0	149	0	0	149	149.0	23	0	0	23	23.0	0	0	0	0	0.0
07:45 - 08:00	43	0	5	48	53.0	277	2	0	279	281.6	17	0	0	17	17.0	0	0	0	0	0.0
08:00 - 08:15	33	0	4	37	41.0	256	3	0	259	262.9	21	0	1	22	23.0	0	0	0	0	0.0
08:15 - 08:30	25	1	1	27	29.3	271	5	2	278	286.5	29	0	0	29	29.0	0	0	0	0	0.0
08:30 - 08:45	30	0	3	33	36.0	197	4	0	201	206.2	25	0	0	25	25.0	2	0	0	2	2.0
08:45 - 09:00	50	1	2	53	56.3	194	4	1	199	205.2	21	1	0	22	23.3	0	0	0	0	0.0
09:00 - 09:15	40	0	3	43	46.0	161	8	1	170	181.4	31	0	1	32	33.0	3	0	0	3	3.0
09:15 - 09:30	39	0	3	42	45.0	177	4	2	183	190.2	26	0	0	26	26.0	1	0	0	1	1.0
09:30 - 09:45	37	0	3	40	43.0	159	4	1	164	170.2	23	0	0	23	23.0	2	0	0	2	2.0
09:45 - 10:00	46	0	0	46	46.0	146	3	0	149	152.9	21	1	0	22	23.3	0	0	0	0	0.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

15:30 - 15:45	24	0	3	27	30.0	113	6	0	119	126.8	19	1	0	20	21.3	0	0	0	0	0.0
15:45 - 16:00	21	0	2	23	25.0	144	8	2	154	166.4	22	0	0	22	22.0	0	0	0	0	0.0
16:00 - 16:15	23	0	2	25	27.0	120	5	2	127	135.5	25	0	0	25	25.0	1	0	0	1	1.0
16:15 - 16:30	21	0	1	22	23.0	156	1	2	159	162.3	21	1	0	22	23.3	0	0	0	0	0.0
16:30 - 16:45	15	0	2	17	19.0	152	2	1	155	158.6	19	2	0	21	23.6	1	0	0	1	1.0
16:45 - 17:00	18	0	2	20	22.0	123	6	0	129	136.8	21	0	0	21	21.0	0	0	0	0	0.0
17:00 - 17:15	16	0	2	18	20.0	155	3	1	159	163.9	19	0	0	19	19.0	1	0	0	1	1.0
17:15 - 17:30	18	0	1	19	20.0	167	1	0	168	169.3	22	1	0	23	24.3	0	0	0	0	0.0
17:30 - 17:45	33	0	3	36	39.0	166	0	1	167	168.0	23	0	0	23	23.0	0	0	0	0	0.0
17:45 - 18:00	36	0	2	38	40.0	121	1	0	122	123.3	16	0	0	16	16.0	0	0	0	0	0.0
18:00 - 18:15	29	0	4	33	37.0	134	1	0	135	136.3	17	0	0	17	17.0	0	0	0	0	0.0
18:15 - 18:30	33	1	3	37	41.3	127	0	0	127	127.0	20	0	1	21	22.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	150	937	98	2
erved AM (08:00-09:00) - Lights	138	918	96	2
erved AM (08:00-09:00) - HGVs	12	19	2	0
erved AM (08:00-09:00) - HGV %				
erved AM (08:00-09:00) - PCU	163	961	100	2
erved PM (16:45-17:45) - Total Vehicles	93	623	86	1
erved PM (16:45-17:45) - Lights	85	611	85	1
erved PM (16:45-17:45) - HGVs	8	12	1	0
erved PM (16:45-17:45) - HGV %				
erved PM (16:45-17:45) - PCU	101	638	87	1

TIME	Queue Lengths (Vehicles)
700	0
705	3
710	2
715	0
720	5
725	3
730	6
735	7
740	4
745	9
750	12
755	7
800	9
805	13
810	10
815	8
820	6
825	9
830	14
835	15
840	7
845	9
850	5
855	8
900	12
905	8
910	6
915	8
920	5
925	9
930	4
935	6
940	5
945	3
950	4
955	6

TIME	Queue Lengths (Vehicles)
1530	8
1535	5
1540	9
1545	4
1550	6
1555	5
1600	3
1605	4
1610	6
1615	7
1620	4
1625	9
1630	12
1635	7
1640	9
1645	13
1650	6
1655	9
1700	8
1705	4
1710	9
1715	11
1720	7
1725	9
1730	5
1735	8
1740	12
1745	7
1750	6
1755	5
1800	8
1805	4
1810	3
1815	0
1820	4
1825	2

Solihull, Tuesday 10th May 2022

Junction: 4  
Approach: B4102 East



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (South)					Ahead to B4102 (West)					Right to A34 Stratford Road (North)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	21	1	0	22	23.3	17	1	0	18	19.3	28	2	1	31	34.6	0	0	0	0	0.0
07:15 - 07:30	21	0	0	21	21.0	15	1	0	16	17.3	21	4	0	25	30.2	0	0	0	0	0.0
07:30 - 07:45	19	0	0	19	19.0	15	0	2	17	19.0	35	0	5	40	45.0	0	0	0	0	0.0
07:45 - 08:00	21	0	0	21	21.0	21	1	0	22	23.3	44	1	0	45	46.3	0	0	0	0	0.0
08:00 - 08:15	17	1	0	18	19.3	24	1	0	25	26.3	47	1	1	49	51.3	0	0	0	0	0.0
08:15 - 08:30	19	1	0	20	21.3	23	0	0	23	23.0	49	1	0	50	51.3	0	0	0	0	0.0
08:30 - 08:45	28	3	0	31	34.9	26	0	0	26	26.0	43	1	2	46	49.3	1	0	0	1	1.0
08:45 - 09:00	28	0	0	28	28.0	25	0	0	25	25.0	54	0	0	54	54.0	1	0	0	1	1.0
09:00 - 09:15	40	2	0	42	44.6	19	2	0	21	23.6	39	1	2	42	45.3	0	0	0	0	0.0
09:15 - 09:30	45	0	0	45	45.0	22	0	0	22	22.0	56	0	0	56	56.0	2	0	0	2	2.0
09:30 - 09:45	37	0	3	40	43.0	18	0	0	18	18.0	40	0	1	41	42.0	1	1	0	2	3.3
09:45 - 10:00	19	0	0	19	19.0	21	0	0	21	21.0	57	0	0	57	57.0	0	0	0	0	0.0
15:30 - 15:45	45	1	0	46	47.3	57	0	0	57	57.0	38	1	0	39	40.3	0	0	0	0	0.0
15:45 - 16:00	39	0	0	39	39.0	36	0	0	36	36.0	33	1	2	36	39.3	1	0	0	1	1.0
16:00 - 16:15	41	2	0	43	45.6	43	1	0	44	45.3	34	3	2	39	44.9	1	0	0	1	1.0
16:15 - 16:30	50	2	0	52	54.6	56	1	0	57	58.3	46	0	0	46	46.0	1	0	0	1	1.0
16:30 - 16:45	40	0	0	40	40.0	65	0	0	65	65.0	41	0	0	41	41.0	0	0	0	0	0.0
16:45 - 17:00	51	0	0	51	51.0	87	0	1	88	89.0	36	1	1	38	40.3	3	0	0	3	3.0
17:00 - 17:15	43	0	0	43	43.0	75	1	0	76	77.3	24	0	0	24	24.0	0	0	0	0	0.0
17:15 - 17:30	38	0	0	38	38.0	71	0	0	71	71.0	58	1	0	59	60.3	1	0	0	1	1.0
17:30 - 17:45	35	0	0	35	35.0	76	0	0	76	76.0	51	0	1	52	53.0	1	0	0	1	1.0
17:45 - 18:00	33	1	0	34	35.3	76	0	0	76	76.0	43	0	0	43	43.0	0	0	0	0	0.0
18:00 - 18:15	37	1	0	38	39.3	72	0	0	72	72.0	34	1	0	35	36.3	0	0	0	0	0.0
18:15 - 18:30	39	0	0	39	39.0	68	0	0	68	68.0	34	0	0	34	34.0	0	0	0	0	0.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	5
705	3
710	6
715	8
720	5
725	3
730	5
735	6
740	4
745	5
750	9
755	9
800	14
805	6
810	5
815	8
820	5
825	7
830	7
835	5
840	3
845	5
850	2
855	5
900	8
905	6
910	5
915	8
920	4
925	6
930	4
935	3
940	2
945	6
950	2
955	4

TIME	Queue Lengths (Vehicles)
1530	9
1535	6
1540	4
1545	7
1550	7
1555	9
1600	12
1605	10
1610	8
1615	9
1620	6
1625	9
1630	14
1635	12
1640	15
1645	20
1650	13
1655	14
1700	11
1705	9
1710	7
1715	9
1720	6
1725	7
1730	13
1735	9
1740	12
1745	11
1750	6
1755	5
1800	9
1805	5
1810	4
1815	3
1820	0
1825	2

erved AM (08:00-09:00) - Total Vehicles	97	99	199	2
erved AM (08:00-09:00) - Lights	92	98	193	2
erved AM (08:00-09:00) - HGVs	5	1	6	0
erved AM (08:00-09:00) - HGV %				
served AM (08:00-09:00) - PCU	104	100	206	2
erved PM (16:45-17:45) - Total Vehicles	167	311	173	5
erved PM (16:45-17:45) - Lights	167	309	169	5
erved PM (16:45-17:45) - HGVs	0	2	4	0
erved PM (16:45-17:45) - HGV %				
served PM (16:45-17:45) - PCU	167	313	178	5

Solihull, Tuesday 10th May 2022

Junction: 4  
Approach: A34 Stratford Road South



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to B4102 (West)					Ahead to A34 Stratford Road (North)					Right to B4102 (East)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	13	0	0	13	13.0	109	11	2	122	138.3	24	0	0	24	24.0	0	0	0	0	0.0
07:15 - 07:30	16	0	1	17	18.0	138	2	0	140	142.6	31	1	1	33	35.3	1	0	0	1	1.0
07:30 - 07:45	25	0	2	27	29.0	113	7	0	120	129.1	35	1	2	38	41.3	0	0	0	0	0.0
07:45 - 08:00	42	0	1	43	44.0	129	2	0	131	133.6	48	2	0	50	52.6	0	0	0	0	0.0
08:00 - 08:15	26	0	1	27	28.0	161	9	0	170	181.7	46	0	1	47	48.0	0	0	0	0	0.0
08:15 - 08:30	58	0	0	58	58.0	177	6	0	183	190.8	36	0	0	36	36.0	0	0	0	0	0.0
08:30 - 08:45	62	2	0	64	66.6	174	3	0	177	180.9	41	3	0	44	47.9	0	0	0	0	0.0
08:45 - 09:00	36	1	1	38	40.3	221	2	1	224	227.6	42	0	0	42	42.0	1	0	0	1	1.0
09:00 - 09:15	34	1	0	35	36.3	178	6	1	185	193.8	48	1	0	49	50.3	1	0	0	1	1.0
09:15 - 09:30	32	0	0	32	32.0	201	7	0	208	217.1	36	1	0	37	38.3	0	0	0	0	0.0
09:30 - 09:45	44	0	0	44	44.0	143	12	2	157	174.6	37	2	0	39	41.6	1	0	0	1	1.0
09:45 - 10:00	46	0	0	46	46.0	146	8	0	154	164.4	41	2	0	41	41.0	3	1	0	4	5.3

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

15:30 - 15:45	48	0	0	48	48.0	201	1	0	202	203.3	28	1	0	29	30.3	0	0	0	0	0.0
15:45 - 16:00	61	1	0	62	63.3	192	2	0	194	196.6	33	0	0	33	33.0	1	0	0	1	1.0
16:00 - 16:15	55	0	0	55	55.0	212	7	1	220	230.1	31	0	1	32	33.0	3	0	0	3	3.0
16:15 - 16:30	54	0	0	54	54.0	245	7	0	252	261.1	29	1	0	30	31.3	0	0	0	0	0.0
16:30 - 16:45	66	0	1	67	68.0	255	6	2	263	272.8	34	1	2	37	40.3	0	0	0	0	0.0
16:45 - 17:00	72	0	0	72	72.0	276	5	0	281	287.5	41	0	0	41	41.0	1	0	0	1	1.0
17:00 - 17:15	68	0	0	68	68.0	289	6	0	295	302.8	29	0	0	29	29.0	0	0	0	0	0.0
17:15 - 17:30	59	0	0	59	59.0	265	5	0	270	276.5	33	0	0	33	33.0	1	0	0	1	1.0
17:30 - 17:45	63	0	0	63	63.0	255	6	0	261	268.8	29	0	0	29	29.0	2	0	0	2	2.0
17:45 - 18:00	73	0	0	73	73.0	254	5	0	259	265.5	36	1	0	37	38.3	0	0	0	0	0.0
18:00 - 18:15	59	2	0	61	63.6	267	2	0	269	271.6	31	0	0	31	31.0	0	0	0	0	0.0
18:15 - 18:30	45	0	0	45	45.0	255	3	0	258	261.9	26	0	0	26	26.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	187	754	169	1
erved AM (08:00-09:00) - Lights	182	733	165	1
erved AM (08:00-09:00) - HGVs	5	21	4	0
erved AM (08:00-09:00) - HGV %				
erved AM (08:00-09:00) - PCU	193	781	174	1
erved PM (16:45-17:45) - Total Vehicles	262	1107	132	4
erved PM (16:45-17:45) - Lights	262	1085	132	4
erved PM (16:45-17:45) - HGVs	0	22	0	0
erved PM (16:45-17:45) - HGV %				
erved PM (16:45-17:45) - PCU	262	1136	132	4

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	3
715	5
720	0
725	3
730	7
735	6
740	9
745	12
750	5
755	8
800	13
805	10
810	8
815	9
820	7
825	4
830	8
835	5
840	9
845	10
850	7
855	8
900	12
905	6
910	6
915	4
920	8
925	4
930	9
935	5
940	6
945	7
950	0
955	2

TIME	Queue Lengths (Vehicles)
1530	7
1535	5
1540	8
1545	3
1550	9
1555	12
1600	6
1605	4
1610	10
1615	13
1620	7
1625	9
1630	12
1635	13
1640	10
1645	8
1650	6
1655	9
1700	6
1705	13
1710	9
1715	15
1720	7
1725	9
1730	5
1735	7
1740	6
1745	8
1750	5
1755	9
1800	4
1805	5
1810	3
1815	4
1820	2
1825	3

Solihull, Tuesday 10th May 2022

Junction: 4  
Approach: B4102 West



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to A34 Stratford Road (North)					Ahead to B4102 (East)					Right to A34 Stratford Road (South)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	9	0	0	9	9.0	16	0	0	16	16.0	29	1	0	30	31.3	0	0	0	0	0.0
07:15 - 07:30	12	1	0	13	14.3	37	0	1	38	39.0	31	0	0	31	31.0	0	0	0	0	0.0
07:30 - 07:45	16	0	0	16	16.0	56	0	0	56	56.0	34	2	0	36	38.6	0	0	0	0	0.0
07:45 - 08:00	27	0	0	27	27.0	71	0	2	73	75.0	47	0	0	47	47.0	1	0	0	1	1.0
08:00 - 08:15	14	0	0	14	14.0	94	1	0	95	96.3	45	1	0	46	47.3	0	0	0	0	0.0
08:15 - 08:30	24	1	0	25	26.3	82	0	0	82	82.0	44	2	0	46	48.6	0	0	0	0	0.0
08:30 - 08:45	22	0	0	22	22.0	88	1	1	90	92.3	37	0	0	37	37.0	0	0	0	0	0.0
08:45 - 09:00	26	0	0	26	26.0	97	1	0	98	99.3	41	2	1	44	47.6	0	0	0	0	0.0
09:00 - 09:15	21	0	0	21	21.0	57	0	0	57	57.0	38	0	2	40	42.0	0	0	0	0	0.0
09:15 - 09:30	17	1	0	18	19.3	64	0	0	64	64.0	32	0	0	32	32.0	1	0	0	1	1.0
09:30 - 09:45	22	0	0	22	22.0	40	0	0	40	40.0	37	1	0	38	39.3	0	0	0	0	0.0
09:45 - 10:00	10	0	0	10	10.0	63	0	0	63	63.0	33	0	0	33	33.0	0	0	0	0	0.0
15:30 - 15:45	20	0	0	20	20.0	31	0	0	31	31.0	42	1	0	43	44.3	1	0	0	1	1.0
15:45 - 16:00	11	1	0	12	13.3	34	1	0	35	36.3	46	1	0	47	48.3	0	0	0	0	0.0
16:00 - 16:15	20	0	0	20	20.0	31	1	0	32	33.3	41	1	0	42	43.3	0	0	0	0	0.0
16:15 - 16:30	17	0	0	17	17.0	25	0	0	25	25.0	34	0	0	34	34.0	0	0	0	0	0.0
16:30 - 16:45	14	1	0	15	16.3	23	0	1	24	25.0	41	0	0	41	41.0	0	0	0	0	0.0
16:45 - 17:00	24	0	1	25	26.0	38	0	0	38	38.0	46	0	0	46	46.0	0	0	0	0	0.0
17:00 - 17:15	20	0	0	20	20.0	30	0	0	30	30.0	44	1	1	46	48.3	0	0	0	0	0.0
17:15 - 17:30	19	0	0	19	19.0	37	0	0	37	37.0	45	0	0	45	45.0	1	0	0	1	1.0
17:30 - 17:45	15	0	0	15	15.0	27	0	0	27	27.0	36	0	0	36	36.0	0	0	0	0	0.0
17:45 - 18:00	17	0	0	17	17.0	38	0	1	39	40.0	56	0	0	56	56.0	0	0	0	0	0.0
18:00 - 18:15	20	1	0	21	22.3	31	0	0	31	31.0	47	0	1	48	49.0	0	0	0	0	0.0
18:15 - 18:30	26	0	0	26	26.0	37	0	0	37	37.0	29	0	0	29	29.0	0	0	0	0	0.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	3
715	2
720	4
725	3
730	4
735	6
740	5
745	7
750	8
755	5
800	6
805	7
810	8
815	13
820	6
825	7
830	8
835	5
840	8
845	10
850	7
855	5
900	6
905	4
910	8
915	4
920	6
925	3
930	6
935	2
940	5
945	6
950	4
955	3

TIME	Queue Lengths (Vehicles)
1530	6
1535	4
1540	7
1545	6
1550	4
1555	6
1600	8
1605	5
1610	5
1615	4
1620	7
1625	4
1630	6
1635	5
1640	7
1645	10
1650	5
1655	7
1700	7
1705	4
1710	8
1715	7
1720	6
1725	4
1730	8
1735	5
1740	8
1745	9
1750	5
1755	9
1800	10
1805	7
1810	6
1815	4
1820	3
1825	5

erved AM (08:00-09:00) - Total Vehicles	87	365	173	0
erved AM (08:00-09:00) - Lights	86	361	167	0
erved AM (08:00-09:00) - HGVs	1	4	6	0
erved AM (08:00-09:00) - HGV %				
served AM (08:00-09:00) - PCU	88	370	181	0
erved PM (16:45-17:45) - Total Vehicles	79	132	173	1
erved PM (16:45-17:45) - Lights	78	132	171	1
erved PM (16:45-17:45) - HGVs	1	0	2	0
erved PM (16:45-17:45) - HGV %				
served PM (16:45-17:45) - PCU	80	132	175	1

Solihull, Tuesday 10th May 2022



Junction: 5  
 Approach: B4102 Blackford Road East

Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Dog Kennel Lane					Ahead to B4102 Blackford Road (West)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	12	0	0	12	12.0	37	1	0	38	39.3	1	0	0	1	1.0
07:15 - 07:30	2	0	0	2	2.0	45	2	2	49	53.6	0	0	0	0	0.0
07:30 - 07:45	7	0	0	7	7.0	55	0	4	59	63.0	0	0	0	0	0.0
07:45 - 08:00	11	0	0	11	11.0	72	1	1	74	76.3	0	0	0	0	0.0
08:00 - 08:15	6	0	0	6	6.0	58	0	2	60	62.0	0	0	0	0	0.0
08:15 - 08:30	4	0	0	4	4.0	98	0	0	98	98.0	0	0	0	0	0.0
08:30 - 08:45	2	0	0	2	2.0	109	1	0	110	111.3	0	0	0	0	0.0
08:45 - 09:00	8	0	0	8	8.0	75	4	1	80	86.2	0	0	0	0	0.0
09:00 - 09:15	6	0	0	6	6.0	71	3	1	75	79.9	0	0	0	0	0.0
09:15 - 09:30	16	0	0	16	16.0	65	0	0	65	65.0	0	0	0	0	0.0
09:30 - 09:45	6	0	0	6	6.0	72	0	0	72	72.0	1	0	0	1	1.0
09:45 - 10:00	8	0	0	8	8.0	82	1	0	83	84.3	0	0	0	0	0.0

15:30 - 15:45	6	0	0	6	6.0	123	0	0	123	123.0	0	0	0	0	0.0
15:45 - 16:00	6	0	0	6	6.0	117	2	1	120	123.6	0	0	0	0	0.0
16:00 - 16:15	5	0	0	5	5.0	118	1	0	119	120.3	0	0	0	0	0.0
16:15 - 16:30	5	0	0	5	5.0	117	0	0	117	117.0	0	0	0	0	0.0
16:30 - 16:45	3	1	0	4	5.3	149	1	1	151	153.3	0	0	0	0	0.0
16:45 - 17:00	7	0	0	7	7.0	166	0	0	166	166.0	0	0	0	0	0.0
17:00 - 17:15	5	0	0	5	5.0	162	1	0	163	164.3	0	0	0	0	0.0
17:15 - 17:30	4	0	0	4	4.0	155	0	0	155	155.0	0	0	0	0	0.0
17:30 - 17:45	9	0	0	9	9.0	160	0	0	160	160.0	0	0	0	0	0.0
17:45 - 18:00	9	0	0	9	9.0	165	0	1	166	167.0	0	0	0	0	0.0
18:00 - 18:15	8	0	0	8	8.0	144	2	0	146	148.6	0	0	0	0	0.0
18:15 - 18:30	1	0	0	1	1.0	134	0	0	134	134.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	20	348	0
erved AM (08:00-09:00) - Lights	20	340	0
erved AM (08:00-09:00) - HGVs	0	8	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	20	358	0
erved PM (16:45-17:45) - Total Vehicles	25	644	0
erved PM (16:45-17:45) - Lights	25	643	0
erved PM (16:45-17:45) - HGVs	0	1	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	25	645	0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	0
720	0
725	2
730	0
735	2
740	2
745	2
750	4
755	5
800	4
805	3
810	3
815	3
820	4
825	0
830	5
835	2
840	2
845	0
850	3
855	4
900	2
905	0
910	2
915	0
920	2
925	2
930	2
935	0
940	4
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	2
1540	0
1545	4
1550	0
1555	2
1600	2
1605	3
1610	0
1615	2
1620	2
1625	0
1630	0
1635	3
1640	2
1645	3
1650	2
1655	2
1700	7
1705	4
1710	3
1715	6
1720	3
1725	3
1730	5
1735	4
1740	2
1745	3
1750	2
1755	3
1800	4
1805	2
1810	2
1815	0
1820	2
1825	3

# Solihull, Tuesday 10th May 2022

Junction: 5  
 Approach: Dog Kennel Lane



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to B4102 Blackford Road (West)					Right to B4102 Blackford Road (East)				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	30	0	0	30	30.0	3	0	0	3	3.0
07:15 - 07:30	27	0	0	27	27.0	4	0	0	4	4.0
07:30 - 07:45	44	2	0	46	48.6	6	0	0	6	6.0
07:45 - 08:00	55	1	0	56	57.3	2	0	0	2	2.0
08:00 - 08:15	65	1	1	67	69.3	6	0	0	6	6.0
08:15 - 08:30	98	1	0	99	100.3	4	0	0	4	4.0
08:30 - 08:45	85	0	1	86	87.0	2	0	0	2	2.0
08:45 - 09:00	86	2	0	88	90.6	4	1	0	5	6.3
09:00 - 09:15	65	2	1	68	71.6	5	0	0	5	5.0
09:15 - 09:30	55	2	1	58	61.6	9	0	0	9	9.0
09:30 - 09:45	54	0	1	55	56.0	9	0	0	9	9.0
09:45 - 10:00	54	0	0	54	54.0	10	0	0	10	10.0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	2
705	0
710	4
715	2
720	0
725	2
730	3
735	2
740	4
745	0
750	4
755	5
800	4
805	3
810	3
815	4
820	3
825	5
830	4
835	3
840	3
845	3
850	4
855	0
900	5
905	5
910	3
915	3
920	2
925	0
930	3
935	3
940	2
945	3
950	0
955	3

TIME	Queue Lengths (Vehicles)
1530	4
1535	4
1540	5
1545	6
1550	7
1555	5
1600	8
1605	4
1610	5
1615	5
1620	6
1625	4
1630	6
1635	5
1640	4
1645	7
1650	7
1655	8
1700	4
1705	6
1710	6
1715	5
1720	7
1725	8
1730	8
1735	8
1740	8
1745	4
1750	8
1755	6
1800	8
1805	4
1810	4
1815	5
1820	3
1825	5

15:30 - 15:45	117	2	0	119	121.6	4	0	0	4	4.0
15:45 - 16:00	95	0	1	96	97.0	7	0	0	7	7.0
16:00 - 16:15	118	0	1	119	120.0	8	0	0	8	8.0
16:15 - 16:30	145	0	0	145	145.0	5	0	0	5	5.0
16:30 - 16:45	159	0	0	159	159.0	2	0	0	2	2.0
16:45 - 17:00	151	5	0	156	162.5	6	0	0	6	6.0
17:00 - 17:15	165	1	0	166	167.3	8	0	0	8	8.0
17:15 - 17:30	193	1	0	194	195.3	11	0	0	11	11.0
17:30 - 17:45	218	2	0	220	222.6	2	0	0	2	2.0
17:45 - 18:00	142	0	0	142	142.0	9	0	0	9	9.0
18:00 - 18:15	134	0	0	134	134.0	11	0	0	11	11.0
18:15 - 18:30	145	0	0	145	145.0	8	0	0	8	8.0

erved AM (08:00-09:00) - Total Vehicles	340	17
erved AM (08:00-09:00) - Lights	334	16
erved AM (08:00-09:00) - HGVs	6	1
erved AM (08:00-09:00) - HGV %		
erved AM (08:00-09:00) - PCU	347	18
erved PM (16:45-17:45) - Total Vehicles	736	27
erved PM (16:45-17:45) - Lights	727	27
erved PM (16:45-17:45) - HGVs	9	0
erved PM (16:45-17:45) - HGV %		
erved PM (16:45-17:45) - PCU	748	27

Solihull, Tuesday 10th May 2022

Junction: 5  
 Approach: B4102 Blackford Road West



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Ahead to B4102 Blackford Road (East)					Right to Dog Kennel Lane					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	42	0	0	42	42.0	91	1	0	92	93.3	16	1	0	17	18.3
07:15 - 07:30	78	1	1	80	82.3	137	2	0	139	141.6	13	0	1	14	15.0
07:30 - 07:45	99	2	0	101	103.6	149	3	2	154	159.9	19	0	0	19	19.0
07:45 - 08:00	146	1	3	150	154.3	192	0	1	193	194.0	23	0	0	23	23.0
08:00 - 08:15	155	1	1	157	159.3	219	0	0	219	219.0	28	1	0	29	30.3
08:15 - 08:30	151	3	0	154	157.9	204	2	0	206	208.6	26	0	0	26	26.0
08:30 - 08:45	136	1	1	138	140.3	200	5	0	205	211.5	35	0	1	36	37.0
08:45 - 09:00	166	3	1	170	174.9	195	2	0	197	199.6	43	1	0	44	45.3
09:00 - 09:15	113	0	2	115	117.0	166	0	0	166	166.0	37	0	0	37	37.0
09:15 - 09:30	100	1	0	101	102.3	105	2	0	107	109.6	21	0	1	22	23.0
09:30 - 09:45	89	1	0	90	91.3	71	1	0	72	73.3	16	0	1	17	18.0
09:45 - 10:00	93	0	0	93	93.0	70	1	0	71	72.3	9	0	0	9	9.0

15:30 - 15:45	90	0	0	90	90.0	99	0	0	99	99.0	37	0	0	37	37.0
15:45 - 16:00	83	3	0	86	89.9	89	0	0	89	89.0	23	0	1	24	25.0
16:00 - 16:15	85	1	0	86	87.3	67	0	0	67	67.0	25	0	0	25	25.0
16:15 - 16:30	68	0	0	68	68.0	86	2	0	88	90.6	24	0	1	25	26.0
16:30 - 16:45	78	0	1	79	80.0	88	1	0	89	90.3	20	0	0	20	20.0
16:45 - 17:00	89	0	1	90	91.0	102	1	0	103	104.3	27	0	1	28	29.0
17:00 - 17:15	91	1	1	93	95.3	89	0	0	89	89.0	30	0	0	30	30.0
17:15 - 17:30	84	0	0	84	84.0	76	0	0	76	76.0	21	0	1	22	23.0
17:30 - 17:45	78	0	0	78	78.0	100	0	0	100	100.0	29	0	0	29	29.0
17:45 - 18:00	95	0	1	96	97.0	106	0	0	106	106.0	28	0	1	29	30.0
18:00 - 18:15	79	1	1	81	83.3	72	1	0	73	74.3	30	0	0	30	30.0
18:15 - 18:30	86	0	0	86	86.0	68	0	0	68	68.0	23	0	1	24	25.0

erved AM (08:00-09:00) - Total Vehicles	619	827	135
erved AM (08:00-09:00) - Lights	608	818	132
erved AM (08:00-09:00) - HGVs	11	9	3
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	632	839	139
erved PM (16:45-17:45) - Total Vehicles	345	368	109
erved PM (16:45-17:45) - Lights	342	367	107
erved PM (16:45-17:45) - HGVs	3	1	2
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	348	369	111

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	4
705	4
710	5
715	4
720	6
725	5
730	5
735	7
740	0
745	3
750	3
755	5
800	4
805	3
810	3
815	5
820	3
825	3
830	6
835	4
840	3
845	7
850	4
855	4
900	5
905	4
910	5
915	3
920	3
925	4
930	4
935	3
940	4
945	5
950	3
955	4

TIME	Queue Lengths (Vehicles)
1530	2
1535	0
1540	2
1545	3
1550	2
1555	2
1600	0
1605	2
1610	2
1615	3
1620	0
1625	2
1630	2
1635	3
1640	2
1645	2
1650	3
1655	4
1700	2
1705	0
1710	2
1715	2
1720	2
1725	2
1730	0
1735	5
1740	2
1745	0
1750	3
1755	3
1800	0
1805	3
1810	3
1815	2
1820	2
1825	2

Junction: 6  
 Approach: Tanworth Lane



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to B4102 Blackford Road					Right to B4102 Tanworth Lane				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	46	1	0	47	48.3	0	0	0	0	0.0
07:15 - 07:30	46	0	1	47	48.0	0	0	0	0	0.0
07:30 - 07:45	66	2	0	68	70.6	0	0	0	0	0.0
07:45 - 08:00	73	0	0	73	73.0	0	0	0	0	0.0
08:00 - 08:15	96	0	1	97	98.0	0	0	0	0	0.0
08:15 - 08:30	96	1	0	97	98.3	0	0	0	0	0.0
08:30 - 08:45	89	0	1	90	91.0	0	0	0	0	0.0
08:45 - 09:00	118	2	0	120	122.6	0	0	0	0	0.0
09:00 - 09:15	90	0	1	91	92.0	0	0	0	0	0.0
09:15 - 09:30	54	0	0	54	54.0	0	0	0	0	0.0
09:30 - 09:45	45	0	1	46	47.0	0	0	0	0	0.0
09:45 - 10:00	34	0	0	34	34.0	0	0	0	0	0.0

15:30 - 15:45	73	0	1	74	75.0	0	0	0	0	0.0
15:45 - 16:00	48	0	1	49	50.0	0	0	0	0	0.0
16:00 - 16:15	50	0	0	50	50.0	0	0	0	0	0.0
16:15 - 16:30	61	1	1	63	65.3	0	0	0	0	0.0
16:30 - 16:45	55	0	0	55	55.0	0	0	0	0	0.0
16:45 - 17:00	60	0	1	61	62.0	0	0	0	0	0.0
17:00 - 17:15	58	0	0	58	58.0	0	0	0	0	0.0
17:15 - 17:30	52	0	1	53	54.0	0	0	0	0	0.0
17:30 - 17:45	60	0	0	60	60.0	0	0	0	0	0.0
17:45 - 18:00	67	0	1	68	69.0	0	0	0	0	0.0
18:00 - 18:15	52	0	0	52	52.0	0	0	0	0	0.0
18:15 - 18:30	58	0	1	59	60.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	404	0
erved AM (08:00-09:00) - Lights	399	0
erved AM (08:00-09:00) - HGVs	5	0
erved AM (08:00-09:00) - HGV %		
erved AM (08:00-09:00) - PCU	410	0
erved PM (16:45-17:45) - Total Vehicles	232	0
erved PM (16:45-17:45) - Lights	230	0
erved PM (16:45-17:45) - HGVs	2	0
erved PM (16:45-17:45) - HGV %		
erved PM (16:45-17:45) - PCU	234	0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	4
705	5
710	7
715	6
720	7
725	6
730	6
735	8
740	7
745	9
750	12
755	10
800	9
805	5
810	3
815	7
820	7
825	8
830	12
835	10
840	6
845	10
850	8
855	14
900	10
905	6
910	7
915	9
920	12
925	5
930	4
935	6
940	4
945	6
950	6
955	7

TIME	Queue Lengths (Vehicles)
1530	5
1535	4
1540	6
1545	5
1550	5
1555	5
1600	7
1605	4
1610	5
1615	4
1620	6
1625	5
1630	7
1635	6
1640	7
1645	11
1650	15
1655	14
1700	12
1705	6
1710	12
1715	9
1720	9
1725	10
1730	14
1735	10
1740	6
1745	7
1750	7
1755	8
1800	6
1805	5
1810	7
1815	4
1820	4
1825	5

# Solihull, Tuesday 10th May 2022

Junction: 6  
 Approach: B4102 Blackford Road



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Ahead to B4102 Tanworth Lane					Right to Tanworth Lane				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	72	2	1	75	78.6	10	0	0	10	10.0
07:15 - 07:30	84	2	2	88	92.6	3	0	0	3	3.0
07:30 - 07:45	102	3	4	109	116.9	16	0	0	16	16.0
07:45 - 08:00	135	0	1	136	137.0	16	1	0	17	18.3
08:00 - 08:15	135	1	3	139	143.3	18	0	0	18	18.0
08:15 - 08:30	191	1	1	193	195.3	30	0	0	30	30.0
08:30 - 08:45	197	3	1	201	205.9	33	0	0	33	33.0
08:45 - 09:00	170	5	1	176	183.5	33	0	0	33	33.0
09:00 - 09:15	140	4	2	146	153.2	27	0	1	28	29.0
09:15 - 09:30	125	2	2	129	133.6	18	0	0	18	18.0
09:30 - 09:45	115	0	1	116	117.0	29	0	0	29	29.0
09:45 - 10:00	127	2	0	129	131.6	18	0	0	18	18.0

15:30 - 15:45	226	2	0	228	230.6	47	0	0	47	47.0
15:45 - 16:00	198	1	3	202	206.3	36	0	0	36	36.0
16:00 - 16:15	204	2	1	207	210.6	56	0	0	56	56.0
16:15 - 16:30	242	0	1	243	244.0	39	0	0	39	39.0
16:30 - 16:45	282	2	1	285	288.6	53	0	0	53	53.0
16:45 - 17:00	290	5	1	296	303.5	54	0	0	54	54.0
17:00 - 17:15	294	2	0	296	298.6	63	0	0	63	63.0
17:15 - 17:30	296	1	1	298	300.3	72	0	0	72	72.0
17:30 - 17:45	341	2	0	343	345.6	67	0	0	67	67.0
17:45 - 18:00	291	0	2	293	295.0	44	0	0	44	44.0
18:00 - 18:15	260	2	0	262	264.6	48	0	0	48	48.0
18:15 - 18:30	265	0	1	266	267.0	37	0	0	37	37.0

erved AM (08:00-09:00) - Total Vehicles	709	114
erved AM (08:00-09:00) - Lights	693	114
erved AM (08:00-09:00) - HGVs	16	0
erved AM (08:00-09:00) - HGV %		
erved AM (08:00-09:00) - PCU	728	114
erved PM (16:45-17:45) - Total Vehicles	1233	256
erved PM (16:45-17:45) - Lights	1221	256
erved PM (16:45-17:45) - HGVs	12	0
erved PM (16:45-17:45) - HGV %		
erved PM (16:45-17:45) - PCU	1248	256

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
	Right Turn
700	0
705	0
710	2
715	0
720	0
725	2
730	0
735	0
740	0
745	0
750	2
755	2
800	3
805	2
810	4
815	3
820	5
825	3
830	2
835	2
840	0
845	2
850	2
855	2
900	3
905	0
910	2
915	3
920	2
925	0
930	0
935	2
940	2
945	2
950	2
955	0

TIME	Queue Lengths (Vehicles)
	Right Turn
1530	3
1535	2
1540	2
1545	2
1550	4
1555	3
1600	2
1605	2
1610	4
1615	3
1620	2
1625	2
1630	4
1635	3
1640	3
1645	2
1650	3
1655	4
1700	2
1705	2
1710	3
1715	5
1720	2
1725	3
1730	3
1735	4
1740	5
1745	5
1750	4
1755	3
1800	5
1805	7
1810	2
1815	3
1820	2
1825	4

# Solihull, Tuesday 10th May 2022

Junction: 6

Approach: B4102 Tanworth Lane



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Tanworth Lane					Ahead to B4102 Blackford Road				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	31	0	0	31	31.0	101	2	1	104	107.6
07:15 - 07:30	45	0	1	46	47.0	184	3	1	188	192.9
07:30 - 07:45	51	1	1	53	55.3	199	3	2	204	209.9
07:45 - 08:00	64	2	1	67	70.6	292	1	4	297	302.3
08:00 - 08:15	63	2	0	65	67.6	306	2	0	308	310.6
08:15 - 08:30	72	1	1	74	76.3	282	4	0	286	291.2
08:30 - 08:45	82	1	0	83	84.3	284	5	1	290	297.5
08:45 - 09:00	31	1	1	33	35.3	284	3	1	288	292.9
09:00 - 09:15	47	2	0	49	51.6	223	0	2	225	227.0
09:15 - 09:30	43	2	1	46	49.6	174	3	0	177	180.9
09:30 - 09:45	36	1	0	37	38.3	132	2	0	134	136.6
09:45 - 10:00	25	0	1	26	27.0	143	2	0	145	147.6

15:30 - 15:45	64	0	1	65	66.0	153	1	0	154	155.3
15:45 - 16:00	46	1	0	47	48.3	149	1	0	150	151.3
16:00 - 16:15	63	1	1	65	67.3	128	1	0	129	130.3
16:15 - 16:30	49	0	0	49	49.0	117	1	0	118	119.3
16:30 - 16:45	54	0	1	55	56.0	132	1	1	134	136.3
16:45 - 17:00	54	0	1	55	56.0	157	1	1	159	161.3
17:00 - 17:15	71	0	1	72	73.0	152	1	1	154	156.3
17:15 - 17:30	60	1	0	61	62.3	131	0	0	131	131.0
17:30 - 17:45	74	0	1	75	76.0	147	1	0	148	149.3
17:45 - 18:00	48	0	0	48	48.0	162	0	1	163	164.0
18:00 - 18:15	61	0	1	62	63.0	129	2	1	132	135.6
18:15 - 18:30	63	0	0	63	63.0	117	0	0	117	117.0

erved AM (08:00-09:00) - Total Vehicles	255	1172
erved AM (08:00-09:00) - Lights	248	1156
erved AM (08:00-09:00) - HGVs	7	16
erved AM (08:00-09:00) - HGV %		
erved AM (08:00-09:00) - PCU	264	1192
erved PM (16:45-17:45) - Total Vehicles	263	592
erved PM (16:45-17:45) - Lights	259	587
erved PM (16:45-17:45) - HGVs	4	5
erved PM (16:45-17:45) - HGV %		
erved PM (16:45-17:45) - PCU	267	598

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	0
720	0
725	0
730	0
735	0
740	0
745	0
750	0
755	0
800	0
805	0
810	0
815	0
820	0
825	0
830	0
835	0
840	0
845	0
850	0
855	0
900	0
905	0
910	0
915	0
920	0
925	0
930	0
935	0
940	0
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	0
1540	0
1545	0
1550	0
1555	0
1600	0
1605	0
1610	0
1615	0
1620	0
1625	0
1630	0
1635	0
1640	0
1645	0
1650	0
1655	0
1700	0
1705	0
1710	0
1715	0
1720	0
1725	0
1730	0
1735	0
1740	0
1745	0
1750	0
1755	0
1800	0
1805	0
1810	0
1815	0
1820	0
1825	0

# Solihull, Tuesday 10th May 2022

Junction: 7  
 Approach: B4102 Tanworth Lane North



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Ahead to B4102 Tanworth Lane (South)					Right to Dickens Heath Road					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	47	0	0	47	47.0	24	2	0	26	28.6	0	0	0	0	0.0
07:15 - 07:30	37	1	0	38	39.3	42	1	3	46	50.3	1	0	0	1	1.0
07:30 - 07:45	50	1	2	53	56.3	51	2	2	55	59.6	5	0	0	5	5.0
07:45 - 08:00	61	0	1	62	63.0	66	0	0	66	66.0	5	0	0	5	5.0
08:00 - 08:15	67	0	1	68	69.0	72	1	3	76	80.3	4	0	0	4	4.0
08:15 - 08:30	60	0	0	60	60.0	118	1	1	120	122.3	9	0	0	9	9.0
08:30 - 08:45	73	3	0	76	79.9	112	0	1	113	114.0	6	0	0	6	6.0
08:45 - 09:00	81	2	1	84	87.6	94	2	0	96	98.6	4	0	0	4	4.0
09:00 - 09:15	57	2	1	60	63.6	82	1	1	84	86.3	0	0	0	0	0.0
09:15 - 09:30	56	1	1	58	60.3	69	1	1	71	73.3	0	0	0	0	0.0
09:30 - 09:45	49	0	0	49	49.0	61	0	1	62	63.0	0	0	0	0	0.0
09:45 - 10:00	57	0	0	57	57.0	67	2	0	69	71.6	0	0	0	0	0.0

15:30 - 15:45	83	0	0	83	83.0	147	2	0	149	151.6	0	0	0	0	0.0
15:45 - 16:00	67	2	1	70	73.6	130	0	2	132	134.0	0	0	0	0	0.0
16:00 - 16:15	81	0	0	81	81.0	123	2	1	126	129.6	2	0	0	2	2.0
16:15 - 16:30	64	0	0	64	64.0	177	0	1	178	179.0	0	0	0	0	0.0
16:30 - 16:45	98	3	1	102	106.9	185	0	0	185	185.0	0	0	0	0	0.0
16:45 - 17:00	125	2	0	127	129.6	165	3	1	169	173.9	0	0	0	0	0.0
17:00 - 17:15	118	2	0	120	122.6	174	0	0	174	174.0	2	0	0	2	2.0
17:15 - 17:30	121	0	0	121	121.0	173	1	1	175	177.3	0	0	0	0	0.0
17:30 - 17:45	127	0	0	127	127.0	221	2	0	223	225.6	2	0	0	2	2.0
17:45 - 18:00	121	0	1	122	123.0	170	0	1	171	172.0	0	0	0	0	0.0
18:00 - 18:15	99	2	0	101	103.6	167	0	0	167	167.0	0	0	0	0	0.0
18:15 - 18:30	86	0	0	86	86.0	170	0	1	171	172.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	288	405	23
erved AM (08:00-09:00) - Lights	281	396	23
erved AM (08:00-09:00) - HGVs	7	9	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	297	415	23
erved PM (16:45-17:45) - Total Vehicles	495	741	4
erved PM (16:45-17:45) - Lights	491	733	4
erved PM (16:45-17:45) - HGVs	4	8	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	500	751	4

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	0
705	0
710	0
715	0
720	2
725	0
730	0
735	0
740	0
745	0
750	0
755	2
800	0
805	0
810	0
815	0
820	3
825	2
830	0
835	0
840	0
845	2
850	0
855	0
900	0
905	2
910	0
915	0
920	0
925	0
930	0
935	0
940	0
945	0
950	0
955	0

TIME	Queue Lengths (Vehicles)
1530	0
1535	0
1540	2
1545	0
1550	0
1555	3
1600	0
1605	0
1610	0
1615	0
1620	2
1625	0
1630	0
1635	0
1640	0
1645	2
1650	2
1655	0
1700	0
1705	2
1710	0
1715	0
1720	0
1725	0
1730	2
1735	0
1740	0
1745	0
1750	2
1755	0
1800	0
1805	0
1810	0
1815	0
1820	2
1825	0

# Solihull, Tuesday 10th May 2022

Junction: 7  
 Approach: B4102 Tanworth Lane South



Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to Dickens Heath Road					Ahead to B4102 Tanworth Lane (North)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	5	0	0	5	5.0	46	3	0	49	52.9	0	0	0	0	0.0
07:15 - 07:30	4	0	0	4	4.0	74	1	0	75	76.3	0	0	0	0	0.0
07:30 - 07:45	9	0	1	10	11.0	90	0	0	90	90.0	0	0	0	0	0.0
07:45 - 08:00	10	0	1	11	12.0	132	2	2	136	140.6	0	0	0	0	0.0
08:00 - 08:15	7	0	0	7	7.0	124	3	0	127	130.9	0	0	0	0	0.0
08:15 - 08:30	10	0	0	10	10.0	151	5	0	156	162.5	0	0	0	0	0.0
08:30 - 08:45	18	0	0	18	18.0	149	4	0	153	158.2	0	0	0	0	0.0
08:45 - 09:00	10	1	1	12	14.3	116	4	0	120	125.2	0	0	0	0	0.0
09:00 - 09:15	6	0	0	6	6.0	69	0	2	71	73.0	0	0	0	0	0.0
09:15 - 09:30	6	0	0	6	6.0	70	2	0	72	74.6	0	0	0	0	0.0
09:30 - 09:45	5	1	0	6	7.3	63	1	0	64	65.3	0	0	0	0	0.0
09:45 - 10:00	3	0	1	4	5.0	53	1	0	54	55.3	0	0	0	0	0.0

15:30 - 15:45	9	0	0	9	9.0	74	0	0	74	74.0	1	0	0	1	1.0
15:45 - 16:00	12	0	0	12	12.0	83	1	0	84	85.3	1	0	0	1	1.0
16:00 - 16:15	9	0	1	10	11.0	72	0	0	72	72.0	0	0	0	0	0.0
16:15 - 16:30	14	0	0	14	14.0	62	0	0	62	62.0	0	0	0	0	0.0
16:30 - 16:45	9	0	1	10	11.0	76	0	0	76	76.0	0	0	0	0	0.0
16:45 - 17:00	16	0	2	18	20.0	99	1	0	100	101.3	0	0	0	0	0.0
17:00 - 17:15	15	0	1	16	17.0	88	0	1	89	90.0	0	0	0	0	0.0
17:15 - 17:30	13	0	0	13	13.0	79	1	0	80	81.3	0	0	0	0	0.0
17:30 - 17:45	13	1	0	14	15.3	95	0	0	95	95.0	0	0	0	0	0.0
17:45 - 18:00	14	0	0	14	14.0	59	0	1	60	61.0	0	0	0	0	0.0
18:00 - 18:15	14	0	1	15	16.0	78	0	1	79	80.0	0	0	0	0	0.0
18:15 - 18:30	8	0	0	8	8.0	79	0	0	79	79.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	47	556	0
erved AM (08:00-09:00) - Lights	45	540	0
erved AM (08:00-09:00) - HGVs	2	16	0
erved AM (08:00-09:00) - HGV %			
served AM (08:00-09:00) - PCU	49	577	0
erved PM (16:45-17:45) - Total Vehicles	61	364	0
erved PM (16:45-17:45) - Lights	57	361	0
erved PM (16:45-17:45) - HGVs	4	3	0
erved PM (16:45-17:45) - HGV %			
served PM (16:45-17:45) - PCU	65	368	0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	2
705	4
710	3
715	5
720	4
725	4
730	3
735	5
740	4
745	2
750	6
755	2
800	3
805	3
810	6
815	5
820	7
825	4
830	4
835	5
840	3
845	6
850	4
855	4
900	5
905	3
910	6
915	4
920	5
925	5
930	5
935	4
940	5
945	2
950	6
955	4

TIME	Queue Lengths (Vehicles)
1530	4
1535	4
1540	3
1545	5
1550	7
1555	3
1600	4
1605	4
1610	5
1615	6
1620	6
1625	6
1630	5
1635	6
1640	4
1645	4
1650	6
1655	7
1700	7
1705	5
1710	4
1715	5
1720	6
1725	3
1730	4
1735	4
1740	5
1745	3
1750	3
1755	4
1800	5
1805	3
1810	3
1815	4
1820	5
1825	5

# Solihull, Tuesday 10th May 2022



Junction: 7  
Approach: Dickens Heath Road

Queues Measured as Stationary Vehicles (Maximum Queue every 5 Minutes)

TIME	Left to B4102 Tanworth Lane (North)					Right to B4102 Tanworth Lane (South)					U-Turn				
	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs	LIGHT	HEAVY	BUS	TOTAL	PCUs
07:00 - 07:15	86	0	1	87	88.0	9	2	0	11	13.6	1	0	0	1	1.0
07:15 - 07:30	155	1	2	158	161.3	13	0	3	16	19.0	0	0	0	0	0.0
07:30 - 07:45	153	4	3	160	168.2	8	0	0	8	8.0	0	0	0	0	0.0
07:45 - 08:00	215	1	3	219	223.3	13	0	0	13	13.0	0	0	0	0	0.0
08:00 - 08:15	236	1	0	237	238.3	11	0	0	11	11.0	0	0	0	0	0.0
08:15 - 08:30	196	1	1	198	200.3	11	0	0	11	11.0	0	0	0	0	0.0
08:30 - 08:45	211	1	1	213	215.3	13	0	1	14	15.0	0	0	0	0	0.0
08:45 - 09:00	198	0	2	200	202.0	18	0	0	18	18.0	0	0	0	0	0.0
09:00 - 09:15	195	1	0	196	197.3	8	0	0	8	8.0	0	0	0	0	0.0
09:15 - 09:30	148	4	1	153	159.2	9	0	0	9	9.0	3	0	0	3	3.0
09:30 - 09:45	105	2	0	107	109.6	8	0	1	9	10.0	1	0	0	1	1.0
09:45 - 10:00	114	1	1	116	118.3	4	0	0	4	4.0	0	0	0	0	0.0

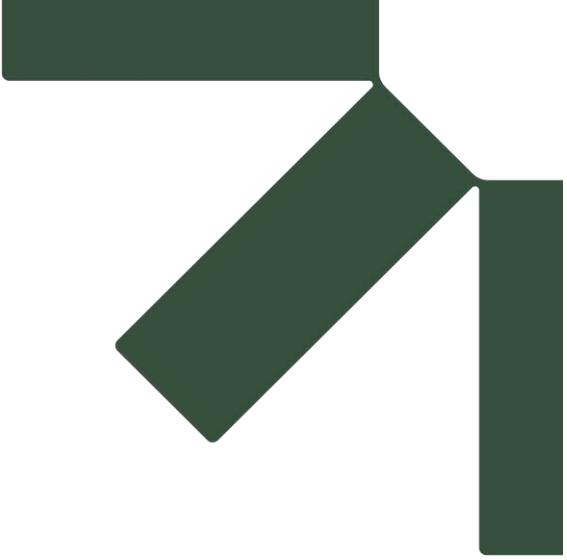
15:30 - 15:45	141	1	1	143	145.3	13	0	1	14	15.0	0	0	0	0	0.0
15:45 - 16:00	112	1	0	113	114.3	14	1	1	16	18.3	0	0	0	0	0.0
16:00 - 16:15	113	2	1	116	119.6	8	0	0	8	8.0	0	0	0	0	0.0
16:15 - 16:30	110	1	0	111	112.3	9	0	0	9	9.0	0	0	0	0	0.0
16:30 - 16:45	108	1	2	111	114.3	19	0	0	19	19.0	1	0	0	1	1.0
16:45 - 17:00	119	1	2	122	125.3	11	0	1	12	13.0	0	0	0	0	0.0
17:00 - 17:15	133	0	1	134	135.0	12	0	0	12	12.0	0	0	0	0	0.0
17:15 - 17:30	109	0	0	109	109.0	5	0	0	5	5.0	0	0	0	0	0.0
17:30 - 17:45	124	0	1	125	126.0	11	0	0	11	11.0	0	0	0	0	0.0
17:45 - 18:00	154	0	0	154	154.0	9	0	1	10	11.0	0	0	0	0	0.0
18:00 - 18:15	114	2	1	117	120.6	7	0	0	7	7.0	0	0	0	0	0.0
18:15 - 18:30	101	0	0	101	101.0	9	0	0	9	9.0	0	0	0	0	0.0

erved AM (08:00-09:00) - Total Vehicles	848	54	0
erved AM (08:00-09:00) - Lights	841	53	0
erved AM (08:00-09:00) - HGVs	7	1	0
erved AM (08:00-09:00) - HGV %			
erved AM (08:00-09:00) - PCU	856	55	0
erved PM (16:45-17:45) - Total Vehicles	490	40	0
erved PM (16:45-17:45) - Lights	485	39	0
erved PM (16:45-17:45) - HGVs	5	1	0
erved PM (16:45-17:45) - HGV %			
erved PM (16:45-17:45) - PCU	495	41	0

PCU Factors:	
LIGHT	1.0
HEAVY	2.3
BUS	2.0

TIME	Queue Lengths (Vehicles)
700	4
705	5
710	4
715	6
720	6
725	6
730	7
735	8
740	9
745	6
750	12
755	10
800	15
805	13
810	11
815	8
820	15
825	12
830	8
835	6
840	9
845	12
850	10
855	7
900	7
905	6
910	7
915	10
920	5
925	7
930	3
935	3
940	4
945	6
950	4
955	5

TIME	Queue Lengths (Vehicles)
1530	4
1535	3
1540	5
1545	4
1550	4
1555	3
1600	6
1605	5
1610	4
1615	5
1620	4
1625	4
1630	6
1635	7
1640	4
1645	5
1650	3
1655	5
1700	5
1705	6
1710	8
1715	5
1720	4
1725	6
1730	4
1735	4
1740	7
1745	7
1750	5
1755	6
1800	4
1805	5
1810	5
1815	5
1820	5
1825	3



# Appendix F    Flow Diagram – Observed Traffic Flows

## Transport Assessment

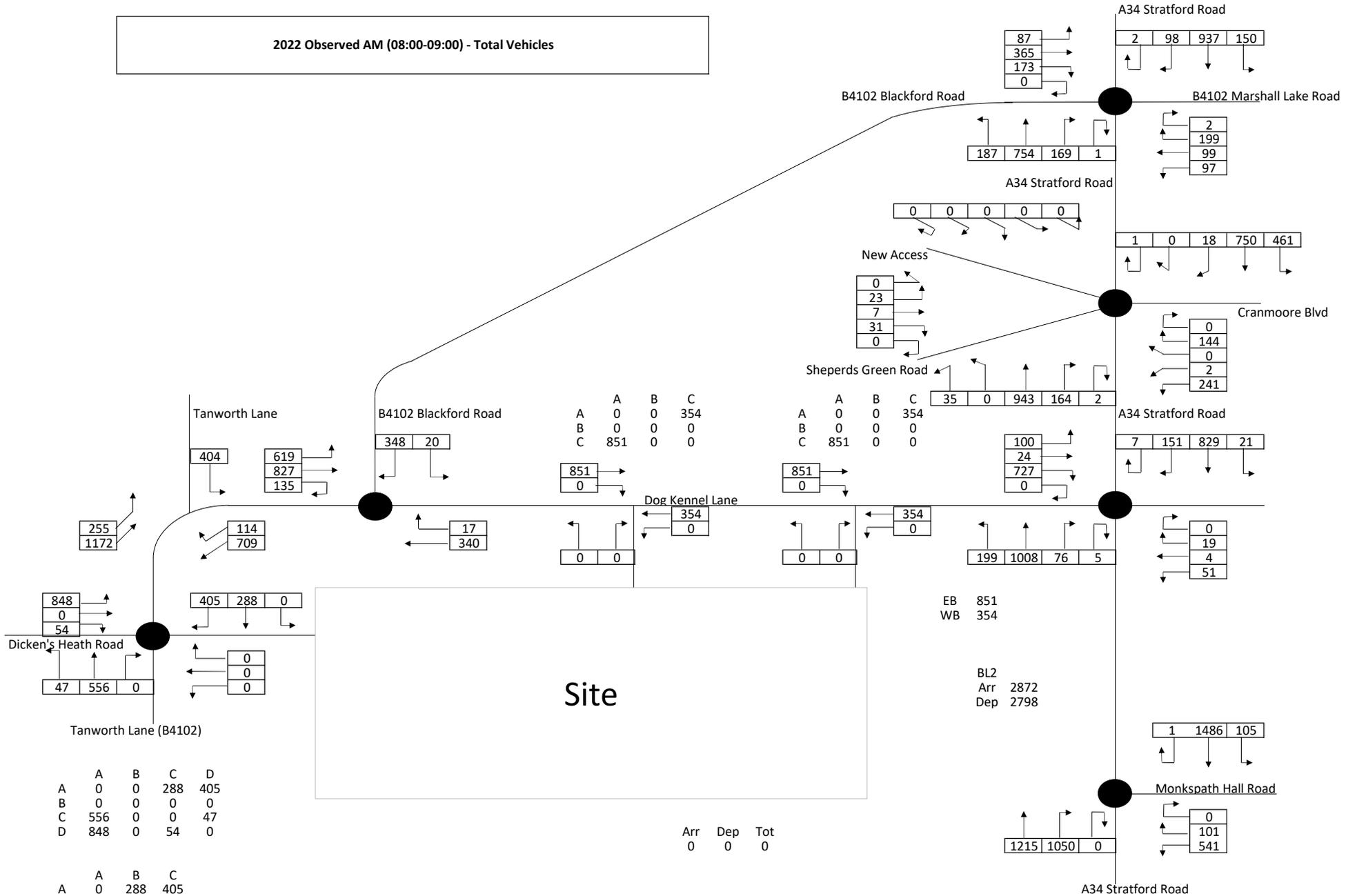
Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey UK Ltd

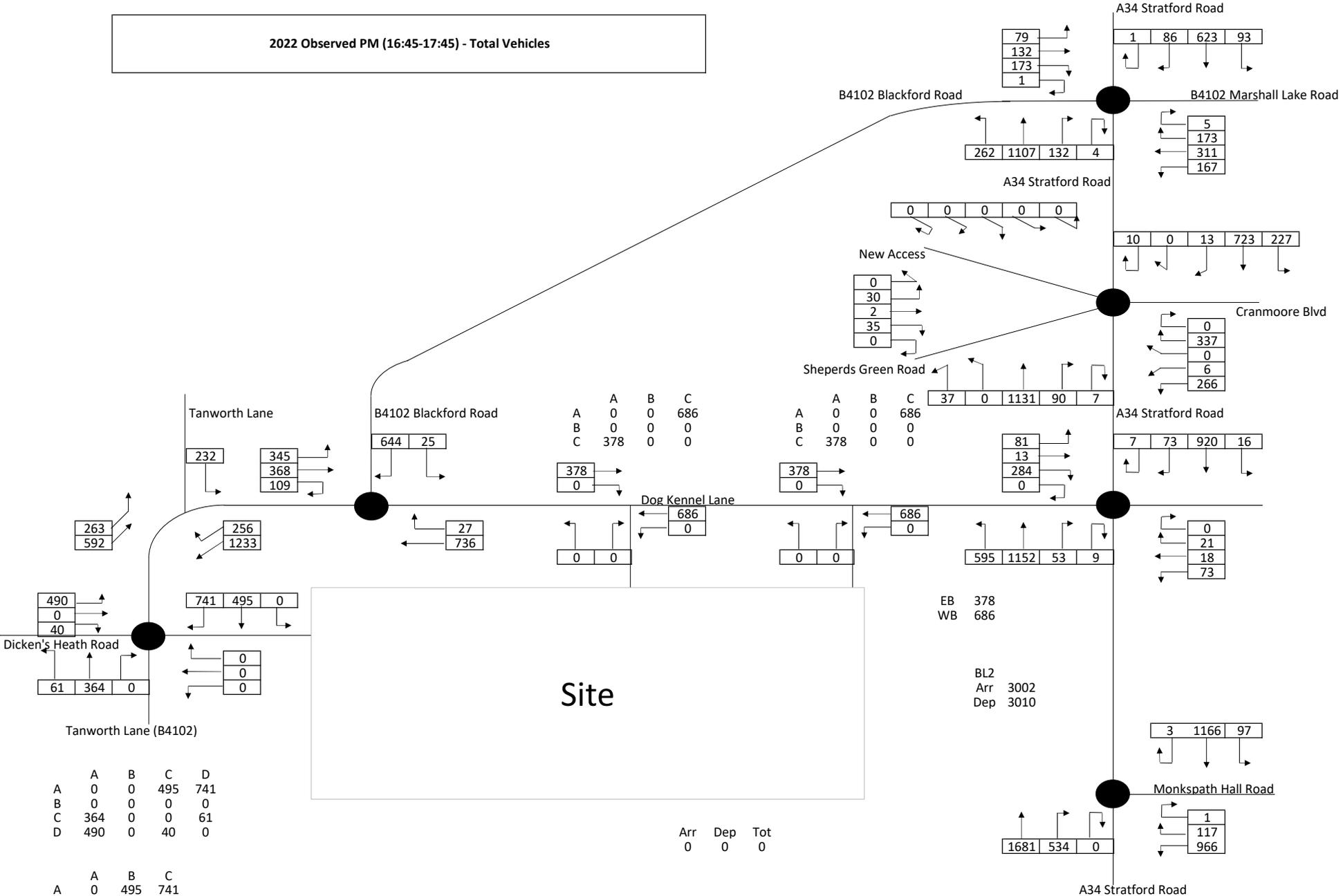
SLR Project No.: 425.000418.0001

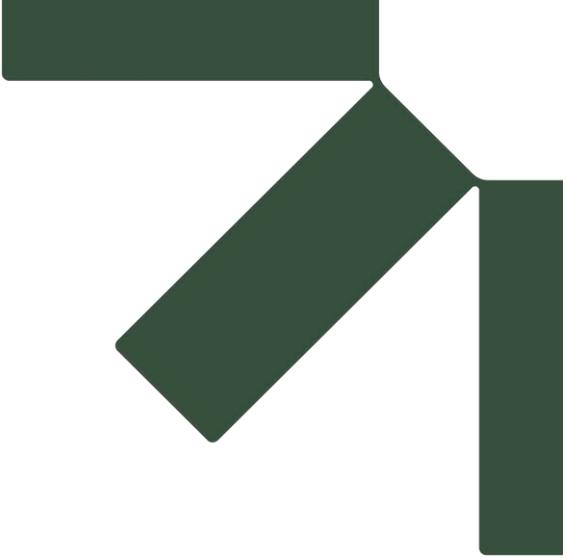
December 2024

2022 Observed AM (08:00-09:00) - Total Vehicles



2022 Observed PM (16:45-17:45) - Total Vehicles





# **Appendix G    West Midlands Collision Report**

## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

SLR Project No.: 425.000418.0001

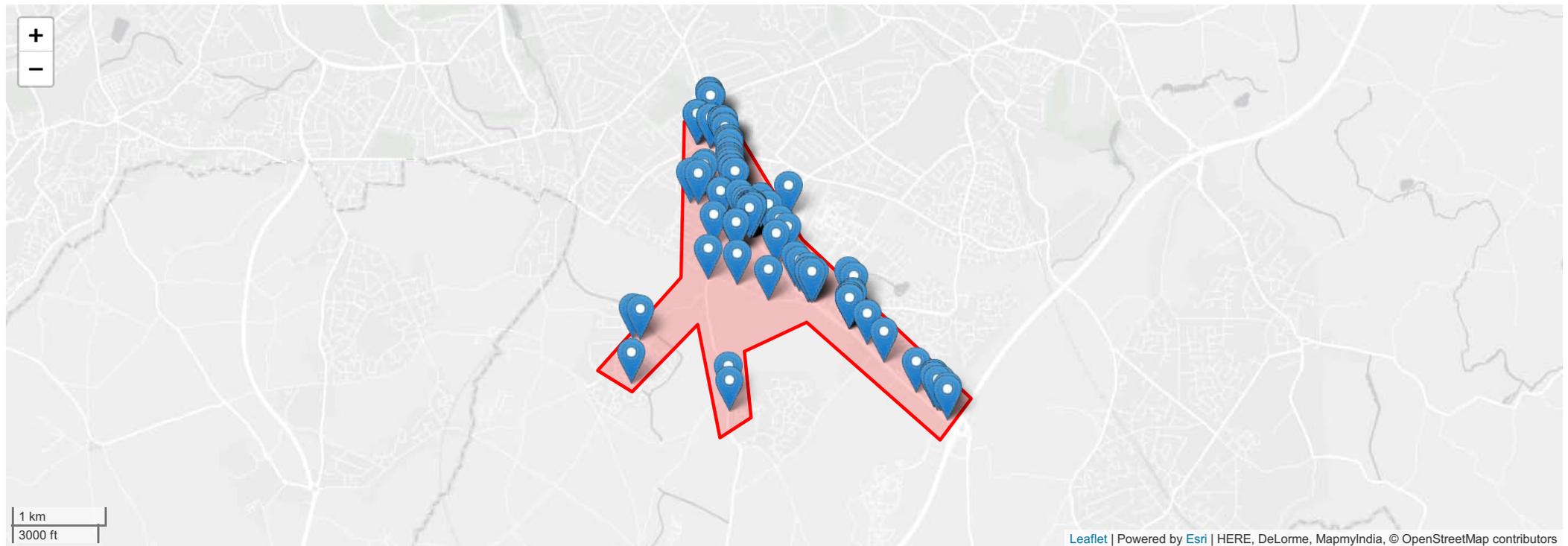
December 2024

# Transport for West Midlands Road Traffic Collision Report

## From 01/01/2019 to 13/08/2024

Report generated on 13 August 2024 at 10:42

Total Collisions	No. of Fatal Collisions	No. of Serious Collisions	No. of Slight Collisions	Total Casualties	No. of Fatal Casualties	No. of Serious Casualties	No. of Slight Casualties	No. of Driver Classification	No. of Passenger Classification	No. of Pedestrian Classification
82	0	14	68	115	0	16	99	69	33	13



# Incident Record Number: 1 - Monday 17:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L82947719	07/01/2019	17:30	Monday	2	1	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
HIGHLANDS ROAD	No Data Provided



## Incident Record Number: 1 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
HIGHLANDS ROAD	413456, 277044	Unknown	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	22	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	30	30 - 39 years	Car, No tow articulation	VOLKSWAGEN, POLO MATCH TDI	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Turning right	SE SW

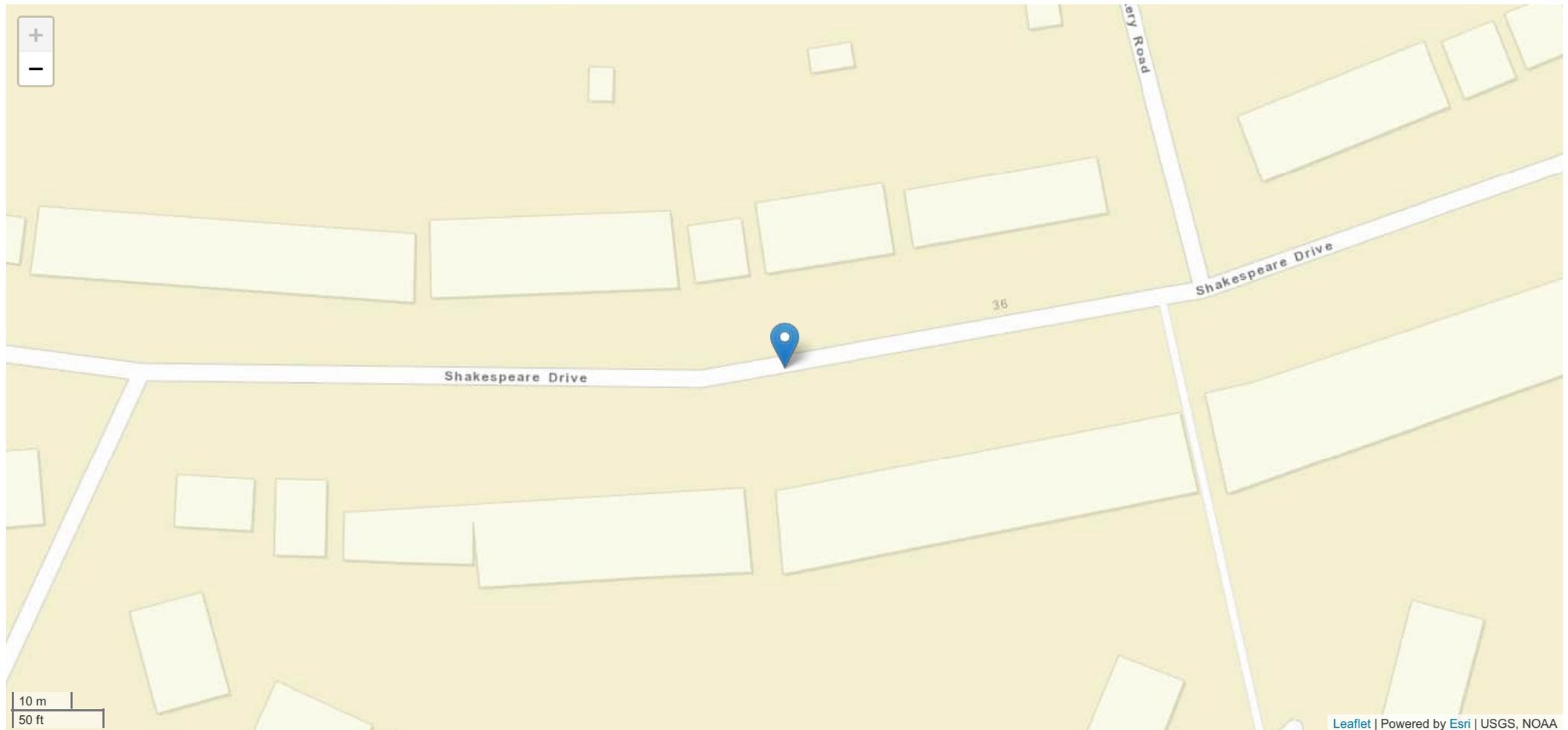
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	22	20 - 29 years	Car, No tow articulation	SKODA, FABIA SPORT TDI 105	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Offside	Going ahead other	SE NW

## Incident Record Number: 2 - Tuesday 18:25 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L83237819	08/01/2019	18:25	Tuesday	2	1	Daylight	Unknown	Slight	Dry

Road Name 1	Road Name 2
SHAKESPEARE DRIVE	No Data Provided



## Incident Record Number: 2 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
SHAKESPEARE DRIVE	411937, 278155	Unknown	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	22	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	TOYOTA, PRIUS HYBRID	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Back	Reversing	No Data Provided

