

Proposed Residential Development, Glen Dimplex, Stoney Lane, Whiston – Transport Technical Note 01 – July 2026

Introduction

- 1 BTG Eddisons has been instructed by Taylor Wimpey to advise on the traffic and transport issues relating to the proposed residential development on land at Stoney Lane in Whiston (Planning Ref: 25/00672/FUL).
- 2 This Transport Note has been produced in response to the consultation responses received from Knowsley Metropolitan Borough Council (KMBC) on 24th May 2026.

Main Access

- 3 The following section will consider the comments raised by KMBC on the proposed vehicular access point into the site.
- 4 Knowsley Metropolitan Borough Council has stated that they require:

“At pre-application stage, highways raised concern regarding the positioning of any residential access opposite the operational accesses serving the Ambulance Station on Stoney Lane. Although the applicant has marginally repositioned the access serving the cul-de-sac fronting Stoney Lane, the revised location now sits almost directly opposite the ambulance station’s eastern access. This remains unacceptable.

Routine residential turning movements would directly conflict with emergency vehicle egress, particularly during blue-light departures where ambulances require immediate, unobstructed priority. Opposing accesses in such close proximity increase driver hesitation, complicate decision-making, and introduce avoidable obstruction risk. Given that there is a clear length of frontage between the ambulance station’s two accesses where a residential junction could be positioned without directly opposing either, the current arrangement represents a design choice rather than a constraint.

The access should therefore be repositioned to remove direct conflict with emergency operations and maintain a predictable, low-conflict highway environment.”

- 5 The site access is now positioned approximately 15 metres to the west, as shown on **Plan 1**.

Emergency Access

- 6 KMBC have also stated the below regarding the emergency access:

"The planning layout shows a number of "emergency-only" vehicular accesses around the site perimeter, significantly more than would normally be required for a development of this scale. While pedestrian and cycle permeability is strongly supported, the number of vehicular emergency accesses proposed is excessive and unjustified.

The emergency accesses positioned on Stoney Lane create unnecessary frontage breaks, undermine hierarchy, and increase the likelihood of informal vehicular use over time. Standard practice would typically expect no more than one well-located emergency vehicular access if deemed it was required operationally. If a single emergency vehicular access is required, the access located near Plot 138 is the preferred location. The emergency access strategy therefore requires rationalisation, with vehicular emergency access reduced to a single appropriate location, and all other boundary breaks redesigned as pedestrian and cycle links only.

All other boundary breaks currently shown as "emergency access" should be removed or redesigned for pedestrian/cycle use only. Any retained emergency access must be supported by a clear, enforceable management plan and all must show that they meet current visibility requirements on a scaled plan"

- 7 The revised emergency access will be located between the two access points by Plot 176 is shown on **Plan 1**. The emergency vehicular access will be adopted.

Access to plots 176–178

- 8 KMBC have also made a comment regarding access to plots 176–178:

"The access arrangement serving Plots 176–178 is currently unacceptable. These dwellings are served via a route labelled as an "emergency access" that in practice functions as the sole vehicular access. The route exceeds acceptable private-drive lengths, incorporates an adopted footway running alongside a privately managed

surface, and fails to meet either private shared drive or adoptable cul-de-sac standards. It also does not support compliant refuse servicing or fire appliance access.

This arrangement must be fundamentally redesigned so that these plots are served by either:

- *a properly designed adoptable cul-de-sac; or*
- *a compliant private shared driveway with a single, clearly defined access.*

Hybrid emergency corridors cannot be supported.

It is acknowledged that the applicant may have intended this area to function similar to a standard private drive, however, the arrangement shown with an adopted footway running across the access is also unacceptable.”

- 9 This emergency access has been amended to provide the adequate dimensions to provide both the emergency access and the pedestrian/cycle link to Cumber Lane and Stoney Lane, which is shown on **Plan 2**.

Access adjacent to Plot 13

- 10 Regarding the access adjacent to Plot 13, KMBC has stated the below.

“The proposed connection adjacent to Plot 13 linking to Cumber Lane requires redesign. While pedestrian permeability is supported, this route is enclosed between rear boundaries and areas of vegetation not in the control of the applicant, poorly overlooked, and presents significant personal-safety and anti-social behaviour risks. If intended as emergency vehicle access, the geometry is unsuitable and not accepted by highways; if intended as a pedestrian route, it must be redesigned to be clearly non-vehicular, well-overlooked, and well-lit.

A safe pedestrian and cycle route should be delivered here, but the current configuration cannot be supported.”

- 11 This connection to Cumber Lane has been redesigned from an emergency vehicle access to a 3.7 metre wide footpath. To enforce the footpath as non-vehicular, chicanes have been proposed at both ends and lighting will be provided, as shown in **Plan 3**.

Visibility

12 KMBC has stated the below regarding visibility:

“Visibility splays of 2.4m × 43m are shown at the proposed access points on Stoney Lane that are consistent with Manual for Streets guidance for a 30mph road. However, internal junctions are designed using 20mph visibility parameters despite no TRO being proposed to reduce the legal speed limit.

In the absence of a legally enforceable 20mph TRO, all visibility splays, including at internal junctions and emergency accesses, must be designed to 30mph standards. Visibility drawings must therefore be revised accordingly. For clarity, it is acknowledged that it is generally accepted that residential speeds can be lower, but visibility splays should be demonstrated for the posted speed limit rather than the design speed.

To ensure visibility splays at the Stoney Lane accesses can be maintained, junction protection will be required. This will include extensions of double-yellow-line restrictions on Stoney Lane and into the site. TRO costs (£7,000 as of 1 April 2026) will be secured via Section 106, with lining and signing works delivered via Section 278 before occupation. A plan will be secured depicting the agreed extents of the proposed restriction markings.”

13 The Traffic Regulation Order cost of £7,000 to be secured via Section 106 is acceptable by the applicant.

14 Knowsley Council has stated the following regarding access to plots 176–178:

“The access arrangement serving Plots 176–178 is currently unacceptable. These dwellings are served via a route labelled as an “emergency access” that in practice functions as the sole vehicular access. The route exceeds acceptable private-drive lengths, incorporates an adopted footway running alongside a privately managed surface, and fails to meet either private shared drive or adoptable cul-de-sac standards. It also does not support compliant refuse servicing or fire appliance access. This arrangement must be fundamentally redesigned so that these plots are served by either:

- *a properly designed adoptable cul-de-sac; or*
- *a compliant private shared driveway with a single, clearly defined access.*

Hybrid emergency corridors cannot be supported.

It is acknowledged that the applicant may have intended this area to function similar to a standard private drive, however, the arrangement shown with an adopted footway running across the access is also unacceptable."

- 15 The site layout has been amended to address these comments and is shown in **Plan 3**.

Traffic impact and Trip Generation

- 16 Regarding the existing staffing levels, KMBC has stated the following:

"The TA applies a full 500–employee industrial fallback as the assumed "existing" site trip generation, resulting in baseline flows of 130 AM peak and 85 PM peak two-way trips attributed to the former B2 use. This approach has the effect of reducing the net impact of the residential development, as the assumed industrial flows are subtracted from the residential trip generation. While this is presented as a robust assessment approach, the TA itself acknowledges that only around 100 employees are currently present on the site and that the buildings are proposed for demolition, meaning the likelihood of the site operating at a 500–employee industrial intensity in future is limited. As a result, the fallback assumption artificially suppresses the net development impact when considering the realistic existing situation. This issue has also been specifically identified in comments received from St Helens Council, who note that the industrial trip distribution method is not correct."

- 17 The traffic figures have been amended to assume that no industrial fallback therefore providing the most robust assessment. The amended traffic figures are shown in **Appendix 1**.

- 18 KMBC continue:

"The Transport Assessment does not demonstrate that the surrounding network can accommodate the additional development traffic without intervention. Furthermore, the TA does not provide a robust cumulative impact assessment, as it relies on an unrealistic industrial fallback, does not explicitly account for committed or emerging development, and fails to model key junctions under future-year conditions. As such, it does not demonstrate that the cumulative traffic impacts arising from the development would not be severe.

In addition, the TA only undertakes capacity modelling for the new primary site access using PICADY, which shows RFC values of 0.14 (AM) and 0.09 (PM) and a Level of Service (LOS) A in both peaks, with queues <0.2 PCU. While these results indicate the primary access operates well within capacity, the TA does not model any of the surrounding junctions, including:

- *Stoney Lane/Cumber Lane*
- *Stoney Lane/Dragon Lane*
- *Stoney Lane/Old Lane*
- *Whiston Hospital and ambulance station access points*

Although these junctions were within the agreed study area and traffic survey data has been collected, their performance under 2031 “with development” scenarios has not been assessed using junction modelling. Instead, the TA relies solely on percentage change analysis. Given the sensitivity of Stoney Lane, serving Whiston Hospital, the ambulance station, nearby schools, and forming a key east–west distributor route, this approach does not demonstrate whether the surrounding junctions would continue to operate satisfactorily once development traffic is added, particularly where the industrial fallback is discounted and realistic net increases are applied.”

- 19 The traffic figure has been amended to include the additional junctions and the amended cumulative assessments. The traffic figure is shown in **Appendix 1**.
- 20 The revised Stoney Lane/Site access priority junction and the additional capacity assessments are included below.

Stoney Lane/Site Access Priority Junction

- 21 To assess the operation of the proposed Stoney Lane/Site Access priority-controlled junction the computer program JUNCTIONS11 software has been utilised using the proposed site access layout and the 2031 ‘With Development’ Flows.
- 22 The results of this analysis are summarised below in **Table 1**, whilst the full output is contained within **Appendix 2**.

Arm	2031 With Development Flows			
	Weekday AM		Weekday PM	
	RFC	Q	RFC	Q
Site Access	0.16	0	0.06	0
Stoney Lane	0.05	0	0.10	0

Table 1 – Summary of JUNCTIONS11 Results for the proposed Stoney Lane/Site Access Junction – 2031 With Development Flows

23 As can be seen in Table 1, the proposed Stoney Lane/Site Access priority-controlled junction is forecast to operate well within its theoretical capacity.

24 Based on the above, it is concluded that the proposed site access junction can accommodate the proposed development traffic.

Stoney Lane/Cumber Lane Signalised Junction

25 Capacity assessments of the Stoney Lane/Cumber Lane signalised junction, the computer program LINSIG3 has been utilised.

26 Assessments of the junction have been undertaken using the 2025 surveyed flows and the model has been validated to reflect the observed queues at the junction. The queue surveys are saved within **Appendix 3**.

27 The results of this analysis are summarised below in **Table 2** below.

Movement	2025 Surveyed Flows			
	Weekday AM		Weekday PM	
	DoS	MMQ	DoS	MMQ
Cumber Lane Left Right	57.2%	7.4	44.0%	5.1
Stoney Lane (W) Ahead Right	56.7%	9.2	45.1%	6.7
Stoney Lane (E) Ahead Left	35.1%	4.7	38.1%	5.4

Table 2 Summary of LINSIG3 Output for the Stoney Lane/Cumber Lane Signalised Junction – 2025 Surveyed Flows

28 Capacity assessments of the Stoney Lane/Cumber Lane signalised junction have been undertaken using the LINSIG3 program. The analysis has been also carried out using the 2031 'Base' and 'With Development' flows, which is shown in **Table 3** below. The full results are contained within **Appendix 4**.

Movement	2031 Base Flows				2031 'With Dev' Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	DoS	MMQ	DoS	MMQ	DoS	MMQ	DoS	MMQ
Cumber Lane Left Right	66.3%	9.7	55.7%	6.6	68.8%	9.9	58.2%	6.8
Stoney Lane (W) Ahead Right	67.1%	11.3	55.9%	8.3	68.2%	11.5	56.4%	8.8
Stoney Lane (E) Ahead Left	40.0%	5.4	41.8%	6.1	42.9%	6.0	42.3%	6.2

Table 3 Summary of LINSIG3 Output for the Stoney Lane/Cumber Lane Signalised Junction – 2031 Base and 'With Development' Flows

- 29 As can be seen from Table 3, the Stoney Lane/Cumber Lane signalised junction is forecast to operate within its theoretical capacity in the 2031 Base scenarios.
- 30 With the addition of the proposed development flows, the junction will continue to operate within its theoretical capacity with minimal increases in the forecast Degree of Saturation and queuing.

Dragon Lane/Stoney Lane/Meadway Signalised Junction

- 31 Capacity assessments of the Dragon Lane/Stoney Lane/Meadway signalised junction, the computer program LINSIG3 has been utilised.
- 32 Assessments of the junction have been undertaken using the 2025 surveyed flows and the model has been validated to reflect the observed queues at the junction. The queue surveys are saved within Appendix 3.
- 33 The results of this analysis are summarised below in **Table 4**, below.

Movement	2025 Surveyed Flows			
	Weekday AM		Weekday PM	
	DoS	MMQ	DoS	MMQ
Dragon Lane (N) Left Ahead Right	80.7 : 80.7%	10.8	71.5 : 71.5%	7.6
Stoney Lane Left Ahead Right	81.0%	11.9	71.4%	10.9
Dragon Lane (S) Right Left Ahead	69.7 : 69.7%	9.8	60.8 : 60.8%	7.6
Meadway Ahead Right Left	3.6%	0.2	0.0%	0

Table 4 Summary of LINSIG3 Output for the Dragon Lane/Stoney Lane/Meadway Signalised Junction – 2025 Surveyed Flows

- 34 Capacity assessments of the Dragon Lane/Stoney Lane/Meadway signalised junction have been undertaken using the LINSIG3 program. The analysis has been also carried out using the 2031 'Base' and 'With Development' flows, which is shown in **Table 5** below. The full results are contained within **Appendix 5**.

Movement	2031 Base Flows				2031 'With Dev' Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	DoS	MMQ	DoS	MMQ	DoS	MMQ	DoS	MMQ
Dragon Lane (N) Left Ahead Right	89.8 : 89.8%	15.4	81.4 : 81.4%	11.8	93.2 : 93.2%	18.9	85.3 : 85.3%	12.0
Stoney Lane Left Ahead Right	90.7%	16.4	80.2%	13.2	94.4%	20.3	83.9%	13.3
Dragon Lane (S) Right Left Ahead	76.2 : 76.2%	11.6	64.8 : 64.8%	9.1	77.6 : 87.4%	12.8	64.0 : 64.0%	8.2
Meadway Ahead Right Left	3.6%	0.2	0.0%	0.0	3.6%	0.2	0.0%	0.0

Table 5 Summary of LINSIG3 Output for the Dragon Lane/Stoney Lane/Meadway Signalised Junction – 2031 Base and 'With Development' Flows

35 As can be seen from Table 5, the Dragon Lane/Stoney Lane/Meadway signalised junction is forecast to operate within its theoretical capacity in the 2031 Base scenarios.

36 With the addition of the proposed development flows, the junction will continue to operate within its theoretical capacity with minimal increases in the forecast Degree of Saturation and queuing.

Stoney Lane/Old Lane Mini Roundabout Junction

37 Capacity assessments of the Stoney Lane/Old Lane mini roundabout junction have been undertaken using the JUNCTIONS11 program.

38 Assessments of the junction have been undertaken using the 2025 surveyed flows and the model has been validated to reflect the observed queues at the junction. The queue surveys are saved within Appendix 3.

39 The results of the 2025 surveyed flows are summarised within **Table 6** below.

Arm	2025 Surveyed Flows			
	Weekday AM		Weekday PM	
	Max RFC	Max Queue	Max RFC	Max Queue
Old Lane (N)	0.36	1	0.23	0
Old Lane (S)	0.38	1	0.28	0
Stoney Lane	0.38	1	0.32	1

Table 6 Summary of LINSIG3 Output for the Stoney Lane/Old Lane Mini Roundabout Junction – 2025 Surveyed Flows

40 Capacity assessments of the Old Lane/Stoney Lane mini roundabout have been undertaken using the JUNCTION11 program. The analysis has been also carried out using the 2031 'Base' and 'With Development' flows, which is shown in **Table 7** below. The full results are contained within **Appendix 6**.

Arm	2031 Base Flows				2031 'With Dev' Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
Old Lane (N)	0.39	1	0.26	0	0.40	1	0.26	0
Old Lane (S)	0.41	1	0.31	0	0.42	1	0.33	1
Stoney Lane	0.42	1	0.35	1	0.45	1	0.36	1

Table 7 Summary of LINSIG3 Output for the Stoney Lane/Old Lane Mini Roundabout Junction – 2031 Base and 'With Development' Flows

41 As can be seen from Table 7, the Old Lane/Stoney Lane mini roundabout is forecast to operate within its theoretical capacity in the 2031 Base scenarios.

- 42 With the addition of the proposed development flows, the junction will continue to operate within its theoretical capacity with minimal increases in the forecast RFC and queuing.

Whiston Hospital Priority Access Junction

- 43 As requested by KMBC, traffic counts were undertaken at the Stoney Lane/Whiston Hospital junction.
- 44 Although the surveyed flows and impact on this the Stoney Lane/Whiston Hospital access priority junction is low, capacity assessments have been undertaken using the JUNCTION11 program to provide a robust assessment.
- 45 The analysis has been carried out using the 2031 'Base' and 'With Development' flows, which is shown in **Table 8** below. The full results are contained within **Appendix 7**.

Arm	2031 Base Flows				2031 'With Dev' Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
Whiston Hospital Access	0.06	0	0.25	0	0.10	0	0.25	0
Stoney Lane (E)	0.05	0	0.02	0	0.06	0	0.02	0

Table 8 Summary of JUNCTIONS11 Output for the Stoney Lane/Whiston Hospital Access Priority Junction – 2031 Base and 'With Development' Flows

- 46 As can be seen from Table 8, the Stoney Lane/Whiston Hospital access priority junction is forecast to operate within its theoretical capacity in the 2031 Base scenarios.

Whiston Ambulance Station Priority Access Junction

- 47 As requested by KMBC, traffic counts were undertaken at the Stoney Lane/Stoney Lane/Whiston Hospital Access Priority Junction.

- 48 Although the surveyed flows and impact on this the Stoney Lane/Whiston Ambulance station access priority junction is negligible, capacity assessments have been undertaken using the JUNCTION11 program to provide a robust assessment.
- 49 The analysis has been carried out using the 2031 'Base' and 'With Development' flows, which is shown in **Table 9** below. The full results are contained within **Appendix 8**.

Arm	2031 Base Flows				2031 'With Dev' Flows			
	Weekday AM		Weekday PM		Weekday AM		Weekday PM	
	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue	Max RFC	Max Queue
Ambulance Station Access	0	0	0.02	0	0	0	0.02	0
Stoney Lane (E)	0.01	0	0	0	0.01	0	0	0

Table 9 Summary of LINSIG3 Output for the Stoney Lane/Whiston Ambulation Station Access Priority Junction – 2031 Base and 'With Development' Flows

- 50 As can be seen from Table 9, the Stoney Lane/Whiston Ambulance Station access priority junction is forecast to operate within its theoretical capacity in the 2031 Base scenarios.

Internal layout

- 51 KMBC has stated the following regarding the internal layout:

"The layout is structured around a single continuous road with long straight sections, minimal deflection and little variation in street character. While a primary route is expected, the layout fails to establish hierarchy. Uniform geometry, extensive forward visibility and large junction radii create a car-dominated environment, reliant on a single raised table for speed management.

The reliance on a singular table traffic-calming feature is insufficient to deliver a self-enforcing 20mph environment. Streetscapes are further weakened by extensive frontage parking, limited soft landscaping and minimal enclosure, conflicting with Manual for Streets, the National Design Guide and the Council Plan ambitions for healthy, walkable

neighbourhoods. These concerns were raised at pre-application stage and remain unresolved.

Beyond speed management, the overall streetscape lacks pedestrian-friendly qualities. The majority of properties have double front driveways, minimal or no front garden space, and very limited soft landscaping or street trees. This results in a visually harsh environment dominated by parked vehicles and hard surfacing, rather than greenery, enclosure or active frontage. National design guidance, including Manual for Streets, the National Design Guide and the National Model Design Code, emphasises walkable neighbourhoods, street greening, varied enclosure, and environments that support outdoor play, social interaction and healthy lifestyles. The proposed layout does not reflect these principles: long rows of driveways, limited soft landscaping and lack of street-edge variety create an exposed, vehicle-oriented environment rather than the human-scaled residential character expected in contemporary developments.

This concern is exacerbated by the lack of any dedicated on-street visitor parking. With frontage streets already dominated by private driveways, there will be significant pressure for informal kerbside parking. This is likely to narrow carriageways, obstruct footways, reduce visibility and further intensify car dominance, undermining safe pedestrian movement along the street edge.

From a Knowsley Council perspective, the design conflicts with ambitions set out in the KMBC Council Plan, which prioritises improving residents' health, promoting active travel, delivering high-quality and distinctive neighbourhoods, and creating streets that people enjoy living in. Highways must play a role in achieving these corporate objectives by ensuring new residential developments provide safe, attractive, inclusive and welcoming public realms, where residents feel comfortable walking and where children can play safely. As currently configured, the street network prioritises frontage parking and maximising plot numbers, resulting in a layout that feels compressed, vehicle-dominated and lacking in meaningful amenity, greening or place-making."

- 52** A speed cushion location plan has been produced, as shown in Plan 3, whilst the overall site layout has been updated to reflect the comments regarding the overall streetscape, which is shown in Plan 2.

Junction Geometry

- 53 Regarding junction geometry, KMBC has stated:

“Uniform 6m kerbs radii are applied to all internal junctions. While appropriate at the main access, their use on all streets removes opportunities to reduce speeds or reinforce hierarchy. Junction geometry must be tailored to street function and revised accordingly. In summary, while straight roads can be acceptable within residential developments, they must be accompanied by a coherent design strategy that moderates vehicle speeds, creates visual interest and promotes pedestrian comfort. The current layout does not achieve this. Without further horizontal deflection, street tree planting, landscaping, visual narrowing, varied enclosure and properly designed visitor-parking provision, the streets risk functioning as long, hard, vehicle-priority corridors rather than attractive, healthy residential places. A more balanced, resident-centred layout will be required to bring the scheme in line with national design guidance and the expectations of the Council Plan.”

- 54 These comments have been addressed and are reflected in the revised layout shown in Plan 2.

Adoptable Areas

- 55 Regarding adoptable areas, KMBC has stated the following:

“A review of the Adoptable Areas plan identifies a fragmented adoption strategy, with multiple locations where adopted footways run directly alongside private shared driveways or privately managed verges. This hybrid arrangement is unacceptable and will not be supported under KMBC Section 38 Technical Approval. Footways forming part of the public highway must be contained within a continuous adopted corridor to ensure clear maintenance responsibility, statutory undertaker access, enforceability and long-term operational consistency. Mixed adoption boundaries risk future conflict, uncertainty over maintenance liability and complications during street works.

Several private shared driveways exceed KMBC standards of a maximum of four dwellings and 25 m in length, which is unacceptable for long-term safety and operation.

These arrangements require redesign, either by bringing them into adoption or reconfiguring the layout to reduce the number of dwellings served privately."

56 These comments have been addressed and are reflected in the revised layout shown in Plan 2.

57 KMBC continue:

"The plan also shows the pumping station accessed from a privately managed drive, which is unacceptable. Pumping stations require reliable access for 12 m tankers directly from an adopted highway, with provision for forward entry and exit. The proposed arrangement presents unacceptable risks relating to access rights, surface condition, maintenance liability and operational resilience.

The fragmented adoption proposal therefore requires substantial revision to deliver a clean, logical and maintainable highway layout."

58 The pump station arrangement has been amended to accommodate a 12-metre tanker vehicle entering in a forward gear, turning around and exiting in a forward gear.

59 The swept path analysis of the 12-metre tanker vehicle is shown in **Plan 4**.

Swept Path Analysis

60 Regarding swept path analysis, KMBC has stated:

"The swept path analysis for the refuse vehicle, fire appliance and service tanker identifies multiple instances of encroachment into opposing lanes and overrun of footways, tactile crossing areas and verge space. In several locations, the tracking shows vehicles overrunning areas where pedestrians would be expected to wait to cross, including tactile paving at junctions. While limited overrun can be acceptable in isolated or low-conflict circumstances, the extent and frequency of overrun shown on the submitted drawings raise material highway safety concerns, particularly in relation to the operation of both proposed accesses onto Stoney Lane for larger service vehicles.

The tracking also demonstrates that service vehicles are expected to rely on private shared drives, narrow internal corridors and routes labelled as "emergency access" in order to reach dwellings or infrastructure such as the pumping station. As previously

advised, KMBC refuse vehicles will not enter private drives or unadopted roads, and all bin collections must take place within 25 m of an adopted collection point."

- 61 The swept path analysis for both the refuse and fire appliance vehicles has been amended to minimise encroachment into opposing lanes. In addition, the turning areas and private drives have been redesigned to ensure that bin collection points are within 25 metres of an adopted collection point.
- 62 The swept path analysis for refuse is shown in **Plan 5**, whilst the swept path analysis for the fire appliance vehicles is shown in **Plan 6**.

"Of particular concern is the swept path at the cul-de-sac access fronting Stoney Lane, where the tracking for the refuse vehicle demonstrates significant overrun across the full width of the junction, fully encroaching into the area of pedestrian waiting space at the junction, including the tactile paving, thereby removing any safe standing area for pedestrians awaiting a crossing opportunity. This compromises the safety of anybody standing at the tactile crossing area. Further to this, the swept path drawings show that refuse vehicles exiting the estate from both accesses onto Stoney Lane are required to significantly overrun opposing lanes to a degree that exceeds what would normally be considered acceptable onto a busy distributor road. These arrangements present an unacceptable risk at a location that already experiences high pedestrian activity.

To address the access-related overrun issues on Stoney Lane, the estate access road should be widened to a minimum of 6.0 m from the junction with Stoney Lane to at least the first internal junction, allowing larger vehicles to enter and exit without unacceptable encroachment. Beyond that point, carriageway widths should reduce appropriately to reinforce the residential hierarchy and traffic-calmed environment.

Similarly, the cul-de-sac access fronting Stoney Lane must be widened to accommodate refuse and service vehicles safely, with internal road widths reduced once vehicles have cleared the junction. Junction geometry and carriageway widths must be designed to safely accommodate necessary service vehicles at the point of access, rather than relying on overrun of pedestrian areas."

- 63 The primary access into the site now shows a carriageway width of 6 metres, whilst the eastern access onto Stoney Lane have now been redesigned to show an initial

carriageway width of 6.5 metres. A large refuse vehicle can now turn left in and left out without encroachment over the footways and tactile paving at the site access.

64 The revised vehicular access arrangement is shown on Plan 1.

65 Regarding the swept path analysis of the tanker, KMBC has stated:

"The swept path analysis for the service tanker demonstrates that the vehicle would be required to reverse for an excessive and concerning distance in order to access and service the pumping station. This arrangement is unacceptable. Service tankers must be able to enter and leave the pumping station in forward gear, without reliance on extended reversing manoeuvres, particularly within a residential environment. The degree of reversing shown raises clear safety and operational concerns and confirms that the servicing arrangement is not acceptable in its current form."

66 The turning area for the tanker has now been redesigned to allow it to enter and leave in a forward gear. The swept path analysis for the tanker is shown on Plan 4.

Parking and Servicing

67 Regarding parking, KMBC has stated:

"A review of the house type distribution confirms that 73 dwellings within the development, equivalent to approximately 36% of the total site, are 4-bed units. Under the Council's Ensuring a Choice of Travel SPD, all 4-bed properties are required to provide three off-street parking spaces. The submitted layout does not achieve this.

Many of the identified 4-bed plots are shown with only two spaces, and whilst a number of dwellings include garages, there are some plots without indication of a garage space. This results in a significant site-wide shortfall against the SPD standards. Given the site's immediate proximity to Whiston Hospital, its location within an existing Residents' Parking Zone (RPZ), and the concerns already raised about long straight streets, car-dominated frontages and the lack of visitor parking, it is particularly important that on-plot parking provision reflects the realistic car-ownership levels of 4-bed family homes. Without SPD-compliant on-plot parking, there is a high risk of overspill onto the internal estate roads, creating operational issues for refuse and emergency access, obstructing

footways, and undermining the Council's objectives for delivering high-quality, safe and attractive residential neighbourhoods consistent with the ambitions of the KMBC Council Plan. Revised plans will therefore be required to demonstrate three dedicated parking spaces for each 4-bed dwelling in a manner that is convenient, legible and usable in day-to-day practice.

Parking arrangements for Plots 50–55, 68–71, 50, 72, 103 and 110 involve remote or ambiguous parking locations and inter-plot conflicts. Such arrangements are unlikely to function, risk on-street overspill, and would not be supported under Section 38. Revised layouts are required ensuring parking is close, attributable and independently usable."

- 68 The revised site layout has been amended to resolve the parking matters raised by the Council.
- 69 The layout has now been redesigned to show each four-bedroom dwelling is provided with 3 off-street parking spaces.
- 70 The parking arrangements for plots 50–55, 68–71, 72, 103 and 110 have been amended where necessary to reduce the risk of on-street parking.

Residents Parking Zone

- 71 Regarding a residents parking zone (RPZ), KMBC has stated:

"Given the site's immediate proximity to Whiston Hospital, the surrounding area is already subject to a Residents' Parking Zone (RPZ) due to long-standing issues with overspill and commuter parking. Any new dwellings added to this location would place additional pressure on the existing RPZ unless they are incorporated into an extended zone from the outset. As previously advised, the internal layout provides very limited on-street visitor parking, and the dominance of frontage parking and narrow street corridors means there is little capacity within the development to absorb overspill without obstructing footways, restricting vehicle movements, or compromising visibility. In such a constrained layout, unmanaged external parking pressures, particularly from hospital users, would quickly lead to unsafe and inconvenient parking patterns within the estate. For these reasons, the proposed development must be included within the existing RPZ, with the applicant required to fund the necessary Traffic Regulation Order (TRO),

consultation and implementation costs. This is essential to protect the operational function of the internal road layout, maintain safe pedestrian routes, ensure emergency and refuse access, and prevent the new streets becoming overwhelmed by non-resident parking demand."

- 72 The applicant accepts the funding of the Traffic Regulation Order (TRO) and for the site to be within the existing residents parking zone.

Servicing Alleyways

- 73 Regarding servicing alleyways, KMBC has stated:

"Rear and side alleyways serving terraced blocks exceed permitted drag distances in some cases the drag distances are more than double the maximum 25m permitted under Building Regulations Part H. They are also poorly overlooked and present ASB risks.