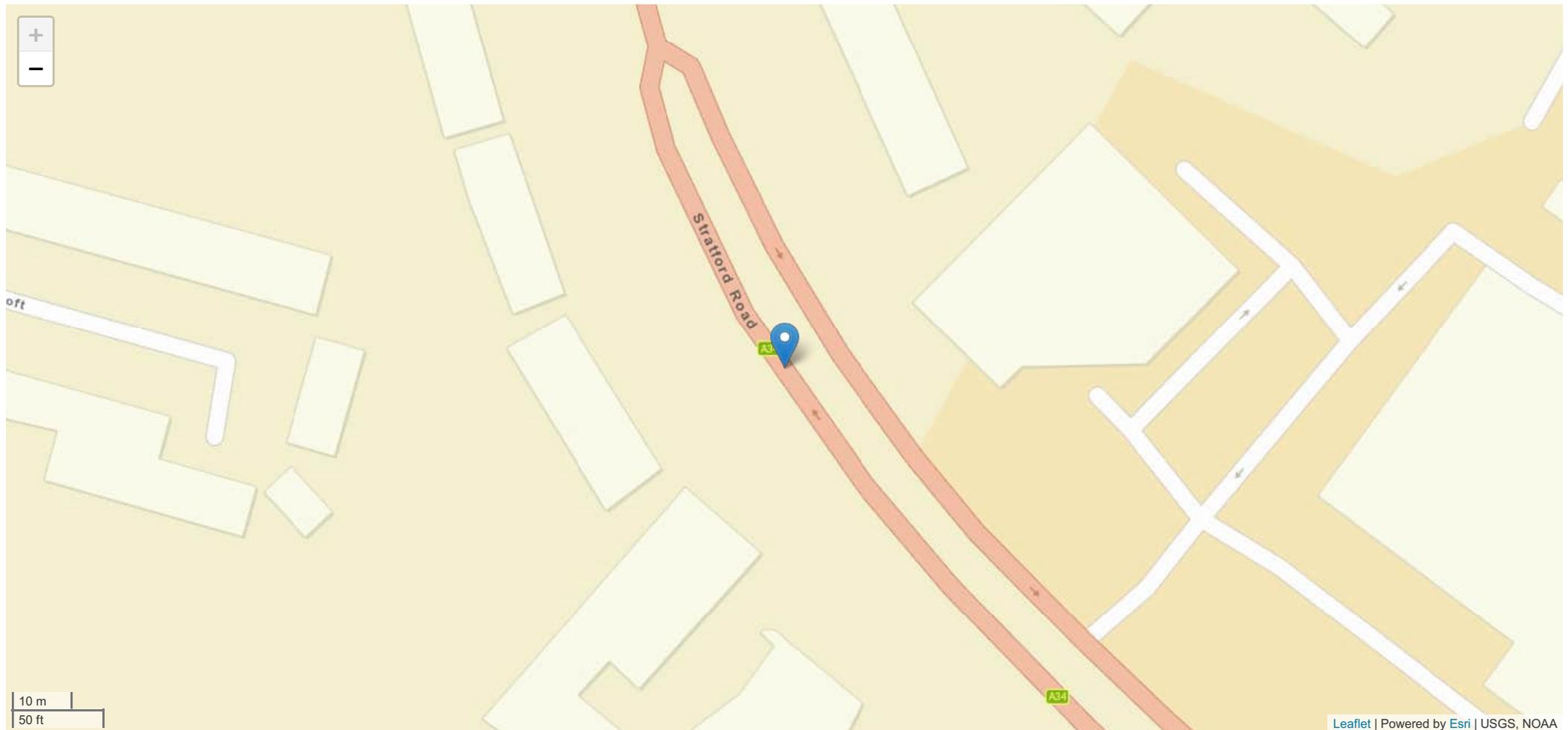
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	22	20 - 29 years	Pedal cycle, No tow articulation	UNKNOWN, No Data Provided	No Data Provided	None	Footway pavement	None	Nearside	Going ahead other	No Data Provided

## Incident Record Number: 3 - Saturday 16:19 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L82051519	02/02/2019	16:19	Saturday	3	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) - 177 METRES FROM JUNCTION WITH STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 3 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) - 177 METRES FROM JUNCTION WITH STRATFORD ROAD (A34)	412311, 277855	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Distraction in vehicle	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	28	20 - 29 years
2	2	Driver or rider	Slight	50	50 - 59 years

## Vehicle Details

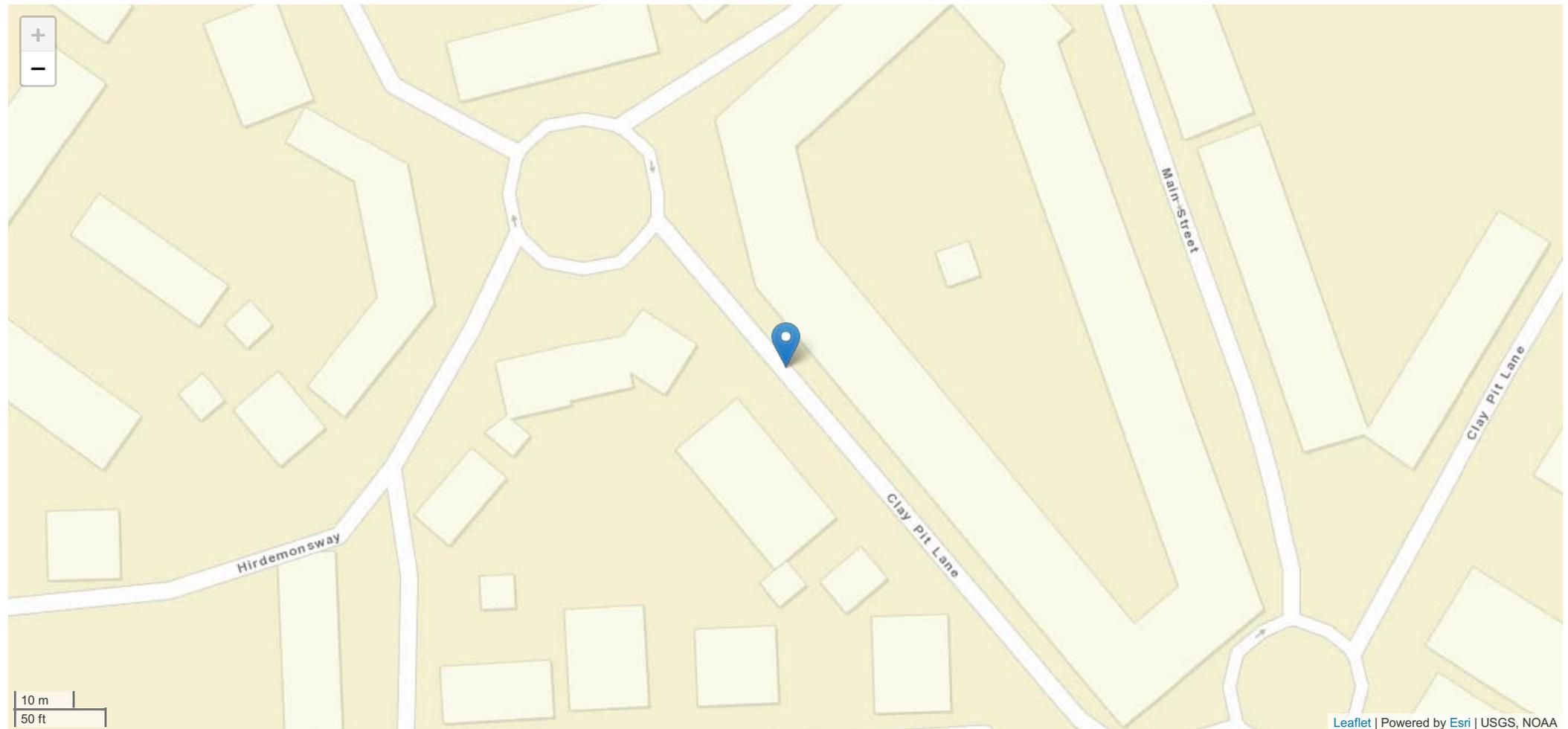
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	28	20 - 29 years	Car, No tow articulation	VOLKSWAGEN, SHARAN SE TDI 115	Not provided medical reasons	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW
2	50	50 - 59 years	Car, No tow articulation	PEUGEOT, 207 URBAN	Not provided medical reasons	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE
3	59	50 - 59 years	Car, No tow articulation	BMW, X4 XDRIVE20D M SPORT	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

## Incident Record Number: 4 - Saturday 16:19 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L84067819	13/04/2019	16:19	Saturday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
RUMBUSH LANE	No Data Provided



## Incident Record Number: 4 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
RUMBUSH LANE	411188, 276190	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Passenger	Slight	0	0 - 4 years

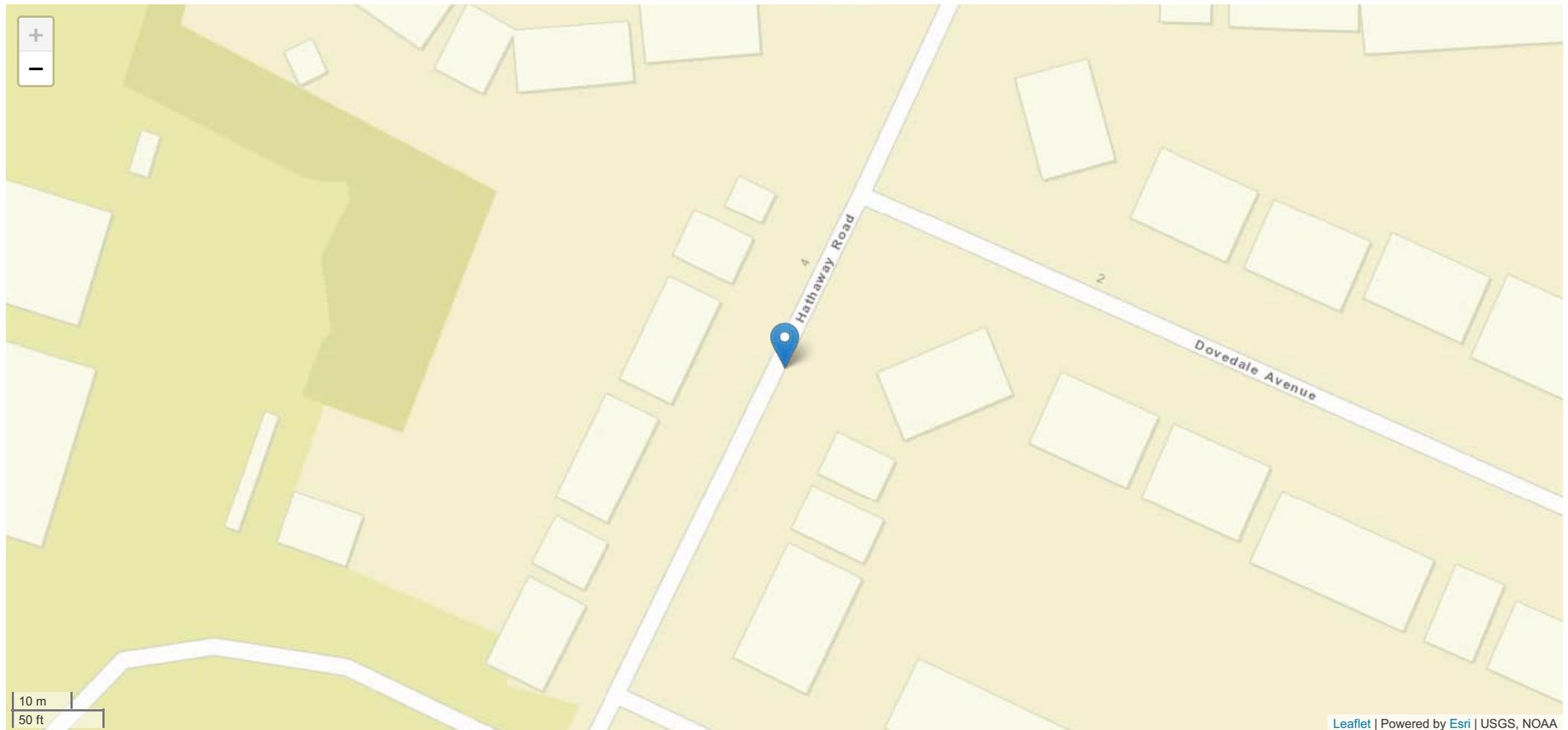
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	34	30 - 39 years	Car, No tow articulation	MERCEDES, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE
2	29	20 - 29 years	Car, No tow articulation	FIAT, 500 POP	No Data Provided	None	On main c way - not in restricted lane	Kerb	Front	Parked	0

## Incident Record Number: 5 - Friday 15:10 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L84285119	17/05/2019	15:10	Friday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
HATHAWAY ROAD - 32 METRES FROM JUNCTION WITH DOVEDALE AVENUE	No Data Provided



## Incident Record Number: 5 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
HATHAWAY ROAD - 32 METRES FROM JUNCTION WITH DOVEDALE AVENUE	411792, 278068	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Cyclist entering road from pavement	Poor turn or manoeuvre	Failed to look properly (pedestrian)

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	13	12 - 15 years

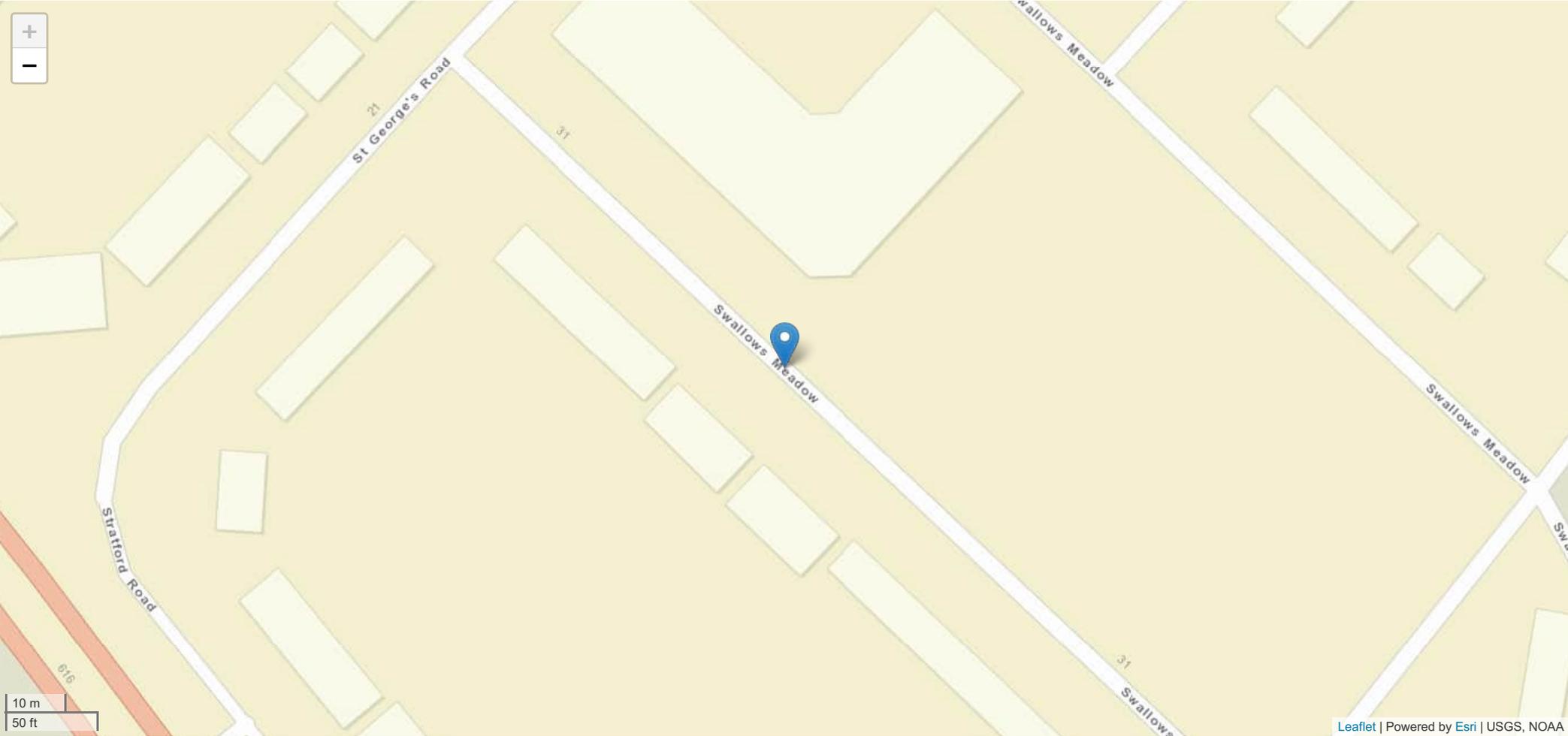
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	13	12 - 15 years	Pedal cycle, No tow articulation	UNKNOWN, No Data Provided	No Data Provided	Overtaken	On main c way - not in restricted lane	None	Front	Going ahead other	NE SW
2	53	50 - 59 years	Car, No tow articulation	TOYOTA, PRIUS	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	SW NE

# Incident Record Number: 6 - Thursday 12:00 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L87605519	23/05/2019	12:00	Thursday	1	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
SWALLOWS MEADOW - 73 METRES FROM JUNCTION WITH ST. GEORGES ROAD	No Data Provided



## Incident Record Number: 6 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
SWALLOWS MEADOW - 73 METRES FROM JUNCTION WITH ST. GEORGES ROAD	412735, 277581	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	64	60 - 69 years

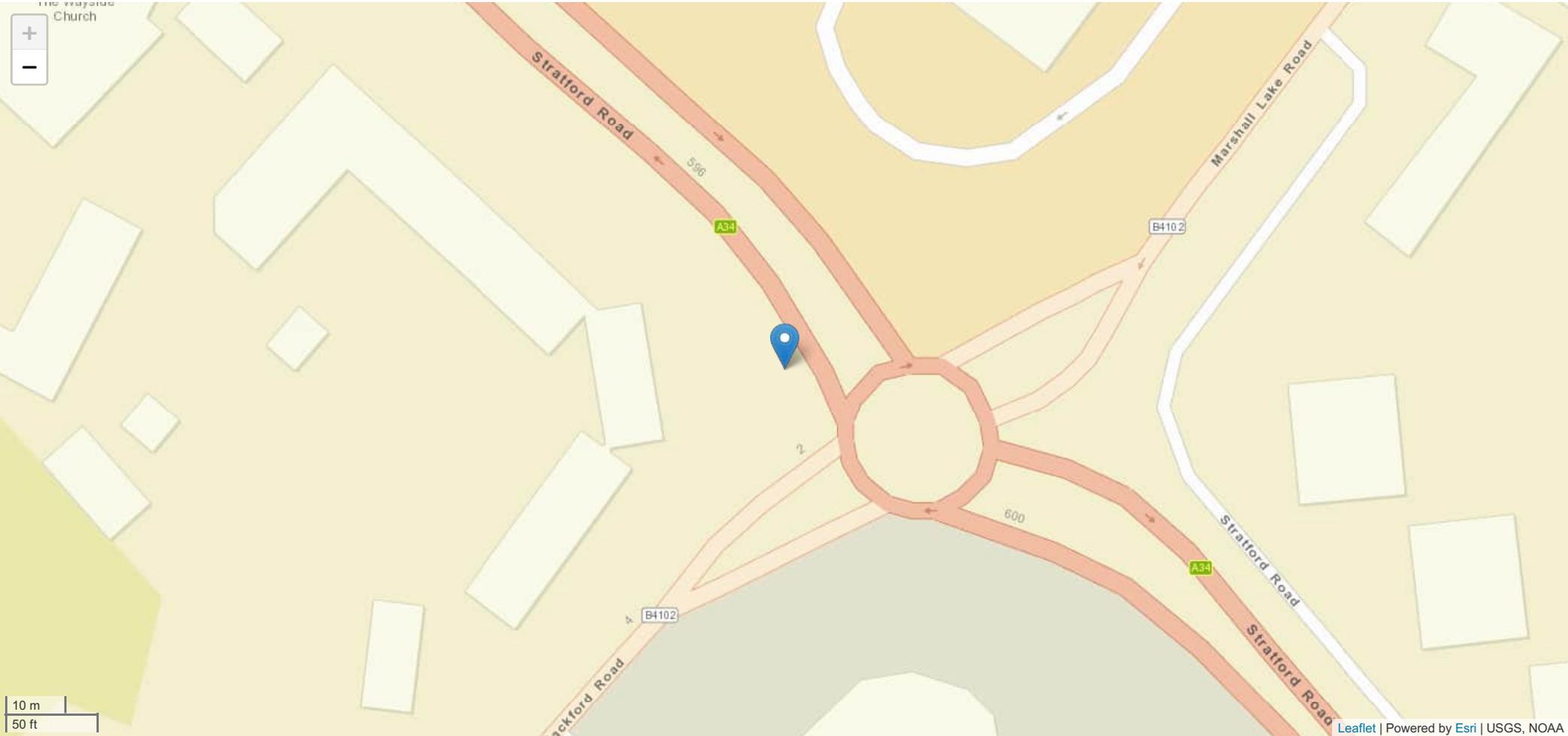
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	RENAULT, MODUS DYNAMIQUE	No Data Provided	None	No Data Provided	None	Back	Reversing	No Data Provided

# Incident Record Number: 7 - Thursday 23:29 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L86954319	18/07/2019	23:29	Thursday	2	3	Darkness - lights lit	Fine no high winds	Serious	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 7 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	2	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412420, 277729	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Aggressive driving	Inexperienced or learner driver or rider	Exceeding speed limit

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Serious	17	16 - 19 years
2	2	Driver or rider	Serious	65	60 - 69 years
3	1	Passenger	Slight	19	16 - 19 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
1	17	16 - 19 years	Car, No tow articulation	FORD, FIESTA 957 LC L	Negative	None	On main c way - not in restricted lane	None	Back	Going ahead other	No Data Provided
2	65	60 - 69 years	Car, No tow articulation	AUDI, A3 1.8	Not provided medical reasons	None	On main c way - not in restricted lane	None	Offside	Going ahead other	No Data Provided

# Incident Record Number: 8 - Friday 15:47 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L86940019	02/08/2019	15:47	Friday	1	2	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
WOODLANDS LANE NEAR JUNCTION WITH TANWORTH LANE	No Data Provided



## Incident Record Number: 8 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
WOODLANDS LANE NEAR JUNCTION WITH TANWORTH LANE	412112, 277877	Unknown	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	65	60 - 69 years
2	1	Passenger	Serious	85	80+ years

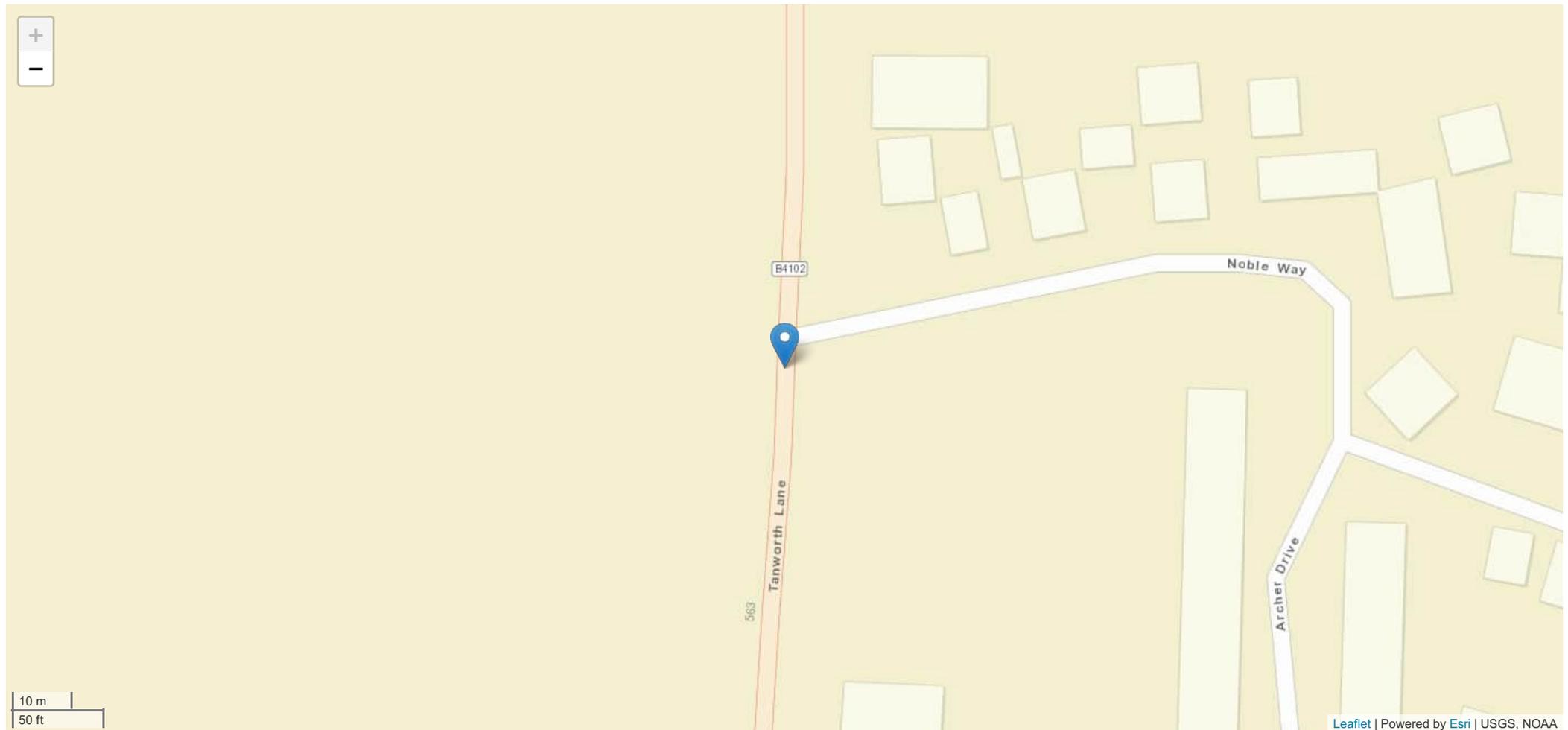
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	65	60 - 69 years	Car, No tow articulation	TOYOTA, YARIS ICON HYBRID VV	Not requested	None	No Data Provided	Kerb	Front	Turning left	SW NW

## Incident Record Number: 9 - Saturday 17:13 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L89033519	24/08/2019	17:13	Saturday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
TANWORTH LANE (B4102) AT JUNCTION WITH NOBLE WAY	No Data Provided



## Incident Record Number: 9 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
TANWORTH LANE (B4102) AT JUNCTION WITH NOBLE WAY	412206, 275900	B 4102	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Exceeding speed limit	Failed to judge other persons path or speed	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	19	16 - 19 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	19	16 - 19 years	Motorcycle 125cc and under, No tow articulation	YAMAHA, YZF R125 124	Not requested	Skidded	On main c way - not in restricted lane	None	Did not impact	Going ahead other	S N

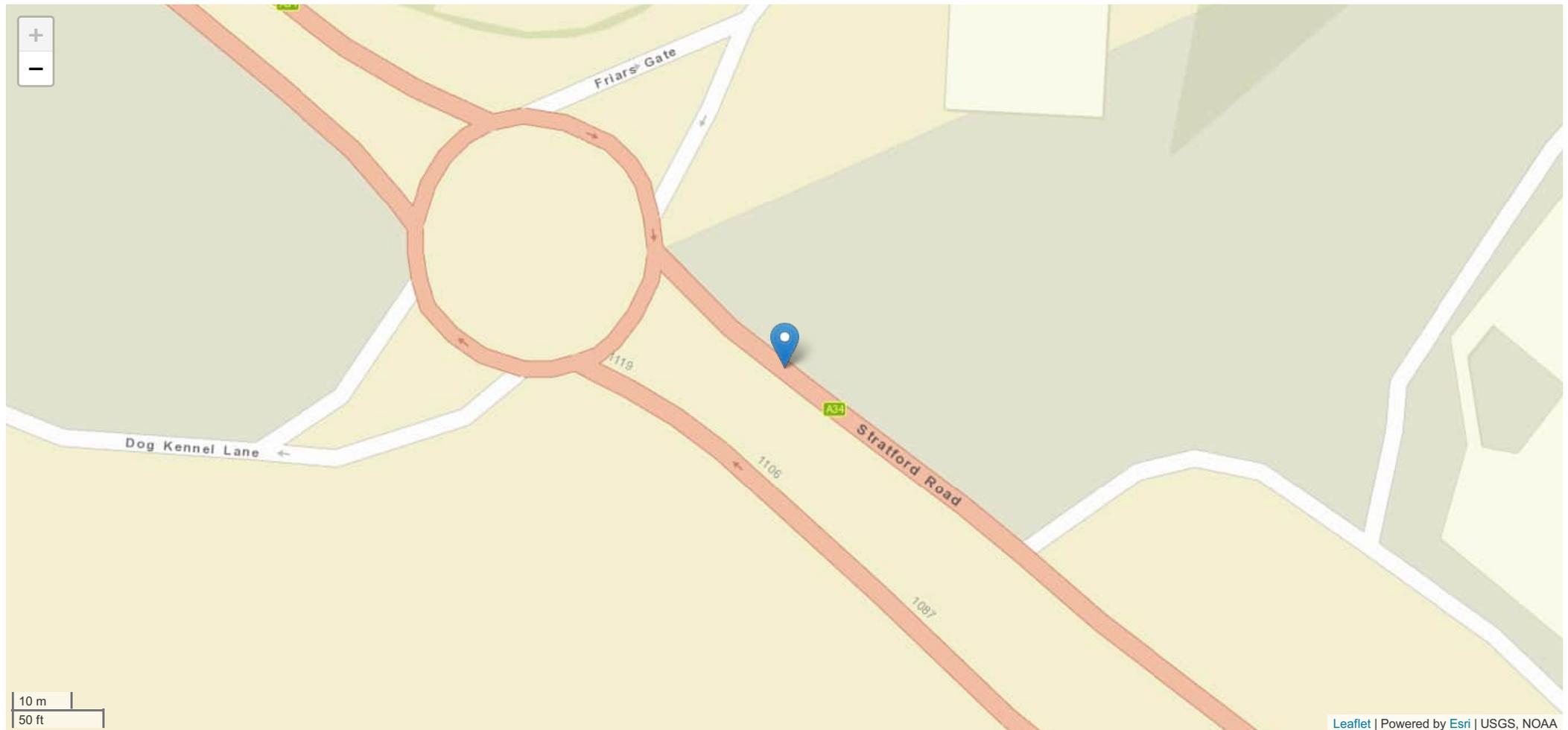
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	41	40 - 49 years	Taxi/Private hire car, No tow articulation	MERCEDES, 220	Not requested	None	On main c way - not in restricted lane	None	Did not impact	Turning right	E S

## Incident Record Number: 10 - Wednesday 20:45 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L89872619	09/10/2019	20:45	Wednesday	2	1	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) NEAR DOG KENNEL LANE	No Data Provided



## Incident Record Number: 10 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) NEAR DOG KENNEL LANE	413106, 277044	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	55	50 - 59 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	30	30 - 39 years	Car, No tow articulation	NISSAN, JUKE ACENTA CVT	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Offside	Going ahead other	SE NW

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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	55	50 - 59 years	Car, No tow articulation	VAUXHALL, ASTRA GTC SPORT S/S	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Nearside	Changing lane to left	SE NW

# Incident Record Number: 11 - Wednesday 17:15 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L90052619	06/11/2019	17:15	Wednesday	1	1	Darkness - lights lit	Raining no high winds	Serious	Wet or damp

Road Name 1	Road Name 2
WOODLANDS LANE NEAR JUNCTION WITH TANWORTH LANE	No Data Provided



## Incident Record Number: 11 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
WOODLANDS LANE NEAR JUNCTION WITH TANWORTH LANE	412108, 277879	Unknown	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Poor turn or manoeuvre	Rain, sleet, snow, or fog	Dazzling headlights

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Serious	No Data Provided	Unknown

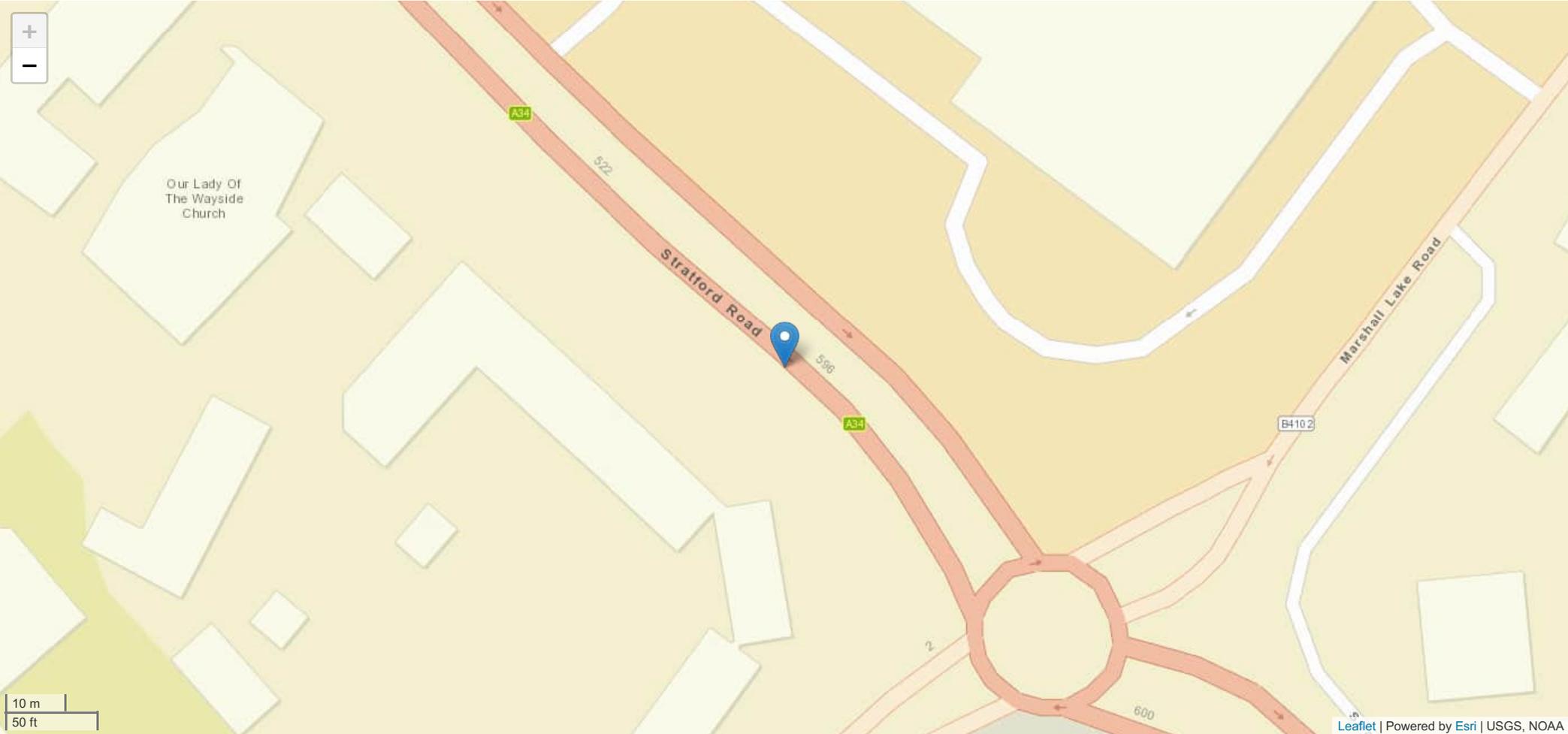
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	40	40 - 49 years	Car, No tow articulation	FORD, FIESTA	Not requested	None	No Data Provided	None	Front	Turning right	NE NW

# Incident Record Number: 12 - Friday 14:45 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L91315119	08/11/2019	14:45	Friday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 12 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412399, 277761	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Sudden braking	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	34	30 - 39 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	44	40 - 49 years	Car, No tow articulation	NISSAN, JUKE VISIA	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	34	30 - 39 years	Car, No tow articulation	BMW, 118I M SPORT AUTO	Not applicable	None	On main c way - not in restricted lane	None	Back	Waiting to go held up	NW SE

# Incident Record Number: 13 - Sunday 17:50 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L91359919	10/11/2019	17:50	Sunday	1	1	Darkness - lights lit	Fine no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
DOG KENNEL LANE	No Data Provided



## Incident Record Number: 13 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
DOG KENNEL LANE	412287, 277222	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Careless or Reckless or In a hurry	Pedestrian wearing dark clothing at night	Disability or illness, mental or physical

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	22	20 - 29 years

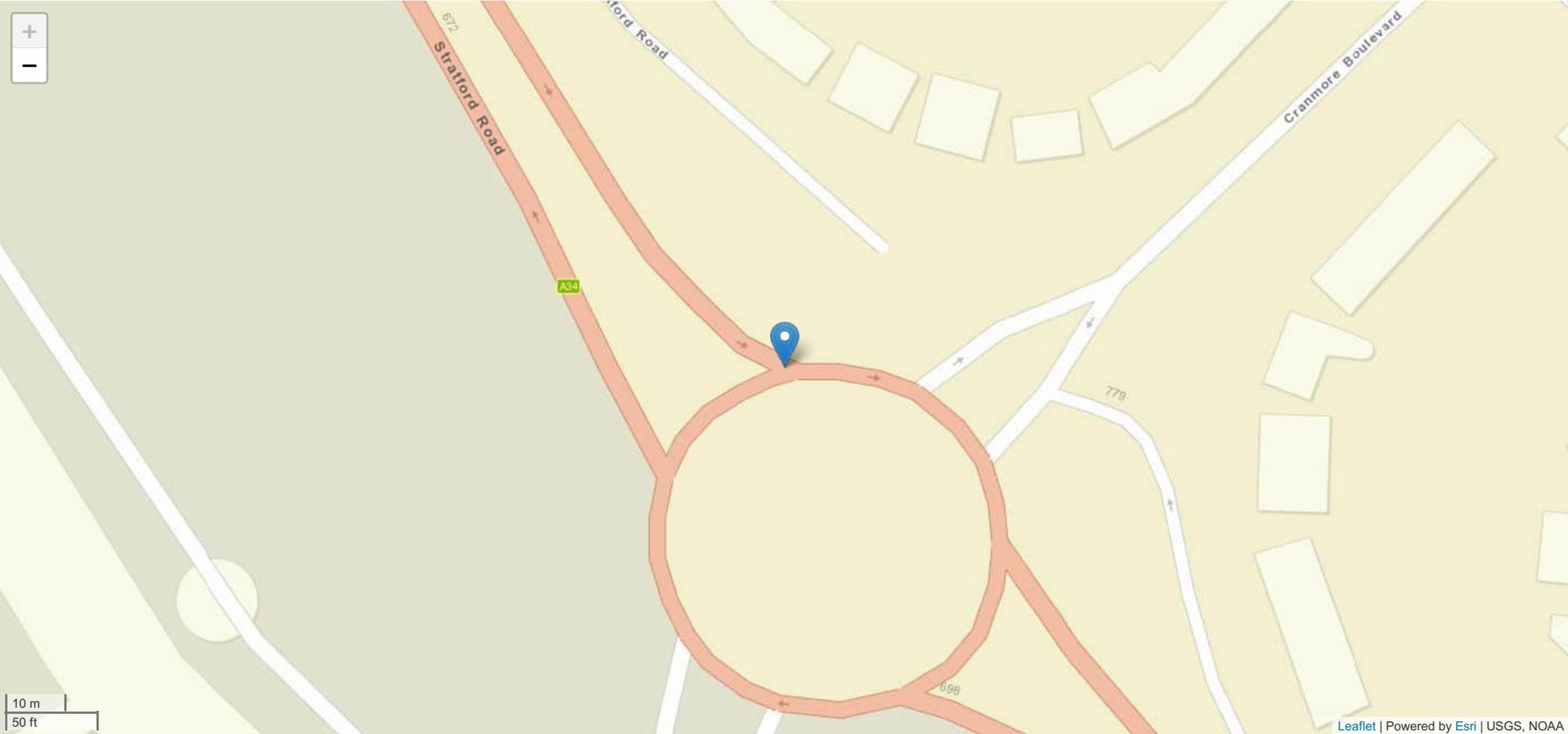
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	No Data Provided, No Data Provided	Not applicable	None	No Data Provided	None	Front	Going ahead other	[NW]SE

# Incident Record Number: 14 - Friday 16:00 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L92206419	06/12/2019	16:00	Friday	2	1	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) NEAR JUNCTION WITH CRANMORE BOULEVARD	No Data Provided



## Incident Record Number: 14 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) NEAR JUNCTION WITH CRANMORE BOULEVARD	412699, 277435	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	16	16 - 19 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	No Data Provided, No Data Provided	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Did not impact	Turning left	NE NW

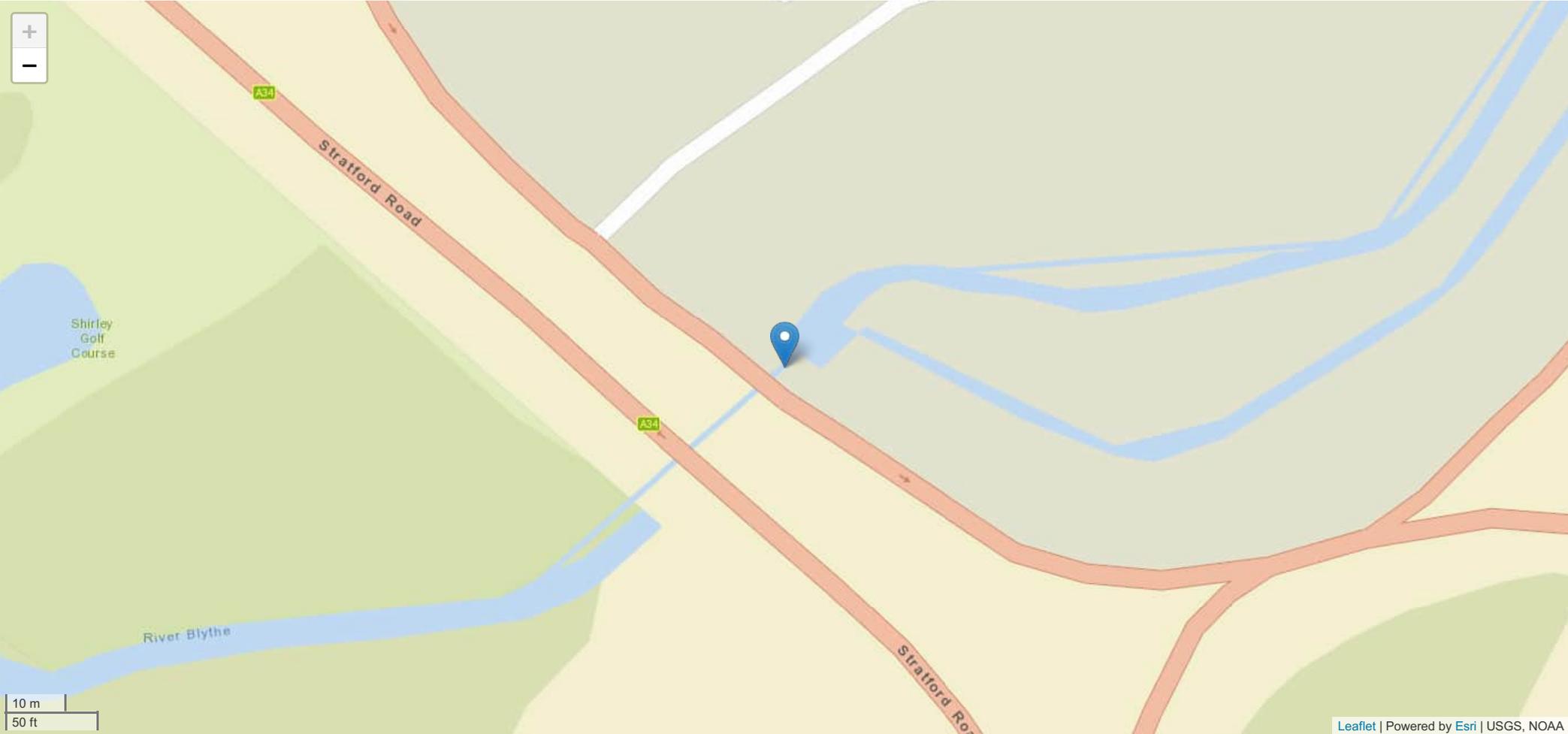
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	16	16 - 19 years	Motorcycle 50cc and under, No tow articulation	AJS, 49	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Back	Going ahead other	SE NW

# Incident Record Number: 15 - Saturday 11:23 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L92890120	04/01/2020	11:23	Saturday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 15 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	414499, 275855	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to judge other persons path or speed	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	59	50 - 59 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	59	50 - 59 years	Motorcycle over 500cc, No tow articulation	APRILIA, SL 750 SHIVER 750	Not requested	None	On main c way - not in restricted lane	Kerb	Did not impact	Changing lane to left	SE NW

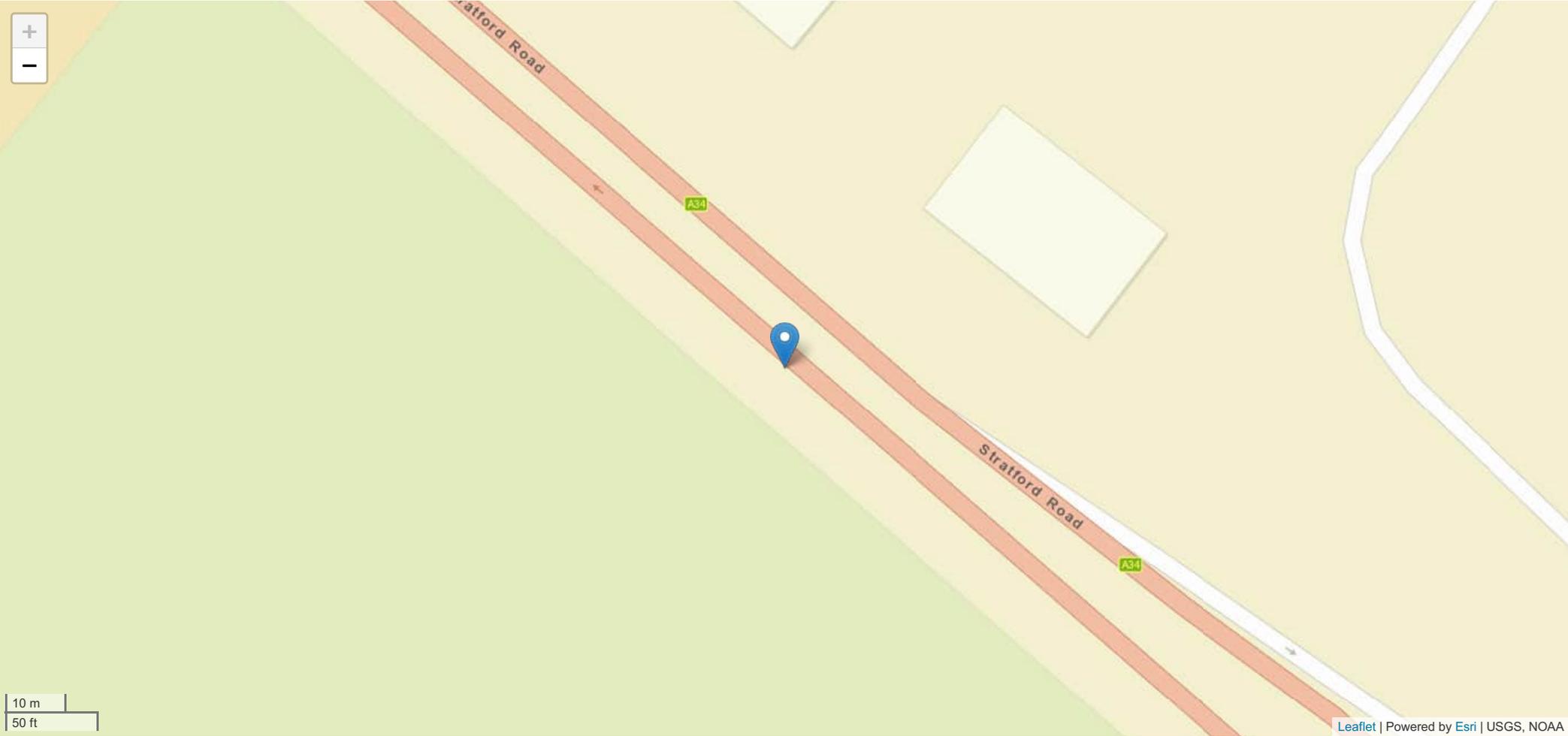
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	36	30 - 39 years	Car, No tow articulation	PEUGEOT, 2008 ALLURE BLUE HDI	Not applicable	None	On main c way - not in restricted lane	None	Did not impact	Changing lane to left	SE NW

# Incident Record Number: 16 - Saturday 18:19 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L94199620	08/02/2020	18:19	Saturday	1	1	Darkness - lights lit	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 16 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	414176, 276102	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to judge vehicles path or speed	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	87	80+ years

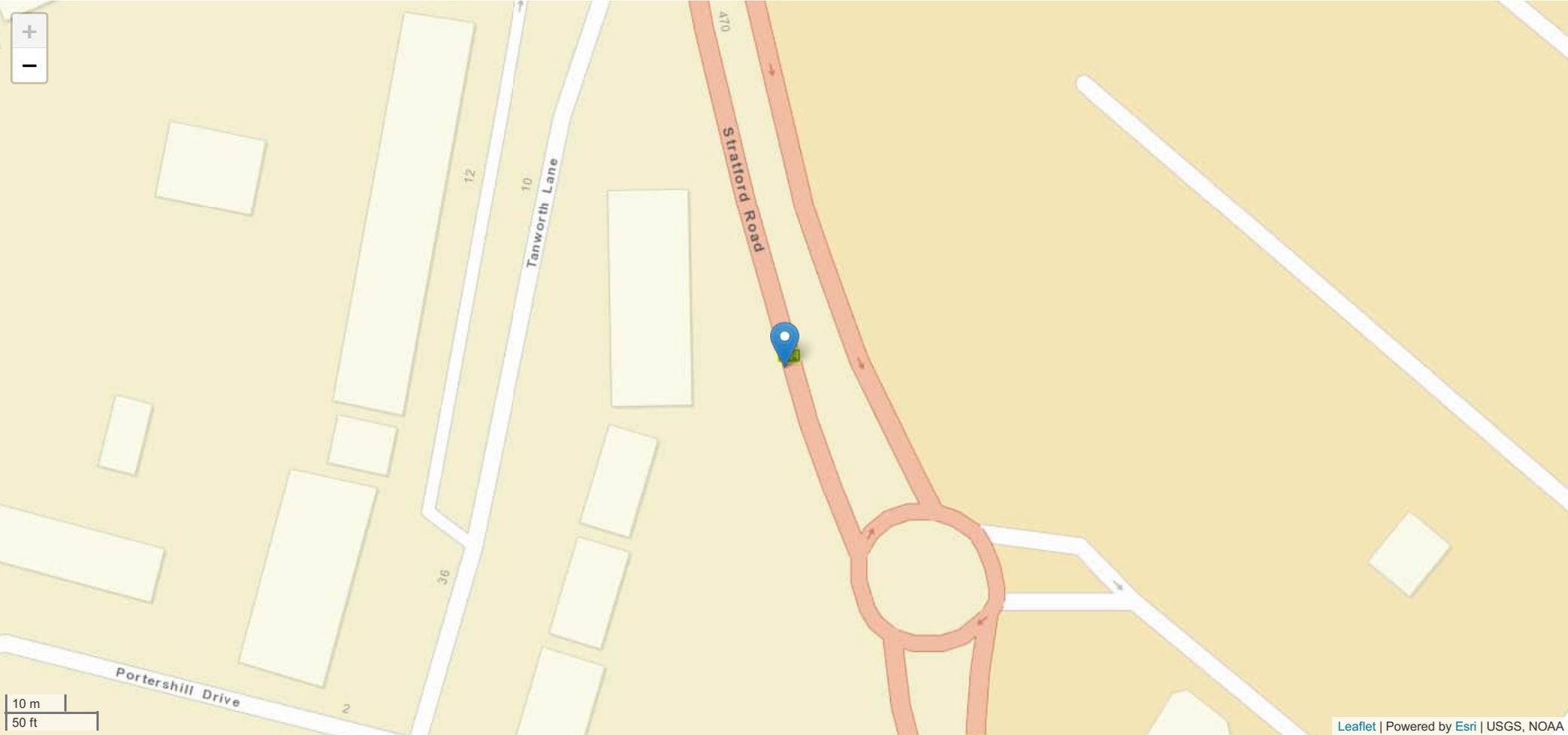
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	26	20 - 29 years	Car, No tow articulation	BMW, 335I M SPORT	Negative	None	No Data Provided	None	Offside	Going ahead other	SE NW

# Incident Record Number: 17 - Friday 19:15 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L94245520	21/02/2020	19:15	Friday	2	2	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 17 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412227, 278115	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Aggressive driving	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	28	20 - 29 years
2	2	Passenger	Slight	28	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	31	Data missing or out of range	Car, No tow articulation	AUDI, A7 S LINE TDI AUTO	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Turning left	W SE

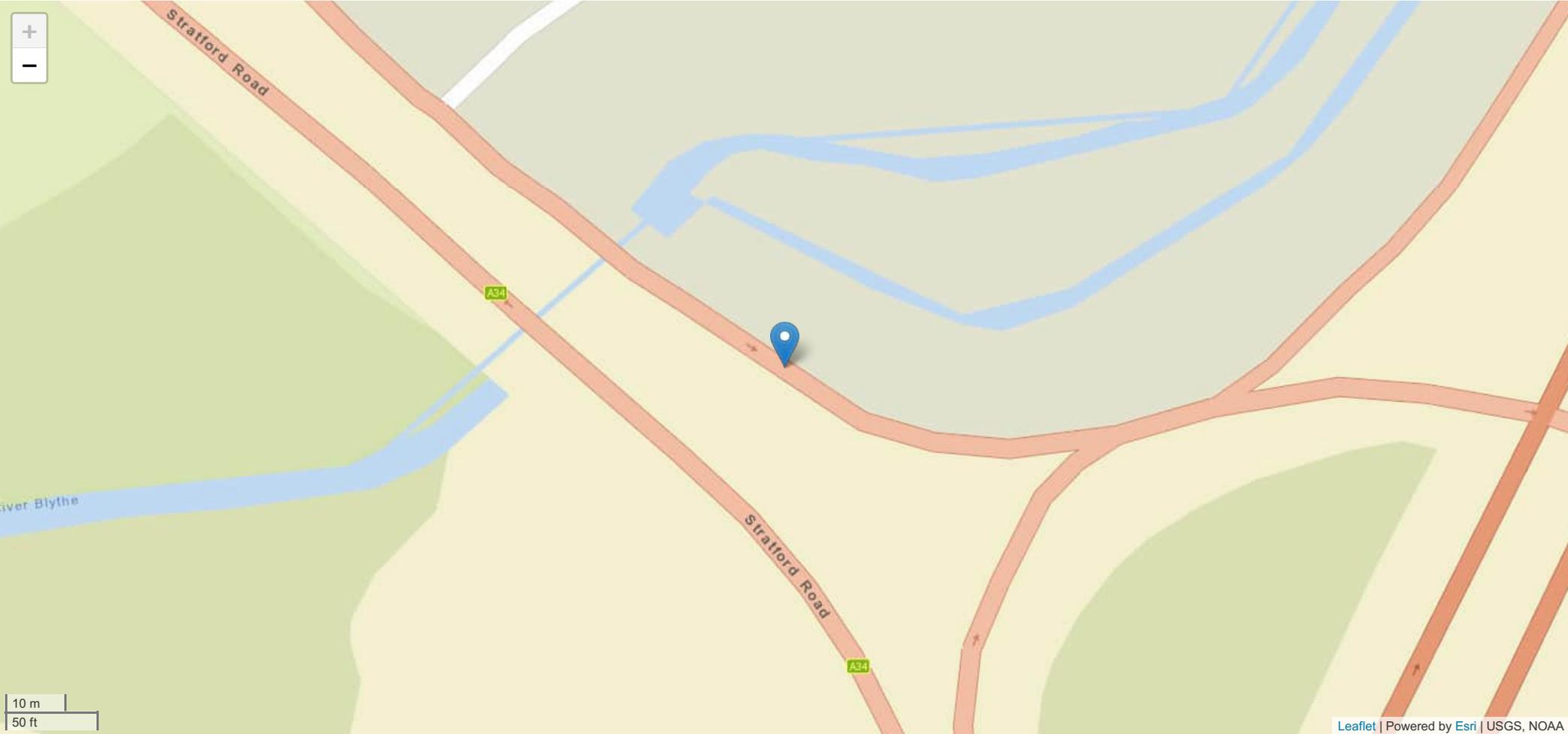
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	28	20 - 29 years	Car, No tow articulation	AUDI, S3 TFSI QUATTRO	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Back	Going ahead other	NW SE

# Incident Record Number: 18 - Wednesday 17:50 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L94601820	08/04/2020	17:50	Wednesday	2	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) - 55 METRES FROM JUNCTION WITH HUSKISSON WAY	No Data Provided



## Incident Record Number: 18 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) - 55 METRES FROM JUNCTION WITH HUSKISSON WAY	414524, 275834	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Failed to judge other persons path or speed	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Serious	29	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	29	20 - 29 years	Motorcycle 125cc and under, No tow articulation	SUZUKI, GZ 125 W 124	Not applicable	None	On main c way - not in restricted lane	None	Offside	Going ahead other	SE NW

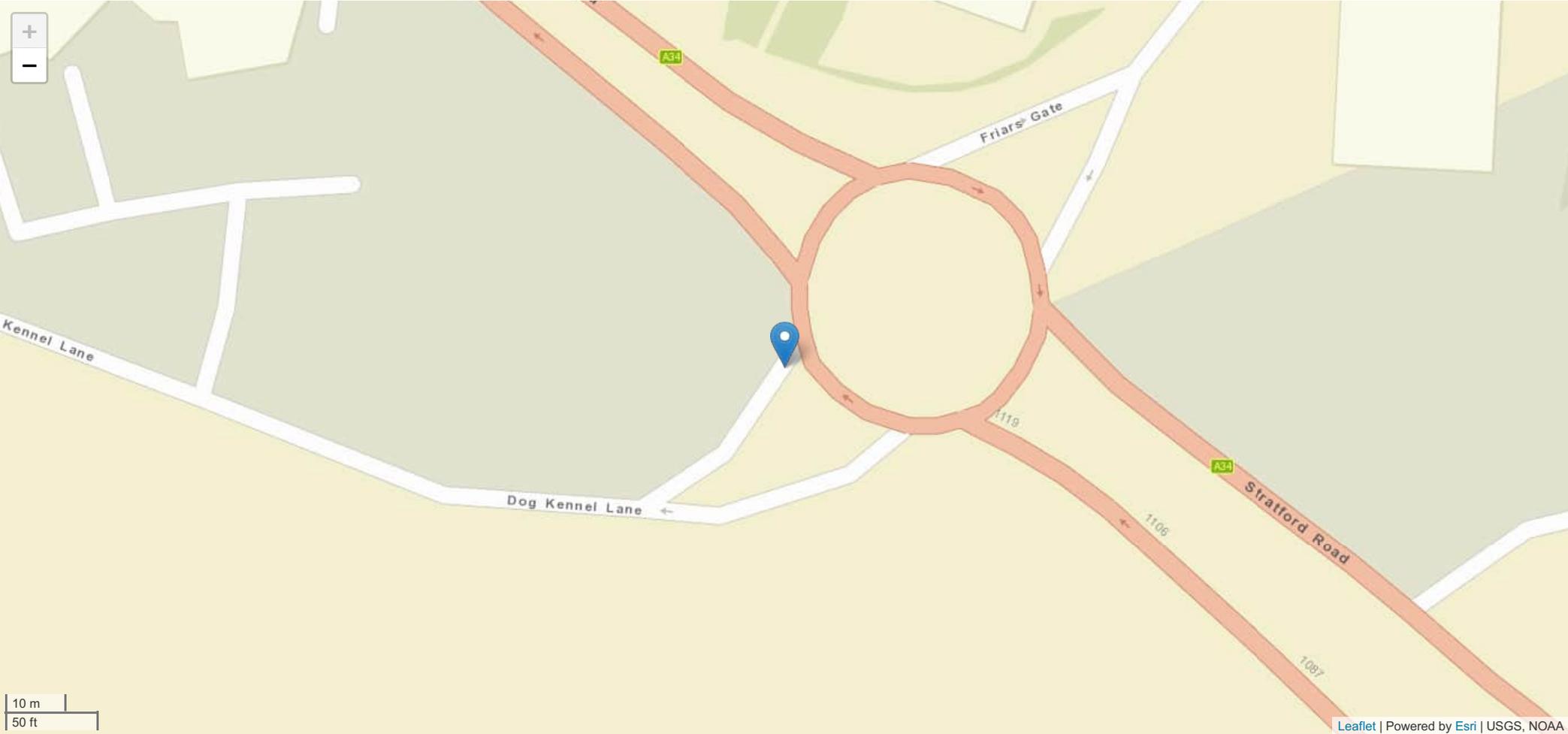
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	BMW, No Data Provided	Driver not contacted at time of accident	None	No Data Provided	None	Offside	Overtaking moving vehicle offside	SE NW

# Incident Record Number: 19 - Tuesday 19:38 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L95171220	05/05/2020	19:38	Tuesday	2	2	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH DOG KENNEL LANE	No Data Provided



## Incident Record Number: 19 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH DOG KENNEL LANE	413043, 277053	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Travelling too fast for conditions	Failed to judge other persons path or speed

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Serious	30	30 - 39 years
2	1	Passenger	Slight	11	8 - 11 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	30	30 - 39 years	Car, No tow articulation	FORD, ECOSPORT ZETEC TDCI	Negative	Overtuned	On main c way - not in restricted lane	Bollard or refuge	Offside	Moving off	NE SW

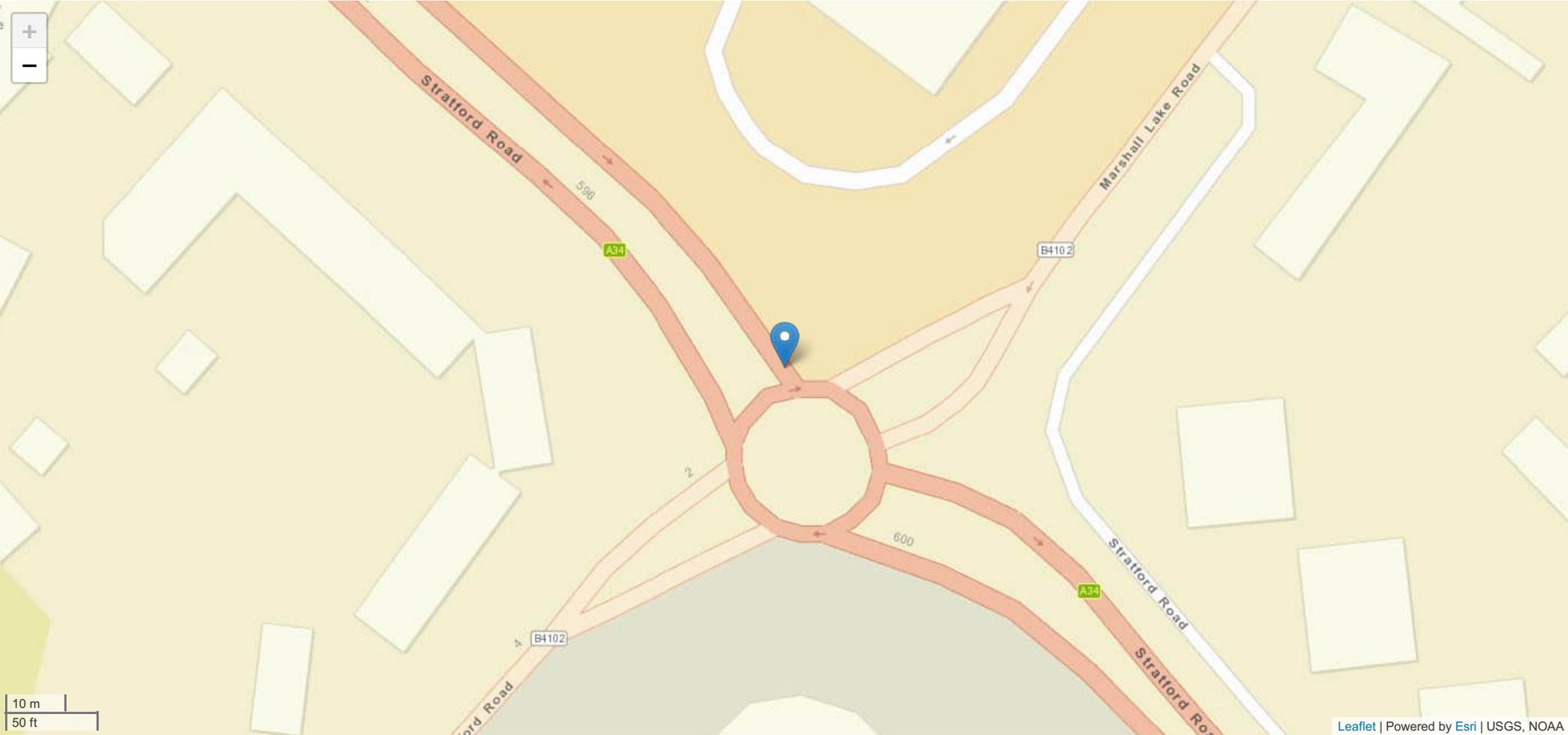
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	22	20 - 29 years	Car, No tow articulation	BMW, 116I SPORT	Negative	Skidded	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

# Incident Record Number: 20 - Monday 06:56 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L95548620	18/05/2020	06:56	Monday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) JUNCTION WITH BLACKFORD ROAD (B4102)	No Data Provided



## Incident Record Number: 20 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) JUNCTION WITH BLACKFORD ROAD (B4102)	412438, 277733	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	23	20 - 29 years

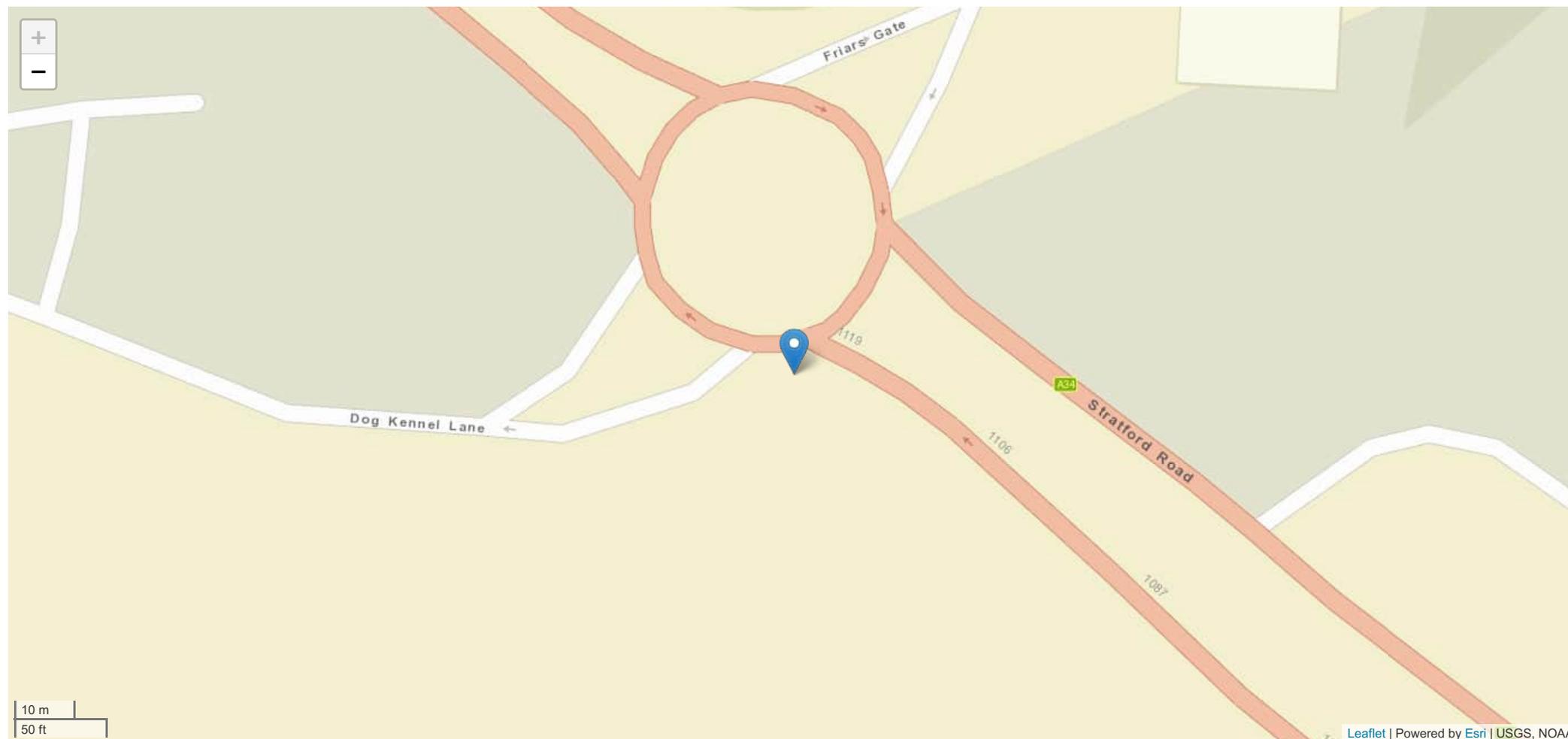
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	34	30 - 39 years	Car, No tow articulation	MERCEDES, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW
2	23	20 - 29 years	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	NE SW

## Incident Record Number: 21 - Thursday 13:30 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L97598720	11/06/2020	13:30	Thursday	2	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) NEAR JUNCTION WITH DOG KENNEL LANE	No Data Provided



## Incident Record Number: 21 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) NEAR JUNCTION WITH DOG KENNEL LANE	413070, 277039	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Serious	No Data Provided	Unknown

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	51	50 - 59 years	Car, No tow articulation	NISSAN, MICRA L	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

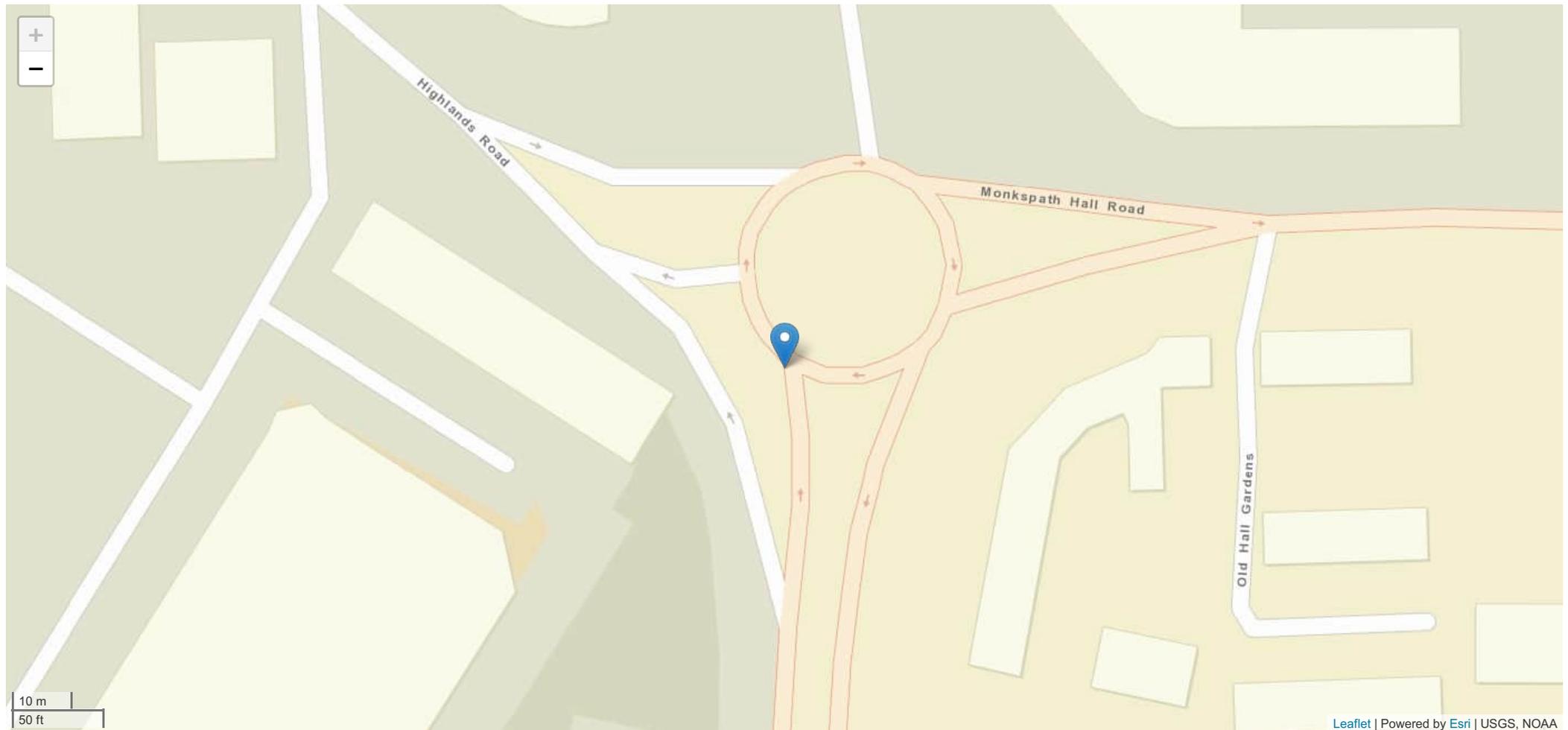
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	SW NW

## Incident Record Number: 22 - Friday 21:51 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L97204520	24/07/2020	21:51	Friday	2	1	Darkness - lights lit	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
MONKSPATH HALL ROAD NEAR JUNCTION WITH HIGHLANDS ROAD	No Data Provided



## Incident Record Number: 22 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
MONKSPATH HALL ROAD NEAR JUNCTION WITH HIGHLANDS ROAD	413518, 276996	Unknown	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Impaired by alcohol	Careless or Reckless or In a hurry (Driver)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	No Data Provided	Unknown

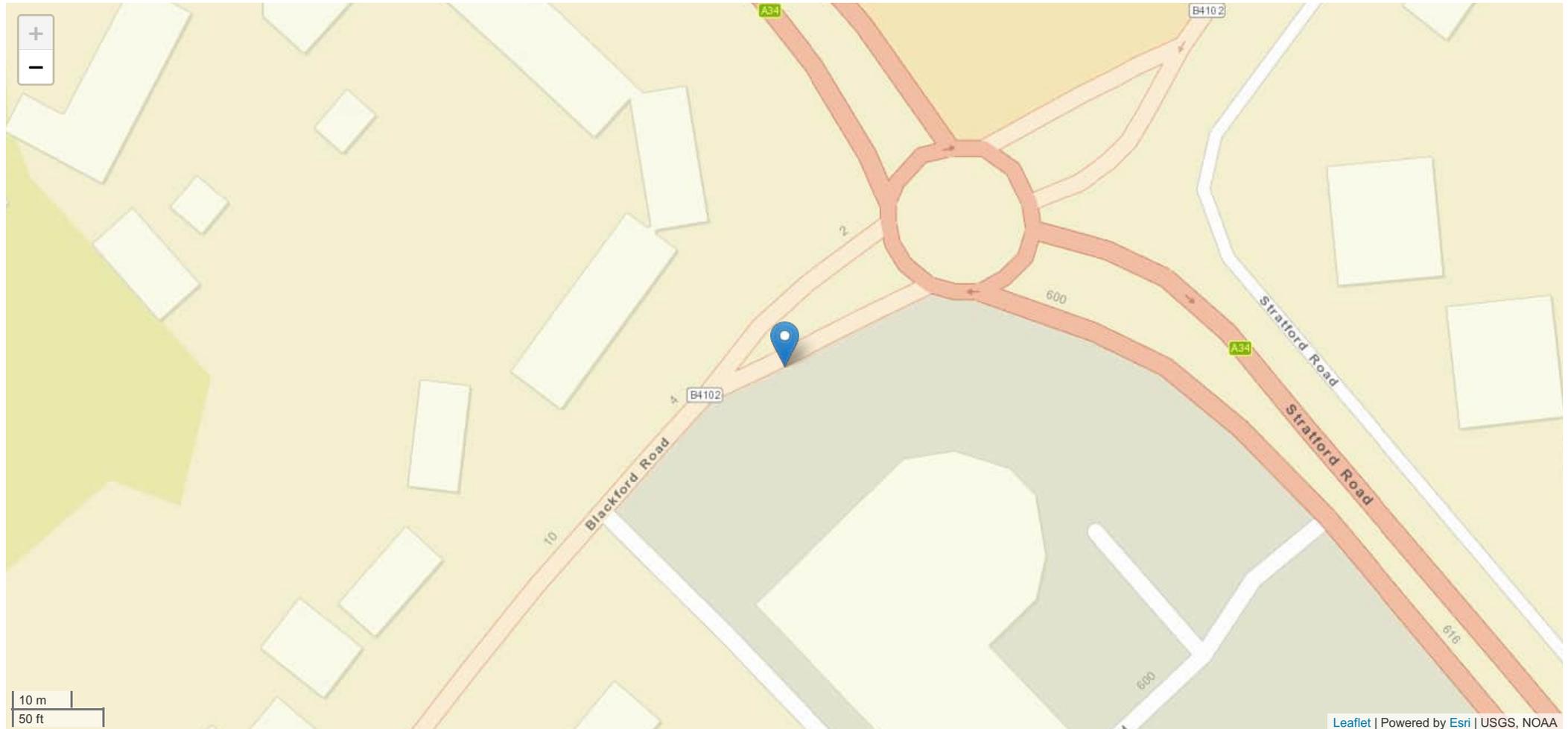
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	40	40 - 49 years	Car, No tow articulation	CITROEN, C4 GRAND PICASSO	Not requested	None	On main c way - not in restricted lane	Kerb	Front	Going ahead other	N S
2	No Data Provided	Data missing or out of range	Car, No tow articulation	FORD, FOCUS	Not requested	None	On main c way - not in restricted lane	Kerb	Front	Turning right	E S

## Incident Record Number: 23 - Monday 15:23 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L97646320	27/07/2020	15:23	Monday	1	1	Daylight	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
BLACKFORD ROAD (B4102) - 22 METRES FROM JUNCTION WITH STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 23 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
BLACKFORD ROAD (B4102) - 22 METRES FROM JUNCTION WITH STRATFORD ROAD (A34)	412413, 277694	B 4102	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Slippery road (due to weather)	Poor or defective road surface	Loss of control

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	50	50 - 59 years

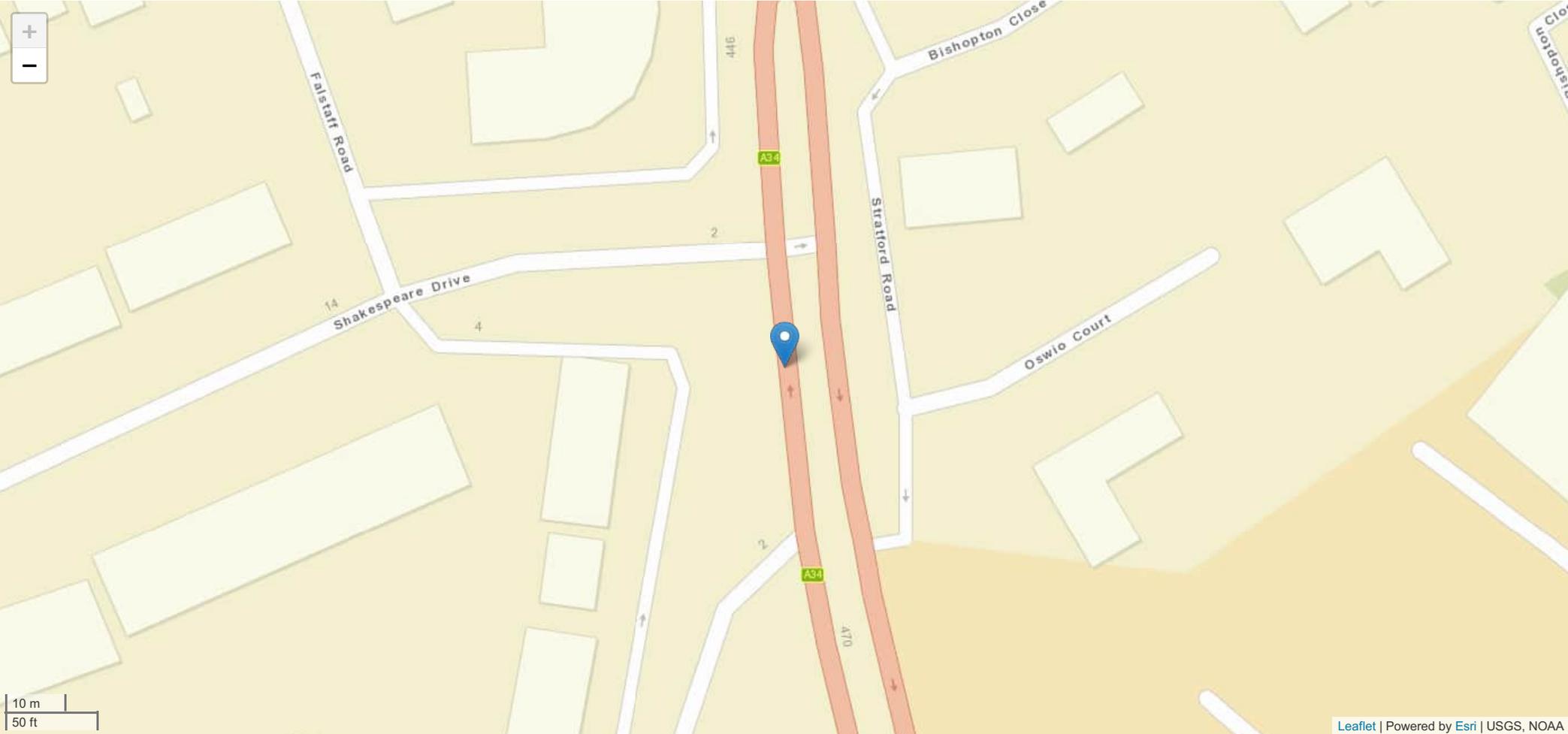
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	50	50 - 59 years	Car, No tow articulation	MERCEDES-BENZ, C250 AMG SPORT EDT P	Not applicable	None	No Data Provided	Kerb	Front	Going ahead other	NE SW

# Incident Record Number: 24 - Saturday 22:50 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L98184620	15/08/2020	22:50	Saturday	2	1	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) NEAR JUNCTION WITH SHAKESPEARE DRIVE	No Data Provided



## Incident Record Number: 24 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) NEAR JUNCTION WITH SHAKESPEARE DRIVE	412207, 278214	A 34	Unknown	T or staggered junction	Auto traffic signal

Contributory 1	Contributory 2	Contributory 3
Disobeyed automatic traffic signal	Exceeding speed limit	Travelling too fast for conditions

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	72	70 - 79 years

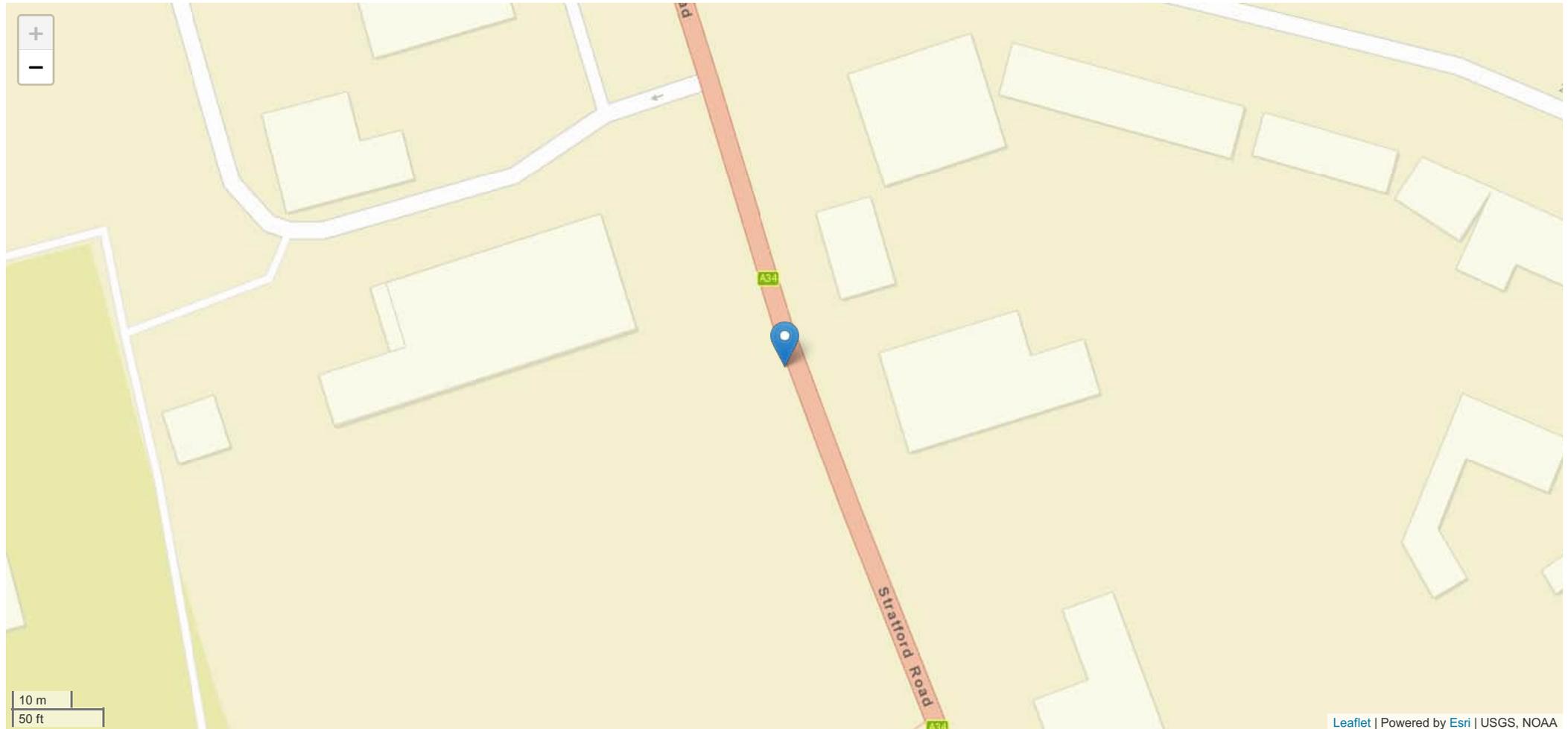
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	72	70 - 79 years	Car, No tow articulation	PEUGEOT, 308 GTI THP 200	Not applicable	None	On main c way - not in restricted lane	Kerb	Back	Waiting to go held up	N S
2	No Data Provided	Data missing or out of range	Car, No tow articulation	VAUXHALL, INSIGNIA	Not applicable	None	On main c way - not in restricted lane	Kerb	Front	Overtaking static vehicle offside	N S

## Incident Record Number: 25 - Friday 09:20 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L99628220	18/09/2020	09:20	Friday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 25 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	411998, 278901	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Poor turn or manoeuvre	Failed to look properly (pedestrian)	Swerved

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
2	2	Driver or rider	Slight	26	20 - 29 years

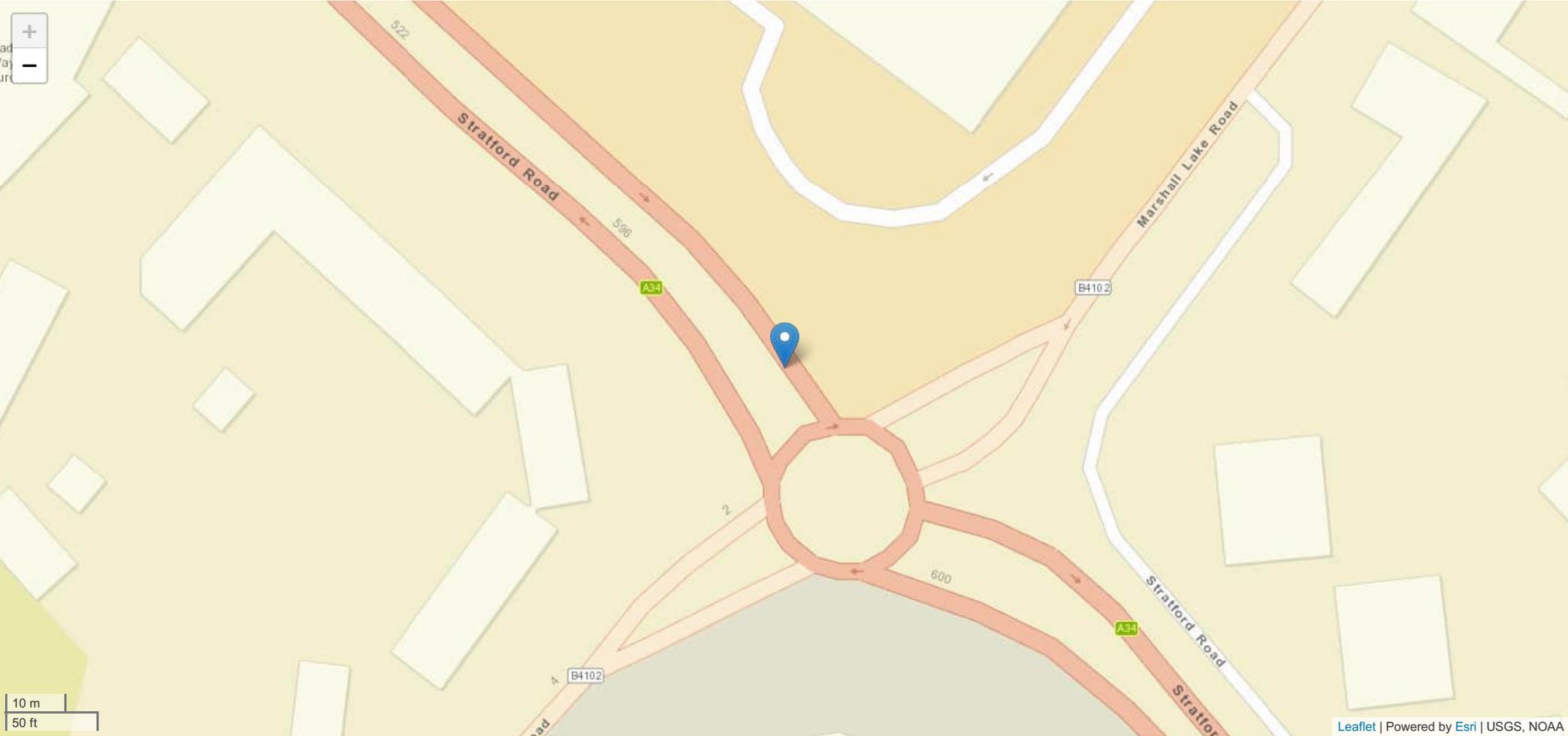
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	66	60 - 69 years	Car, No tow articulation	TOYOTA, YARIS TR VVT-I	Not requested	None	On main c way - not in restricted lane	None	Offside	Turning right	E S
2	26	20 - 29 years	Car, No tow articulation	SEAT, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S

# Incident Record Number: 26 - Wednesday 16:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L99189520	23/09/2020	16:30	Wednesday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) NEAR JUNCTION WITH MARSHALL LAKE ROAD (B4102)	No Data Provided



## Incident Record Number: 26 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) NEAR JUNCTION WITH MARSHALL LAKE ROAD (B4102)	412432, 277739	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	28	20 - 29 years

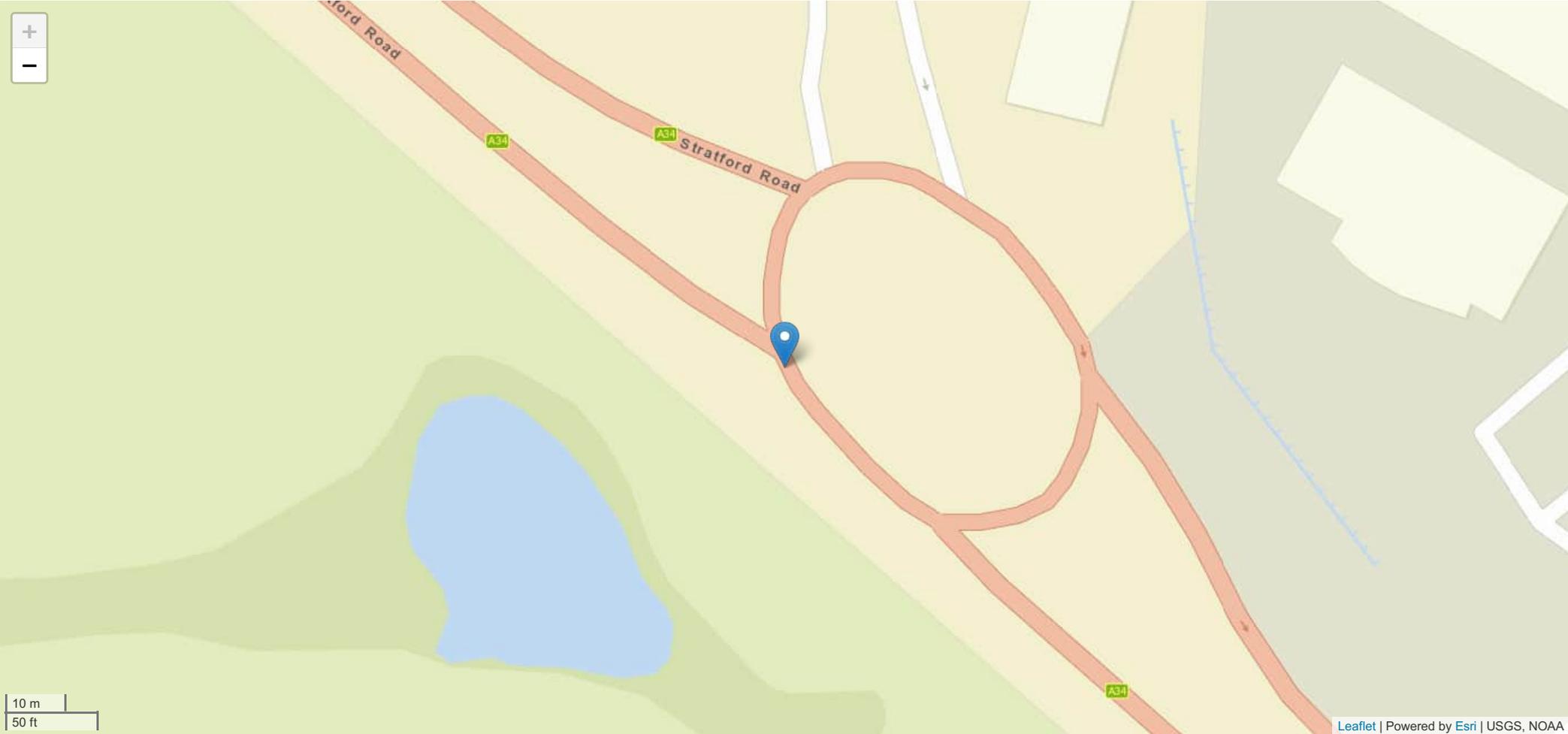
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	FORD, KUGA ZETEC TDCI	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW
2	28	20 - 29 years	Car, No tow articulation	VAUXHALL, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Back	Waiting to go held up	SE NW

# Incident Record Number: 27 - Friday 15:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L99534920	09/10/2020	15:30	Friday	2	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 27 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	414360, 275951	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Sudden braking	Aggressive driving	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	29	20 - 29 years
2	1	Passenger	Slight	29	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	29	20 - 29 years	Car, No tow articulation	FORD, FIESTA TITANIUM 90 T	Not applicable	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

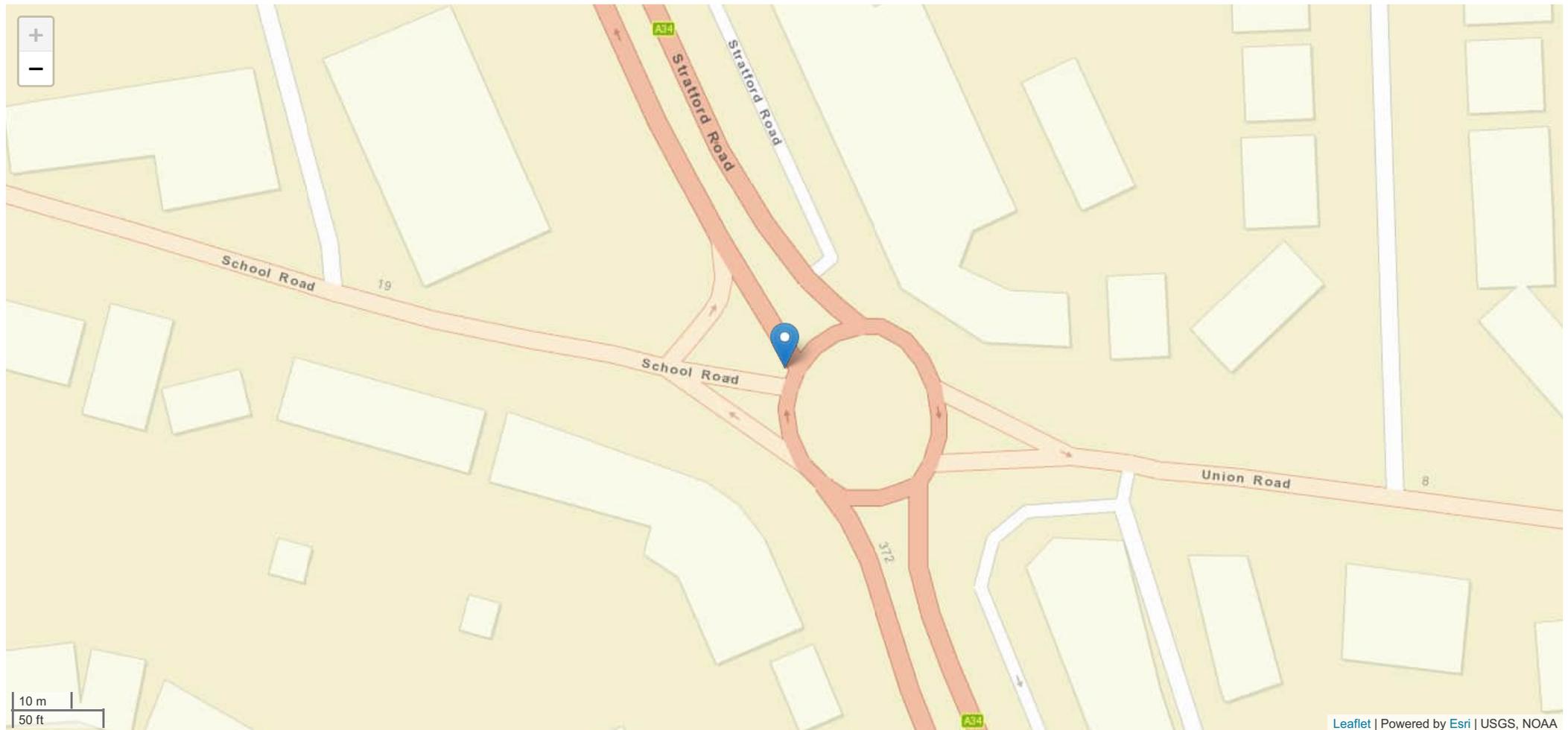
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	VOLKSWAGEN, PASSAT TDI	Not applicable	None	On main c way - not in restricted lane	None	Did not impact	Going ahead other	NW SE

## Incident Record Number: 28 - Saturday 19:34 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L100265320	10/10/2020	19:34	Saturday	2	3	Darkness - lights lit	Fine no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH SCHOOL ROAD	No Data Provided



## Incident Record Number: 28 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	3

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH SCHOOL ROAD	412120, 278623	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Junction overshoot	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	49	40 - 49 years
2	2	Passenger	Slight	37	30 - 39 years
3	1	Passenger	Slight	18	16 - 19 years

## Vehicle Details

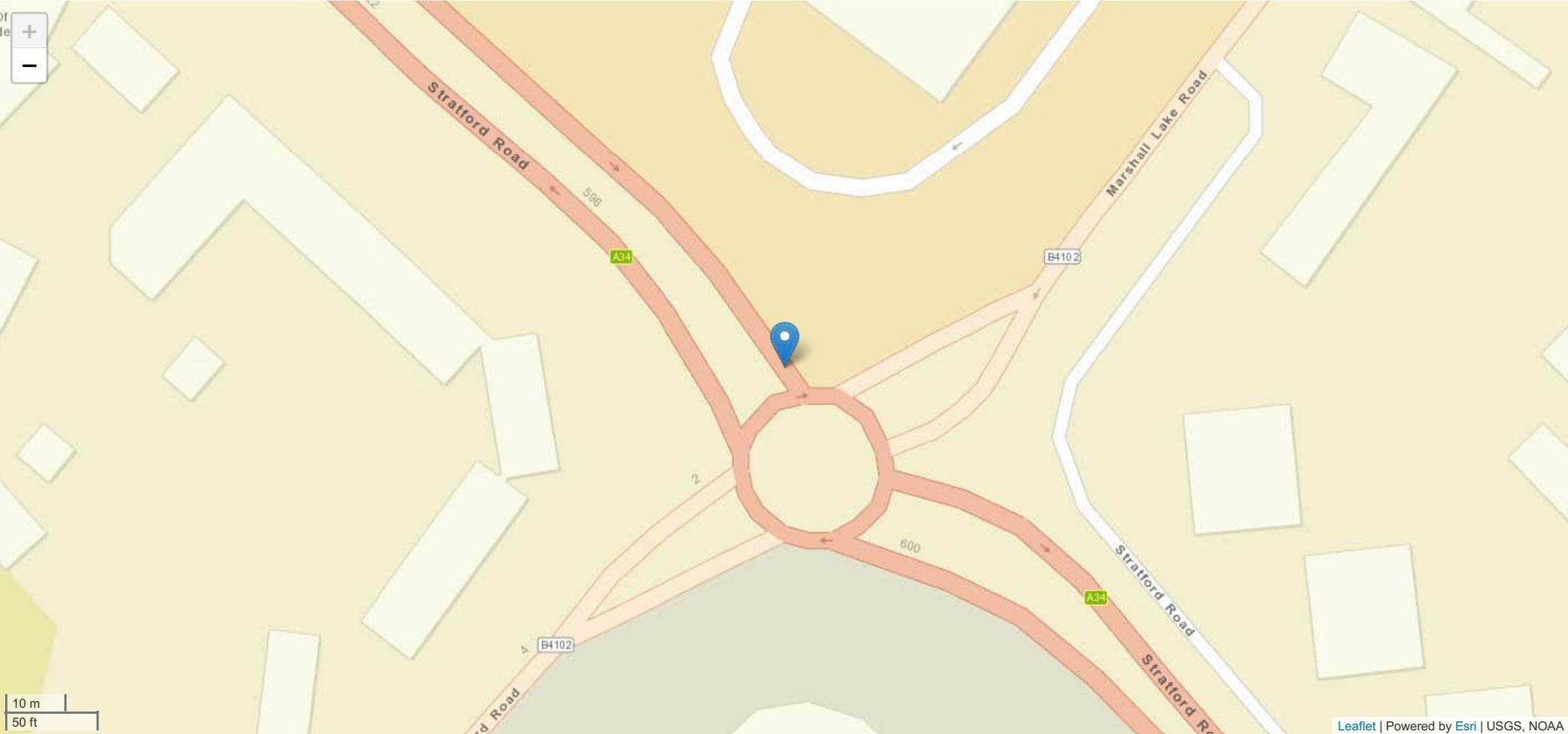
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
1	49	40 - 49 years	Car, No tow articulation	VAUXHALL, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	NE NW
2	37	30 - 39 years	Car, No tow articulation	TOYOTA, No Data Provided	Not requested	None	On main c way - not in restricted lane	Kerb	Nearside	Going ahead other	NE S

# Incident Record Number: 29 - Thursday 10:20 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L99803320	15/10/2020	10:20	Thursday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT BLACKFORD ROAD	No Data Provided



## Incident Record Number: 29 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT BLACKFORD ROAD	412437, 277734	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Dazzling sun	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
2	2	Driver or rider	Slight	39	30 - 39 years

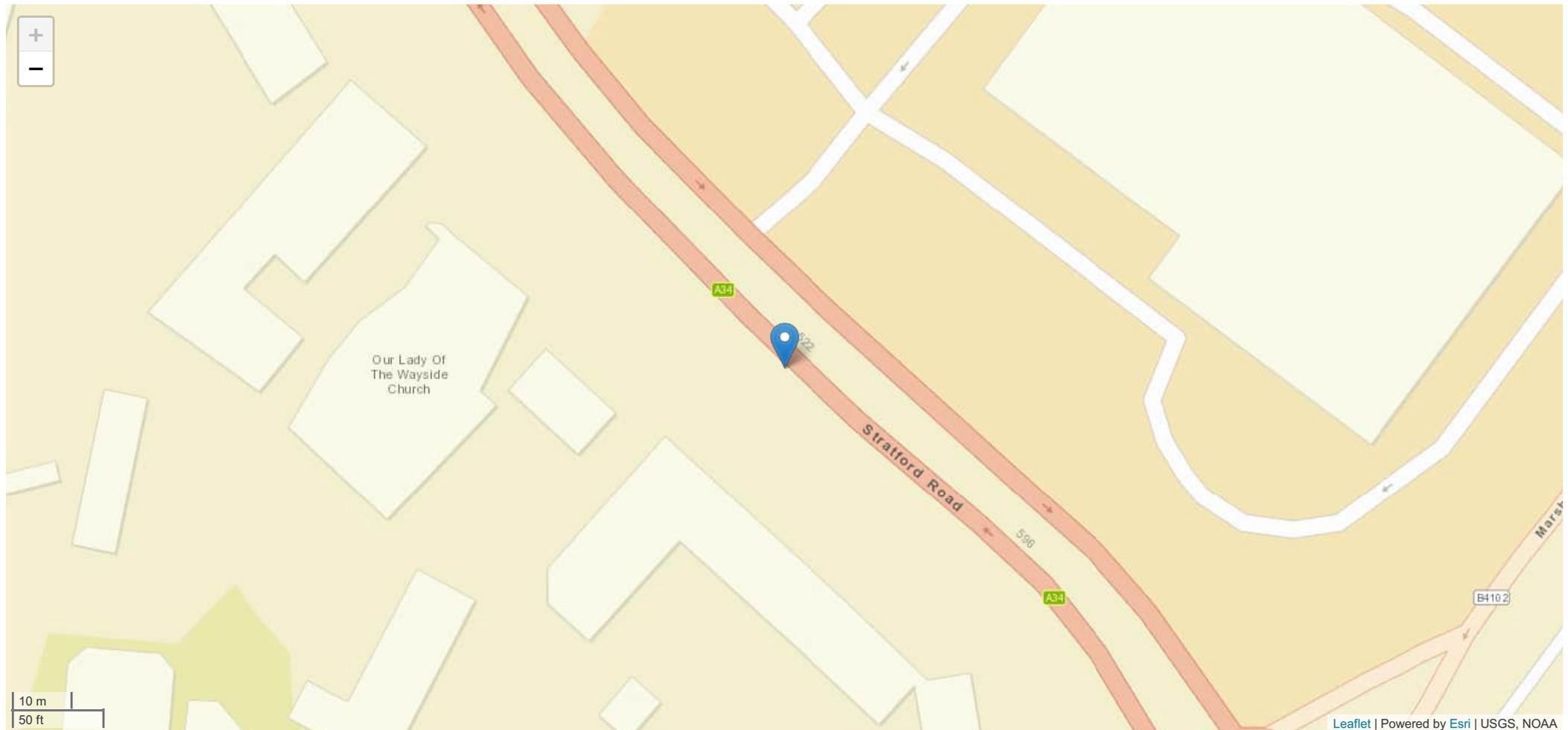
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	80	12	Car, No tow articulation	PEUGEOT, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Did not impact	Going ahead other	SE NW
2	39	30 - 39 years	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Did not impact	Going ahead other	NE SW

## Incident Record Number: 30 - Sunday 15:00 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L100313120	18/10/2020	15:00	Sunday	1	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
O/S NO. 568 STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 30 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
O/S NO. 568 STRATFORD ROAD (A34)	412366, 277789	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	38	30 - 39 years

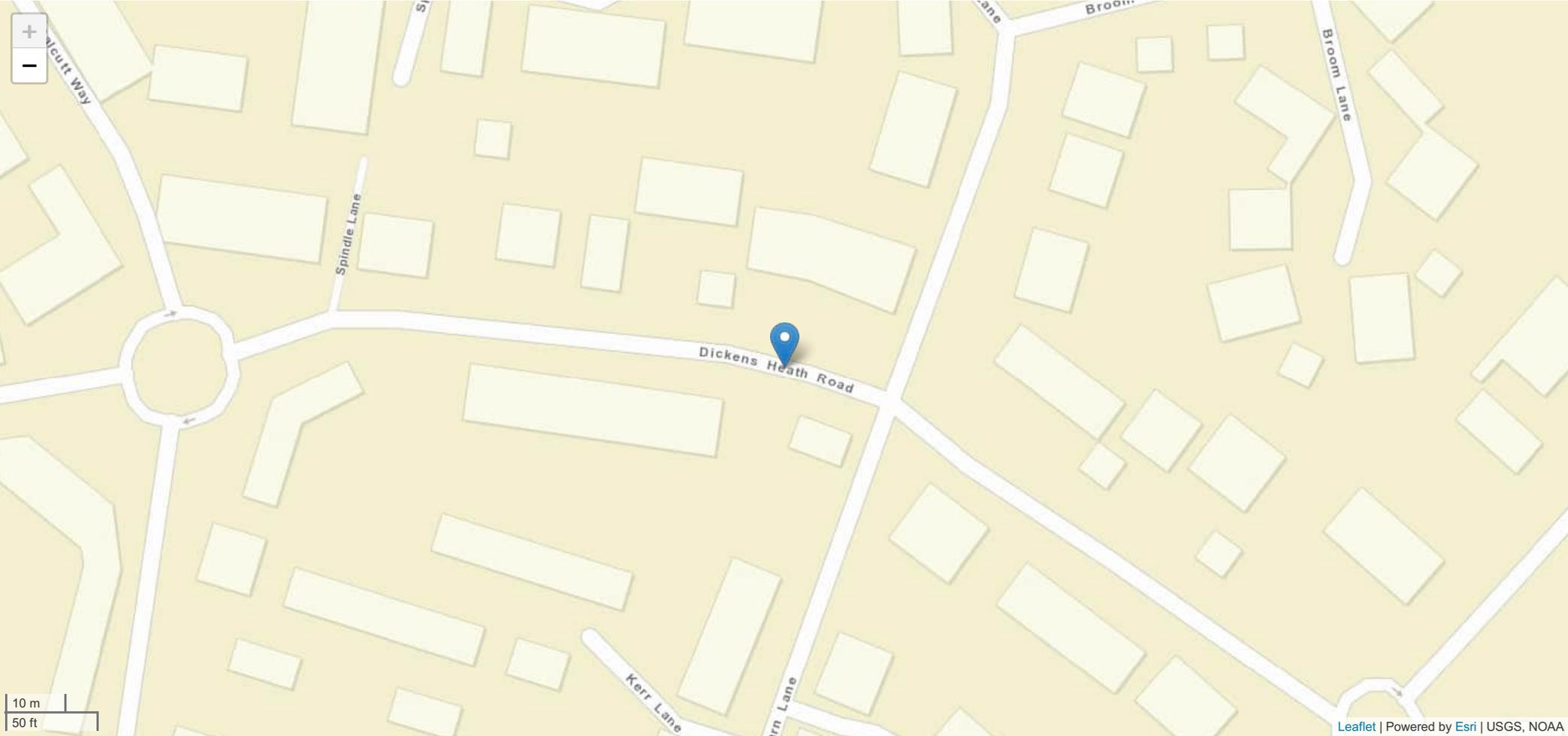
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	VOLKSWAGEN, No Data Provided	Driver not contacted at time of accident	None	No Data Provided	None	Front	Moving off	SW NW

# Incident Record Number: 31 - Tuesday 13:50 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L100022220	20/10/2020	13:50	Tuesday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
DICKENS HEATH ROAD NEAR JUNCTION WITH TYTHE BARN LANE	No Data Provided



## Incident Record Number: 31 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
DICKENS HEATH ROAD NEAR JUNCTION WITH TYTHE BARN LANE	411270, 276649	Unknown	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Aggressive driving	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	31	30 - 39 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	31	30 - 39 years	Car, No tow articulation	VOLKSWAGEN, POLO	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Offside	Going ahead other	SE NW

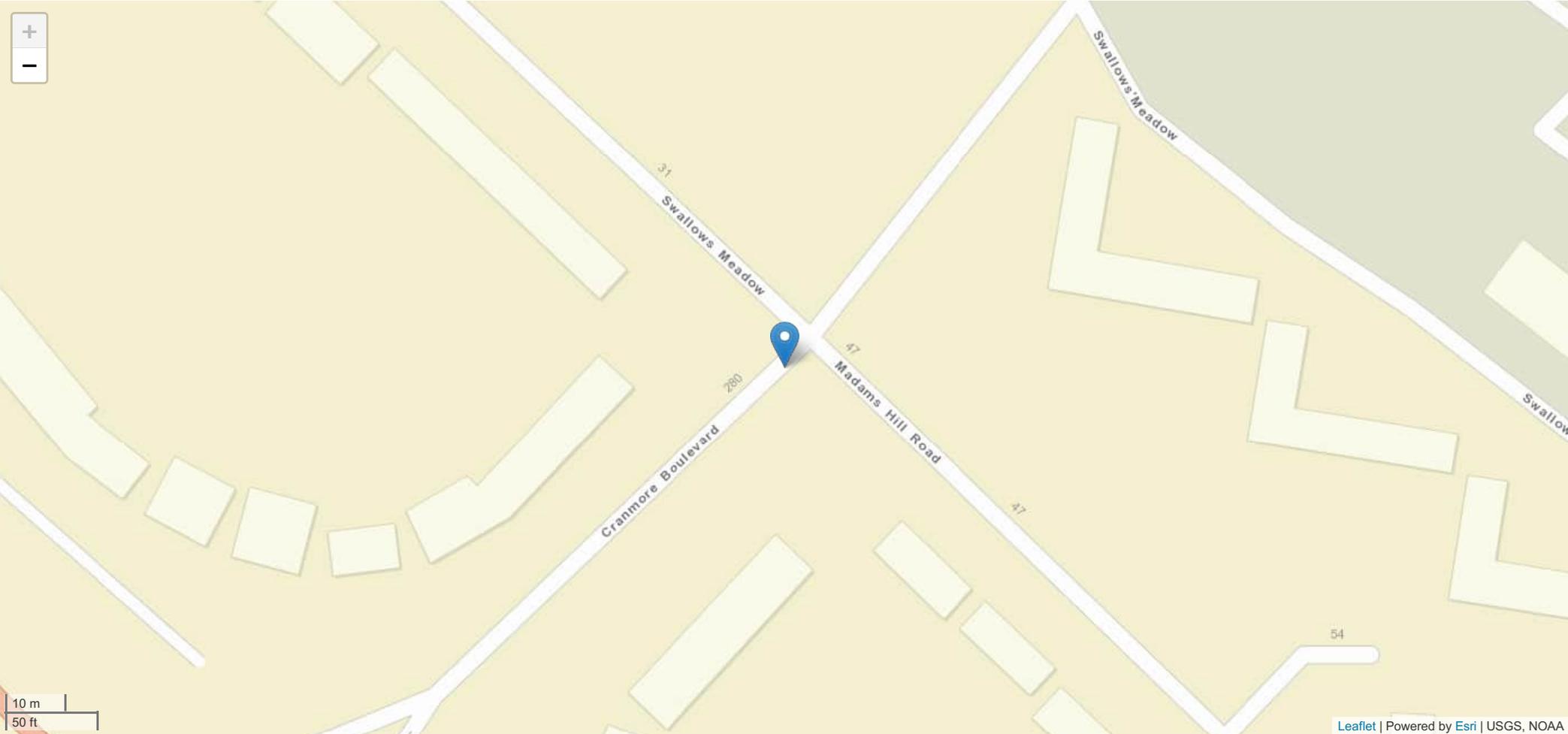
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	MG, ZR 105 TROPHY SE	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

# Incident Record Number: 32 - Friday 20:46 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L100482620	30/10/2020	20:46	Friday	2	1	Darkness - lights lit	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
CRANMORE BOULEVARD NEAR JUNCTION WITH CRANMORE ROAD	No Data Provided



## Incident Record Number: 32 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
CRANMORE BOULEVARD NEAR JUNCTION WITH CRANMORE ROAD	412810, 277502	Unknown	Unknown	Mini-roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Impaired by alcohol	Junction overshoot	Swerved

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	60	60 - 69 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	60	60 - 69 years	Goods vehicle - unknown weight, No tow articulation	CITROEN, BERLINGO 625 LX HDI	Negative	None	On main c way - not in restricted lane	Bollard or refuge	Front	Going ahead other	SW NE

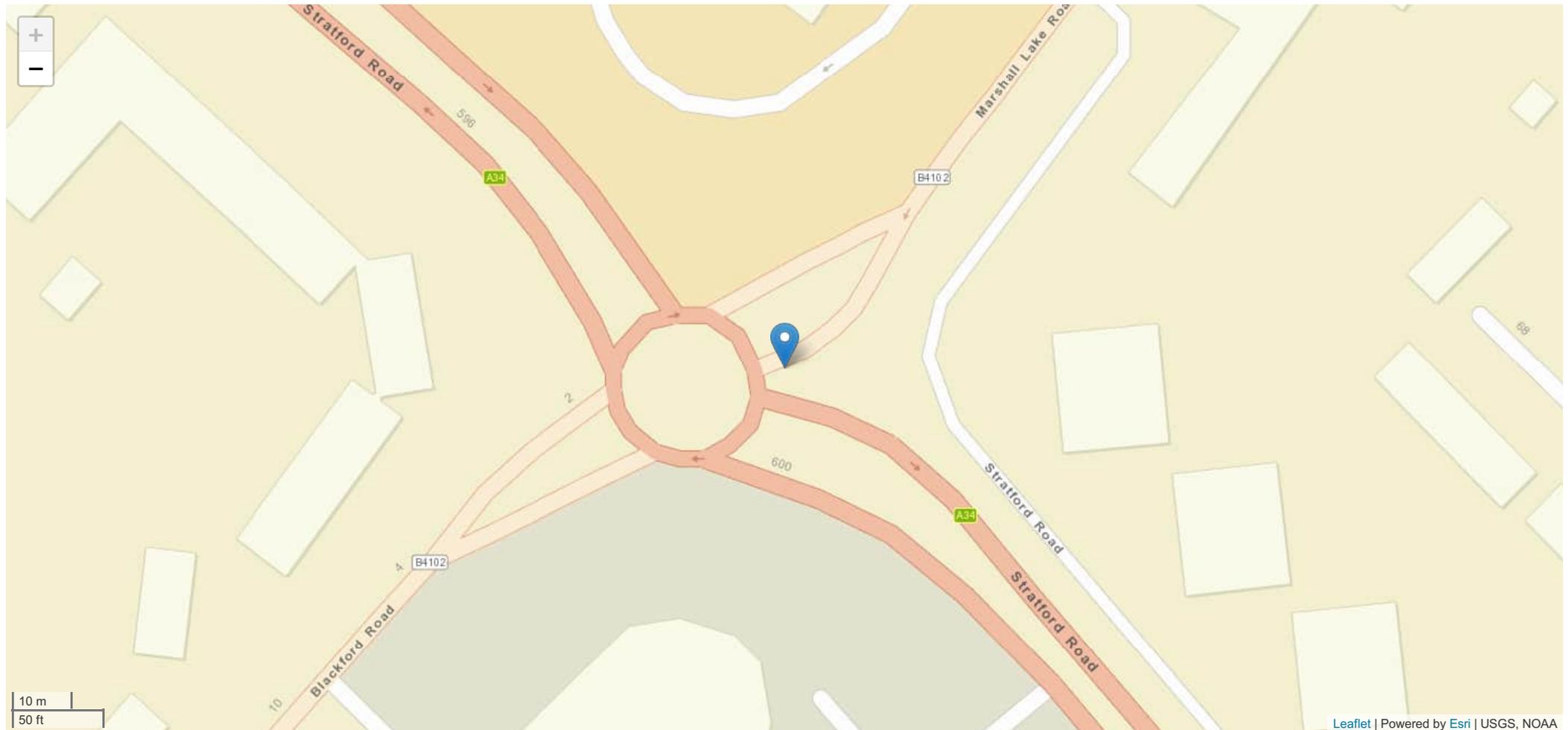
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	43	40 - 49 years	Car, No tow articulation	KIA, CEED 3 ECODYNAMICS C	Not requested	None	On main c way - not in restricted lane	None	Did not impact	Going ahead other	NE SW

## Incident Record Number: 33 - Saturday 18:58 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L100826920	21/11/2020	18:58	Saturday	2	3	Darkness - lights lit	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH MARSHALL LAKE ROAD (B4102)	No Data Provided



## Incident Record Number: 33 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	3

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH MARSHALL LAKE ROAD (B4102)	412458, 277721	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Exceeding speed limit	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	23	20 - 29 years
2	1	Passenger	Slight	28	20 - 29 years
3	2	Passenger	Slight	24	20 - 29 years

## Vehicle Details

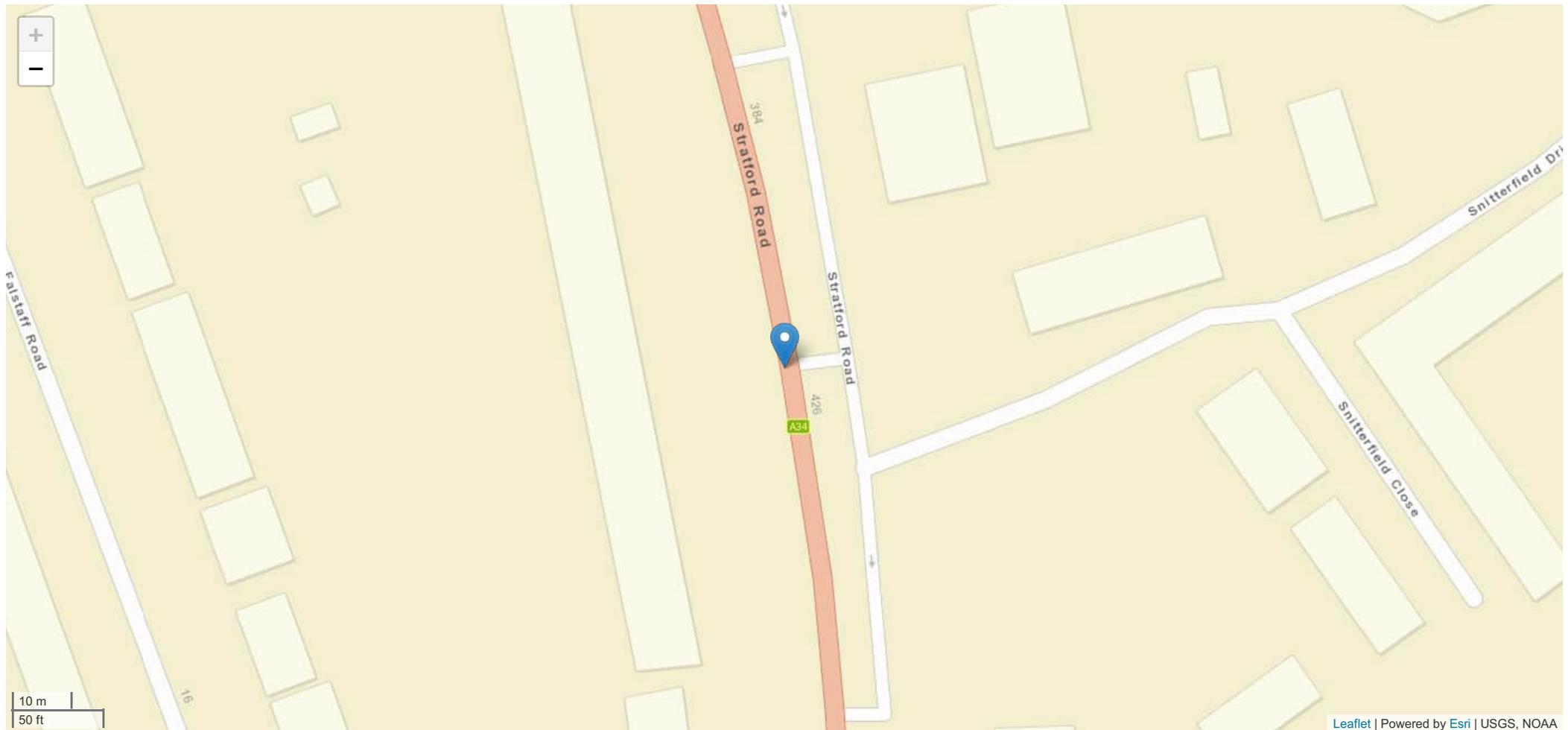
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
1	28	20 - 29 years	Car, No tow articulation	FORD, FIESTA S	Negative	Skidded	On main c way - not in restricted lane	None	Offside	Going ahead other	SW NE
2	23	20 - 29 years	Car, No tow articulation	SEAT, LEON S	Negative	Skidded	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

## Incident Record Number: 34 - Saturday 16:48 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L102219520	19/12/2020	16:48	Saturday	2	2	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 34 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412194, 278416	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Poor turn or manoeuvre	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	46	40 - 49 years
2	2	Passenger	Slight	43	40 - 49 years

## Vehicle Details

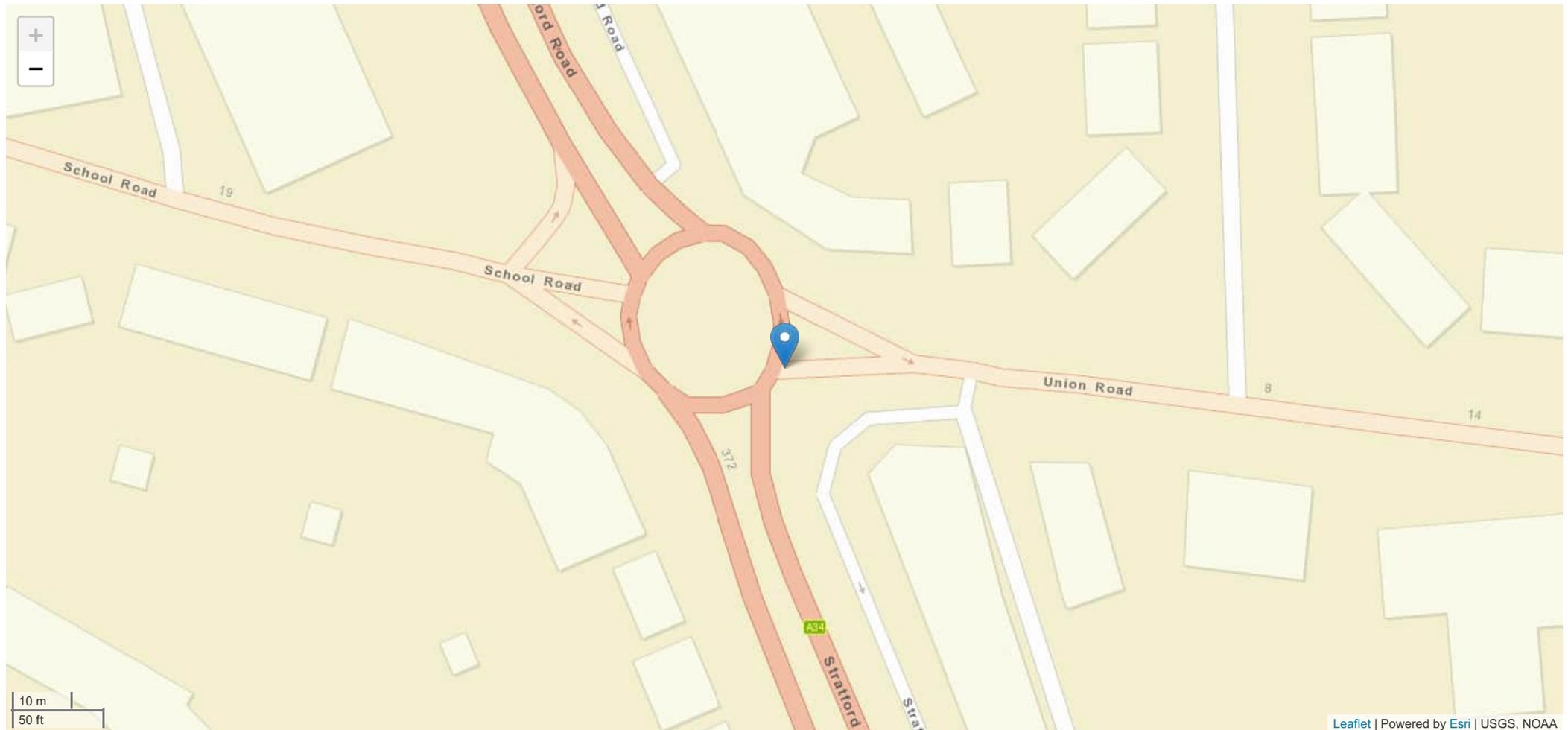
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	40	40 - 49 years	Car, No tow articulation	AUDI, A4	Not applicable	None	On main c way - not in restricted lane	None	Front	Waiting to turn right	E S

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	46	40 - 49 years	Car, No tow articulation	TOYOTA, YARIS	Not applicable	None	On main c way - not in restricted lane	None	Front	Going ahead other	S N

## Incident Record Number: 35 - Saturday 16:55 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L105085521	03/04/2021	16:55	Saturday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH UNION ROAD	No Data Provided



## Incident Record Number: 35 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH UNION ROAD	412146, 278608	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Passenger	Slight	10	8 - 11 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	BMW, X5	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

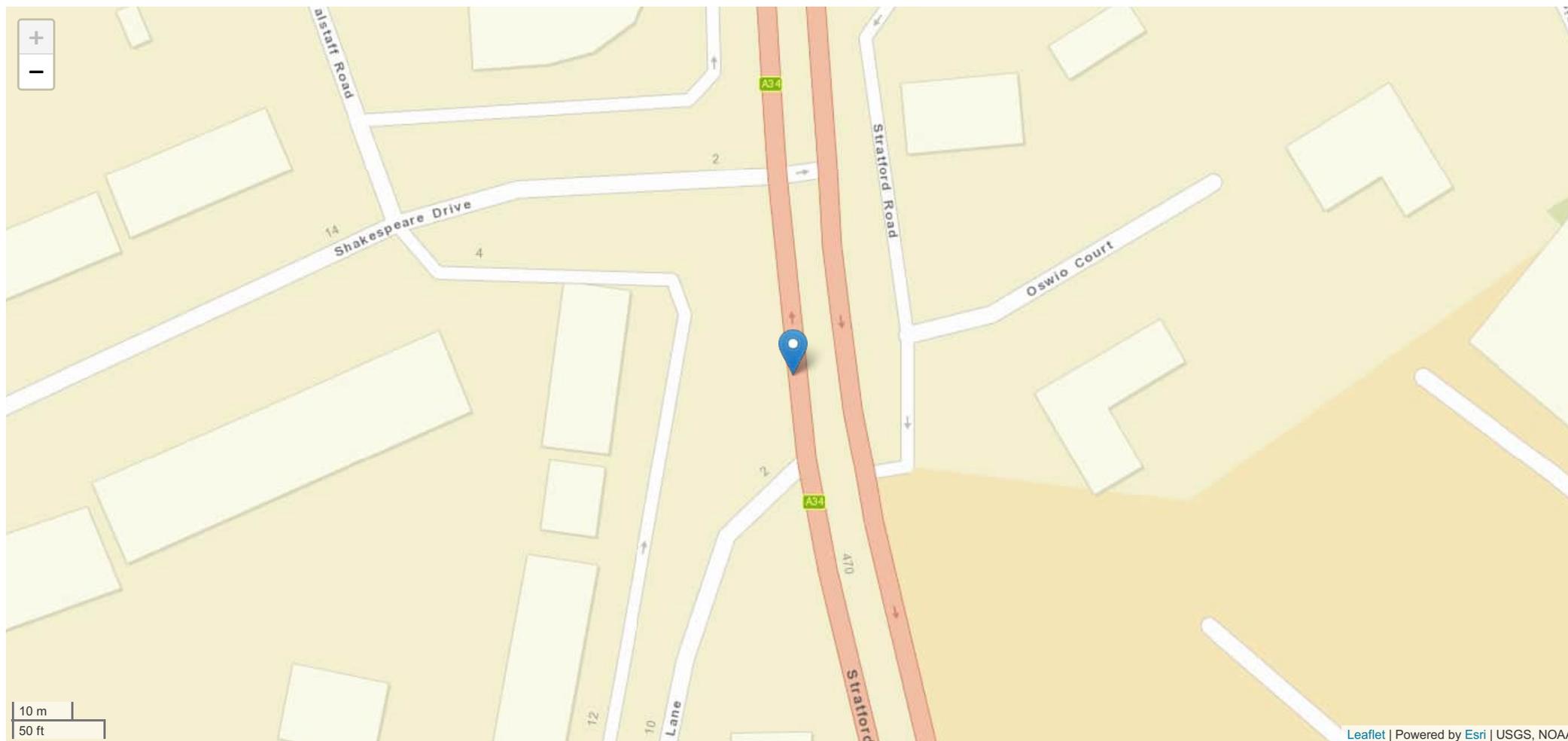
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	35	30 - 39 years	Car, No tow articulation	DACIA, No Data Provided	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	SE NW

## Incident Record Number: 36 - Saturday 18:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L107844821	24/04/2021	18:30	Saturday	1	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 36 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412208, 278201	A 34	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Dangerous action in carriageway (e.g. playing)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	No Data Provided	Unknown

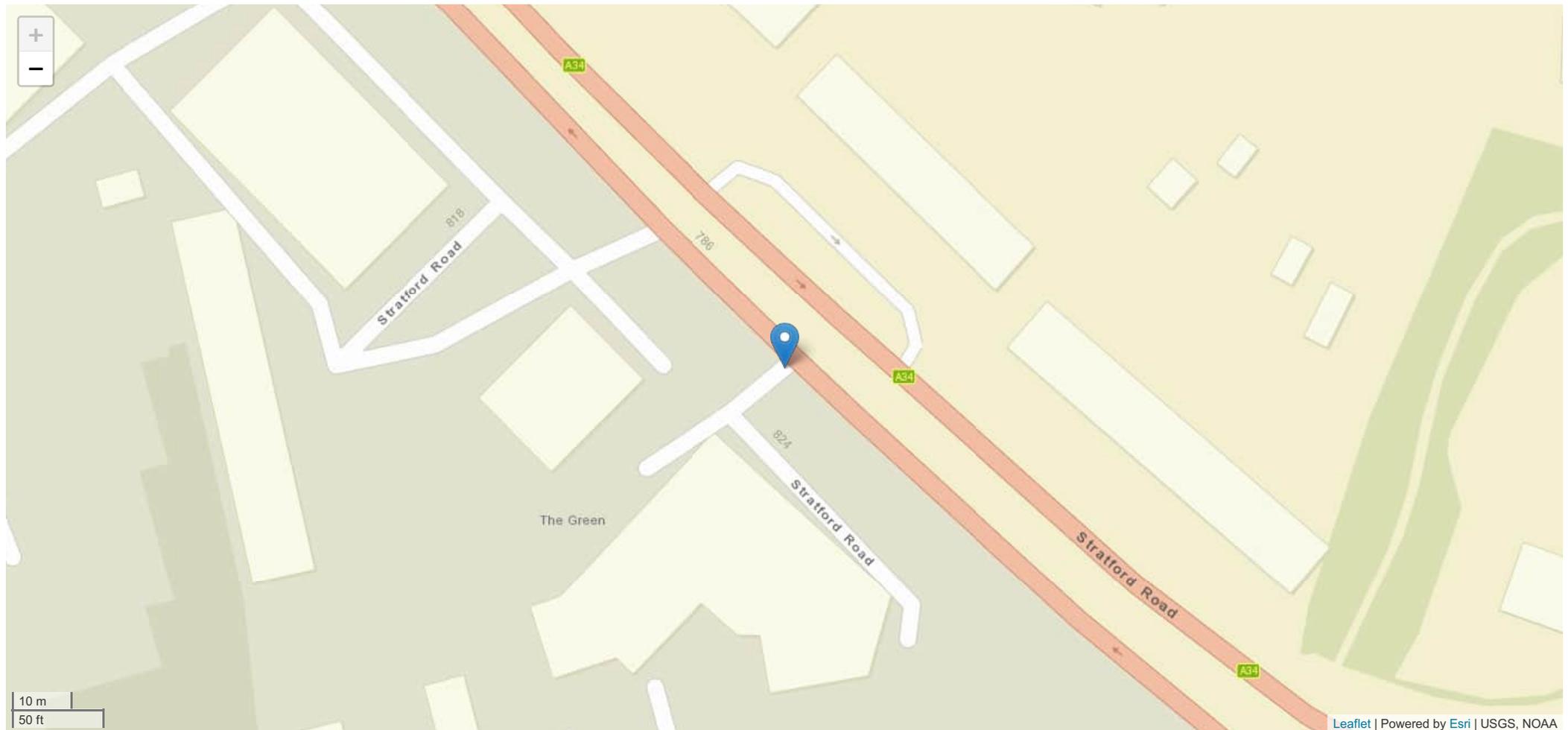
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	33	30 - 39 years	Car, No tow articulation	VAUXHALL, CORSA SE CDTI	Not applicable	None	No Data Provided	None	Front	Going ahead other	S N

## Incident Record Number: 37 - Monday 15:44 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L108473721	31/05/2021	15:44	Monday	4	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 37 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412948, 277152	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Exceeding speed limit	Inexperienced or learner driver or rider	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	64	60 - 69 years

## Vehicle Details

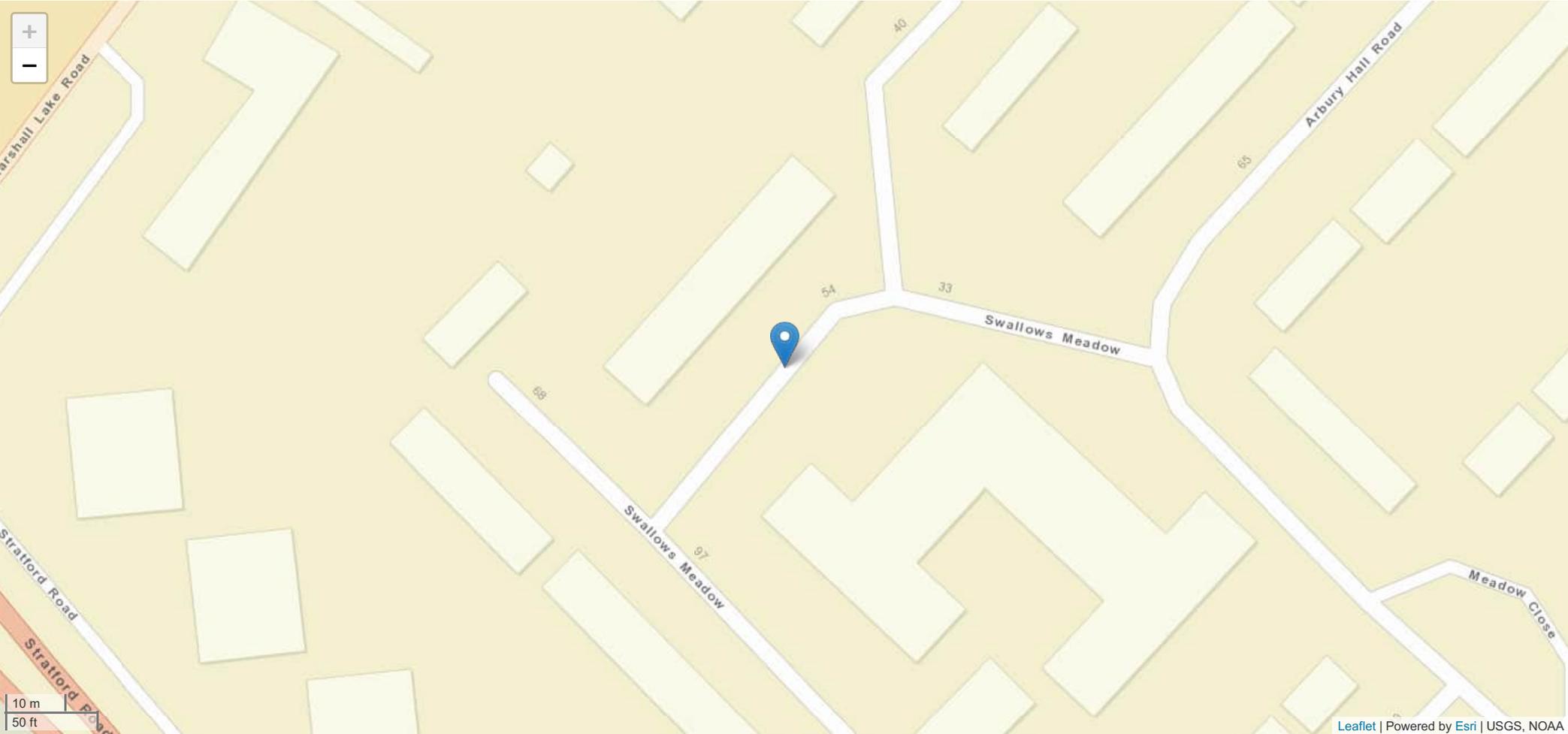
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	64	60 - 69 years	Car, No tow articulation	NISSAN, QASHQAI TEKNA DCI 2W	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE
2	78	70 - 79 years	Car, No tow articulation	VOLKSWAGEN, PASSAT A-TRACK TDI B	Not requested	None	On main c way - not in restricted lane	None	Back	Going ahead other	NE SW

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
3	37	30 - 39 years	Car, No tow articulation	PEUGEOT, 107 URBAN	Not requested	None	On main c way - not in restricted lane	None	Back	Turning left	SW SE
4	73	70 - 79 years	Car, No tow articulation	PEUGEOT, 308 ACTIVE NAV VERSI	Not requested	None	On main c way - not in restricted lane	None	Back	Going ahead other	NW SE

# Incident Record Number: 38 - Saturday 20:11 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L107158421	05/06/2021	20:11	Saturday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
SWALLOWS MEADOW	No Data Provided



## Incident Record Number: 38 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
SWALLOWS MEADOW	412619, 277732	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Stolen vehicle	Vehicle in course of crime	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Passenger	Slight	52	50 - 59 years

## Vehicle Details

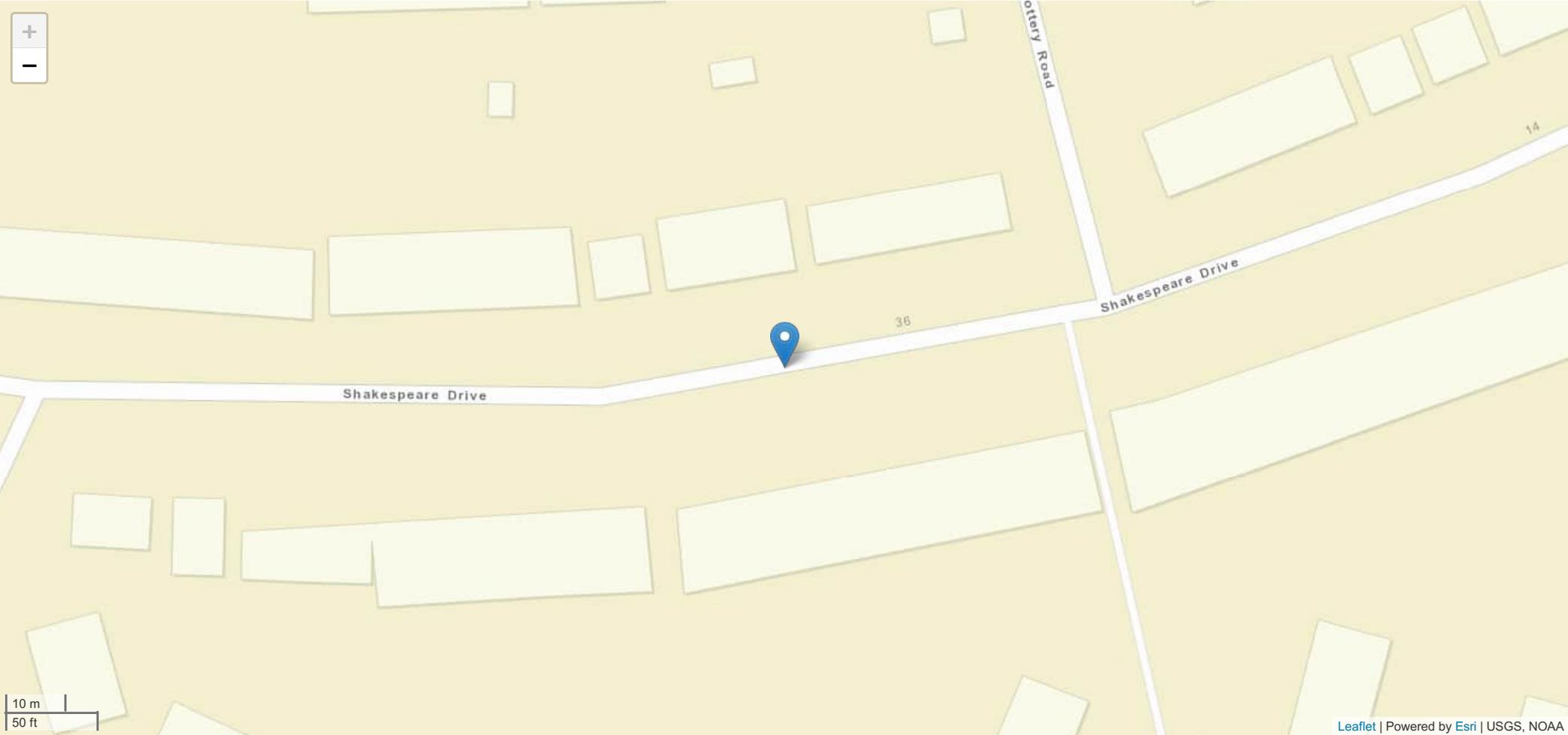
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	AUDI, No Data Provided	Driver not contacted at time of accident	None	Footway pavement	None	Offside	U turn	NE NE