Manual for Streets emphasises that bin routes should be short, convenient, direct and well overlooked, enabling residents to present waste without passing through hidden or insecure areas. The proposed alleys fail these tests. If these routes become unsafe or unpleasant to use, it is highly likely that residents will present bins on the nearest street frontage, which, given the already constrained carriageway widths and limited visitor-parking capacity, will further obstruct footways, compound existing car-dominance issues and impede refuse and emergency access."

- 74 The servicing alleyways have been amended and are shown on the revised layout, which is shown in Plan 1.

Cycle Parking Provision

- 75 Regarding cycle parking provision, KMBC has stated:

"Cycle parking must be clearly identified for each plot, with the specification, location and enclosure type confirmed prior to occupation. This is particularly important for affordable units and households on lower incomes, who are more likely to rely on cycling as an essential mode of travel for work, education and local trips. In these cases, the absence of secure, usable cycle storage can become a genuine barrier to sustainable mobility.

Furthermore, the growing prevalence of e-bikes and e-cargo bikes introduces additional requirements: many insurance providers now stipulate that electric bicycles must be stored within a secure, lockable structure, and must not be charged outdoors or in unsecured sheds due to fire-safety risks. National guidance is increasingly clear that cycle storage must be designed to accommodate larger and more valuable cycle types, including e-bikes, adapted cycles, cargo cycles and trikes, which require more generous footprints than traditional units. The layout submitted does not show how such provision will be achieved.

Cycle parking details can be secured by condition; however, the applicant must demonstrate that every dwelling can be provided with high-quality, secure and usable cycle storage, giving residents genuine ability to choose active modes and ensuring compliance with KMBC's adopted standards."

- 76 Cycle storage provision has been shown on the revised layout, which is provided in Plan 2.

Pedestrian and Cycle Connectivity

- 77 Regarding the pedestrian and cycle connectivity, KMBC has stated:

"A development of 204 dwellings in this location must demonstrate safe, attractive and continuous pedestrian and cycle routes both within the site and connecting to the wider active travel network". Neither the Design & Access Statement (DAS) nor the Transport Assessment (TA) provides any meaningful assessment of walking or cycling conditions. No walking or cycling audits have been undertaken and no off-site improvements are proposed, despite clear policy requirements.

This approach does not comply with Manual for Streets, the Knowsley Local Cycling & Walking Infrastructure Plan (LCWIP), the Liverpool City Region LCWIP, or the Developer Contributions SPD (2023), all of which require new development "to mitigate its transport impacts and contribute to infrastructure that supports sustainable travel, modal shift and healthy communities."

- 78 Walking route audits have been undertaken to the surrounding areas, nearby bus stops and Whiston train station. The audits categorise the walking route into attractive, comfort,

directness, safety and coherence. The audit also identifies the potential off-site improvements which could be provided.

- 79 The walking route audits identified a potential improvement at the Stoney Lane/Hulton Avenue priority junction in the form of an uncontrolled pedestrian crossing with tactile paving and associated tactile.
- 80 The estimated costs for the improvement scheme at the Stoney Lane/Hulton Avenue priority junction would be between £10,000 and £15,000.
- 81 The walking route audits are provided in **Appendix 9**, whilst the proposed uncontrolled crossing plan is shown on **Plan 7**.

Internal Pedestrian and Cycle Connectivity

- 82 Regarding internal pedestrian and cycle connectivity, KMBC has stated:

"The proposed layout does not provide a safe or attractive environment for walking and cycling within the site:

- Internal streets are long, straight and car-dominated, offering little natural speed management.*
- No dedicated cycle infrastructure is provided, requiring cyclists to share distributor-style corridors.*
- The proposed link to Cumber Lane (adjacent to Plot 13) is enclosed between rear boundaries, poorly overlooked and presents a high risk of anti-social behaviour, contrary to Manual for Streets, LCWIP objectives and pre-application advice.*
- The estate lacks quiet-street design, filtered permeability, green corridors or measures that support children walking or scootering safely."*

- 83 These comments regarding pedestrian and cycle connectivity have been addressed in the revised site layout, which is shown on Plan 2.

External Connectivity

- 84 Regarding external connectivity, KMBC has stated that:

“The site is strategically located with high active-travel potential, yet the TA and DAS do not assess safe walking or cycling routes to key destinations, including employment (Whiston Hospital, Prescott Town Centre, Cables Retail Park), education (St Edmund Arrowsmith and local schools), health and community facilities, public transport (Whiston, Prescott and Rainhill stations, and nearby bus stops), or leisure and recreation destinations. No audits have been undertaken, no gaps identified and no mitigation or improvements proposed. Given the Knowsley LCWIP’s priority on improving access to jobs, education, healthcare, retail and transport hubs, this represents a serious deficiency.”

- 85 As previously mentioned, a walking route audit has been undertaken and is provided in Appendix 9.

Stoney Lane – Required Improvements

- 86 Regarding improvements at Stoney Lane, KMBC has stated the following:

“Stoney Lane is a high-traffic corridor serving Whiston Hospital and ambulance operations. Existing footways are narrow, uneven and poorly aligned, with no cycling provision. Despite this, the TA proposes no improvements to footway width or surfacing, dropped kerbs, tactile paving, pedestrian crossings, or cycle safety measures. Given the scale of development and sensitive location, this is unacceptable.

Both the Knowsley and Liverpool City Region LCWIPs prioritise walking and cycling access to Whiston Hospital, strategic routes connecting Prescott–Whiston–Lea Green, safe routes to rail stations and town centres, and improvements along key corridors such as Stoney Lane. The development provides little to support these objectives and offers no justification for omitting surrounding network improvements.”

- 87 Dropped kerbs with associated tactile paving has been proposed at both access junctions, therefore enhancing walking provision along Stoney Lane. This is shown in Plan 2.

Required Mitigation

- 88 Regarding the internal layout requirements, KMBC has stated the following:

"In accordance with the Developer Contributions SPD (2023), proportionate mitigation is required as a minimum.

- A safe, well-overlooked pedestrian and cycle link to Cumber Lane.*
- Continuous 3.0 m shared-use footways on both sides of adoptable streets.*
- Traffic-calmed internal routes to support safe cycling.*
- A cycle-friendly estate design.*
- Secure cycle storage for every dwelling, including e-bike-compatible storage and charging within secure enclosures.*

89 Continuous 3.0 metre shared use footways on both side of adoptable streets as the proposed width of 2.0 metres is sufficient due to the low driving speeds and traffic volume throughout the site. Traffic calming features have been proposed to create a cycle friendly estate and support safe cycling.

90 However, the remainder of these comments have been included in the revised site layout which is shown in Plan 1.

Travel Plan

91 Regarding the Travel Plan, KMBC has stated the following:

"The submitted Travel Plan is provided as an interim framework appended to the Transport Assessment and is largely generic in nature, setting out high-level aspirations rather than site-specific, evidence-based measures.

Given the number and scale of unresolved issues identified within this response, particularly in relation to pedestrian and cycle connectivity, public transport access, parking pressure, road safety and the need for meaningful modal shift, it has not been possible to undertake an assessment of the Travel Plan at this stage.

Notwithstanding this, it is clear that the interim document does not currently reflect the constraints of the site context, the proximity of Whiston Hospital, the Residents' Parking Zone, or the deficiencies in existing walking, cycling and public transport infrastructure identified elsewhere. A full Residential Travel Plan will therefore be required to be secured by planning condition and submitted for approval prior to first occupation.

This must include site-specific baseline data, realistic modal-split targets, detailed measures to support walking, cycling and public transport use, confirmation of off-site infrastructure improvements where required, and a robust monitoring and enforcement framework in accordance with KMBC and Merseytravel requirements.

The associated Travel Plan monitoring fee of £10,000 will be secured via planning condition, as set out within the legal and procedural matters below. The acceptability of the Travel Plan cannot be confirmed until both the wider transport issues are resolved, and the full Travel Plan demonstrates that genuine, deliverable modal shift will be achieved in practice.”

- 92 A full residential Travel Plan and the monitoring fee of £10,000 will be secured via planning condition.

Public Transport access

- 93 Regarding the walking routes to the local bus stops, KMBC has stated:

“While walking distances fall within accepted national guidance, on-street assessment identifies several concerns:

- *Footways on Stoney Lane vary in width and surface quality and run adjacent to high-volume hospital-related traffic.*
- *There is no controlled pedestrian crossing near the proposed site access, despite significant pedestrian movement between the site, hospital and bus stops.*
- *No pedestrian audit has been submitted, and the TA and DAS do not assess dropped kerbs, tactile paving, footway width or condition, lighting, or pinch points and trip hazards.”*

- 94 As previously mentioned, a walking route audit to each of the bus stops along Stoney Lane is provided in Appendix 9, which analyses dropped kerbs, tactile paving, footway width or condition, lighting, or pinch points and trip hazards.

- 95 Regarding bus service frequency and reliability, KMBC has requested that the following is assessed:

- *Service reliability;*
- *Suitability for hospital shift patterns;*
- *Evening and weekend provision;*
- *Capacity at peak times; or*
- *Residents' ability to safely access bus services on foot.*

96 In terms of service reliability, existing services operate on established routes that form part of the local public transport network. Information available from operators indicates that regular services are provided throughout the day, supporting access to the site.

97 Although the bus services run from around 7am until around midnight, it is not considered necessary that the suitability to hospital shift patterns is assessed. Due to the close proximity of the hospital to the site, residents that work in the hospital are likely going to walk to the hospital. As previously mentioned, bus services are provided throughout the day, therefore no specific assessment of shift patterns is required.

98 Evening and weekend provision is provided, with buses operating until around midnight during the week, services operating throughout Saturdays and an hourly service on a Sunday.

99 The pedestrian walking route audit to the bus stops on Stoney Lane is provided in Appendix 9.

100 Regarding rail access and walking routes to Whiston Station, KMBC has stated:

"None of these routes have been assessed within the TA, DAS or Framework Travel Plan. There is no consideration of:

- *the attractiveness of the walking environment.*
- *levels of passive surveillance, particularly during darker evenings.*
- *lighting conditions.*
- *footway width and continuity; or*
- *user comfort and personal-safety perception.*

Where pedestrian infrastructure falls below modern accessibility standards, proportionate off-site mitigation will be required. This will include:

- *Footway widening or resurfacing.*
- *Upgraded dropped kerbs and tactile paving.*
- *Enhanced lighting; and*
- *Improved pedestrian crossing facilities.”*

101 As previously mentioned, a walking route audit of the primary and alternative routes to Whiston Station and to the nearby bus stops are provided in Appendix 9.

Road Safety Considerations

102 Regarding accident analysis, KMBC has stated the following:

“The Transport Assessment (TA) refers to general accident data; however, no detailed collision analysis has been provided for Stoney Lane, Cumber Lane, the Whiston Hospital frontage or surrounding junctions. In particular:

- *No validated five-year collision dataset is included.*
- *No collision plots, contributory factor analysis or assessment of patterns or clusters are provided.*
- *No commentary is offered on collisions involving pedestrians, cyclists, vulnerable road users or emergency vehicles, despite the site’s proximity to Whiston Hospital and the ambulance station.”*

103 The Stats19 data has been provided directly by Knowsley Metropolitan Borough Council and is therefore validated.

104 The revised accident analysis including an accident plot is provided **Appendix 10**.

105 KMBC has stated:

“The submission also fails to assess:

- *Visibility splays for emergency and secondary accesses.*
- *Pedestrian safety implications at site access points.*

- *Potential misuse of emergency links by residents or visitors.*
- *Safety impacts of the proposed pedestrian access adjacent to Plot 13."*

106 The comments regarding visibility and pedestrian safety have been addressed in Plan 1, whilst the remaining comments have been addressed in the revised site layout, which is provided in Plan 2.

107 Regarding Road Safety Audits, KMBC have requested the following:

"A Stage 1/2 RSA must be submitted at planning stage and cover:

- *Junction design and geometry*
- *Visibility provision*
- *Pedestrian routes and crossing points*
- *Interaction with ambulance egress*
- *Conflicts between vehicles and vulnerable road users"*

108 A stage 1/2 Road Safety Audit has been carried out and has identified the following:

"Summary: Vehicles queuing through the junction could result in side-impact type collisions.

The location of the proposed western site access junction may result in vehicles queuing back through the junction due to its proximity to the Stoney Lane/Cumber Lane signalised junction which could result in vehicles wanting to turn right from the site access onto Stoney Road making injudicious turning manoeuvres through queuing vehicles due to potentially restricted visibility to the west and could result in an increased risk of side-impact type collisions.'

Recommendation: It is recommended that 'keep clear' carriageway markings are provided on the Stoney Lane in front of the proposed site access."

109 The amended site access arrangement incorporating the recommended 'Keep Clear' markings is shown on Plan 1.

110 The Road Safety Audit is contained within **Appendix 11**, whilst the Designer's Response is contained within **Appendix 12**.

Statutory Consultee Considerations (Highways and Transportation Matters only)

111 Regarding Statutory Consultee Considerations, KMBC has stated the following:

"In addition to the matters identified within the KMBC Highways response, concerns have been raised by a number of statutory and specialist consultees, including:

- *St Helens Council (transport/highways),*
- *Active Travel England,*
- *Merseyside Police (Designing Out Crime Officer),*
- *Merseyside Fire and Rescue Service, and*
- *Whiston Hospital Estates and Facilities.*

Collectively, these representations highlight unresolved issues relating to access arrangements, emergency and service vehicle operation, site permeability, pedestrian and cycle safety, parking pressure, construction impacts and the interface between the development and the operational requirements of Whiston Hospital.

The Hospital Trust has specifically drawn attention to potential impacts on ambulance access, parking displacement, construction traffic management, noise, dust, lighting and other disturbances affecting patients, staff and critical hospital functions, reinforcing the need for robust mitigation and careful phasing.

Given that outstanding concerns remain from multiple consultees whose statutory roles include safeguarding highway safety, emergency access, active travel outcomes, public order and the continued safe operation of a major acute hospital, KMBC Highways objection will be maintained until these matters are satisfactorily resolved through scheme redesign, supporting assessments and appropriately secured mitigation."

112 The comments raised by each statutory and specialist consultees are addressed within this response and separate individual responses.

Legal Requirements

113 Regarding a Section 278 agreement, KMBC has stated:

"A Section 278 Agreement will be required to deliver off-site highway works associated with the development, including:

- Construction of the new priority junction(s) onto Stoney Lane.*
- Construction of any emergency vehicular access within Knowsley.*
- Associated kerbing, footway build-outs, visibility improvements and drainage connections.*
- Upgrades to pedestrian/cycle routes, including footway resurfacing and/or widening, tactile paving and crossing improvements identified through the planning process.*
- Any temporary traffic management required during construction.*
- A Section 278-compliant Road Safety Audit (RSA) will be required at Stages 1-4 for all works affecting the adopted highway."*

114 The applicant acknowledges that a Section 278 Agreement will be required to deliver any off-site highway works within the adopted highway associated with the development including Road Safety Audits at Stages 1-4.

115 Regarding Section 38 Agreement, KMBC has stated:

"A Section 38 Agreement will be required for the adoption of internal estate roads, including carriageways, footways, verges, drainage and street lighting, where offered for adoption. This will secure:

- The internal road layout to adoptable standards.*
- Forward visibility splays, junction geometry and swept-path compliance.*
- Any agreed traffic-calming measures; and*
- Pedestrian routes fully contained within the adoptable corridor."*

116 The applicant acknowledges that a Section 38 agreement will be required for the adoption of the internal roads.

117 Regarding a Section 106 agreement, KMBC has stated:

"A Section 106 Agreement will be required to secure:

- Inclusion of the site within the existing Residents' Parking Zone (RPZ) surrounding Whiston Hospital, including administration, consultation and Traffic Regulation Order (TRO) costs (set at £7,000 as of 1 April 2026, excluding physical works).*
- Travel Plan monitoring fees, in accordance with KMBC fees and charges (set at £10,000 as of 1 April 2026 for developments of 151–250 dwellings).*
- Any additional sustainable transport measures identified as necessary mitigation.*

These measures are required to manage parking displacement and ensure integration with the existing controlled parking environment."

118 The applicant acknowledges that a Section 106 agreement will be required for the Residents Parking Zone (RPZ), Travel Plan monitoring and any necessary mitigation.

119 Regarding Traffic Regulation Orders (TRO), KMBC has stated:

"At least one Traffic Regulation Order (TRO) will be required for:

- Junction protection (double yellow lines) at the site access to maintain visibility and protect pedestrian crossing points.*
- Extension of the RPZ (secured via Section 106 but implemented through a TRO).*
- Any additional waiting restrictions required to protect bus stops, turning areas or pedestrian desire lines.*

All TROs require statutory procedures and consultation and cannot be secured by condition alone; funding and commitment to progress them must therefore be secured through the Section 106 Agreement.

There are no recorded Public Rights of Way affected by the development, and no diversion or stopping-up orders are required.

Street lighting drawings have been submitted; however street lighting is not approved through the planning process, and all adopted and public highway lighting (Sections 38 and 278) must be technically approved by the Council's Street Lighting PFI contractor,

Enerveo, in accordance with Knowsley's PFI arrangements. This approval is subject to a separate technical review fee payable directly to Enerveo.

Street lighting drawings will only be treated as approved under the planning permission where written confirmation of technical acceptance is provided by Enerveo prior to determination. Where this is not obtained, lighting details should be removed from the list of approved drawings/plans and must instead be assessed through the Section 278 and/or Section 38 technical approval process, and any required amendments must be incorporated into the final construction drawings to meet adopted standards and PFI asset management requirements."

- 120 The applicant accepts that the funding of any necessary TROs will need to be secured through the appropriate legal agreement and will be progressed in consultation with Knowsley Metropolitan Borough Council.
- 121 The applicant acknowledges the requirement for all adopted and public highway lighting associated with Sections 38 and 278 works to be technically approved by Enerveo in accordance with Knowsley's PFI requirements.

Conclusions

- 122 This Technical Note has considered the comments raised by Knowsley Metropolitan Borough Council, on the proposed residential development off Stoney Lane in Whiston.
- 123 The following conclusions can be drawn from this Note.
- The proposed site access arrangements have been revised in response to KMBC's comments and are capable of accommodating the forecast development traffic whilst maintaining safe access for all highway users.
 - The emergency access strategy has been rationalised and amended to accord with the operational requirements of the development and the Council's recommendations.
 - The internal highway layout has been revised to improve street hierarchy, vehicle speed management, pedestrian and cycle connectivity, parking provision, and adoptability.

- Visibility requirements and junction protection measures have been addressed, with the applicant accepting the requirement for the associated Traffic Regulation Orders and Section 106 contributions.
- Additional junction capacity assessments have been undertaken at key junctions on the surrounding highway network, demonstrating that the highway network is forecast to continue operating within acceptable capacity in both the 2031 Base and 2031 With Development scenarios.
- Swept path analysis has been updated to demonstrate that refuse vehicles, fire appliances and service vehicles can safely access and manoeuvre throughout the development.
- Parking provision has been revised to accord with Knowsley's parking standards.
- Pedestrian and cycle connections within and around the site have been enhanced, supported by walking route audits and improvements to access arrangements.
- The applicant has accepted the principle of extending the existing Residents' Parking Zone and funding the associated Traffic Regulation Order process.
- A full Residential Travel Plan will be secured by condition, alongside the required monitoring arrangements.
- The applicant acknowledges the requirements for Sections 38, 278 and 106 Agreements and will progress the necessary highway and sustainable transport measures through the detailed design stage.
- The revised proposals address the transport and highway concerns raised by Knowsley Metropolitan Borough Council and demonstrate that the development can be accommodated without resulting in a severe impact on the local highway network.

124 In conclusion, the proposals for a residential development will provide a sustainable development in transport terms and planning permission should be granted in accordance with the NPPF.

Enclosures

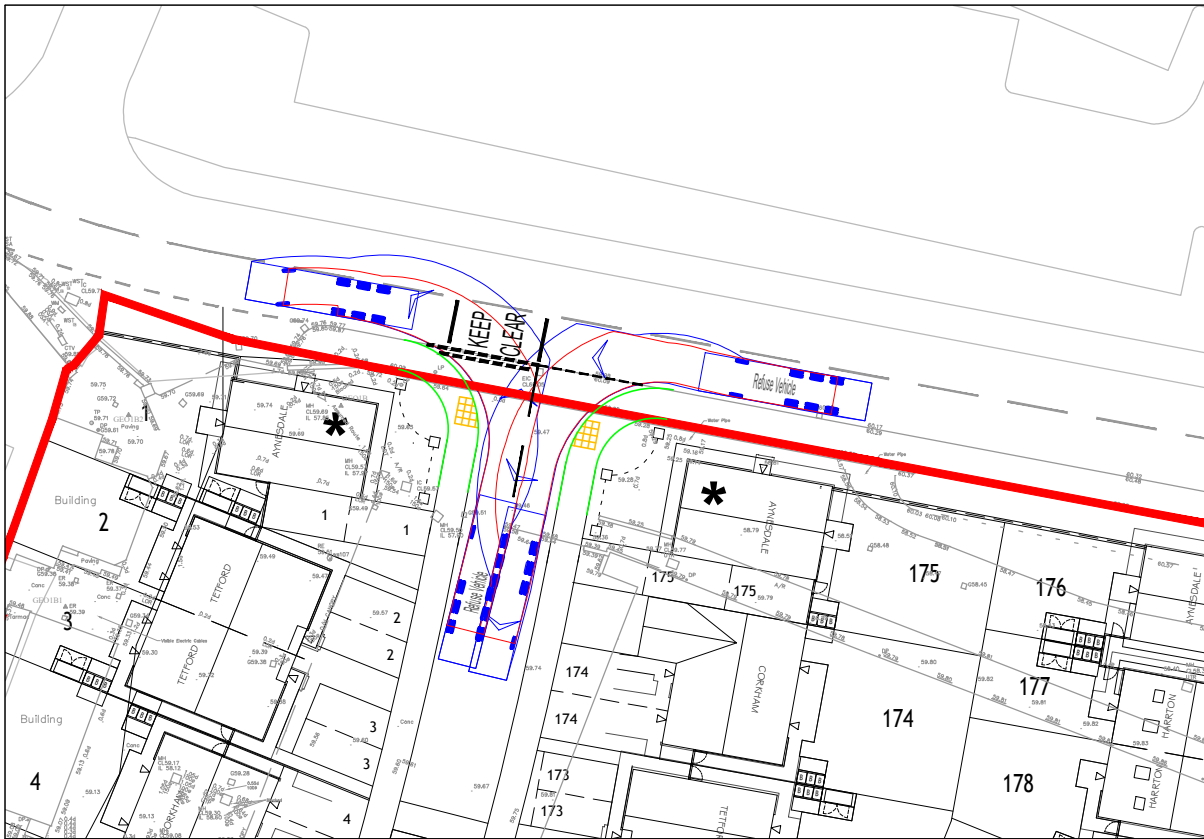
Plan 1	Proposed Site Access Arrangement
Plan 2	Proposed Site Layout
Plan 3	Proposed Speed Cushion Plan
Plan 4	Swept Path Analysis – Tanker
Plan 5	Swept Path Analysis – Fire Tender
Plan 6	Swept Path Analysis – Refuse Vehicle
Plan 7	Proposed Uncontrolled Crossing Plan
Appendix 1	Revised Traffic Figures
Appendix 2	JUNCTIONS11 Output – Site Access/Stoney Lane Priority Junction
Appendix 3	Queue Survey Data
Appendix 4	LINSIG3 Output – Stoney Lane/Cumber Lane Signalised Junction
Appendix 5	LINSIG3 Output – Dragon Lane/Stoney Lane/Meadway Signalised Junction
Appendix 6	JUNCTIONS11 Output – Stoney Lane/Old Lane Mini Roundabout Junction
Appendix 7	JUNCTIONS11 Output – Stoney Lane/Whiston Hospital Access Junction
Appendix 8	JUNCTIONS11 Output – Stoney Lane/Whiston Ambulance Station Access Junction
Appendix 9	Pedestrian Walking Route Audits
Appendix 10	Revised Accident Analysis
Appendix 11	Road Safety Audit
Appendix 12	Designer's Response

Plans

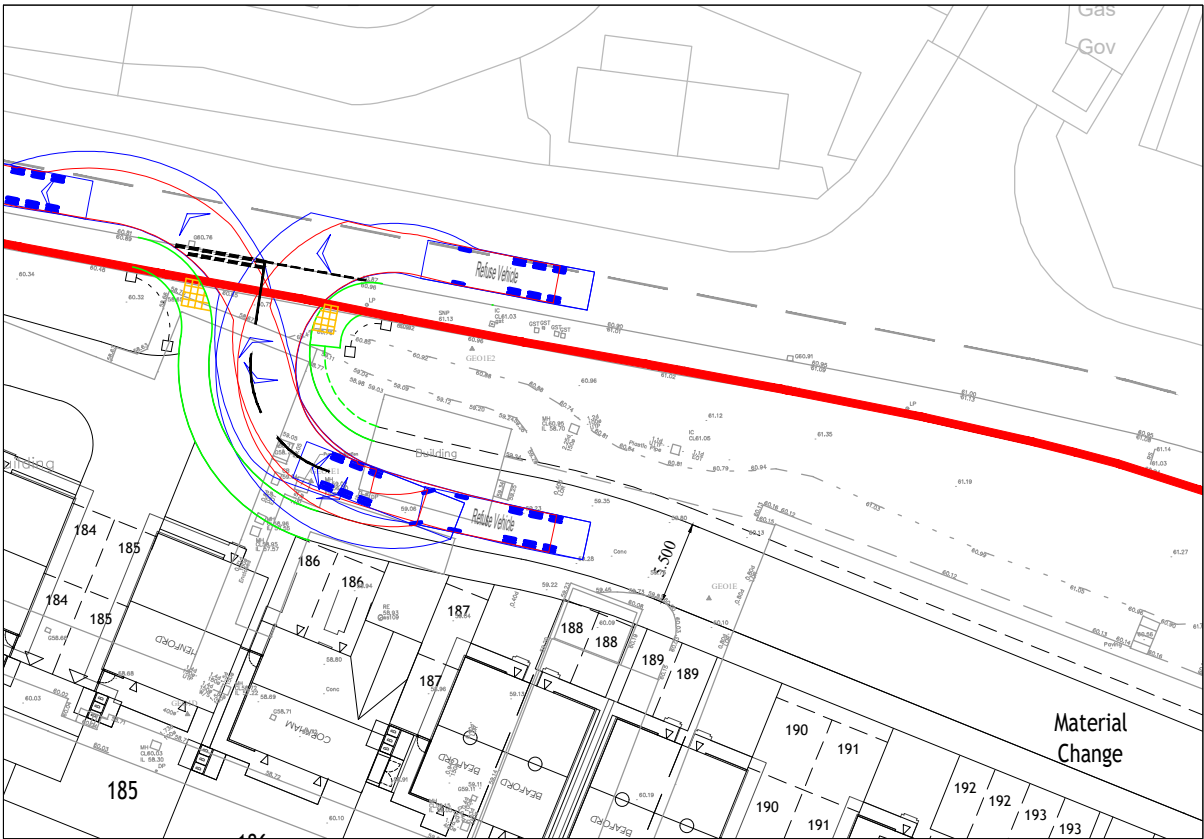
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NORTH SOUTH AERIAL VIEW (NTS)



SWEPT PATH ANALYSIS - REFUSE VEHICLE - WESTERN ACCESS - LEFT IN & LEFT OUT

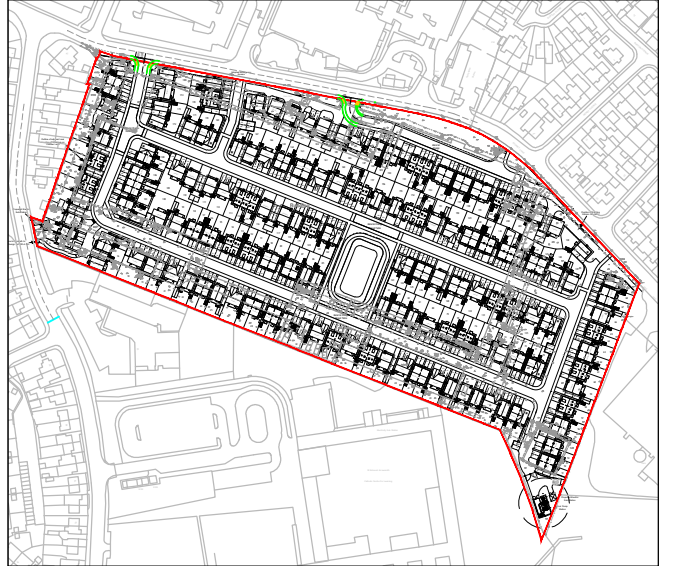


SWEPT PATH ANALYSIS - REFUSE VEHICLE - EASTERN ACCESS - LEFT IN & LEFT OUT

NOTES
THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY.
THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.