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
2	31	30 - 39 years	Car, No tow articulation	BMW, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	SW NE

# Incident Record Number: 39 - Friday 15:13 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L106181521	18/06/2021	15:13	Friday	1	1	Daylight	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
O/S NO. 40 SHAKESPEARE DRIVE	No Data Provided



## Incident Record Number: 39 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
O/S NO. 40 SHAKESPEARE DRIVE	411953, 278158	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	15	12 - 15 years

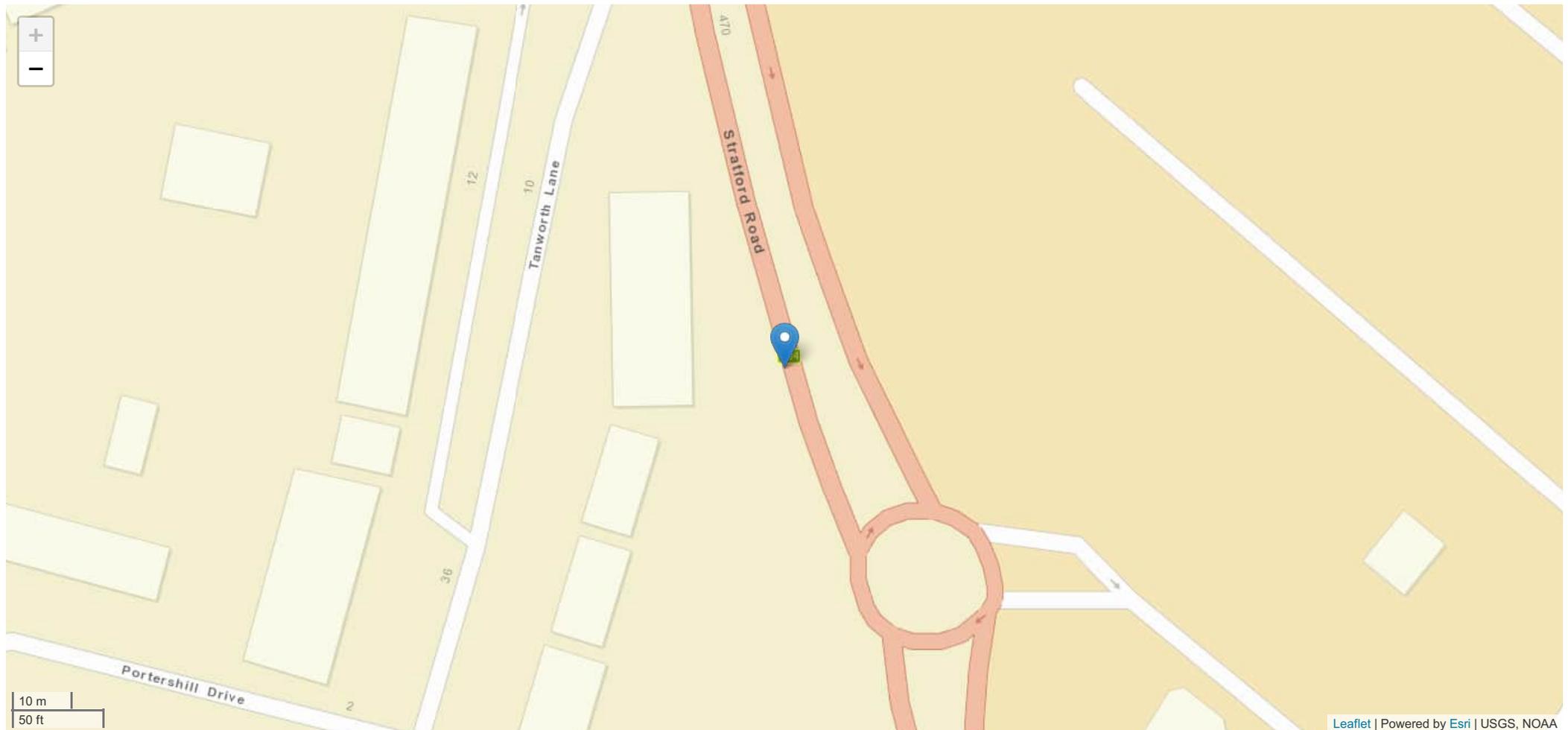
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	KIA, PICANTO SE	Not requested	None	No Data Provided	None	Front	Going ahead other	E W

## Incident Record Number: 40 - Wednesday 21:05 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L108573721	14/07/2021	21:05	Wednesday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) - 63 METRES FROM JUNCTION WITH TANWORTH LANE	No Data Provided



## Incident Record Number: 40 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) - 63 METRES FROM JUNCTION WITH TANWORTH LANE	412227, 278115	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Exceeding speed limit	Following too close	Failed to judge other persons path or speed

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	19	16 - 19 years

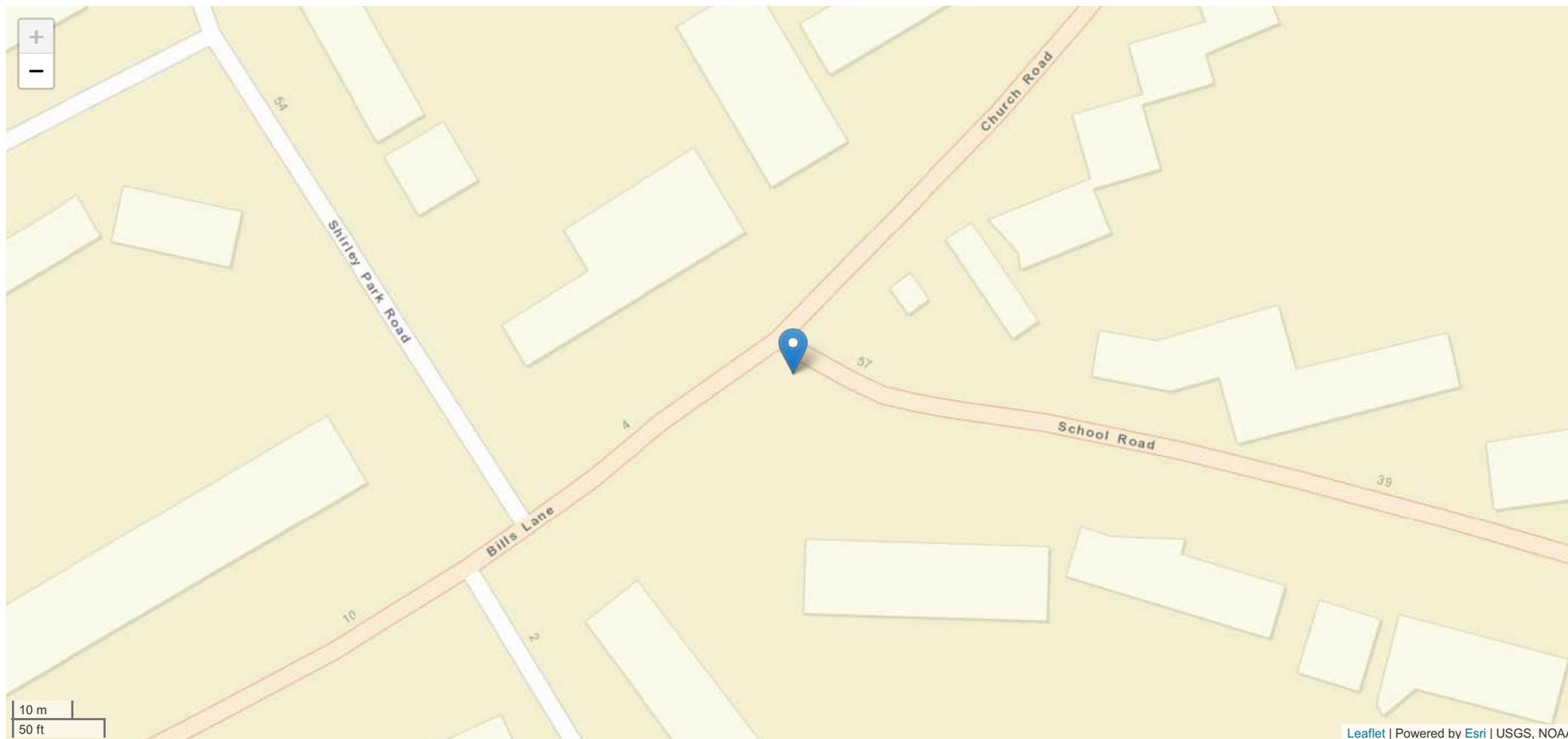
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	19	16 - 19 years	Car, No tow articulation	FORD, FIESTA ZETEC	Not provided medical reasons	Overtuned	On main c way - not in restricted lane	None	Nearside	Turning right	N S
2	68	60 - 69 years	Car, No tow articulation	FORD, FIESTA ZETEC TDCI 70	Not requested	None	On main c way - not in restricted lane	None	Offside	Turning left	N S

## Incident Record Number: 41 - Saturday 22:24 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L110726521	17/07/2021	22:24	Saturday	1	1	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
SCHOOL ROAD	No Data Provided



## Incident Record Number: 41 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
SCHOOL ROAD	411879, 278676	Unknown	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Impaired by alcohol	Failed to look properly (driver)	Failed to look properly (pedestrian)

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	31	30 - 39 years

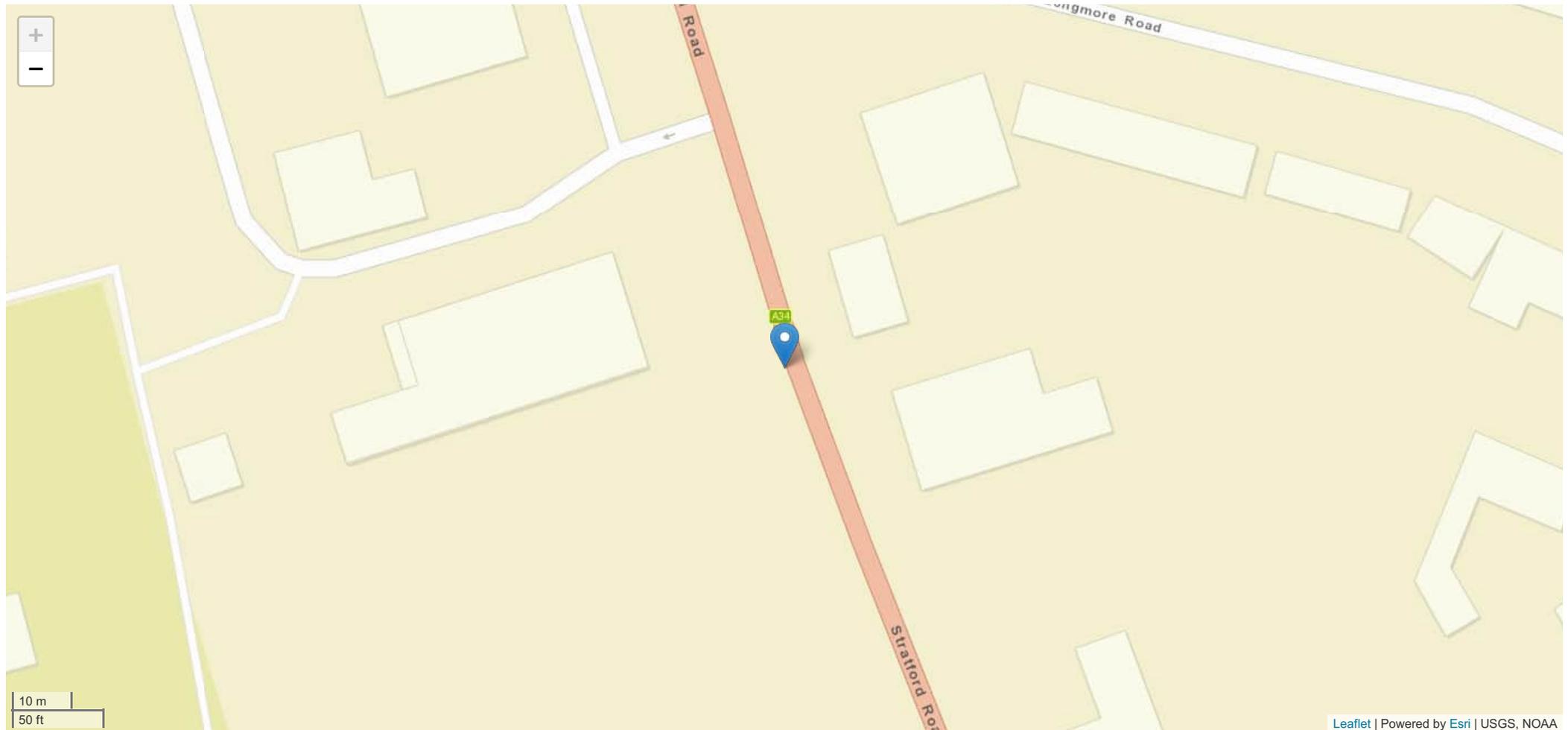
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	UNKNOWN, UNKNOWN	Driver not contacted at time of accident	None	No Data Provided	None	Front	Turning right	SW SE

## Incident Record Number: 42 - Thursday 16:05 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L111418921	29/07/2021	16:05	Thursday	2	2	Daylight	Other	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 42 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	411996, 278907	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Illegal turn or direction of travel	Failed to look properly (pedestrian)	Nervous or Uncertain or Panic

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	19	16 - 19 years
2	2	Driver or rider	Slight	17	16 - 19 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	19	16 - 19 years	Car, No tow articulation	MERCEDES, B200 CDI SE CVT	Not requested	None	On main c way - not in restricted lane	None	Nearside	Turning right	NE SE

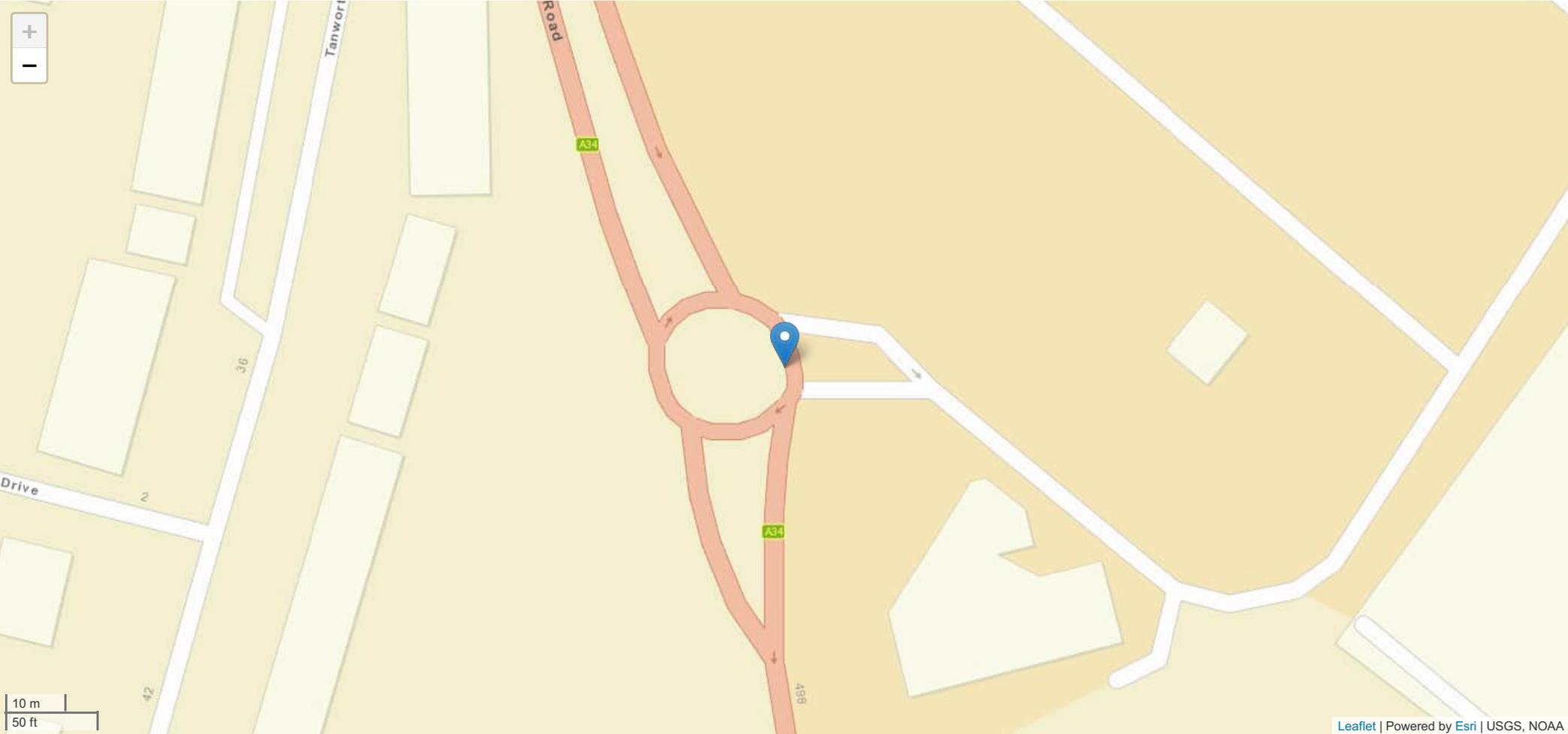
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	17	16 - 19 years	Car, No tow articulation	RENAULT, MEGANE SL OASIS 16V	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

# Incident Record Number: 43 - Saturday 17:51 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L109344521	07/08/2021	17:51	Saturday	2	2	Daylight	Unknown	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 43 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412260, 278081	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
2	2	Driver or rider	Slight	30	30 - 39 years
3	2	Passenger	Slight	29	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	64	60 - 69 years	Bus or coach (17 or more pass seats), No tow articulation	EUROLINER, No Data Provided	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	SE NW

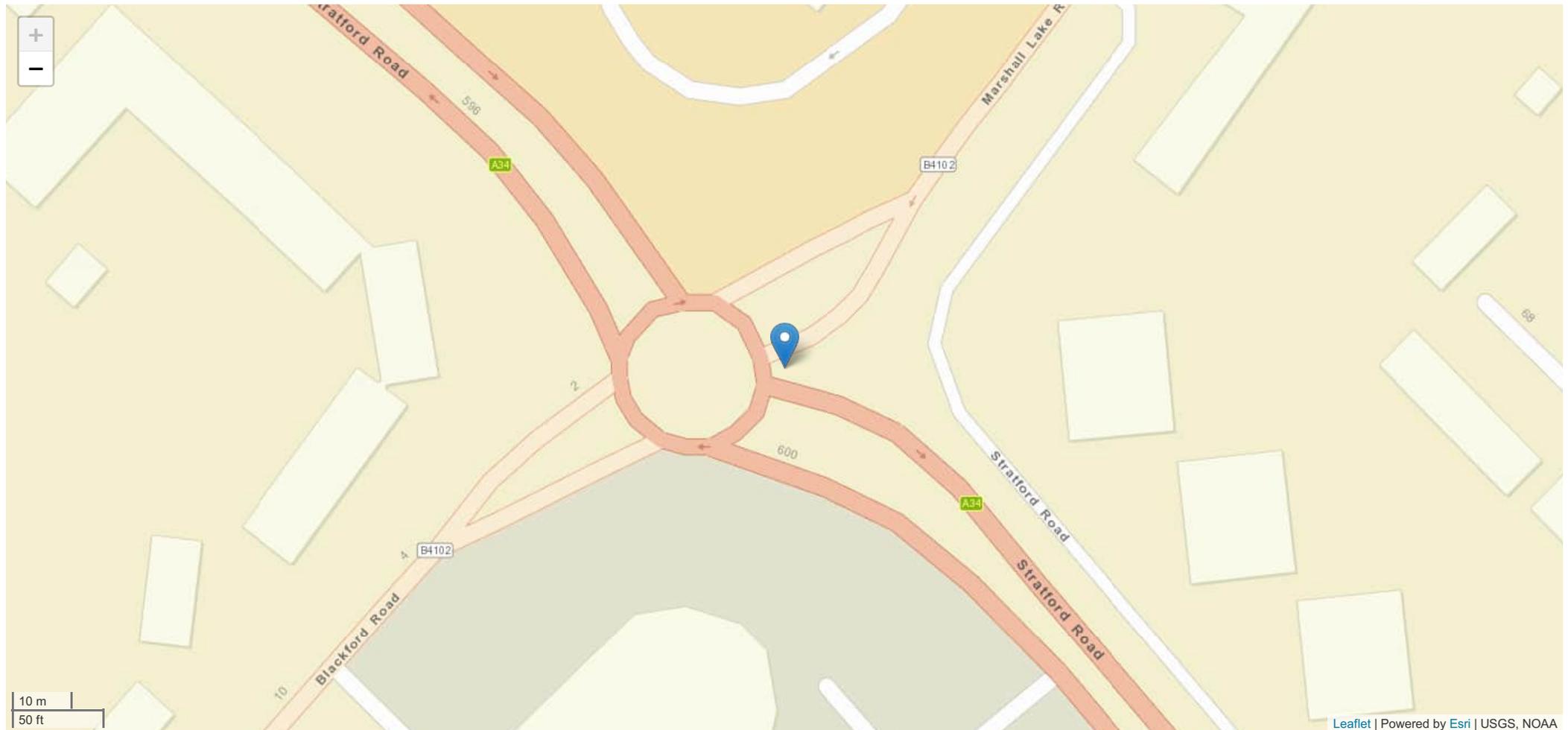
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	30	30 - 39 years	Car, No tow articulation	SUBARU, IMPREZA GL 4WD	Not applicable	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

## Incident Record Number: 44 - Friday 20:07 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L113428221	24/09/2021	20:07	Friday	2	4	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH MARSHALL LAKE ROAD (B4102)	No Data Provided



## Incident Record Number: 44 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	4

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH MARSHALL LAKE ROAD (B4102)	412457, 277719	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Poor turn or manoeuvre	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	24	20 - 29 years
2	2	Driver or rider	Slight	22	20 - 29 years
3	2	Passenger	Slight	22	20 - 29 years
4	2	Passenger	Slight	25	20 - 29 years

## Vehicle Details

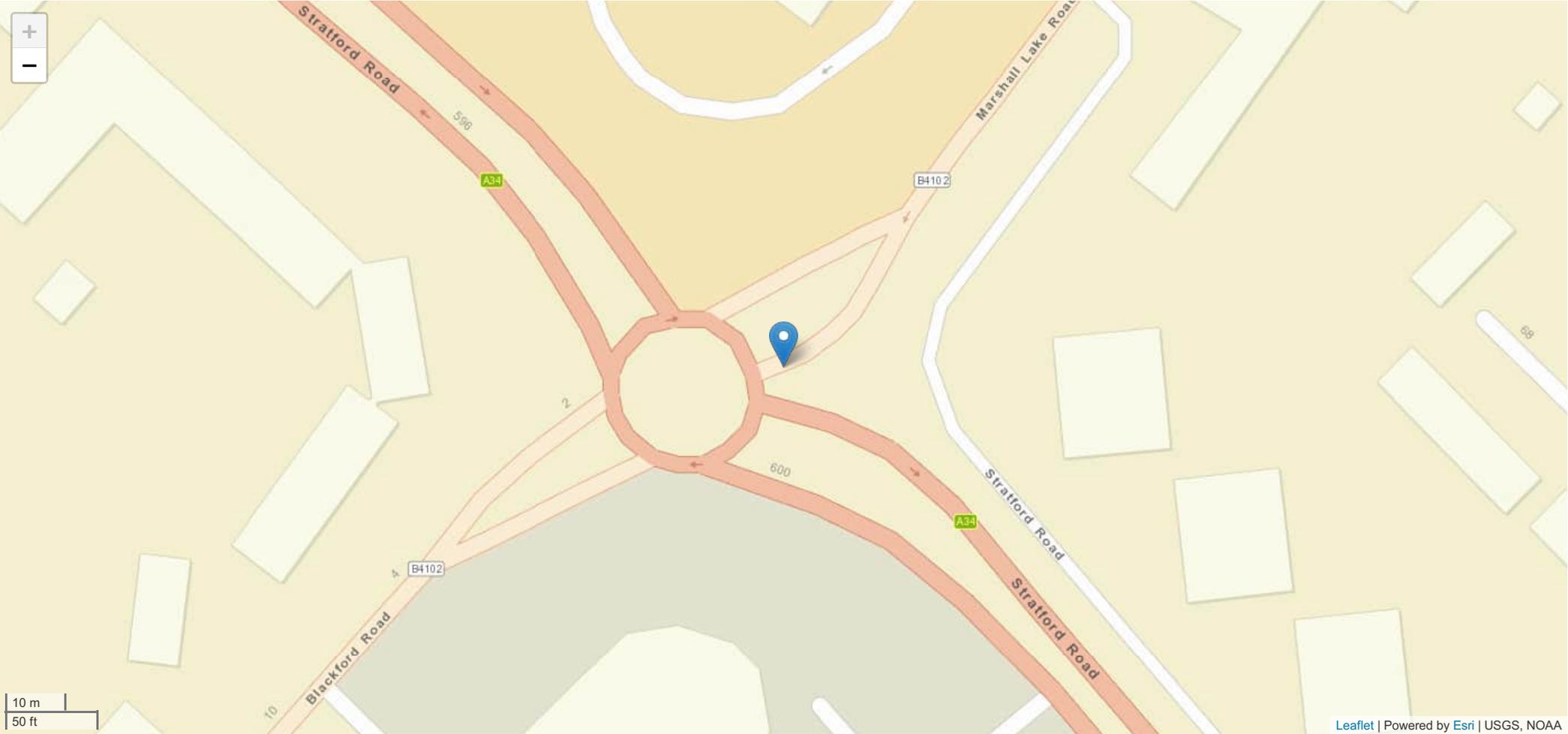
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
1	24	20 - 29 years	Car, No tow articulation	VOLKSWAGEN, GOLF	Not requested	None	On main c way - not in restricted lane	None	Back	Moving off	SW NE
2	22	20 - 29 years	Car, No tow articulation	VAUXHALL, CORSA	Not requested	Skidded	On main c way - not in restricted lane	None	Back	Going ahead other	SE NW

# Incident Record Number: 45 - Saturday 23:50 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L113963821	11/12/2021	23:50	Saturday	2	2	Darkness - lights lit	Fine no high winds	Serious	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 45 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412458, 277722	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to judge other persons path or speed	Careless or Reckless or In a hurry (Driver)	Exceeding speed limit

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	18	16 - 19 years
2	1	Passenger	Serious	19	16 - 19 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	18	16 - 19 years	Car, No tow articulation	VAUXHALL, No Data Provided	Negative	Skidded	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

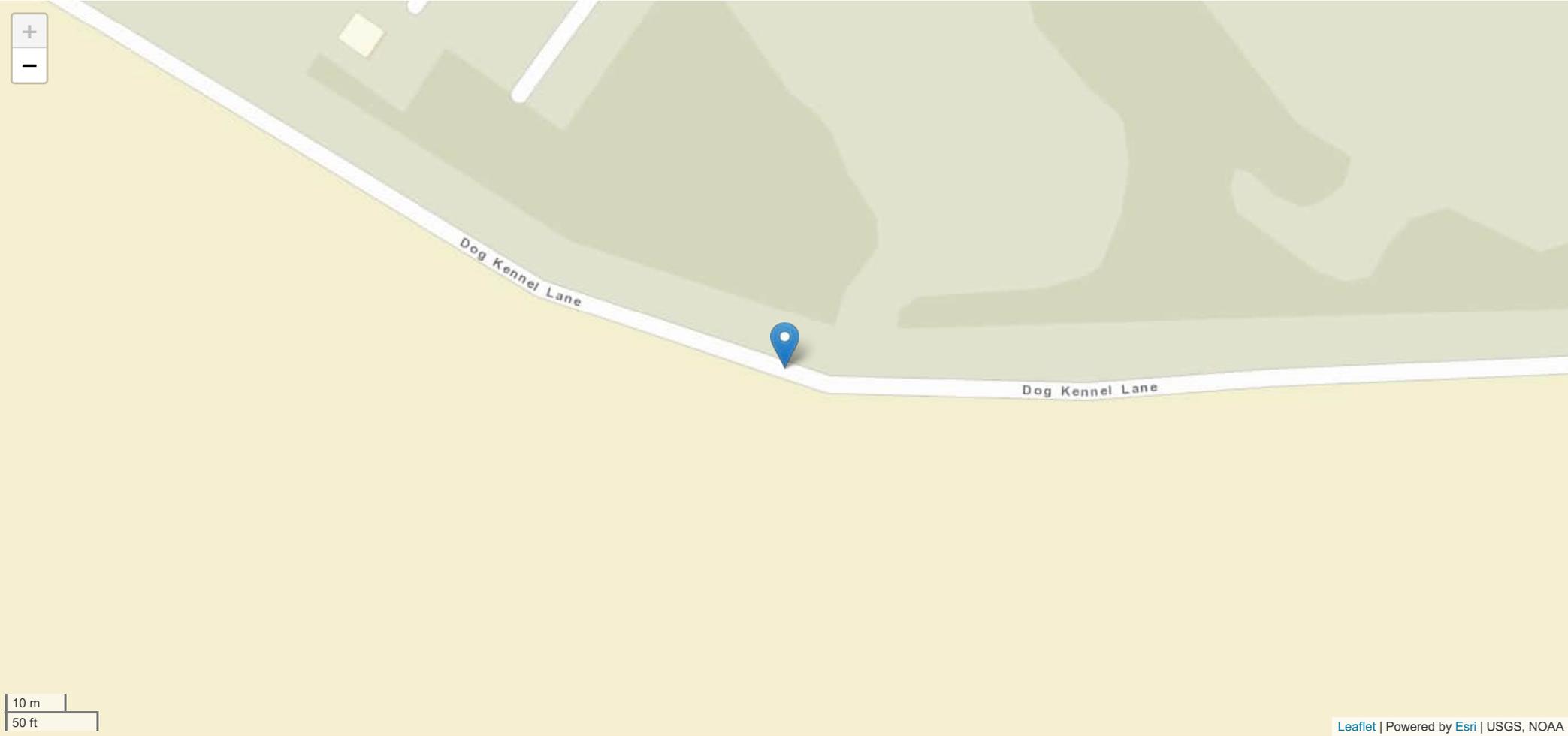
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	49	40 - 49 years	Car, No tow articulation	JAGUAR, I-PACE EV400 S	Negative	None	On main c way - not in restricted lane	None	Front	Moving off	SW NE

# Incident Record Number: 46 - Friday 21:09 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L121897322	04/02/2022	21:09	Friday	1	1	Darkness - lights lit	Fine no high winds	Slight	Frost or ice

Road Name 1	Road Name 2
DOG KENNEL LANE	No Data Provided



## Incident Record Number: 46 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
DOG KENNEL LANE	412619, 277061	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Impaired by alcohol	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	36	30 - 39 years

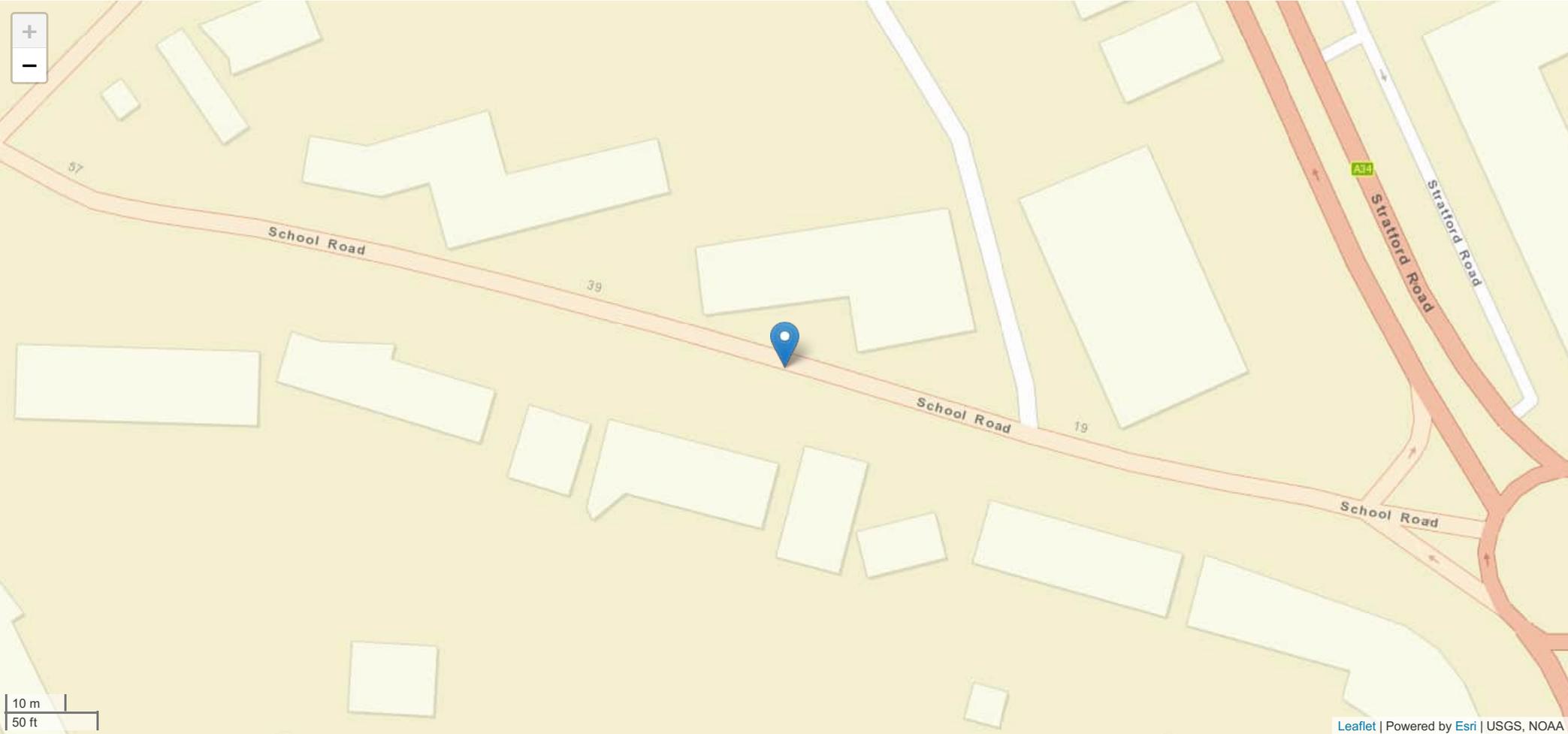
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	36	30 - 39 years	Car, No tow articulation	KIA, No Data Provided	Refused to provide	Overtuned	No Data Provided	Kerb	Front	Going ahead left hand bend	NW E

# Incident Record Number: 47 - Saturday 15:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L125639322	16/04/2022	15:30	Saturday	2	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
O/S NO. 29 SCHOOL ROAD	No Data Provided



## Incident Record Number: 47 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
O/S NO. 29 SCHOOL ROAD	412006, 278646	Unknown	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	Tyres illegal, defective or under inflated	Failed to look properly (pedestrian)

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	No Data Provided	Unknown
2	2	Driver or rider	Slight	No Data Provided	Unknown

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	FORD, PUMA	Not requested	None	On main c way - not in restricted lane	None	Offside	Reversing	SW NE

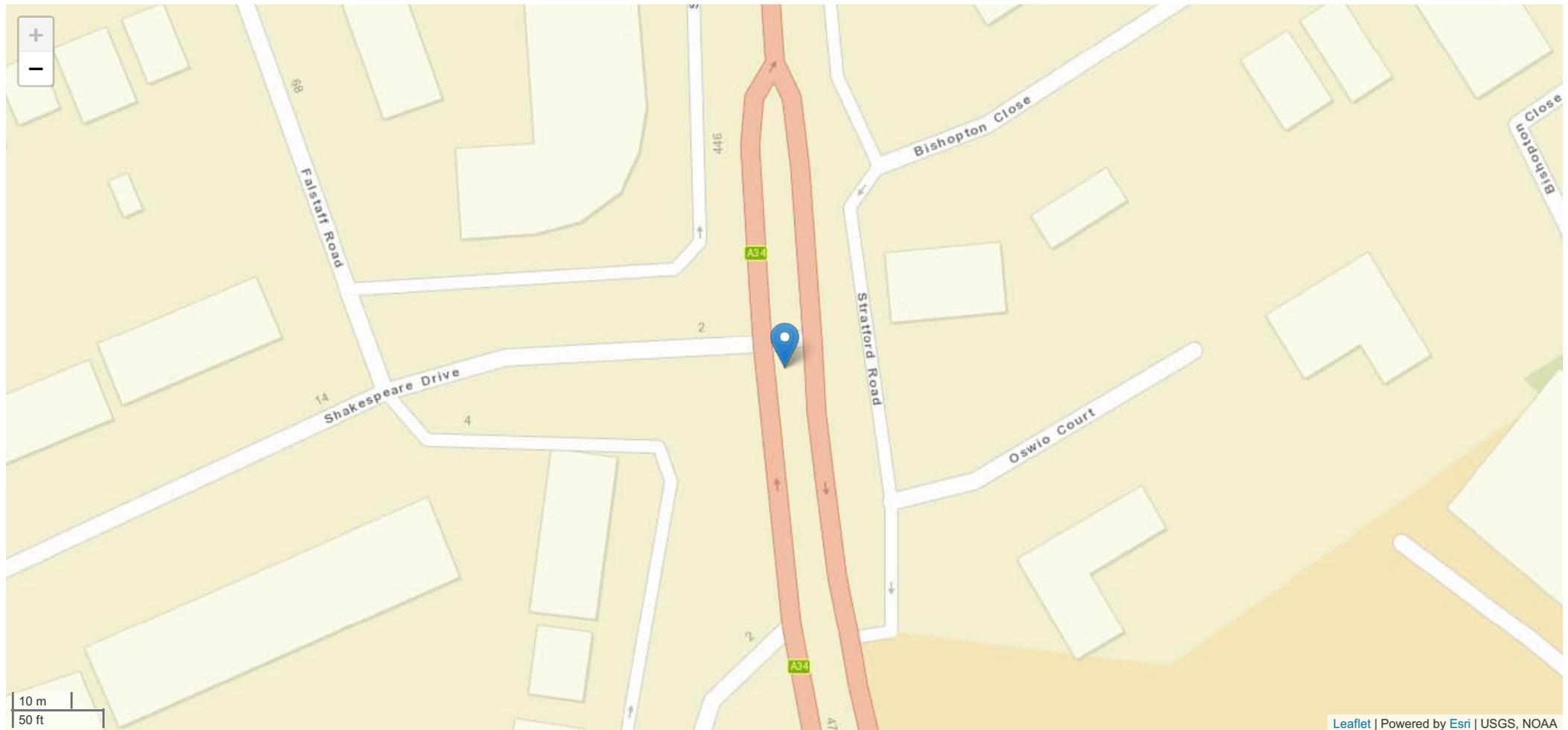
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	No Data Provided, No Data Provided	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

## Incident Record Number: 48 - Sunday 18:27 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L117576722	17/04/2022	18:27	Sunday	2	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH SHAKESPEARE DRIVE	No Data Provided



## Incident Record Number: 48 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH SHAKESPEARE DRIVE	412209, 278229	A 34	Unknown	Other junction	Auto traffic signal

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Illegal turn or direction of travel	Travelling too fast for conditions

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Passenger	Serious	40	40 - 49 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	28	20 - 29 years	Car, No tow articulation	BMW, M3 COMPETITION PACKA	Negative	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S

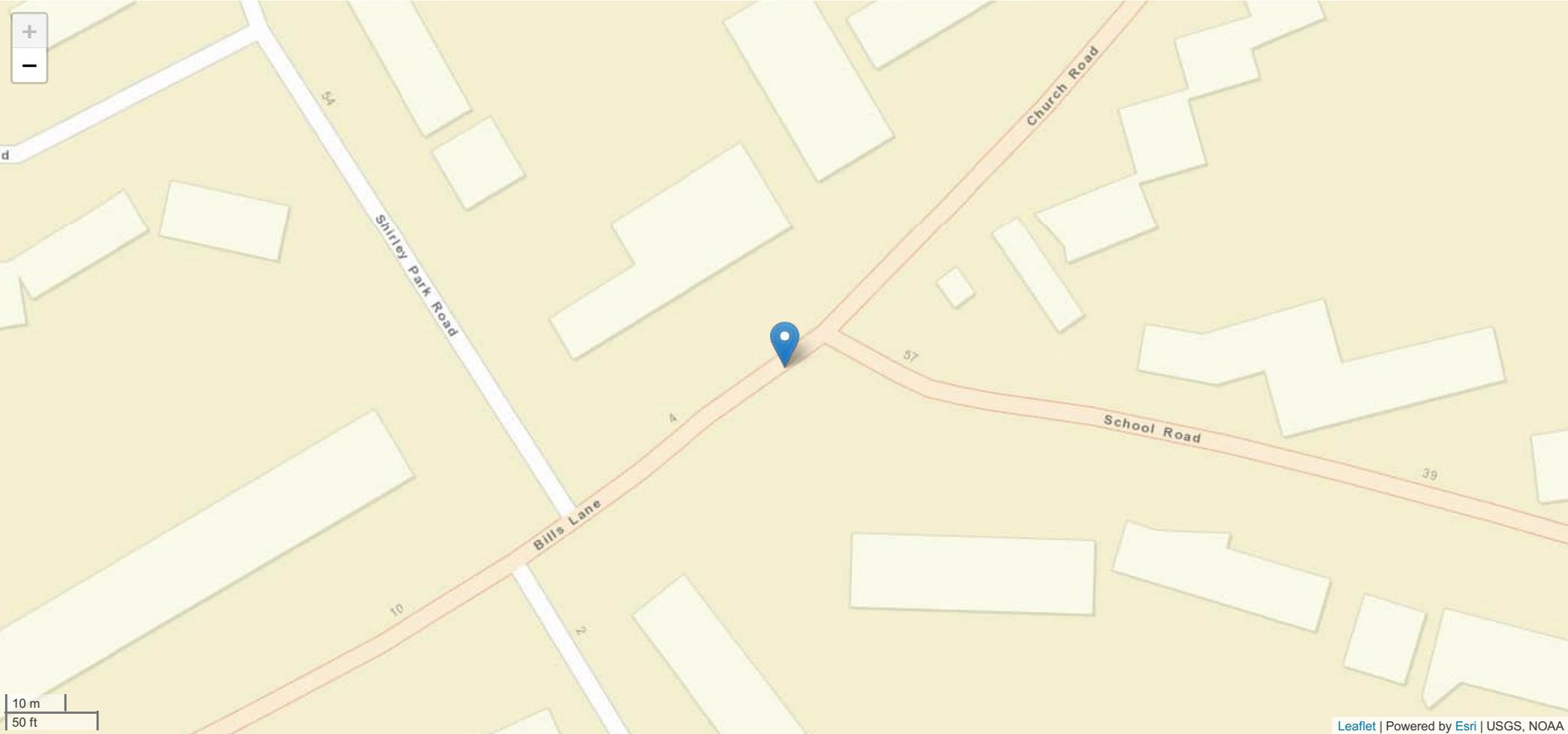
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	FORD, FIESTA S	Positive	None	On main c way - not in restricted lane	None	Offside	Going ahead other	N S

# Incident Record Number: 49 - Sunday 09:00 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L126235522	08/05/2022	09:00	Sunday	2	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
BILLS LANE	No Data Provided



## Incident Record Number: 49 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
BILLS LANE	411870, 278676	Unknown	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Poor turn or manoeuvre	Failed to look properly (pedestrian)	Failed to judge other persons path or speed

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	No Data Provided	Unknown
2	2	Driver or rider	Slight	No Data Provided	Unknown

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	FIAT, PUNTO 55 S	No Data Provided	None	On main c way - not in restricted lane	None	Front	Turning right	SE SW

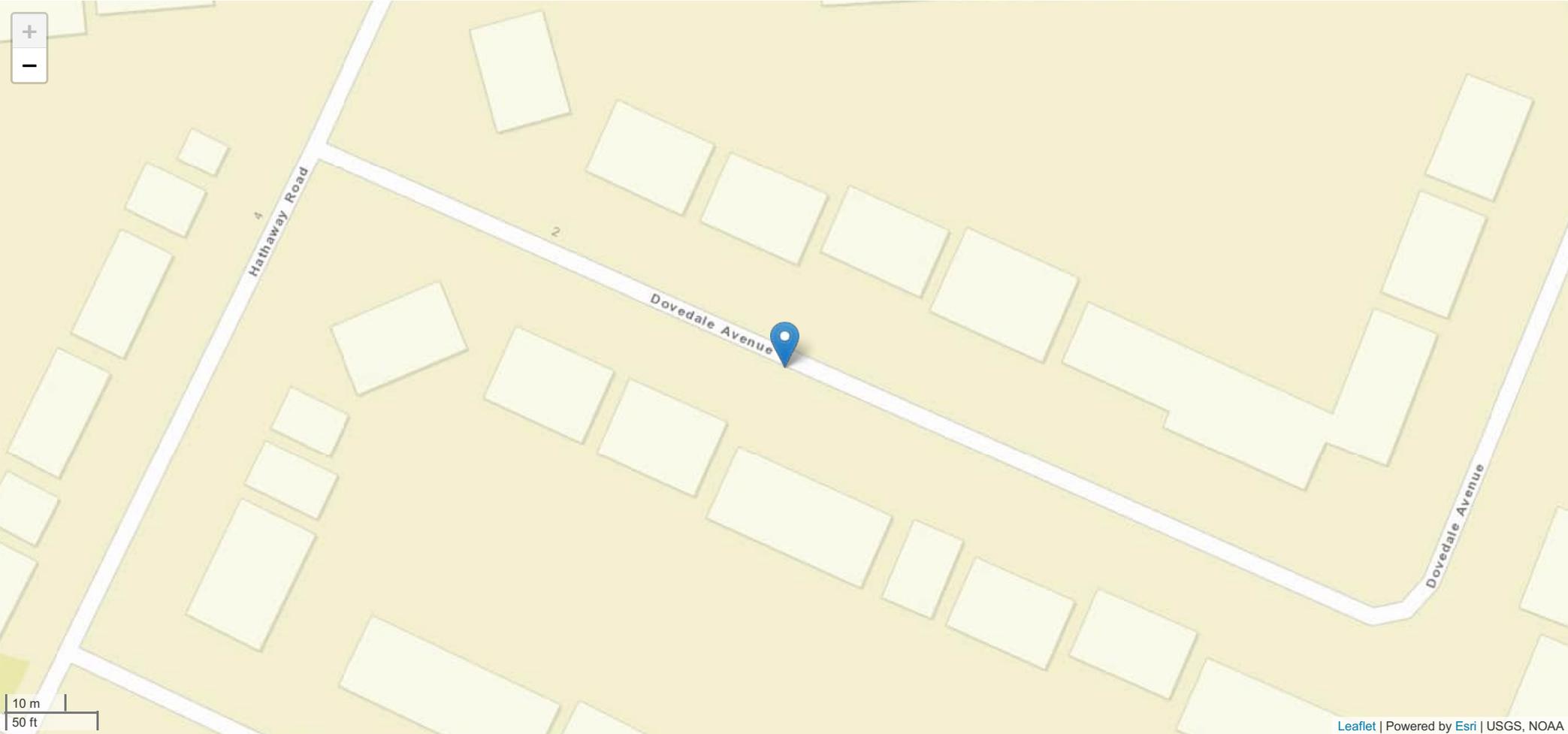
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	JAGUAR, X-TYPE V6	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	NE SW

# Incident Record Number: 50 - Wednesday 08:45 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L118785122	18/05/2022	08:45	Wednesday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
DOVEDALE AVENUE	No Data Provided



## Incident Record Number: 50 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
DOVEDALE AVENUE	411881, 278061	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to judge other persons path or speed	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	No Data Provided	Unknown

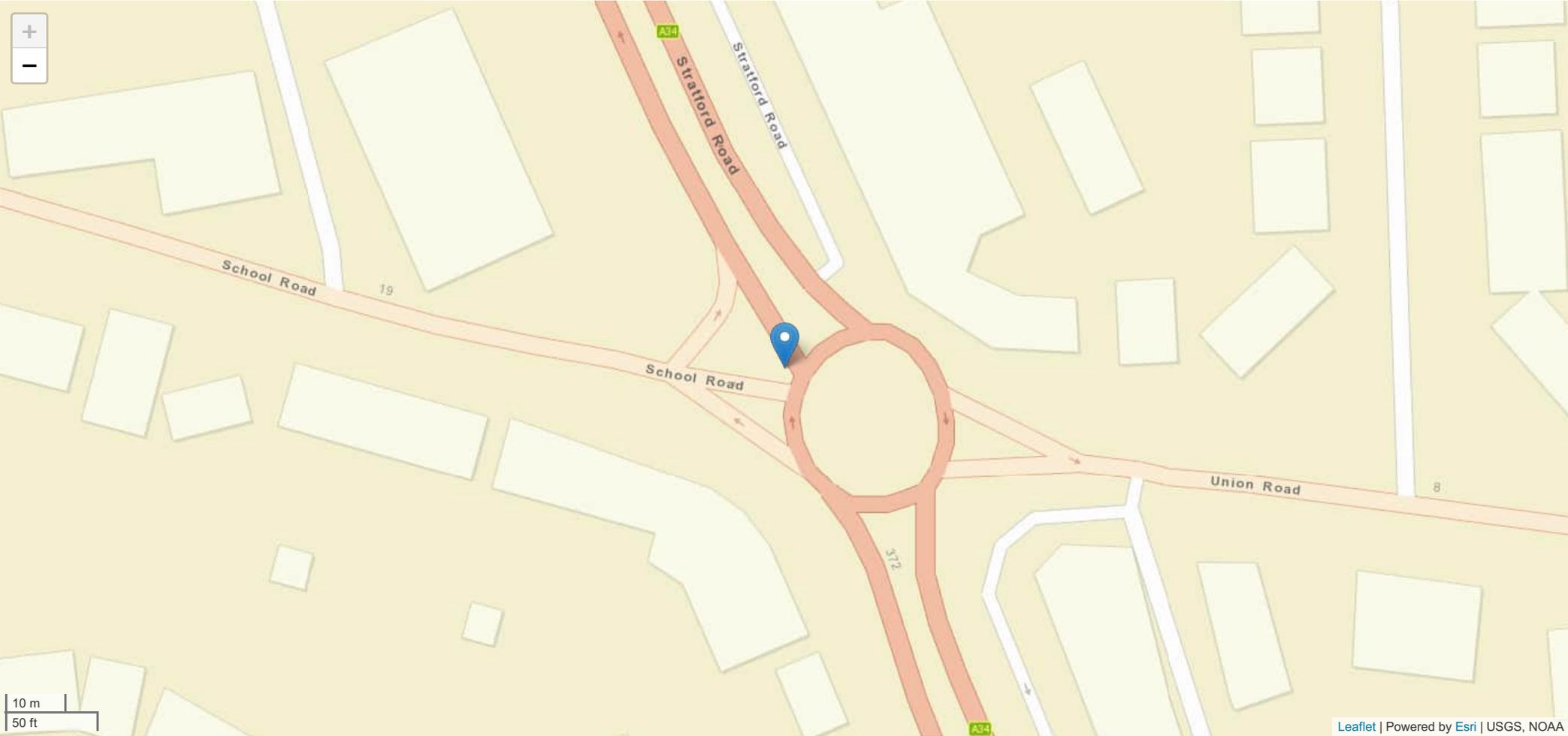
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	57	50 - 59 years	Car, No tow articulation	FORD, FIESTA	Not applicable	None	On main c way - not in restricted lane	None	Offside	Going ahead other	SE NW
2	No Data Provided	Data missing or out of range	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

# Incident Record Number: 51 - Saturday 08:13 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L125403722	02/07/2022	08:13	Saturday	2	1	Daylight	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH SCHOOL ROAD	No Data Provided



## Incident Record Number: 51 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH SCHOOL ROAD	412119, 278624	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Failed to judge other persons path or speed	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Passenger	Slight	52	50 - 59 years

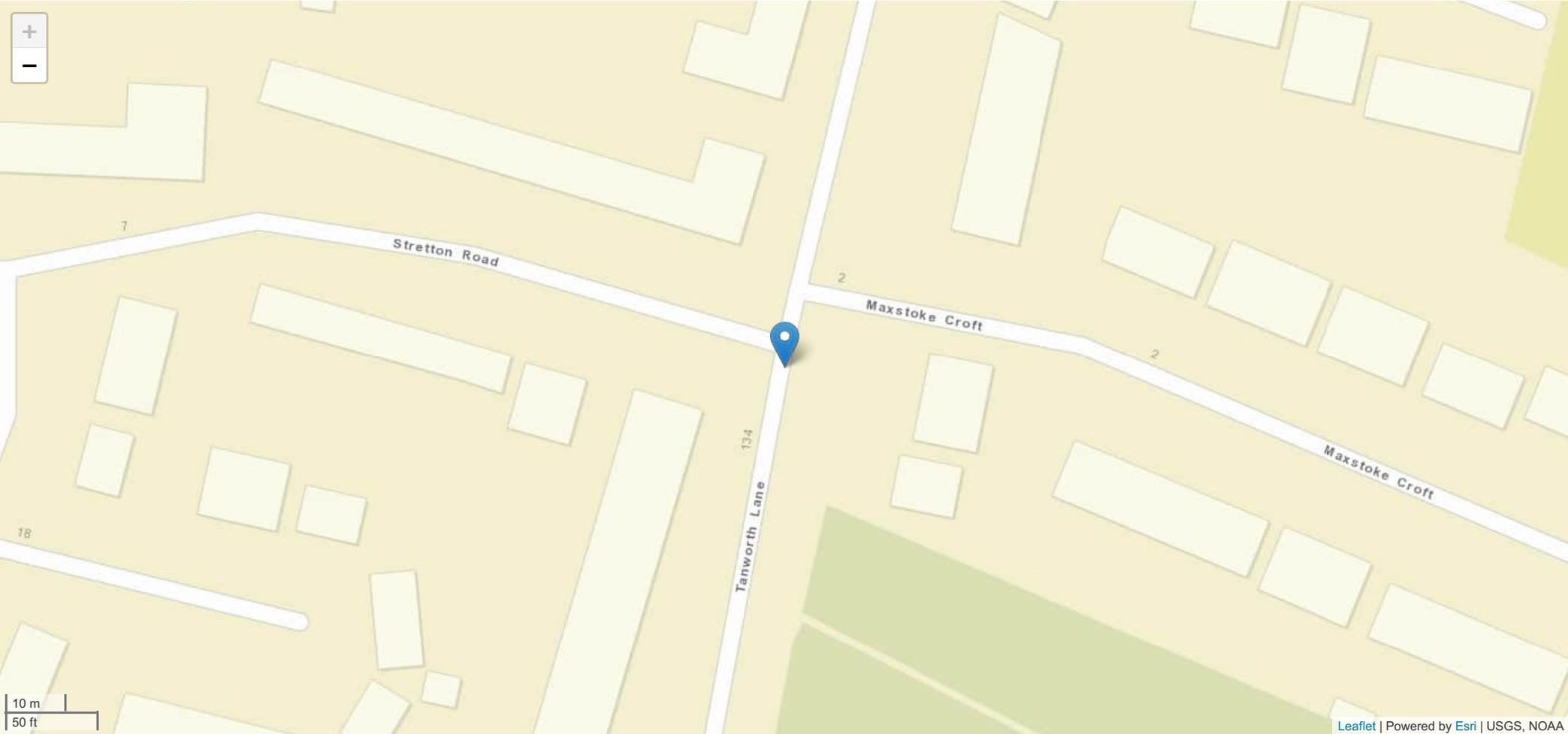
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	36	30 - 39 years	Car, No tow articulation	FORD, B-MAX STUDIO	Not requested	None	On main c way - not in restricted lane	None	Front	Moving off	E NW
2	59	50 - 59 years	Car, No tow articulation	NISSAN, JUKE ACENTA	Not requested	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	N S

# Incident Record Number: 52 - Tuesday 17:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L120485922	26/07/2022	17:30	Tuesday	3	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
TANWORTH LANE	No Data Provided



## Incident Record Number: 52 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
TANWORTH LANE	412049, 277626	Unknown	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Junction overshoot	Poor turn or manoeuvre	Failed to look properly (pedestrian)

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	3	Driver or rider	Slight	No Data Provided	Unknown

## Vehicle Details

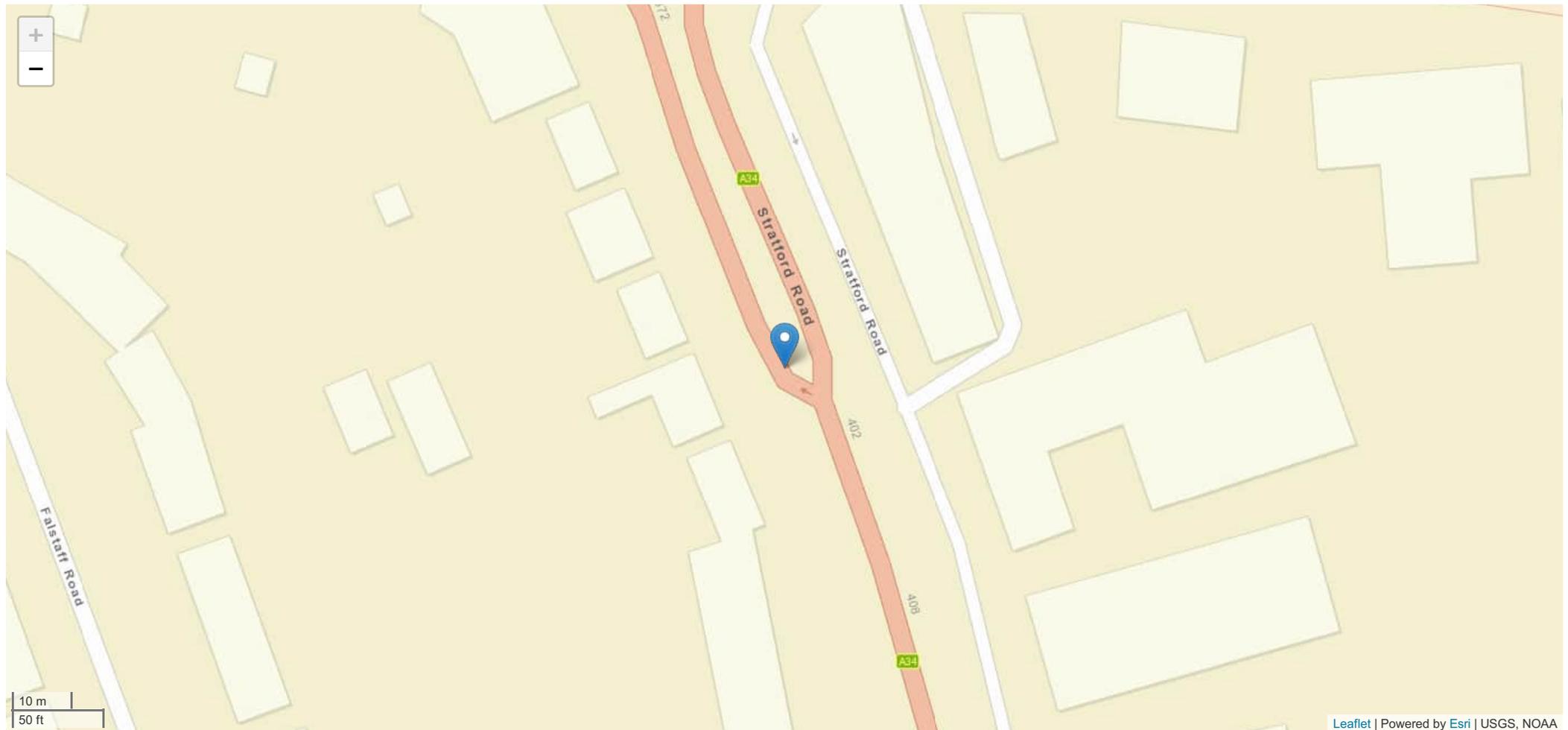
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	65	60 - 69 years	Car, No tow articulation	LAND ROVER, No Data Provided	Negative	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	46	40 - 49 years	Car, No tow articulation	TOYOTA, YARIS S	Negative	None	On main c way - not in restricted lane	None	Back	Slowing or stopping	N S
3	No Data Provided	Data missing or out of range	Motorcycle over 500cc, No tow articulation	BMW, No Data Provided	Negative	None	On main c way - not in restricted lane	None	Back	Slowing or stopping	N S

## Incident Record Number: 53 - Friday 18:13 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L122410122	29/07/2022	18:13	Friday	1	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
O/S NO. 400 STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 53 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
O/S NO. 400 STRATFORD ROAD (A34)	412157, 278535	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Aggressive driving	Careless or Reckless or In a hurry (Driver)	Loss of control

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	34	30 - 39 years

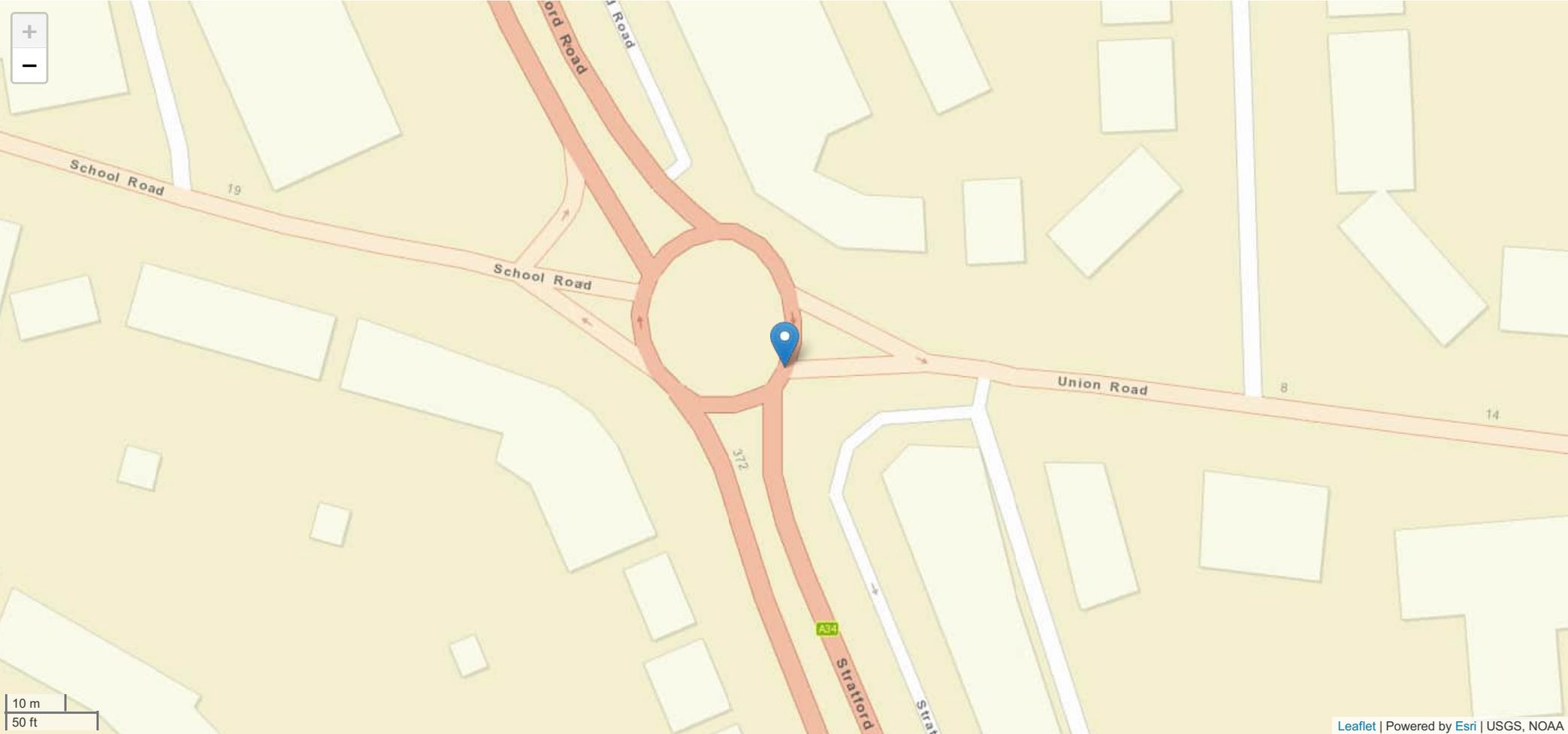
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	34	30 - 39 years	Other vehicle, No tow articulation	YAMAHA, No Data Provided	Not requested	Overtuned	No Data Provided	Kerb	Offside	Going ahead other	SE NW

# Incident Record Number: 54 - Thursday 14:37 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L122406922	04/08/2022	14:37	Thursday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 54 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412144, 278608	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	57	50 - 59 years

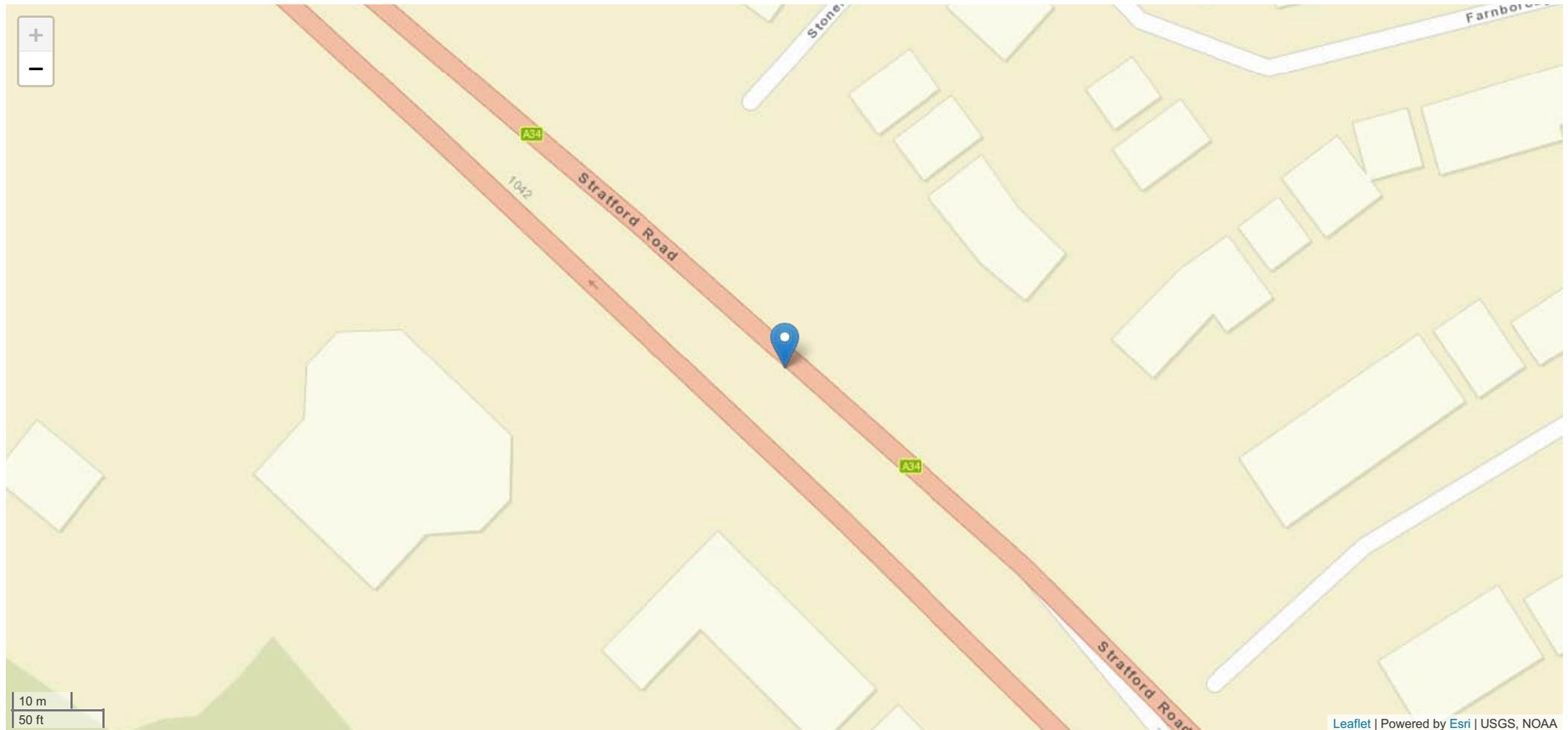
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	AUDI, A6 S LINE BLACK ED T	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE
2	57	50 - 59 years	Car, No tow articulation	VOLVO, XC40 R-DESIGN PRO T3	Not requested	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	SE NW

## Incident Record Number: 55 - Sunday 09:29 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L122478622	07/08/2022	09:29	Sunday	2	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 55 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	413658, 276605	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Following too close	Failed to look properly (pedestrian)	Loss of control

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Serious	75	70 - 79 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	75	70 - 79 years	Motorcycle over 500cc, No tow articulation	HONDA, ST 1300 A-9 1300	Not applicable	None	On main c way - not in restricted lane	None	Back	Going ahead other	SE NW

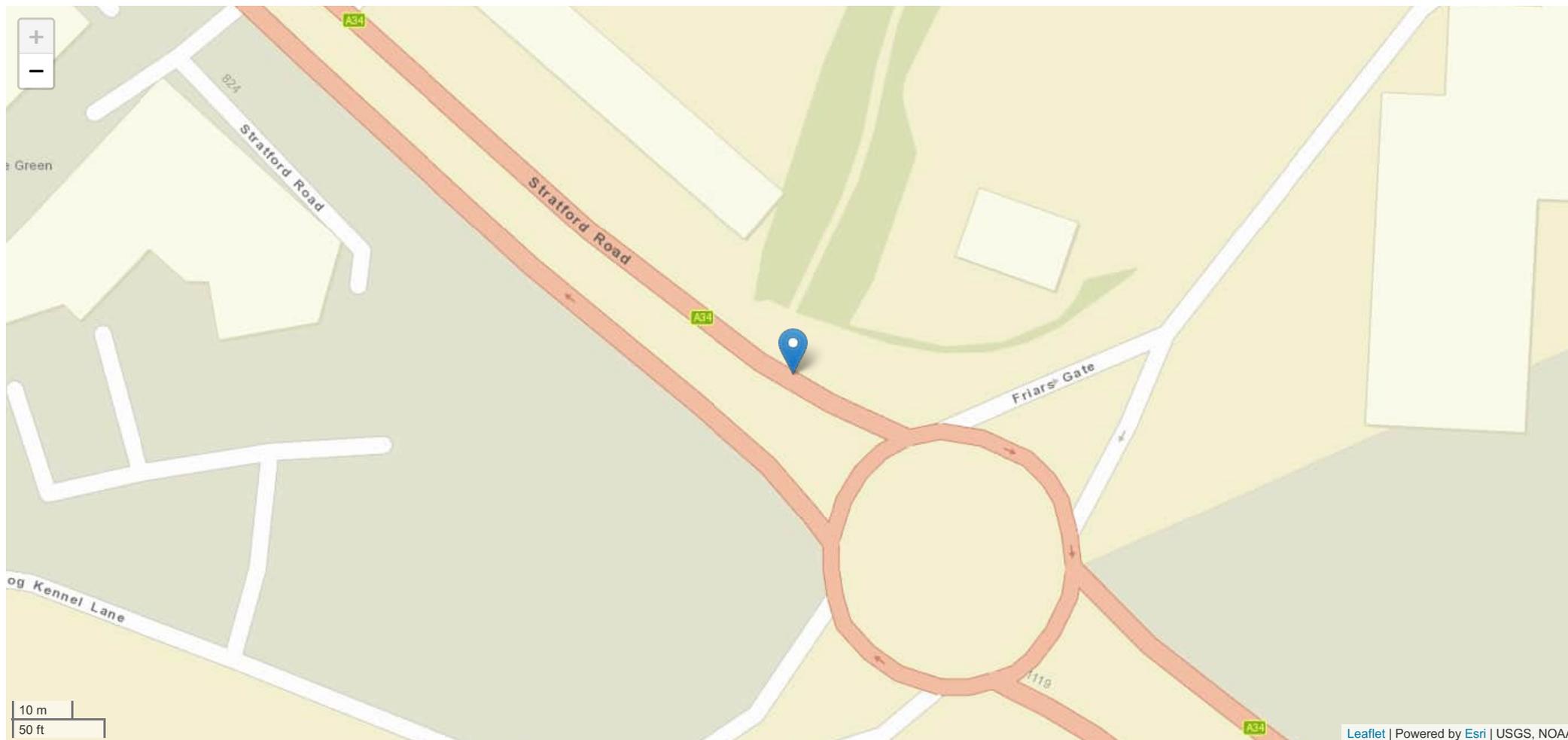
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	VOLKSWAGEN, GOLF GT TDI 140	Not applicable	None	On main c way - not in restricted lane	None	Front	Overtaking moving vehicle offside	SE NW

## Incident Record Number: 56 - Thursday 16:35 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L123259622	18/08/2022	16:35	Thursday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 56 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	413039, 277094	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	63	60 - 69 years

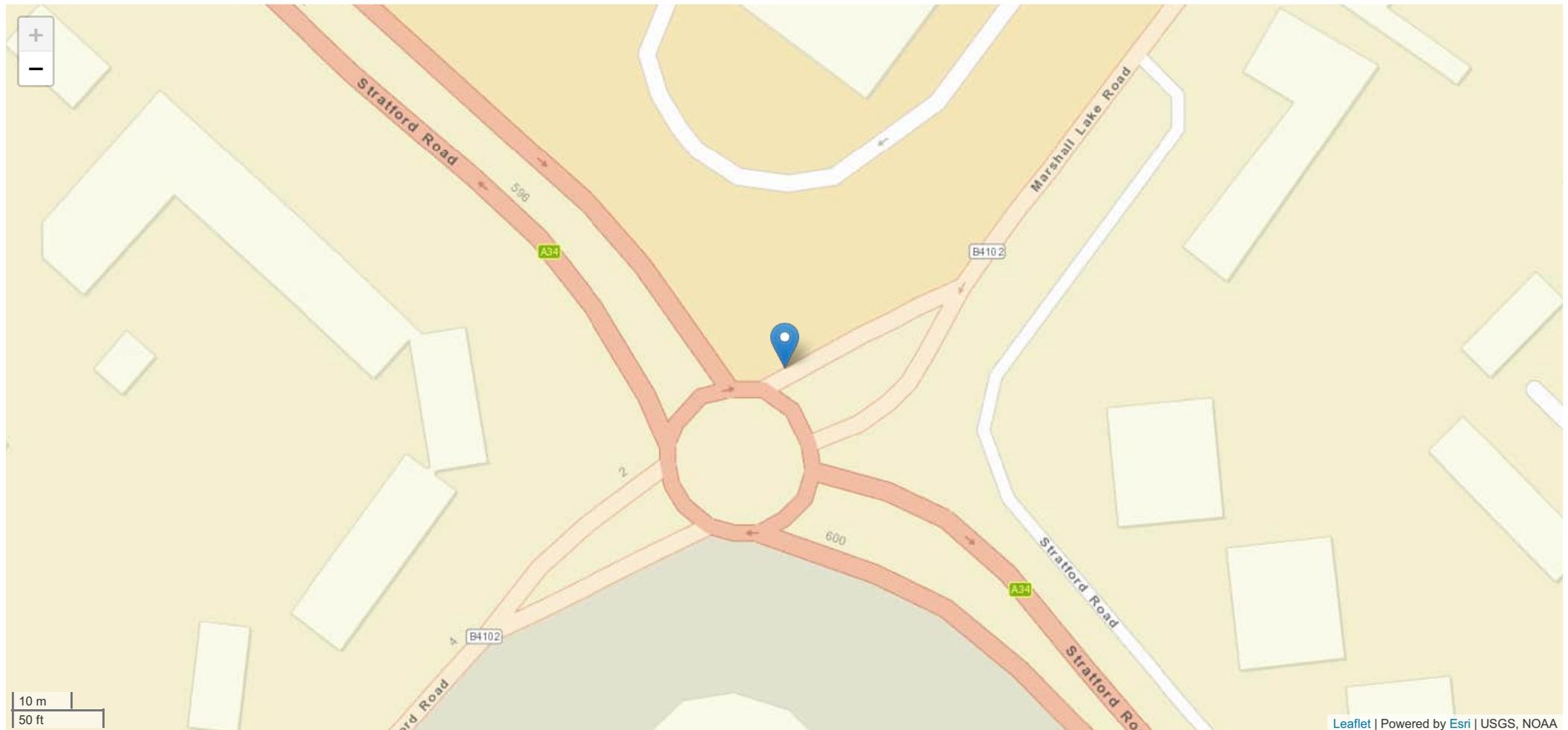
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	63	60 - 69 years	Car, No tow articulation	FORD, FIESTA GHIA AUTO	Not requested	None	On main c way - not in restricted lane	None	Back	Going ahead other	SE NW
2	No Data Provided	Data missing or out of range	Car, No tow articulation	AUDI, S3 BLACK ED TFSI QUA	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

## Incident Record Number: 57 - Wednesday 05:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L127072922	24/08/2022	05:30	Wednesday	2	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH MARSHALL LAKE ROAD (B4102)	No Data Provided



## Incident Record Number: 57 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH MARSHALL LAKE ROAD (B4102)	412449, 277733	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Disobeyed Give Way or Stop sign or markings	Exceeding speed limit	Failed to look properly (pedestrian)

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	48	40 - 49 years
2	1	Passenger	Slight	43	40 - 49 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	48	40 - 49 years	Car, No tow articulation	SEAT, ARONA FR SPORT TSI S	Negative	None	On main c way - not in restricted lane	None	Offside	Going ahead other	NE SW

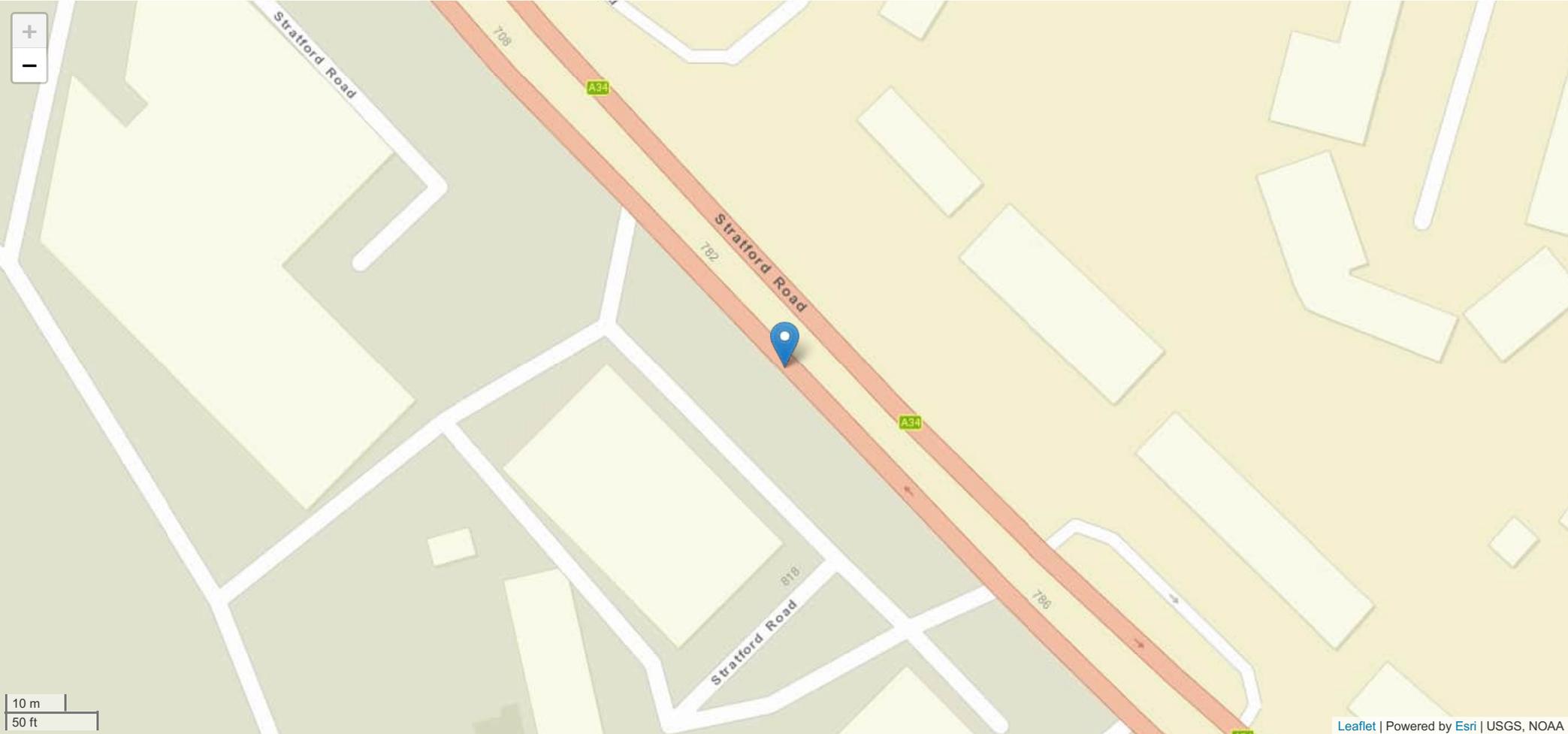
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	51	50 - 59 years	Car, No tow articulation	VAUXHALL, INSIGNIA DSIGN NAV C	Negative	None	On main c way - not in restricted lane	None	Front	Going ahead other	NE NW

# Incident Record Number: 58 - Sunday 14:21 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L124022322	18/09/2022	14:21	Sunday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 58 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412893, 277210	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	64	60 - 69 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	26	20 - 29 years	Car, No tow articulation	BMW, M235I AUTO	Not applicable	Skidded	On main c way - not in restricted lane	Kerb	Front	Changing lane to right	S N

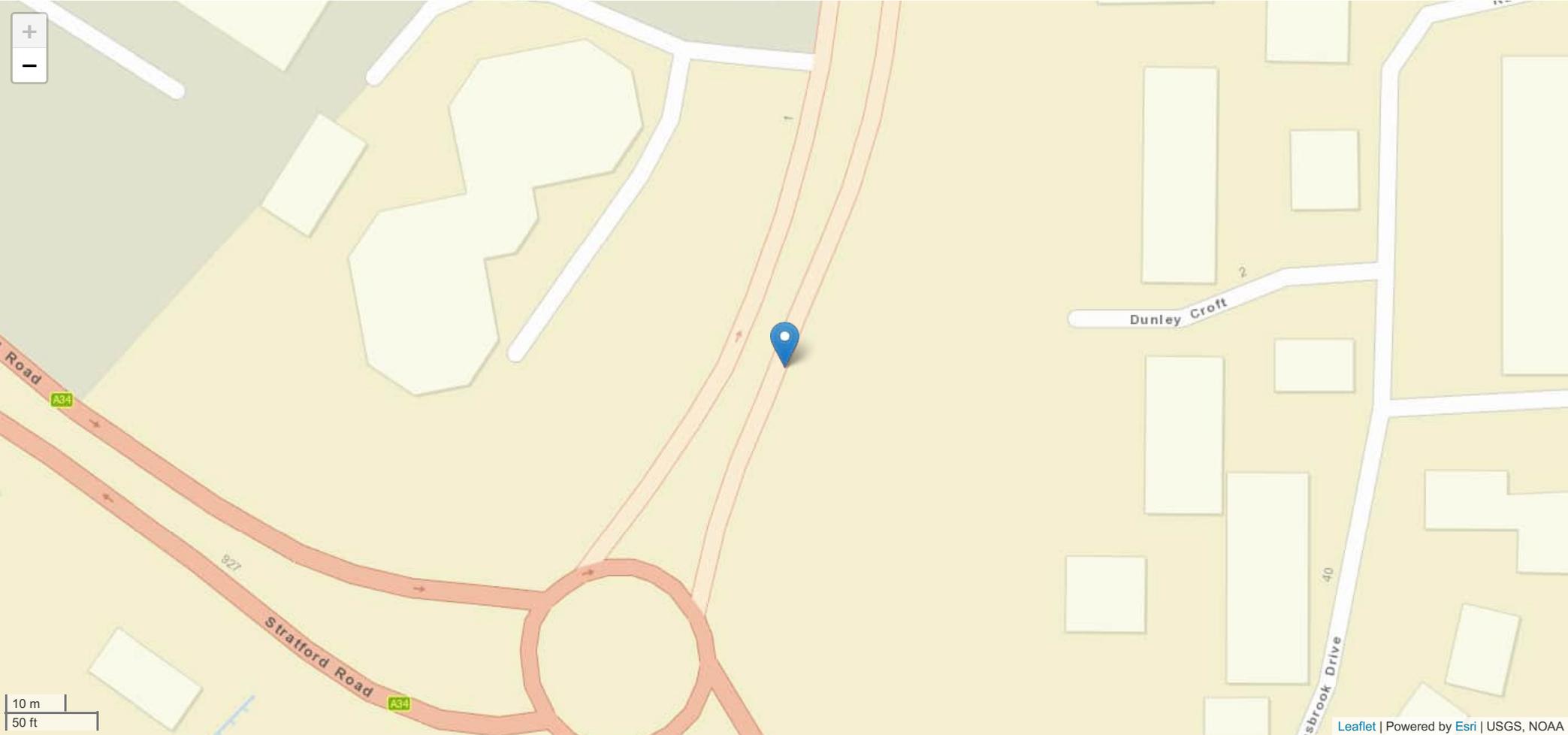
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	64	60 - 69 years	Car, No tow articulation	NISSAN, QASHQAI TEKNA + DIG-	Driver not contacted at time of accident	Skidded	On main c way - not in restricted lane	Kerb	Nearside	Going ahead other	S N

# Incident Record Number: 59 - Wednesday 07:59 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L127276022	28/09/2022	07:59	Wednesday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
MONKSPATH HALL ROAD	No Data Provided



## Incident Record Number: 59 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
MONKSPATH HALL ROAD	413507, 276819	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Following too close	Careless or Reckless or In a hurry

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Passenger	Slight	18	16 - 19 years

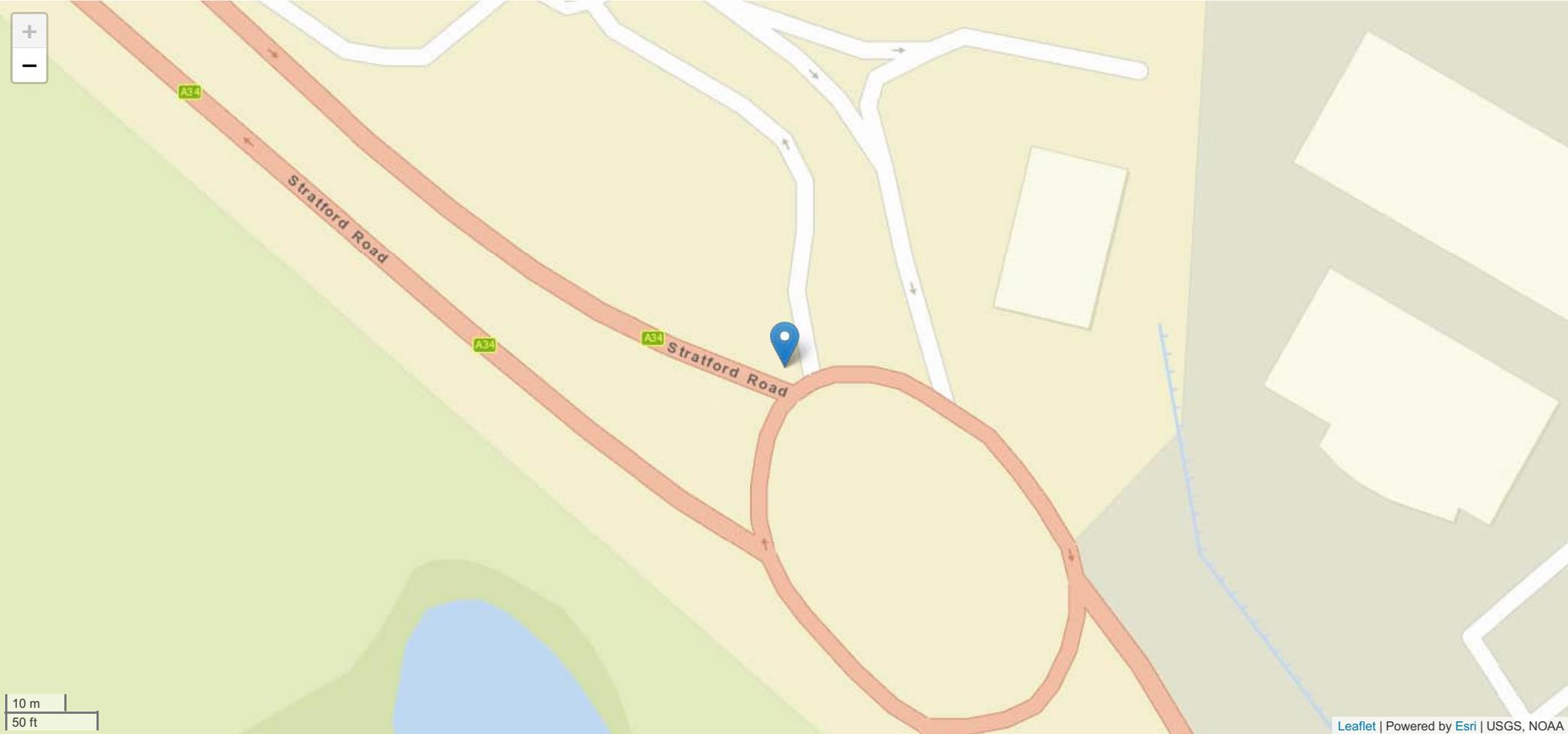
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	FORD, FIESTA	Not applicable	None	On main c way - not in restricted lane	None	Front	Going ahead other	SW NE
2	52	50 - 59 years	Car, No tow articulation	VOLKSWAGEN, TOURAN S FSI	Not applicable	None	On main c way - not in restricted lane	None	Back	Waiting to go held up	SW NE

# Incident Record Number: 60 - Sunday 21:50 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L127274322	02/10/2022	21:50	Sunday	1	2	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 60 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	414362, 275984	A 34	Unknown	Roundabout	Auto traffic signal

Contributory 1	Contributory 2	Contributory 3
Impaired by alcohol	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	46	40 - 49 years
2	1	Passenger	Slight	54	50 - 59 years

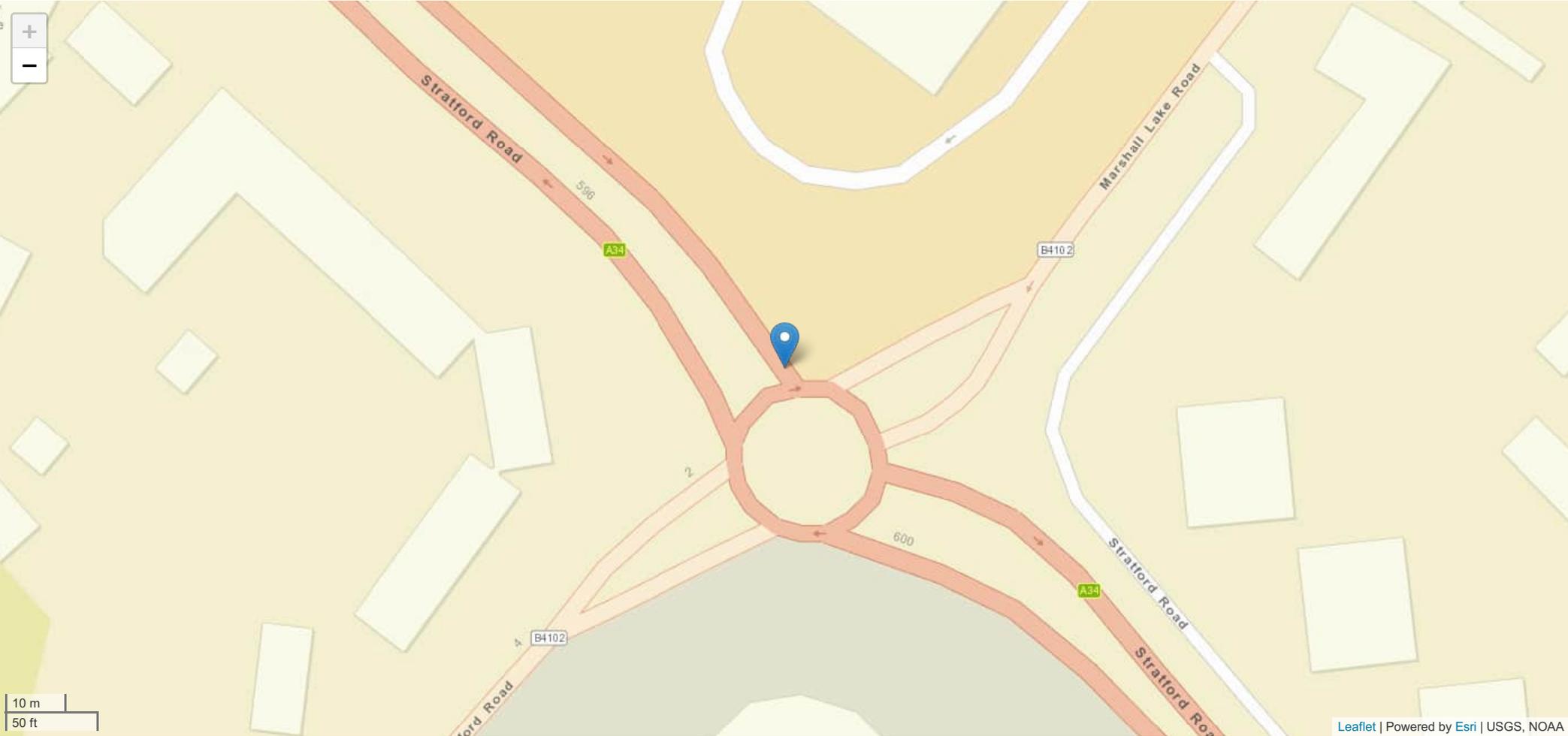
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	46	40 - 49 years	Car, No tow articulation	VOLKSWAGEN, No Data Provided	Not provided medical reasons	None	No Data Provided	Central island of roundabout	Front	Going ahead other	NW SE

# Incident Record Number: 61 - Saturday 14:25 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L124743022	19/11/2022	14:25	Saturday	2	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 61 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412438, 277733	A 34	B 4102	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Junction restart	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Serious	40	40 - 49 years

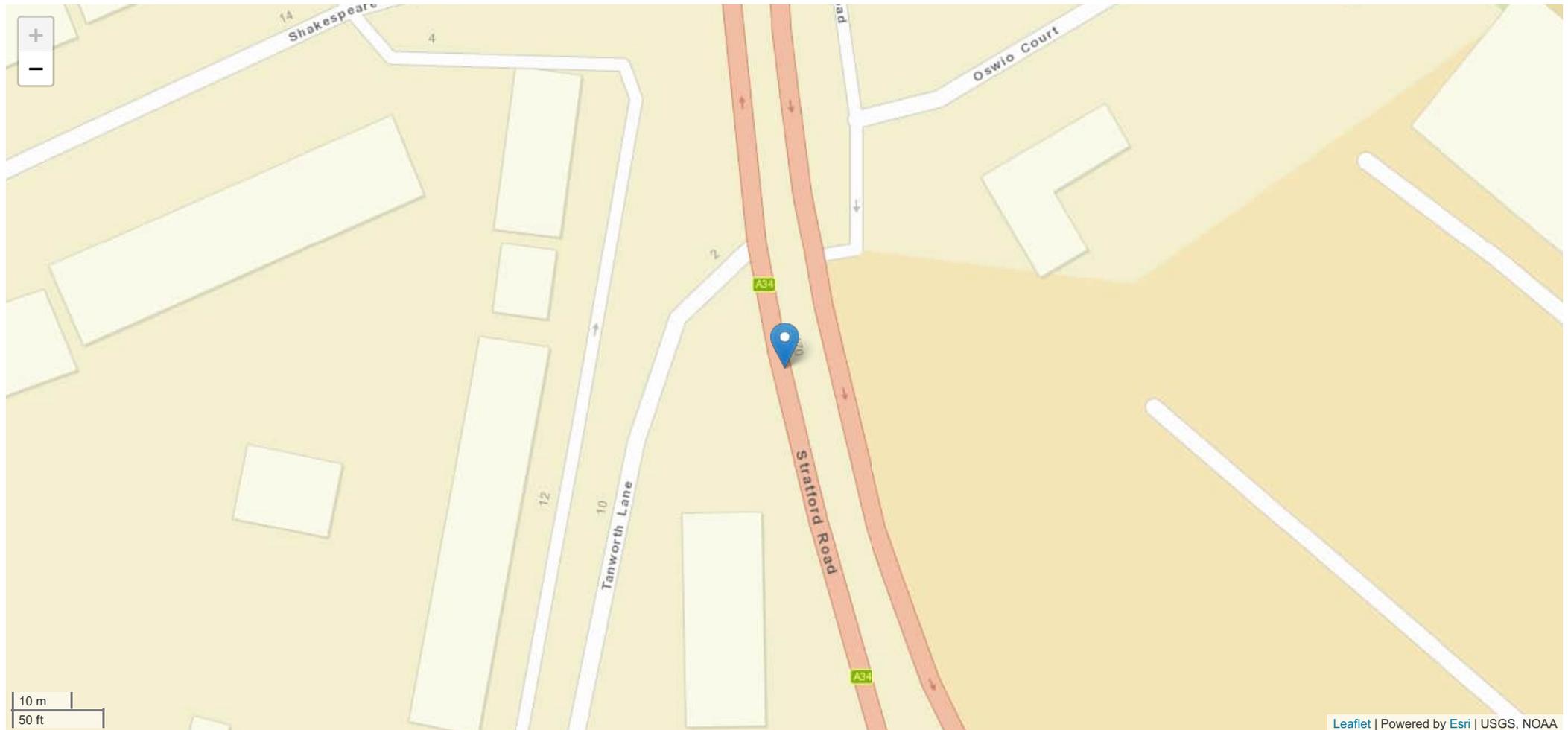
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	LEXUS, ES 300H F SPORT CVT	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	N W
2	40	40 - 49 years	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	N S

## Incident Record Number: 62 - Wednesday 14:00 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L125116422	23/11/2022	14:00	Wednesday	1	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 62 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412215, 278167	A 34	Unknown	Other junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Careless or Reckless or In a hurry (Driver)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Serious	20	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	No Data Provided, No Data Provided	Not applicable	None	No Data Provided	None	Front	Going ahead other	S N

# Incident Record Number: 63 - Friday 16:48 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L127600422	25/11/2022	16:48	Friday	2	1	Darkness - no lighting	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
TANWORTH LANE (B4102) AT JUNCTION WITH LADY LANE	No Data Provided



## Incident Record Number: 63 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
TANWORTH LANE (B4102) AT JUNCTION WITH LADY LANE	412205, 276056	B 4102	Unknown	T or staggered junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Dazzling headlights	Failed to look properly (pedestrian)	Failed to judge other persons path or speed

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	48	40 - 49 years

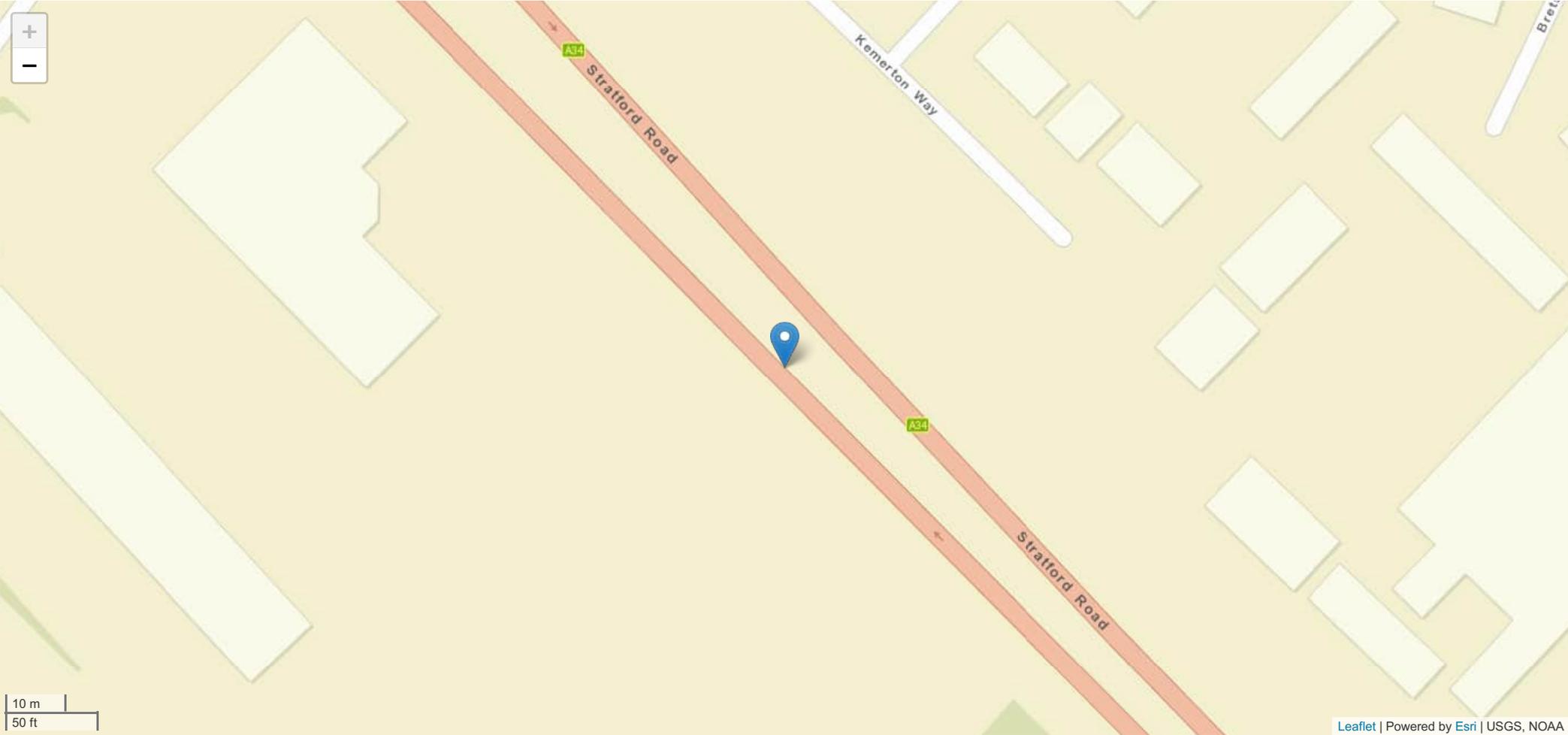
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	48	40 - 49 years	Car, No tow articulation	DACIA, SANDERO AMBIANCE TCE	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S
2	53	50 - 59 years	Car, No tow articulation	FORD, MONDEO ZETEC ECONETI	Not applicable	None	On main c way - not in restricted lane	None	Front	Turning right	SW N

# Incident Record Number: 64 - Monday 14:16 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L127656222	12/12/2022	14:16	Monday	2	1	Daylight	Other	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 64 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	413830, 276422	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	50	50 - 59 years

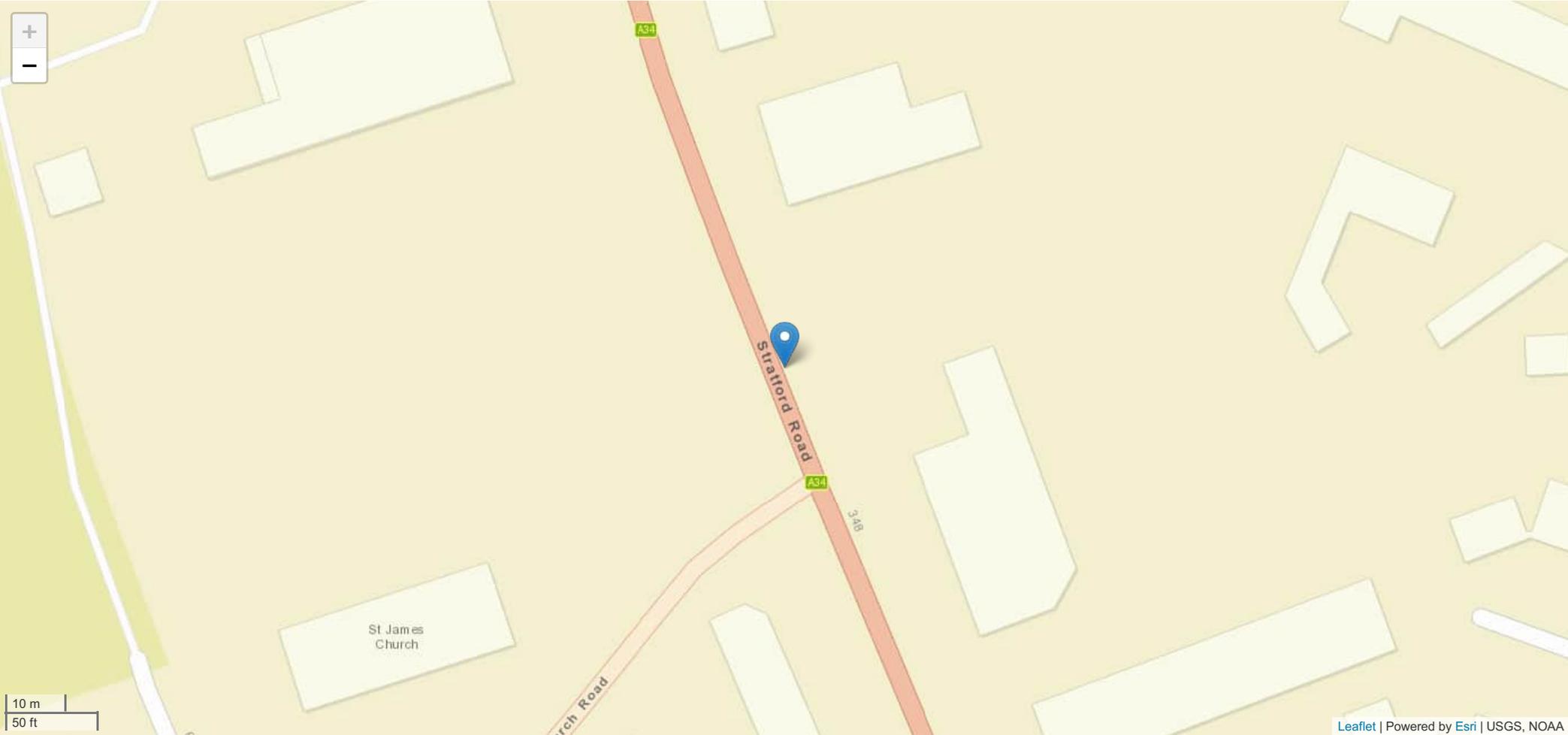
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	55	50 - 59 years	Car, No tow articulation	HONDA, CIVIC VTEC-E 1.5l	Not requested	None	On main c way - not in restricted lane	None	Front	Moving off	NW SE
2	50	50 - 59 years	Car, No tow articulation	LAND ROVER, No Data Provided	Not applicable	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

# Incident Record Number: 65 - Friday 19:40 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L128521122	23/12/2022	19:40	Friday	3	2	Darkness - lights lit	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 65 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412018, 278861	A 34	Unknown	T or staggered junction	Auto traffic signal

Contributory 1	Contributory 2	Contributory 3
Poor turn or manoeuvre	Impaired by drugs (illicit or medicinal)(Driver)	Failed to look properly (pedestrian)

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	No Data Provided	Unknown
2	1	Passenger	Slight	26	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	CITROEN, DS3 DSTYLE + E-HDI	Not applicable	None	On main c way - not in restricted lane	None	Front	Turning left	SE NE

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	44	40 - 49 years	Car, No tow articulation	TOYOTA, AYGO VVT-I	Not requested	None	On main c way - not in restricted lane	None	Back	Going ahead other	SE NW
3	22	20 - 29 years	Car, No tow articulation	FORD, FIESTA ZETEC	Not requested	None	On main c way - not in restricted lane	None	Back	Waiting to go held up	SE NW

# Incident Record Number: 66 - Wednesday 09:07 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L128520923	04/01/2023	09:07	Wednesday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 66 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412205, 278230	A 34	Unknown	T or staggered junction	Auto traffic signal

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Careless or Reckless or In a hurry (Driver)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	30	30 - 39 years

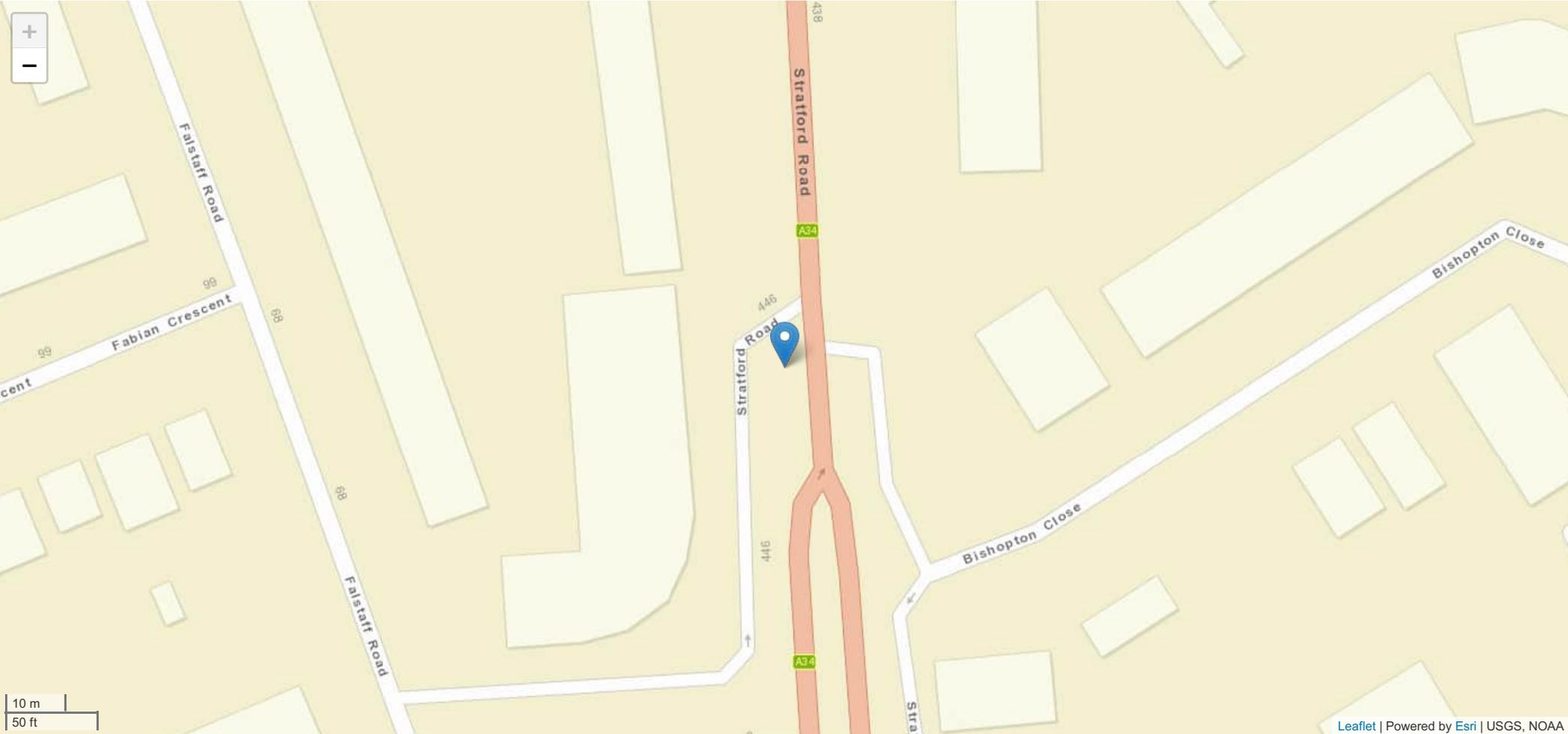
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	57	50 - 59 years	Car, No tow articulation	KIA, CEE'D S	Not requested	None	On main c way - not in restricted lane	None	Did not impact	Going ahead other	N S
2	30	30 - 39 years	Car, No tow articulation	VAUXHALL, CORSA	Not requested	None	On main c way - not in restricted lane	None	Did not impact	Turning right	S W

# Incident Record Number: 67 - Wednesday 09:11 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L131266523	01/02/2023	09:11	Wednesday	3	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 67 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412201, 278295	A 34	Unknown	Slip road	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Poor turn or manoeuvre	Disobeyed Give Way or Stop sign or markings

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	33	30 - 39 years

## Vehicle Details

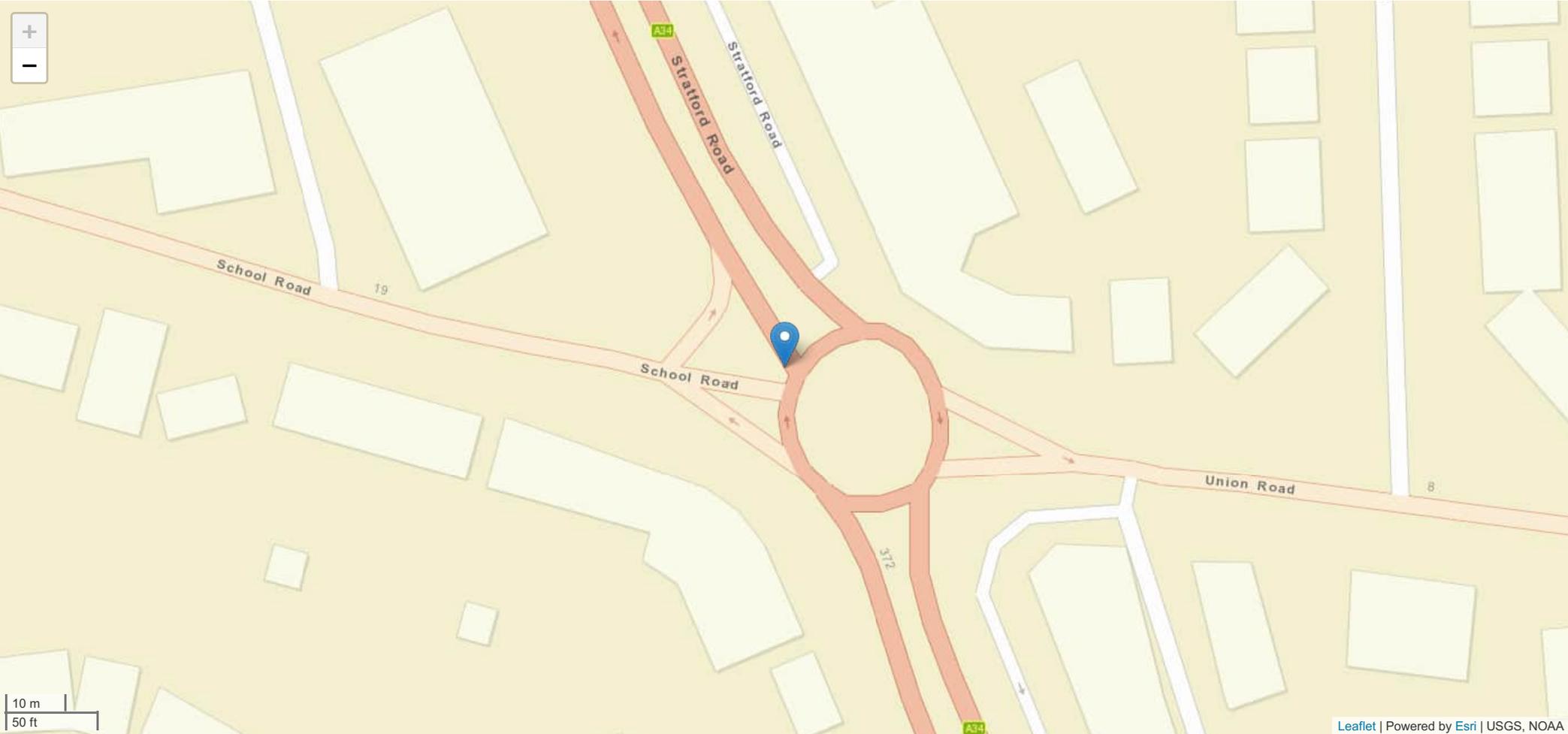
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	25	20 - 29 years	Van / Goods 3.5 tonnes mgw or under, No tow articulation	MERCEDES, SPRINTER 313 CDI	Negative	None	On main c way - not in restricted lane	None	Offside	Turning right	S W

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	33	30 - 39 years	Car, No tow articulation	TOYOTA, AURIS ICON VALVEMATI	Not applicable	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S
3	52	50 - 59 years	Car, No tow articulation	LEXUS, CT 200H ADVANCE CVT	Negative	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S

# Incident Record Number: 68 - Tuesday 17:40 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L128603723	28/02/2023	17:40	Tuesday	2	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) AT JUNCTION WITH SCHOOL ROAD	No Data Provided



## Incident Record Number: 68 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) AT JUNCTION WITH SCHOOL ROAD	412120, 278624	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	22	20 - 29 years
2	1	Passenger	Slight	21	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	22	20 - 29 years	Car, No tow articulation	SEAT, ARONA FR TSI	No Data Provided	None	On main c way - not in restricted lane	None	Nearside	Going ahead other	NW SE

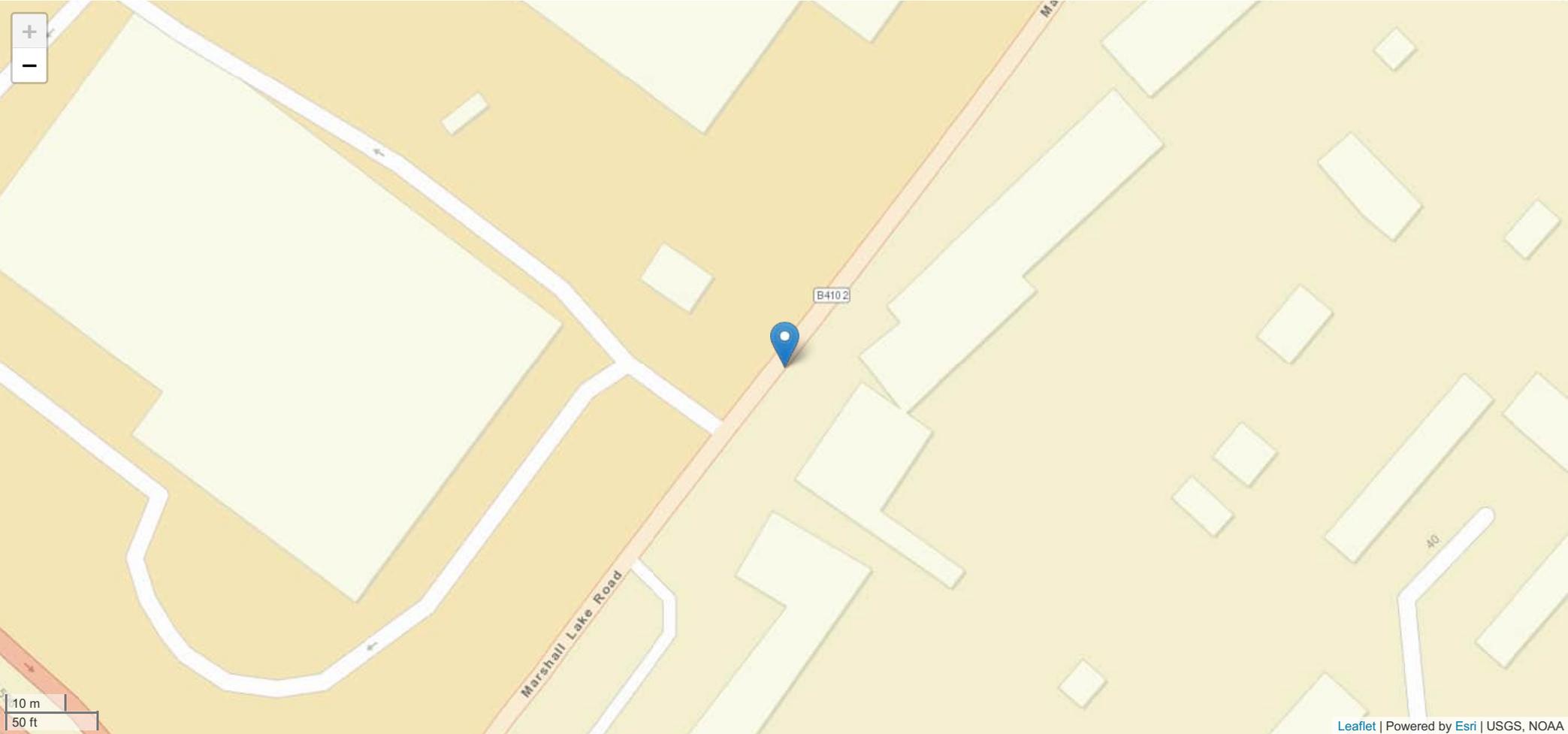
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	VOLKSWAGEN, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	E W

# Incident Record Number: 69 - Sunday 09:52 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L132017723	26/03/2023	09:52	Sunday	4	2	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
MARSHALL LAKE ROAD (B4102) O/S NO. 24	No Data Provided



## Incident Record Number: 69 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
MARSHALL LAKE ROAD (B4102) O/S NO. 24	412532, 277815	B 4102	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Exceeding speed limit	Uncorrected, defective eyesight	Driver using mobile phone

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	28	20 - 29 years
4	1	Passenger	Slight	25	20 - 29 years

## Vehicle Details

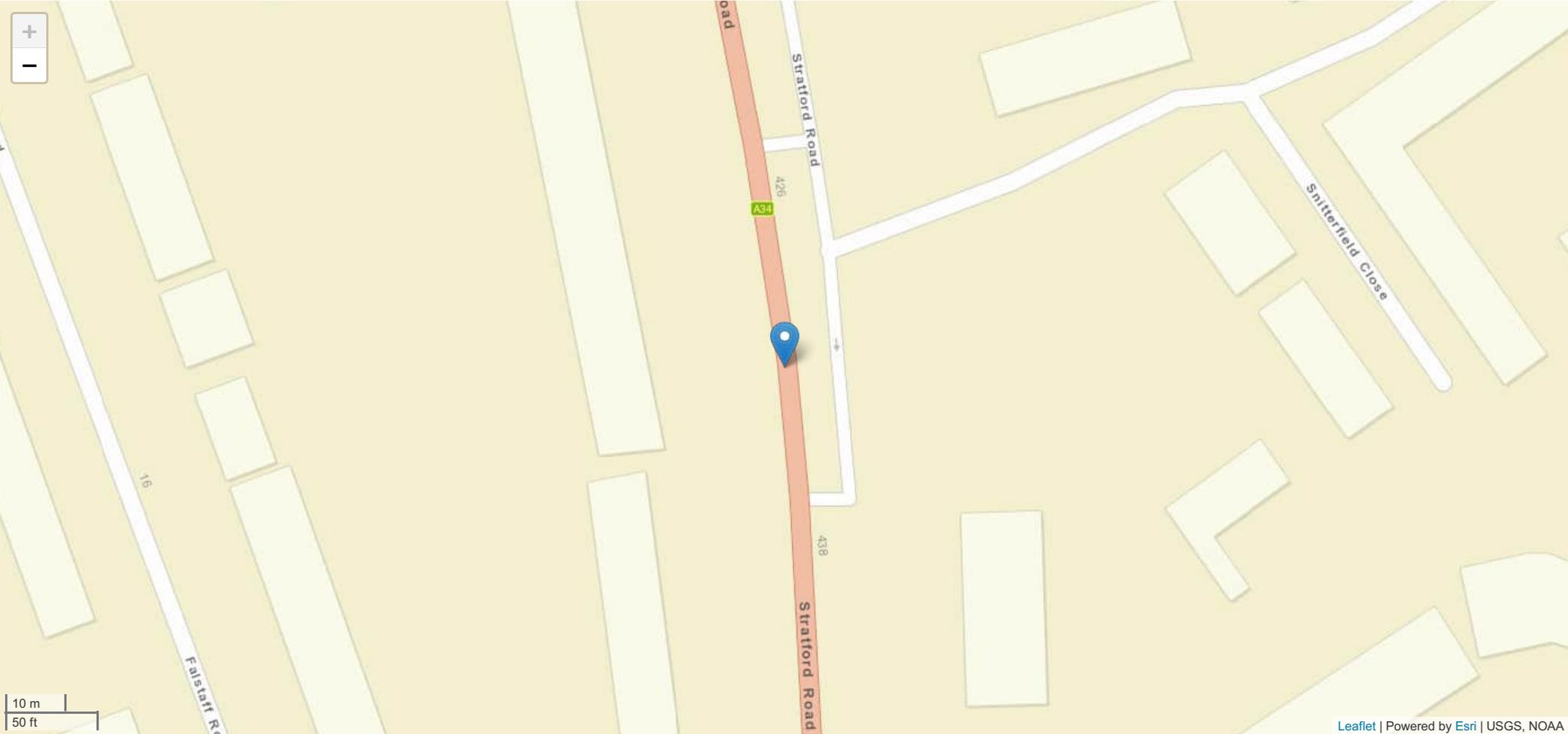
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	28	20 - 29 years	Car, No tow articulation	VAUXHALL, CORSA	Not applicable	None	On main c way - not in restricted lane	Parked vehicle	Front	Going ahead other	SW NE

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	No Data Provided	Data missing or out of range	Car, No tow articulation	KIA, SPORTAGE KX-3	Not applicable	None	On main c way - not in restricted lane	Parked vehicle	Back	Parked	0
3	No Data Provided	Data missing or out of range	Car, No tow articulation	VOLKSWAGEN, POLO	Not applicable	None	On main c way - not in restricted lane	Parked vehicle	Back	Parked	0
4	No Data Provided	Data missing or out of range	Car, No tow articulation	MINI, JOHN COOPER WORKS	Not applicable	None	On main c way - not in restricted lane	None	Back	Parked	0

# Incident Record Number: 70 - Thursday 15:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L131487723	27/04/2023	15:30	Thursday	2	2	Daylight	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 70 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412200, 278381	A 34	Unknown	Private drive or entrance	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	36	30 - 39 years
2	2	Passenger	Slight	11	8 - 11 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	ABARTH, 595	Not applicable	None	Cycleway or shared use footway not part of main carriageway	None	Offside	Turning right	N E

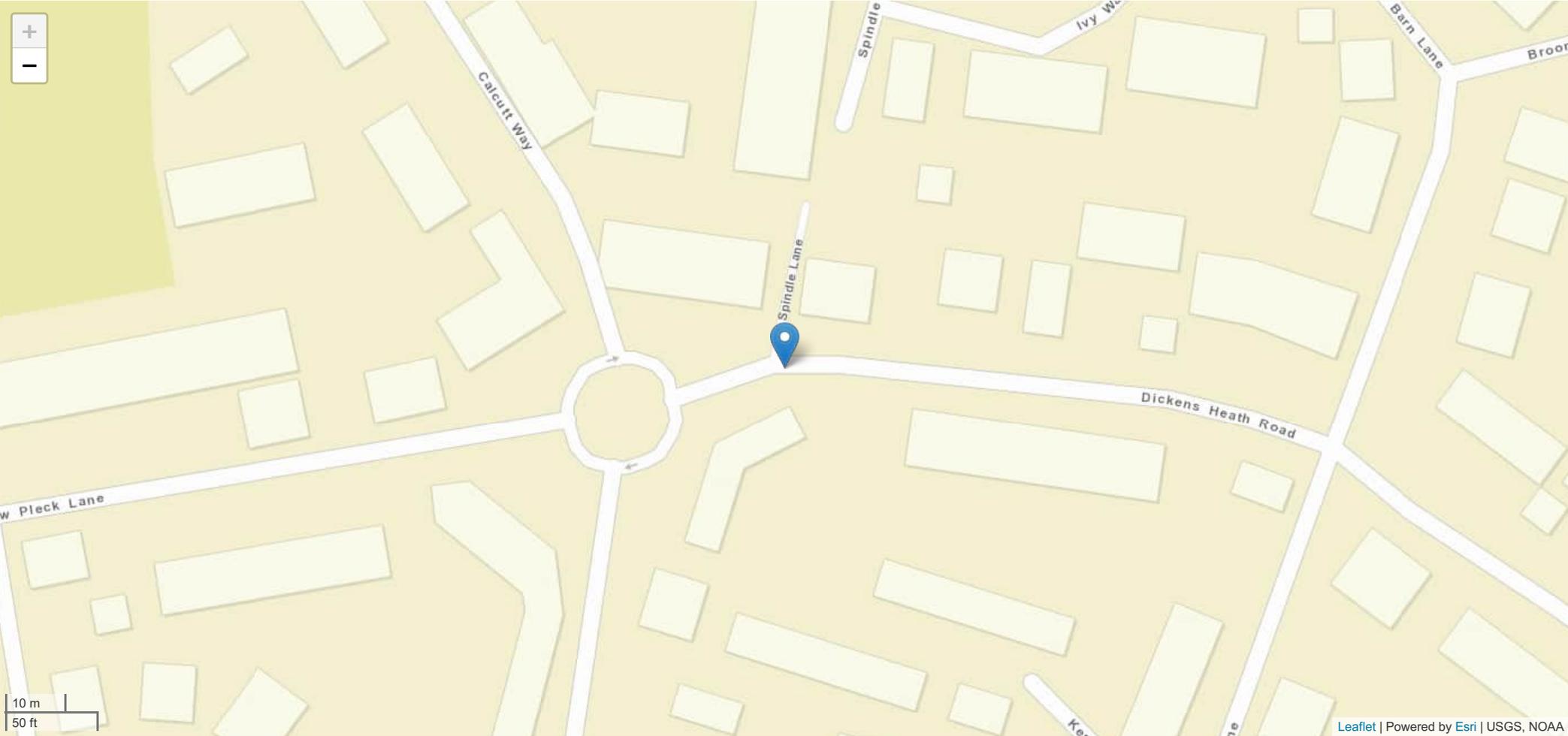
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	36	30 - 39 years	Car, No tow articulation	CITROEN, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	S N

# Incident Record Number: 71 - Friday 08:30 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L131412123	19/05/2023	08:30	Friday	1	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
DICKENS HEATH ROAD	No Data Provided



## Incident Record Number: 71 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
DICKENS HEATH ROAD	411198, 276656	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Disobeyed pedestrian crossing facility	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	11	8 - 11 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	TOYOTA, AYGO X-PLAY TSS VVT-	No Data Provided	None	No Data Provided	None	Front	Going ahead other	E W

# Incident Record Number: 72 - Friday 16:39 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L132826523	09/06/2023	16:39	Friday	2	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
TANWORTH LANE	No Data Provided



## Incident Record Number: 72 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
TANWORTH LANE	411990, 277282	Unknown	B 4102	Other junction	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Careless or Reckless or In a hurry	Failed to judge other persons path or speed	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	21	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	LAND ROVER, No Data Provided	Driver not contacted at time of accident	None	On main c way - not in restricted lane	None	Front	Turning right	N NE

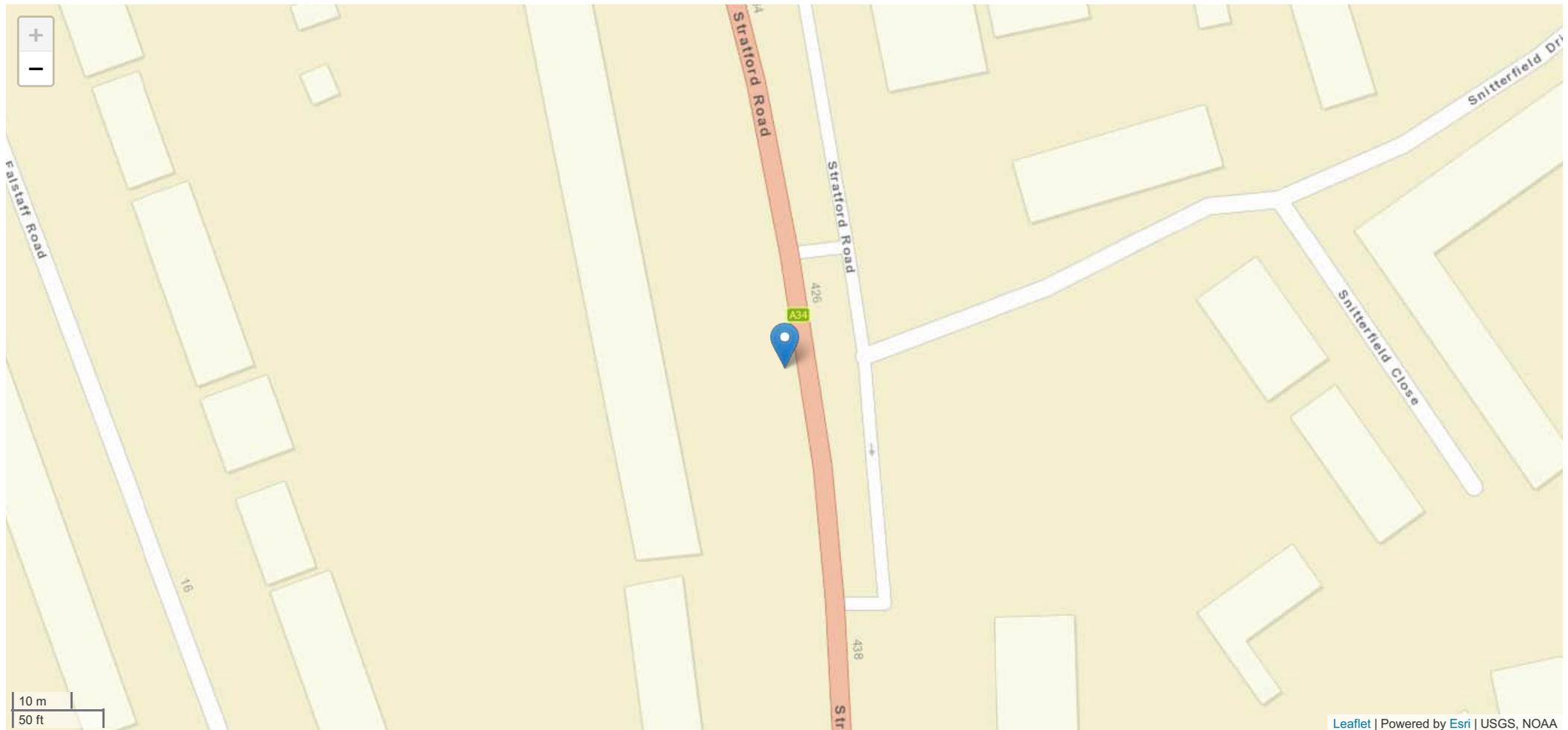
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	21	20 - 29 years	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Moving off	NE SW

## Incident Record Number: 73 - Friday 16:40 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L135754223	11/08/2023	16:40	Friday	1	1	Daylight	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) O/S NO. 430	No Data Provided



## Incident Record Number: 73 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) O/S NO. 430	412194, 278398	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Dangerous action in carriageway (e.g. playing)	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	3	0 - 4 years

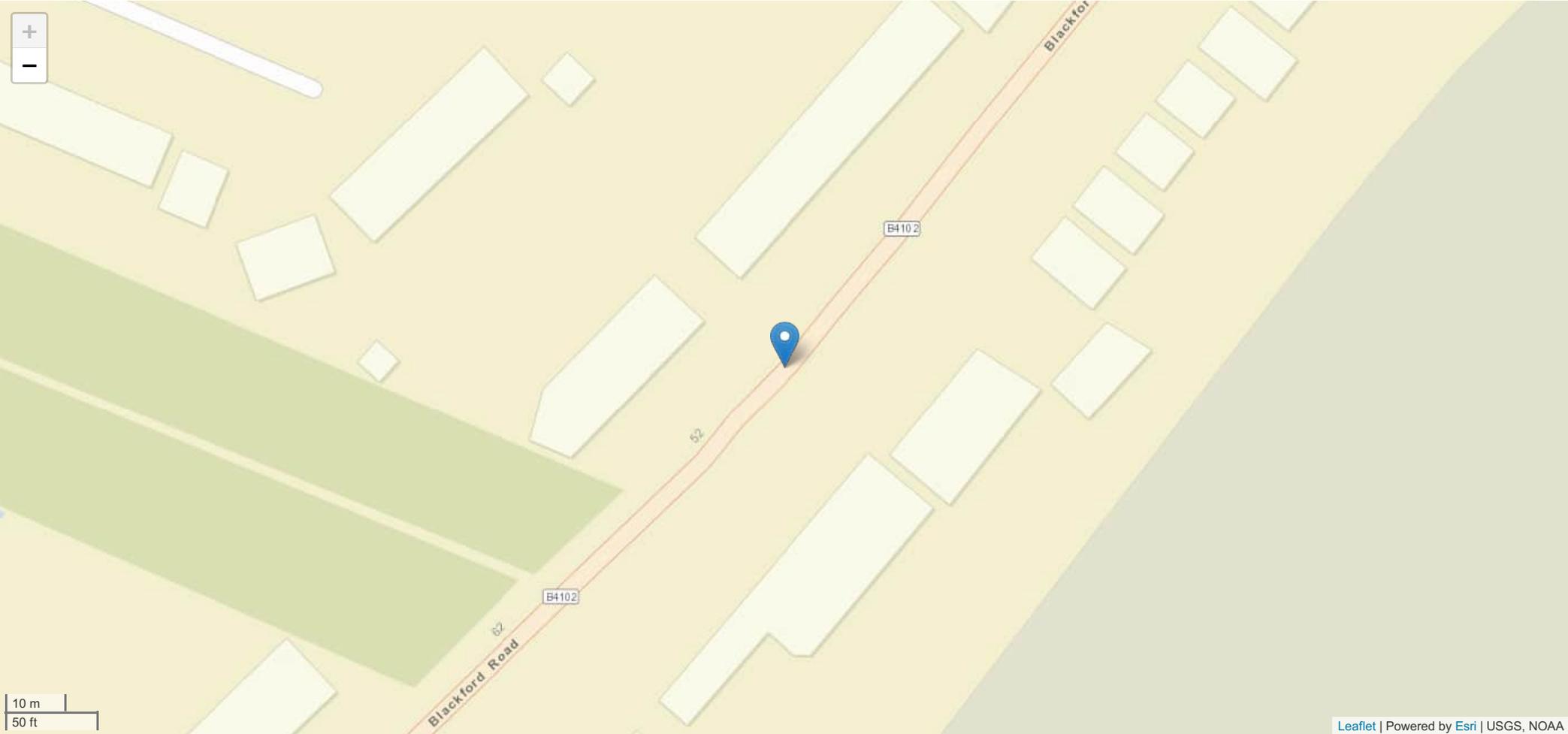
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	46	40 - 49 years	Car, No tow articulation	MERCEDES-BENZ, No Data Provided	No Data Provided	None	No Data Provided	None	Nearside	Going ahead other	N S

# Incident Record Number: 74 - Saturday 15:21 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L137252523	12/08/2023	15:21	Saturday	2	4	Daylight	Fine no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
BLACKFORD ROAD (B4102) O/S NO. 44	No Data Provided



## Incident Record Number: 74 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	4

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
BLACKFORD ROAD (B4102) O/S NO. 44	412277, 277542	B 4102	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly (pedestrian)	Failed to judge other persons path or speed	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Slight	60	60 - 69 years
2	2	Driver or rider	Slight	30	30 - 39 years
3	1	Passenger	Slight	26	20 - 29 years
4	1	Passenger	Slight	28	20 - 29 years

## Vehicle Details

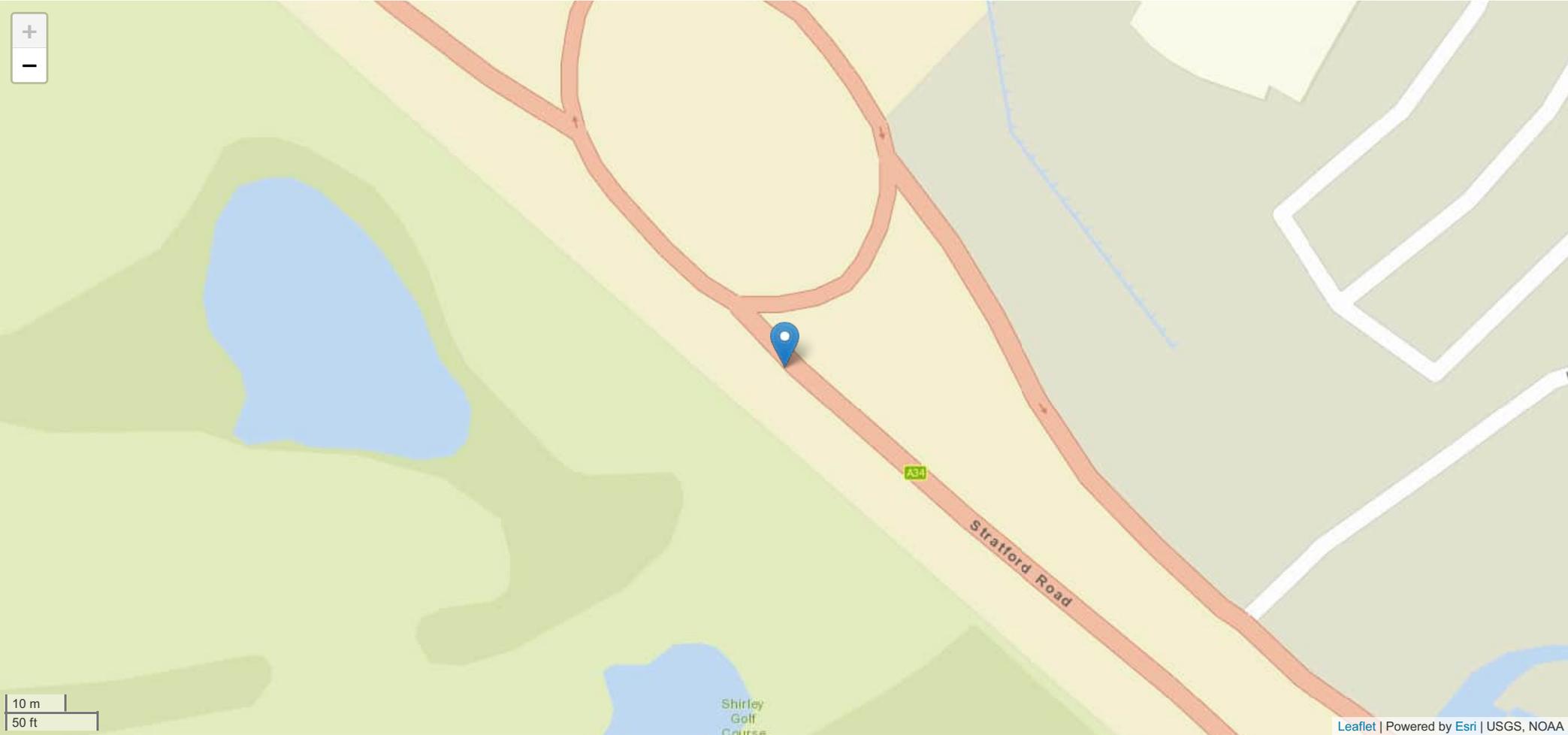
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
1	60	60 - 69 years	Car, No tow articulation	AUDI, Q2 SE TDI	Not requested	None	On main c way - not in restricted lane	None	Front	Overtaking static vehicle offside	NE SW
2	30	30 - 39 years	Car, No tow articulation	VAUXHALL, CORSA	Not requested	None	On main c way - not in restricted lane	None	Front	Moving off	NW SE