- INDICATIVE SITE BOUNDARY
- DENOTES NEW KERBS
- EXISTING ADOPTED HIGHWAY

LOCAL AUTHORITY: KNOWSLEY COUNCIL
TOTAL AREA OF SITE: 5.8 HECTARES (APPROX)



Refuse Vehicle		11.210m
Overall Length		2.550m
Overall Width		3.751m
Overall Body Height		0.304m
Min Body Ground Clearance		2.500m
Track Width		6.50s
Lock to lock time		10.329m
Kerb to Kerb Turning Radius		

K	AMENDED TO RSA 182	LB	PW	JUN 2026
J	VISI AMENDMENT	LB	PW	JUN 2026
I	WESTERN ACCESS AMENDS	JC	PW	JUN 2026
H	EMERGENCY ACCESS VIS PLAY AMENDMENTS	JC	PW	MAY 2026
G	AMENDED AS PER LHA COMMENTS	LB	PW	MAY 2026
F	SCALE BAR ADDED	LB	PW	JAN 2025
E	CLIENT NAME UPDATED	LB	PW	NOV 2025
D	PROPOSED SITE LAYOUT & ACCESS UPDATED	SL	PW	NOV 2025
C	PROPOSED SITE LAYOUT & ACCESS UPDATED	SL	PW	NOV 2025
B	EASTERN ACCESS UPDATED	SL	PW	OCT 2025
A	PROPOSED SITE LAYOUT & ACCESSES UPDATED	SL	PW	OCT 2025

REV	DETAILS	DRAWN	CHECKED	DATE
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CLIENT: TAYLOR WIMPEY

PROJECT: GLEN DIMPLEX, WHISTON

DRAWING TITLE: PROPOSED SITE ACCESS

SCALE: 1:500 @ A2

DRAWN: LB	CHECKED: PW	DATE: MAY 2025
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Eddisons
340 Deansgate
Manchester
M3 4LY
Email: info@eddisons.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER: 4726-F03	REVISION: K
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FORMER GLEN DIMPLEX | LAND SOUTH OF STONEY LANE

0 5 10 15 25m
1:500

PLAN 2

ACCOMMODATION SCHEDULE							
Name	Ref	TW ref	Bed	Storey	Unit No's	Unit ft²	ft² Total
Open Market Dwellings (184)							
Beaford Semi	BEA	EMA22	2 Bed	2	6	778	4668
Beaford Mid	BEA	EMA22	2 Bed	2	2	778	1556
Brambleford Semi	BRA	EMA32	3 Bed	2	37	907	33559
Aynesdale Semi	AYN	EMT31	3 Bed	2	11	1058	11638
Aynesdale Det	AYN	EMT31	3 Bed	2	9	1058	9522
Tetford Det	TET	EMA35	3 Bed	2	13	1021	13273
Tetford Semi	TET	EMA35	3 Bed	2	10	1021	10210
Hartton Mid	HAR	EMB31	3 Bed	2.5	5	1140	5700
Hartton Semi	HAR	EMB31	3 Bed	2.5	30	1140	34200
Hartton End	HAR	EMB31	3 Bed	2.5	10	1140	11400
Bittesford	BIT	EMA42	4 Bed	2	16	1236	19776
Corkham	COR	EMG42	4 Bed	2	24	1347	32328
Henford	HEN	EMA44	4 Bed	2	11	1359	14949
Sub Total:					184 Units		202779 ft²
Affordable Dwellings @ 10% (21)							
Beaford Mid	BEA	EMA22	2 Bed	2	3	778	2334
Beaford Semi	BEA	EMA22	2 Bed	2	14	778	10892
Eynsford End	EYN	EMA33	3 Bed	2	4	972	3888
Sub Total:					21 Units		17114 ft²
Grand Total:					205 Units		219893 ft²
Net Site Area:					5.2410 ha		12.95 ac
Net Coverage:					3898 m²/ha		16980 ft²/ac

Planning Key

- TW Red line / Legal Ownership
- Cheshire Railing with Brickwork Piers
- Ball-Top Railings to SuDS Feature
- Fencing - rear/side boundaries
- Fencing - plot boundaries
- Brick Screenwall
- Knee Rail Fence
- Paladin Mesh Fencing
- POS / SuDS Area
- POS and buffers
- Proposed Tree Planting
- Existing Tree / Vegetation to be retained
- Existing Tree / Vegetation to be cut back
- Existing Tree / Vegetation to be removed
- Plot Refuse storage
- Cycle storage
- Affordable house types
- Demountable Bollards for Emergency Access
- Chicanes to Cumber Lane Access
- Dual Aspect Plots

- J. In progress!
I. BB EDIT
H. In progress!
G. Accesses updated to Edisons latest drawings, emergency access to Cumber Lane revised to pedestrian route only. Private drive to Plots 175, etc. revised to Adoptable Standards. Private drive serving Plot 137 revised and emergency access removed. Width reductions to spine road removed. Substation to Cumber Lane revised for parking in front. 19/05/26 BB
F. Pond updated to latest drainage design and paths around increased from 1.2m to 2m wide in-line with ATE comments. 28/04/26 BB
E. Plots 68-70 & 137-140 re-designed due to Gas Easement.
Plot 178-180 re-designed to accommodate lost plot due to Gas Easement. Additional affordable Beaford shown, plots 142-144 reallocated to Plots 145-148. Twin garage block updated. 12/03/26 BB
D. Plots 1-12, 167-181 re-designed 26/01/26 CHW
Plot 283 Brambleford substituted with Hartton type
Plot 118-12 Aylesford substituted with Tetford type
C. Plots 1, 167-181 re-designed/repositioned 22/01/26 CHW
Plot 167 Tetford substituted with Aylesford type
Plot 181 Tetford substituted with Wainsdale type
B. Plots 175-181 re-designed/repositioned 16/01/26 CHW
Plot 181 Tetford substituted with Hartford type
A. Plots 1-5 & 167-180 re-designed/repositioned 06/01/26 CHW
Plot 180 Tetford substituted with Hartford type

Rev	Description	Date	Initial
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Taylor Wimpey

Taylor Wimpey North West
Washington House, Birchwood Park,
Warrington, Cheshire WA3 6GR
Tel 01925 849 500 Fax 01925 849 501
www.taylorwimpey.com

Former Glen Dimplex
Land South of Stoney Lane
Whiston
Planning Layout

PLANNING			
1:500 @ A0	11/1/25	BGA	BGA
DRAWING NUMBER			
22970	PL	1000	H

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LOCATION PLAN - 1:1250

SITE PLAN - 1:500

Z:\projects\4726 Glen Dimplex Site, Whiston\CAD\EDDISONS DRAWINGS\4726-02 REV B (Speed Cushion Location Plan).dwg



NOTES

PLAN 3

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY. THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.

PROPOSED LOCATION OF SPEED CUSHIONS

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

TAYLOR WIMPEY

PROJECT:

GLEN DIMPLEX, WHISTON

DRAWING TITLE:

SPEED CUSHION LOCATION PLAN

SCALES:

1:500 @ A1

DRAWN:	LB	CHECKED:	PW	DATE:	MAY 26
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Eddisons
340 Deansgate
Manchester
M3 4LY
Email: info@crofts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	4726-02	REVISION:	B
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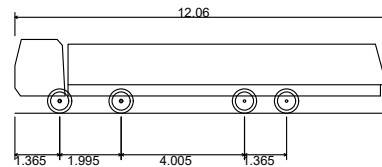
Eddisons

C:\Users\Leon.Blythe\OneDrive - Begbies Traynor Group\Desktop\GA Work\Delete\4726-SP03 Rev B (Tracking - Tanker).dwg



NOTES

PLAN 4



Volvo FM13 8x4 rigid	12.060m
Overall Length	2.490m
Overall Width	2.393m
Overall Body Height	0.559m
Min Body Ground Clearance	2.250m
Track Width	6.00s
Lock to lock time	12.450m
Kerb to Kerb Turning Radius	

B	SCALE BAR ADDED	LB	PJW	JUN 26
A	SCALE BAR ADDED	LB	PJW	JAN 26
REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

TAYLOR WIMPEY

PROJECT:

GLEN DIMPLEX,
WHISTON

DRAWING TITLE:

SWEPT PATH ANALYSIS
TANKER

SCALES:

1:500 @ A3

DRAWN:	LB	CHECKED:	LB	DATE:	NOV 25
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Eddisons
340 Deansgate
Manchester
M3 4LY

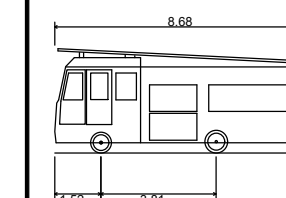
Email: info@crofts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	REVISION:
4726-SP03	B

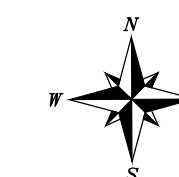
Eddisons

NOTES

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY.
THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW
AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.



DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m



C:\Users\Leon.Blythe\OneDrive - Begbies Traynor Group\Desktop\GA Work\Delete\4726-SP02 Rev F (Tracking - Fire Appliance).dwg

CLIENT: _____

TAYLOR WIMPEY

PROJECT:	
----------	--

GLEN DIMPLEX, WHISTON

DRAWING TITLE:

SWEPT PATH ANALYSIS FIRE APPLIANCE

SCALES:

1:1000 @ A1

DRAWN:	CHECKED:	DATE:
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S

CHECKED: PW

DATE: OCT 2025

Eddisons
340 Deansgate
Manchester
M3 4LY

Email: info@croftts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

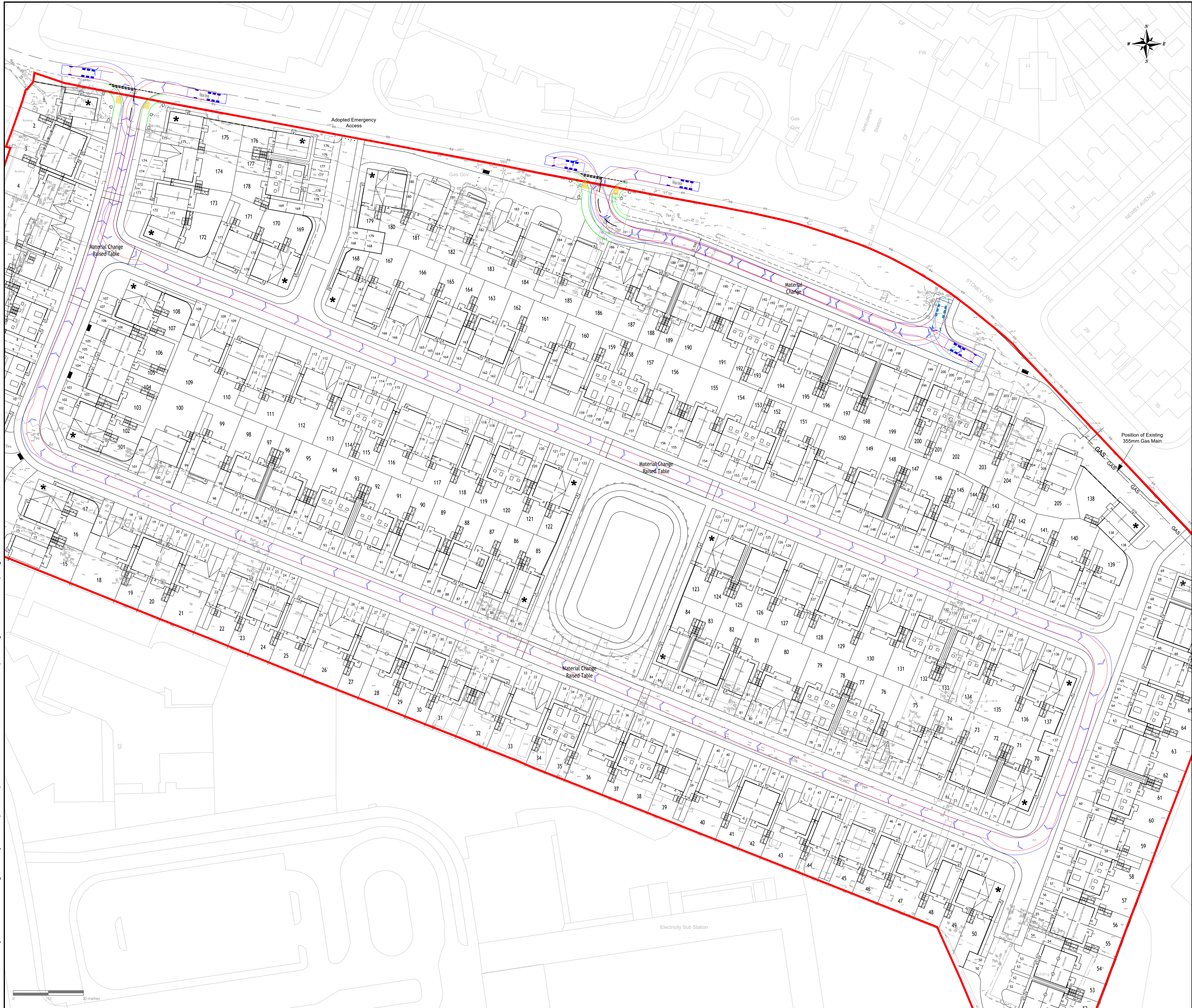
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4726-SP02

REVISION: F

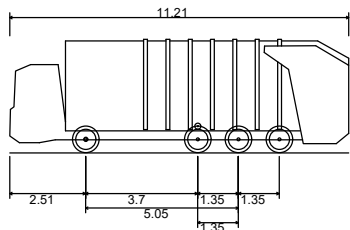
Eddisons

C:\Users\Leon Blythe\OneDrive - Begbies Traynor Group\Desktop\GA Work\Delete\4726-SP01 Rev F (Tracking - Refuse Vehicle).dwg



NOTES

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY. THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.



Refuse Vehicle
Overall Length 11.210m
Overall Width 2.550m
Overall Body Height 3.751m
Min Body Ground Clearance 0.304m
Track Width 2.500m
Lock to lock time 6.58s
Kerb to Kerb Turning Radius 10.320m

REVERSING DISTANCE

PLAN 6

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT: TAYLOR WIMPEY

PROJECT: GLEN DIMPLEX, WHISTON

DRAWING TITLE: SWEPT PATH ANALYSIS
REFUSE VEHICLE

SCALES: 1:500 @ A1

DRAWN: SL CHECKED: PW DATE: OCT 2025

Eddisons
340 Deansgate
Manchester
M3 4LY
Email: info@croffts.co.uk
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

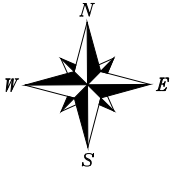
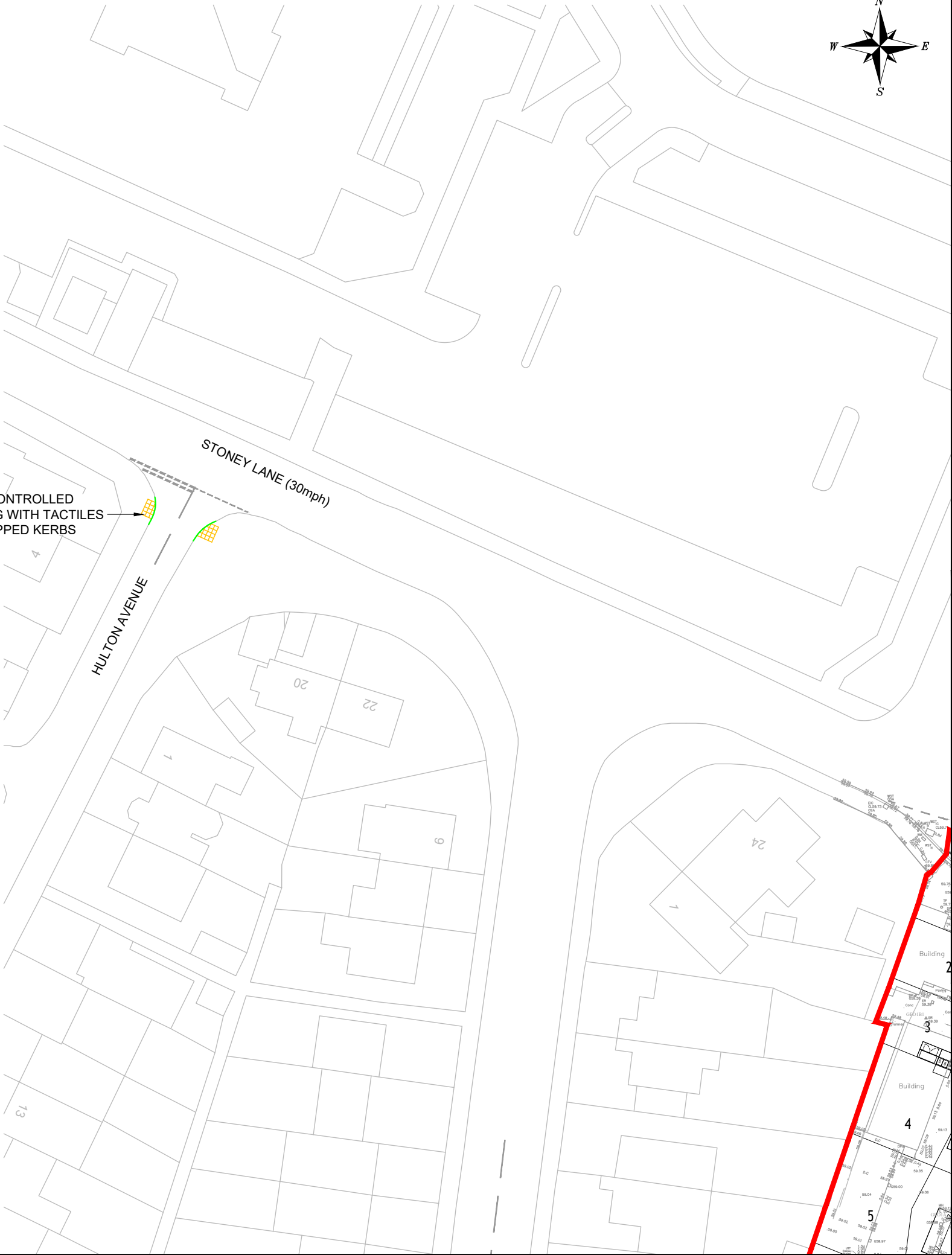
DRAWING NUMBER: 4726-SP01 REVISION: F

Eddisons



NORTH SOUTH AERIAL VIEW

NEW UNCONTROLLED
CROSSING WITH TACTILES
AND DROPPED KERBS



NOTES

PLAN 7

THIS IS NOT A CONSTRUCTION DRAWING AND IS FOR INDICATIVE PURPOSES ONLY.
THE DRAWING WILL BE SUBJECT TO CHANGE FOLLOWING LOCAL AUTHORITY REVIEW AND CONFIRMATION OF PUBLIC HIGHWAY AND THIRD PARTY LAND BOUNDARIES.

— DENOTES NEW KERBS

REV	DETAILS	DRAWN	CHECKED	DATE
-	-	-	-	-

CLIENT:

TAYLOR WIMPEY

PROJECT:

GLEN DIMPLEX,
WHISTON

DRAWING TITLE:

PROPOSED UNCONTROLLED
CROSSING PLAN

SCALES:

1:500 @ A3

DRAWN:	LB	CHECKED:	GM	DATE:	JUL 26
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BTG Eddisons
340 Deansgate
Manchester
M3 4LY

Email: info@eddisons.com
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	4725-F04	REVISION:	-
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Appendices

Appendix 1

Revised Traffic Figures

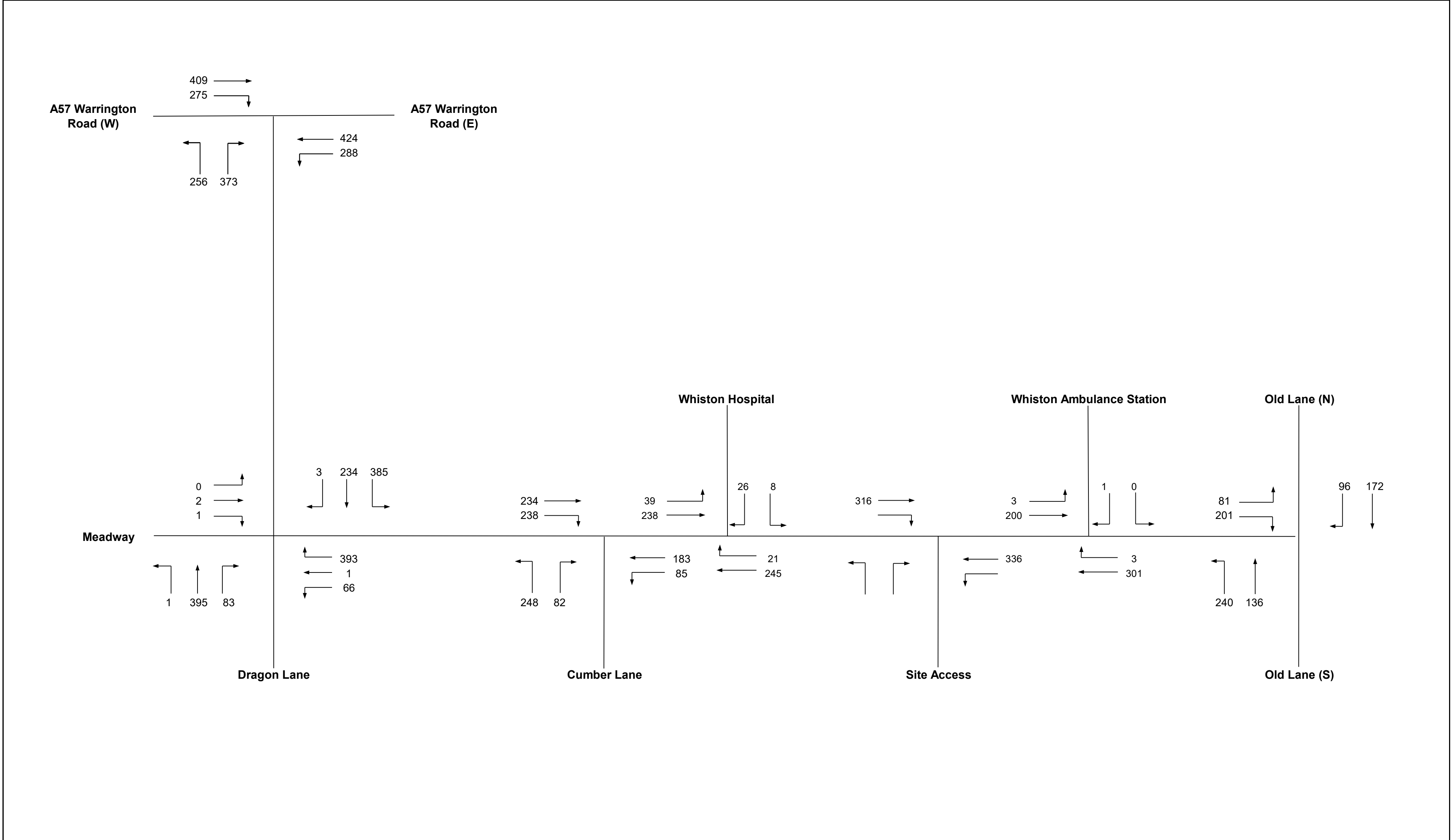


Figure 1 Surveyed Flows - Weekday AM Peak (0800-0900)

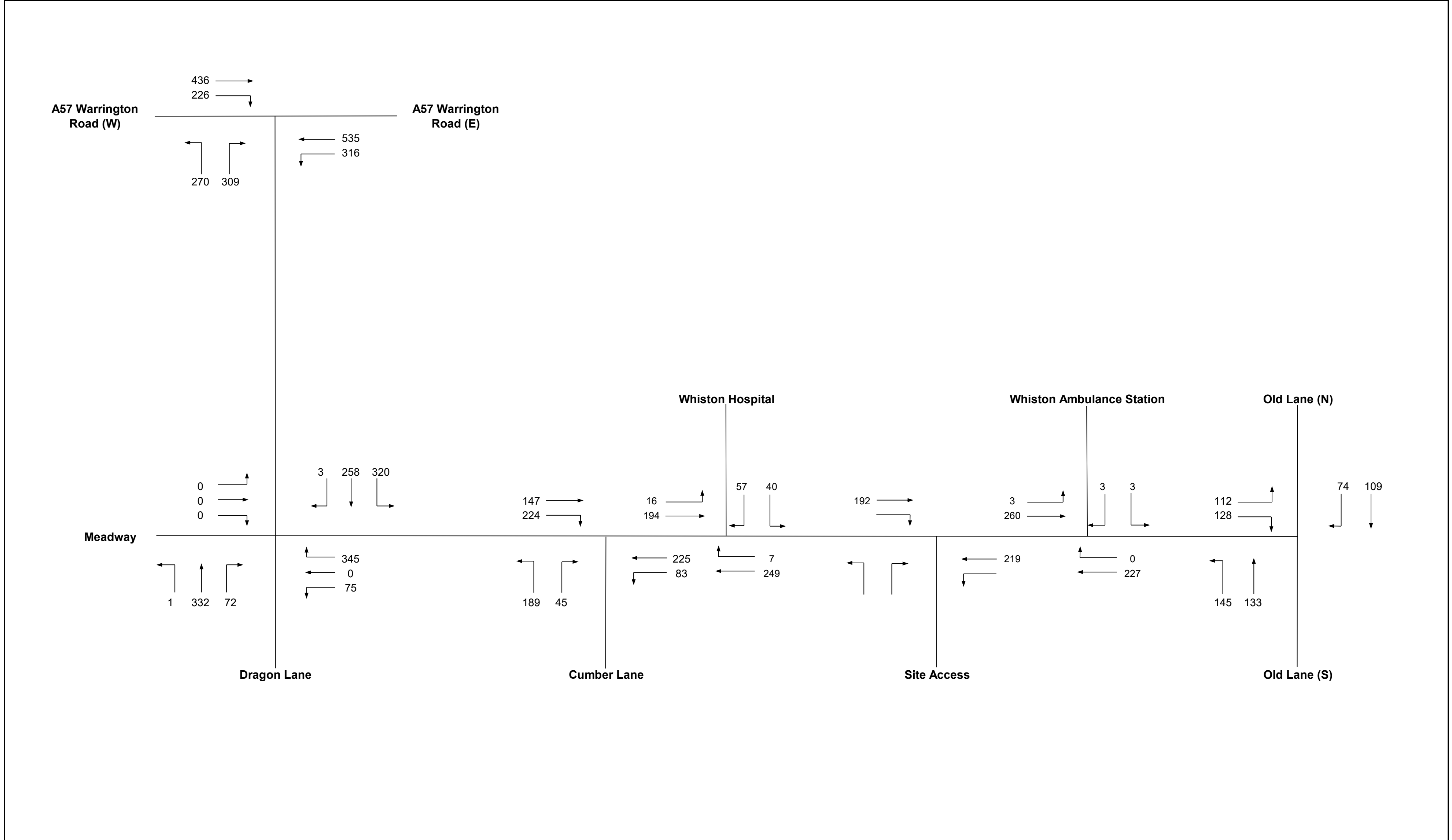


Figure 2 Surveyed Flows - Weekday PM Peak (1630-1730)

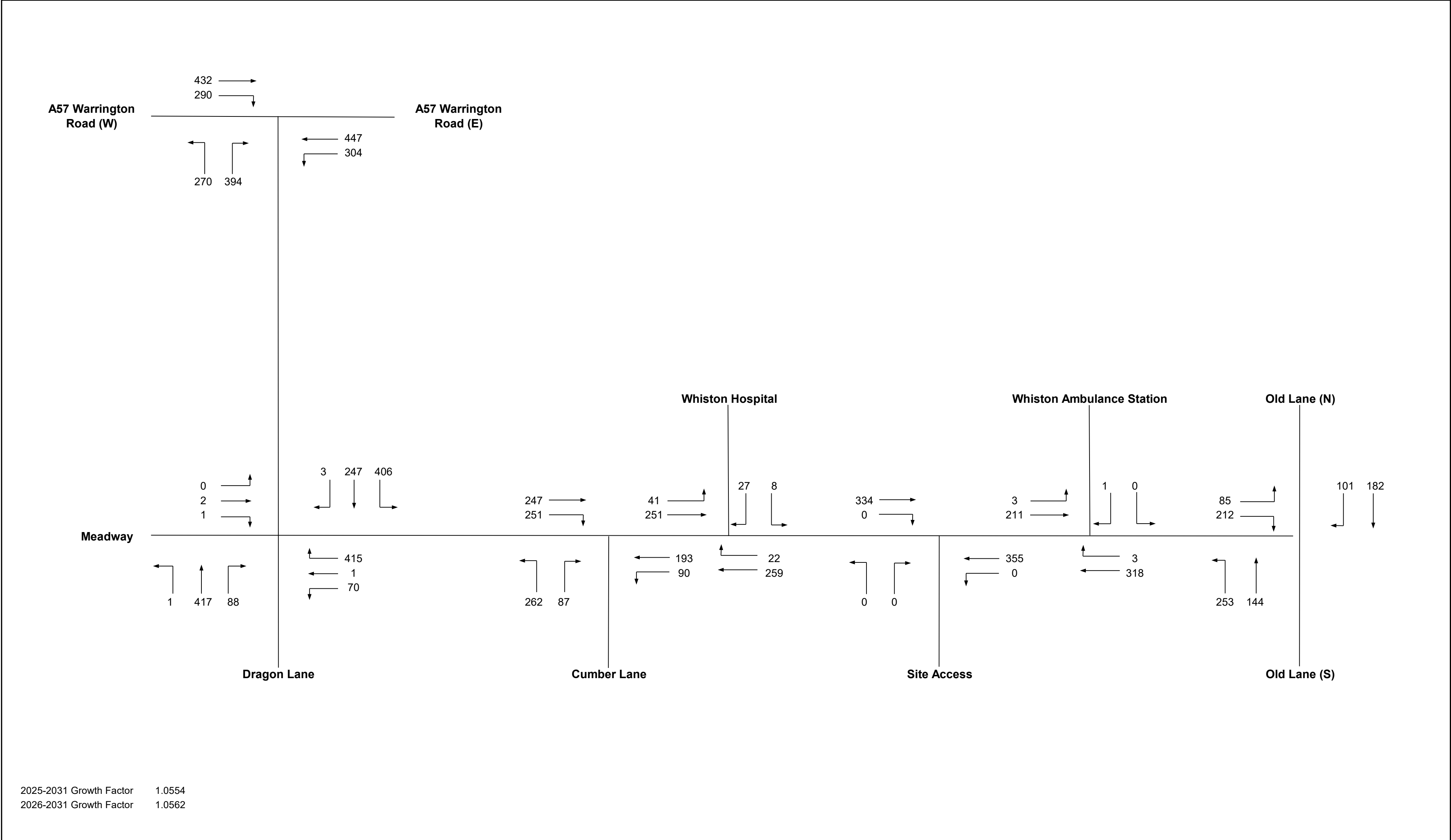


Figure 3 2031 Growthed Flows - Weekday AM Peak (0800-0900)