# Incident Record Number: 75 - Saturday 19:21 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L141520423	30/09/2023	19:21	Saturday	2	1	Darkness - lights lit	Raining no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 75 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

Description
Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	414393, 275916	A 34	A 34	Roundabout	Auto traffic signal

Contributory 1	Contributory 2	Contributory 3
Slippery road (due to weather)	Loss of control	Exceeding speed limit

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	33	30 - 39 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	64	60 - 69 years	Car, No tow articulation	VOLKSWAGEN, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE
2	33	30 - 39 years	Car, No tow articulation	FORD, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Nearside	Waiting to go held up	NW SE

# Incident Record Number: 76 - Sunday 11:15 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L142510923	22/10/2023	11:15	Sunday	2	2	Daylight	Fine no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
MONKSPATH HALL ROAD	No Data Provided



## Incident Record Number: 76 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
MONKSPATH HALL ROAD	413502, 276832	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Poor turn or manoeuvre	Sudden braking	Careless or Reckless or In a hurry

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Passenger	Slight	55	50 - 59 years
2	2	Driver or rider	Slight	29	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	65	60 - 69 years	Car, No tow articulation	VOLKSWAGEN, PASSAT SPORT TDI 140	Not requested	None	On main c way - not in restricted lane	None	Back	Changing lane to right	N S

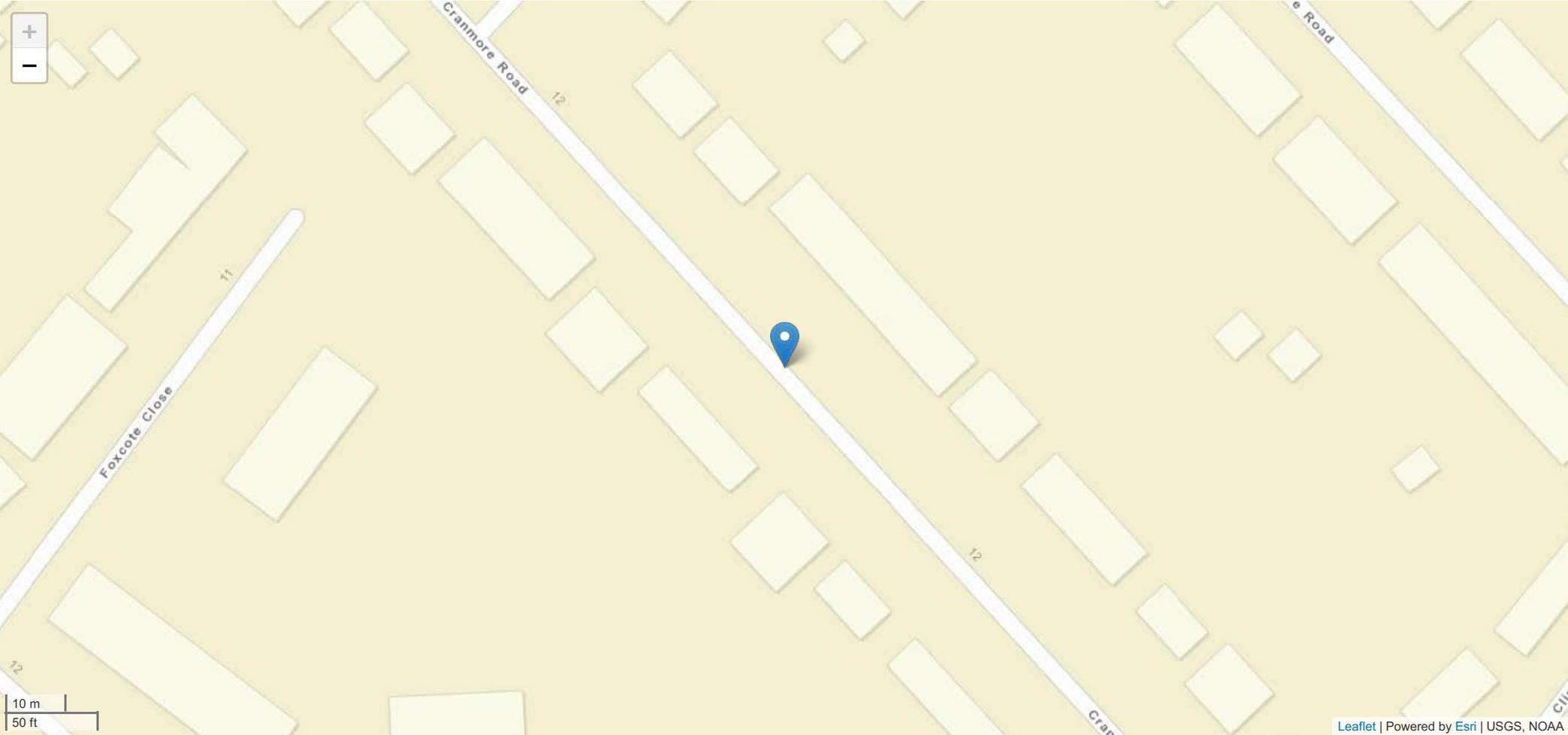
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	29	20 - 29 years	Car, No tow articulation	LAND ROVER, R ROVER EVOQUE SE TE	Not requested	None	On main c way - not in restricted lane	None	Front	Going ahead other	N S

# Incident Record Number: 77 - Friday 16:16 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L138241023	27/10/2023	16:16	Friday	2	1	Daylight	Other	Slight	Dry

Road Name 1	Road Name 2
CRANMORE ROAD	No Data Provided



## Incident Record Number: 77 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
CRANMORE ROAD	412820, 277929	Unknown	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Careless or Reckless or In a hurry	Failed to look properly (pedestrian)	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Slight	11	8 - 11 years

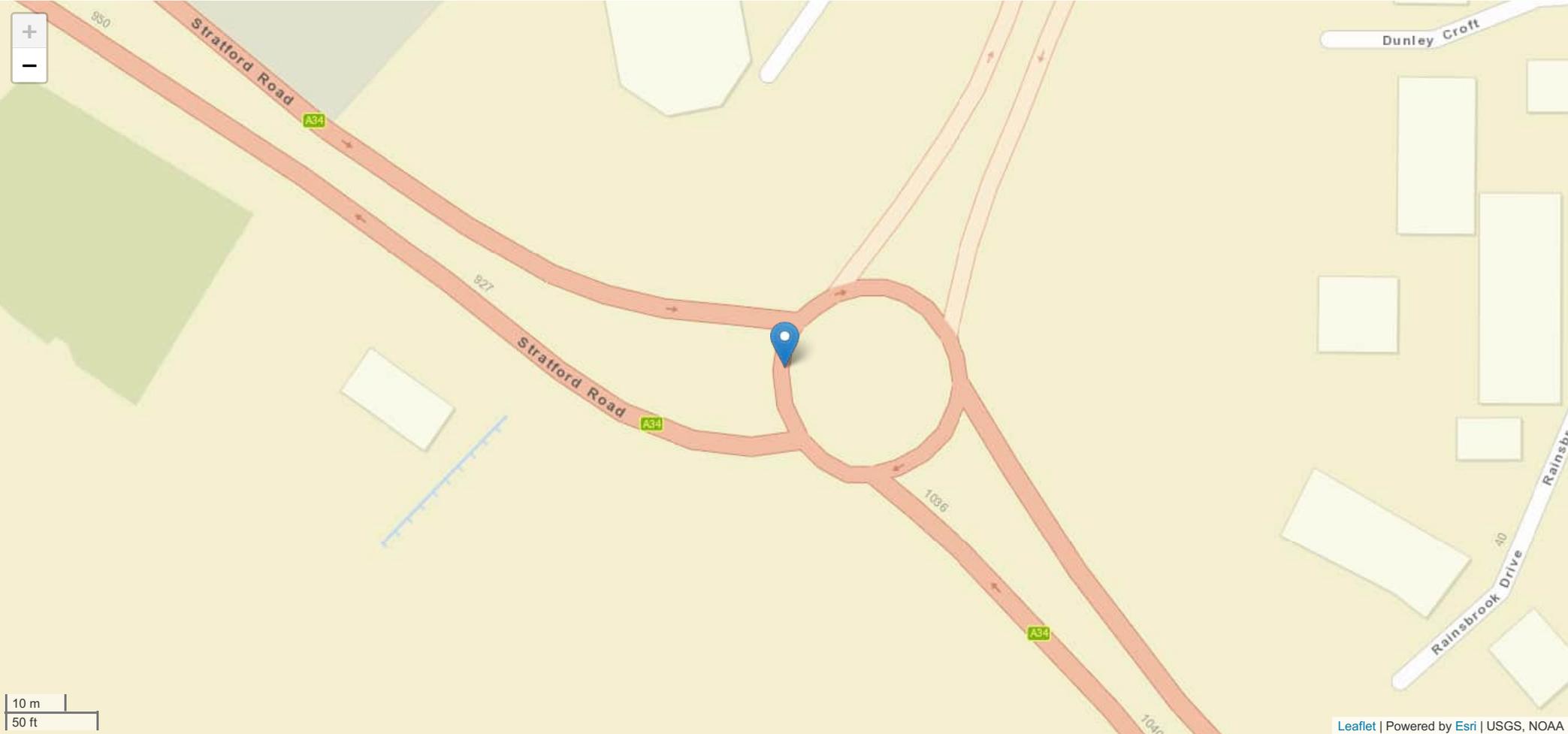
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	No Data Provided	Data missing or out of range	Car, No tow articulation	MINI, COOPER	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE
2	11	8 - 11 years	Pedal cycle, No tow articulation	No Data Provided, No Data Provided	No Data Provided	None	On main c way - not in restricted lane	None	Front	Going ahead other	NW SE

# Incident Record Number: 78 - Saturday 05:45 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L140852124	10/02/2024	05:45	Saturday	1	3	Darkness - lights lit	Fine no high winds	Serious	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 78 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	2	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	413466, 276774	A 34	A 34	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Exceeding speed limit	Travelling too fast for conditions	Junction overshoot

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Driver or rider	Serious	22	20 - 29 years
2	1	Passenger	Slight	20	20 - 29 years
3	1	Passenger	Serious	19	16 - 19 years

## Vehicle Details

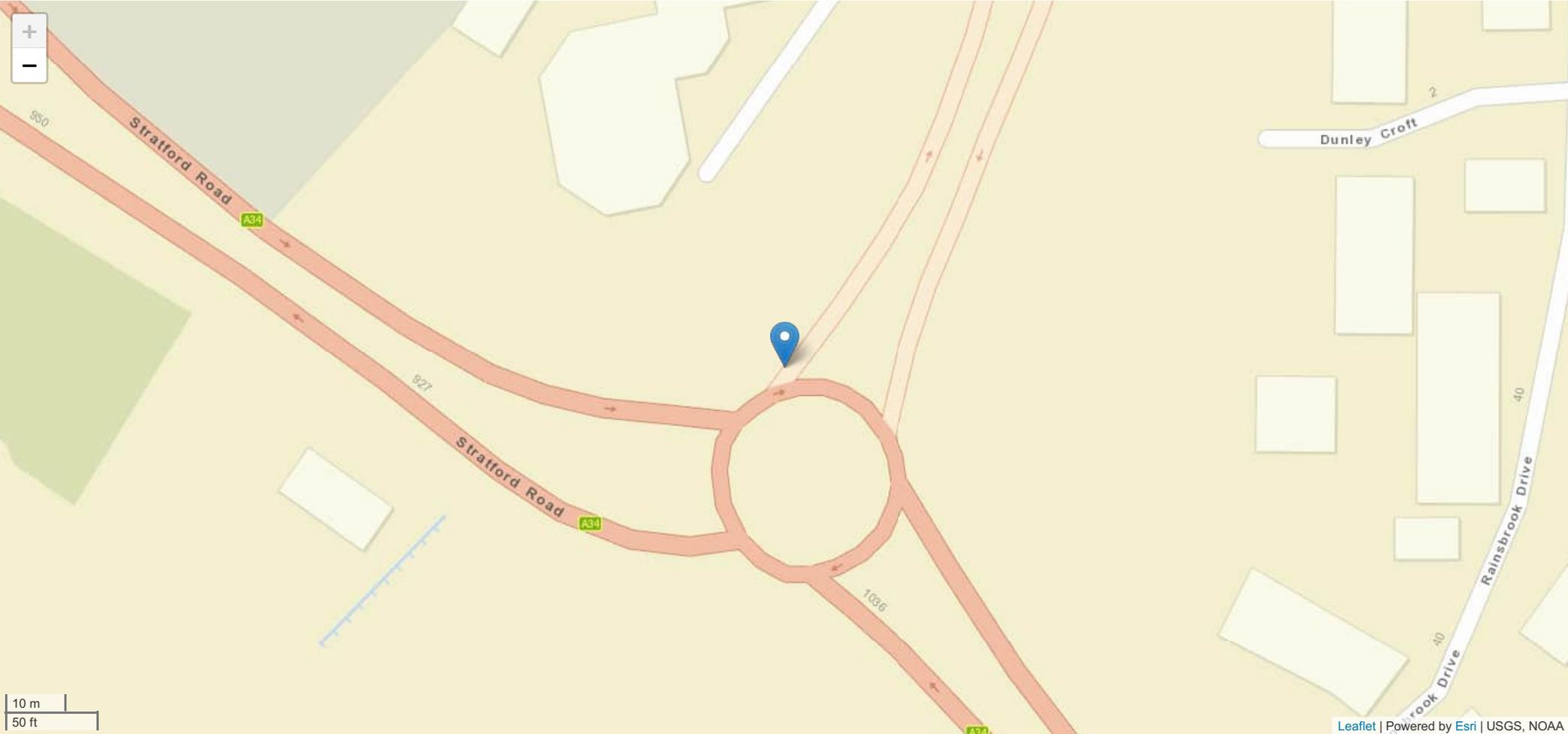
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
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Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	22	20 - 29 years	Car, No tow articulation	No Data Provided, No Data Provided	Refused to provide	None	No Data Provided	Kerb	Front	Going ahead other	NW NE

# Incident Record Number: 79 - Friday 19:05 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L141857924	08/03/2024	19:05	Friday	2	2	Darkness - lights lit	Fine no high winds	Slight	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 79 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	2

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	413476, 276790	A 34	Unknown	Roundabout	Give way or uncontrolled

Contributory 1	Contributory 2	Contributory 3
Failed to judge other persons path or speed	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Passenger	Slight	80	80+ years
2	1	Passenger	Slight	88	80+ years

## Vehicle Details

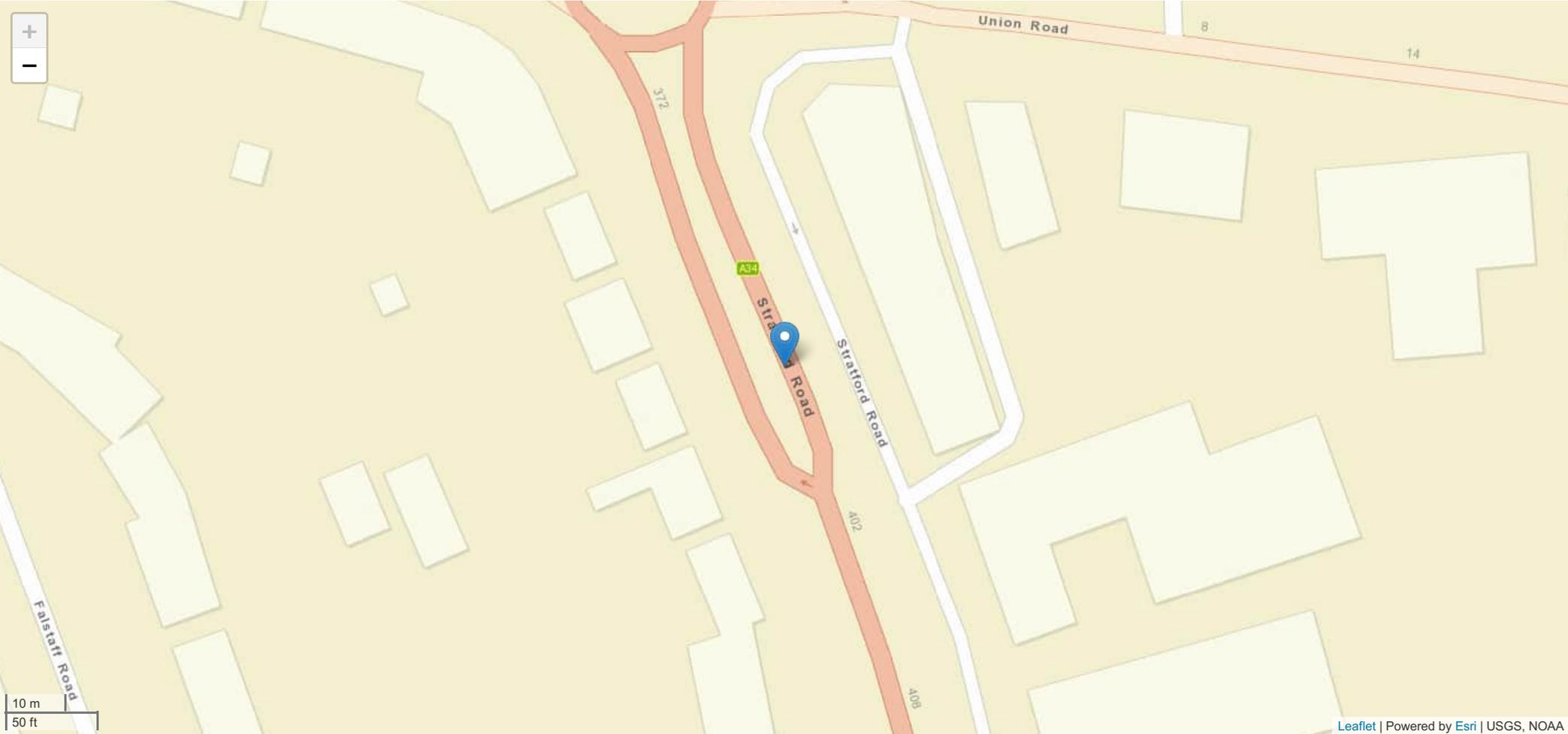
Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	82	12	Car, No tow articulation	CITERON, C3 AIRCROSS	Not applicable	Skidded	On main c way - not in restricted lane	None	Nearside	Going ahead other	E NW

<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	47	40 - 49 years	Car, No tow articulation	MERCEDES, C250	Not applicable	Skidded	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

# Incident Record Number: 80 - Saturday 16:46 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L141881224	09/03/2024	16:46	Saturday	2	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34) - 40 METRES FROM JUNCTION WITH UNCLASSIFIED ROAD, SHIRLEY, SOLIHULL, SOLIHULL	No Data Provided



## Incident Record Number: 80 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34) - 40 METRES FROM JUNCTION WITH UNCLASSIFIED ROAD, SHIRLEY, SOLIHULL, SOLIHULL	412157, 278550	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Disobeyed automatic traffic signal	Failed to look properly (pedestrian)	Inexperienced or learner driver or rider

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	2	Driver or rider	Serious	25	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	20	20 - 29 years	Car, No tow articulation	CITROEN, C3 L	Negative	None	On main c way - not in restricted lane	None	Front	Going ahead other	SE NW

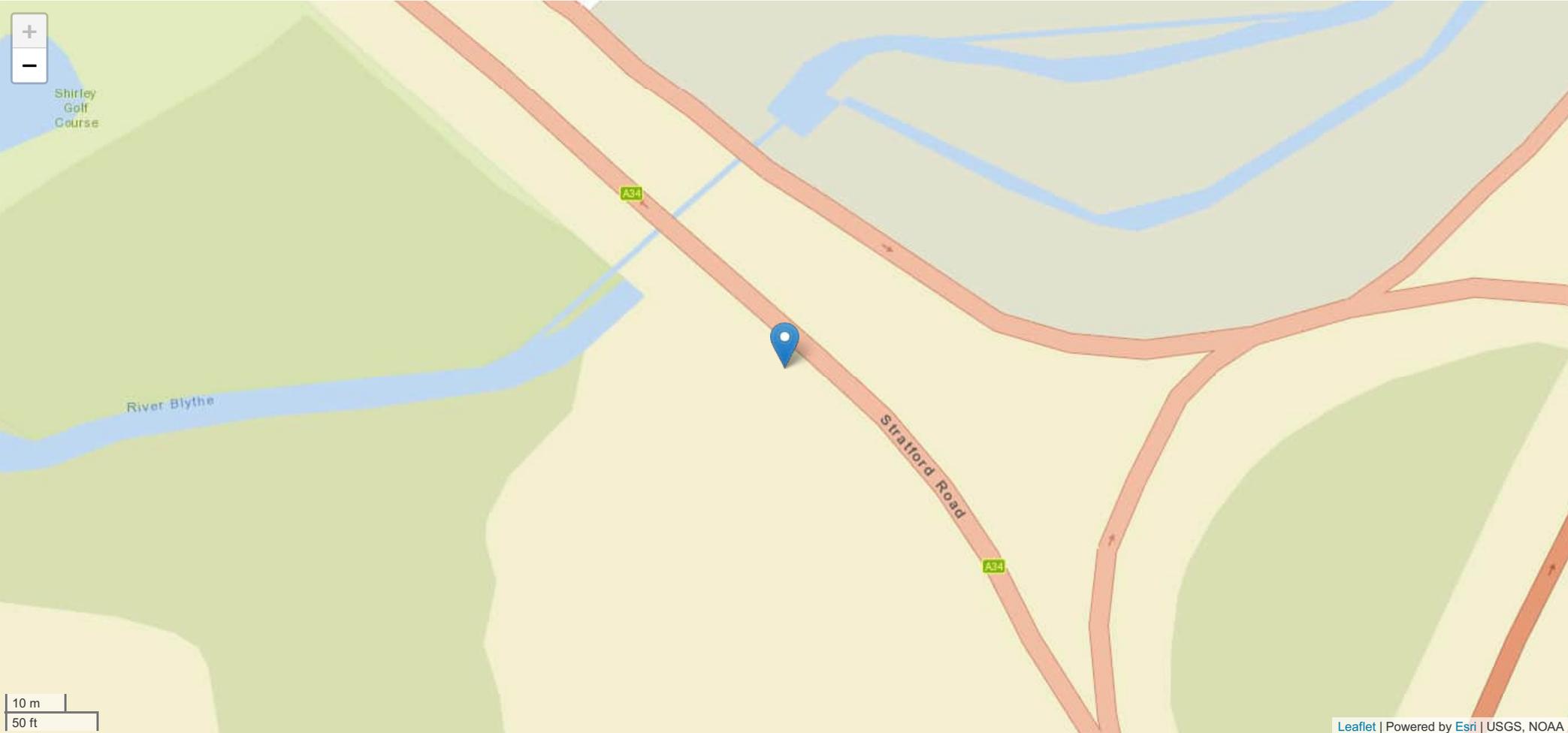
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<b>Vehicle Number</b>	<b>Age</b>	<b>Age Group</b>	<b>Type &amp; Towing</b>	<b>Make &amp; Model</b>	<b>Driver Breath Test</b>	<b>Vehicle Skidding</b>	<b>Vehicle Location</b>	<b>Object in Carriageway</b>	<b>First Impact Damage</b>	<b>Vehicle Manoeuvre</b>	<b>Vehicle Compass</b>
2	25	20 - 29 years	Other vehicle, No tow articulation	No Data Provided, No Data Provided	Not provided medical reasons	None	On main c way - not in restricted lane	None	Offside	Going ahead other	W E

# Incident Record Number: 81 - Tuesday 18:42 Slight

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L142255424	19/03/2024	18:42	Tuesday	1	1	Darkness - lights lit	Fine no high winds	Slight	Wet or damp

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 81 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	0	1

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	414502, 275818	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
Failed to look properly	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Slight	35	30 - 39 years

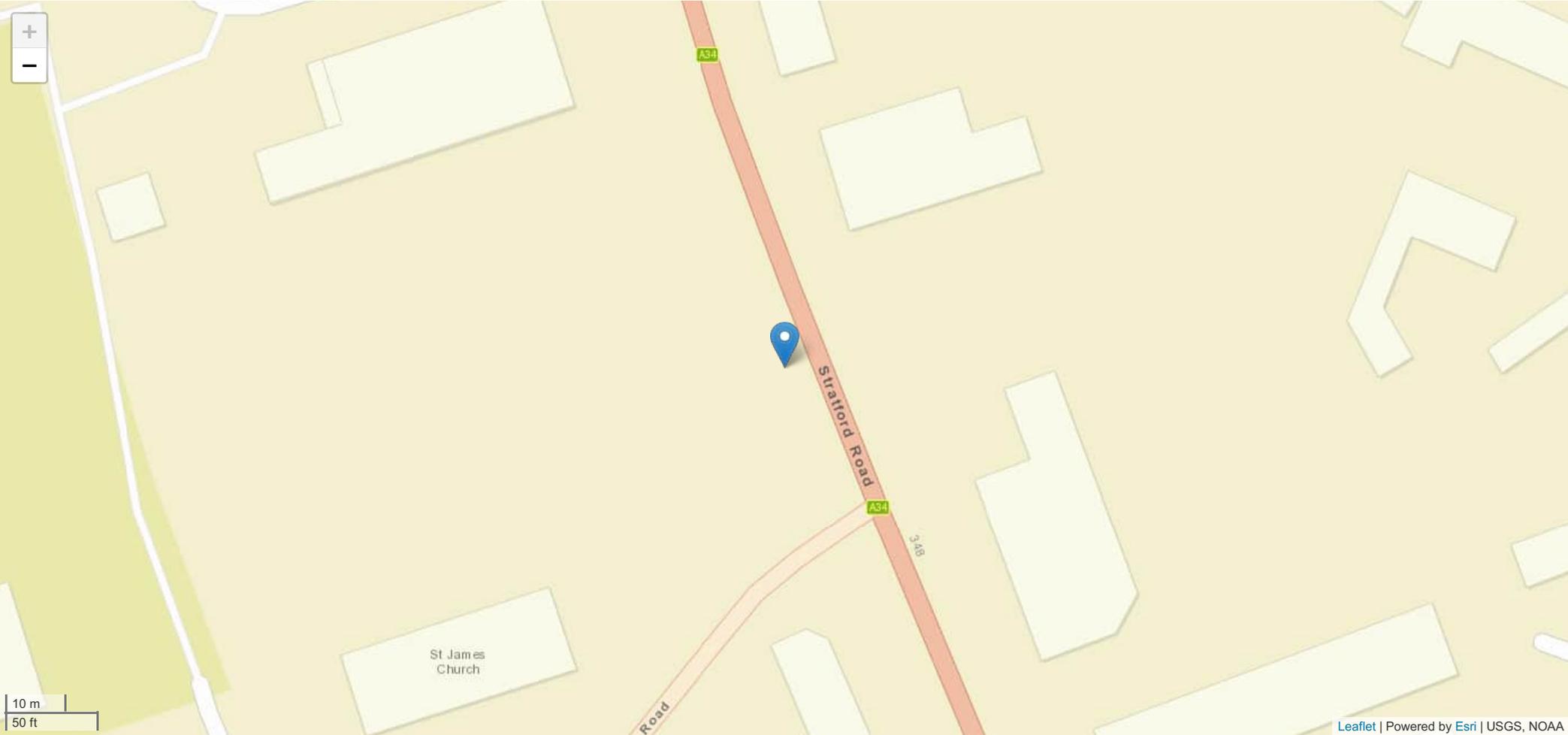
## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	33	30 - 39 years	Car, No tow articulation	PEUGEOT, 308 ACTIVE SW HDI S/	Not requested	None	No Data Provided	None	Front	Going ahead other	S NW

# Incident Record Number: 82 - Tuesday 09:50 Serious

ID	Date	Time	Incident Day	Total Vehicles	Total Casualties	Lighting Conditions	Weather Conditions	Incident Severity	Road Surface
L144545624	21/05/2024	09:50	Tuesday	1	1	Daylight	Fine no high winds	Serious	Dry

Road Name 1	Road Name 2
STRATFORD ROAD (A34)	No Data Provided



## Incident Record Number: 82 continued

Fatal Casualties	Serious Casualties	Slight Casualties
0	1	0

### Description

Field will be populated once Privacy Impact Assessment completed

Road Name	Coordinates	First Road	Second Road	Junction Detail	Junction Control
STRATFORD ROAD (A34)	412008, 278865	A 34	Unknown	Not at junction or within 20 metres	No Data Provided

Contributory 1	Contributory 2	Contributory 3
No Data Provided	No Data Provided	No Data Provided

## Casualty Details

Casualty	Vehicle	Class	Severity	Age	Age Group
1	1	Pedestrian	Serious	23	20 - 29 years

## Vehicle Details

Vehicle Number	Age	Age Group	Type & Towing	Make & Model	Driver Breath Test	Vehicle Skidding	Vehicle Location	Object in Carriageway	First Impact Damage	Vehicle Manoeuvre	Vehicle Compass
1	29	20 - 29 years	Car, No tow articulation	HONDA, JAZZ SPORT	Not requested	None	No Data Provided	None	Offside	Going ahead other	SE NW



# **Appendix H Illustrative Masterplan and Access and Movement Parameter Plan**

## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

SLR Project No.: 425.000418.0001

December 2024

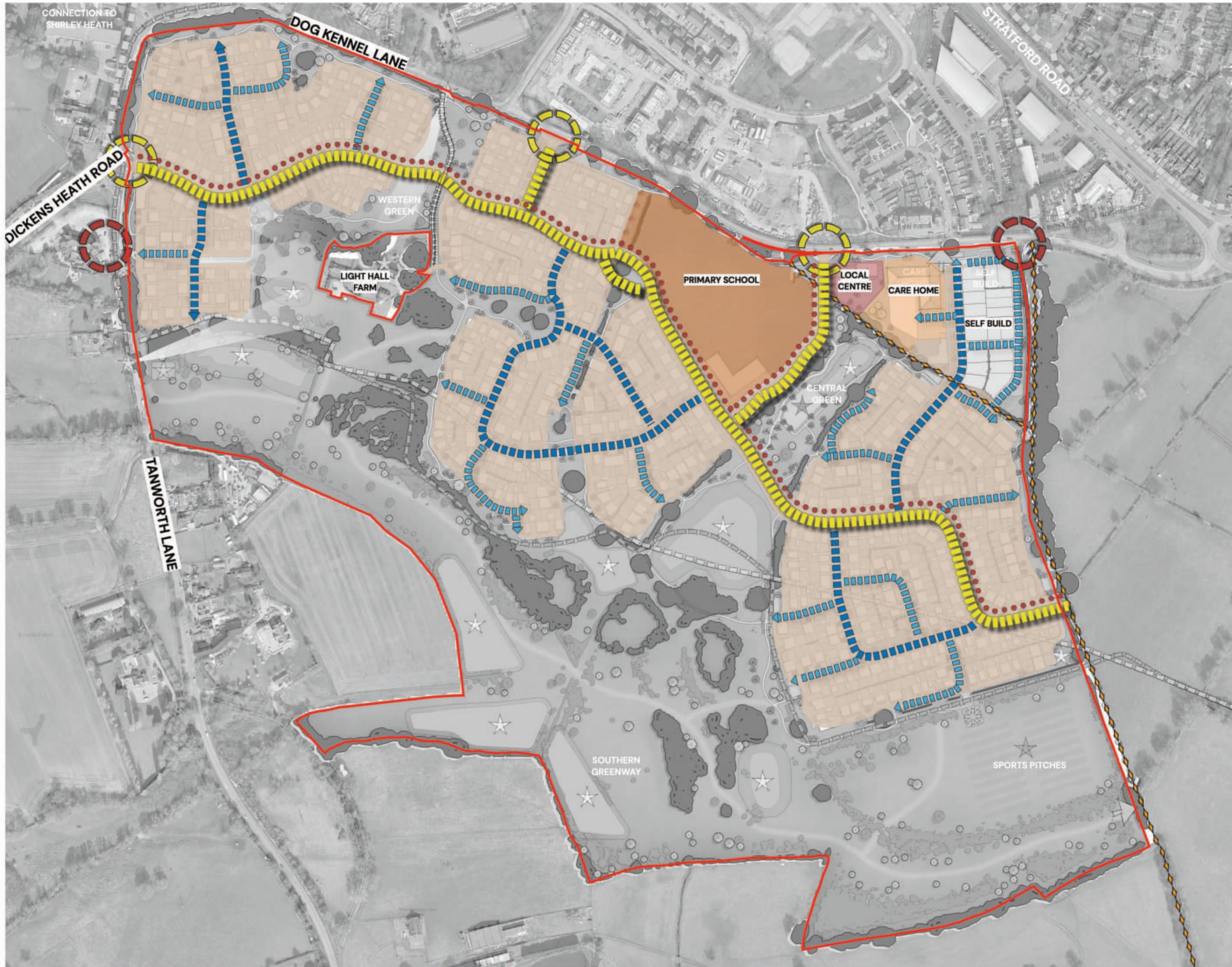


- KEY**
-  SITE LOCATION
  -  PROPOSED SITE ACCESS POINTS
  -  PROPOSED RESIDENTIAL DEVELOPMENT
  -  PROPOSED LOCAL CENTRE
  -  PRIMARY SCHOOL WITH EXPANSION LAND IF REQUIRED
  -  PROPOSED CARE HOME
  -  SELF BUILD PLOTS
  -  INDICATIVE PUBLIC OPEN SPACE INCLUDING LANDSCAPING (DETAILING IS ILLUSTRATIVE)
  -  INDICATIVE PRIMARY MOVEMENT
  -  INDICATIVE SECONDARY AND TERTIARY MOVEMENT ROUTES
  -  INDICATIVE PRIVATE DRIVES
  -  PROPOSED PARKING FOR SPORTS FACILITIES
  -  EXISTING PUBLIC RIGHTS OF WAY
  -  NEARBY CYCLING ROUTES
  -  POTENTIAL PEDESTRIAN LINKS TO ADJACENT AREAS
  -  POTENTIAL VEHICULAR CONNECTION TO NEIGHBOURING DEVELOPMENT
  -  EXISTING TREES AND LANDSCAPING
  -  INDICATIVE LOCATION FOR NEAP
  -  INDICATIVE LOCATION FOR LEAP
  -  INDICATIVE LOCATION FOR SPORTS FACILITIES
  -  VIEW TOWARDS LIGHTHALL FARM
  -  NEARBY BUS STOPS
  -  GRADE II LISTED BUILDING
  -  COLD WAR MONITORING POST TO BE SEALED SHUT AND PRESERVED IN SITU
  -  RETAINED HISTORIC DRIVE
  -  PROPOSED GREENBELT BOUNDARY
  -  DRAFT SOLIHULL GREENBELT BOUNDARY (FOR INFORMATION ONLY)
  -  SUSTAINABLE DRAINAGE SOLUTIONS AND FLOOD STORAGE

**LAND AT LIGHT HALL FARM, SOLIHULL  
ILLUSTRATIVE MASTERPLAN**



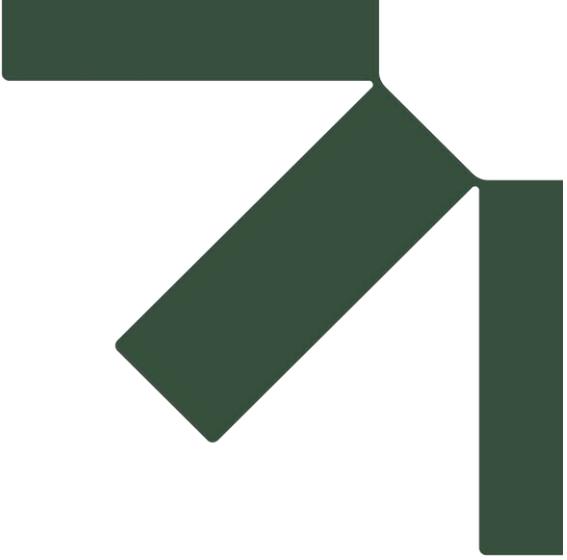
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- KEY**
-  SITE LOCATION
  -  DEVELOPABLE AREA
  -  SCHOOL SITE
  -  CARE HOME
  -  LOCAL CENTRE
  -  VEHICULAR AND PEDESTRIAN SITE ACCESS
  -  POTENTIAL PEDESTRIAN/CYCLE ACCESS TO EXISTING PUBLIC RIGHTS OF WAY
  -  PRIMARY MOVEMENT STREET AND BUS ROUTE (INC SWALES AND CYCLE/PED MOVEMENT, WITH +/- 10M DEVIATION FROM CENTRE LINE ALONG ROUTE SHOWN)
  -  SECONDARY MOVEMENT ROUTES (INC SWALES, WITH +/- 10M DEVIATION FROM CENTRE LINE ALONG ROUTE SHOWN)
  -  TERTIARY STREETS (WITH +/- 10M DEVIATION FROM CENTRE LINE ALONG ROUTE SHOWN)
  -  PUBLIC RIGHT OF WAY
  -  ACTIVE TRAVEL

# LIGHTHALL FARM, SHIRLEY – ACCESS AND MOVEMENT PARAMETER PLAN





# **Appendix I      Potential Pedestrian/Cycle Access to Existing Public Rights of Way**

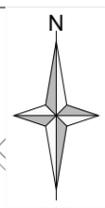
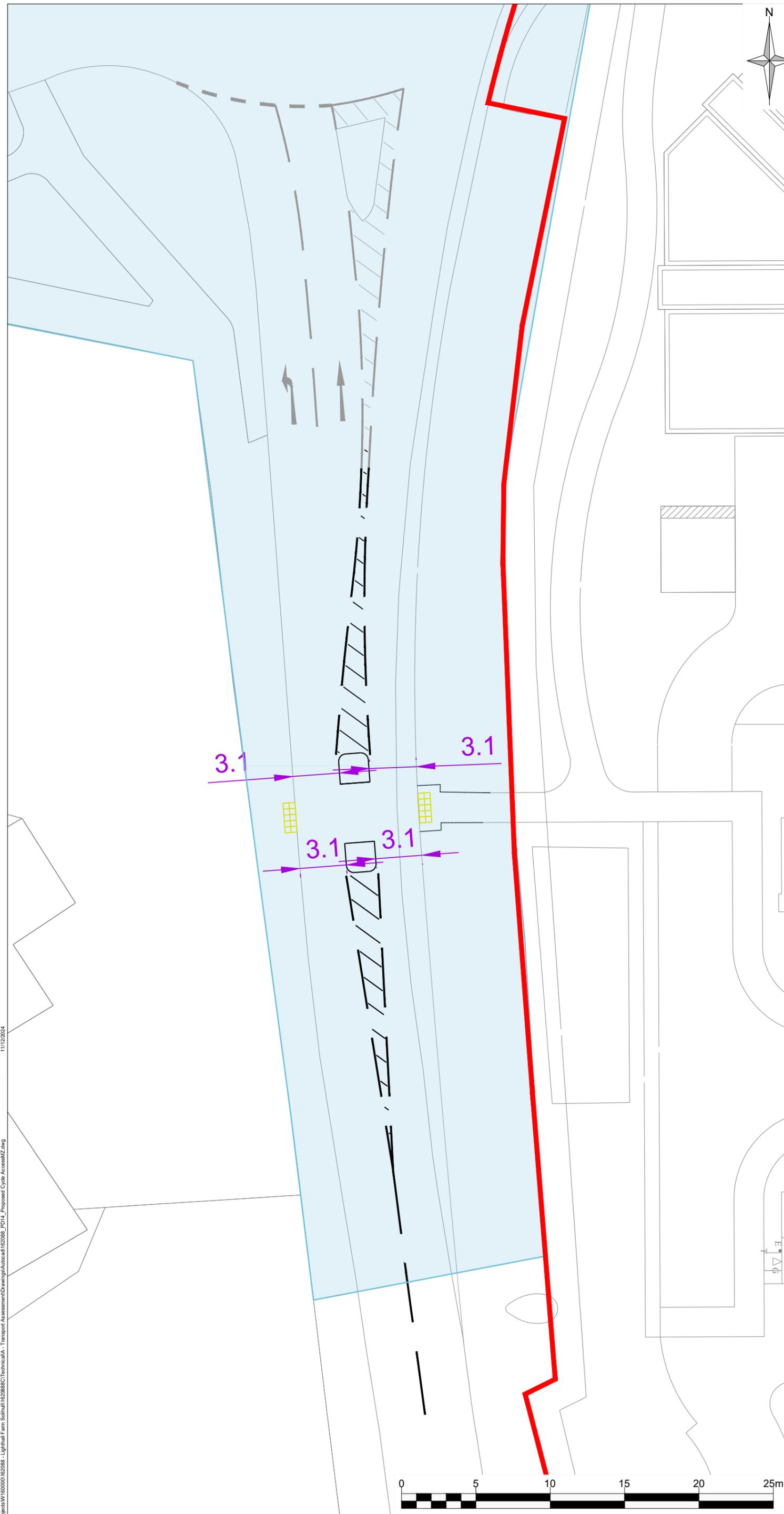
## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

**SLR Project No.: 425.000418.0001**

**December 2024**



**Notes:**  
 1. DRAWING BASED ON: P21-3274\_DE\_003\_05 REV: E

**Legend:**  
 [Symbol] 5M SEGREGATED FOOTWAY AND CYCLE TRACK  
 [Symbol] SITE BOUNDARY  
 [Symbol] HIGHWAY BOUNDARY

H:\Projects\W160000\162088 - Lighthall Farm Solihull\162088\Technical\A - Transport Assessment\Drawings\Aucad\162088\_PD14\_Proposed Cycle Access.dwg 11/12/2024

Rev	Amendments	Date	By	Chk	Auth



[www.slrconsulting.com](http://www.slrconsulting.com)

Drawing Status & Suitability Code

Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**PEDESTRIAN CONNECTION TO TANWORTH LANE**

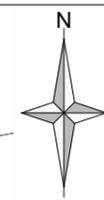
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**162088**

Designed	Drawn	Checked	Authorised
	KR	CP	

Date	Date	Date	Date
	10.12.24	10.12.24	

Drawing Number	Rev.
<b>PD14.1</b>	-





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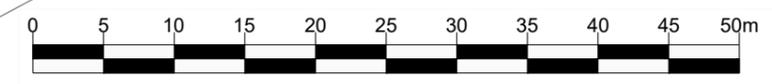
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LB

DOG KENNEL LANE

139.9m

11/12/2024  
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Scale 1:500



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Drawing Status & Suitability Code

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	KR	CP	
Date	Date	Date	Date
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Drawing Number	Rev.	Scale	@ A3	SLR Project No.
PD14.2	-	1:500		162088

Client  
TAYLOR WIMPEY UK LTD

Project  
LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL

Drawing Title  
PEDESTRIAN CONNECTION TO PROW

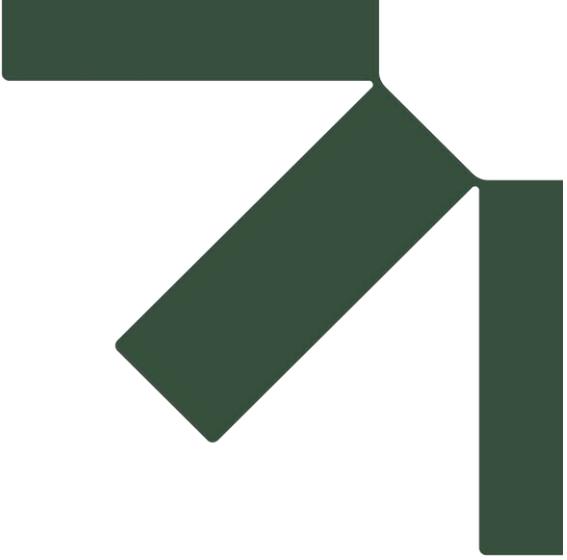
Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

Notes:  
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REV: E

Legend:

	5M SEGREGATED FOOTWAY AND CYCLE TRACK
	SITE BOUNDARY
	HIGHWAY BOUNDARY



# **Appendix J    Stage 1 RSA and Designer's Response**

## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

SLR Project No.: 425.000418.0001

December 2024



# Stage 1 Road Safety Audit

Lighthall Farm, Solihull

**Taylor Wimpey**

Prepared by:

**SLR Consulting Limited**

Ground Floor Helmont House , Churchill Way, Cardiff,  
CF10 2HE

SLR Project No: 425.000418.00001

29 October 2024

Revision: 01

## Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
01	29 October 2024	Sasha Respini	Duncan Stuart	Sasha Respini
	Click to enter a date.			

## Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Taylor Wimpey (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

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## Table of Contents

1.0 Introduction .....	4
2.0 Matters arising from this Stage 1 RSA.....	6
3.0 Audit Team Statement.....	7

## Appendices

Appendix A	Site Location Plan
Appendix B	Submitted Documents
Appendix C	Problem Location Plans



## Acronyms and Abbreviations

RSA	Road Safety Audit
DMRB	Design Manual for Roads and Bridges
MfS	Manual for Streets
PIC	Personal Injury Collisions
DfS	Departures from Standards
SPA	Swept Path Analysis



## 1.0 Introduction

- 1.1 This report results from a Stage 1 Road Safety Audit carried out on Friday 25<sup>th</sup> October 2024. The RSA was carried out on behalf of Taylor Wimpey. The Overseeing Organisation for this Stage 1 is Solihull Metropolitan Borough Council (SMBC).
- 1.2 An Audit Brief was prepared by Cerian Philips of SLR Consulting Ltd on 24<sup>th</sup> October 2024. This Audit Brief was formally accepted by the Audit Team on the same date.
- 1.3 This Road Safety Audit team was as follows:
  - Sasha Respini, BSc (Hons), MSc, MCIHT, MSoRSA, NH Approved Cert. Comp.  
Audit Team Leader  
Principal Transport Planner  
SLR Consulting Ltd
  - Duncan Stuart, BSc, MSc, MCIHT, MSoRSA, NH Cert Comp.  
Audit Team Member  
Associate Transport Planner  
SLR Consulting Ltd
- 1.4 A site visit was undertaken by the Audit Team on Friday 25<sup>th</sup> October 2024, between the hours of 11:00 and 12:00. The weather at the time of the visit was overcast and the carriageway surface was dry. Vehicular traffic levels were moderate. Very low pedestrian and cyclist movements observed during this time.
- 1.5 A site location plan can be found at **Appendix A** of this report.
- 1.6 The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges (DMRB) Standard, GG119 Road Safety Audit.
- 1.7 The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 1.8 A table of documents submitted for this Stage 1 RSA can be found in **Appendix B**.
- 1.9 The scheme subject to this Stage 1 RSA is the following: proposed access points to residential development south of Dog Kennel Lane. 2 x access from Dog Kennel Lane and 1 access from B4102 Tanworth Lane via the existing 3 arm roundabout with Dickens Heath Road.
- 1.10 Submitted design drawings have been annotated to show the locations of any problems identified during this Stage 1 RSA. These plans can be found at **Appendix C**.
- 1.11 Whilst recommendations have been made within this report, there may be equally satisfactory alternatives. The Audit Team will be pleased to consider alternatives if required.



## Departures from Standards

- 1.12 The Audit Team were not informed of any Departure from Standards (DfS) associated with the design proposals.



## 2.0 Matters arising from this Stage 1 RSA

### 425.000418.000001\_PD13.4 Site Access Roundabout

#### 2.1 Problem.

Location: Proposed site access roundabout.

Summary: The segregated 5m walking and cycling route abruptly terminates at the site access roundabout, forcing active travel users to merge with other traffic on the existing roundabout. This may lead to may lead to injudicious pedestrian and cyclist movements, potentially leading to side swipe type collisions.

The discontinuity in the segregated route creates an issue for pedestrians and cyclists at the site access as they transition from a separated environment to a mixed traffic environment; this sudden change in environment could lead to confusion as there is no onward active travel infrastructure.

Recommendation:

It is recommended that the walking and cycling infrastructure is extended beyond the site access to provide a continuous connection to existing walking and cycling network.



### 3.0 Audit Team Statement

3.1 We certify that this Audit has been carried out in accordance with the requirements of GG119.

#### **Road Safety Audit Team Leader**

Name: Sasha Respini



Signed:

Position: Principal Transport Planner

Organisation: SLR Consulting Ltd

Date: 29 October 2024

#### **Road Safety Audit Team Member**

Name: Duncan Stuart Bsc, MCIHT, MSoRSA, NH Cert Competency



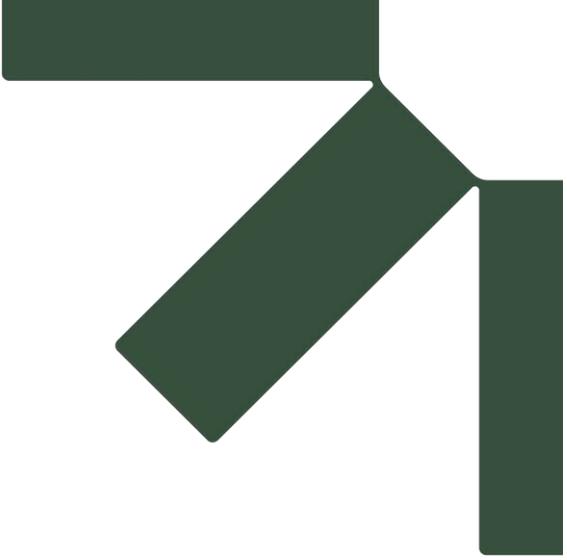
Signed:

Position: Associate Transport Planner

Organisation: SLR Consulting Ltd

Date: 29 October 2024





# Appendix A Site Location Plan

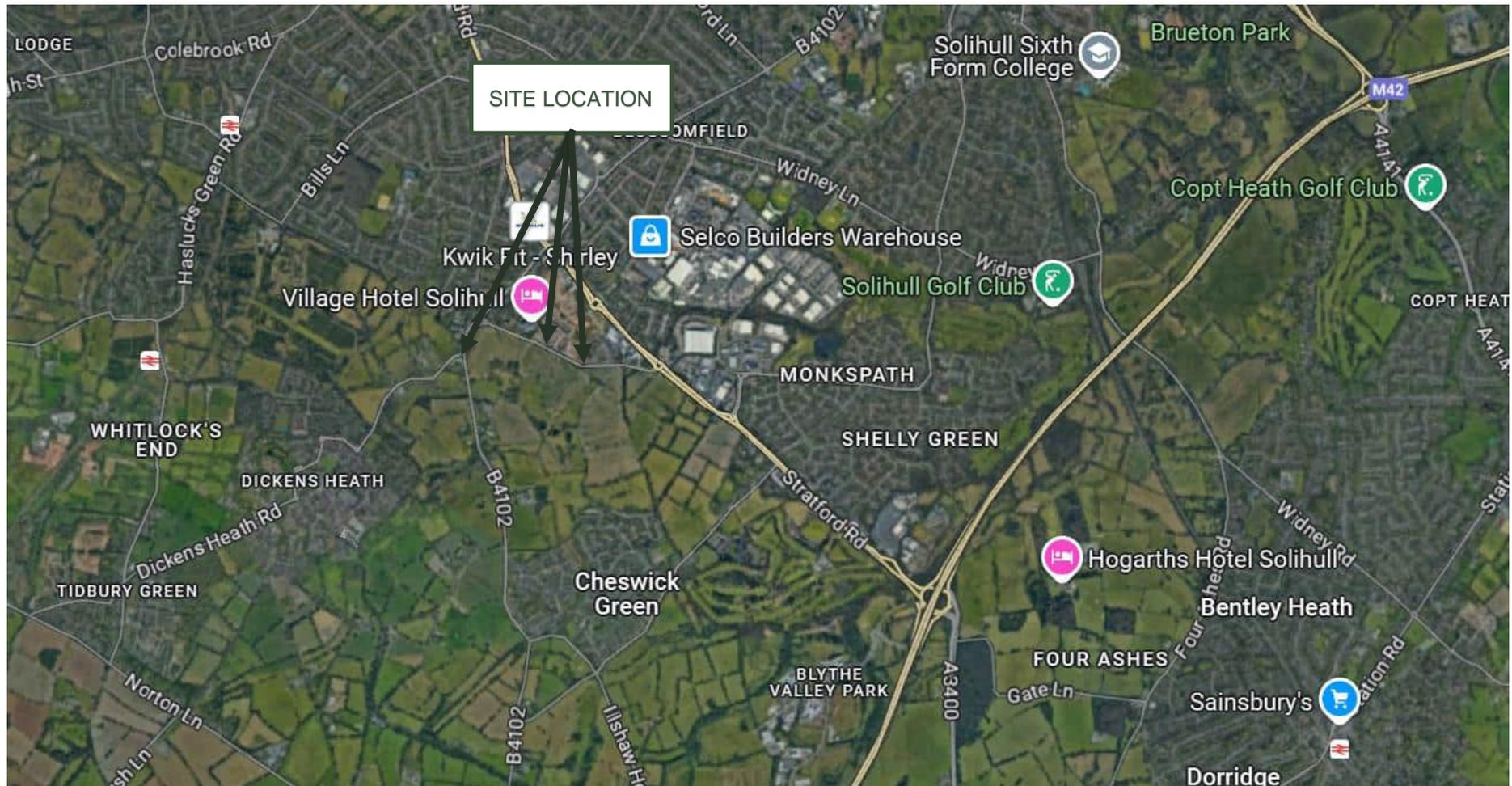
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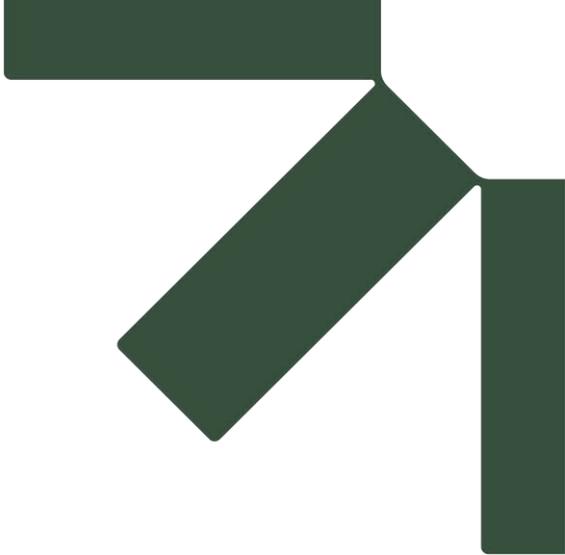
Lighthall Farm, Solihull

Taylor Wimpey

SLR Project No: 425.000418.00001

29 October 2024





# Appendix B Submitted Documents

## Stage 1 Road Safety Audit

Lighthall Farm, Solihull

Taylor Wimpey

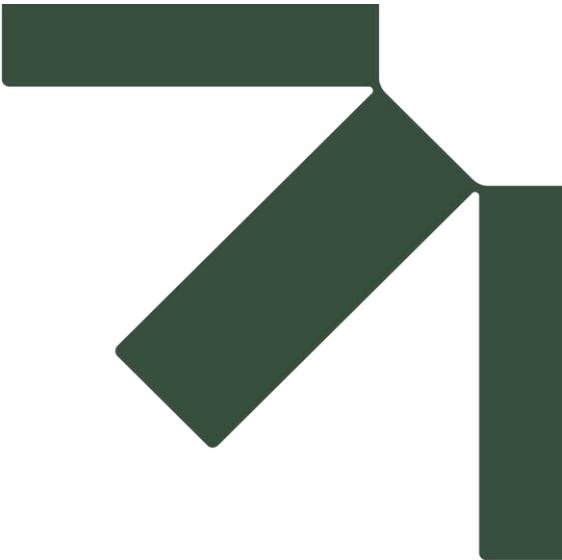
SLR Project No: 425.000418.00001

29 October 2024

### Submitted Documents

Document	Document Title
Design Drawings	162088_PD13_Rev A - Revised Spine Road Alignment 162088_PD13.1_Visibility Splay on Signal Crossing 162088_PD13.2_Visibility Splay West Site Access to Dog Kennel Lane 162088_PD13.3_Visibility Splay East Site Access to Dog Kennel Lane 162088_PD13.4_Site Access Roundabout
Documents	RSA Stage 1 Brief





# Appendix C Problem Location Plans

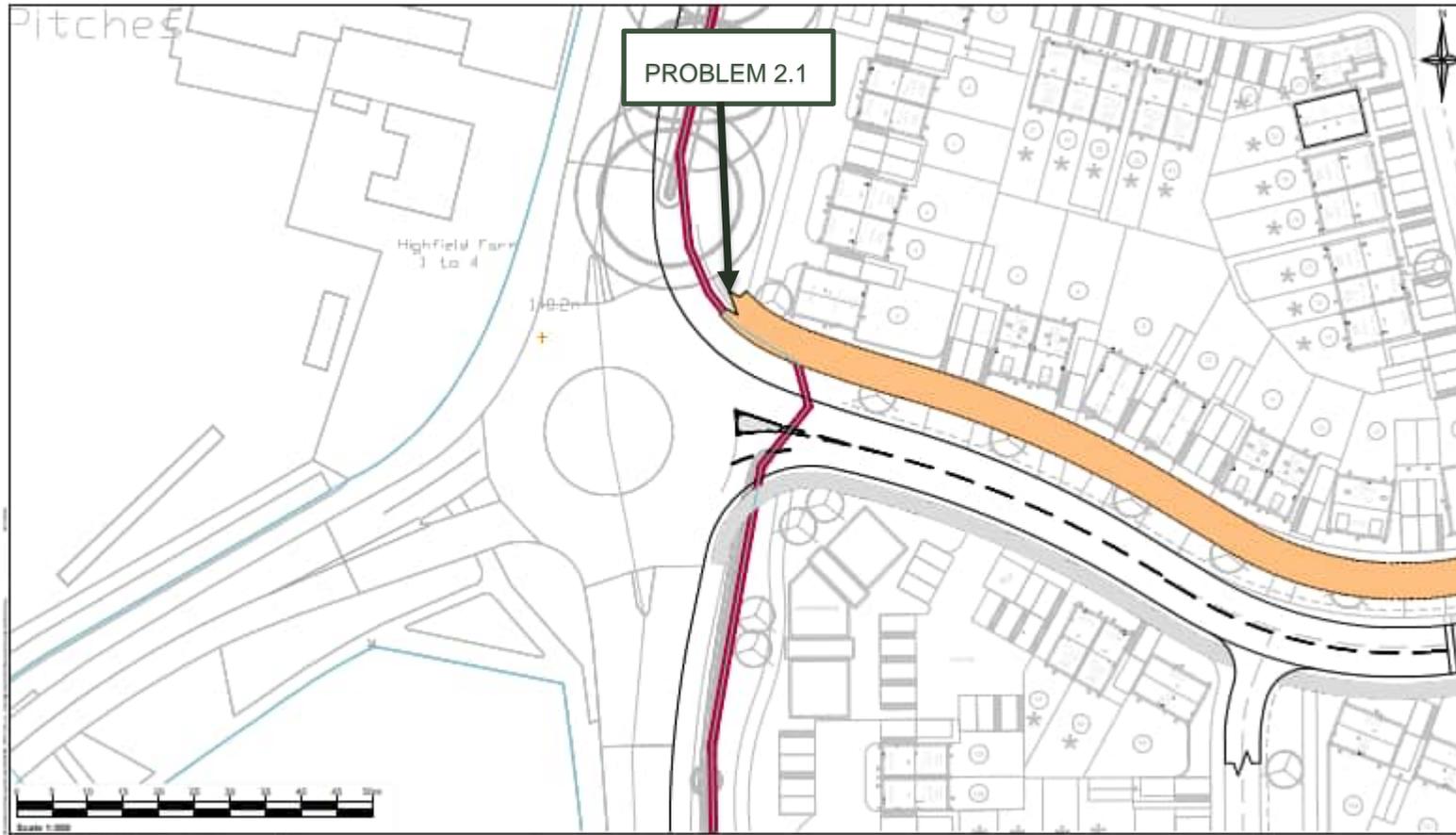
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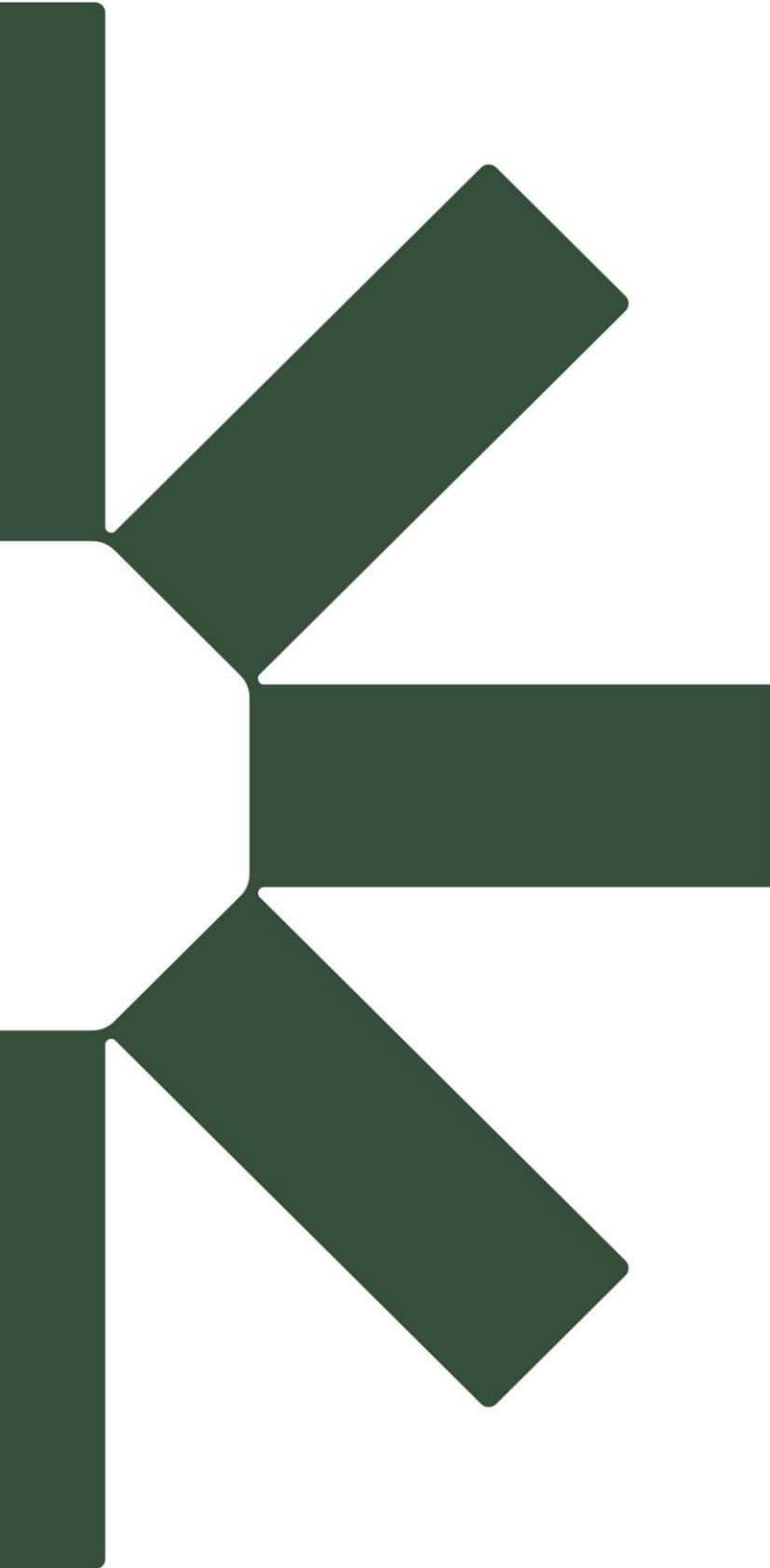
Lighthall Farm, Solihull

Taylor Wimpey

SLR Project No: 425.000418.00001

29 October 2024







# Stage 1 Road Safety Audit Designers Response

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

## Taylor Wimpey

2 Trinity Court  
Broadlands  
Wolverhampton  
WV10 6UH

Prepared by:

### SLR Consulting Limited

Ground Floor Helmont House , Churchill Way, Cardiff,  
CF10 2HE

SLR Project No.: 425.000418.0001

9 December 2024

Revision: V1

## Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
V1	9 December 2024	CP	MR	MR
	Click to enter a date.			
	Click to enter a date.			
	Click to enter a date.			
	Click to enter a date.			

## Basis of Report

This document has been prepared by SLR Consulting Limited (SLR) with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Taylor Wimpey (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

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<b>2.0 Matters arising from this Stage 1 RSA.....</b>	<b>4</b>

## Appendices

<b>Appendix A</b>	<b>Site Location Plan</b>
<b>Appendix B</b>	<b>Tanworth Lane Site Access Roundabout (162088_PD13.4_Rev A)</b>



## 1.0 Introduction

- 1.1 This Designers Response has been prepared following a Stage 1 Road Safety Audit (RSA) carried out on Friday 25<sup>th</sup> October 2024. The RSA was carried out on the instruction of the Transport Planning team at SLR Consulting Ltd, on behalf of Taylor Wimpey. The Overseeing Organisation for the Stage 1 RSA is Solihull Metropolitan Borough Council (SMBC).
- 1.2 A site visit was undertaken by the Audit Team on Friday 25<sup>th</sup> October, between the hours of 11:00 and 12:00. The weather at the time of the visit was overcast and the carriageway surface was dry. Vehicular traffic levels were moderate. Very low pedestrian and cyclist movements were observed during the site visit.
- 1.3 A site location plan can be found at **Appendix A** of this report.



## 2.0 Matters arising from this Stage 1 RSA

### 162088\_PD13.4 Site Access Roundabout

#### 2.1 Problem

Location: Proposed site access roundabout.

Summary: The segregated 5m walking and cycling route abruptly terminates at the site access roundabout, forcing active travel users to merge with other traffic on the existing roundabout. This may lead to injudicious pedestrian and cyclist movements, potentially leading to side swipe type collisions.

The discontinuity in the segregated route creates an issue for pedestrians and cyclists at the site access as they transition from a separated environment to a mixed traffic environment; this sudden change in environment could lead to confusion as there is no onward active travel infrastructure.

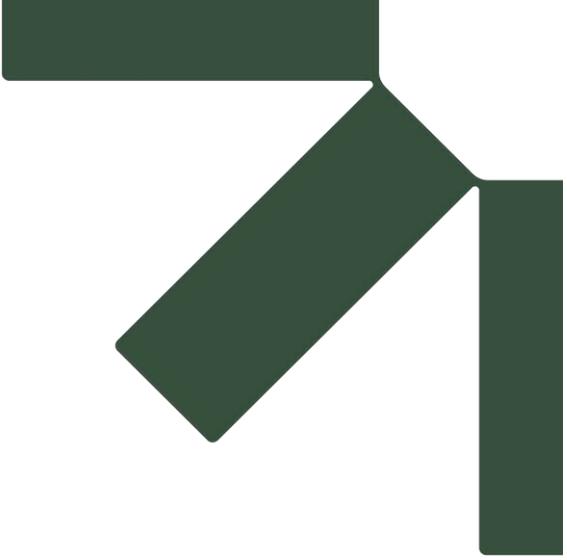
Recommendation:

It is recommended that the walking and cycling infrastructure is extended beyond the site access to provide a continuous connection to existing walking and cycling network.

**Designers Response:**

**Agree:** The drawing has been updated to show the segregated tying into a shared route within the internal site layout. This is shown in updated Site Access Roundabout drawing (PD13.4 Rev A) which is included at **Appendix B**.