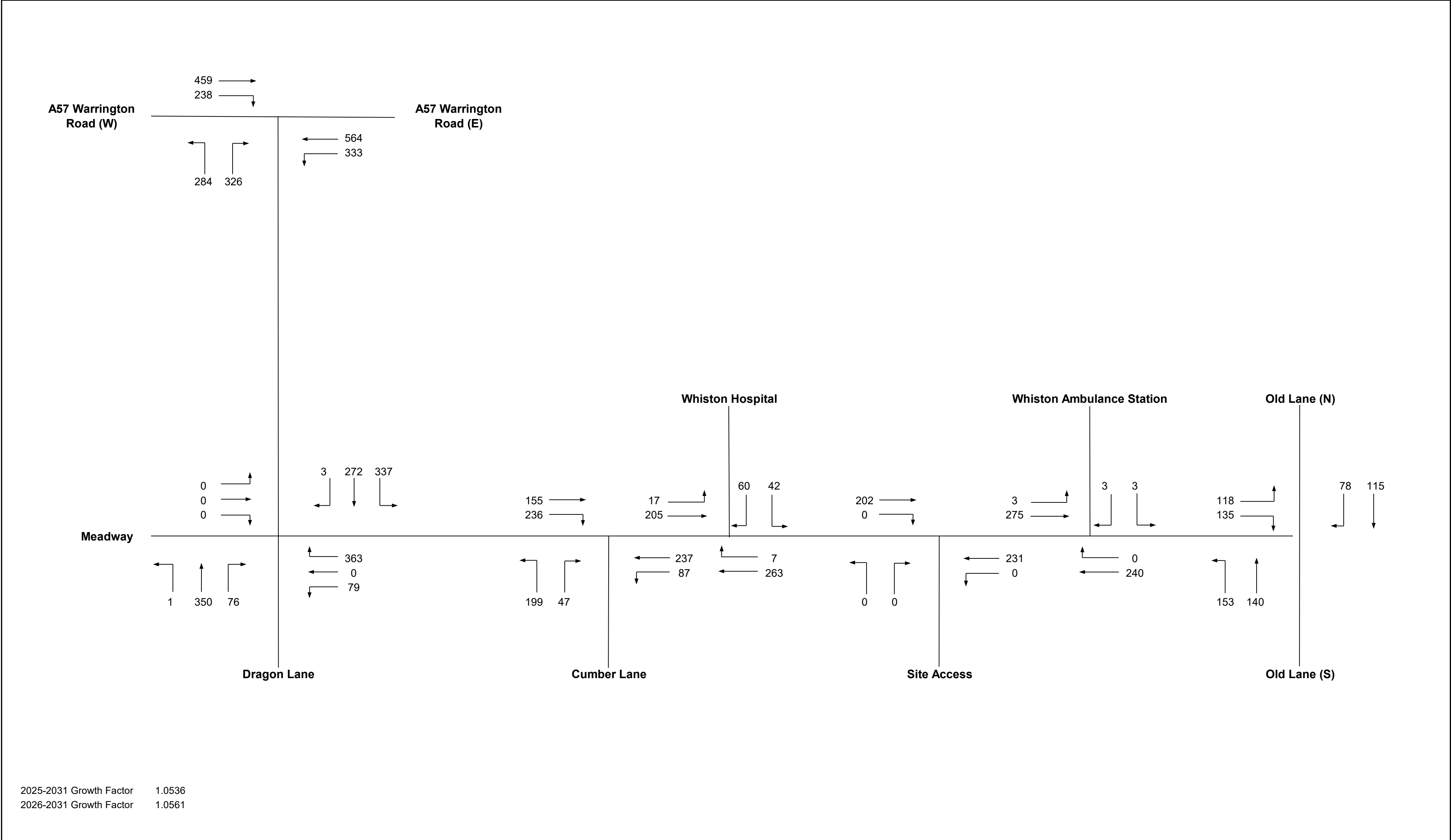


Figure 4 2031 Growthed Flows - Weekday PM Peak (1630-1730)

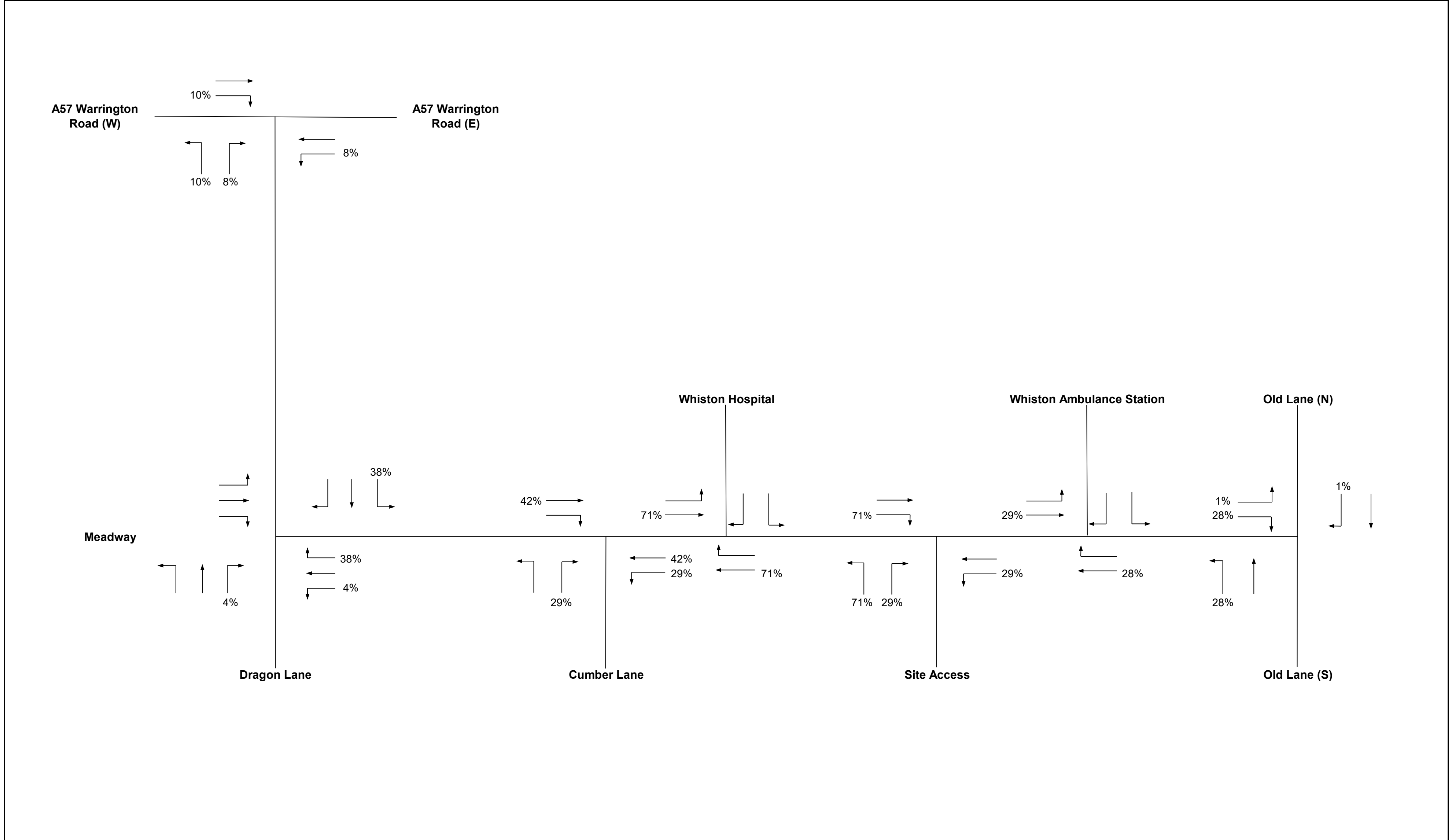


Figure 5 Proposed Trip Distribution - Weekday AM + PM Peak

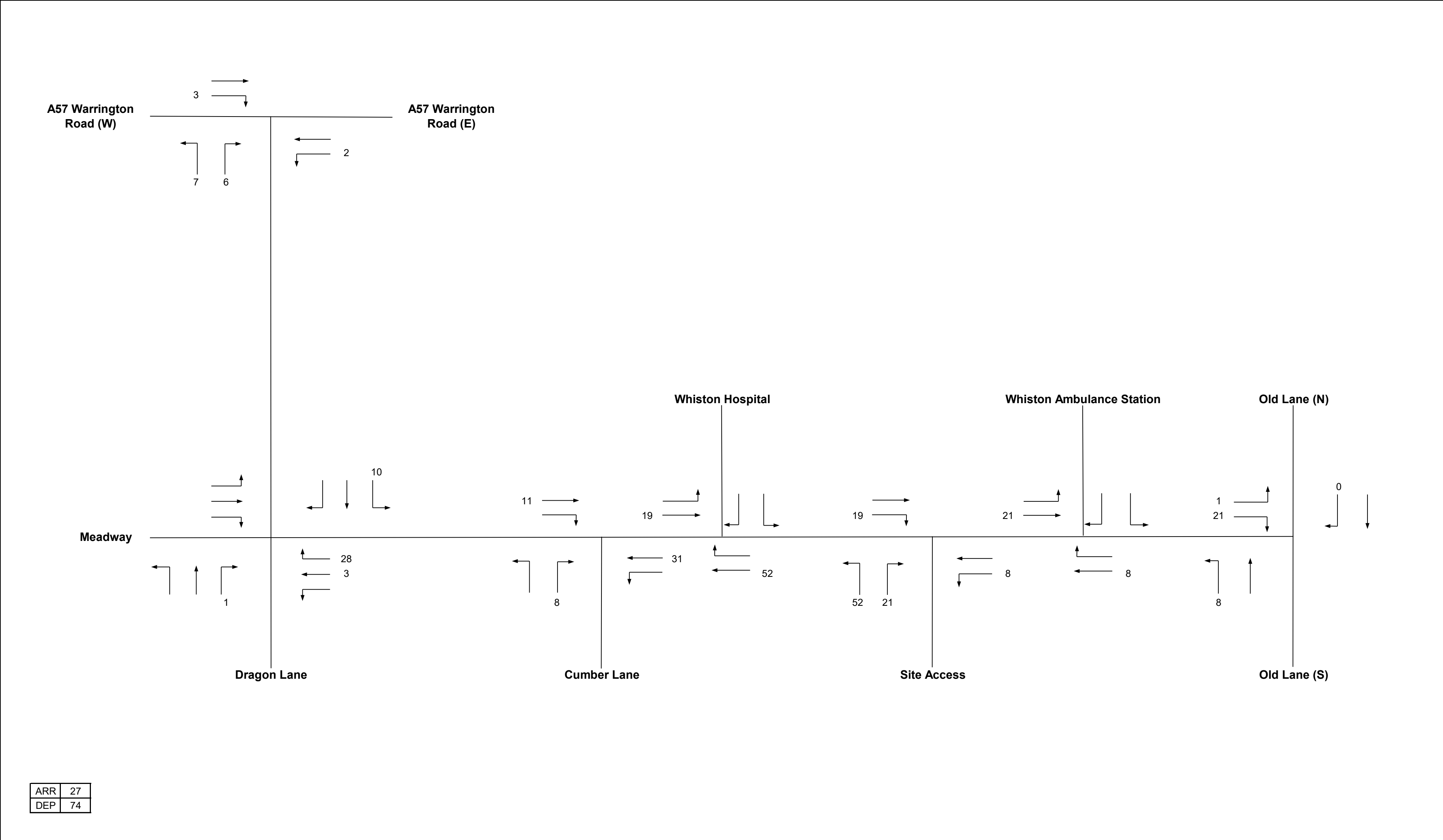


Figure 6 Proposed Residential Trip Generation- Weekday AM Peak (0800-0900)

Eddisons

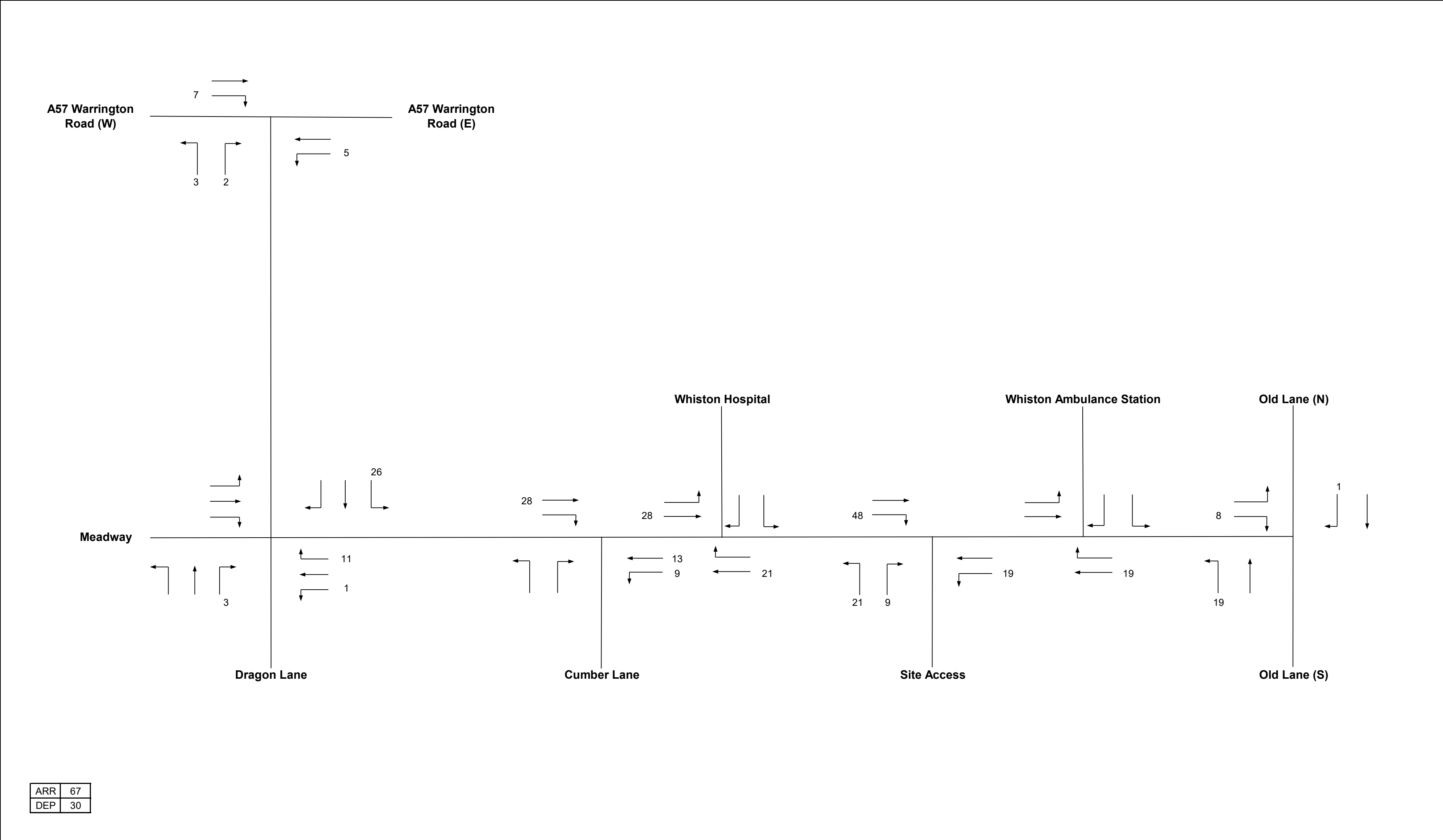


Figure 7 Proposed Residential Trip Generation - Weekday PM Peak (1630-1730)

Eddisons

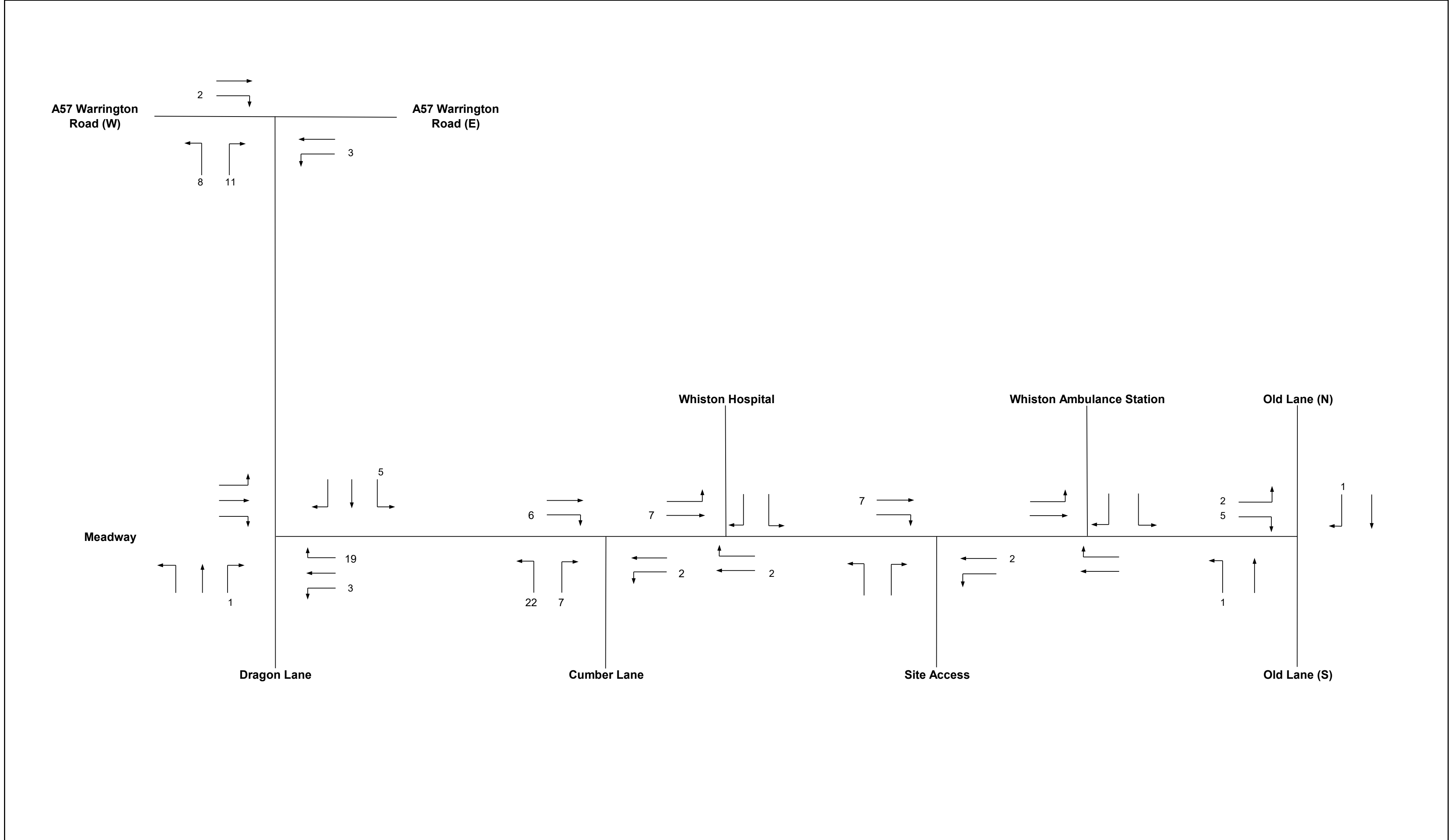


Figure 8 Committed Development Flows (Lickers Lane) - Weekday AM Peak (0800-0900)

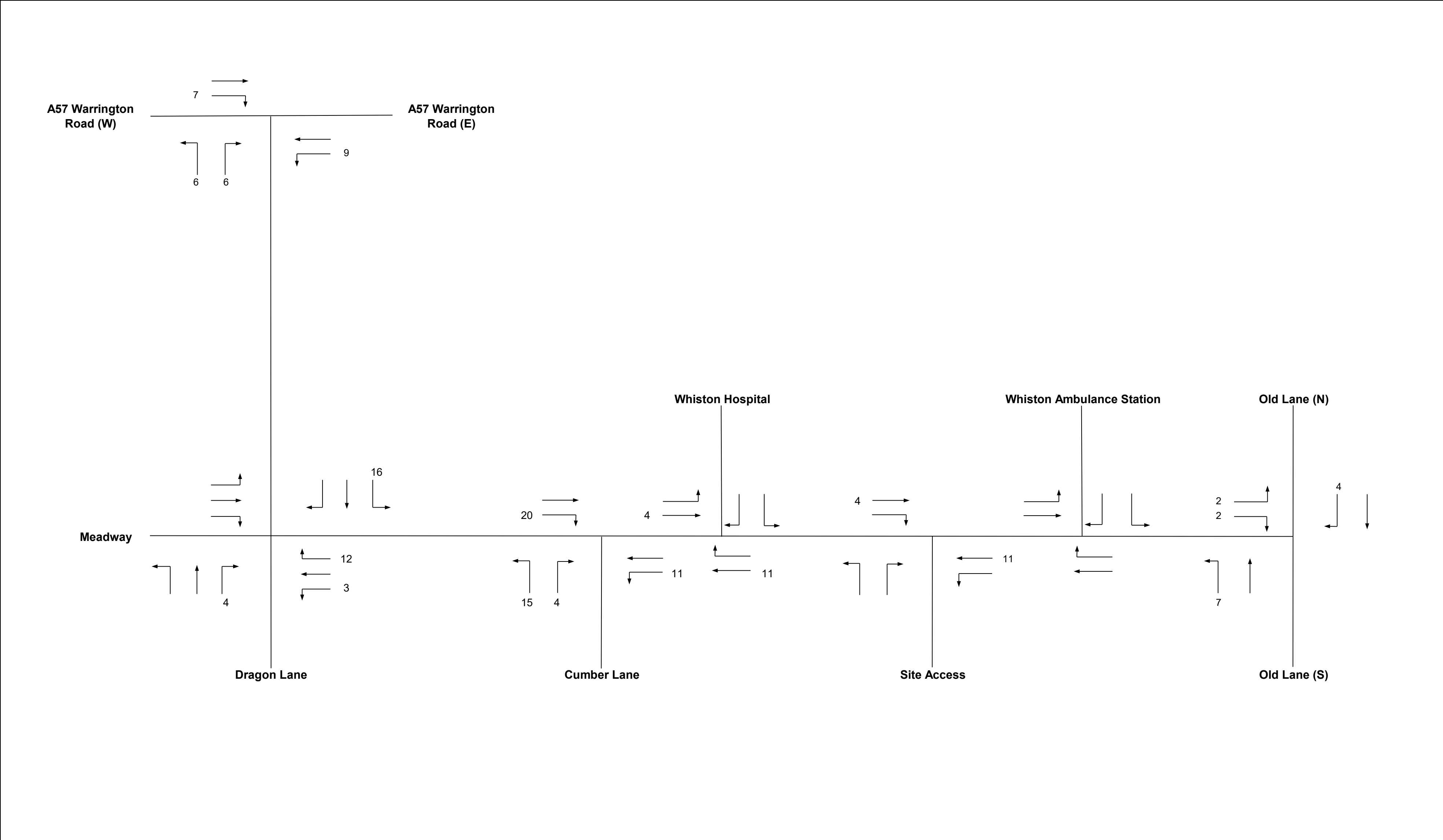


Figure 9 Committed Development Flows (Lickers Lane) - Weekday PM Peak (1630-1730)

Eddisons

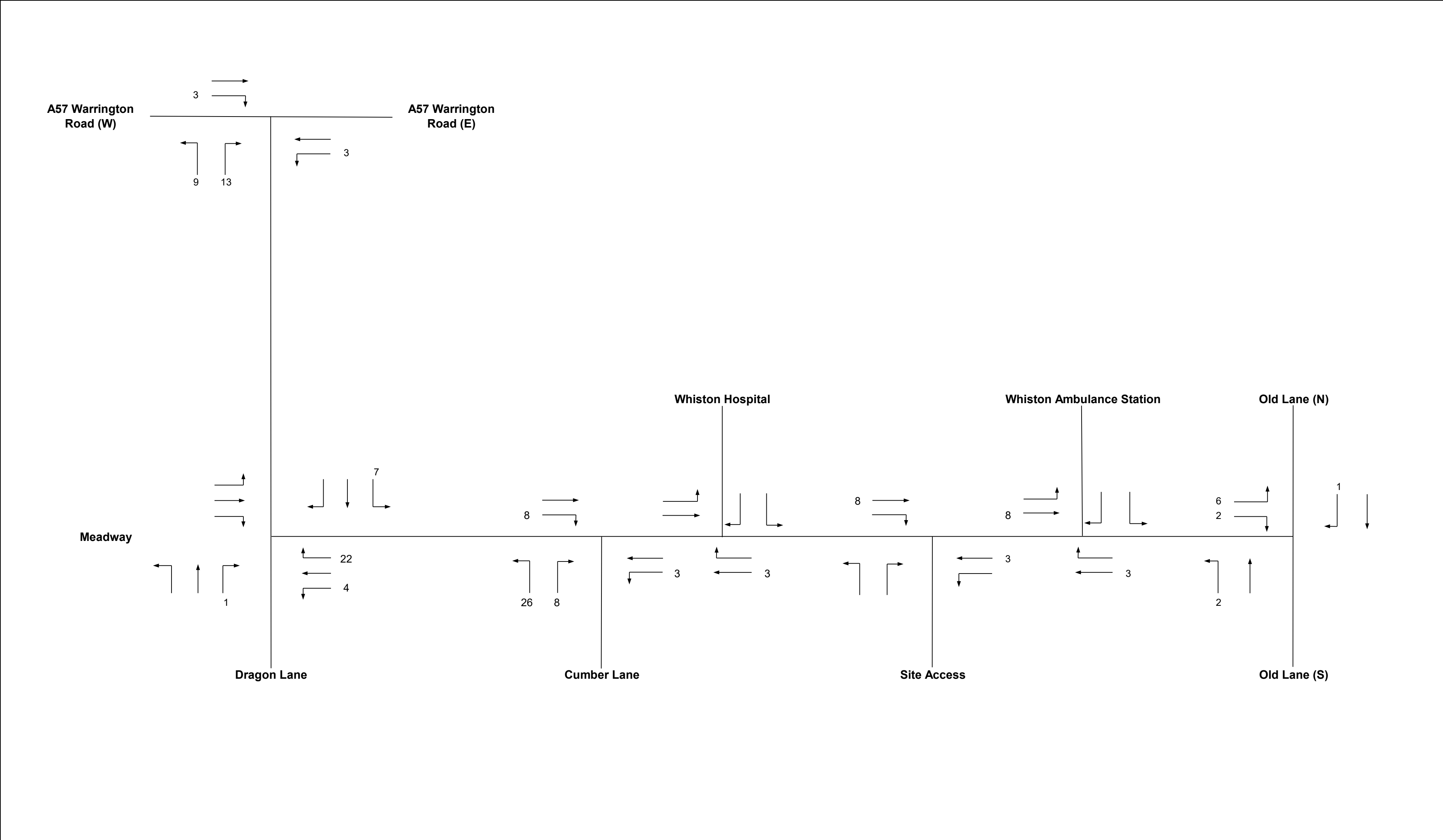


Figure 10 Committed Development Flows (Fox's Bank Lane) - Weekday AM Peak (0800-0900)

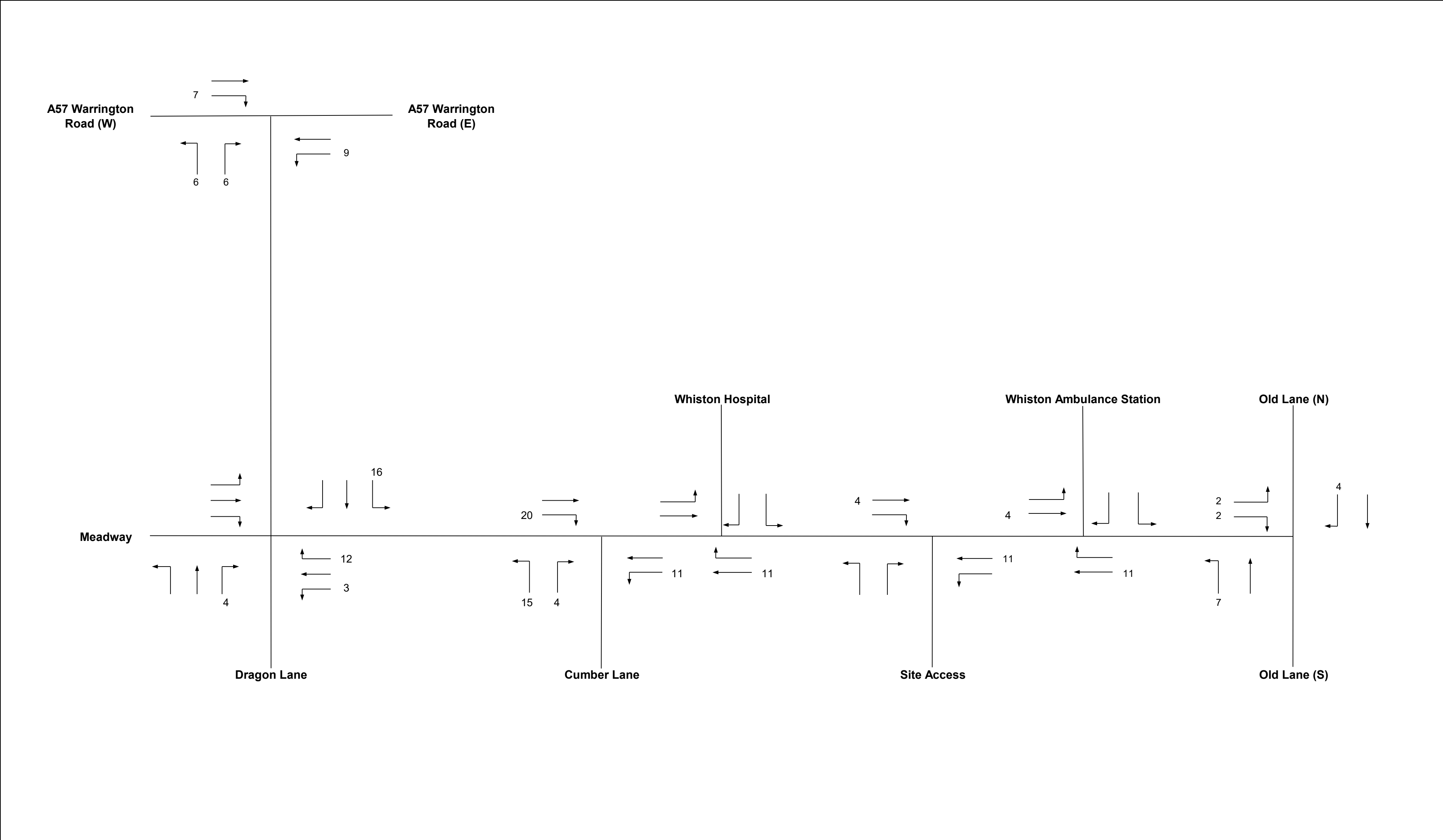


Figure 11 Committed Development Flows (Fox's Bank Lane) - Weekday PM Peak (1630-1730)