# Appendix A Site Location Plan

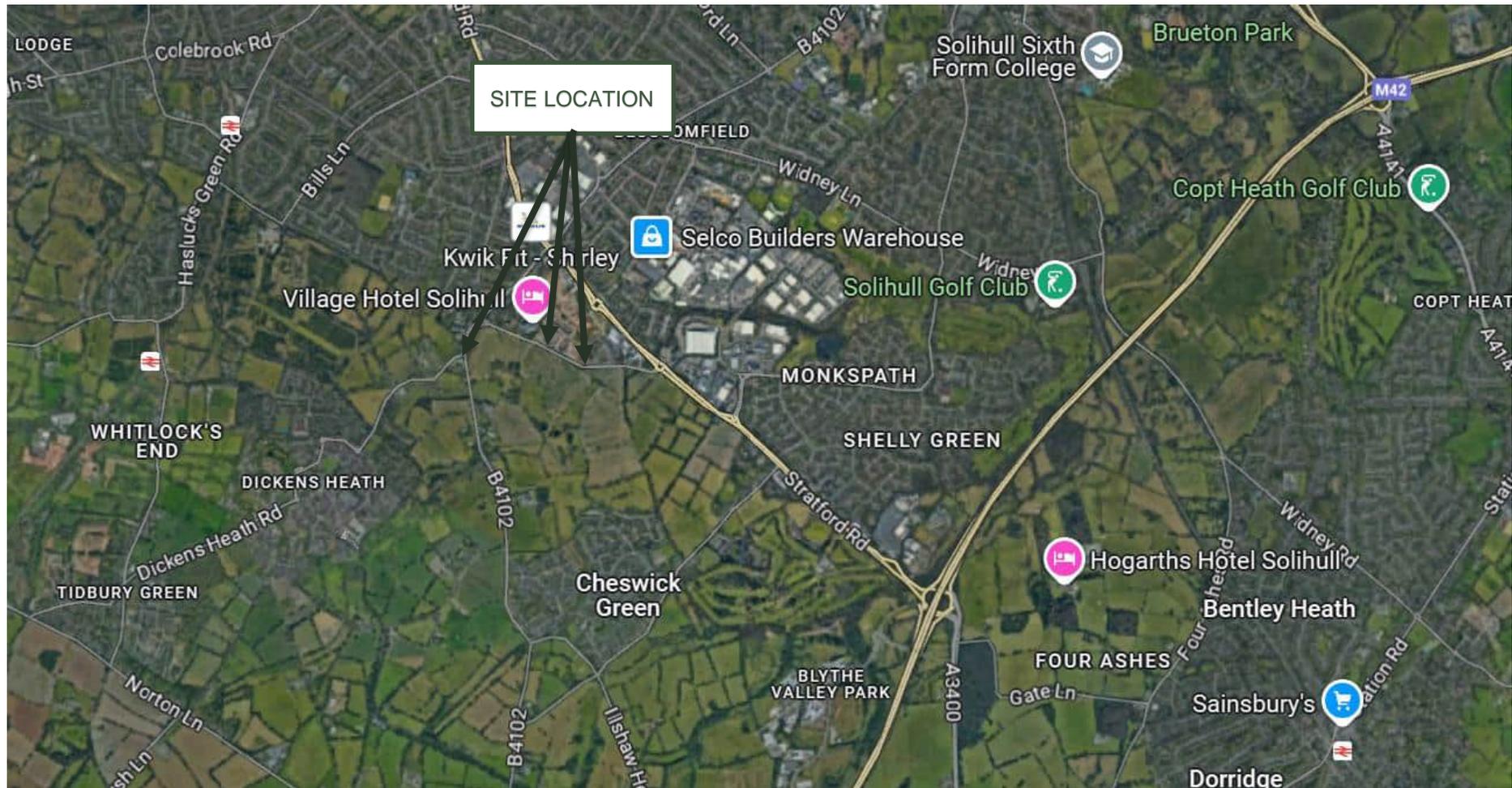
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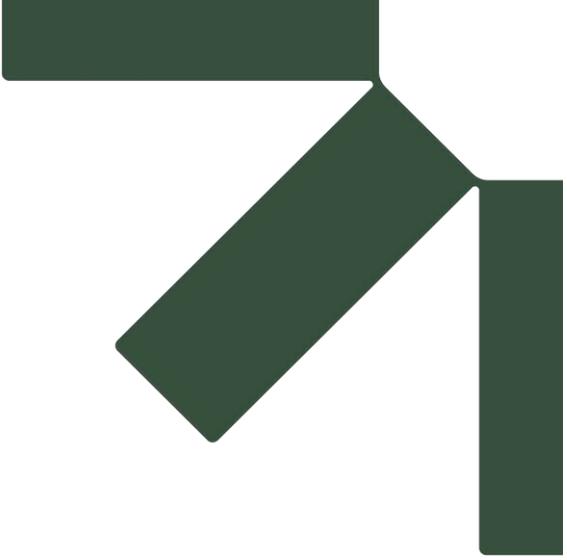
Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey

SLR Project No.: 425.000418.0001

9 December 2024





# **Appendix B    Tanworth Lane Site Access Roundabout (162088\_PD13.4\_Rev A)**

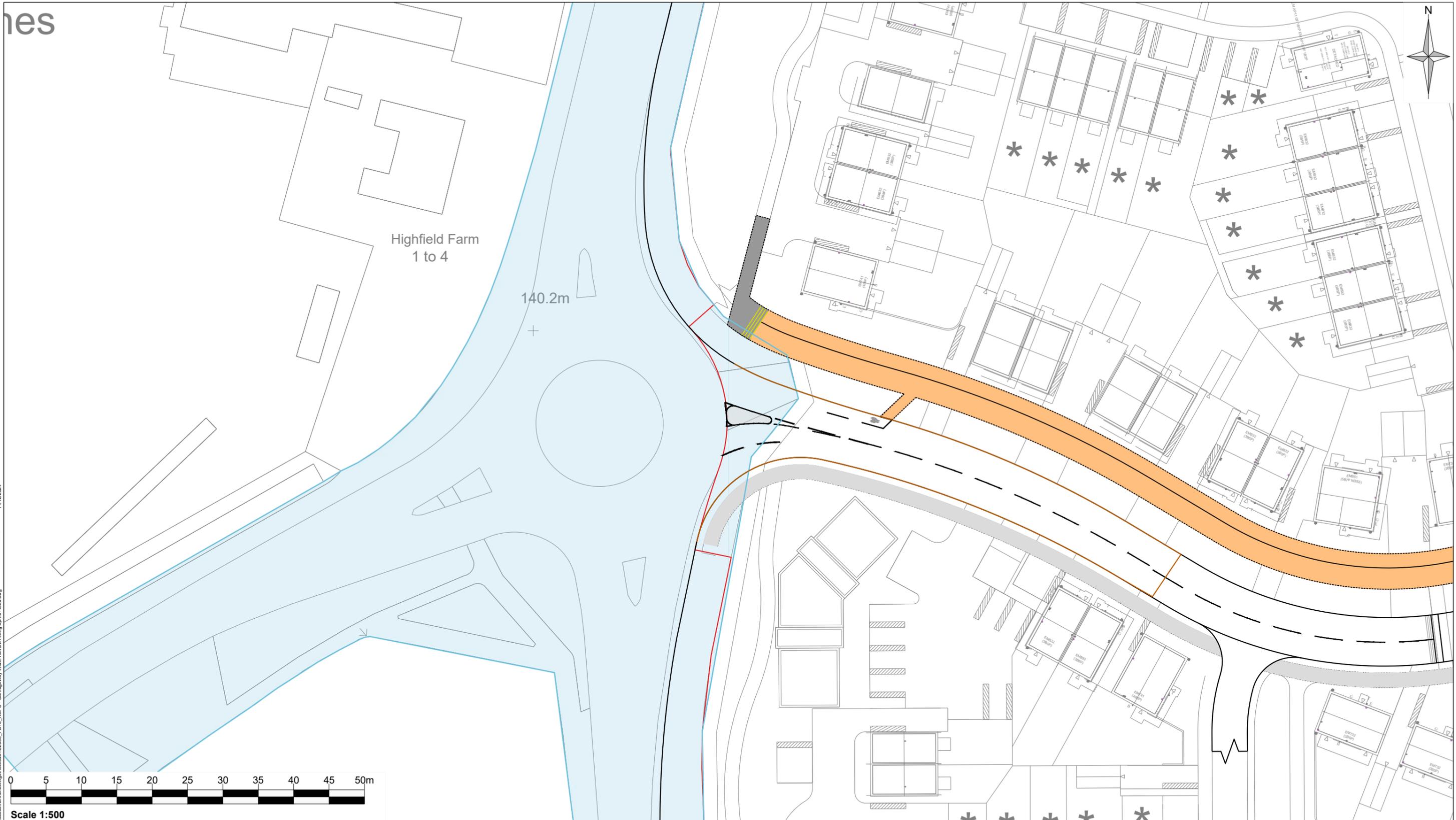
## **Stage 1 Road Safety Audit Designers Response**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey**

SLR Project No.: 425.000418.0001

9 December 2024




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	MZ	CP	
Date	Date	Date	Date
	24.10.2024	24.10.2024	
Drawing Number	Rev.	Scale	SLR Project No.
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Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
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Rev	Amendments	Date	By	Chk

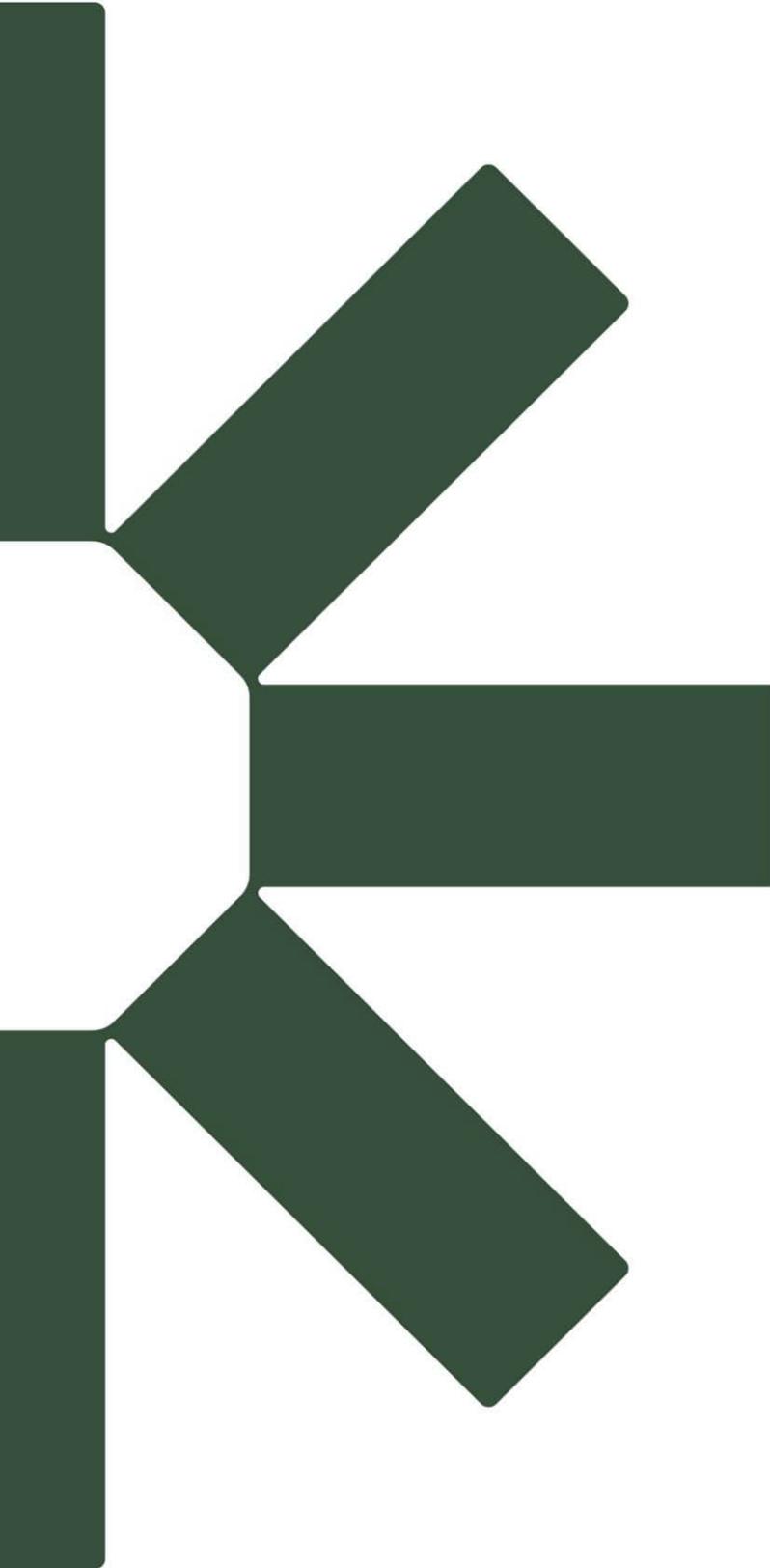
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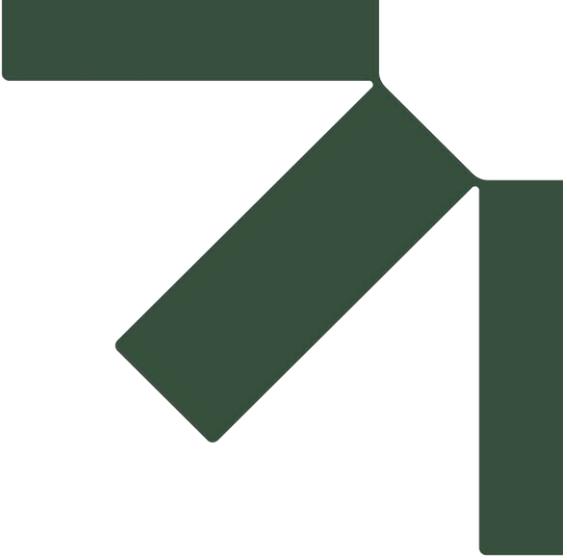
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- END OF PROPOSED APPROVED WORKS





# Appendix K Site Access Drawings

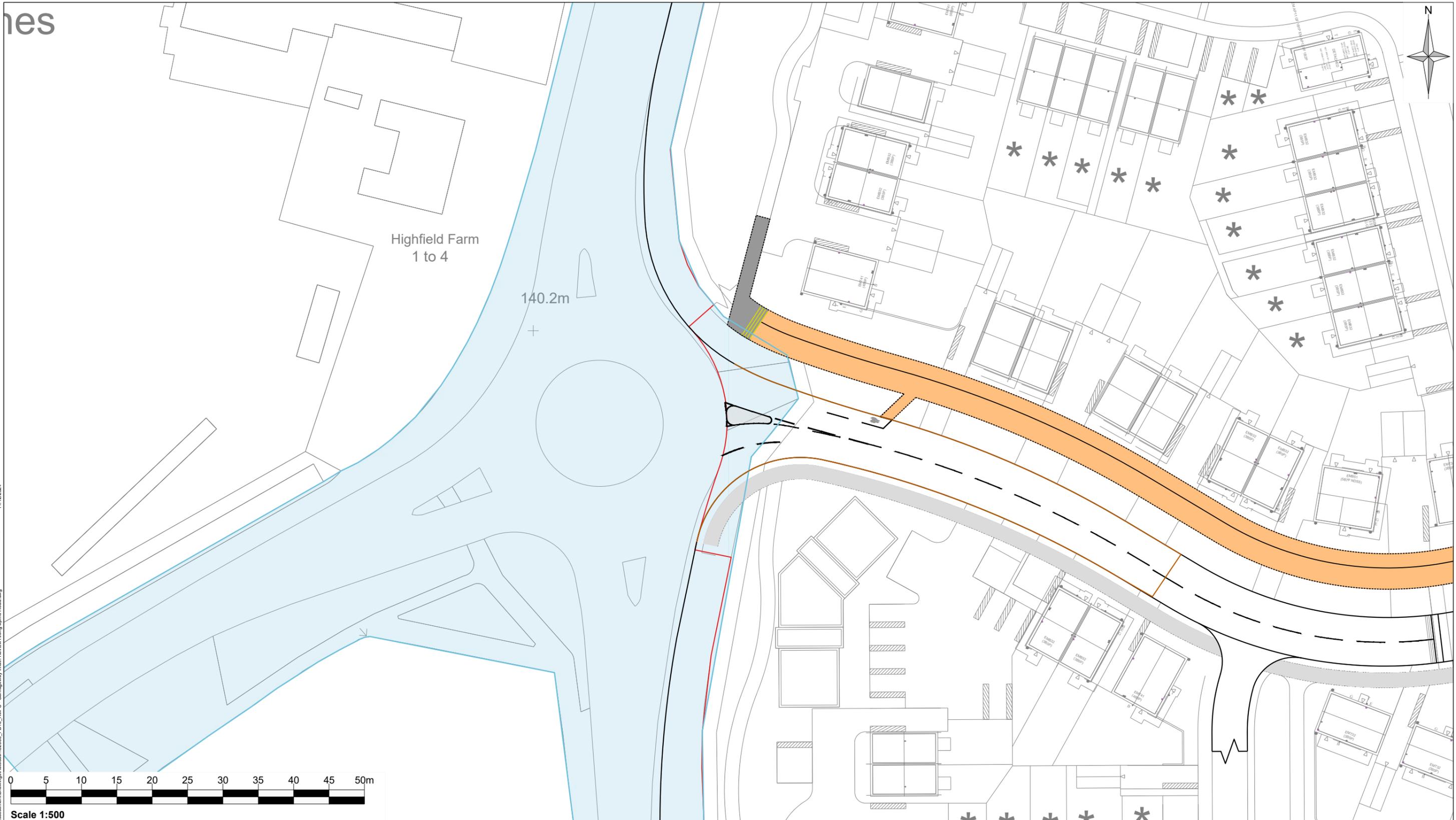
## Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024




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Drawing Number	Rev.	Scale	SLR Project No.
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Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**TANWORTH LANE  
SITE ACCESS ROUNDABOUT**

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Rev	Amendments	Date	By	Chk	Auth
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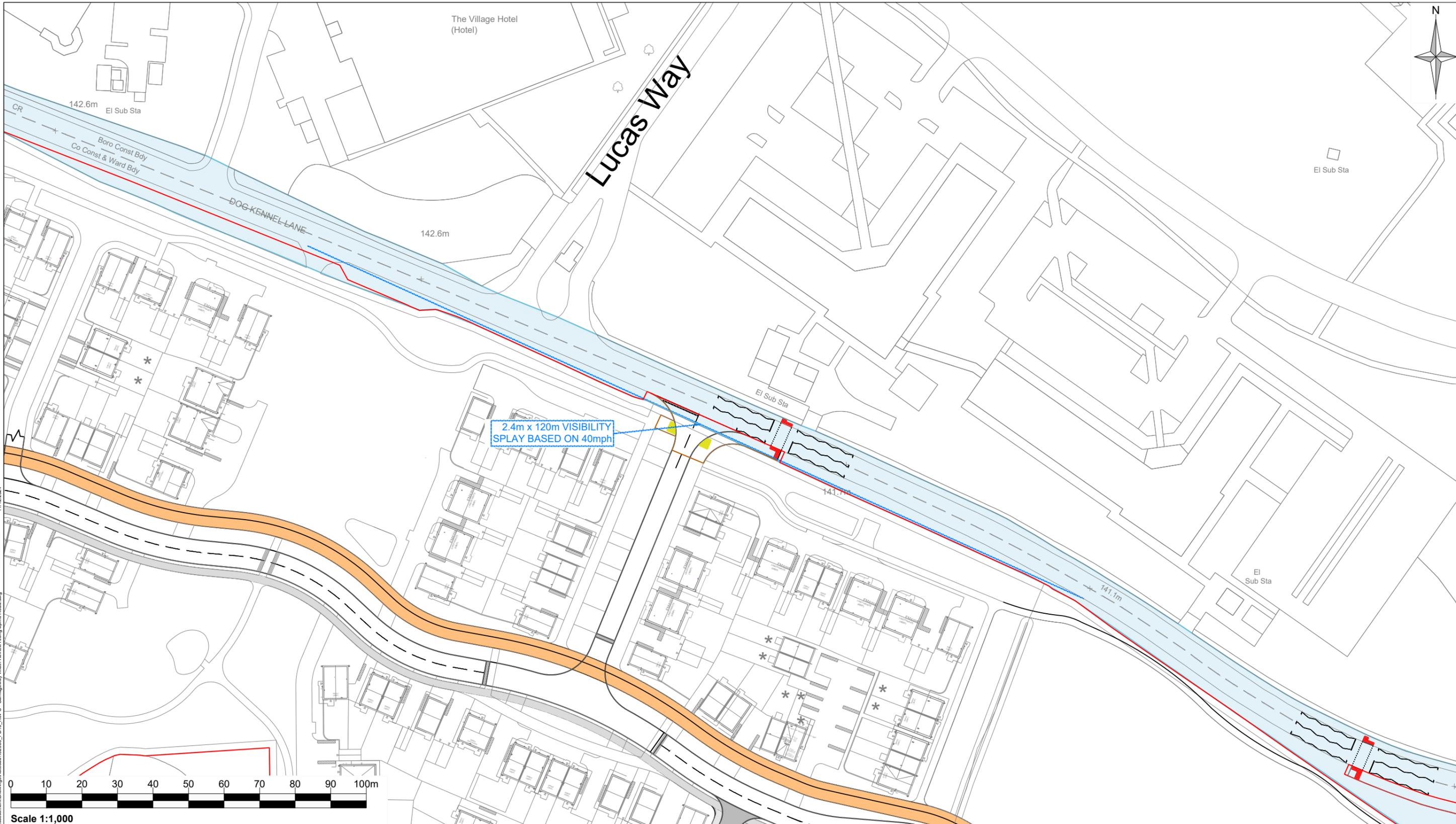
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- SITE BOUNDARY
- HIGHWAY BOUNDARY
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Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
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Drawing Number **PD13.2**

Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**DOG KENNEL LANE SITE ACCESS JUNCTION (WEST)**

Scale  
**1:1000 @ A3**

SLR Project No.  
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Rev	Amendments	Date	By	Chk

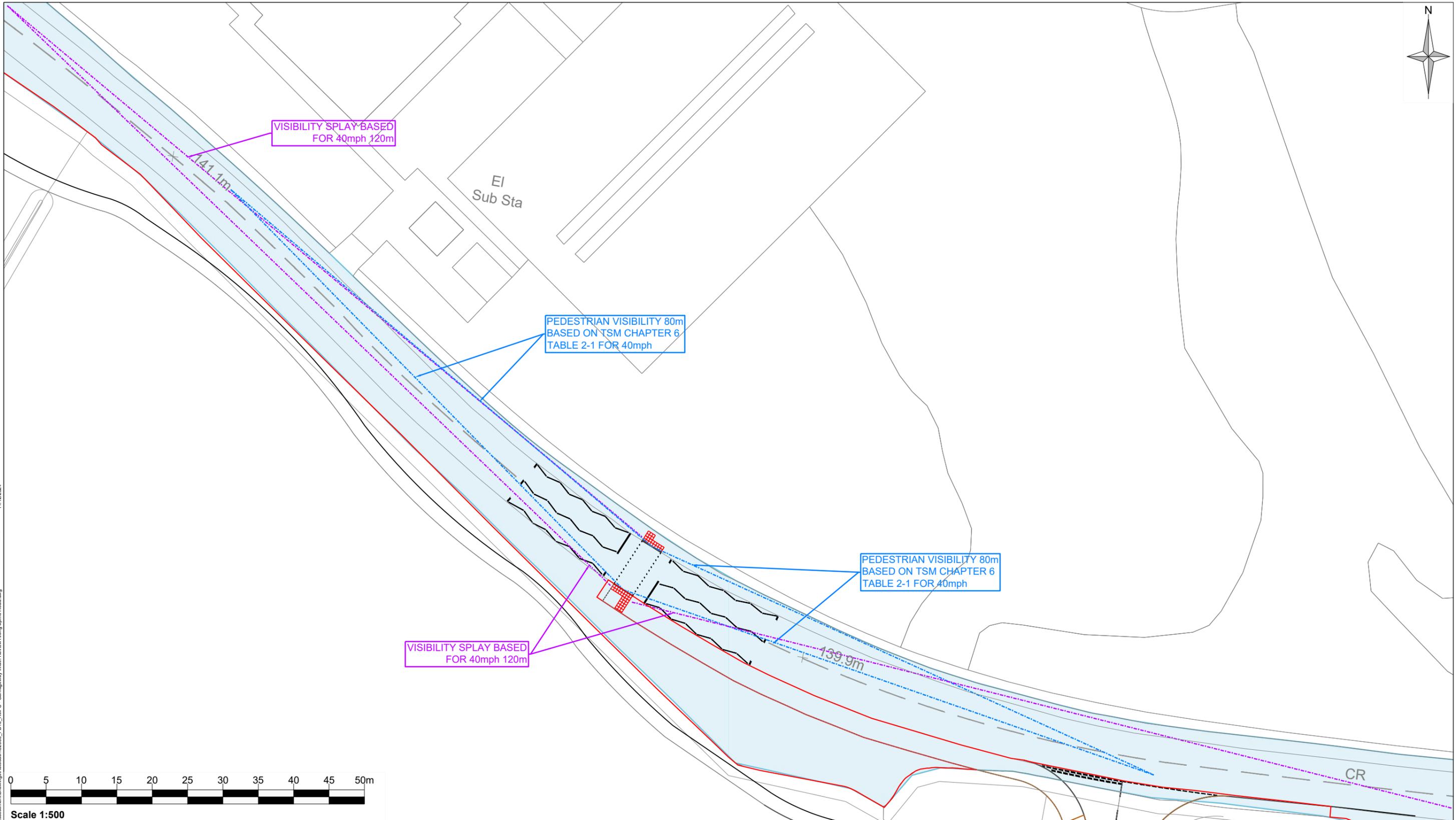
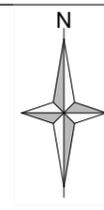
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**Notes:**

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**Legend:**

- SITE BOUNDARY
- HIGHWAY BOUNDARY
- END OF PROPOSED APPROVED WORKS



**SLR**  
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Drawing Status & Suitability Code

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Drawing Number	Rev.	Scale	SLR Project No.
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Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**VISIBILITY SPLAY ON SIGNAL CROSSING**

Rev	Amendments	Date	By	Chk	Auth

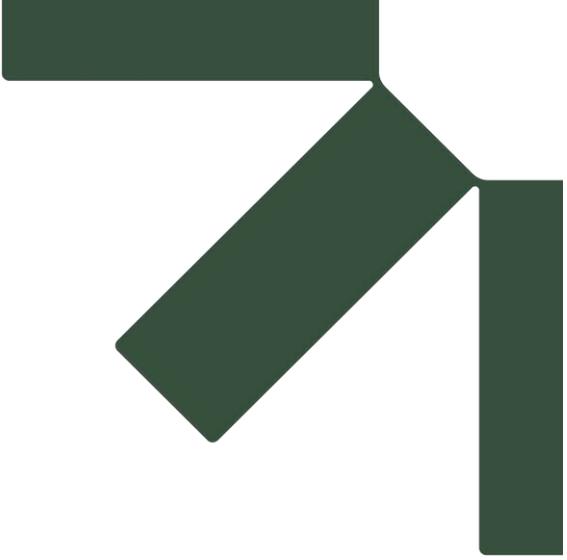
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**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05  
REV: E

**Legend:**

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- HIGHWAY BOUNDARY



# Appendix L Swept Path Analysis Drawings

## Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

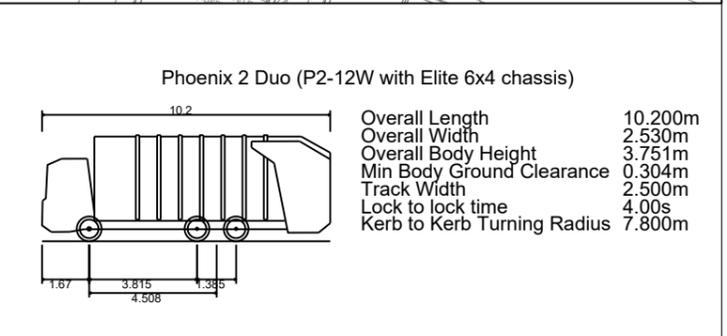
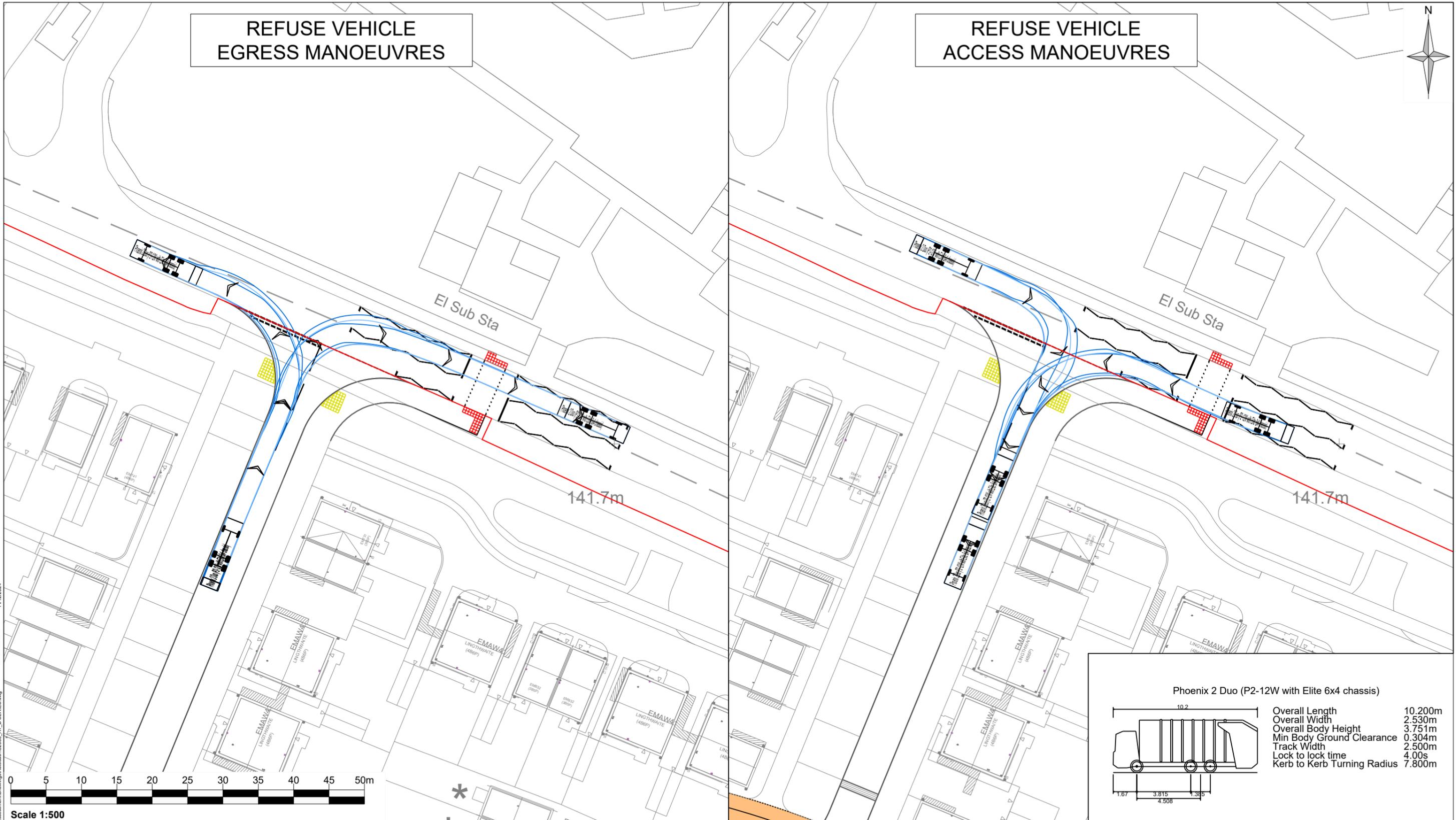
Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024

# REFUSE VEHICLE EGRESS MANOEUVRES

# REFUSE VEHICLE ACCESS MANOEUVRES



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Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
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Drawing Number	Rev.	Scale	SLR Project No.
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Client  
TAYLOR WIMPEY UK LTD

Project  
LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL

Drawing Title  
SITE ACCESS JUNCTION (WEST)  
SWEEP PATH ANALYSIS  
10.2M REFUSE VEHICLE

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

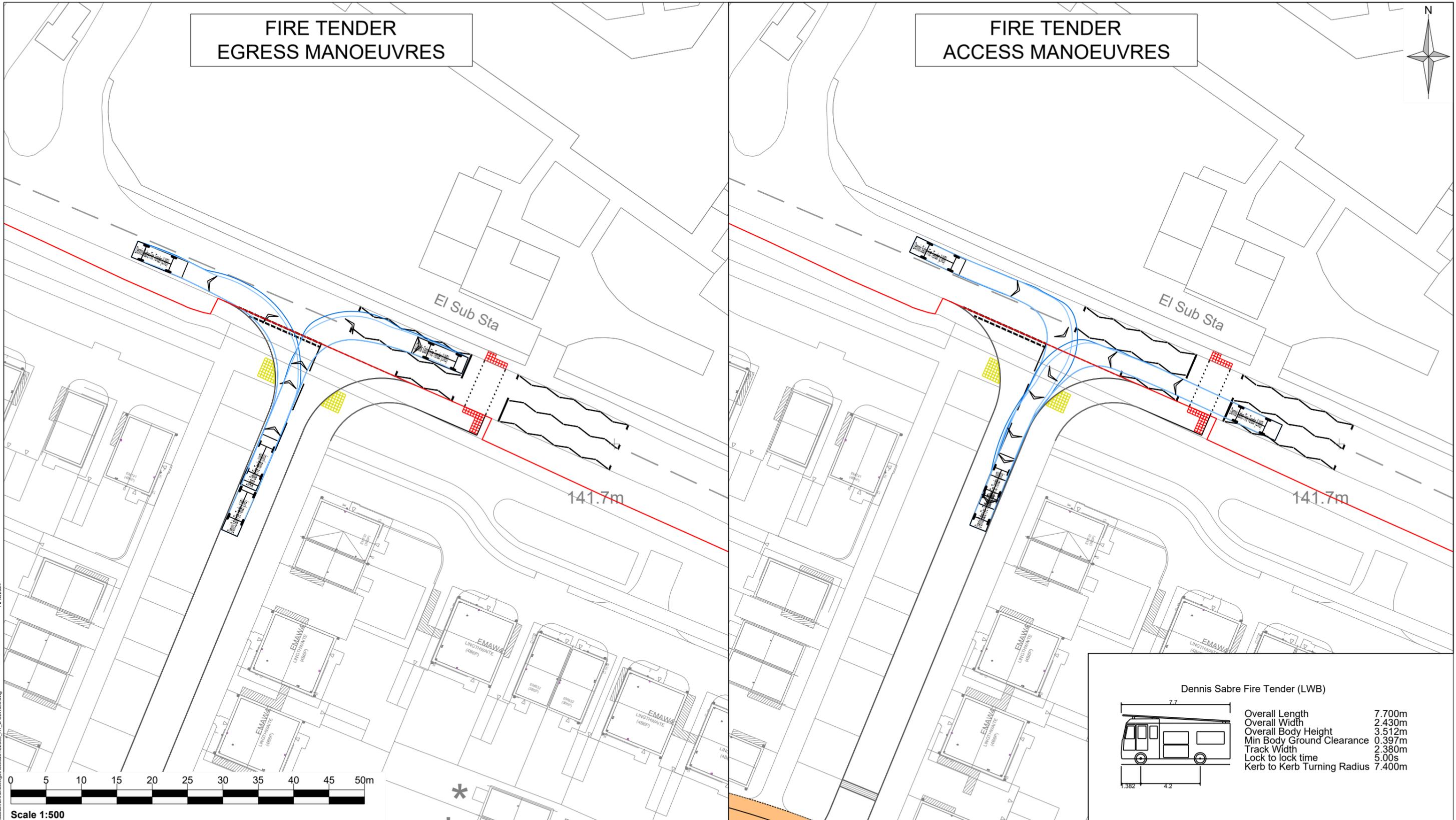
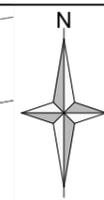
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- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

# FIRE TENDER EGRESS MANOEUVRES

# FIRE TENDER ACCESS MANOEUVRES



**Dennis Sabre Fire Tender (LWB)**

Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

[www.slrconsulting.com](http://www.slrconsulting.com)

Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
<b>AT_B02</b>	-	1:500 @ A3	162088

Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**SITE ACCESS JUNCTION (WEST)  
SWEEP PATH ANALYSIS  
FIRE TENDER**

Rev	Amendments	Date	By	Chk	Auth

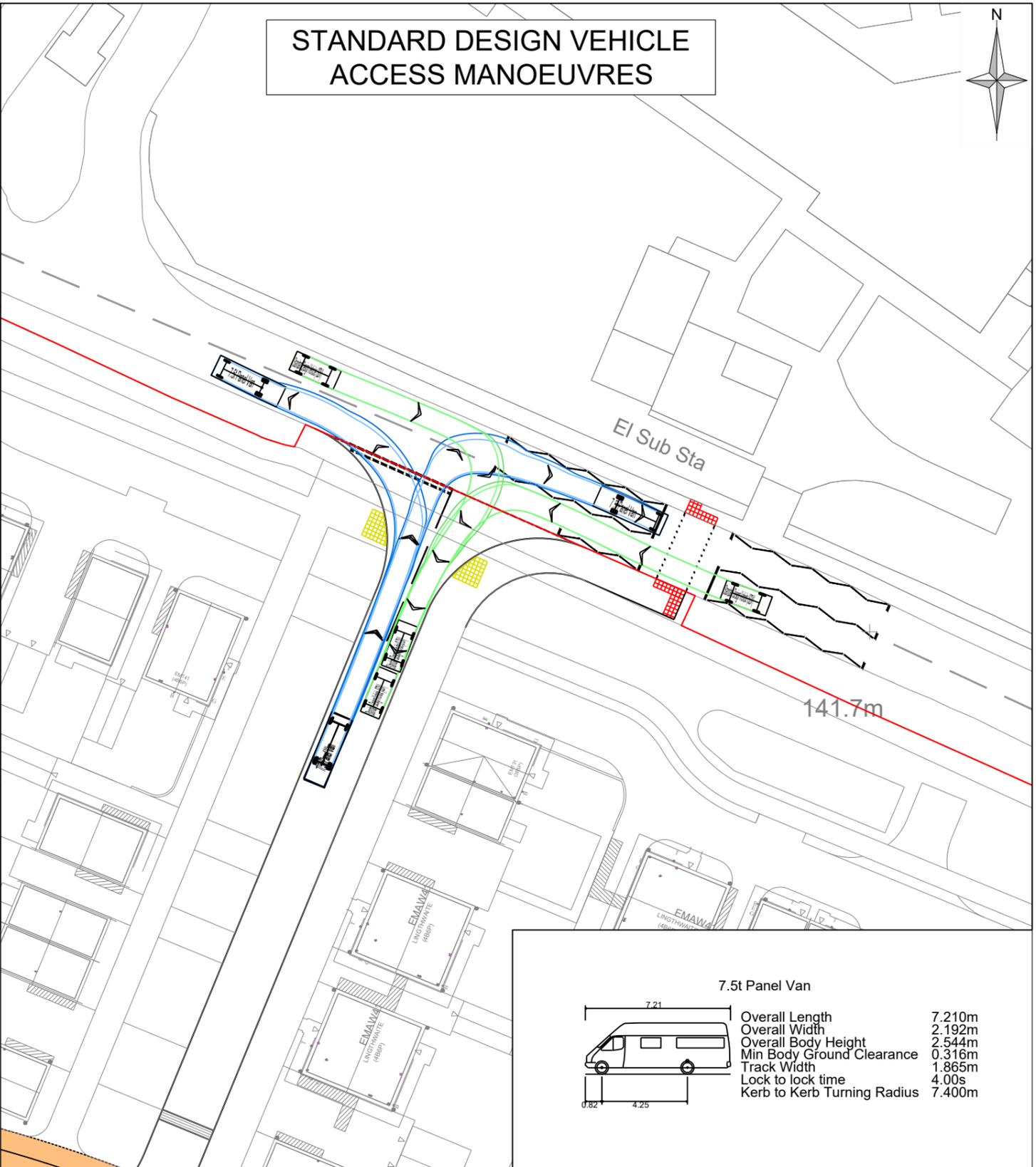
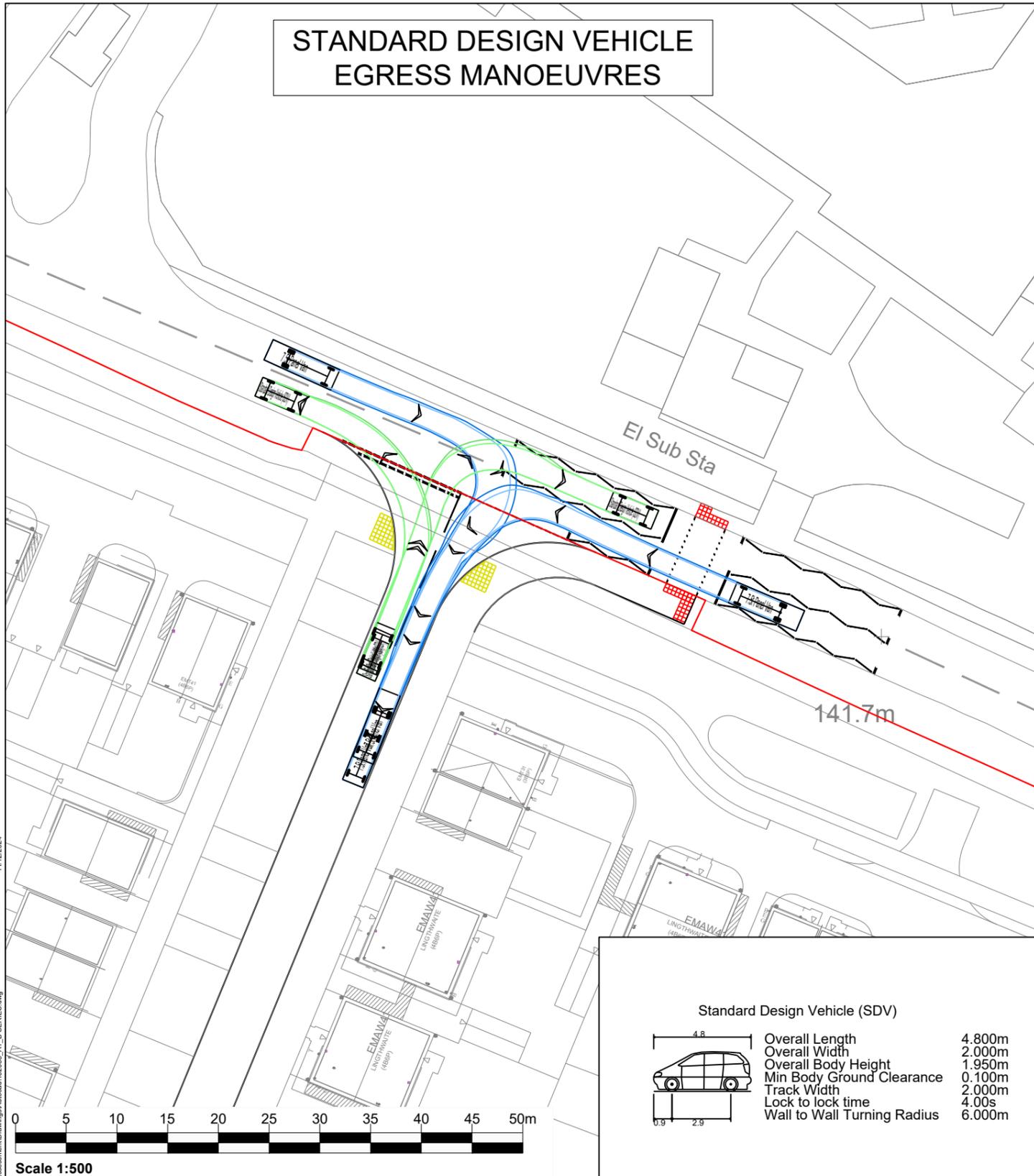
**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

# STANDARD DESIGN VEHICLE EGRESS MANOEUVRES

# STANDARD DESIGN VEHICLE ACCESS MANOEUVRES



**Standard Design Vehicle (SDV)**

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

**7.5t Panel Van**

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

[www.slrconsulting.com](http://www.slrconsulting.com)

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
AT_B03	-	1:500 @ A3	162088

**Client**  
TAYLOR WIMPEY UK LTD

**Project**  
LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL

**Drawing Title**  
SITE ACCESS JUNCTION (WEST)  
SWEEP PATH ANALYSIS  
STANDARD DESIGN VEHICLE AND PANEL VAN

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

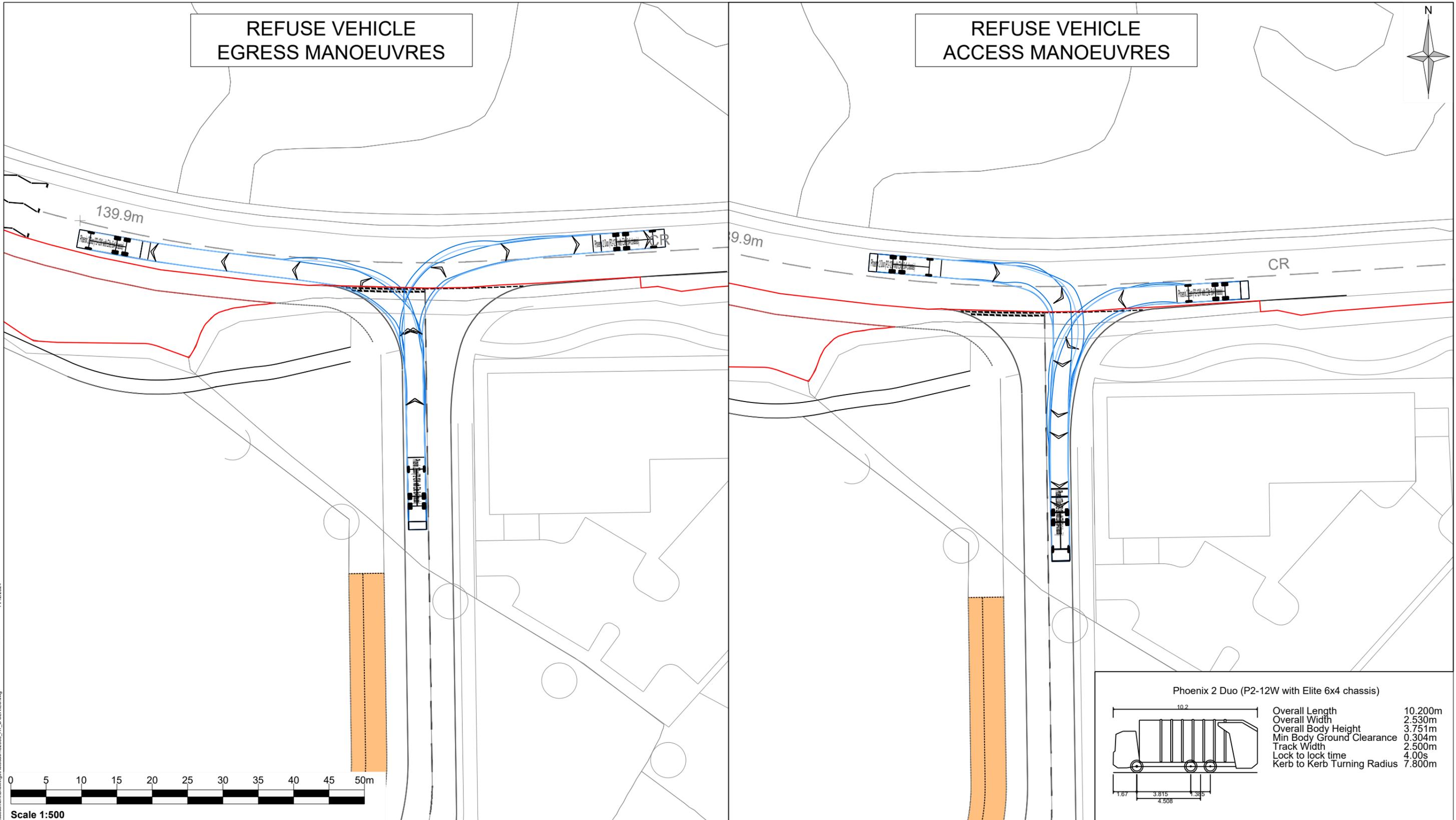
**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

REFUSE VEHICLE  
EGRESS MANOEUVRES

REFUSE VEHICLE  
ACCESS MANOEUVRES



Scale 1:500

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

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

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Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
AT_B04	-	1:500 @ A3	162088

Client  
TAYLOR WIMPEY UK LTD

Project  
LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL

Drawing Title  
SITE ACCESS JUNCTION (EAST)  
SWEEP PATH ANALYSIS  
10.2M REFUSE VEHICLE

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

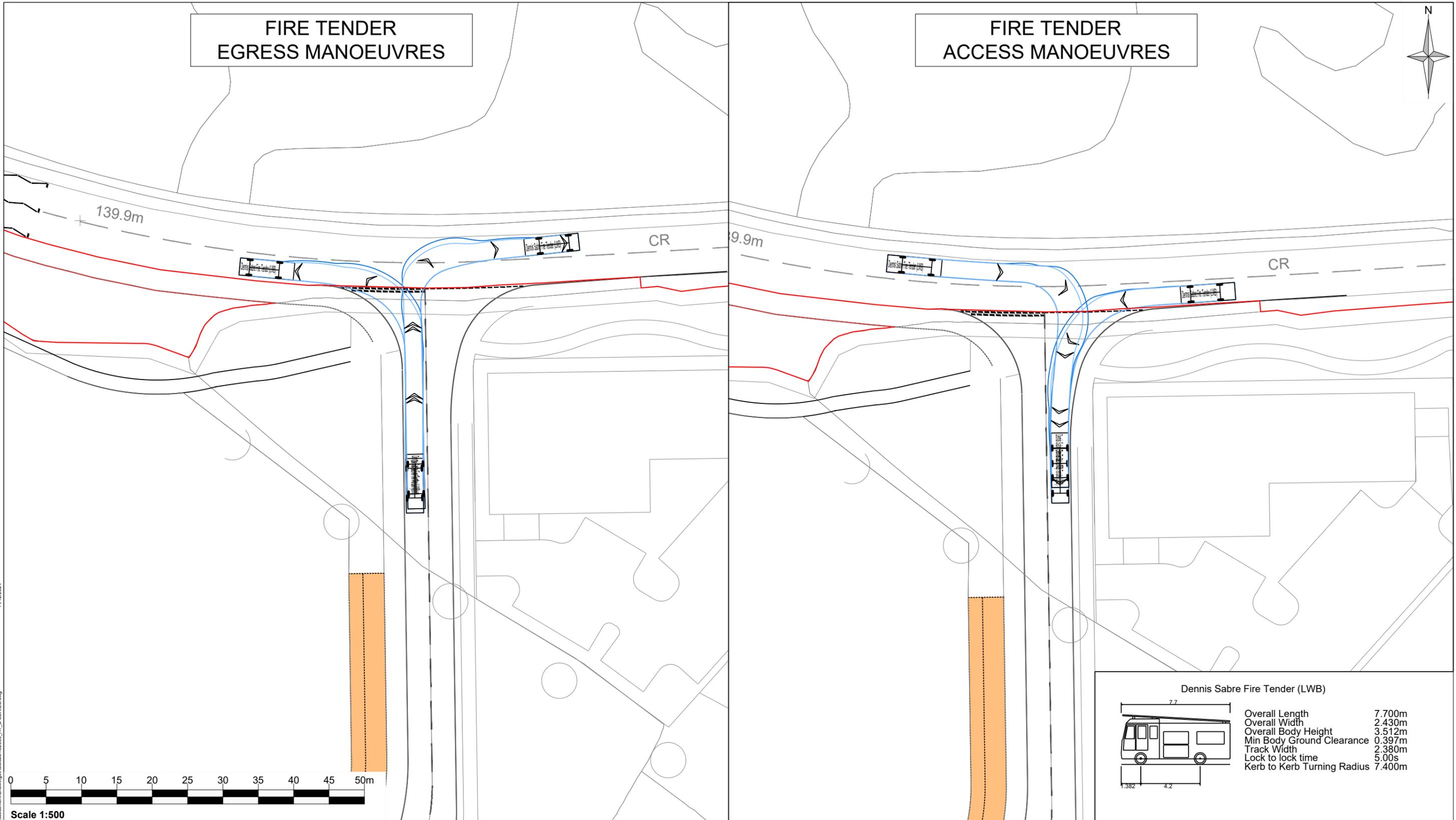
**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

FIRE TENDER  
EGRESS MANOEUVRES

FIRE TENDER  
ACCESS MANOEUVRES



Scale 1:500

Dennis Sabre Fire Tender (LWB)

Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

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Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
AT_B05	-	1:500 @ A3	162088

Client  
TAYLOR WIMPEY UK LTD

Project  
LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL

Drawing Title  
SITE ACCESS JUNCTION (EAST)  
SWEEP PATH ANALYSIS  
FIRE TENDER

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

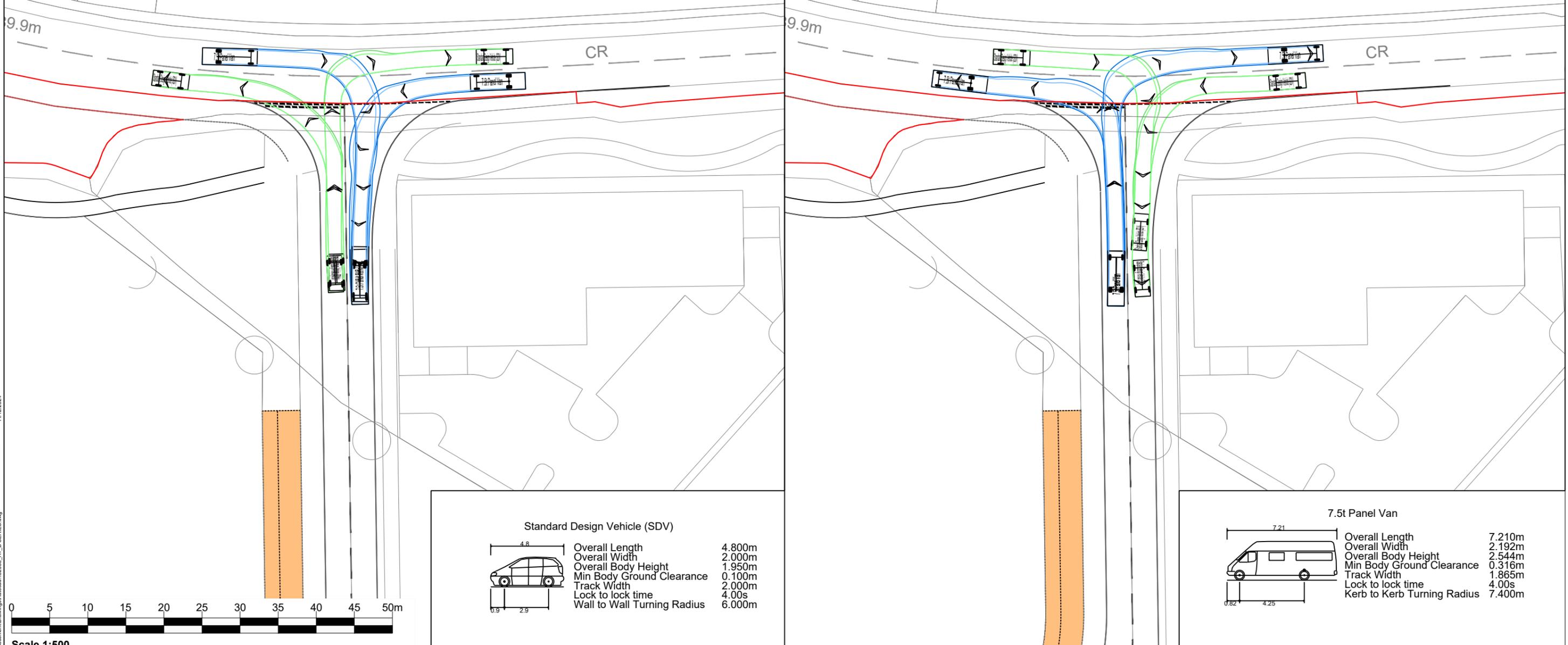
**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

# STANDARD DESIGN VEHICLE EGRESS MANOEUVRES

# STANDARD DESIGN VEHICLE ACCESS MANOEUVRES



**Standard Design Vehicle (SDV)**

Overall Length	4.800m
Overall Width	2.000m
Overall Body Height	1.950m
Min Body Ground Clearance	0.100m
Track Width	2.000m
Lock to lock time	4.00s
Wall to Wall Turning Radius	6.000m

**7.5t Panel Van**

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

**www.slrconsulting.com**

Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
<b>AT_B06</b>	-	1:500 @ A3	162088

**Client**  
TAYLOR WIMPEY UK LTD

**Project**  
LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL

**Drawing Title**  
SITE ACCESS JUNCTION (EAST)  
SWEEP PATH ANALYSIS  
STANDARD DESIGN VEHICLE AND PANEL VAN

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

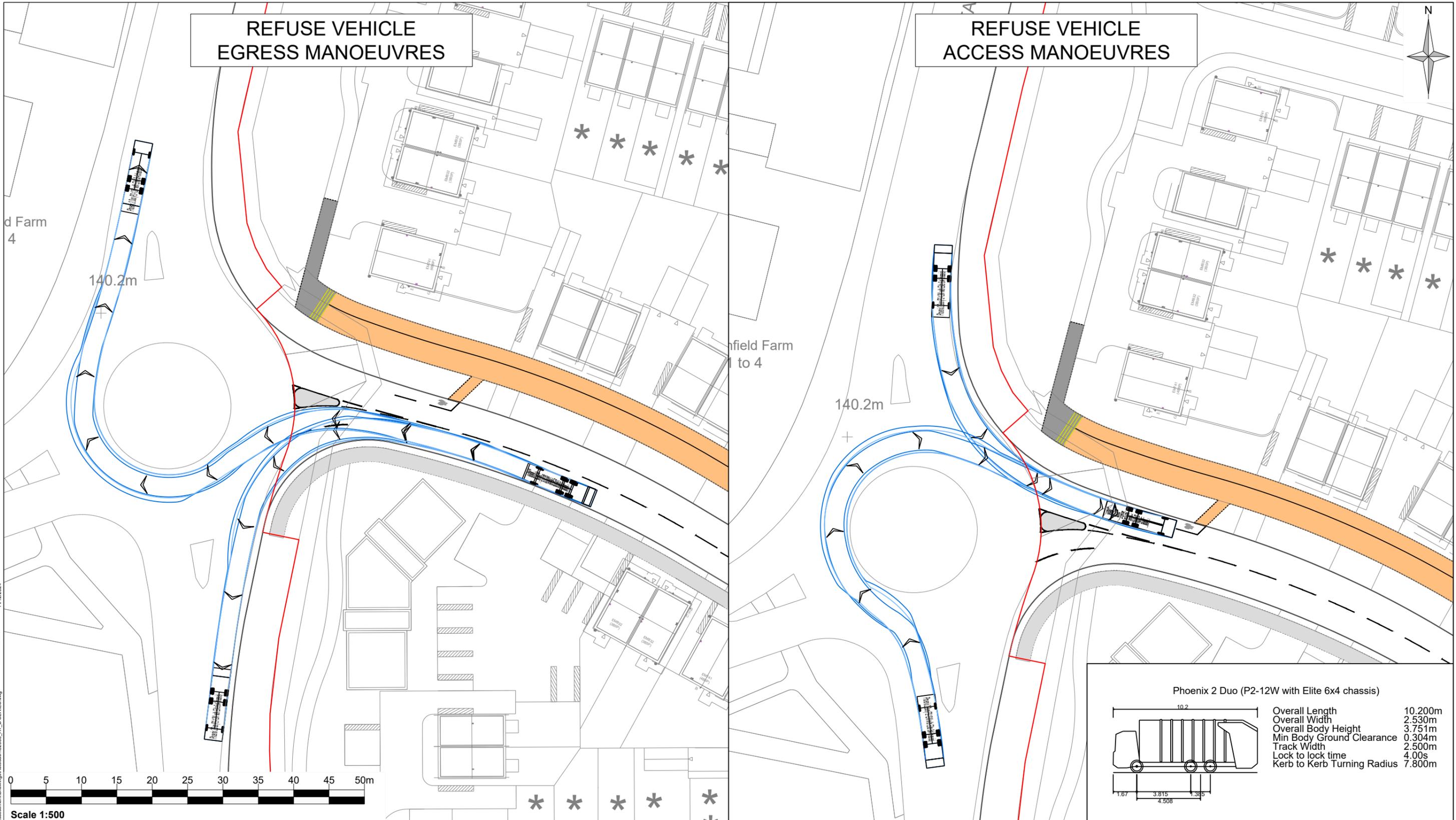
**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

# REFUSE VEHICLE EGRESS MANOEUVRES

# REFUSE VEHICLE ACCESS MANOEUVRES



Scale 1:500

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

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

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Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
<b>AT_B07</b>	-	1:500 @ A3	162088

Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**SITE ACCESS ROUNDABOUT  
SWEEP PATH ANALYSIS  
10.2M REFUSE VEHICLE**

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

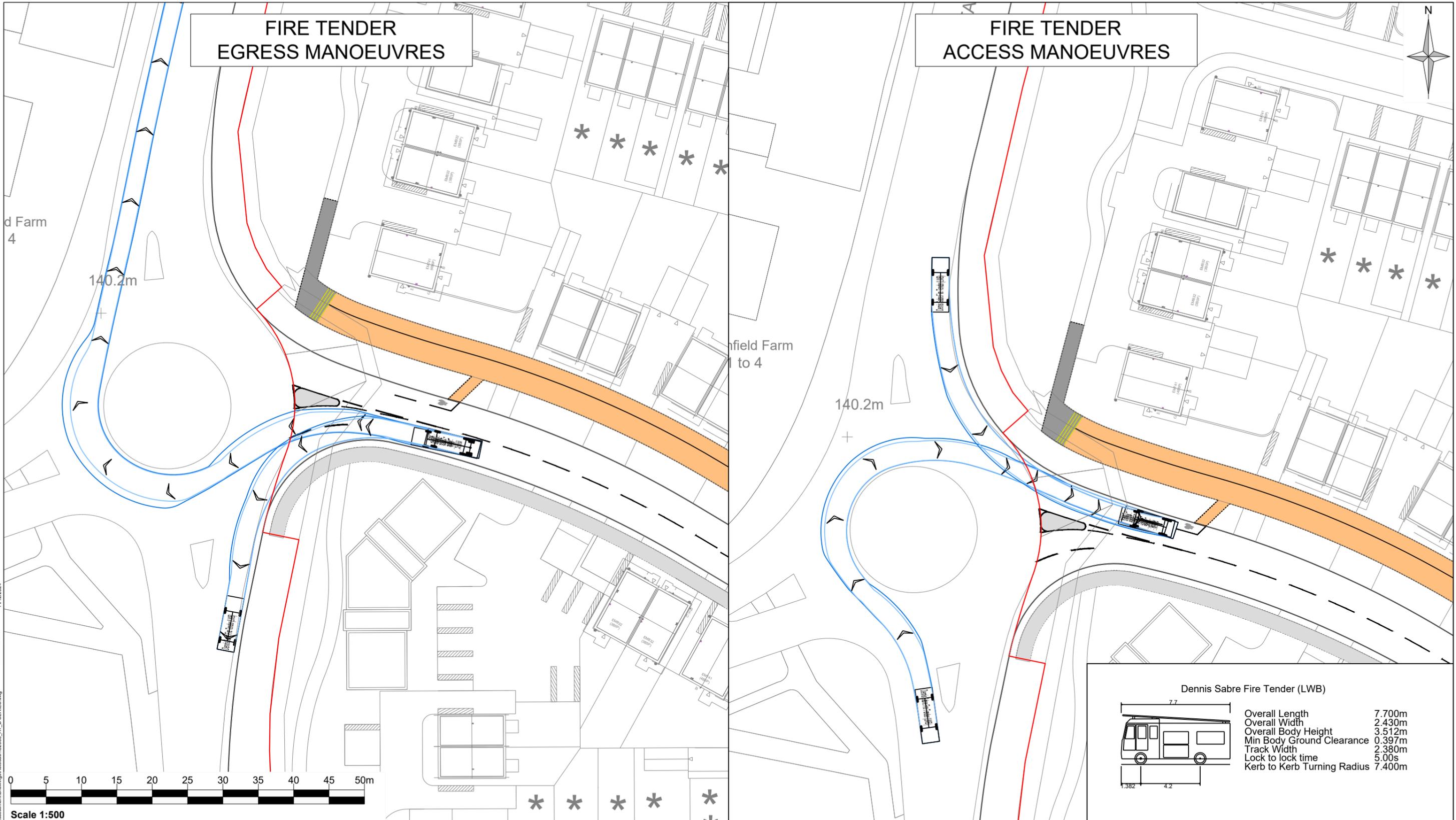
**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

# FIRE TENDER EGRESS MANOEUVRES

# FIRE TENDER ACCESS MANOEUVRES




[www.slrconsulting.com](http://www.slrconsulting.com)

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	
Drawing Number	Rev.	Scale	SLR Project No.
<b>AT_B08</b>	-	1:500 @ A3	162088

Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**SITE ACCESS ROUNDABOUT  
SWEEP PATH ANALYSIS  
FIRE TENDER**

Rev	Amendments	Date	By	Chk	Auth

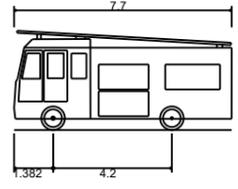
Rev	Amendments	Date	By	Chk	Auth

**Notes:**

- DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

**Dennis Sabre Fire Tender (LWB)**

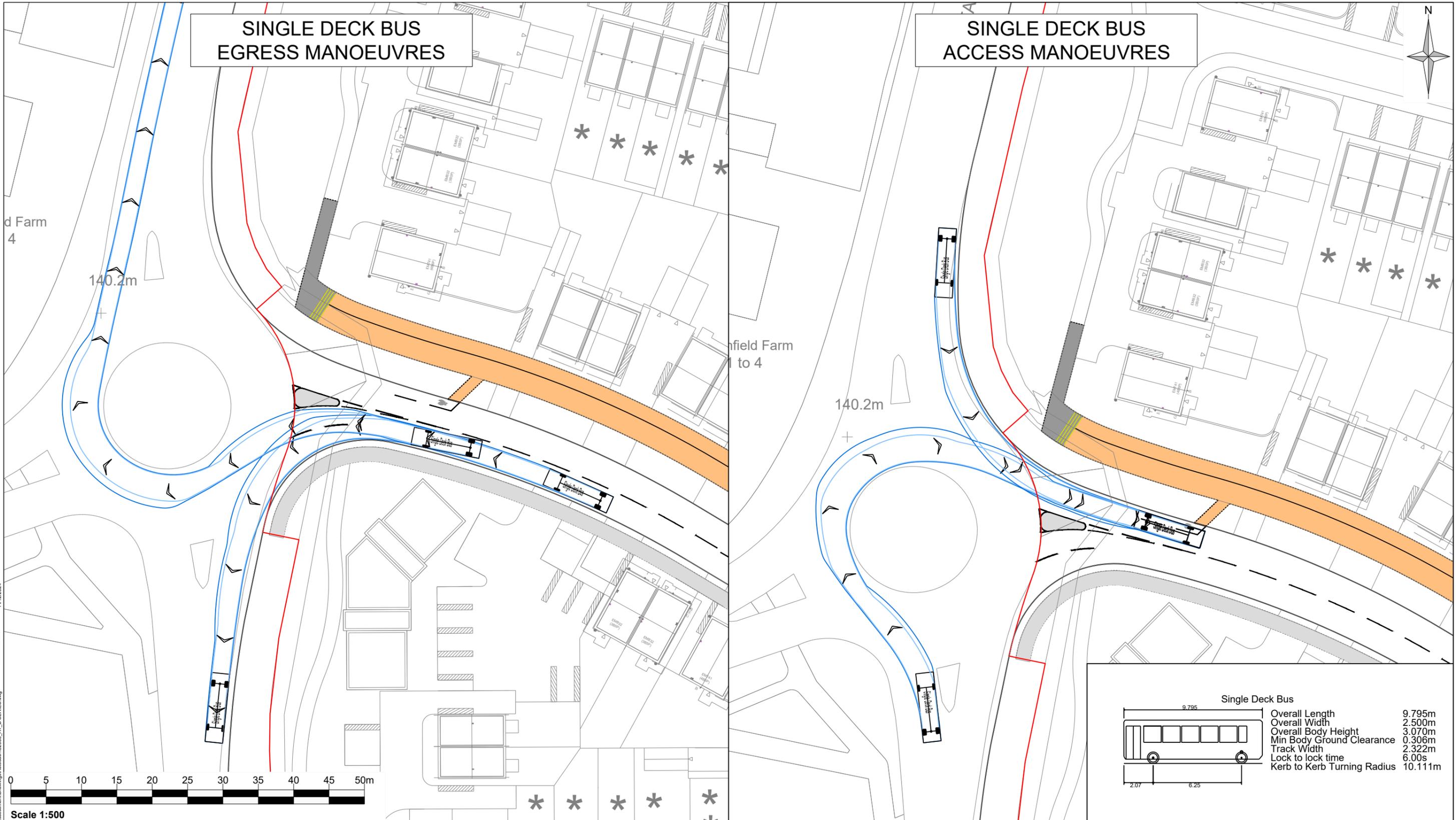


Overall Length	7.700m
Overall Width	2.430m
Overall Body Height	3.512m
Min Body Ground Clearance	0.397m
Track Width	2.380m
Lock to lock time	5.00s
Kerb to Kerb Turning Radius	7.400m

H:\Projects\W1600001\162088 - Lightail Farm Solihull\162088\Technical\A - Transport Assessment\Drawings\AutoCAD\162088\_AT\_B\_SERIES.dwg 11/12/2024

# SINGLE DECK BUS EGRESS MANOEUVRES

# SINGLE DECK BUS ACCESS MANOEUVRES



**Single Deck Bus**

Overall Length	9.795m
Overall Width	2.500m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	10.111m

**SLR**  
www.slrconsulting.com

Client <b>TAYLOR WIMPEY UK LTD</b>			
Project <b>LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL</b>			
Drawing Title <b>SITE ACCESS ROUNDABOUT SWEEP PATH ANALYSIS SINGLE DECK BUS</b>			
Designed <b>KR</b>	Drawn <b>CP</b>	Checked <b>CP</b>	Authorised
Date <b>10.12.24</b>	Date <b>10.12.24</b>	Date	Date
Drawing Number <b>AT_B09</b>		Rev. <b>-</b>	Scale <b>1:500 @ A3</b>
SLR Project No. <b>162088</b>			

Rev	Amendments	Date	By	Chk	Auth

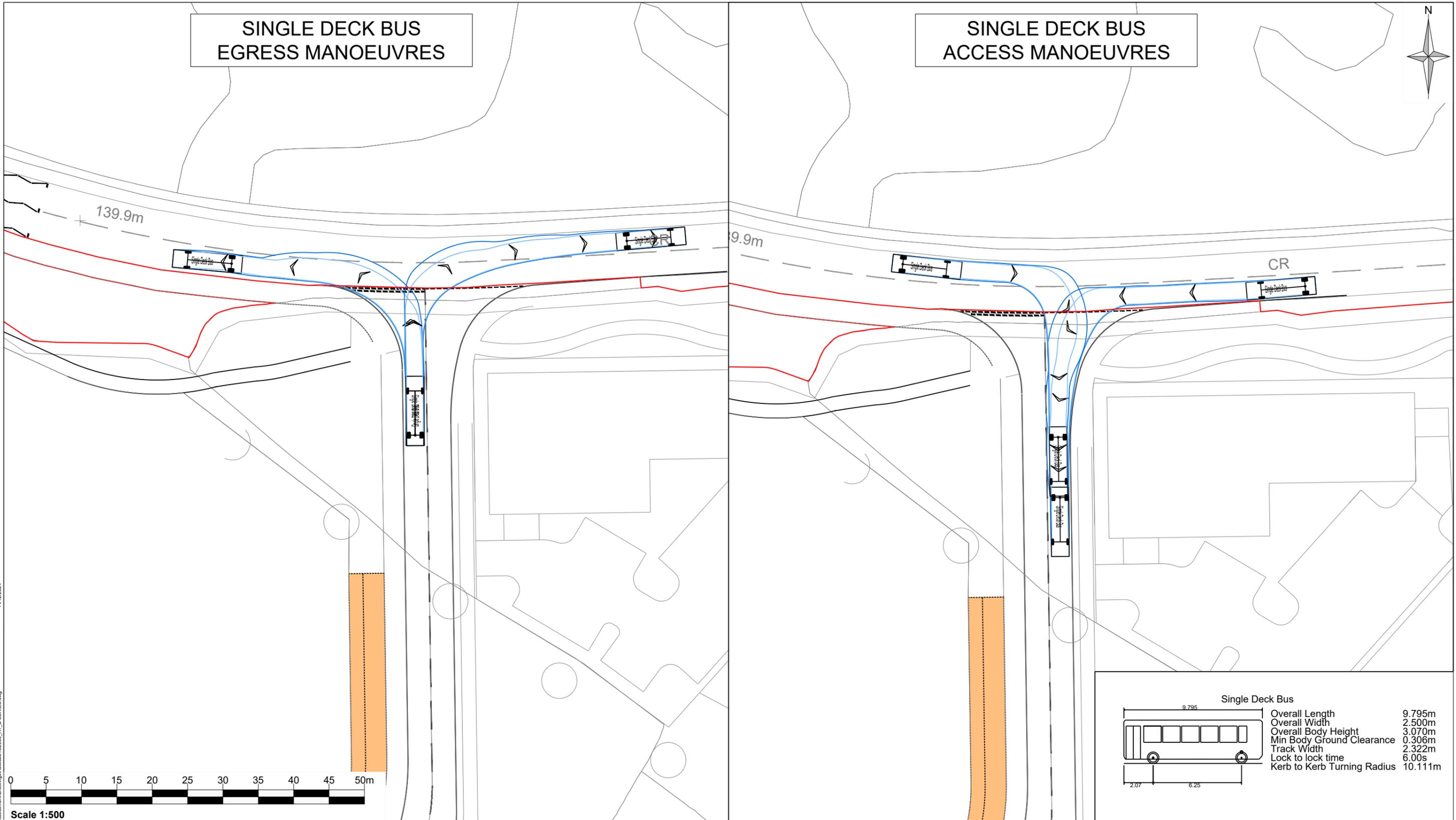
Rev	Amendments	Date	By	Chk	Auth

**Notes:**  
1. DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**

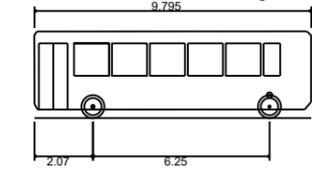
**SINGLE DECK BUS  
EGRESS MANOEUVRES**

**SINGLE DECK BUS  
ACCESS MANOEUVRES**



Scale 1:500

Single Deck Bus



Overall Length	9.795m
Overall Width	2.500m
Overall Body Height	3.070m
Min Body Ground Clearance	0.306m
Track Width	2.322m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	10.111m



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Drawing Status & Suitability Code