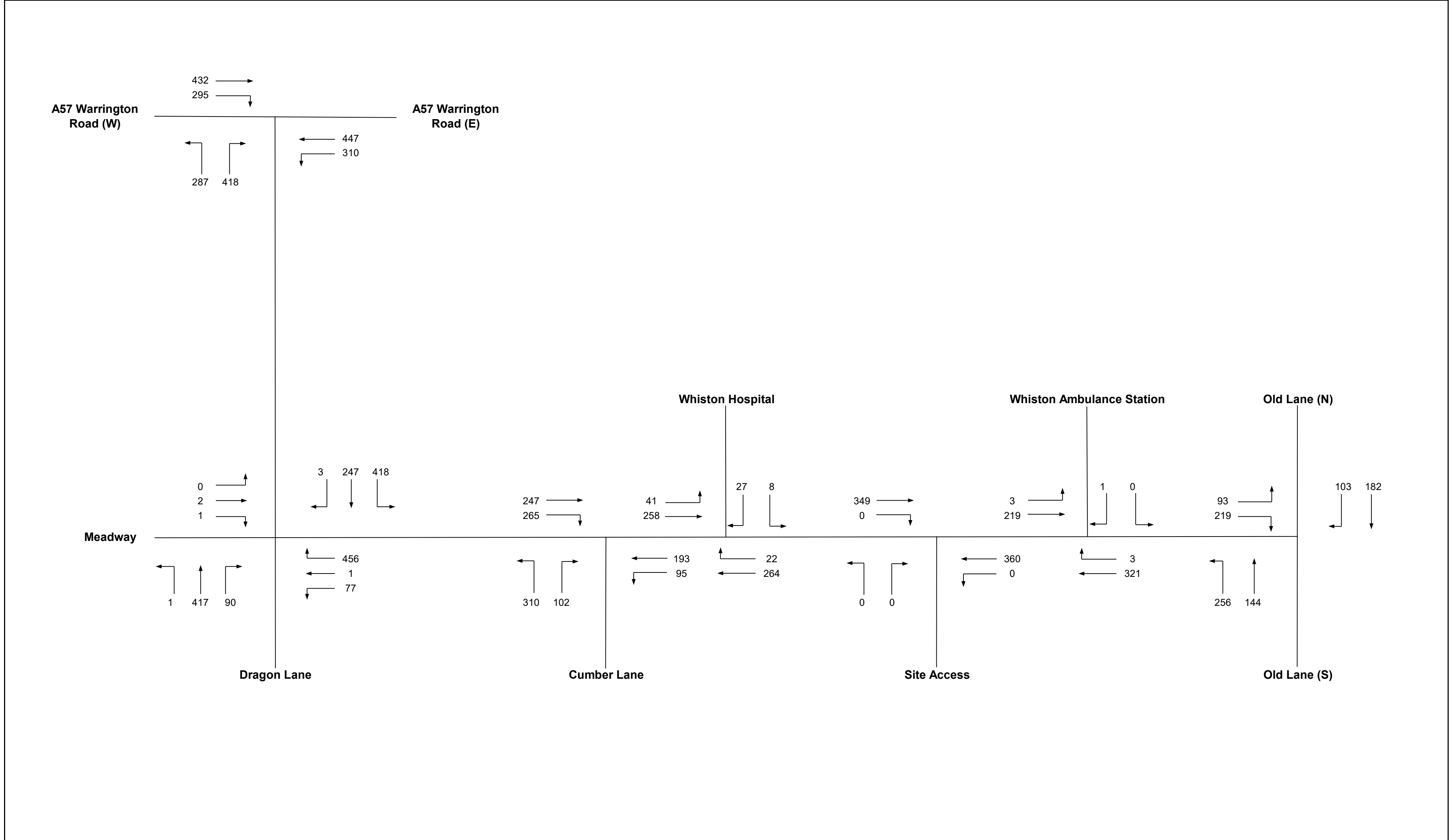


Figure 12 2031 Base Flows - Weekday AM Peak (0800-0900)

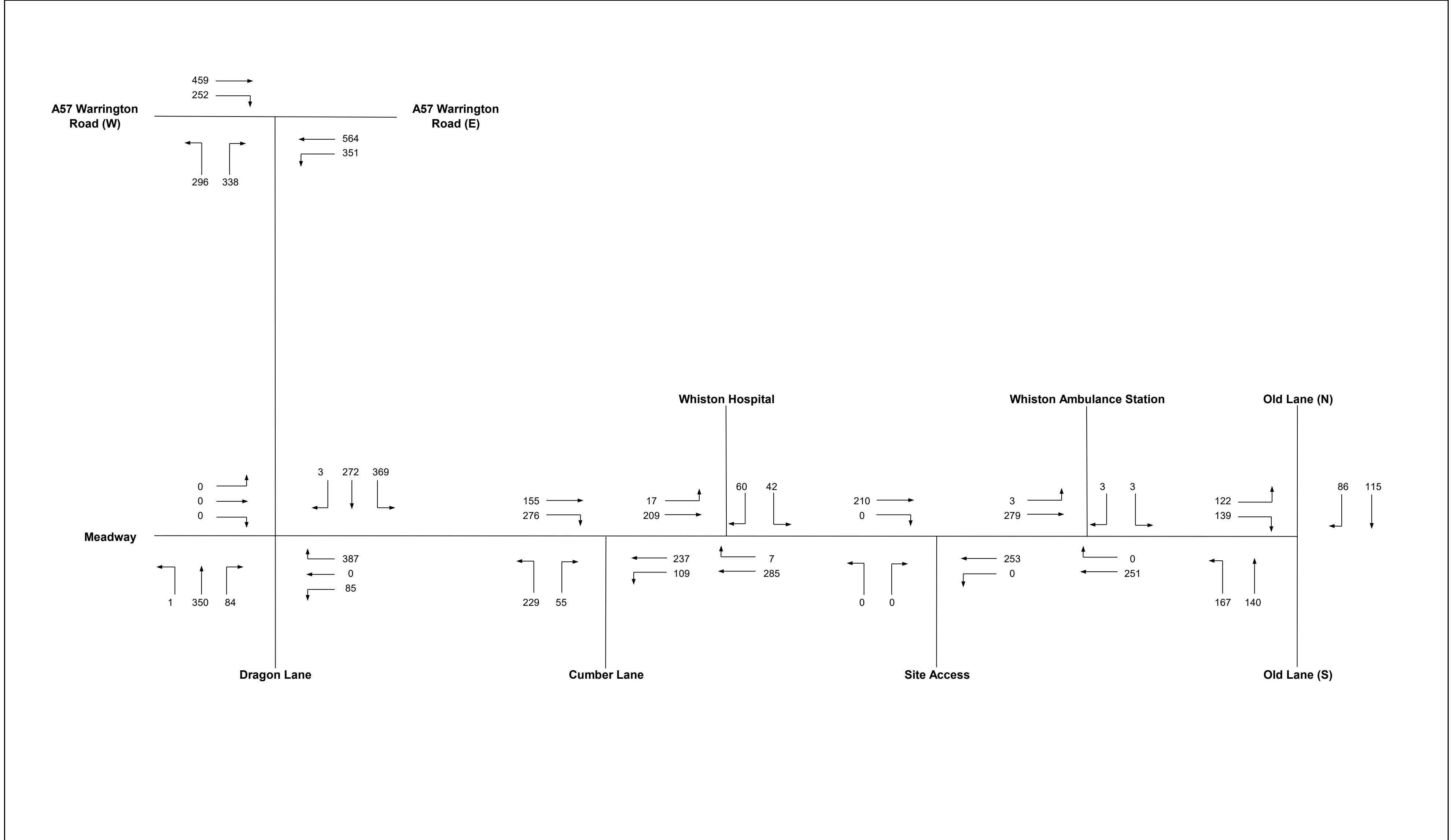


Figure 13 2031 Base Flows - Weekday PM Peak (1630-1730)

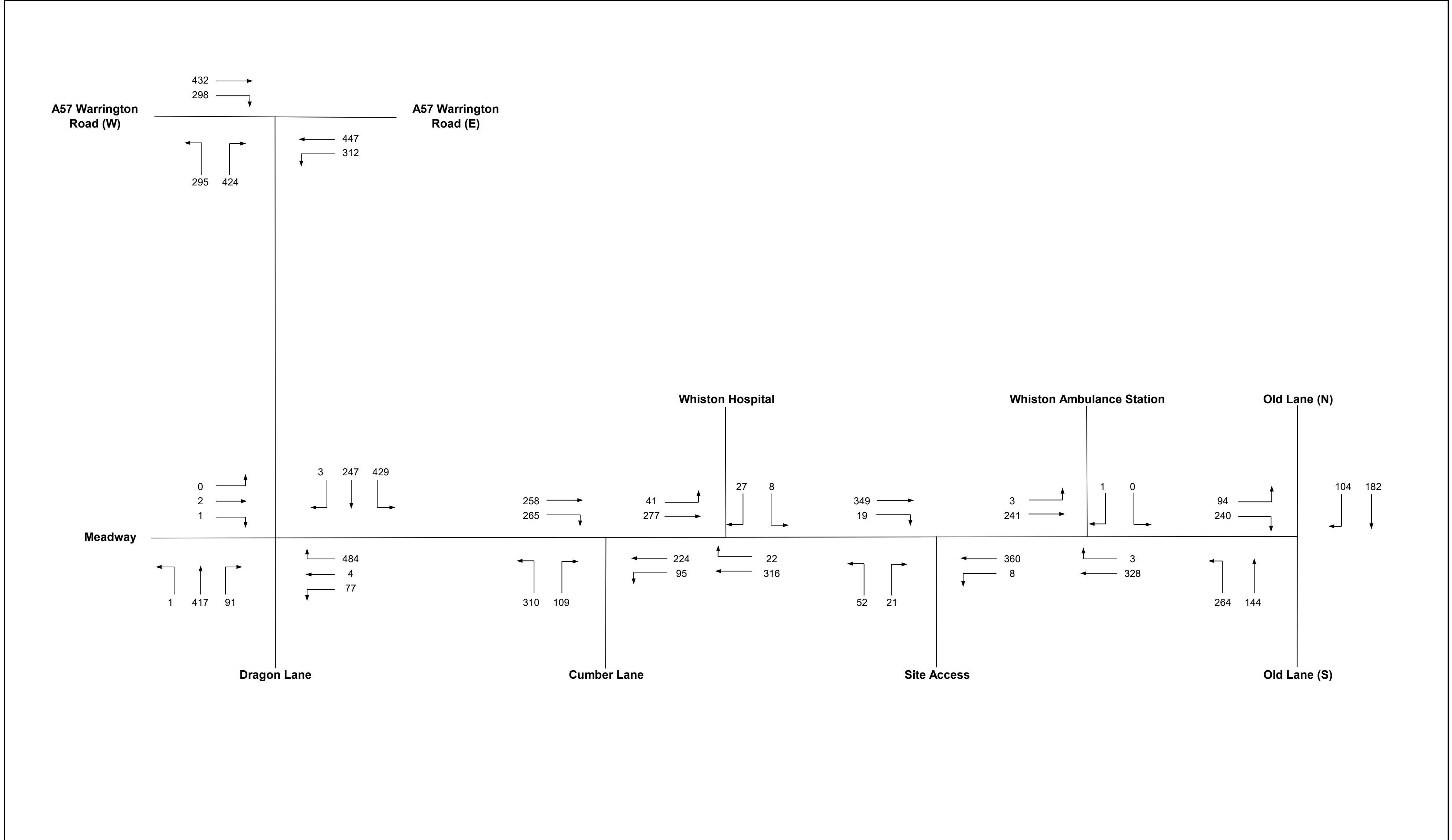


Figure 14 2031 with Development Flows - Weekday AM Peak (0800-0900)

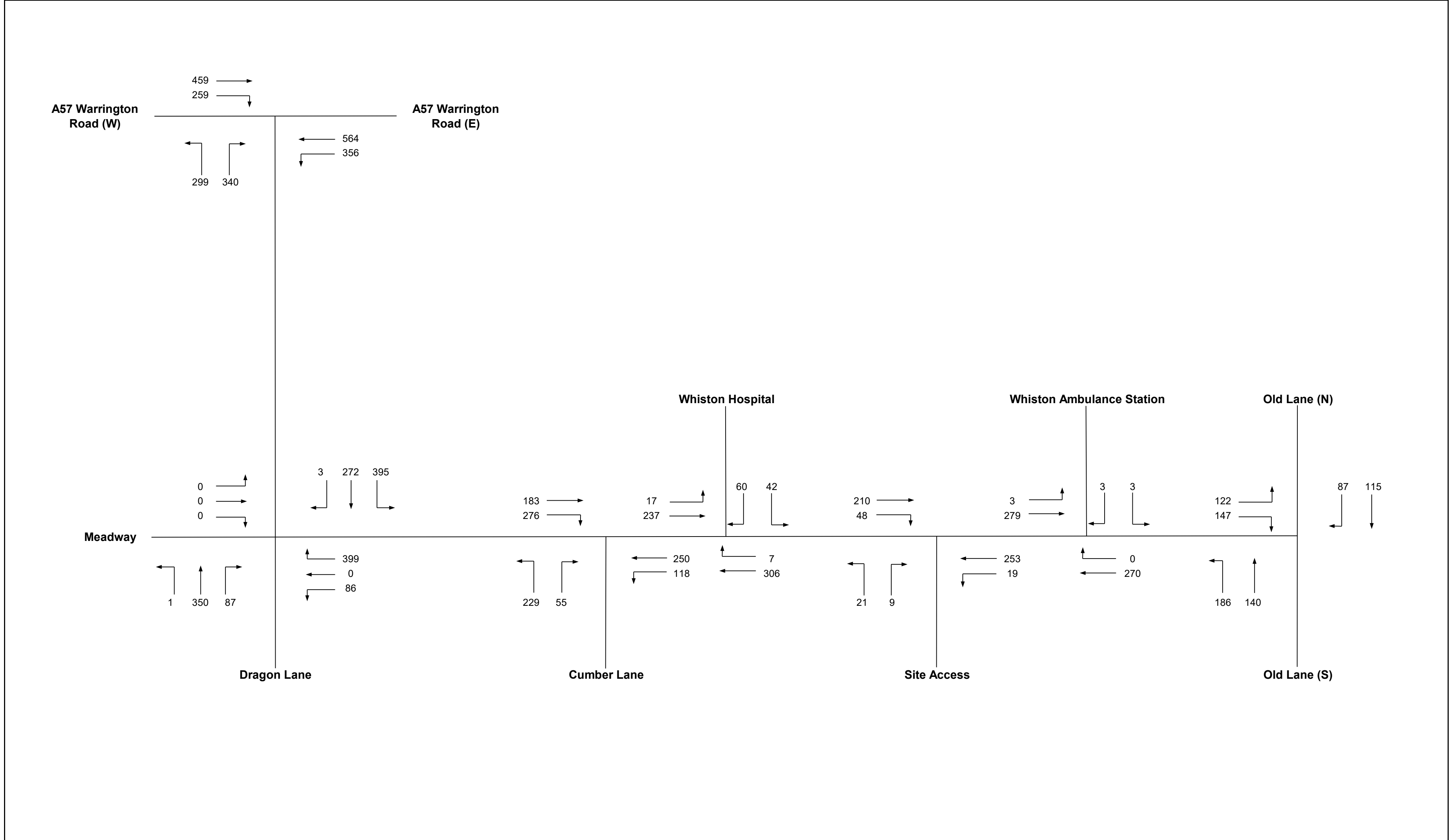


Figure 15 2031 with Development Flows - Weekday PM Peak (1630-1730)

Appendix 2

JUNCTIONS11 Output – Site Access/Stoney Lane Priority Junction

Junctions 11													
PICADY 11 - Priority Intersection Module													
Version: 11.0.0.2177													
© Copyright TRL Software Limited, 2024													
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: Stoney Lane-Site Access Priority Junction.j11
Path: Z:\projects\4726 Glen Dimplex Site, Whiston\Picady
Report generation date: 04/06/2026 13:33:25

»2031 | with Development Flows | AM
 »2031 | with Development Flows | PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
2031 - with Development Flows														
Stream B-AC	D1	0.2	8.54	0.16	A	0.96	A	D2	0.1	7.17	0.06	A	1.00	A
Stream C-AB		0.1	4.69	0.05	A				0.2	5.24	0.10	A		

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	18/11/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD\George.Monks
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031	with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓
D2	2031	with Development Flows	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2031 | with Development Flows | AM

Data Errors and Warnings

No errors or warnings

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		0.96	A

Junction Network

Driving side	Lighting	In London	Network delay (s)	Network LOS
Left	Normal/unknown		0.96	A

Arms

Arms

Arm	Name	Description	Arm type
A	Stoney Lane (E)		Major
B	Site Access		Minor
C	Stoney Lane (W)		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	6.20			200.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	63	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	545	0.098	0.249	0.156	0.355
B-C	683	0.104	0.262	-	-
C-B	690	0.265	0.265	-	-

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031	with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	368	100.000
B		ONE HOUR	✓	73	100.000
C		ONE HOUR	✓	368	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	8	360
	B	21	0	52
	C	349	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.16	8.54	0.2	A	67	100
C-AB	0.05	4.69	0.1	A	29	44
C-A					308	463
A-B					7	11
A-C					330	496

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	14	0.00	546	0.101	55	0.0	0.1	7.325	A
C-AB	21	5	0.00	789	0.027	21	0.0	0.0	4.688	A
C-A	256	64	0.00			256				
A-B	6	2	0.00			6				
A-C	271	68	0.00			271				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	66	16	0.00	527	0.124	66	0.1	0.1	7.794	A
C-AB	28	7	0.00	811	0.034	28	0.0	0.0	4.597	A
C-A	303	76	0.00			303				
A-B	7	2	0.00			7				
A-C	324	81	0.00			324				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	0.00	502	0.160	80	0.1	0.2	8.537	A
C-AB	39	10	0.00	842	0.046	38	0.0	0.1	4.478	A
C-A	367	92	0.00			367				
A-B	9	2	0.00			9				
A-C	396	99	0.00			396				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	0.00	502	0.160	80	0.2	0.2	8.544	A
C-AB	39	10	0.00	842	0.046	39	0.1	0.1	4.480	A
C-A	367	92	0.00			367				
A-B	9	2	0.00			9				
A-C	396	99	0.00			396				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	66	16	0.00	527	0.124	66	0.2	0.1	7.805	A
C-AB	28	7	0.00	811	0.034	28	0.1	0.0	4.598	A
C-A	303	76	0.00			303				
A-B	7	2	0.00			7				
A-C	324	81	0.00			324				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	14	0.00	546	0.101	55	0.1	0.1	7.341	A
C-AB	22	5	0.00	789	0.027	22	0.0	0.0	4.689	A
C-A	256	64	0.00			256				
A-B	6	2	0.00			6				
A-C	271	68	0.00			271				

Accident Prediction

Accident Prediction Options

Accident prediction type	Junction Environment
Simple (M0)	Urban

Accident Parameters

Arm	Kerbed island present	Zebra crossing	Pelican crossing
A			
B			
C			

Accident prediction: Flows (AADT x 1000)

	To			
From		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Accident Prediction (detailed): Pedestrian Flows

Arm	Pedestrian flow (peds x 1000)
A	0.000
B	0.000
C	0.000

Accident Prediction: Results

Total vehicle accidents (Accidents/year)	Total pedestrian accidents (Accidents/year)	Total Accident Rate (Accidents/year)
0.000	0.000	0.000

2031 | with Development Flows | PM

Data Errors and Warnings

No errors or warnings

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		1.00	A

Junction Network

Driving side	Lighting	In London	Network delay (s)	Network LOS
Left	Normal/unknown		1.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031	with Development Flows	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	272	100.000
B		ONE HOUR	✓	30	100.000
C		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	19	253
	B	9	0	21
	C	210	48	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.17	0.1	A	28	41
C-AB	0.10	5.24	0.2	A	60	90
C-A					177	265
A-B					17	26
A-C					232	348

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	0.00	567	0.040	22	0.0	0.0	6.604	A
C-AB	46	11	0.00	738	0.062	46	0.0	0.1	5.201	A
C-A	148	37	0.00			148				
A-B	14	4	0.00			14				
A-C	190	48	0.00			190				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	7	0.00	554	0.049	27	0.0	0.1	6.830	A
C-AB	58	14	0.00	748	0.077	58	0.1	0.1	5.215	A
C-A	174	44	0.00			174				
A-B	17	4	0.00			17				
A-C	227	57	0.00			227				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	0.00	535	0.062	33	0.1	0.1	7.167	A
C-AB	76	19	0.00	763	0.100	76	0.1	0.2	5.237	A
C-A	208	52	0.00			208				
A-B	21	5	0.00			21				
A-C	279	70	0.00			279				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	8	0.00	535	0.062	33	0.1	0.1	7.168	A
C-AB	76	19	0.00	763	0.100	76	0.2	0.2	5.239	A
C-A	208	52	0.00			208				
A-B	21	5	0.00			21				
A-C	279	70	0.00			279				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	7	0.00	554	0.049	27	0.1	0.1	6.832	A
C-AB	58	14	0.00	748	0.077	58	0.2	0.1	5.219	A
C-A	174	44	0.00			174				
A-B	17	4	0.00			17				
A-C	227	57	0.00			227				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	0.00	567	0.040	23	0.1	0.0	6.608	A
C-AB	46	12	0.00	738	0.062	46	0.1	0.1	5.206	A
C-A	148	37	0.00			148				
A-B	14	4	0.00			14				
A-C	190	48	0.00			190				

Accident Prediction

Accident Prediction Options

Accident prediction type	Junction Environment
Simple (M0)	Urban

Accident Parameters

Arm	Kerbed island present	Zebra crossing	Pelican crossing
A			
B			
C			

Accident prediction: Flows (AADT x 1000)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Accident Prediction (detailed): Pedestrian Flows

Arm	Pedestrian flow (peds x 1000)
A	0.000
B	0.000
C	0.000

Accident Prediction: Results

Total vehicle accidents (Accidents/year)	Total pedestrian accidents (Accidents/year)	Total Accident Rate (Accidents/year)
0.000	0.000	0.000

Appendix 3

Queue Survey Data

Knowsley, Tuesday 9th September 2025

Site 1

Queues are stationary vehicles each 5 minutes
LANE 1 is nearside lane



	A57 Warrington Road (East)		Dragon Lane		A57 Warrington Road (West)	
TIME	LANE 1	LANE 2	LANE 1	LANE 2	LANE 1	LANE 2
07:30	0	0	2	2	0	0
07:35	1	1	0	0	1	2
07:40	0	0	8	8	0	0
07:45	1	1	0	2	0	3
07:50	7	7	0	0	5	2
07:55	0	2	5	11	0	0
08:00	0	0	5	10	0	0
08:05	3	5	0	0	0	1
08:10	0	0	5	9	0	2
08:15	1	1	2	10	0	0
08:20	5	5	0	0	0	2
08:25	0	0	11	12	0	2
08:30	0	0	3	3	0	3
08:35	0	0	4	16	0	0
08:40	0	0	2	15	0	0
08:45	0	3	8	9	1	0
08:50	0	1	5	12	0	0
08:55	1	3	0	0	11	12
09:00	7	5	0	0	6	0
09:05	10	9	1	8	4	2
09:10	0	0	8	11	0	2
09:15	0	0	3	4	0	3
09:20	1	0	3	9	0	0
09:25	2	2	0	0	0	0
16:30	0	0	1	1	0	0
16:35	0	0	6	7	0	3
16:40	0	0	11	5	0	2
16:45	0	0	1	2	0	4
16:50	0	0	12	11	0	0
16:55	0	0	11	9	0	0
17:00	0	0	2	12	0	5
17:05	9	9	0	0	0	4
17:10	12	9	0	0	5	10
17:15	0	1	0	0	0	1
17:20	1	2	9	7	0	0
17:25	0	0	3	18	0	0
17:30	0	0	13	11	0	0
17:35	0	0	8	5	0	3
17:40	0	0	7	12	0	0
17:45	0	0	9	10	0	0
17:50	0	0	9	12	0	6
17:55	0	0	7	12	0	0
18:00	0	0	12	8	0	3
18:05	0	0	6	8	0	10
18:10	0	0	3	18	0	2
18:15	0	0	10	7	0	4
18:20	0	2	7	5	0	3
18:25	0	0	7	12	0	2

Knowsley, Tuesday 9th September 2025

Site 2

Queues are stationary vehicles each 5 minutes
LANE 1 is nearside lane



Dragon Lane (North)			Stoney Lane	Dragon Lane (South)		Meadway
TIME	LANE 1	LANE 2		LANE 1	LANE 2	
07:30	0	0	3	0	0	0
07:35	3	0	0	8	1	0
07:40	6	3	0	4	0	0
07:45	0	0	6	0	0	0
07:50	0	0	0	0	0	0
07:55	0	0	3	0	0	0
08:00	0	0	11	0	0	0
08:05	0	0	3	0	0	0
08:10	0	0	1	0	2	0
08:15	0	0	3	0	0	0
08:20	0	0	16	0	2	0
08:25	0	0	16	0	0	0
08:30	0	0	10	0	0	1
08:35	12	1	0	4	2	0
08:40	0	0	7	0	1	0
08:45	15	0	12	0	3	0
08:50	0	0	18	0	0	0
08:55	4	1	0	3	3	0
09:00	12	5	0	3	0	0
09:05	0	0	1	0	0	0
09:10	0	0	3	0	0	0
09:15	0	0	12	0	0	0
09:20	0	0	6	0	0	1
09:25	2	2	0	3	1	0
16:30	0	0	10	0	0	0
16:35	0	0	0	0	0	0
16:40	0	0	6	0	1	0
16:45	0	0	3	0	3	0
16:50	3	1	0	6	0	0
16:55	3	2	0	1	2	0
17:00	2	4	0	0	0	0
17:05	0	0	12	0	0	0
17:10	0	0	18	0	0	0
17:15	0	0	9	0	1	0
17:20	6	3	0	2	0	0
17:25	5	2	0	4	2	0
17:30	0	0	3	0	0	0
17:35	5	1	0	1	1	0
17:40	0	0	0	0	0	0
17:45	4	1	0	0	0	0
17:50	0	0	17	0	0	0
17:55	0	0	0	0	0	0
18:00	0	0	6	0	0	0
18:05	0	0	4	0	0	0
18:10	1	5	0	0	0	0
18:15	1	2	0	2	1	0
18:20	0	0	1	0	0	0
18:25	0	0	10	0	0	0

Knowsley, Tuesday 9th September 2025

Site 3



Queues are stationary vehicles each 5 minutes

TIME	Stoney Lane (East)	Cumber Lane	Stoney Lane (West)
07:30	0	1	0
07:35	0	0	3
07:40	0	5	0
07:45	0	2	0
07:50	0	0	2
07:55	2	5	0
08:00	0	0	8
08:05	1	0	0
08:10	0	0	5
08:15	4	0	11
08:20	1	11	0
08:25	10	15	0
08:30	3	15	0
08:35	3	0	12
08:40	3	0	19
08:45	4	0	18
08:50	3	0	16
08:55	6	3	0
09:00	5	0	0
09:05	0	1	0
09:10	0	3	0
09:15	0	6	0
09:20	0	0	0
09:25	0	6	0

16:30	0	2	0
16:35	0	2	0
16:40	0	8	0
16:45	0	0	1
16:50	0	5	0
16:55	0	5	0
17:00	0	6	0
17:05	0	2	2
17:10	10	0	1
17:15	1	0	13
17:20	0	0	0
17:25	2	0	5
17:30	0	0	2
17:35	2	0	6
17:40	0	1	0
17:45	2	0	13
17:50	3	18	0
17:55	2	0	7
18:00	0	3	0
18:05	0	1	0
18:10	0	0	0
18:15	0	1	1
18:20	0	2	0
18:25	0	0	2

Knowsley, Tuesday 9th September 2025

Site 4



Queues are stationary vehicles each 5 minutes

TIME	Old Lane (North)	Old Lane (South)	Stoney Lane
07:30	0	0	0
07:35	0	0	0
07:40	0	0	0
07:45	0	0	0
07:50	0	0	0
07:55	0	0	0
08:00	1	0	0
08:05	0	0	0
08:10	0	0	0
08:15	0	0	0
08:20	0	0	0
08:25	0	0	0
08:30	0	0	4
08:35	0	0	0
08:40	0	0	0
08:45	0	1	0
08:50	0	0	0
08:55	0	0	0
09:00	0	0	0
09:05	0	0	0
09:10	0	0	0
09:15	0	0	0
09:20	0	0	0
09:25	0	0	0
16:30	0	0	0
16:35	0	0	0
16:40	0	0	0
16:45	0	0	0
16:50	0	0	0
16:55	0	0	0
17:00	0	0	2
17:05	0	0	1
17:10	0	0	0
17:15	0	0	0
17:20	0	0	0
17:25	0	0	0
17:30	0	0	0
17:35	0	0	0
17:40	0	0	4
17:45	0	0	0
17:50	0	0	0
17:55	0	0	0
18:00	0	0	0
18:05	0	0	0
18:10	0	0	0
18:15	0	0	0
18:20	0	0	2
18:25	0	0	0

Appendix 4

LINSIG3 Output – Stoney Lane/Cumber Lane Signalised Junction

Basic Input Data and Results**User and Project Details**

Project:	
Title:	
Location:	
Additional detail:	
File name:	Stoney Lane-Cumber Lane Signalised junction.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2025 Surveyed Flows - AM Peak	2025 Surveyed Flows - AM Peak	Network Control Plan 1	08:00 - 09:00	88	57.3	7.79
2	2025 Surveyed Flows - PM Peak	2025 Surveyed Flows - PM Peak	Network Control Plan 1	16:30 - 17:30	88	99.5	6.11
3	2032 Base Flows - AM Peak	2031 Base Flows - AM Peak	Network Control Plan 1	08:00 - 09:00	88	34.1	9.95
4	2032 Base Flows - PM Peak	2031 Base Flows - PM Peak	Network Control Plan 1	16:30 - 17:30	88	60.9	7.75
5	2032 with Development Flows - AM Peak	2031 With Development Flows - AM Peak	Network Control Plan 1	08:00 - 09:00	88	30.8	10.51
6	2032 with Development Flows - PM Peak	2031 With Development Flows - PM Peak	Network Control Plan 1	16:30 - 17:30	88	54.6	7.98

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Pedestrian		4	4
E	Pedestrian		4	4
F	Pedestrian		4	4
G	Ind. Arrow	C	3	3

Basic Input Data and Results

Phase Intergreens Matrix

Terminating Phase	Starting Phase							
		A	B	C	D	E	F	G
	A		6	-	9	9	9	5
	B	5		5	8	8	8	5
	C	-	6		9	9	9	-
	D	0	0	0		-	-	0
	E	0	0	0	-		-	0
	F	0	0	0	-	-		0
	G	6	6	-	9	9	9	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage					
		1	2	3	4	5
	1		5	6	9	0
	2	6		6	9	6
	3	5	5		8	5
	4	2	X	2		2
	5	2	5	6	9	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	C G
3	B
4	D E F
5	A

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (Cumber Lane)	U	B	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 2 Left Arm 4 Right	18.00 18.00
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Stoney Lane (W))	O	C G	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 4 Ahead Arm 6 Right	Inf 20.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Stoney Lane (E))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 2 Ahead Arm 6 Left	Inf 18.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Basic Input Data and Results
Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Stoney Lane (W))	6/1 (Right)	1439	0	5/1	1.09	All	2.00	2.00	0.50	2	2.00

Basic Input Data and Results

Scenario 1: '2025 Surveyed Flows - AM Peak' (FG1: '2025 Surveyed Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Cumber Lane)	5.00	0.00	Y	Arm 2 Left Arm 4 Right	18.00 18.00	75.2 % 24.8 %	1952	1952
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane (W))	3.60	0.00	Y	Arm 4 Ahead Arm 6 Right	Inf 20.00	49.6 % 50.4 %	1903	1903
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoney Lane (E))	3.00	0.00	Y	Arm 2 Ahead Arm 6 Left	Inf 18.00	68.3 % 31.7 %	1866	1866
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2025 Surveyed Flows - PM Peak' (FG2: '2025 Surveyed Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Cumber Lane)	5.00	0.00	Y	Arm 2 Left Arm 4 Right	18.00 18.00	80.8 % 19.2 %	1952	1952
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane (W))	3.60	0.00	Y	Arm 4 Ahead Arm 6 Right	Inf 20.00	39.6 % 60.4 %	1889	1889
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoney Lane (E))	3.00	0.00	Y	Arm 2 Ahead Arm 6 Left	Inf 18.00	73.1 % 26.9 %	1873	1873
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2032 Base Flows - AM Peak' (FG3: '2031 Base Flows - AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Cumber Lane)	5.00	0.00	Y	Arm 2 Left Arm 4 Right	18.00 18.00	75.2 % 24.8 %	1952	1952
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane (W))	3.60	0.00	Y	Arm 4 Ahead Arm 6 Right	Inf 20.00	48.2 % 51.8 %	1901	1901
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoney Lane (E))	3.00	0.00	Y	Arm 2 Ahead Arm 6 Left	Inf 18.00	67.0 % 33.0 %	1864	1864
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2032 Base Flows - PM Peak' (FG4: '2031 Base Flows - PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Cumber Lane)	5.00	0.00	Y	Arm 2 Left Arm 4 Right	18.00 18.00	80.6 % 19.4 %	1952	1952
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane (W))	3.60	0.00	Y	Arm 4 Ahead Arm 6 Right	Inf 20.00	36.0 % 64.0 %	1884	1884
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoney Lane (E))	3.00	0.00	Y	Arm 2 Ahead Arm 6 Left	Inf 18.00	68.5 % 31.5 %	1866	1866
6/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2032 with Development Flows - AM Peak' (FG5: '2031 With Development Flows - AM Peak', Plan 1:

Basic Input Data and Results

'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Cumber Lane)	5.00	0.00	Y	Arm 2 Left	18.00	75.2 %	1952	1952
				Arm 4 Right	18.00	24.8 %		
2/1				Infinite Saturation Flow			Inf	Inf
3/1 (Stoney Lane (W))	3.60	0.00	Y	Arm 4 Ahead	Inf	49.3 %	1903	1903
				Arm 6 Right	20.00	50.7 %		
4/1				Infinite Saturation Flow			Inf	Inf
5/1 (Stoney Lane (E))	3.00	0.00	Y	Arm 2 Ahead	Inf	70.2 %	1869	1869
				Arm 6 Left	18.00	29.8 %		
6/1				Infinite Saturation Flow			Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2032 with Development Flows - PM Peak' (FG6: '2031 With Development Flows - PM Peak', Plan 1:

'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Cumber Lane)	5.00	0.00	Y	Arm 2 Left	18.00	80.6 %	1952	1952
				Arm 4 Right	18.00	19.4 %		
2/1				Infinite Saturation Flow			Inf	Inf
3/1 (Stoney Lane (W))	3.60	0.00	Y	Arm 4 Ahead	Inf	39.9 %	1890	1890
				Arm 6 Right	20.00	60.1 %		
4/1				Infinite Saturation Flow			Inf	Inf
5/1 (Stoney Lane (E))	3.00	0.00	Y	Arm 2 Ahead	Inf	69.6 %	1868	1868
				Arm 6 Left	18.00	30.4 %		
6/1				Infinite Saturation Flow			Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 Surveyed Flows - AM Peak'	08:00	09:00	01:00	
2: '2025 Surveyed Flows - PM Peak'	16:30	17:30	01:00	
3: '2031 Base Flows - AM Peak'	08:00	09:00	01:00	
4: '2031 Base Flows - PM Peak'	16:30	17:30	01:00	
5: '2031 With Development Flows - AM Peak'	08:00	09:00	01:00	
6: '2031 With Development Flows - PM Peak'	16:30	17:30	01:00	

Traffic Flows, Desired**FG1: '2025 Surveyed Flows - AM Peak'**

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	85	183	268
	B	82	0	248	330
	C	234	238	0	472
	Tot.	316	323	431	1070

FG2: '2025 Surveyed Flows - PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	83	225	308
	B	45	0	189	234
	C	147	224	0	371
	Tot.	192	307	414	913

FG3: '2031 Base Flows - AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	95	193	288
	B	102	0	310	412
	C	247	265	0	512
	Tot.	349	360	503	1212

Basic Input Data and Results

FG4: '2031 Base Flows - PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
	A	0	109	237	346
	B	55	0	229	284
	C	155	276	0	431
Origin	Tot.	210	385	466	1061

FG5: '2031 With Development Flows - AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
	A	0	95	224	319
	B	102	0	310	412
	C	258	265	0	523
Origin	Tot.	360	360	534	1254

FG6: '2031 With Development Flows - PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
	A	0	109	250	359
	B	55	0	229	284
	C	183	276	0	459
Origin	Tot.	238	385	479	1102

Scenario 1: '2025 Surveyed Flows - AM Peak' (FG1: '2025 Surveyed Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	2	3	4	5
Duration	33	3	25	4	0
Change Point	0	35	43	74	86

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Stoney Lane (E) Ahead Left	Traffic	35	0	35
B	Cumber Lane Left Right	Traffic	25	49	74
C	Stoney Lane (W) Ahead Right	Traffic	41	2	43
D	Pedestrians across	Pedestrian	4	82	86
E	Pedestrians across	Pedestrian	4	82	86
F	Pedestrians across	Pedestrian	4	82	86
G	Stoney Lane (W) Right IGA	Ind. Arrow	3	40	43

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	57.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	57.2%
1/1	Cumber Lane Left Right	U	N/A	N/A	B		1	25	-	-	330	1952	577	57.2%
2/1		U	N/A	N/A	-		-	-	-	-	431	Inf	Inf	0.0%
3/1	Stoney Lane (W) Ahead Right	O	N/A	N/A	C	G	1	41	3	-	472	1903	833	56.7%
4/1		U	N/A	N/A	-		-	-	-	-	316	Inf	Inf	0.0%
5/1	Stoney Lane (E) Ahead Left	U	N/A	N/A	A		1	35	-	-	268	1866	763	35.1%
6/1		U	N/A	N/A	-		-	-	-	-	323	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	216	16	5	6.0	1.6	0.2	7.8	-	-	-	-	
Unnamed Junction	-	-	216	16	5	6.0	1.6	0.2	7.8	-	-	-	-	
1/1	330	330	-	-	-	2.4	0.7	-	3.1	33.5	6.8	0.7	7.4	
2/1	431	431	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	472	472	216	16	5	2.3	0.7	0.2	3.1	23.7	8.5	0.7	9.2	
4/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	268	268	-	-	-	1.3	0.3	-	1.6	21.6	4.5	0.3	4.7	
6/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalised Lanes (%): 57.3 Total Delay for Signalised Lanes (pcuHr): 7.79 Cycle Time (s): 88 PRC Over All Lanes (%): 57.3 Total Delay Over All Lanes(pcuHr): 7.79														

Basic Input Data and Results

Scenario 2: '2025 Surveyed Flows - PM Peak' (FG2: '2025 Surveyed Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	2	3	4	5
Duration	35	3	23	4	0
Change Point	0	37	45	74	86

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Stoney Lane (E) Ahead Left	Traffic	37	0	37
B	Cumber Lane Left Right	Traffic	23	51	74
C	Stoney Lane (W) Ahead Right	Traffic	43	2	45
D	Pedestrians across	Pedestrian	4	82	86
E	Pedestrians across	Pedestrian	4	82	86
F	Pedestrians across	Pedestrian	4	82	86
G	Stoney Lane (W) Right IGA	Ind. Arrow	3	42	45

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	45.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	45.1%
1/1	Cumber Lane Left Right	U	N/A	N/A	B		1	23	-	-	234	1952	532	44.0%
2/1		U	N/A	N/A	-		-	-	-	-	414	Inf	Inf	0.0%
3/1	Stoney Lane (W) Ahead Right	O	N/A	N/A	C	G	1	43	3	-	371	1889	822	45.1%
4/1		U	N/A	N/A	-		-	-	-	-	192	Inf	Inf	0.0%
5/1	Stoney Lane (E) Ahead Left	U	N/A	N/A	A		1	37	-	-	308	1873	809	38.1%
6/1		U	N/A	N/A	-		-	-	-	-	307	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	204	15	5	4.8	1.1	0.2	6.1	-	-	-	-	
Unnamed Junction	-	-	204	15	5	4.8	1.1	0.2	6.1	-	-	-	-	
1/1	234	234	-	-	-	1.7	0.4	-	2.1	32.5	4.7	0.4	5.1	
2/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	371	371	204	15	5	1.6	0.4	0.2	2.2	21.7	6.3	0.4	6.7	
4/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	308	308	-	-	-	1.5	0.3	-	1.8	20.6	5.0	0.3	5.4	
6/1	307	307	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalised Lanes (%): 99.5 Total Delay for Signalised Lanes (pcuHr): 6.11 Cycle Time (s): 88 PRC Over All Lanes (%): 99.5 Total Delay Over All Lanes(pcuHr): 6.11														

Basic Input Data and Results

Scenario 3: '2032 Base Flows - AM Peak' (FG3: '2031 Base Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	2	3	4	5
Duration	31	3	27	4	0
Change Point	0	33	41	74	86

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Stoney Lane (E) Ahead Left	Traffic	33	0	33
B	Cumber Lane Left Right	Traffic	27	47	74
C	Stoney Lane (W) Ahead Right	Traffic	39	2	41
D	Pedestrians across	Pedestrian	4	82	86
E	Pedestrians across	Pedestrian	4	82	86
F	Pedestrians across	Pedestrian	4	82	86
G	Stoney Lane (W) Right IGA	Ind. Arrow	3	38	41

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	67.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	67.1%
1/1	Cumber Lane Left Right	U	N/A	N/A	B		1	27	-	-	412	1952	621	66.3%
2/1		U	N/A	N/A	-		-	-	-	-	503	Inf	Inf	0.0%
3/1	Stoney Lane (W) Ahead Right	O	N/A	N/A	C	G	1	39	3	-	512	1901	763	67.1%
4/1		U	N/A	N/A	-		-	-	-	-	349	Inf	Inf	0.0%
5/1	Stoney Lane (E) Ahead Left	U	N/A	N/A	A		1	33	-	-	288	1864	720	40.0%
6/1		U	N/A	N/A	-		-	-	-	-	360	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	241	18	6	7.4	2.3	0.2	10.0	-	-	-	-	
Unnamed Junction	-	-	241	18	6	7.4	2.3	0.2	10.0	-	-	-	-	
1/1	412	412	-	-	-	3.0	1.0	-	3.9	34.5	8.7	1.0	9.7	
2/1	503	503	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	512	512	241	18	6	2.9	1.0	0.2	4.1	28.9	10.2	1.0	11.3	
4/1	349	349	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	288	288	-	-	-	1.6	0.3	-	1.9	23.8	5.0	0.3	5.4	
6/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalised Lanes (%): 34.1 Total Delay for Signalised Lanes (pcuHr): 9.95 Cycle Time (s): 88 PRC Over All Lanes (%): 34.1 Total Delay Over All Lanes(pcuHr): 9.95														

Basic Input Data and Results

Scenario 4: '2032 Base Flows - PM Peak' (FG4: '2031 Base Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	2	3	4	5
Duration	36	3	22	4	0
Change Point	0	38	46	74	86

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Stoney Lane (E) Ahead Left	Traffic	38	0	38
B	Cumber Lane Left Right	Traffic	22	52	74
C	Stoney Lane (W) Ahead Right	Traffic	44	2	46
D	Pedestrians across	Pedestrian	4	82	86
E	Pedestrians across	Pedestrian	4	82	86
F	Pedestrians across	Pedestrian	4	82	86
G	Stoney Lane (W) Right IGA	Ind. Arrow	3	43	46

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	55.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	55.9%
1/1	Cumber Lane Left Right	U	N/A	N/A	B		1	22	-	-	284	1952	510	55.7%
2/1		U	N/A	N/A	-		-	-	-	-	466	Inf	Inf	0.0%
3/1	Stoney Lane (W) Ahead Right	O	N/A	N/A	C	G	1	44	3	-	431	1884	771	55.9%
4/1		U	N/A	N/A	-		-	-	-	-	210	Inf	Inf	0.0%
5/1	Stoney Lane (E) Ahead Left	U	N/A	N/A	A		1	38	-	-	346	1866	827	41.8%
6/1		U	N/A	N/A	-		-	-	-	-	385	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	251	19	6	5.8	1.6	0.4	7.8	-	-	-	-	
Unnamed Junction	-	-	251	19	6	5.8	1.6	0.4	7.8	-	-	-	-	
1/1	284	284	-	-	-	2.2	0.6	-	2.8	36.0	6.0	0.6	6.6	
2/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	431	431	251	19	6	2.0	0.6	0.4	2.9	24.6	7.7	0.6	8.3	
4/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	346	346	-	-	-	1.6	0.4	-	2.0	20.5	5.8	0.4	6.1	
6/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalised Lanes (%): 60.9 Total Delay for Signalised Lanes (pcuHr): 7.75 Cycle Time (s): 88 PRC Over All Lanes (%): 60.9 Total Delay Over All Lanes(pcuHr): 7.75														

Basic Input Data and Results

Scenario 5: '2032 with Development Flows - AM Peak' (FG5: '2031 With Development Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	2	3	4	5
Duration	30	3	26	4	2
Change Point	0	32	40	72	84

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Stoney Lane (E) Ahead Left	Traffic	34	86	32
B	Cumber Lane Left Right	Traffic	26	46	72
C	Stoney Lane (W) Ahead Right	Traffic	38	2	40
D	Pedestrians across	Pedestrian	4	80	84
E	Pedestrians across	Pedestrian	4	80	84
F	Pedestrians across	Pedestrian	4	80	84
G	Stoney Lane (W) Right IGA	Ind. Arrow	3	37	40

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	68.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	68.8%
1/1	Cumber Lane Left Right	U	N/A	N/A	B		1	26	-	-	412	1952	599	68.8%
2/1		U	N/A	N/A	-		-	-	-	-	534	Inf	Inf	0.0%
3/1	Stoney Lane (W) Ahead Right	O	N/A	N/A	C	G	1	38	3	-	523	1903	767	68.2%
4/1		U	N/A	N/A	-		-	-	-	-	360	Inf	Inf	0.0%
5/1	Stoney Lane (E) Ahead Left	U	N/A	N/A	A		1	34	-	-	319	1869	743	42.9%
6/1		U	N/A	N/A	-		-	-	-	-	360	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	241	18	6	7.8	2.5	0.2	10.5	-	-	-	-	
Unnamed Junction	-	-	241	18	6	7.8	2.5	0.2	10.5	-	-	-	-	
1/1	412	412	-	-	-	3.1	1.1	-	4.2	36.3	8.8	1.1	9.9	
2/1	534	534	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	523	523	241	18	6	3.0	1.1	0.2	4.3	29.4	10.5	1.1	11.5	
4/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	319	319	-	-	-	1.7	0.4	-	2.1	23.5	5.6	0.4	6.0	
6/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalised Lanes (%): 30.8 Total Delay for Signalised Lanes (pcuHr): 10.51 Cycle Time (s): 88 PRC Over All Lanes (%): 30.8 Total Delay Over All Lanes(pcuHr): 10.51														

Basic Input Data and Results

Scenario 6: '2032 with Development Flows - PM Peak' (FG6: '2031 With Development Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	2	3	4	5
Duration	37	3	21	4	0
Change Point	0	39	47	74	86

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	Stoney Lane (E) Ahead Left	Traffic	39	0	39
B	Cumber Lane Left Right	Traffic	21	53	74
C	Stoney Lane (W) Ahead Right	Traffic	45	2	47
D	Pedestrians across	Pedestrian	4	82	86
E	Pedestrians across	Pedestrian	4	82	86
F	Pedestrians across	Pedestrian	4	82	86
G	Stoney Lane (W) Right IGA	Ind. Arrow	3	44	47

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	58.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	58.2%
1/1	Cumber Lane Left Right	U	N/A	N/A	B		1	21	-	-	284	1952	488	58.2%
2/1		U	N/A	N/A	-		-	-	-	-	479	Inf	Inf	0.0%
3/1	Stoney Lane (W) Ahead Right	O	N/A	N/A	C	G	1	45	3	-	459	1890	815	56.4%
4/1		U	N/A	N/A	-		-	-	-	-	238	Inf	Inf	0.0%
5/1	Stoney Lane (E) Ahead Left	U	N/A	N/A	A		1	39	-	-	359	1868	849	42.3%
6/1		U	N/A	N/A	-		-	-	-	-	385	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	251	19	6	5.9	1.7	0.4	8.0	-	-	-	-	
Unnamed Junction	-	-	251	19	6	5.9	1.7	0.4	8.0	-	-	-	-	
1/1	284	284	-	-	-	2.3	0.7	-	3.0	37.7	6.1	0.7	6.8	
2/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	459	459	251	19	6	2.0	0.6	0.4	3.0	23.7	8.2	0.6	8.8	
4/1	238	238	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	359	359	-	-	-	1.6	0.4	-	2.0	19.9	5.9	0.4	6.2	
6/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalised Lanes (%): 54.6 Total Delay for Signalised Lanes (pcuHr): 7.98 Cycle Time (s): 88 PRC Over All Lanes (%): 54.6 Total Delay Over All Lanes(pcuHr): 7.98														

Appendix 5

LINSIG3 Output – Dragon Lane/Stoney Lane/Meadway Signalised Junction

Basic Input Data and Results**User and Project Details**

Project:	
Title:	
Location:	
Additional detail:	
File name:	Dragon Lane-Stoney Lane-Meadway Signalised junction.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2025 Surveyed Flows - AM Peak	2025 Surveyed Flows - AM Peak	Network Control Plan 1	08:00 - 09:00	170	11.2	16.11
2	2025 Surveyed Flows - PM Peak	2025 Surveyed Flows - PM Peak	Network Control Plan 1	17:00 - 18:00	170	25.9	12.69
3	2031 Base Flows - AM Peak	2031 Base Flows - AM Peak	Network Control Plan 1	08:00 - 09:00	170	-0.8	22.45
4	2031 Base Flows - PM Peak	2031 Base Flows - PM Peak	Network Control Plan 1	17:00 - 18:00	170	10.6	15.94
5	2031 with Development Flows - AM Peak	2031 with Development Flows - AM Peak	Network Control Plan 1	08:00 - 09:00	170	-4.9	27.19
6	2031 with Development Flows - PM Peak	2031 with Development Flows - PM Peak	Network Control Plan 1	17:00 - 18:00	170	5.5	17.32

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		7	7
F	Pedestrian		7	7

Basic Input Data and Results

Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		6	-	6	8	9
	B	6		6	6	8	8
	C	-	6		6	8	9
	D	6	6	6		8	6
	E	0	0	0	0		-
	F	0	0	0	0	-	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage					
		1	2	3	4	5
	1		0	9	6	6
	2	2		9	6	6
	3	2	2		2	2
	4	6	6	8		6
	5	6	6	8	6	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	A
3	E F
4	B
5	D

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (Dragon Lane (N))	U	C	2	3	7.0	Geom	-	2.90	0.00	Y	Arm 2 Left	15.00
1/2 (Dragon Lane (N))	O	C	2	3	60.0	Geom	-	2.90	0.00	N	Arm 4 Ahead Arm 6 Right	Inf Inf
2/1 (Stoney Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Stoney Lane)	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Left	12.00
											Arm 6 Ahead Arm 8 Right	Inf 12.00
4/1 (Dragon Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Dragon Lane (S))	U	A	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 6 Left	Inf
											Arm 8 Ahead	Inf
5/2 (Dragon Lane (S))	O	A	2	3	5.0	Geom	-	2.80	0.00	N	Arm 2 Right	12.00
6/1 (Meadway)	U		2	3	60.0	Inf	-	-	-	-	-	-
											Arm 2 Ahead	Inf
7/1 (Meadway)	U	B	2	3	7.8	Geom	-	2.60	0.00	Y	Arm 4 Right	11.00
											Arm 8 Left	11.00
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Basic Input Data and Results
Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (Dragon Lane (N))	6/1 (Right)	1439	0	5/1	1.09	All	2.00	2.00	0.50	2	2.00
5/2 (Dragon LAne (S))	2/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				1/2	1.09	To 4/1 (Ahead)					

Basic Input Data and Results

Scenario 1: '2025 Surveyed Flows - AM Peak' (FG1: '2025 Surveyed Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Dragon Lane (N))	2.90	0.00	Y	Arm 2 Left	15.00	100.0 %	1732	1732
1/2 (Dragon Lane (N))	2.90	0.00	N	Arm 4 Ahead Arm 6 Right	Inf Inf	98.7 % 1.3 %	2045	2045
2/1 (Stoney Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane)	3.25	0.00	Y	Arm 4 Left Arm 6 Ahead Arm 8 Right	12.00 Inf 12.00	14.3 % 0.2 % 85.4 %	1725	1725
4/1 (Dragon Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Dragon LAne (S))	2.80	0.00	Y	Arm 6 Left Arm 8 Ahead	Inf Inf	0.3 % 99.7 %	1895	1895
5/2 (Dragon LAne (S))	2.80	0.00	N	Arm 2 Right	12.00	100.0 %	1809	1809
6/1 (Meadway Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Meadway)	2.60	0.00	Y	Arm 2 Ahead Arm 4 Right Arm 8 Left	Inf 11.00 11.00	66.7 % 33.3 % 0.0 %	1793	1793
8/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2025 Surveyed Flows - PM Peak' (FG2: '2025 Surveyed Flows - PM Peak', Plan 1: 'Network Control

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Dragon Lane (N))	2.90	0.00	Y	Arm 2 Left	15.00	100.0 %	1732	1732
1/2 (Dragon Lane (N))	2.90	0.00	N	Arm 4 Ahead	Inf	98.9 %	2045	2045
				Arm 6 Right	Inf	1.1 %		
2/1 (Stoney Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane)	3.25	0.00	Y	Arm 4 Left	12.00	17.9 %	1724	1724
				Arm 6 Ahead	Inf	0.0 %		
				Arm 8 Right	12.00	82.1 %		
4/1 (Dragon Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Dragon Lane (S))	2.80	0.00	Y	Arm 6 Left	Inf	0.3 %	1895	1895
				Arm 8 Ahead	Inf	99.7 %		
5/2 (Dragon Lane (S))	2.80	0.00	N	Arm 2 Right	12.00	100.0 %	1809	1809
6/1 (Meadway Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Meadway)	2.60	0.00	Y	Arm 2 Ahead	Inf	0.0 %	1875	1875
				Arm 4 Right	11.00	0.0 %		
				Arm 8 Left	11.00	0.0 %		
8/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2031 Base Flows - AM Peak' (FG3: '2031 Base Flows - AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Dragon Lane (N))	2.90	0.00	Y	Arm 2 Left	15.00	100.0 %	1732	1732
1/2 (Dragon Lane (N))	2.90	0.00	N	Arm 4 Ahead	Inf	98.8 %	2045	2045
				Arm 6 Right	Inf	1.2 %		
2/1 (Stoney Lane Lane 1)				Infinite Saturation Flow			Inf	Inf
3/1 (Stoney Lane)	3.25	0.00	Y	Arm 4 Left	12.00	14.4 %	1725	1725
				Arm 6 Ahead	Inf	0.2 %		
				Arm 8 Right	12.00	85.4 %		
4/1 (Dragon Lane Lane 1)				Infinite Saturation Flow			Inf	Inf
5/1 (Dragon LAne (S))	2.80	0.00	Y	Arm 6 Left	Inf	0.2 %	1895	1895
				Arm 8 Ahead	Inf	99.8 %		
5/2 (Dragon LAne (S))	2.80	0.00	N	Arm 2 Right	12.00	100.0 %	1809	1809
6/1 (Meadway Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (Meadway)	2.60	0.00	Y	Arm 2 Ahead	Inf	66.7 %	1793	1793
				Arm 4 Right	11.00	33.3 %		
				Arm 8 Left	11.00	0.0 %		
8/1				Infinite Saturation Flow			Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2031 Base Flows - PM Peak' (FG4: '2031 Base Flows - PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Dragon Lane (N))	2.90	0.00	Y	Arm 2 Left	15.00	100.0 %	1732	1732
1/2 (Dragon Lane (N))	2.90	0.00	N	Arm 4 Ahead	Inf	98.9 %	2045	2045
				Arm 6 Right	Inf	1.1 %		
2/1 (Stoney Lane Lane 1)				Infinite Saturation Flow			Inf	Inf
3/1 (Stoney Lane)	3.25	0.00	Y	Arm 4 Left	12.00	18.0 %	1724	1724
				Arm 6 Ahead	Inf	0.0 %		
				Arm 8 Right	12.00	82.0 %		
4/1 (Dragon Lane Lane 1)				Infinite Saturation Flow			Inf	Inf
5/1 (Dragon LAne (S))	2.80	0.00	Y	Arm 6 Left	Inf	0.3 %	1895	1895
				Arm 8 Ahead	Inf	99.7 %		
5/2 (Dragon LAne (S))	2.80	0.00	N	Arm 2 Right	12.00	100.0 %	1809	1809
6/1 (Meadway Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (Meadway)	2.60	0.00	Y	Arm 2 Ahead	Inf	0.0 %	1875	1875
				Arm 4 Right	11.00	0.0 %		
				Arm 8 Left	11.00	0.0 %		
8/1				Infinite Saturation Flow			Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2031 with Development Flows - AM Peak' (FG5: '2031 with Development Flows - AM Peak', Plan 1:

Basic Input Data and Results

'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Dragon Lane (N))	2.90	0.00	Y	Arm 2 Left	15.00	100.0 %	1732	1732
1/2 (Dragon Lane (N))	2.90	0.00	N	Arm 4 Ahead	Inf	98.8 %	2045	2045
				Arm 6 Right	Inf	1.2 %		
2/1 (Stoney Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane)	3.25	0.00	Y	Arm 4 Left	12.00	14.3 %	1724	1724
				Arm 6 Ahead	Inf	0.0 %		
				Arm 8 Right	12.00	85.7 %		
4/1 (Dragon Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Dragon LAne (S))	2.80	0.00	Y	Arm 6 Left	Inf	0.2 %	1895	1895
				Arm 8 Ahead	Inf	99.8 %		
5/2 (Dragon LAne (S))	2.80	0.00	N	Arm 2 Right	12.00	100.0 %	1809	1809
6/1 (Meadway Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Meadway)	2.60	0.00	Y	Arm 2 Ahead	Inf	66.7 %	1793	1793
				Arm 4 Right	11.00	33.3 %		
				Arm 8 Left	11.00	0.0 %		
8/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2031 with Development Flows - PM Peak' (FG6: '2031 with Development Flows - PM Peak', Plan 1:

Basic Input Data and Results

'Network Control Plan 1')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Dragon Lane (N))	2.90	0.00	Y	Arm 2 Left	15.00	100.0 %	1732	1732
1/2 (Dragon Lane (N))	2.90	0.00	N	Arm 4 Ahead	Inf	98.9 %	2045	2045
				Arm 6 Right	Inf	1.1 %		
2/1 (Stoney Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
3/1 (Stoney Lane)	3.25	0.00	Y	Arm 4 Left	12.00	17.7 %	1724	1724
				Arm 6 Ahead	Inf	0.0 %		
				Arm 8 Right	12.00	82.3 %		
4/1 (Dragon Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Dragon LAne (S))	2.80	0.00	Y	Arm 6 Left	Inf	0.3 %	1895	1895
				Arm 8 Ahead	Inf	99.7 %		
5/2 (Dragon LAne (S))	2.80	0.00	N	Arm 2 Right	12.00	100.0 %	1809	1809
6/1 (Meadway Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Meadway)	2.60	0.00	Y	Arm 2 Ahead	Inf	0.0 %	1875	1875
				Arm 4 Right	11.00	0.0 %		
				Arm 8 Left	11.00	0.0 %		
8/1	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 Surveyed Flows - AM Peak'	08:00	09:00	01:00	
2: '2025 Surveyed Flows - PM Peak'	17:00	18:00	01:00	
3: '2031 Base Flows - AM Peak'	08:00	09:00	01:00	
4: '2031 Base Flows - PM Peak'	17:00	18:00	01:00	
5: '2031 with Development Flows - AM Peak'	08:00	09:00	01:00	
6: '2031 with Development Flows - PM Peak'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2025 Surveyed Flows - AM Peak'

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	385	234	3	622
	B	393	0	66	1	460
	C	395	83	0	1	479
	D	0	2	1	0	3
	Tot.	788	470	301	5	1564

FG2: '2025 Surveyed Flows - PM Peak'

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	320	258	3	581
	B	345	0	75	0	420
	C	332	72	0	1	405
	D	0	0	0	0	0
	Tot.	677	392	333	4	1406

FG3: '2031 Base Flows - AM Peak'

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	418	247	3	668
	B	456	0	77	1	534
	C	417	90	0	1	508
	D	0	2	1	0	3
	Tot.	873	510	325	5	1713

FG4: '2031 Base Flows - PM Peak'

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	369	272	3	644
	B	387	0	85	0	472
	C	350	84	0	1	435
	D	0	0	0	0	0
	Tot.	737	453	357	4	1551

Basic Input Data and Results

FG5: '2031 with Development Flows - AM Peak'

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	429	247	3	679
	B	484	0	81	0	565
	C	417	91	0	1	509
	D	0	2	1	0	3
	Tot.	901	522	329	4	1756

FG6: '2031 with Development Flows - PM Peak'

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	395	272	3	670
	B	399	0	86	0	485
	C	350	87	0	1	438
	D	0	0	0	0	0
	Tot.	749	482	358	4	1593

Scenario 1: '2025 Surveyed Flows - AM Peak' (FG1: '2025 Surveyed Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	3	5	1	3	4	5
Duration	34	7	34	21	7	7	20
Change Point	0	40	56	92	119	135	144

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Dragon LANE (S) Right Left Ahead	Traffic	34	6	40	21	98	119
B	Meadway Ahead Right Left	Traffic	7	137	144			
C	Dragon Lane (N) Left Ahead Right	Traffic	34	6	40	21	98	119
D	Stoney Lane Left Ahead Right	Traffic	34	58	92	20	150	0
E	Pedestrians across Phase I in the Signal timing data	Pedestrian	8	48	56	8	127	135
F	Pedestrians across Phase H in the Signal Timing Data	Pedestrian	7	49	56	7	128	135