Designed	Drawn	Checked	Authorised
	KR	CP	
Date	Date	Date	Date
	10.12.24	10.12.24	

Drawing Number **AT\_B10**

Client  
**TAYLOR WIMPEY UK LTD**

Project  
**LAND SOUTH OF DOG KENNEL LANE 'HARE'S CROFT', SOLIHULL**

Drawing Title  
**SITE ACCESS JUNCTION (EAST)  
SWEEP PATH ANALYSIS  
SINGLE DECK BUS**

Scale  
**1:500 @ A3**

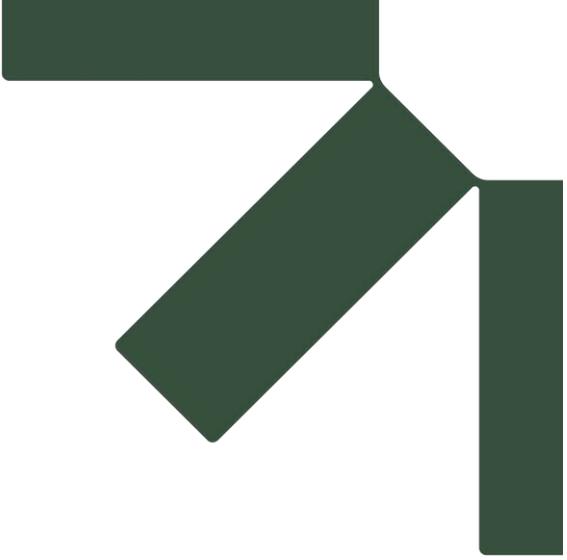
SLR Project No.  
**162088**

Rev	Amendments	Date	By	Chk	Auth

Rev	Amendments	Date	By	Chk	Auth

**Notes:**  
1. DRAWING BASED ON: P21-3274\_DE\_003\_05 I  
REV: E

**Legend:**



# Appendix M TRICS Outputs

## Transport Assessment

Land South of Dog Kennel Lane 'Hare's Croft', Solihull

Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024

SLR Consulting Helmont House Cardiff

Licence No: 529506

Filtering Summary

Land Use	05/F	HEALTH/CARE HOME (ELDERLY RESIDENTIAL)
Selected Trip Rate Calculation Parameter Range	17-180 RESIDE	
Actual Trip Rate Calculation Parameter Range	31-60 RESIDE	
Date Range	Minimum: 01/01/16	Maximum: 18/06/23
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	2
	Tuesday	2
	Thursday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	2
	Edge of Town	3
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	4 - Selected
	Servicing vehicles Excluded	1 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000	1
	15,001 to 20,000	1
	25,001 to 50,000	3
Population <5 Mile ranges selected	25,001 to 50,000	1
	75,001 to 100,000	1
	125,001 to 250,000	2
	250,001 to 500,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	3
PTAL Rating	No PTAL Present	5

Calculation Reference: AUDIT-529506-240524-0518

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use     : 05 - HEALTH  
Category     : F - CARE HOME (ELDERLY RESIDENTIAL)  
TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	WS    WEST SUSSEX	1 days
05	EAST MIDLANDS	
	NN    NORTH NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY    NORTH YORKSHIRE	1 days
08	NORTH WEST	
	BP    BLACKPOOL	1 days
09	NORTH	
	TW    TYNE & WEAR	1 days

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



## Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	3 days

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

Travel Plan:

No	5 days
----	--------

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

PTAL Rating:

No PTAL Present	5 days
-----------------	--------

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



TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

TOTAL VEHICLES

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	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	5	47	0.098	5	47	0.081	5	47	0.179
08:00 - 09:00	5	47	0.073	5	47	0.060	5	47	0.133
09:00 - 10:00	5	47	0.073	5	47	0.047	5	47	0.120
10:00 - 11:00	5	47	0.051	5	47	0.038	5	47	0.089
11:00 - 12:00	5	47	0.064	5	47	0.081	5	47	0.145
12:00 - 13:00	5	47	0.051	5	47	0.064	5	47	0.115
13:00 - 14:00	5	47	0.094	5	47	0.038	5	47	0.132
14:00 - 15:00	5	47	0.068	5	47	0.111	5	47	0.179
15:00 - 16:00	5	47	0.098	5	47	0.171	5	47	0.269
16:00 - 17:00	5	47	0.038	5	47	0.056	5	47	0.094
17:00 - 18:00	5	47	0.034	5	47	0.043	5	47	0.077
18:00 - 19:00	5	47	0.034	5	47	0.038	5	47	0.072
19:00 - 20:00	5	47	0.056	5	47	0.030	5	47	0.086
20:00 - 21:00	5	47	0.047	5	47	0.051	5	47	0.098
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>0.879</b>			<b>0.909</b>			<b>1.788</b>

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

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

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#### Parameter summary

Trip rate parameter range selected:	31 - 60 (units: )
Survey date range:	01/01/16 - 18/06/23
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-300 DWELLS	
Actual Trip Rate Calculation Parameter Range	8-243 DWELLS	
Date Range	Minimum: 01/01/23	Maximum: 14/11/23
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Monday	3
	Tuesday	5
	Wednesday	1
	Thursday	1
Main Location Types selected	Edge of Town	10
Inclusion of Servicing Vehicles Counts	Servicing vehicles Included	1 - Selected
	Servicing vehicles Excluded	9 - Selected
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000	2
	10,001 to 15,000	5
	15,001 to 20,000	2
	20,001 to 25,000	1
Population <5 Mile ranges selected	25,001 to 50,000	1
	50,001 to 75,000	3
	100,001 to 125,000	2
	125,001 to 250,000	3
	250,001 to 500,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	7
	1.6 to 2.0	1
PTAL Rating	No PTAL Present	10

Calculation Reference: AUDIT-529506-240516-0549

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
Category : A - HOUSES PRIVATELY OWNED  
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
CT	CENTRAL BEDFORDSHIRE	1 days
ES	EAST SUSSEX	2 days
HC	HAMPSHIRE	3 days
HF	HERTFORDSHIRE	1 days
KC	KENT	1 days
WS	WEST SUSSEX	2 days

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



## Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	5 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	3 days
100,001 to 125,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	7 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	10 days
-----	---------

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

PTAL Rating:

No PTAL Present	10 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CT-03-A-03 ARLESEY ROAD STOTFOLD	MIXED HOUSES	CENTRAL BEDFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	73	
	<i>Survey date: TUESDAY</i>	<i>27/06/23</i>	<i>Survey Type: MANUAL</i>
2	ES-03-A-09 THE FAIRWAY NEWHAVEN	DETACHED & SEMI-DETACHED	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	47	
	<i>Survey date: MONDAY</i>	<i>13/03/23</i>	<i>Survey Type: MANUAL</i>
3	ES-03-A-10 WATERGATE BEXHILL-ON-SEA	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	139	
	<i>Survey date: THURSDAY</i>	<i>28/09/23</i>	<i>Survey Type: MANUAL</i>
4	HC-03-A-33 CROW LANE RINGWOOD CROW	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	195	
	<i>Survey date: TUESDAY</i>	<i>04/07/23</i>	<i>Survey Type: MANUAL</i>
5	HC-03-A-34 STONEHAM LANE EASTLEIGH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	243	
	<i>Survey date: TUESDAY</i>	<i>14/11/23</i>	<i>Survey Type: MANUAL</i>
6	HC-03-A-36 HAVANT ROAD EMSWORTH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	145	
	<i>Survey date: TUESDAY</i>	<i>12/09/23</i>	<i>Survey Type: MANUAL</i>
7	HF-03-A-05 HOLMSIDE RISE WATFORD SOUTH OXHEY	TERRACED HOUSES	HERTFORDSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	8	
	<i>Survey date: MONDAY</i>	<i>05/06/23</i>	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

8	KC-03-A-10 HEADCORN ROAD STAPLEHURST	MIXED HOUSES	KENT
	Edge of Town Residential Zone Total No of Dwellings: 106 <i>Survey date: TUESDAY 09/05/23</i>		<i>Survey Type: MANUAL</i>
9	WS-03-A-17 SHOPWHYKE ROAD CHICHESTER	MIXED HOUSES & FLATS	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 86 <i>Survey date: WEDNESDAY 01/03/23</i>		<i>Survey Type: MANUAL</i>
10	WS-03-A-19 TURNERS HILL ROAD EAST GRINSTEAD	MIXED HOUSES & FLATS	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 92 <i>Survey date: MONDAY 15/05/23</i>		<i>Survey Type: MANUAL</i>

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

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

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.60

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	10	113	0.068	10	113	0.309	10	113	0.377
08:00 - 09:00	10	113	0.139	10	113	0.379	10	113	0.518
09:00 - 10:00	10	113	0.132	10	113	0.187	10	113	0.319
10:00 - 11:00	10	113	0.113	10	113	0.128	10	113	0.241
11:00 - 12:00	10	113	0.112	10	113	0.134	10	113	0.246
12:00 - 13:00	10	113	0.146	10	113	0.150	10	113	0.296
13:00 - 14:00	10	113	0.167	10	113	0.160	10	113	0.327
14:00 - 15:00	10	113	0.161	10	113	0.201	10	113	0.362
15:00 - 16:00	10	113	0.303	10	113	0.175	10	113	0.478
16:00 - 17:00	10	113	0.263	10	113	0.150	10	113	0.413
17:00 - 18:00	10	113	0.359	10	113	0.146	10	113	0.505
18:00 - 19:00	10	113	0.253	10	113	0.108	10	113	0.361
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			<b>2.216</b>			<b>2.227</b>			<b>4.443</b>

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

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

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#### Parameter summary

Trip rate parameter range selected: 8 - 243 (units: )  
Survey date date range: 01/01/23 - 14/11/23  
Number of weekdays (Monday-Friday): 10  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys automatically removed from selection: 0  
Surveys manually removed from selection: 0

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

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

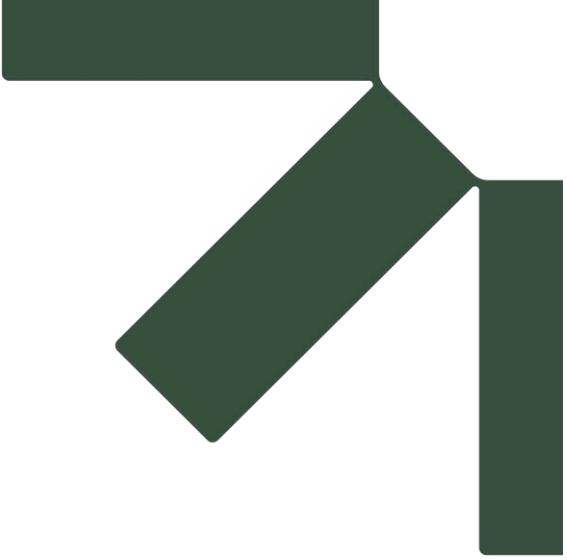
BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.60

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	10	113	0.086	10	113	0.519	10	113	0.605
08:00 - 09:00	10	113	0.204	10	113	0.757	10	113	0.961
09:00 - 10:00	10	113	0.173	10	113	0.274	10	113	0.447
10:00 - 11:00	10	113	0.160	10	113	0.191	10	113	0.351
11:00 - 12:00	10	113	0.173	10	113	0.203	10	113	0.376
12:00 - 13:00	10	113	0.221	10	113	0.218	10	113	0.439
13:00 - 14:00	10	113	0.235	10	113	0.230	10	113	0.465
14:00 - 15:00	10	113	0.236	10	113	0.282	10	113	0.518
15:00 - 16:00	10	113	0.638	10	113	0.263	10	113	0.901
16:00 - 17:00	10	113	0.477	10	113	0.249	10	113	0.726
17:00 - 18:00	10	113	0.553	10	113	0.233	10	113	0.786
18:00 - 19:00	10	113	0.391	10	113	0.161	10	113	0.552
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			3.547			3.580			7.127

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

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



# Appendix N Flow Diagram – Trip Distribution

## Transport Assessment

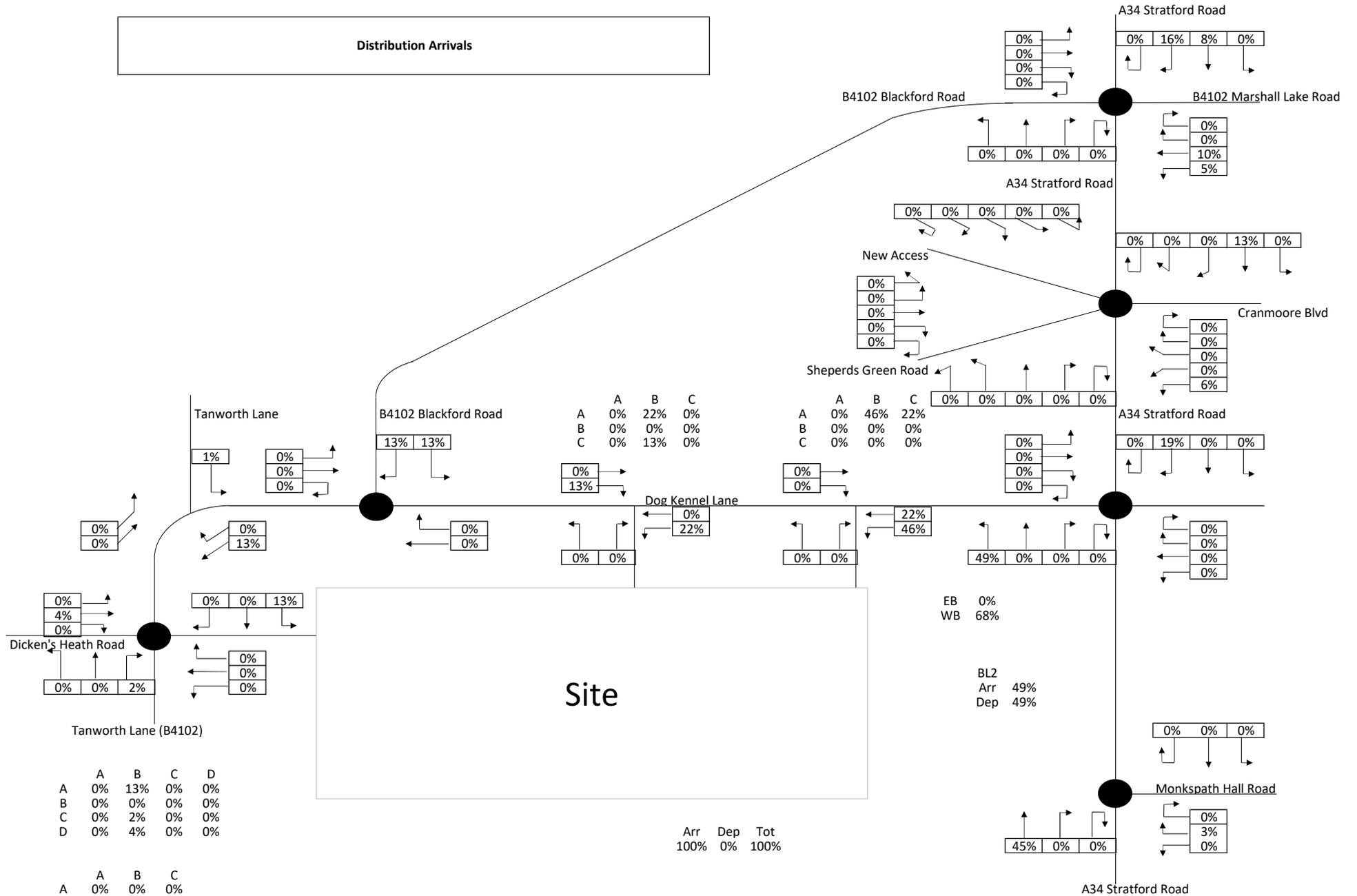
Land South of Dog Kennel Lane ‘Hare’s Croft’, Solihull

Taylor Wimpey UK Ltd

SLR Project No.: 425.000418.0001

December 2024

Distribution Arrivals



	A	B	C
A	0%	22%	0%
B	0%	0%	0%
C	0%	13%	0%

	A	B	C
A	0%	46%	22%
B	0%	0%	0%
C	0%	0%	0%

EB 0%  
WB 68%

BL2  
Arr 49%  
Dep 49%

Site

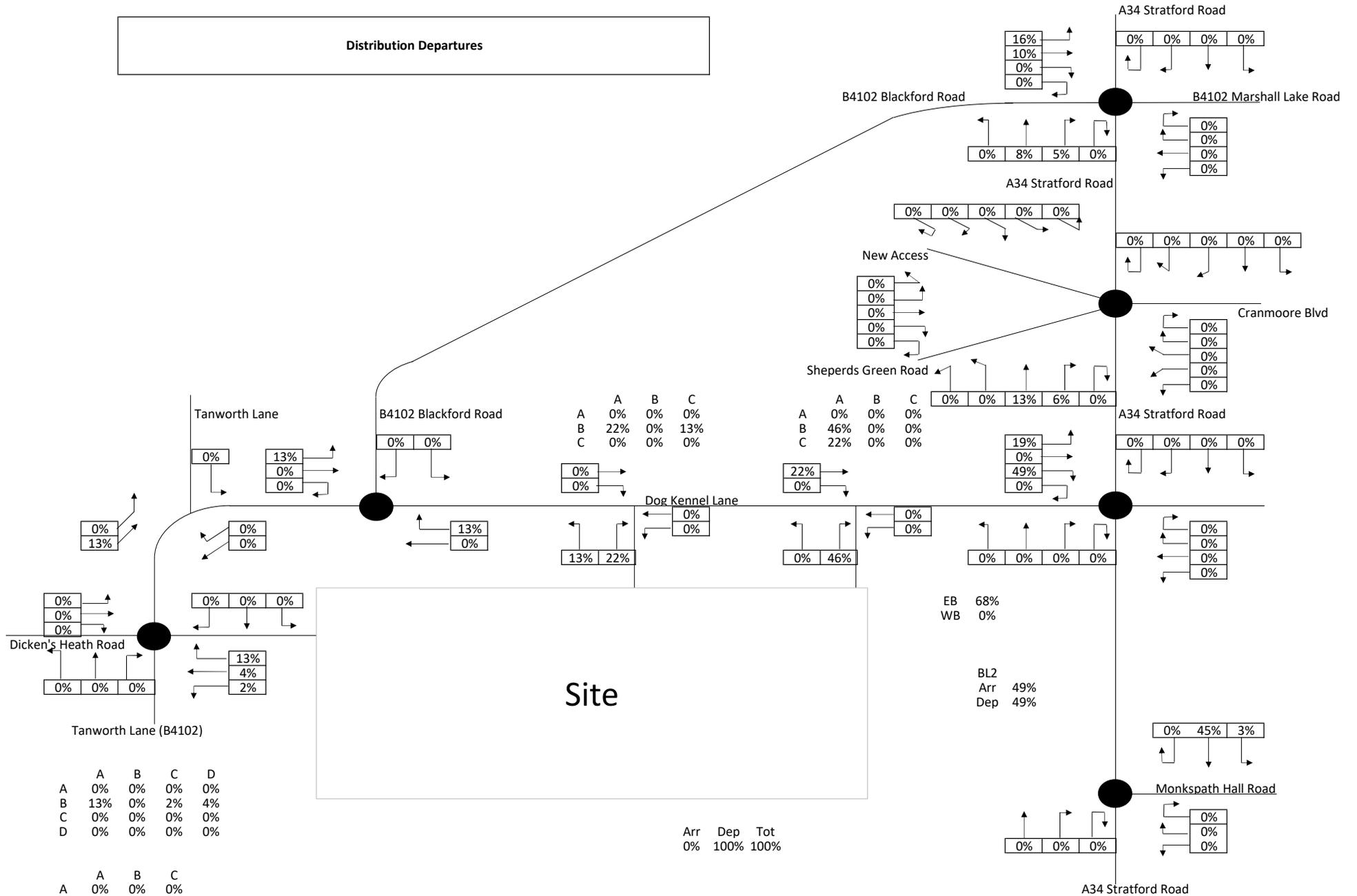
Arr Dep Tot  
100% 0% 100%

	A	B	C	D
A	0%	13%	0%	0%
B	0%	0%	0%	0%
C	0%	2%	0%	0%
D	0%	4%	0%	0%

	A	B	C
A	0%	0%	0%

Tanworth Lane (B4102)

Distribution Departures



	A	B	C
A	0%	0%	0%
B	22%	0%	13%
C	0%	0%	0%

	A	B	C
A	0%	0%	0%
B	46%	0%	0%
C	22%	0%	0%

EB 68%  
WB 0%

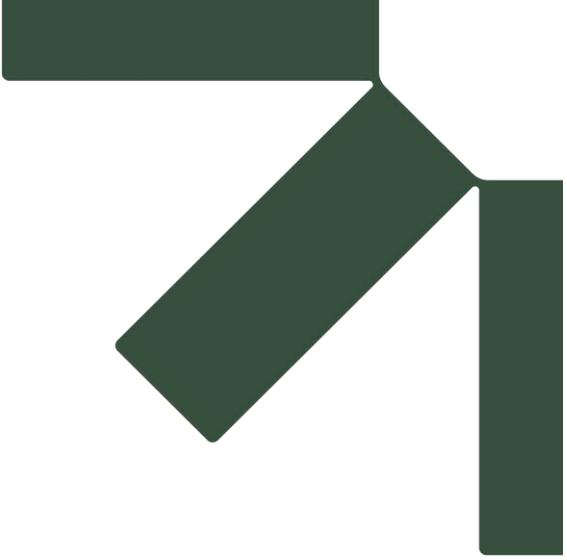
BL2  
Arr 49%  
Dep 49%

Arr Dep Tot  
0% 100% 100%

	A	B	C	D
A	0%	0%	0%	0%
B	13%	0%	2%	4%
C	0%	0%	0%	0%
D	0%	0%	0%	0%

	A	B	C
A	0%	0%	0%

Tanworth Lane (B4102)



# **Appendix O    Committed Development Assumptions from VISSIM**

## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

SLR Project No.: 425.000418.0001

December 2024



- Legend**
- Committed Development Locations
  - Base Model extent

Contains OS data © Crown copyright and database right 2015

CLIENT:

PROJECT:  
**Light Hall**

TITLE:  
**Committed Development Locations**

SCALE:  
**NTS**

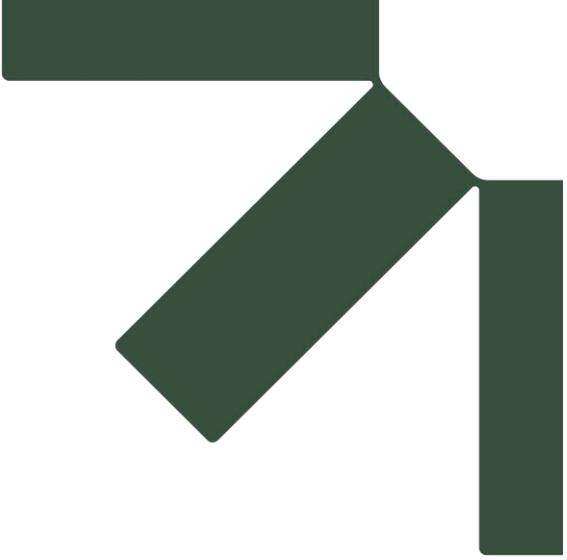
DRAWN:	CHECKED:	DATE:	REVISION:
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7th Floor, 36 Great Charles Street, Birmingham, B3 3JY  
Tel: 0121 289 5610 Email: [microsim@vectos.co.uk](mailto:microsim@vectos.co.uk) [www.vectos.co.uk](http://www.vectos.co.uk)

DRAWING REFERENCE:

Ref	Included in 2027?	Included in 2036?	Development	Dwelling	2027 build out	2027 Dwelling	2036 build out	2036 Dwelling
A	YES	YES	Solihull Business Park	108	100%	108	100%	108
B	YES	YES	Birmingham Business Park	117	100%	117	100%	117
C	YES	YES	Blythe Valley	328	100%	328	100%	328
Q	NO	YES	Stratford Road	25	100%	25	100%	25
R	NO	YES	Land North Clook Interchange	94	100%	94	100%	94
S	NO	YES	Biokenhill Lane	42	100%	42	100%	42
T	NO	YES	Homer Road	8	100%	8	100%	8
U	NO	YES	Touchwood	16	100%	16	100%	16
V	NO	YES	Mell Square	33	100%	33	100%	33
W	NO	YES	UK Central Interchange	942	0%	0	100%	942
X	NO	YES	Fen End	1161	100%	1161	100%	1161
Y	NO	YES	Damson Parkway	858	100%	858	100%	858
AA	NO	YES	Meriden Road	110	100%	110	100%	110
AB	NO	YES	UK Central Housing	1000	50%	500	100%	1000
AC	NO	YES	Barratt's Farm	800	67%	533	100%	800
AD	NO	YES	Frog Lane Balsall Common	150	100%	150	100%	150
AE	NO	YES	Windmill Lane/Kenilworth Road	200	100%	200	100%	200
AF	NO	NO	West of Dickens Heath	700	67%	467	100%	700
AG	NO	YES	Chester Road/Moorend Avenue	100	0%	0	100%	100
AH	NO	YES	Kingshurst Centre	100	100%	100	100%	100
AI	NO	YES	Hampton Road Knowle	300	100%	300	100%	300
AJ	NO	YES	Hampton Road	300	100%	300	100%	300
AK	NO	YES	Land South of Knowle	750	67%	500	100%	750
AL	NO	YES	Former TRW Site	400	100%	400	100%	400
AM	NO	NO	Land South of DOg Kennel Lane	850	67%	567	100%	850
AN	NO	NO	Land South of Shirley	600	67%	400	100%	600
AO	NO	YES	Auckland Drive	100	100%	100	100%	100
AP	NO	YES	Land East of Solihull	600	50%	300	100%	600
AQ	NO	YES	Moat Lane/Vulcan Road	150	0%	0	100%	150
AR	NO	YES	Sharmans Cross Road	100	100%	100	100%	100
D	YES	YES	Foxglove Crescent	200	100%	200	100%	200
E	YES	YES	Conway Road	75	100%	75	100%	75
F	YES	YES	Bishop Wilson and St Andrew's Scout Hut	140	100%	140	100%	140
G	YES	YES	Birmingham Road	70	100%	70	100%	70
H	YES	YES	Lowbrook	75	100%	75	100%	75
I	YES	YES	Chelmsley Lane/Colehill Road	80	100%	80	100%	80
J	YES	YES	Moat House Farm, Elmdon Road	80	100%	80	100%	80
K	YES	YES	Middlefield Road, Knowle	100	100%	100	100%	100
L	YES	YES	Four Ashes Road, Bentley Heath	150	100%	150	100%	150
M	YES	YES	Land at Mount Dairy Farm, Tanworth Lane	200	100%	200	100%	200
N	YES	YES	Braggs Far, Dickens Heath	65	100%	65	100%	65
O	YES	YES	Land at Cleobury Lane, Dickens Heath	185	100%	185	100%	185
P	YES	YES	Blythe Valley Park	750	100%	750	100%	750
Z	NO	YES	Simon Digby	200	100%	200	100%	200



# **Appendix P    ARCADY and PICADY Modelling Outputs**

## **Transport Assessment**

**Land South of Dog Kennel Lane 'Hare's Croft', Solihull**

**Taylor Wimpey UK Ltd**

SLR Project No.: 425.000418.0001

December 2024

Junctions 10
ARCADY 10 - Roundabout Module
Version: 10.1.0.1820 © Copyright TRL Software Limited, 2023
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com
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:** Dickens Heath B4102 Roundabout (existing).j10  
**Path:** O:\Cardiff\Vectos\CardiffShare\Projects\W160000\162088 - Lighthall Farm Solihull\425.000418.0001 - 2024 Application\Technical\A - Transport Assessment\Modelling\Arcady  
**Report generation date:** 02/12/2024 14:09:06

- »2036 + Com, AM
- »2036 + Com, PM
- »2036 Ref, AM
- »2036 Ref, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Q (Veh)	Delay (s)	RFC	LOS	Set ID	Q (Veh)	Delay (s)	RFC	LOS
2036 + Com										
1 - B4102 N	D1	1.0	3.91	0.50	A	D2	6.1	14.12	0.86	B
2 - B4102 S		2.8	13.26	0.74	B		1.8	12.23	0.65	B
3 - Dickens Heath Rd		20.5	63.66	0.99	F		1.0	5.22	0.50	A
2036 Ref										
1 - B4102 N	D3	0.7	3.20	0.40	A	D4	3.7	9.25	0.79	A
2 - B4102 S		1.8	9.10	0.65	A		1.3	9.41	0.57	A
3 - Dickens Heath Rd		4.9	17.88	0.84	C		0.9	4.86	0.48	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 Av. delay per arriving vehicle.

**File summary**

File Description

Title	
Location	
Site number	
Date	08/10/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SLR\jameswalker
Description	

### Units

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

### Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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	2036 + Com	AM	ONE HOUR	07:45	09:15	15
D2	2036 + Com	PM	ONE HOUR	16:45	18:15	15
D3	2036 Ref	AM	ONE HOUR	07:45	09:15	15
D4	2036 Ref	PM	ONE HOUR	16:45	18:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2036 + Com, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	30.83	D

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	30.83	D

## Arms

### Arms

Arm	Name	Description	No give-way line
1	B4102 N		
2	B4102 S		
3	Dickens Heath Rd		

### Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - B4102 N	3.20	7.90	28.8	16.2	36.0	25.9		
2 - B4102 S	2.80	6.00	33.1	7.8	36.0	44.1		
3 - Dickens Heath Rd	3.10	6.10	30.1	38.7	32.6	22.3		

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B4102 N	0.693	1910
2 - B4102 S	0.549	1390
3 - Dickens Heath Rd	0.673	1710

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

## 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	2036 + Com	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	823	100.000
2 - B4102 S		✓	715	100.000
3 - Dickens Heath Rd		✓	1071	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To			
	1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd	
1 - B4102 N	0	337	486	
2 - B4102 S	661	0	54	
3 - Dickens Heath Rd	1009	62	0	

## Vehicle Mix

### Heavy Vehicle %

From	To			
	1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd	
1 - B4102 N	0	2	2	
2 - B4102 S	3	0	4	
3 - Dickens Heath Rd	1	2	0	

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.50	3.91	1.0	A
2 - B4102 S	0.74	13.26	2.8	B
3 - Dickens Heath Rd	0.99	63.66	20.5	F

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	620	46	1840	0.337	618	0.5	2.939	A
2 - B4102 S	538	365	1150	0.468	535	0.9	5.818	A
3 - Dickens Heath Rd	806	494	1353	0.596	801	1.4	6.446	A

#### 08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	740	55	1834	0.403	739	0.7	3.286	A
2 - B4102 S	643	437	1111	0.578	641	1.3	7.625	A
3 - Dickens Heath Rd	963	592	1286	0.749	957	2.8	10.760	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	906	65	1827	0.496	905	1.0	3.899	A
2 - B4102 S	787	534	1058	0.744	782	2.8	12.765	B
3 - Dickens Heath Rd	1179	723	1197	0.985	1131	14.9	39.308	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	906	67	1826	0.496	906	1.0	3.913	A
2 - B4102 S	787	535	1058	0.744	787	2.8	13.262	B
3 - Dickens Heath Rd	1179	728	1194	0.988	1157	20.5	63.659	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	740	60	1831	0.404	741	0.7	3.308	A
2 - B4102 S	643	438	1111	0.579	648	1.4	7.886	A
3 - Dickens Heath Rd	963	600	1281	0.751	1032	3.2	18.134	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	620	47	1840	0.337	620	0.5	2.955	A
2 - B4102 S	538	366	1149	0.468	540	0.9	5.931	A
3 - Dickens Heath Rd	806	500	1350	0.597	813	1.5	6.790	A

# 2036 + Com, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	11.60	B

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.60	B

## 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	2036 + Com	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	1457	100.000
2 - B4102 S		✓	497	100.000
3 - Dickens Heath Rd		✓	624	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	From	To		
		1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd
	1 - B4102 N	0	583	874
	2 - B4102 S	426	0	71
	3 - Dickens Heath Rd	578	46	0

## Vehicle Mix

### Heavy Vehicle %

	From	To		
		1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd
	1 - B4102 N	0	1	1
	2 - B4102 S	1	0	7
	3 - Dickens Heath Rd	1	3	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.86	14.12	6.1	B
2 - B4102 S	0.65	12.23	1.8	B
3 - Dickens Heath Rd	0.50	5.22	1.0	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1097	34	1867	0.588	1091	1.4	4.611	A
2 - B4102 S	374	655	1008	0.371	372	0.6	5.638	A
3 - Dickens Heath Rd	470	319	1477	0.318	468	0.5	3.563	A

#### 17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1310	41	1862	0.704	1306	2.3	6.437	A
2 - B4102 S	447	784	938	0.476	446	0.9	7.291	A
3 - Dickens Heath Rd	561	382	1434	0.391	560	0.6	4.115	A

#### 17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1604	51	1855	0.865	1590	5.8	12.957	B
2 - B4102 S	547	954	845	0.647	544	1.8	11.804	B
3 - Dickens Heath Rd	687	466	1378	0.499	686	1.0	5.190	A

#### 17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1604	51	1855	0.865	1603	6.1	14.124	B
2 - B4102 S	547	962	841	0.651	547	1.8	12.225	B
3 - Dickens Heath Rd	687	469	1376	0.499	687	1.0	5.225	A

#### 17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1310	41	1862	0.704	1324	2.4	6.874	A
2 - B4102 S	447	794	932	0.479	450	0.9	7.529	A
3 - Dickens Heath Rd	561	386	1432	0.392	562	0.6	4.147	A

#### 18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1097	35	1866	0.588	1101	1.4	4.726	A
2 - B4102 S	374	660	1005	0.372	376	0.6	5.730	A
3 - Dickens Heath Rd	470	322	1475	0.319	470	0.5	3.589	A

# 2036 Ref, AM

### Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	10.92	B

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.92	B

## 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)
D3	2036 Ref	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	681	100.000
2 - B4102 S		✓	671	100.000
3 - Dickens Heath Rd		✓	934	100.000

## Origin-Destination Data

### Demand (Veh/hr)

	From	To		
		1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd
	1 - B4102 N	0	294	387
	2 - B4102 S	641	0	30
	3 - Dickens Heath Rd	886	48	0

## Vehicle Mix

### Heavy Vehicle %

	From	To		
		1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd
	1 - B4102 N	0	0	0
	2 - B4102 S	2	0	0
	3 - Dickens Heath Rd	0	0	0

# Results

## Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.40	3.20	0.7	A
2 - B4102 S	0.65	9.10	1.8	A
3 - Dickens Heath Rd	0.84	17.88	4.9	C

## Main Results for each time segment

### 07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	513	36	1885	0.272	511	0.4	2.618	A
2 - B4102 S	505	291	1207	0.418	502	0.7	5.087	A
3 - Dickens Heath Rd	703	480	1381	0.509	699	1.0	5.248	A

### 08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	612	43	1880	0.326	612	0.5	2.838	A
2 - B4102 S	603	348	1176	0.513	602	1.0	6.253	A
3 - Dickens Heath Rd	840	575	1316	0.638	837	1.7	7.472	A

### 08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	750	52	1874	0.400	749	0.7	3.200	A
2 - B4102 S	739	426	1134	0.651	736	1.8	8.973	A
3 - Dickens Heath Rd	1028	703	1228	0.837	1017	4.6	16.206	C

### 08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	750	53	1873	0.400	750	0.7	3.203	A
2 - B4102 S	739	426	1134	0.651	739	1.8	9.096	A
3 - Dickens Heath Rd	1028	706	1226	0.839	1027	4.9	17.879	C

### 08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	612	44	1879	0.326	613	0.5	2.845	A
2 - B4102 S	603	348	1176	0.513	606	1.1	6.354	A
3 - Dickens Heath Rd	840	579	1313	0.640	852	1.8	8.012	A

### 09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	513	36	1885	0.272	513	0.4	2.627	A
2 - B4102 S	505	292	1207	0.419	507	0.7	5.152	A
3 - Dickens Heath Rd	703	484	1378	0.510	706	1.1	5.380	A

# 2036 Ref, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.16	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.16	A

## 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)
D4	2036 Ref	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	1348	100.000
2 - B4102 S		✓	465	100.000
3 - Dickens Heath Rd		✓	623	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To		
	1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd
1 - B4102 N	0	549	799
2 - B4102 S	364	0	101
3 - Dickens Heath Rd	588	35	0

## Vehicle Mix

### Heavy Vehicle %

From	To		
	1 - B4102 N	2 - B4102 S	3 - Dickens Heath Rd
1 - B4102 N	0	0	1
2 - B4102 S	0	0	4
3 - Dickens Heath Rd	1	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.79	9.25	3.7	A
2 - B4102 S	0.57	9.41	1.3	A
3 - Dickens Heath Rd	0.48	4.86	0.9	A

### Main Results for each time segment

#### 16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1015	26	1880	0.540	1010	1.2	4.116	A
2 - B4102 S	350	599	1049	0.334	348	0.5	5.124	A
3 - Dickens Heath Rd	469	272	1513	0.310	467	0.4	3.437	A

#### 17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1212	31	1877	0.646	1209	1.8	5.372	A
2 - B4102 S	418	717	984	0.425	417	0.7	6.342	A
3 - Dickens Heath Rd	560	326	1477	0.379	559	0.6	3.922	A

#### 17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1484	38	1872	0.793	1477	3.7	8.939	A
2 - B4102 S	512	875	897	0.571	510	1.3	9.247	A
3 - Dickens Heath Rd	686	399	1428	0.480	685	0.9	4.833	A

#### 17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1484	39	1872	0.793	1484	3.7	9.252	A
2 - B4102 S	512	880	894	0.572	512	1.3	9.408	A
3 - Dickens Heath Rd	686	401	1427	0.481	686	0.9	4.856	A

#### 17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1212	32	1877	0.646	1219	1.9	5.535	A
2 - B4102 S	418	723	981	0.426	420	0.8	6.450	A
3 - Dickens Heath Rd	560	329	1475	0.380	561	0.6	3.946	A

#### 18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1015	26	1880	0.540	1018	1.2	4.184	A
2 - B4102 S	350	603	1046	0.335	351	0.5	5.187	A
3 - Dickens Heath Rd	469	275	1511	0.310	470	0.5	3.460	A

Junctions 10
ARCADY 10 - Roundabout Module
Version: 10.1.0.1820 © Copyright TRL Software Limited, 2023
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**Filename:** Dickens Heath B4102 Roundabout (proposed).j10  
**Path:** O:\Cardiff\Vectos\CardiffShare\Projects\W160000\162088 - Lighthall Farm Solihull\425.000418.0001 - 2024 Application\Technical\A - Transport Assessment\Modelling\Arcady  
**Report generation date:** 02/12/2024 14:25:24

- »2036 + Com + Dev, AM
- »2036 + Com + Dev, PM
- »2036 Cumulative Development , AM
- »2036 Cumulative Development , PM

**Summary of junction performance**

	AM					PM				
	Set ID	Q (Veh)	Delay (s)	RFC	LOS	Set ID	Q (Veh)	Delay (s)	RFC	LOS
<b>2036 + Com + Dev</b>										
1 - B4102 N	D1	1.0	3.82	0.49	A	D2	6.9	15.72	0.88	C
2 - Site Access		0.1	4.87	0.05	A		0.1	9.56	0.06	A
3 - B4102 S		2.9	13.46	0.75	B		1.8	12.26	0.65	B
4 - Dickens Heath Rd		22.1	67.82	0.99	F		1.0	5.27	0.51	A
<b>2036 Cumulative Development</b>										
1 - B4102 N	D3	3.6	9.06	0.78	A	D4	4.2	10.54	0.81	B
2 - Site Access		0.5	10.57	0.33	B		0.7	12.68	0.42	B
3 - B4102 S		1.7	12.51	0.63	B		3.0	19.84	0.76	C
4 - Dickens Heath Rd		0.7	4.53	0.43	A		1.3	6.40	0.58	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 Av. delay per arriving vehicle.

**File summary**

**File Description**

<b>Title</b>	
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	08/10/2024
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	SLR\jameswalker
<b>Description</b>	

### Units

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

### Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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	2036 + Com + Dev	AM	ONE HOUR	07:45	09:15	15
D2	2036 + Com + Dev	PM	ONE HOUR	16:45	18:15	15
D3	2036 Cumulative Development	AM	ONE HOUR	07:45	09:15	15
D4	2036 Cumulative Development	PM	ONE HOUR	16:45	18:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2036 + Com + Dev, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	32.15	D

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	32.15	D

## Arms

### Arms

Arm	Name	Description	No give-way line
1	B4102 N		
2	Site Access		
3	B4102 S		
4	Dickens Heath Rd		

### Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - B4102 N	3.20	7.90	28.8	16.2	36.0	25.9		
2 - Site Access	3.65	7.00	4.1	15.0	36.0	36.3		
3 - B4102 S	2.80	6.00	33.1	7.8	36.0	44.1		
4 - Dickens Heath Rd	3.10	6.10	30.1	38.7	32.6	22.3		

### Slope / Intercept / Capacity

#### Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B4102 N	0.693	1910
2 - Site Access	0.564	1333
3 - B4102 S	0.549	1390
4 - Dickens Heath Rd	0.673	1710

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

## 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	2036 + Com + Dev	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	834	100.000
2 - Site Access		✓	38	100.000
3 - B4102 S		✓	717	100.000
4 - Dickens Heath Rd		✓	1074	100.000

## Origin-Destination Data

### Demand (Veh/hr)

From	To			
	1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
1 - B4102 N	0	11	337	486
2 - Site Access	27	0	4	7
3 - B4102 S	661	2	0	54
4 - Dickens Heath Rd	1009	3	62	0

## Vehicle Mix

### Heavy Vehicle %

From	To			
	1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
1 - B4102 N	0	0	0	0
2 - Site Access	0	0	0	2
3 - B4102 S	2	4	0	0
4 - Dickens Heath Rd	0	1	0	0

## Results

### Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.49	3.82	1.0	A
2 - Site Access	0.05	4.87	0.1	A
3 - B4102 S	0.75	13.46	2.9	B
4 - Dickens Heath Rd	0.99	67.82	22.1	F

### Main Results for each time segment

#### 07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	628	50	1875	0.335	626	0.5	2.876	A
2 - Site Access	29	664	955	0.030	28	0.0	3.885	A
3 - B4102 S	540	390	1154	0.468	536	0.9	5.796	A
4 - Dickens Heath Rd	809	516	1356	0.596	803	1.5	6.438	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	750	60	1869	0.401	749	0.7	3.214	A
2 - Site Access	34	795	882	0.039	34	0.0	4.247	A
3 - B4102 S	645	467	1113	0.579	643	1.4	7.627	A
4 - Dickens Heath Rd	966	618	1286	0.751	960	2.9	10.842	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	918	71	1861	0.493	917	1.0	3.808	A
2 - Site Access	42	970	783	0.053	42	0.1	4.857	A
3 - B4102 S	789	572	1056	0.747	784	2.8	12.935	B
4 - Dickens Heath Rd	1182	754	1193	0.991	1131	15.7	40.907	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	918	72	1860	0.494	918	1.0	3.821	A
2 - Site Access	42	973	781	0.054	42	0.1	4.867	A
3 - B4102 S	789	573	1056	0.748	789	2.9	13.459	B
4 - Dickens Heath Rd	1182	759	1190	0.994	1157	22.1	67.823	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	750	65	1865	0.402	751	0.7	3.236	A
2 - Site Access	34	801	878	0.039	34	0.0	4.266	A
3 - B4102 S	645	468	1112	0.580	650	1.4	7.897	A
4 - Dickens Heath Rd	966	626	1281	0.754	1041	3.2	19.346	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	628	51	1875	0.335	629	0.5	2.889	A
2 - Site Access	29	667	953	0.030	29	0.0	3.893	A
3 - B4102 S	540	392	1153	0.468	542	0.9	5.910	A
4 - Dickens Heath Rd	809	521	1353	0.598	815	1.5	6.786	A

# 2036 + Com + Dev, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	12.51	B

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.51	B

## 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	2036 + Com + Dev	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	1490	100.000
2 - Site Access		✓	21	100.000
3 - B4102 S		✓	502	100.000
4 - Dickens Heath Rd		✓	633	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
From	1 - B4102 N	0	33	583	874
	2 - Site Access	15	0	2	4
	3 - B4102 S	426	5	0	71
	4 - Dickens Heath Rd	578	9	46	0

## Vehicle Mix

**Heavy Vehicle %**

		To			
		1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
From	1 - B4102 N	0	0	0	0
	2 - Site Access	0	0	0	1
	3 - B4102 S	0	0	0	4
	4 - Dickens Heath Rd	0	1	0	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.88	15.72	6.9	C
2 - Site Access	0.06	9.56	0.1	A
3 - B4102 S	0.65	12.26	1.8	B
4 - Dickens Heath Rd	0.51	5.27	1.0	A

**Main Results for each time segment**

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1122	45	1879	0.597	1116	1.5	4.683	A
2 - Site Access	16	1126	697	0.023	16	0.0	5.286	A
3 - B4102 S	378	669	1017	0.372	376	0.6	5.594	A
4 - Dickens Heath Rd	477	334	1486	0.321	475	0.5	3.555	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1339	54	1873	0.715	1336	2.4	6.652	A
2 - Site Access	19	1347	572	0.033	19	0.0	6.507	A
3 - B4102 S	451	800	945	0.478	450	0.9	7.253	A
4 - Dickens Heath Rd	569	400	1441	0.395	568	0.6	4.121	A

**17:15 - 17:30**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1641	66	1864	0.880	1624	6.5	14.127	B
2 - Site Access	23	1639	408	0.057	23	0.1	9.354	A
3 - B4102 S	553	974	850	0.650	549	1.8	11.807	B
4 - Dickens Heath Rd	697	488	1382	0.504	696	1.0	5.235	A

**17:30 - 17:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1641	66	1864	0.880	1639	6.9	15.719	C
2 - Site Access	23	1653	400	0.058	23	0.1	9.560	A
3 - B4102 S	553	982	846	0.654	552	1.8	12.255	B
4 - Dickens Heath Rd	697	491	1380	0.505	697	1.0	5.271	A

**17:45 - 18:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1339	54	1873	0.715	1357	2.6	7.195	A
2 - Site Access	19	1368	560	0.034	19	0.0	6.653	A
3 - B4102 S	451	813	938	0.481	455	0.9	7.502	A
4 - Dickens Heath Rd	569	404	1438	0.396	570	0.7	4.155	A

**18:00 - 18:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1122	45	1879	0.597	1126	1.5	4.809	A
2 - Site Access	16	1136	691	0.023	16	0.0	5.331	A
3 - B4102 S	378	675	1014	0.373	379	0.6	5.689	A
4 - Dickens Heath Rd	477	337	1483	0.321	477	0.5	3.580	A

# 2036 Cumulative Development , AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.79	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.79	A

## 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)
D3	2036 Cumulative Development	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	1312	100.000
2 - Site Access		✓	151	100.000
3 - B4102 S		✓	444	100.000
4 - Dickens Heath Rd		✓	541	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
From	1 - B4102 N	0	18	435	859
	2 - Site Access	72	0	13	66
	3 - B4102 S	323	31	0	90
	4 - Dickens Heath Rd	481	23	37	0

## Vehicle Mix

**Heavy Vehicle %**

		To			
		1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
From	1 - B4102 N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - B4102 S	2	0	0	0
	4 - Dickens Heath Rd	0	0	0	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.78	9.06	3.6	A
2 - Site Access	0.33	10.57	0.5	B
3 - B4102 S	0.63	12.51	1.7	B
4 - Dickens Heath Rd	0.43	4.53	0.7	A

**Main Results for each time segment**

**07:45 - 08:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	988	68	1863	0.530	983	1.1	4.073	A
2 - Site Access	114	998	770	0.148	113	0.2	5.470	A
3 - B4102 S	334	747	966	0.346	332	0.5	5.665	A
4 - Dickens Heath Rd	407	319	1493	0.273	406	0.4	3.308	A

**08:00 - 08:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1179	82	1854	0.636	1177	1.7	5.302	A
2 - Site Access	136	1194	659	0.206	135	0.3	6.864	A
3 - B4102 S	399	894	886	0.451	398	0.8	7.355	A
4 - Dickens Heath Rd	486	382	1449	0.336	486	0.5	3.734	A

**08:15 - 08:30**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1445	100	1841	0.785	1437	3.5	8.771	A
2 - Site Access	166	1458	510	0.326	165	0.5	10.409	B
3 - B4102 S	489	1092	779	0.628	486	1.6	12.140	B
4 - Dickens Heath Rd	596	466	1392	0.428	595	0.7	4.509	A

**08:30 - 08:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1445	100	1841	0.785	1444	3.6	9.061	A
2 - Site Access	166	1465	507	0.328	166	0.5	10.575	B
3 - B4102 S	489	1097	776	0.630	489	1.7	12.511	B
4 - Dickens Heath Rd	596	469	1390	0.429	596	0.7	4.531	A

**08:45 - 09:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1179	82	1853	0.636	1187	1.8	5.458	A
2 - Site Access	136	1204	654	0.208	137	0.3	6.967	A
3 - B4102 S	399	902	882	0.453	402	0.8	7.560	A
4 - Dickens Heath Rd	486	386	1447	0.336	487	0.5	3.758	A

**09:00 - 09:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	988	69	1863	0.530	990	1.1	4.138	A
2 - Site Access	114	1005	766	0.148	114	0.2	5.520	A
3 - B4102 S	334	753	963	0.347	335	0.5	5.750	A
4 - Dickens Heath Rd	407	322	1490	0.273	408	0.4	3.328	A

# 2036 Cumulative Development , PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - B4102 S - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Dickens Heath Rd - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

## Junction Network

### Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.38	B

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.38	B

## 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)
D4	2036 Cumulative Development	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
1 - B4102 N		✓	1341	100.000
2 - Site Access		✓	189	100.000
3 - B4102 S		✓	513	100.000
4 - Dickens Heath Rd		✓	695	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To			
		1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
From	1 - B4102 N	0	38	420	883
	2 - Site Access	107	0	12	70
	3 - B4102 S	356	39	0	118
	4 - Dickens Heath Rd	611	32	52	0

## Vehicle Mix

**Heavy Vehicle %**

		To			
		1 - B4102 N	2 - Site Access	3 - B4102 S	4 - Dickens Heath Rd
From	1 - B4102 N	0	0	0	0
	2 - Site Access	0	0	0	0
	3 - B4102 S	0	0	0	3
	4 - Dickens Heath Rd	1	0	0	0

## Results

**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
1 - B4102 N	0.81	10.54	4.2	B
2 - Site Access	0.42	12.68	0.7	B
3 - B4102 S	0.76	19.84	3.0	C
4 - Dickens Heath Rd	0.58	6.40	1.3	A

**Main Results for each time segment**

**16:45 - 17:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1010	92	1846	0.547	1005	1.2	4.255	A
2 - Site Access	142	1015	760	0.187	141	0.2	5.807	A
3 - B4102 S	386	794	947	0.408	383	0.7	6.354	A
4 - Dickens Heath Rd	523	375	1445	0.362	521	0.6	3.886	A

**17:00 - 17:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1206	110	1834	0.657	1203	1.9	5.681	A
2 - Site Access	170	1215	648	0.262	169	0.4	7.521	A
3 - B4102 S	461	951	862	0.535	459	1.1	8.902	A
4 - Dickens Heath Rd	625	450	1396	0.448	624	0.8	4.659	A

**17:15 - 17:30**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1476	135	1817	0.813	1468	4.1	10.060	B
2 - Site Access	208	1483	496	0.419	207	0.7	12.363	B
3 - B4102 S	565	1160	748	0.755	558	2.9	18.317	C
4 - Dickens Heath Rd	765	547	1331	0.575	763	1.3	6.316	A

**17:30 - 17:45**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1476	135	1816	0.813	1476	4.2	10.538	B
2 - Site Access	208	1491	492	0.423	208	0.7	12.682	B
3 - B4102 S	565	1167	744	0.759	564	3.0	19.843	C
4 - Dickens Heath Rd	765	552	1327	0.577	765	1.3	6.403	A

**17:45 - 18:00**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1206	111	1833	0.658	1215	2.0	5.903	A
2 - Site Access	170	1227	641	0.265	171	0.4	7.689	A
3 - B4102 S	461	960	857	0.538	468	1.2	9.434	A
4 - Dickens Heath Rd	625	458	1390	0.449	627	0.8	4.730	A

**18:00 - 18:15**

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - B4102 N	1010	93	1846	0.547	1013	1.2	4.336	A
2 - Site Access	142	1023	756	0.188	143	0.2	5.875	A
3 - B4102 S	386	800	944	0.409	388	0.7	6.502	A
4 - Dickens Heath Rd	523	380	1442	0.363	524	0.6	3.927	A

Junctions 10
PICADY 10 - Priority Intersection Module
Version: 10.1.0.1820 © Copyright TRL Software Limited, 2023
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**Filename:** Dog Kennel Lane Eastern Site Access v2.j10  
**Path:** O:\Cardiff\Vectos\CardiffShare\Projects\W160000\162088 - Lighthall Farm Solihull\425.000418.0001 - 2024 Application\Technical\A - Transport Assessment\Modelling\Picady  
**Report generation date:** 02/12/2024 14:42:35

- »2036 + Com + Dev, AM
- »2036 + Com + Dev, PM
- »2036 Cumulative Development, AM
- »2036 Cumulative Development, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Q (Veh)	Delay (s)	RFC	LOS	Set ID	Q (Veh)	Delay (s)	RFC	LOS
2036 + Com + Dev										
Stream B-C	D1	0.0	0.00	0.00	A	D2	0.0	0.00	0.00	A
Stream B-A		0.6	22.79	0.40	C		0.3	19.73	0.24	C
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2036 Cumulative Development										
Stream B-C	D3	0.1	6.59	0.09	A	D4	0.0	6.60	0.01	A
Stream B-A		0.2	12.39	0.13	B		0.1	10.03	0.05	B
Stream C-AB		0.2	3.75	0.11	A		0.4	5.12	0.18	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 Av. delay per arriving vehicle.

**File summary**

**File Description**

<b>Title</b>	Dog Kennel Lane Eastern Site Access
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	08/10/2024
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	SLR\jameswalker
<b>Description</b>	

### Units

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

### Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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	2036 + Com + Dev	AM	ONE HOUR	07:45	09:15	15
D2	2036 + Com + Dev	PM	ONE HOUR	16:45	18:15	15
D3	2036 Cumulative Development	AM	ONE HOUR	07:45	09:15	15
D4	2036 Cumulative Development	PM	ONE HOUR	16:45	18:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2036 + Com + Dev, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.28	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.28	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	Dog Kennel Lane East		Major
B	Site Access		Minor
C	Dog Kennel Lane West		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dog Kennel Lane West	7.00			210.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	5.47	3.74	3.66	3.66	✓	1.00	140	48

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	614	0.107	0.270	0.170	0.386
B-C	637	0.093	0.236	-	-
C-B	696	0.258	0.258	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2036 + Com + Dev	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	519	100.000
B - Site Access		✓	94	100.000
C - Dog Kennel Lane West		✓	1059	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	38	481
	B - Site Access	94	0	0
	C - Dog Kennel Lane West	1059	0	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	0	0
	B - Site Access	1	0	0
	C - Dog Kennel Lane West	2	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.40	22.79	0.6	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	522	0.000	0	0.0	0.000	A
B-A	71	371	0.191	70	0.2	11.929	B
C-AB	0	589	0.000	0	0.0	0.000	A
C-A	797			797			
A-B	29			29			
A-C	362			362			

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	497	0.000	0	0.0	0.000	A
B-A	85	325	0.260	84	0.3	14.924	B
C-AB	0	570	0.000	0	0.0	0.000	A
C-A	952			952			
A-B	34			34			
A-C	432			432			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	457	0.000	0	0.0	0.000	A
B-A	103	261	0.396	102	0.6	22.490	C
C-AB	0	543	0.000	0	0.0	0.000	A
C-A	1166			1166			
A-B	42			42			
A-C	530			530			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	456	0.000	0	0.0	0.000	A
B-A	103	261	0.396	103	0.6	22.787	C
C-AB	0	543	0.000	0	0.0	0.000	A
C-A	1166			1166			
A-B	42			42			
A-C	530			530			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	496	0.000	0	0.0	0.000	A
B-A	85	325	0.260	86	0.4	15.123	C
C-AB	0	570	0.000	0	0.0	0.000	A
C-A	952			952			
A-B	34			34			
A-C	432			432			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	522	0.000	0	0.0	0.000	A
B-A	71	371	0.191	71	0.2	12.037	B
C-AB	0	589	0.000	0	0.0	0.000	A
C-A	797			797			
A-B	29			29			
A-C	362			362			

# 2036 + Com + Dev, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.64	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.64	A

## 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	2036 + Com + Dev	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	995	100.000
B - Site Access		✓	51	100.000
C - Dog Kennel Lane West		✓	512	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	113	882
	B - Site Access	51	0	0
	C - Dog Kennel Lane West	512	0	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	0	1
	B - Site Access	0	0	0
	C - Dog Kennel Lane West	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.24	19.73	0.3	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	458	0.000	0	0.0	0.000	A
B-A	38	357	0.108	38	0.1	11.261	B
C-AB	0	498	0.000	0	0.0	0.000	A
C-A	385			385			
A-B	85			85			
A-C	664			664			

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	422	0.000	0	0.0	0.000	A
B-A	46	307	0.149	46	0.2	13.744	B
C-AB	0	461	0.000	0	0.0	0.000	A
C-A	460			460			
A-B	102			102			
A-C	793			793			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	370	0.000	0	0.0	0.000	A
B-A	56	239	0.235	56	0.3	19.630	C
C-AB	0	409	0.000	0	0.0	0.000	A
C-A	564			564			
A-B	124			124			
A-C	971			971			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	370	0.000	0	0.0	0.000	A
B-A	56	239	0.235	56	0.3	19.734	C
C-AB	0	409	0.000	0	0.0	0.000	A
C-A	564			564			
A-B	124			124			
A-C	971			971			

**17:45 - 18:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	422	0.000	0	0.0	0.000	A
B-A	46	307	0.149	46	0.2	13.821	B
C-AB	0	461	0.000	0	0.0	0.000	A
C-A	460			460			
A-B	102			102			
A-C	793			793			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	458	0.000	0	0.0	0.000	A
B-A	38	357	0.108	39	0.1	11.310	B
C-AB	0	498	0.000	0	0.0	0.000	A
C-A	385			385			
A-B	85			85			
A-C	664			664			

# 2036 Cumulative Development, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.92	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.92	A

## 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)
D3	2036 Cumulative Development	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	338	100.000
B - Site Access		✓	89	100.000
C - Dog Kennel Lane West		✓	828	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	16	322
	B - Site Access	40	0	49
	C - Dog Kennel Lane West	799	29	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	0	1
	B - Site Access	0	0	0
	C - Dog Kennel Lane West	2	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.09	6.59	0.1	A
B-A	0.13	12.39	0.2	B
C-AB	0.11	3.75	0.2	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	37	641	0.058	37	0.1	5.949	A
B-A	30	415	0.073	30	0.1	9.346	A
C-AB	53	1016	0.053	53	0.1	3.737	A
C-A	570			570			
A-B	12			12			
A-C	242			242			

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	625	0.071	44	0.1	6.200	A
B-A	36	381	0.094	36	0.1	10.423	B
C-AB	78	1084	0.072	77	0.1	3.574	A
C-A	667			667			
A-B	14			14			
A-C	289			289			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	54	600	0.090	54	0.1	6.586	A
B-A	44	335	0.132	44	0.1	12.373	B
C-AB	126	1180	0.107	126	0.2	3.414	A
C-A	786			786			
A-B	18			18			
A-C	355			355			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	54	600	0.090	54	0.1	6.588	A
B-A	44	335	0.132	44	0.2	12.388	B
C-AB	126	1180	0.107	126	0.2	3.419	A
C-A	785			785			
A-B	18			18			
A-C	355			355			

**08:45 - 09:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	624	0.071	44	0.1	6.207	A
B-A	36	381	0.094	36	0.1	10.443	B
C-AB	78	1084	0.072	78	0.1	3.584	A
C-A	667			667			
A-B	14			14			
A-C	289			289			

**09:00 - 09:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	37	641	0.058	37	0.1	5.960	A
B-A	30	415	0.073	30	0.1	9.367	A
C-AB	54	1017	0.053	54	0.1	3.746	A
C-A	570			570			
A-B	12			12			
A-C	242			242			

# 2036 Cumulative Development, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.98	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.98	A

## 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)
D4	2036 Cumulative Development	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	410	100.000
B - Site Access		✓	25	100.000
C - Dog Kennel Lane West		✓	461	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	20	390
	B - Site Access	18	0	7
	C - Dog Kennel Lane West	389	72	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	0	2
	B - Site Access	0	0	0
	C - Dog Kennel Lane West	4	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.01	6.60	0.0	A
B-A	0.05	10.03	0.1	B
C-AB	0.18	5.12	0.4	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	591	0.009	5	0.0	6.145	A
B-A	14	450	0.030	13	0.0	8.250	A
C-AB	85	803	0.106	85	0.2	5.007	A
C-A	262			262			
A-B	15			15			
A-C	294			294			

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	575	0.011	6	0.0	6.328	A
B-A	16	420	0.039	16	0.0	8.916	A
C-AB	112	828	0.136	112	0.3	5.029	A
C-A	302			302			
A-B	18			18			
A-C	351			351			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	553	0.014	8	0.0	6.602	A
B-A	20	379	0.052	20	0.1	10.021	B
C-AB	158	863	0.183	158	0.4	5.103	A
C-A	349			349			
A-B	22			22			
A-C	429			429			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	8	553	0.014	8	0.0	6.603	A
B-A	20	379	0.052	20	0.1	10.026	B
C-AB	158	863	0.183	158	0.4	5.120	A
C-A	349			349			
A-B	22			22			
A-C	429			429			

**17:45 - 18:00**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	6	575	0.011	6	0.0	6.332	A
B-A	16	420	0.039	16	0.0	8.924	A
C-AB	113	828	0.136	113	0.3	5.056	A
C-A	302			302			
A-B	18			18			
A-C	351			351			

**18:00 - 18:15**

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	591	0.009	5	0.0	6.146	A
B-A	14	449	0.030	14	0.0	8.260	A
C-AB	86	804	0.107	86	0.2	5.029	A
C-A	261			261			
A-B	15			15			
A-C	294			294			

Junctions 10
PICADY 10 - Priority Intersection Module
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**Filename:** Dog Kennel Lane Western Site Access v2.j10  
**Path:** O:\Cardiff\Vectos\CardiffShare\Projects\W160000\162088 - Lighthall Farm Solihull\425.000418.0001 - 2024 Application\Technical\A - Transport Assessment\Modelling\Picady  
**Report generation date:** 02/12/2024 14:40:38

- »2036 + Com + Dev, AM
- »2036 + Com + Dev, PM
- »2036 Cumulative Development, AM
- »2036 Cumulative Development, PM

**Summary of junction performance**

	AM					PM				
	Set ID	Q (Veh)	Delay (s)	RFC	LOS	Set ID	Q (Veh)	Delay (s)	RFC	LOS
2036 + Com + Dev										
Stream B-C	D1	0.1	7.14	0.06	A	D2	0.0	8.41	0.04	A
Stream B-A		0.2	15.78	0.18	C		0.1	15.33	0.10	C
Stream C-AB		0.1	3.41	0.06	A		0.3	5.10	0.13	A
2036 Cumulative Development										
Stream B-C	D3	0.0	6.42	0.05	A	D4	0.0	0.00	0.00	A
Stream B-A		0.1	11.15	0.12	B		0.0	8.81	0.02	A
Stream C-AB		0.0	3.64	0.03	A		0.0	4.82	0.03	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 Av. delay per arriving vehicle.

**File summary**

**File Description**

<b>Title</b>	Dog Kennel Lane Western Site Access
<b>Location</b>	
<b>Site number</b>	
<b>Date</b>	08/10/2024
<b>Version</b>	
<b>Status</b>	(new file)
<b>Identifier</b>	
<b>Client</b>	
<b>Jobnumber</b>	
<b>Enumerator</b>	SLR\jameswalker
<b>Description</b>	

### Units

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

### Analysis Options

Calculate Q Percentiles	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q 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	2036 + Com + Dev	AM	ONE HOUR	07:45	09:15	15
D2	2036 + Com + Dev	PM	ONE HOUR	16:45	18:15	15
D3	2036 Cumulative Development	AM	ONE HOUR	07:45	09:15	15
D4	2036 Cumulative Development	PM	ONE HOUR	16:45	18:15	15

### Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

# 2036 + Com + Dev, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.70	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.70	A

## Arms

### Arms

Arm	Name	Description	Arm type
A	Dog Kennel Lane East		Major
B	Site Access		Minor
C	Dog Kennel Lane West		Major

### Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Dog Kennel Lane West	7.00			129.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane plus flare	10.00	5.80	3.80	3.65	3.65	✓	1.00	162	55

## Slope / Intercept / Capacity

### Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	633	0.110	0.279	0.175	0.398
B-C	696	0.102	0.258	-	-
C-B	649	0.240	0.240	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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	2036 + Com + Dev	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	481	100.000
B - Site Access		✓	72	100.000
C - Dog Kennel Lane West		✓	1025	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	18	463
	B - Site Access	45	0	27
	C - Dog Kennel Lane West	1014	11	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	1	0
	B - Site Access	3	0	0
	C - Dog Kennel Lane West	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.06	7.14	0.1	A
B-A	0.18	15.78	0.2	C
C-AB	0.06	3.41	0.1	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	591	0.034	20	0.0	6.305	A
B-A	34	384	0.088	33	0.1	10.256	B
C-AB	28	1084	0.026	28	0.0	3.406	A
C-A	744			744			
A-B	14			14			
A-C	349			349			

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	568	0.043	24	0.0	6.616	A
B-A	40	339	0.119	40	0.1	12.028	B
C-AB	44	1178	0.037	44	0.1	3.173	A
C-A	878			878			
A-B	16			16			
A-C	416			416			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	30	534	0.056	30	0.1	7.135	A
B-A	50	278	0.178	49	0.2	15.743	C
C-AB	82	1311	0.062	82	0.1	2.926	A
C-A	1047			1047			
A-B	20			20			
A-C	510			510			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	30	534	0.056	30	0.1	7.140	A
B-A	50	278	0.178	50	0.2	15.782	C
C-AB	82	1311	0.062	82	0.1	2.930	A
C-A	1047			1047			
A-B	20			20			
A-C	510			510			

#### 08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	24	568	0.043	24	0.0	6.626	A
B-A	40	340	0.119	41	0.1	12.063	B
C-AB	44	1178	0.037	44	0.1	3.177	A
C-A	877			877			
A-B	16			16			
A-C	416			416			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	20	590	0.034	20	0.0	6.316	A
B-A	34	384	0.088	34	0.1	10.284	B
C-AB	28	1085	0.026	28	0.0	3.409	A
C-A	744			744			
A-B	14			14			
A-C	349			349			

# 2036 + Com + Dev, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.63	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.63	A

## 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	2036 + Com + Dev	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	882	100.000
B - Site Access		✓	39	100.000
C - Dog Kennel Lane West		✓	521	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	54	828
	B - Site Access	24	0	15
	C - Dog Kennel Lane West	488	33	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	1	0
	B - Site Access	0	0	0
	C - Dog Kennel Lane West	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.04	8.41	0.0	A
B-A	0.10	15.33	0.1	C
C-AB	0.13	5.10	0.3	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	527	0.021	11	0.0	6.979	A
B-A	18	378	0.048	18	0.0	9.992	A
C-AB	48	756	0.064	48	0.1	5.089	A
C-A	344			344			
A-B	41			41			
A-C	623			623			

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	493	0.027	13	0.0	7.510	A
B-A	22	329	0.066	21	0.1	11.706	B
C-AB	68	784	0.086	67	0.2	5.025	A
C-A	401			401			
A-B	49			49			
A-C	744			744			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	445	0.037	16	0.0	8.407	A
B-A	26	261	0.101	26	0.1	15.308	C
C-AB	104	828	0.126	104	0.3	4.977	A
C-A	469			469			
A-B	59			59			
A-C	912			912			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	17	444	0.037	17	0.0	8.413	A
B-A	26	261	0.101	26	0.1	15.333	C
C-AB	104	828	0.126	104	0.3	4.986	A
C-A	469			469			
A-B	59			59			
A-C	912			912			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	13	492	0.027	14	0.0	7.519	A
B-A	22	329	0.066	22	0.1	11.727	B
C-AB	68	784	0.087	68	0.2	5.040	A
C-A	400			400			
A-B	49			49			
A-C	744			744			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	11	527	0.021	11	0.0	6.987	A
B-A	18	378	0.048	18	0.1	10.008	B
C-AB	49	756	0.064	49	0.1	5.098	A
C-A	344			344			
A-B	41			41			
A-C	623			623			

# 2036 Cumulative Development, AM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.56	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.56	A

## 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)
D3	2036 Cumulative Development	AM	ONE HOUR	07:45	09:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	327	100.000
B - Site Access		✓	65	100.000
C - Dog Kennel Lane West		✓	832	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	14	313
	B - Site Access	40	0	25
	C - Dog Kennel Lane West	825	7	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	0	1
	B - Site Access	0	0	0
	C - Dog Kennel Lane West	2	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.05	6.42	0.0	A
B-A	0.12	11.15	0.1	B
C-AB	0.03	3.64	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	626	0.030	19	0.0	5.930	A
B-A	30	450	0.067	30	0.1	8.559	A
C-AB	14	1003	0.014	14	0.0	3.639	A
C-A	613			613			
A-B	11			11			
A-C	236			236			

#### 08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	22	610	0.037	22	0.0	6.125	A
B-A	36	415	0.087	36	0.1	9.486	A
C-AB	20	1076	0.019	20	0.0	3.406	A
C-A	728			728			
A-B	13			13			
A-C	281			281			

#### 08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	588	0.047	27	0.0	6.422	A
B-A	44	367	0.120	44	0.1	11.136	B
C-AB	34	1181	0.028	33	0.0	3.135	A
C-A	883			883			
A-B	15			15			
A-C	345			345			

#### 08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	28	588	0.047	28	0.0	6.424	A
B-A	44	367	0.120	44	0.1	11.146	B
C-AB	34	1181	0.028	34	0.0	3.139	A
C-A	883			883			
A-B	15			15			
A-C	345			345			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	22	610	0.037	23	0.0	6.131	A
B-A	36	415	0.087	36	0.1	9.496	A
C-AB	20	1076	0.019	20	0.0	3.414	A
C-A	728			728			
A-B	13			13			
A-C	281			281			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	19	625	0.030	19	0.0	5.938	A
B-A	30	450	0.067	30	0.1	8.573	A
C-AB	14	1003	0.014	14	0.0	3.642	A
C-A	612			612			
A-B	11			11			
A-C	236			236			

# 2036 Cumulative Development, PM

## Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Site Access - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.

## Junction Network

### Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.18	A

### Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.18	A

## 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)
D4	2036 Cumulative Development	PM	ONE HOUR	16:45	18:15	15

### Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Av. Demand (Veh/hr)	Scaling Factor (%)
A - Dog Kennel Lane East		✓	458	100.000
B - Site Access		✓	6	100.000
C - Dog Kennel Lane West		✓	394	100.000

## Origin-Destination Data

### Demand (Veh/hr)

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	43	415
	B - Site Access	6	0	0
	C - Dog Kennel Lane West	382	12	0

## Vehicle Mix

### Heavy Vehicle %

		To		
		A - Dog Kennel Lane East	B - Site Access	C - Dog Kennel Lane West
From	A - Dog Kennel Lane East	0	0	1
	B - Site Access	0	0	0
	C - Dog Kennel Lane West	1	0	0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (Veh)	Max LOS
B-C	0.00	0.00	0.0	A
B-A	0.02	8.81	0.0	A
C-AB	0.03	4.82	0.0	A
C-A				
A-B				
A-C				

### Main Results for each time segment

#### 16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	571	0.000	0	0.0	0.000	A
B-A	5	482	0.009	4	0.0	7.540	A
C-AB	15	761	0.019	14	0.0	4.819	A
C-A	282			282			
A-B	32			32			
A-C	312			312			

#### 17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	556	0.000	0	0.0	0.000	A
B-A	5	454	0.012	5	0.0	8.028	A
C-AB	19	786	0.024	19	0.0	4.690	A
C-A	335			335			
A-B	39			39			
A-C	373			373			

#### 17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	534	0.000	0	0.0	0.000	A
B-A	7	415	0.016	7	0.0	8.814	A
C-AB	27	823	0.033	27	0.0	4.522	A
C-A	407			407			
A-B	47			47			
A-C	457			457			

#### 17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	534	0.000	0	0.0	0.000	A
B-A	7	415	0.016	7	0.0	8.814	A
C-AB	27	823	0.033	27	0.0	4.526	A
C-A	407			407			
A-B	47			47			
A-C	457			457			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	556	0.000	0	0.0	0.000	A
B-A	5	454	0.012	5	0.0	8.029	A
C-AB	19	787	0.024	19	0.0	4.696	A
C-A	335			335			
A-B	39			39			
A-C	373			373			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	571	0.000	0	0.0	0.000	A
B-A	5	482	0.009	5	0.0	7.544	A
C-AB	15	761	0.019	15	0.0	4.821	A
C-A	282			282			
A-B	32			32			
A-C	312			312			