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	81.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	81.0%
1/2+1/1	Dragon Lane (N) Left Ahead Right	O+U	N/A	N/A	C		2	55	-	-	622	2045:1732	294+477	80.7 : 80.7%
2/1	Stoney Lane	U	N/A	N/A	-		-	-	-	-	470	Inf	Inf	0.0%
3/1	Stoney Lane Left Ahead Right	U	N/A	N/A	D		2	54	-	-	460	1725	568	81.0%
4/1	Dragon Lane	U	N/A	N/A	-		-	-	-	-	301	Inf	Inf	0.0%
5/1+5/2	Dragon LAne (S) Right Left Ahead	U+O	N/A	N/A	A		2	55	-	-	479	1895:1809	568+119	69.7 : 69.7%
6/1	Meadway	U	N/A	N/A	-		-	-	-	-	5	Inf	Inf	0.0%
7/1	Meadway Ahead Right Left	U	N/A	N/A	B		1	7	-	-	3	1793	84	3.6%
8/1		U	N/A	N/A	-		-	-	-	-	788	Inf	Inf	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	64	0	22	10.5	5.2	0.3	16.1	-	-	-	-	
Unnamed Junction	-	-	64	0	22	10.5	5.2	0.3	16.1	-	-	-	-	
1/2+1/1	622	622	3	0	0	4.0	2.0	0.0	6.1	35.0	8.7	2.0	10.8	
2/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	460	460	-	-	-	3.3	2.0	-	5.4	42.1	9.8	2.0	11.9	
4/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1+5/2	479	479	61	0	22	3.1	1.1	0.3	4.6	34.5	8.7	1.1	9.8	
6/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	3	3	-	-	-	0.1	0.0	-	0.1	99.8	0.1	0.0	0.2	
8/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalled Lanes (%): 11.2 PRC Over All Lanes (%): 11.2 Total Delay for Signalled Lanes (pcuHr): 16.11 Total Delay Over All Lanes(pcuHr): 16.11 Cycle Time (s): 170														

Basic Input Data and Results

Scenario 2: '2025 Surveyed Flows - PM Peak' (FG2: '2025 Surveyed Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	3	5	1	3	4	5
Duration	40	7	35	13	7	7	21
Change Point	0	46	62	99	118	134	143

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Dragon Lane (S) Right Left Ahead	Traffic	40	6	46	13	105	118
B	Meadway Ahead Right Left	Traffic	7	136	143			
C	Dragon Lane (N) Left Ahead Right	Traffic	40	6	46	13	105	118
D	Stoney Lane Left Ahead Right	Traffic	35	64	99	21	149	0
E	Pedestrians across Phase I in the Signal timing data	Pedestrian	8	54	62	8	126	134
F	Pedestrians across Phase H in the Signal Timing Data	Pedestrian	7	55	62	7	127	134

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	71.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	71.5%
1/2+1/1	Dragon Lane (N) Left Ahead Right	O+U	N/A	N/A	C		2	53	-	-	581	2045:1732	365+448	71.5 : 71.5%
2/1	Stoney Lane	U	N/A	N/A	-		-	-	-	-	392	Inf	Inf	0.0%
3/1	Stoney Lane Left Ahead Right	U	N/A	N/A	D		2	56	-	-	420	1724	588	71.4%
4/1	Dragon Lane	U	N/A	N/A	-		-	-	-	-	333	Inf	Inf	0.0%
5/1+5/2	Dragon LAne (S) Right Left Ahead	U+O	N/A	N/A	A		2	53	-	-	405	1895:1809	548+118	60.8 : 60.8%
6/1	Meadway	U	N/A	N/A	-		-	-	-	-	4	Inf	Inf	0.0%
7/1	Meadway Ahead Right Left	U	N/A	N/A	B		1	7	-	-	0	1875	88	0.0%
8/1		U	N/A	N/A	-		-	-	-	-	677	Inf	Inf	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	48	0	27	9.2	3.2	0.2	12.7	-	-	-	-	
Unnamed Junction	-	-	48	0	27	9.2	3.2	0.2	12.7	-	-	-	-	
1/2+1/1	581	581	3	0	0	3.7	1.2	0.0	5.0	30.9	6.3	1.2	7.6	
2/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	420	420	-	-	-	2.9	1.2	-	4.1	35.3	9.7	1.2	10.9	
4/1	333	333	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1+5/2	405	405	45	0	27	2.6	0.8	0.2	3.6	31.9	6.8	0.8	7.6	
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	677	677	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalled Lanes (%): 25.9 PRC Over All Lanes (%): 25.9 Total Delay for Signalled Lanes (pcuHr): 12.69 Total Delay Over All Lanes(pcuHr): 12.69 Cycle Time (s): 170														

Basic Input Data and Results

Scenario 3: '2031 Base Flows - AM Peak' (FG3: '2031 Base Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	3	5	1	3	4	5
Duration	34	7	31	19	7	7	25
Change Point	0	40	56	89	114	130	139

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Dragon Lane (S) Right Left Ahead	Traffic	34	6	40	19	95	114
B	Meadway Ahead Right Left	Traffic	7	132	139			
C	Dragon Lane (N) Left Ahead Right	Traffic	34	6	40	19	95	114
D	Stoney Lane Left Ahead Right	Traffic	31	58	89	25	145	0
E	Pedestrians across Phase I in the Signal timing data	Pedestrian	8	48	56	8	122	130
F	Pedestrians across Phase H in the Signal Timing Data	Pedestrian	7	49	56	7	123	130

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	90.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	90.7%
1/2+1/1	Dragon Lane (N) Left Ahead Right	O+U	N/A	N/A	C		2	53	-	-	668	2045:1732	278+466	89.8 : 89.8%
2/1	Stoney Lane	U	N/A	N/A	-		-	-	-	-	510	Inf	Inf	0.0%
3/1	Stoney Lane Left Ahead Right	U	N/A	N/A	D		2	56	-	-	534	1725	589	90.7%
4/1	Dragon Lane	U	N/A	N/A	-		-	-	-	-	325	Inf	Inf	0.0%
5/1+5/2	Dragon LAne (S) Right Left Ahead	U+O	N/A	N/A	A		2	53	-	-	508	1895:1809	548+118	76.2 : 76.2%
6/1	Meadway	U	N/A	N/A	-		-	-	-	-	5	Inf	Inf	0.0%
7/1	Meadway Ahead Right Left	U	N/A	N/A	B		1	7	-	-	3	1793	84	3.6%
8/1		U	N/A	N/A	-		-	-	-	-	873	Inf	Inf	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	49	0	44	12.2	9.8	0.4	22.4	-	-	-	-	
Unnamed Junction	-	-	49	0	44	12.2	9.8	0.4	22.4	-	-	-	-	
1/2+1/1	668	668	3	0	0	4.6	4.0	0.0	8.6	46.5	11.4	4.0	15.4	
2/1	510	510	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	534	534	-	-	-	4.0	4.2	-	8.2	55.3	12.2	4.2	16.4	
4/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1+5/2	508	508	46	0	44	3.5	1.6	0.4	5.5	39.2	10.1	1.6	11.6	
6/1	5	5	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	3	3	-	-	-	0.1	0.0	-	0.1	99.8	0.1	0.0	0.2	
8/1	873	873	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalled Lanes (%): -0.8 PRC Over All Lanes (%): -0.8 Total Delay for Signalled Lanes (pcuHr): 22.45 Total Delay Over All Lanes(pcuHr): 22.45 Cycle Time (s): 170														

Basic Input Data and Results

Scenario 4: '2031 Base Flows - PM Peak' (FG4: '2031 Base Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	3	5	1	3	4	5
Duration	40	7	29	13	7	7	27
Change Point	0	46	62	93	112	128	137

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Dragon Lane (S) Right Left Ahead	Traffic	40	6	46	13	99	112
B	Meadway Ahead Right Left	Traffic	7	130	137			
C	Dragon Lane (N) Left Ahead Right	Traffic	40	6	46	13	99	112
D	Stoney Lane Left Ahead Right	Traffic	29	64	93	27	143	0
E	Pedestrians across Phase I in the Signal timing data	Pedestrian	8	54	62	8	120	128
F	Pedestrians across Phase H in the Signal Timing Data	Pedestrian	7	55	62	7	121	128

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	81.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	81.4%
1/2+1/1	Dragon Lane (N) Left Ahead Right	O+U	N/A	N/A	C		2	53	-	-	644	2045:1732	338+453	81.4 : 81.4%
2/1	Stoney Lane	U	N/A	N/A	-		-	-	-	-	453	Inf	Inf	0.0%
3/1	Stoney Lane Left Ahead Right	U	N/A	N/A	D		2	56	-	-	472	1724	588	80.2%
4/1	Dragon Lane	U	N/A	N/A	-		-	-	-	-	357	Inf	Inf	0.0%
5/1+5/2	Dragon LAne (S) Right Left Ahead	U+O	N/A	N/A	A		2	53	-	-	435	1895:1809	542+130	64.8 : 64.8%
6/1	Meadway	U	N/A	N/A	-		-	-	-	-	4	Inf	Inf	0.0%
7/1	Meadway Ahead Right Left	U	N/A	N/A	B		1	7	-	-	0	1875	88	0.0%
8/1		U	N/A	N/A	-		-	-	-	-	737	Inf	Inf	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	54	0	33	10.6	5.0	0.3	15.9	-	-	-	-	
Unnamed Junction	-	-	54	0	33	10.6	5.0	0.3	15.9	-	-	-	-	
1/2+1/1	644	644	3	0	0	4.3	2.1	0.0	6.5	36.2	9.7	2.1	11.8	
2/1	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	472	472	-	-	-	3.4	2.0	-	5.3	40.8	11.3	2.0	13.2	
4/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1+5/2	435	435	51	0	33	2.9	0.9	0.3	4.1	34.1	8.2	0.9	9.1	
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalled Lanes (%): 10.6 PRC Over All Lanes (%): 10.6 Total Delay for Signalled Lanes (pcuHr): 15.94 Total Delay Over All Lanes(pcuHr): 15.94 Cycle Time (s): 170														

Basic Input Data and Results

Scenario 5: '2031 with Development Flows - AM Peak' (FG5: '2031 with Development Flows - AM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	3	5	1	3	4	5
Duration	27	7	28	25	7	7	29
Change Point	0	33	49	79	110	126	135

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Dragon Lane (S) Right Left Ahead	Traffic	27	6	33	25	85	110
B	Meadway Ahead Right Left	Traffic	7	128	135			
C	Dragon Lane (N) Left Ahead Right	Traffic	27	6	33	25	85	110
D	Stoney Lane Left Ahead Right	Traffic	28	51	79	29	141	0
E	Pedestrians across Phase I in the Signal timing data	Pedestrian	8	41	49	8	118	126
F	Pedestrians across Phase H in the Signal Timing Data	Pedestrian	7	42	49	7	119	126

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	94.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	94.4%
1/2+1/1	Dragon Lane (N) Left Ahead Right	O+U	N/A	N/A	C		2	52	-	-	679	2045:1732	268+460	93.2 : 93.2%
2/1	Stoney Lane	U	N/A	N/A	-		-	-	-	-	522	Inf	Inf	0.0%
3/1	Stoney Lane Left Ahead Right	U	N/A	N/A	D		2	57	-	-	565	1724	598	94.4%
4/1	Dragon Lane	U	N/A	N/A	-		-	-	-	-	329	Inf	Inf	0.0%
5/1+5/2	Dragon LAne (S) Right Left Ahead	U+O	N/A	N/A	A		2	52	-	-	509	1895:1809	539+104	77.6 : 87.4%
6/1	Meadway	U	N/A	N/A	-		-	-	-	-	4	Inf	Inf	0.0%
7/1	Meadway Ahead Right Left	U	N/A	N/A	B		1	7	-	-	3	1793	84	3.6%
8/1		U	N/A	N/A	-		-	-	-	-	901	Inf	Inf	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	33	0	61	13.0	13.7	0.5	27.2	-	-	-	-	
Unnamed Junction	-	-	33	0	61	13.0	13.7	0.5	27.2	-	-	-	-	
1/2+1/1	679	679	3	0	0	4.9	5.6	0.0	10.5	55.9	13.3	5.6	18.9	
2/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	565	565	-	-	-	4.3	6.2	-	10.5	66.6	14.1	6.2	20.3	
4/1	329	329	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1+5/2	509	509	30	0	61	3.8	1.9	0.5	6.1	43.2	10.9	1.9	12.8	
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	3	3	-	-	-	0.1	0.0	-	0.1	99.8	0.1	0.0	0.2	
8/1	901	901	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalled Lanes (%): -4.9 PRC Over All Lanes (%): -4.9 Total Delay for Signalled Lanes (pcuHr): 27.19 Total Delay Over All Lanes(pcuHr): 27.19 Cycle Time (s): 170														

Basic Input Data and Results

Scenario 6: '2031 with Development Flows - PM Peak' (FG6: '2031 with Development Flows - PM Peak', Plan 1: 'Network Control Plan 1')

Stage Timings

Stage	1	3	5	1	3	4	5
Duration	35	7	34	19	7	7	21
Change Point	0	41	57	93	118	134	143

Phase Timings

Phase Name	Description	Phase	Green Period 1			Green Period 2		
			Total Green	Start Time	End Time	Total Green	Start Time	End Time
A	Dragon LANE (S) Right Left Ahead	Traffic	35	6	41	19	99	118
B	Meadway Ahead Right Left	Traffic	7	136	143			
C	Dragon Lane (N) Left Ahead Right	Traffic	35	6	41	19	99	118
D	Stoney Lane Left Ahead Right	Traffic	34	59	93	21	149	0
E	Pedestrians across Phase I in the Signal timing data	Pedestrian	8	49	57	8	126	134
F	Pedestrians across Phase H in the Signal Timing Data	Pedestrian	7	50	57	7	127	134

Basic Input Data and Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	-	85.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	85.3%
1/2+1/1	Dragon Lane (N) Left Ahead Right	O+U	N/A	N/A	C		2	54	-	-	670	2045:1732	322+463	85.3 : 85.3%
2/1	Stoney Lane	U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%
3/1	Stoney Lane Left Ahead Right	U	N/A	N/A	D		2	55	-	-	485	1724	578	83.9%
4/1	Dragon Lane	U	N/A	N/A	-		-	-	-	-	358	Inf	Inf	0.0%
5/1+5/2	Dragon LAne (S) Right Left Ahead	U+O	N/A	N/A	A		2	54	-	-	438	1895:1809	548+136	64.0 : 64.0%
6/1	Meadway	U	N/A	N/A	-		-	-	-	-	4	Inf	Inf	0.0%
7/1	Meadway Ahead Right Left	U	N/A	N/A	B		1	7	-	-	0	1875	88	0.0%
8/1		U	N/A	N/A	-		-	-	-	-	749	Inf	Inf	0.0%

Basic Input Data and Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network	-	-	52	0	38	10.8	6.1	0.4	17.3	-	-	-	-	
Unnamed Junction	-	-	52	0	38	10.8	6.1	0.4	17.3	-	-	-	-	
1/2+1/1	670	670	3	0	0	4.5	2.8	0.0	7.2	38.9	9.3	2.8	12.0	
2/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
3/1	485	485	-	-	-	3.5	2.5	-	6.0	44.5	10.8	2.5	13.3	
4/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1+5/2	438	438	49	0	38	2.8	0.9	0.4	4.1	33.6	7.3	0.9	8.2	
6/1	4	4	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
C1 PRC for Signalled Lanes (%): 5.5 PRC Over All Lanes (%): 5.5 Total Delay for Signalled Lanes (pcuHr): 17.32 Total Delay Over All Lanes(pcuHr): 17.32 Cycle Time (s): 170														

Appendix 6

JUNCTIONS11 Output – Stoney Lane/Old Lane Mini Roundabout Junction

Junctions 11											
ARCADY 11 - Roundabout Module											
Version: 11.0.0.2177											
© Copyright TRL Software Limited, 2024											
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: Old Lane-Stoney Lane Mini roundabout.j11
Path: Z:\projects\4726 Glen Dimplex Site, Whiston\Arcady
Report generation date: 15/07/2026 11:29:09

- »2025 Surveyed Flows | | AM
- »2025 Surveyed Flows | | PM
- »2031 Base Flows | | AM
- »2031 Base Flows | | PM
- »2031 with Development Flows | | AM
- »2031 with Development Flows | | PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2025 Surveyed Flows											
Arm 1	D1	0.6	6.86	0.36	A	6.33	D2	0.3	5.39	0.23	A	5.43
Arm 2		0.6	5.36	0.38	A			0.4	4.53	0.28	A	
Arm 3		0.6	7.12	0.38	A			0.5	6.50	0.32	A	
	2031 Base Flows											
Arm 1	D3	0.6	7.30	0.39	A	6.75	D4	0.3	5.62	0.26	A	5.70
Arm 2		0.7	5.62	0.41	A			0.4	4.77	0.31	A	
Arm 3		0.7	7.71	0.42	A			0.5	6.85	0.35	A	
	2031 with Development Flows											
Arm 1	D5	0.7	7.53	0.40	A	7.00	D6	0.3	5.68	0.26	A	5.80
Arm 2		0.7	5.71	0.42	A			0.5	4.91	0.33	A	
Arm 3		0.8	8.13	0.45	A			0.6	6.96	0.36	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	26/05/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD\George.Monks
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
JUNCTIONS 9	5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 Surveyed Flows	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025 Surveyed Flows	PM	ONE HOUR	17:00	18:30	15	✓
D3	2031 Base Flows	AM	ONE HOUR	08:00	09:30	15	✓
D4	2031 Base Flows	PM	ONE HOUR	17:00	18:30	15	✓
D5	2031 with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓
D6	2031 with Development Flows	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2025 Surveyed Flows | | AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	6.33	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		6.33	A

Arms

Arms

Arm	Name	Description
1	Old Lane (N)	
2	Old Lane (S)	
3	Stoney Lane	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.60	3.60	3.60	0.0	11.50	11.00	0.0	
2	3.50	3.50	4.70	8.1	10.00	7.20	0.0	
3	3.30	3.30	3.70	0.8	7.40	6.40	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.616	956
2	0.640	1153
3	0.608	907

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

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025 Surveyed Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	268	100.000
2		ONE HOUR	✓	376	100.000
3		ONE HOUR	✓	282	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	172	96
	2	136	0	240
	3	81	201	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	6.86	0.6	A	246	369
2	0.38	5.36	0.6	A	345	518
3	0.38	7.12	0.6	A	259	388

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	202	50	150	863	0.234	201	162	0.0	0.3	5.424	A
2	283	71	72	1107	0.256	282	279	0.0	0.3	4.355	A
3	212	53	102	845	0.251	211	252	0.0	0.3	5.668	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	241	60	180	845	0.285	241	195	0.3	0.4	5.956	A
2	338	85	86	1098	0.308	338	335	0.3	0.4	4.733	A
3	254	63	122	833	0.305	253	302	0.3	0.4	6.209	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	295	74	221	820	0.360	294	238	0.4	0.6	6.845	A
2	414	103	105	1085	0.381	413	410	0.4	0.6	5.350	A
3	310	78	149	816	0.381	310	369	0.4	0.6	7.102	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	295	74	221	819	0.360	295	239	0.6	0.6	6.865	A
2	414	103	106	1085	0.381	414	411	0.6	0.6	5.361	A
3	310	78	150	816	0.381	310	370	0.6	0.6	7.124	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	241	60	181	844	0.285	242	196	0.6	0.4	5.980	A
2	338	85	87	1098	0.308	339	336	0.6	0.4	4.749	A
3	254	63	123	832	0.305	254	303	0.6	0.4	6.236	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	202	50	152	862	0.234	202	164	0.4	0.3	5.457	A
2	283	71	72	1107	0.256	283	281	0.4	0.3	4.375	A
3	212	53	103	844	0.251	213	253	0.4	0.3	5.702	A

2025 Surveyed Flows | PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.43	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		5.43	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025 Surveyed Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	183	100.000
2		ONE HOUR	✓	278	100.000
3		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	109	74
	2	133	0	145
	3	112	128	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.23	5.39	0.3	A	168	252
2	0.28	4.53	0.4	A	255	383
3	0.32	6.50	0.5	A	220	330

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	138	34	96	897	0.154	137	184	0.0	0.2	4.735	A
2	209	52	55	1118	0.187	208	177	0.0	0.2	3.955	A
3	181	45	100	846	0.214	180	164	0.0	0.3	5.392	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	41	115	885	0.186	164	220	0.2	0.2	4.994	A
2	250	62	66	1110	0.225	250	213	0.2	0.3	4.181	A
3	216	54	119	834	0.259	215	197	0.3	0.3	5.816	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	201	50	141	869	0.232	201	269	0.2	0.3	5.387	A
2	306	77	81	1101	0.278	306	260	0.3	0.4	4.525	A
3	264	66	146	818	0.323	264	241	0.3	0.5	6.492	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	201	50	141	869	0.232	201	270	0.3	0.3	5.393	A
2	306	77	81	1101	0.278	306	261	0.4	0.4	4.529	A
3	264	66	146	818	0.323	264	241	0.5	0.5	6.503	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	41	115	885	0.186	165	221	0.3	0.2	5.004	A
2	250	62	67	1110	0.225	250	213	0.4	0.3	4.187	A
3	216	54	120	834	0.259	216	197	0.5	0.4	5.834	A

18:15 - 18:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	138	34	97	896	0.154	138	185	0.2	0.2	4.750	A
2	209	52	56	1117	0.187	210	179	0.3	0.2	3.966	A
3	181	45	100	846	0.214	181	165	0.4	0.3	5.419	A

2031 Base Flows | | AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	6.75	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		6.75	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031 Base Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	285	100.000
2		ONE HOUR	✓	400	100.000
3		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	182	103
	2	144	0	256
	3	93	219	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.39	7.30	0.6	A	262	392
2	0.41	5.62	0.7	A	367	551
3	0.42	7.71	0.7	A	286	429

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	215	54	164	855	0.251	213	177	0.0	0.3	5.600	A
2	301	75	77	1104	0.273	300	300	0.0	0.4	4.469	A
3	235	59	108	841	0.279	233	269	0.0	0.4	5.909	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	256	64	197	835	0.307	256	213	0.3	0.4	6.215	A
2	360	90	92	1094	0.329	359	360	0.4	0.5	4.896	A
3	280	70	129	828	0.339	280	322	0.4	0.5	6.562	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	314	78	241	808	0.389	313	260	0.4	0.6	7.270	A
2	440	110	113	1081	0.408	440	440	0.5	0.7	5.609	A
3	344	86	158	811	0.424	343	394	0.5	0.7	7.679	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	314	78	241	807	0.389	314	261	0.6	0.6	7.295	A
2	440	110	113	1080	0.408	440	441	0.7	0.7	5.624	A
3	344	86	159	810	0.424	343	395	0.7	0.7	7.710	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	256	64	197	834	0.307	257	214	0.6	0.4	6.247	A
2	360	90	93	1094	0.329	360	362	0.7	0.5	4.916	A
3	280	70	130	828	0.339	281	323	0.7	0.5	6.598	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	215	54	165	854	0.251	215	179	0.4	0.3	5.637	A
2	301	75	78	1103	0.273	302	303	0.5	0.4	4.494	A
3	235	59	109	841	0.279	235	271	0.5	0.4	5.953	A

2031 Base Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.70	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		5.70	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 Base Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	201	100.000
2		ONE HOUR	✓	307	100.000
3		ONE HOUR	✓	261	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	0	115	86
	2	140	0	167
	3	122	139	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	1	2	3	
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.26	5.62	0.3	A	184	277
2	0.31	4.77	0.4	A	282	423
3	0.35	6.85	0.5	A	239	359

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	151	38	104	892	0.170	151	196	0.0	0.2	4.852	A
2	231	58	64	1112	0.208	230	190	0.0	0.3	4.077	A
3	196	49	105	843	0.233	195	190	0.0	0.3	5.548	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	181	45	125	879	0.206	180	235	0.2	0.3	5.153	A
2	276	69	77	1104	0.250	276	228	0.3	0.3	4.347	A
3	235	59	126	830	0.283	234	227	0.3	0.4	6.035	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	221	55	153	862	0.257	221	288	0.3	0.3	5.617	A
2	338	85	95	1092	0.309	338	279	0.3	0.4	4.765	A
3	287	72	154	813	0.353	287	278	0.4	0.5	6.832	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	221	55	153	861	0.257	221	288	0.3	0.3	5.623	A
2	338	85	95	1092	0.309	338	280	0.4	0.4	4.771	A
3	287	72	154	813	0.353	287	279	0.5	0.5	6.847	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	181	45	125	879	0.206	181	236	0.3	0.3	5.163	A
2	276	69	77	1103	0.250	276	229	0.4	0.3	4.355	A
3	235	59	126	830	0.283	235	228	0.5	0.4	6.059	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	151	38	105	891	0.170	152	198	0.3	0.2	4.868	A
2	231	58	65	1112	0.208	231	192	0.3	0.3	4.093	A
3	196	49	106	843	0.233	197	191	0.4	0.3	5.579	A

2031 with Development Flows | | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	7.00	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.00	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031 with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	286	100.000
2		ONE HOUR	✓	408	100.000
3		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	182	104
	2	144	0	264
	3	94	240	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.40	7.53	0.7	A	262	394
2	0.42	5.71	0.7	A	374	562
3	0.45	8.13	0.8	A	306	460

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	215	54	179	845	0.255	214	178	0.0	0.3	5.692	A
2	307	77	78	1103	0.278	306	316	0.0	0.4	4.506	A
3	251	63	108	841	0.299	250	276	0.0	0.4	6.070	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	257	64	215	823	0.312	257	214	0.3	0.4	6.350	A
2	367	92	93	1093	0.335	366	379	0.4	0.5	4.949	A
3	300	75	129	828	0.363	300	330	0.4	0.6	6.805	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	315	79	264	793	0.397	314	261	0.4	0.6	7.499	A
2	449	112	114	1080	0.416	448	463	0.5	0.7	5.694	A
3	368	92	158	811	0.454	367	404	0.6	0.8	8.093	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	315	79	264	793	0.397	315	262	0.6	0.7	7.529	A
2	449	112	114	1080	0.416	449	465	0.7	0.7	5.709	A
3	368	92	159	810	0.454	368	405	0.8	0.8	8.131	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	257	64	216	822	0.313	258	215	0.7	0.5	6.388	A
2	367	92	94	1093	0.336	368	381	0.7	0.5	4.969	A
3	300	75	130	828	0.363	301	332	0.8	0.6	6.848	A

09:15 - 09:30

Am	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	215	54	181	844	0.255	216	180	0.5	0.3	5.734	A
2	307	77	78	1103	0.279	308	318	0.5	0.4	4.529	A
3	251	63	109	841	0.299	252	278	0.6	0.4	6.123	A

2031 with Development Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout		1, 2, 3	5.80	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		5.80	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2031 with Development Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	202	100.000
2		ONE HOUR	✓	326	100.000
3		ONE HOUR	✓	269	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	0	115	87
	2	140	0	186
	3	122	147	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.26	5.68	0.3	A	185	278
2	0.33	4.91	0.5	A	299	449
3	0.36	6.96	0.6	A	247	370

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	110	888	0.171	151	196	0.0	0.2	4.882	A
2	245	61	65	1111	0.221	244	196	0.0	0.3	4.147	A
3	203	51	105	843	0.240	201	205	0.0	0.3	5.600	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	182	45	132	874	0.208	181	235	0.2	0.3	5.193	A
2	293	73	78	1103	0.266	293	235	0.3	0.4	4.443	A
3	242	60	126	830	0.291	241	245	0.3	0.4	6.109	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	222	56	162	856	0.260	222	288	0.3	0.3	5.674	A
2	359	90	96	1092	0.329	358	288	0.4	0.5	4.906	A
3	296	74	154	813	0.364	296	300	0.4	0.6	6.946	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	222	56	162	856	0.260	222	288	0.3	0.3	5.681	A
2	359	90	96	1092	0.329	359	288	0.5	0.5	4.912	A
3	296	74	154	813	0.364	296	301	0.6	0.6	6.964	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	182	45	132	874	0.208	182	236	0.3	0.3	5.205	A
2	293	73	78	1103	0.266	294	236	0.5	0.4	4.450	A
3	242	60	126	830	0.291	242	246	0.6	0.4	6.134	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	111	887	0.171	152	198	0.3	0.2	4.900	A
2	245	61	66	1111	0.221	246	198	0.4	0.3	4.161	A
3	203	51	106	843	0.240	203	206	0.4	0.3	5.630	A

Appendix 7

JUNCTIONS11 Output – Stoney Lane/Whiston Hospital Access Junction

Junctions 11										
PICADY 11 - Priority Intersection Module										
Version: 11.0.0.2177										
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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: Whiston Hospital Access.j11
Path: Z:\projects\4726 Glen Dimplex Site, Whiston\Picady
Report generation date: 07/07/2026 11:10:09

- »2026 | Surveyed | AM
- »2026 | Surveyed | PM
- »2031 | Base | AM
- »2031 | Base | PM
- »2031 | with Development Flows | AM
- »2031 | with Development Flows | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 - Surveyed									
Stream B-AC	D1	0.1	9.35	0.09	A	D2	0.3	10.01	0.23	B
Stream C-AB		0.1	5.34	0.05	A		0.0	5.14	0.02	A
	2031 - Base									
Stream B-AC	D3	0.1	9.61	0.09	A	D4	0.3	10.40	0.25	B
Stream C-AB		0.1	5.30	0.05	A		0.0	5.02	0.02	A
	2031 - with Development Flows									
Stream B-AC	D5	0.1	9.92	0.10	A	D6	0.3	10.45	0.25	B
Stream C-AB		0.1	5.13	0.06	A		0.0	4.95	0.02	A

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

File summary

File Description

Title	Whiston Hospital Access
Location	Whiston
Site number	
Date	07/07/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EDD\George.Monks
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Surveyed	AM	ONE HOUR	08:00	09:30	15	✓
D2	2026	Surveyed	PM	ONE HOUR	08:00	09:30	15	✓
D3	2031	Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2031	Base	PM	ONE HOUR	08:00	09:30	15	✓
D5	2031	with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓
D6	2031	with Development Flows	PM	ONE HOUR	08:00	09:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2026 | Surveyed | AM

Data Errors and Warnings

No errors or warnings

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		0.84	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.84	A

Arms

Arms

Arm	Name	Description	Arm type
A	Stoney Lane (W)		Major
B	Whiston Hospital Access		Minor
C	Stoney Lane (E)		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	6.80			76.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	23	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	497	0.087	0.221	0.139	0.316
B-C	640	0.095	0.239	-	-
C-B	618	0.231	0.231	-	-

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Surveyed	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	277	100.000
B		ONE HOUR	✓	34	100.000
C		ONE HOUR	✓	266	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	39	238
	B	26	0	8
	C	245	21	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	9.35	0.1	A	31	47
C-AB	0.05	5.34	0.1	A	29	43
C-A					216	323
A-B					36	54
A-C					218	328

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	6	0.00	455	0.056	25	0.0	0.1	8.373	A
C-AB	22	5	0.00	696	0.031	21	0.0	0.0	5.338	A
C-A	179	45	0.00			179				
A-B	29	7	0.00			29				
A-C	179	45	0.00			179				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	0.00	441	0.069	31	0.1	0.1	8.760	A
C-AB	27	7	0.00	712	0.038	27	0.0	0.1	5.258	A
C-A	212	53	0.00			212				
A-B	35	9	0.00			35				
A-C	214	53	0.00			214				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	0.00	422	0.089	37	0.1	0.1	9.347	A
C-AB	37	9	0.00	735	0.050	37	0.1	0.1	5.152	A
C-A	256	64	0.00			256				
A-B	43	11	0.00			43				
A-C	262	66	0.00			262				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	9	0.00	422	0.089	37	0.1	0.1	9.351	A
C-AB	37	9	0.00	735	0.050	37	0.1	0.1	5.153	A
C-A	256	64	0.00			256				
A-B	43	11	0.00			43				
A-C	262	66	0.00			262				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	0.00	441	0.069	31	0.1	0.1	8.766	A
C-AB	27	7	0.00	712	0.039	28	0.1	0.1	5.260	A
C-A	212	53	0.00			212				
A-B	35	9	0.00			35				
A-C	214	53	0.00			214				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	6	0.00	455	0.056	26	0.1	0.1	8.385	A
C-AB	22	5	0.00	696	0.031	22	0.1	0.0	5.341	A
C-A	179	45	0.00			179				
A-B	29	7	0.00			29				
A-C	179	45	0.00			179				

2026 | Surveyed | PM

Data Errors and Warnings

No errors or warnings

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		1.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.82	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026	Surveyed	PM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	210	100.000
B		ONE HOUR	✓	97	100.000
C		ONE HOUR	✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	16	194
	B	57	0	40
	C	249	7	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.23	10.01	0.3	B	89	134
C-AB	0.02	5.14	0.0	A	9	14
C-A					225	338
A-B					15	22
A-C					178	267

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	18	0.00	493	0.148	72	0.0	0.2	8.556	A
C-AB	7	2	0.00	708	0.010	7	0.0	0.0	5.133	A
C-A	186	46	0.00			186				
A-B	12	3	0.00			12				
A-C	146	37	0.00			146				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	22	0.00	482	0.181	87	0.2	0.2	9.120	A
C-AB	9	2	0.00	727	0.013	9	0.0	0.0	5.015	A
C-A	221	55	0.00			221				
A-B	14	4	0.00			14				
A-C	174	44	0.00			174				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	0.00	467	0.229	107	0.2	0.3	9.991	A
C-AB	12	3	0.00	753	0.016	12	0.0	0.0	4.860	A
C-A	270	67	0.00			270				
A-B	18	4	0.00			18				
A-C	214	53	0.00			214				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	107	27	0.00	467	0.229	107	0.3	0.3	10.006	B
C-AB	12	3	0.00	753	0.016	12	0.0	0.0	4.862	A
C-A	270	67	0.00			270				
A-B	18	4	0.00			18				
A-C	214	53	0.00			214				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	22	0.00	482	0.181	87	0.3	0.2	9.142	A
C-AB	9	2	0.00	727	0.013	9	0.0	0.0	5.018	A
C-A	221	55	0.00			221				
A-B	14	4	0.00			14				
A-C	174	44	0.00			174				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	18	0.00	493	0.148	73	0.2	0.2	8.593	A
C-AB	7	2	0.00	708	0.010	7	0.0	0.0	5.135	A
C-A	186	46	0.00			186				
A-B	12	3	0.00			12				
A-C	146	37	0.00			146				

2031 | Base | AM

Data Errors and Warnings

No errors or warnings

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		0.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.83	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031	Base	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	299	100.000
B		ONE HOUR	✓	35	100.000
C		ONE HOUR	✓	286	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	41	258
	B	27	0	8
	C	264	22	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	9.61	0.1	A	32	48
C-AB	0.05	5.30	0.1	A	31	46
C-A					232	347
A-B					38	56
A-C					237	355

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	0.00	449	0.059	26	0.0	0.1	8.517	A
C-AB	23	6	0.00	702	0.033	23	0.0	0.0	5.298	A
C-A	192	48	0.00			192				
A-B	31	8	0.00			31				
A-C	194	49	0.00			194				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	0.00	434	0.073	31	0.1	0.1	8.945	A
C-AB	30	7	0.00	720	0.041	30	0.0	0.1	5.214	A
C-A	228	57	0.00			228				
A-B	37	9	0.00			37				
A-C	232	58	0.00			232				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	0.00	413	0.093	38	0.1	0.1	9.602	A
C-AB	40	10	0.00	745	0.053	40	0.1	0.1	5.105	A
C-A	275	69	0.00			275				
A-B	45	11	0.00			45				
A-C	284	71	0.00			284				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	0.00	413	0.093	39	0.1	0.1	9.606	A
C-AB	40	10	0.00	745	0.053	40	0.1	0.1	5.107	A
C-A	275	69	0.00			275				
A-B	45	11	0.00			45				
A-C	284	71	0.00			284				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	0.00	434	0.073	32	0.1	0.1	8.953	A
C-AB	30	7	0.00	720	0.041	30	0.1	0.1	5.216	A
C-A	228	57	0.00			228				
A-B	37	9	0.00			37				
A-C	232	58	0.00			232				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	0.00	449	0.059	26	0.1	0.1	8.528	A
C-AB	23	6	0.00	702	0.033	23	0.1	0.0	5.304	A
C-A	192	48	0.00			192				
A-B	31	8	0.00			31				
A-C	194	49	0.00			194				

2031 | Base | PM

Data Errors and Warnings

No errors or warnings

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		1.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.80	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031	Base	PM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	226	100.000
B		ONE HOUR	✓	102	100.000
C		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	17	209
	B	60	0	42
	C	285	7	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	10.40	0.3	B	94	140
C-AB	0.02	5.02	0.0	A	10	15
C-A					258	387
A-B					16	23
A-C					192	288

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	0.00	487	0.158	76	0.0	0.2	8.745	A
C-AB	7	2	0.00	724	0.010	7	0.0	0.0	5.022	A
C-A	212	53	0.00			212				
A-B	13	3	0.00			13				
A-C	157	39	0.00			157				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	23	0.00	475	0.193	91	0.2	0.2	9.381	A
C-AB	10	2	0.00	746	0.013	10	0.0	0.0	4.888	A
C-A	253	63	0.00			253				
A-B	15	4	0.00			15				
A-C	188	47	0.00			188				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	0.00	458	0.245	112	0.2	0.3	10.381	B
C-AB	13	3	0.00	777	0.017	13	0.0	0.0	4.714	A
C-A	309	77	0.00			309				
A-B	19	5	0.00			19				
A-C	230	58	0.00			230				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	0.00	458	0.245	112	0.3	0.3	10.401	B
C-AB	13	3	0.00	777	0.017	13	0.0	0.0	4.714	A
C-A	309	77	0.00			309				
A-B	19	5	0.00			19				
A-C	230	58	0.00			230				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	23	0.00	475	0.193	92	0.3	0.2	9.407	A
C-AB	10	2	0.00	746	0.013	10	0.0	0.0	4.890	A
C-A	253	63	0.00			253				
A-B	15	4	0.00			15				
A-C	188	47	0.00			188				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	0.00	487	0.158	77	0.2	0.2	8.785	A
C-AB	8	2	0.00	724	0.010	8	0.0	0.0	5.022	A
C-A	212	53	0.00			212				
A-B	13	3	0.00			13				
A-C	157	39	0.00			157				

2031 | with Development Flows | AM

Data Errors and Warnings

No errors or warnings

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		0.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.77	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031	with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	318	100.000
B		ONE HOUR	✓	35	100.000
C		ONE HOUR	✓	338	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	41	277
	B	27	0	8
	C	316	22	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	9.92	0.1	A	32	48
C-AB	0.06	5.13	0.1	A	33	50
C-A					277	415
A-B					38	56
A-C					254	381

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	0.00	441	0.060	26	0.0	0.1	8.680	A
C-AB	25	6	0.00	726	0.034	24	0.0	0.0	5.128	A
C-A	230	57	0.00			230				
A-B	31	8	0.00			31				
A-C	209	52	0.00			209				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	0.00	424	0.074	31	0.1	0.1	9.166	A
C-AB	32	8	0.00	749	0.043	32	0.0	0.1	5.020	A
C-A	272	68	0.00			272				
A-B	37	9	0.00			37				
A-C	249	62	0.00			249				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	0.00	401	0.096	38	0.1	0.1	9.919	A
C-AB	44	11	0.00	781	0.056	44	0.1	0.1	4.883	A
C-A	328	82	0.00			328				
A-B	45	11	0.00			45				
A-C	305	76	0.00			305				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	10	0.00	401	0.096	39	0.1	0.1	9.923	A
C-AB	44	11	0.00	781	0.056	44	0.1	0.1	4.882	A
C-A	328	82	0.00			328				
A-B	45	11	0.00			45				
A-C	305	76	0.00			305				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	8	0.00	424	0.074	32	0.1	0.1	9.175	A
C-AB	32	8	0.00	749	0.043	32	0.1	0.1	5.024	A
C-A	272	68	0.00			272				
A-B	37	9	0.00			37				
A-C	249	62	0.00			249				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	7	0.00	440	0.060	26	0.1	0.1	8.695	A
C-AB	25	6	0.00	726	0.034	25	0.1	0.0	5.134	A
C-A	230	57	0.00			230				
A-B	31	8	0.00			31				
A-C	209	52	0.00			209				

2031 | with Development Flows | PM

Data Errors and Warnings

No errors or warnings

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		1.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.76	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2031	with Development Flows	PM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	222	100.000
B		ONE HOUR	✓	102	100.000
C		ONE HOUR	✓	313	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	17	205
	B	60	0	42
	C	306	7	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	10.45	0.3	B	94	140
C-AB	0.02	4.95	0.0	A	10	15
C-A					277	415
A-B					16	23
A-C					188	282

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	0.00	486	0.158	76	0.0	0.2	8.765	A
C-AB	8	2	0.00	736	0.010	8	0.0	0.0	4.945	A
C-A	228	57	0.00			228				
A-B	13	3	0.00			13				
A-C	154	39	0.00			154				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	23	0.00	474	0.194	91	0.2	0.2	9.410	A
C-AB	10	2	0.00	760	0.013	10	0.0	0.0	4.801	A
C-A	271	68	0.00			271				
A-B	15	4	0.00			15				
A-C	184	46	0.00			184				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	0.00	457	0.246	112	0.2	0.3	10.425	B
C-AB	13	3	0.00	793	0.017	13	0.0	0.0	4.615	A
C-A	331	83	0.00			331				
A-B	19	5	0.00			19				
A-C	226	56	0.00			226				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	0.00	457	0.246	112	0.3	0.3	10.446	B
C-AB	13	3	0.00	793	0.017	13	0.0	0.0	4.615	A
C-A	331	83	0.00			331				
A-B	19	5	0.00			19				
A-C	226	56	0.00			226				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	92	23	0.00	474	0.194	92	0.3	0.2	9.436	A
C-AB	10	2	0.00	760	0.013	10	0.0	0.0	4.803	A
C-A	271	68	0.00			271				
A-B	15	4	0.00			15				
A-C	184	46	0.00			184				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	77	19	0.00	486	0.158	77	0.2	0.2	8.808	A
C-AB	8	2	0.00	736	0.010	8	0.0	0.0	4.947	A
C-A	228	57	0.00			228				
A-B	13	3	0.00			13				
A-C	154	39	0.00			154				

Appendix 8

JUNCTIONS11 Output – Stoney Lane/Whiston Ambulance Station Access Junction

Junctions 11										
PICADY 11 - Priority Intersection Module										
Version: 11.0.0.2177										
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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: Ambulance Station Access.j11
Path: Z:\projects\4726 Glen Dimplex Site, Whiston\Picady
Report generation date: 07/07/2026 11:25:27

- »2026 | Surveyed Flows | AM
- »2026 | Surveyed Flows | PM
- »2031 | Base Flows | AM
- »2031 | Base Flows | PM
- »2031 | with Development Flows | AM
- »2031 | with Development Flows | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2026 - Surveyed Flows									
Stream B-AC	D1	0.0	0.00	0.00	A	D2	0.0	8.82	0.02	A
Stream C-AB		0.0	5.18	0.01	A		0.0	0.00	0.00	A
	2031 - Base Flows									
Stream B-AC	D3	0.0	0.00	0.00	A	D4	0.0	8.92	0.02	A
Stream C-AB		0.0	5.12	0.01	A		0.0	0.00	0.00	A
	2031 - with Development Flows									
Stream B-AC	D5	0.0	0.00	0.00	A	D6	0.0	9.02	0.02	A
Stream C-AB		0.0	5.12	0.01	A		0.0	0.00	0.00	A

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

File summary

File Description

Title	Whiston Ambulance Station
Location	Whison
Site number	4726
Date	07/07/2026
Version	
Status	(new file)
Identifier	BTG Eddisons
Client	
Jobnumber	
Enumerator	EDD\George.Monks
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Surveyed Flows	AM	ONE HOUR	08:00	09:30	15	✓
D2	2026	Surveyed Flows	PM	ONE HOUR	17:00	18:30	15	✓
D3	2031	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓
D4	2031	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓
D5	2031	with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓
D6	2031	with Development Flows	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2026 | Surveyed Flows | AM

Data Errors and Warnings

No errors or warnings

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		0.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.05	A

Arms

Arms

Arm	Name	Description	Arm type
A	Stoney Lane (W)		Major
B	Site Access		Minor
C	Stoney Lane (E)		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	6.00			0.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.080	0.202	0.127	0.289
B-C	574	0.088	0.222	-	-
C-B	574	0.222	0.222	-	-

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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2026	Surveyed Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	202	100.000
B		ONE HOUR	✓	1	100.000
C		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	2	200
	B	1	0	0
	C	301	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	5.18	0.0	A	5	7
C-A					274	412
A-B					2	3
A-C					184	275

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	446	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.84	0.00	699	0.005	3	0.0	0.0	5.176	A
C-A	226	56	0.00			226				
A-B	2	0.38	0.00			2				
A-C	151	38	0.00			151				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	436	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	0.00	724	0.006	4	0.0	0.0	5.001	A
C-A	269	67	0.00			269				
A-B	2	0.45	0.00			2				
A-C	180	45	0.00			180				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	421	0.000	0	0.0	0.0	0.000	A
C-AB	6	1	0.00	759	0.008	6	0.0	0.0	4.777	A
C-A	329	82	0.00			329				
A-B	2	0.55	0.00			2				
A-C	220	55	0.00			220				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	421	0.000	0	0.0	0.0	0.000	A
C-AB	6	1	0.00	759	0.008	6	0.0	0.0	4.777	A
C-A	329	82	0.00			329				
A-B	2	0.55	0.00			2				
A-C	220	55	0.00			220				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	436	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	0.00	724	0.006	4	0.0	0.0	5.002	A
C-A	269	67	0.00			269				
A-B	2	0.45	0.00			2				
A-C	180	45	0.00			180				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	446	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.84	0.00	699	0.005	3	0.0	0.0	5.178	A
C-A	226	56	0.00			226				
A-B	2	0.38	0.00			2				
A-C	151	38	0.00			151				

2026 | Surveyed Flows | PM

Data Errors and Warnings

No errors or warnings

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		0.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.11	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2026	Surveyed Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	263	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	3	260
	B	3	0	3
	C	227	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	8.82	0.0	A	6	8
C-AB	0.00	0.00	0.0	A	0	0
C-A					208	312
A-B					3	4
A-C					239	358

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	441	0.010	4	0.0	0.0	8.240	A
C-AB	0	0	0.00	530	0.000	0	0.0	0.0	0.000	A
C-A	171	43	0.00			171				
A-B	2	0.56	0.00			2				
A-C	196	49	0.00			196				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	430	0.013	5	0.0	0.0	8.472	A
C-AB	0	0	0.00	521	0.000	0	0.0	0.0	0.000	A
C-A	204	51	0.00			204				
A-B	3	0.67	0.00			3				
A-C	234	58	0.00			234				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	0.00	415	0.016	7	0.0	0.0	8.818	A
C-AB	0	0	0.00	510	0.000	0	0.0	0.0	0.000	A
C-A	250	62	0.00			250				
A-B	3	0.83	0.00			3				
A-C	286	72	0.00			286				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	0.00	415	0.016	7	0.0	0.0	8.818	A
C-AB	0	0	0.00	510	0.000	0	0.0	0.0	0.000	A
C-A	250	62	0.00			250				
A-B	3	0.83	0.00			3				
A-C	286	72	0.00			286				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	430	0.013	5	0.0	0.0	8.474	A
C-AB	0	0	0.00	521	0.000	0	0.0	0.0	0.000	A
C-A	204	51	0.00			204				
A-B	3	0.67	0.00			3				
A-C	234	58	0.00			234				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	441	0.010	5	0.0	0.0	8.242	A
C-AB	0	0	0.00	530	0.000	0	0.0	0.0	0.000	A
C-A	171	43	0.00			171				
A-B	2	0.56	0.00			2				
A-C	196	49	0.00			196				

2031 | Base Flows | AM

Data Errors and Warnings

No errors or warnings

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		0.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.05	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	213	100.000
B		ONE HOUR	✓	1	100.000
C		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	2	211
	B	1	0	0
	C	318	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	5.12	0.0	A	5	7
C-A					290	435
A-B					2	3
A-C					194	290

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	443	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.85	0.00	706	0.005	3	0.0	0.0	5.122	A
C-A	238	60	0.00			238				
A-B	2	0.38	0.00			2				
A-C	159	40	0.00			159				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	432	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	0.00	733	0.006	4	0.0	0.0	4.941	A
C-A	284	71	0.00			284				
A-B	2	0.45	0.00			2				
A-C	190	47	0.00			190				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	417	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	0.00	770	0.008	6	0.0	0.0	4.709	A
C-A	347	87	0.00			347				
A-B	2	0.55	0.00			2				
A-C	232	58	0.00			232				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	417	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	0.00	770	0.008	6	0.0	0.0	4.709	A
C-A	347	87	0.00			347				
A-B	2	0.55	0.00			2				
A-C	232	58	0.00			232				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	432	0.000	0	0.0	0.0	0.000	A
C-AB	4	1	0.00	733	0.006	4	0.0	0.0	4.943	A
C-A	284	71	0.00			284				
A-B	2	0.45	0.00			2				
A-C	190	47	0.00			190				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	443	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.86	0.00	706	0.005	3	0.0	0.0	5.124	A
C-A	238	60	0.00			238				
A-B	2	0.38	0.00			2				
A-C	159	40	0.00			159				

2031 | Base Flows | PM

Data Errors and Warnings

No errors or warnings

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		0.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.10	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	278	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	240	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	3	275
	B	3	0	3
	C	240	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	8.92	0.0	A	6	8
C-AB	0.00	0.00	0.0	A	0	0
C-A					220	330
A-B					3	4
A-C					252	379

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	438	0.010	4	0.0	0.0	8.302	A
C-AB	0	0	0.00	527	0.000	0	0.0	0.0	0.000	A
C-A	181	45	0.00			181				
A-B	2	0.56	0.00			2				
A-C	207	52	0.00			207				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	426	0.013	5	0.0	0.0	8.551	A
C-AB	0	0	0.00	518	0.000	0	0.0	0.0	0.000	A
C-A	216	54	0.00			216				
A-B	3	0.67	0.00			3				
A-C	247	62	0.00			247				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	0.00	410	0.016	7	0.0	0.0	8.924	A
C-AB	0	0	0.00	506	0.000	0	0.0	0.0	0.000	A
C-A	264	66	0.00			264				
A-B	3	0.83	0.00			3				
A-C	303	76	0.00			303				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	0.00	410	0.016	7	0.0	0.0	8.924	A
C-AB	0	0	0.00	506	0.000	0	0.0	0.0	0.000	A
C-A	264	66	0.00			264				
A-B	3	0.83	0.00			3				
A-C	303	76	0.00			303				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	426	0.013	5	0.0	0.0	8.554	A
C-AB	0	0	0.00	518	0.000	0	0.0	0.0	0.000	A
C-A	216	54	0.00			216				
A-B	3	0.67	0.00			3				
A-C	247	62	0.00			247				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	438	0.010	5	0.0	0.0	8.303	A
C-AB	0	0	0.00	527	0.000	0	0.0	0.0	0.000	A
C-A	181	45	0.00			181				
A-B	2	0.56	0.00			2				
A-C	207	52	0.00			207				

2031 | with Development Flows | AM

Data Errors and Warnings

No errors or warnings

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		0.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.05	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2031	with Development Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	243	100.000
B		ONE HOUR	✓	1	100.000
C		ONE HOUR	✓	331	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	2	241
	B	1	0	0
	C	328	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.01	5.12	0.0	A	5	7
C-A					299	448
A-B					2	3
A-C					221	332

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	437	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.87	0.00	707	0.005	3	0.0	0.0	5.116	A
C-A	246	61	0.00			246				
A-B	2	0.38	0.00			2				
A-C	181	45	0.00			181				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	425	0.000	0	0.0	0.0	0.000	A
C-AB	5	1	0.00	734	0.006	5	0.0	0.0	4.933	A
C-A	293	73	0.00			293				
A-B	2	0.45	0.00			2				
A-C	217	54	0.00			217				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	409	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	0.00	772	0.008	6	0.0	0.0	4.698	A
C-A	358	90	0.00			358				
A-B	2	0.55	0.00			2				
A-C	265	66	0.00			265				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	409	0.000	0	0.0	0.0	0.000	A
C-AB	6	2	0.00	772	0.008	6	0.0	0.0	4.700	A
C-A	358	90	0.00			358				
A-B	2	0.55	0.00			2				
A-C	265	66	0.00			265				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	425	0.000	0	0.0	0.0	0.000	A
C-AB	5	1	0.00	734	0.006	5	0.0	0.0	4.935	A
C-A	293	73	0.00			293				
A-B	2	0.45	0.00			2				
A-C	217	54	0.00			217				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	0.00	437	0.000	0	0.0	0.0	0.000	A
C-AB	3	0.87	0.00	707	0.005	3	0.0	0.0	5.116	A
C-A	246	61	0.00			246				
A-B	2	0.38	0.00			2				
A-C	181	45	0.00			181				

2031 | with Development Flows | PM

Data Errors and Warnings

No errors or warnings

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		0.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.10	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2031	with Development Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	282	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	270	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	3	279
	B	3	0	3
	C	270	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	9.02	0.0	A	6	8
C-AB	0.00	0.00	0.0	A	0	0
C-A					248	372
A-B					3	4
A-C					256	384

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	435	0.010	4	0.0	0.0	8.357	A
C-AB	0	0	0.00	527	0.000	0	0.0	0.0	0.000	A
C-A	203	51	0.00			203				
A-B	2	0.56	0.00			2				
A-C	210	53	0.00			210				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	423	0.013	5	0.0	0.0	8.621	A
C-AB	0	0	0.00	518	0.000	0	0.0	0.0	0.000	A
C-A	243	61	0.00			243				
A-B	3	0.67	0.00			3				
A-C	251	63	0.00			251				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	0.00	406	0.016	7	0.0	0.0	9.017	A
C-AB	0	0	0.00	505	0.000	0	0.0	0.0	0.000	A
C-A	297	74	0.00			297				
A-B	3	0.83	0.00			3				
A-C	307	77	0.00			307				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	0.00	406	0.016	7	0.0	0.0	9.017	A
C-AB	0	0	0.00	505	0.000	0	0.0	0.0	0.000	A
C-A	297	74	0.00			297				
A-B	3	0.83	0.00			3				
A-C	307	77	0.00			307				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	423	0.013	5	0.0	0.0	8.621	A
C-AB	0	0	0.00	518	0.000	0	0.0	0.0	0.000	A
C-A	243	61	0.00			243				
A-B	3	0.67	0.00			3				
A-C	251	63	0.00			251				

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	0.00	435	0.010	5	0.0	0.0	8.359	A
C-AB	0	0	0.00	527	0.000	0	0.0	0.0	0.000	A
C-A	203	51	0.00			203				
A-B	2	0.56	0.00			2				
A-C	210	53	0.00			210				

Appendix 9

Pedestrian Walking Route Audits



NOTES

Site Location

Walking Route 1

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
TAYLOR WIMPEY

PROJECT:
GLEN DIMPLEX, WHISTON

DRAWING TITLE:
PEDESTRIAN WALKING ROUTE TO WHISTON

SCALES: SCALE @ A3		
DRAWN: SC	CHECKED: GM	DATE: JUN 26

BTG Eddisons
340 Deansgate
Manchester
M3 4LY
Email: info@eddisons.com
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER: 4726-R1	REVISION: -
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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
1. ATTRACTIVENESS - 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.	2	Well maintained footways along route.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along Stoney Lane and Dragon Lane, a moderately trafficked road with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				7		
5. COMFORT - 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.	2		

6. COMFORT - 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.	2		
7. COMFORT - 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.	2		
8. COMFORT - 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.	1	Occasional instances of pavement parking but impact is considered minimal as it generally occurs on wider sections of footway (outside existing residential properties).	No action proposed.
9. COMFORT - 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).	2		
10.COMFORT - other	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		
COMFORT				11		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	2		

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				12		
17.SAFETY - 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.	1	The route runs along Stoney Lane and Dragon Lane where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre, with a range of amenities, services and jobs along the route.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	1	Dropped kerbs and tactile paving are provided at most key crossing points. Some minor junctions are missing tactile paving.	Additional tactile paving could be provided at more minor junctions on route. Potential proportionate improvements can be discussed with the Council as the

						application progresses.
COHERENCE				1		
Total Score				35		

ROUTE SUMMARY

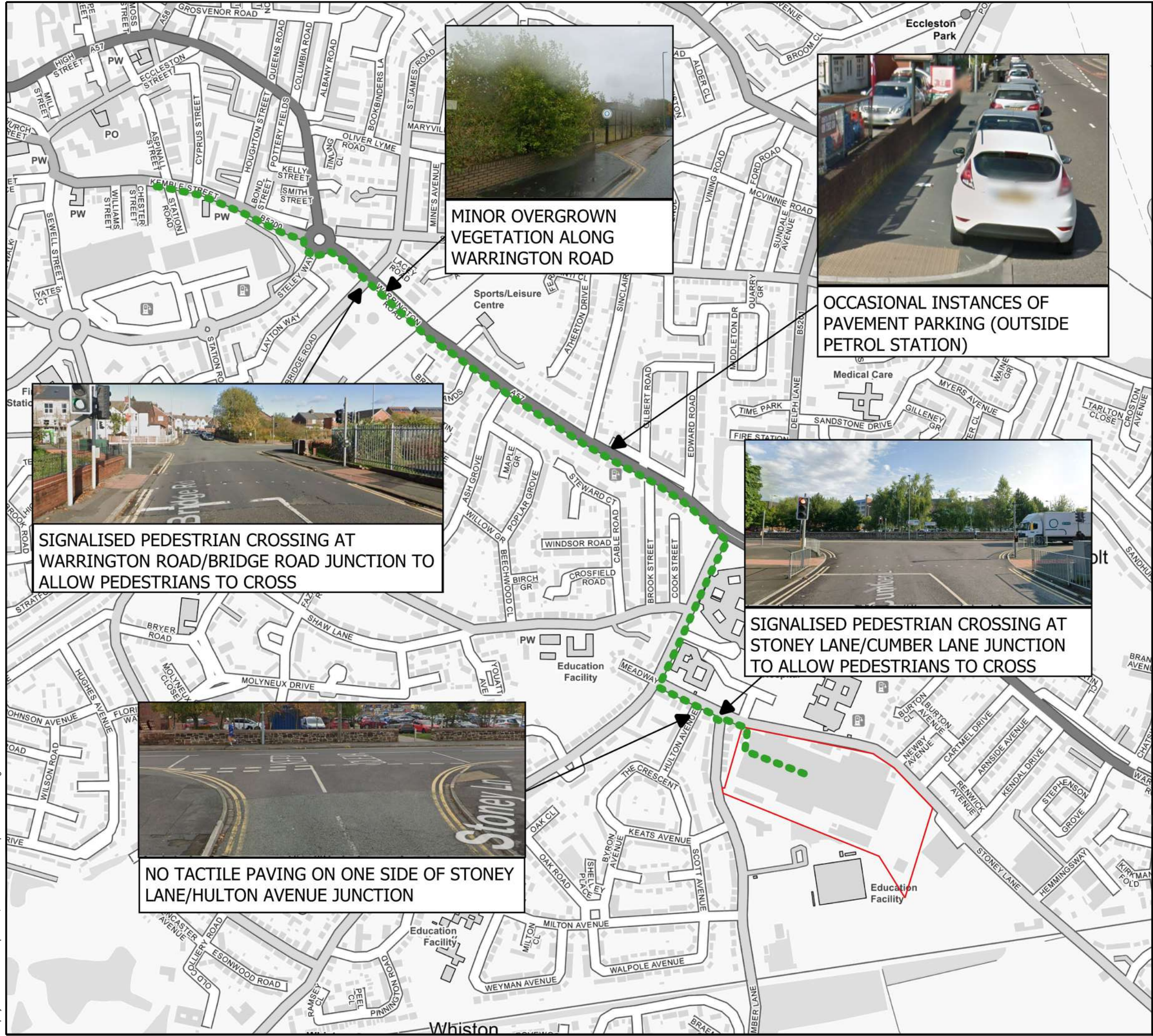
Route Name	Route 1 - Proposed walking route to Whiston
Length	Circa 1.2km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	21 May 2026

Criterion	Performance Scores
Attractiveness	7
Comfort	11
Directness	12
Safety	4
Coherence	1
Total	35

Comments	Tactile paving could be improved at some minor - low trafficked roads along the route, however, these are not considered critical as the route is considered of a sufficient quality to encourage sustainable travel to and from the site
Actions	Potential off-site improvements are to be discussed with the Council Highways at a later stage of the planning application.

Route 1
Proposed Site to Whiston Town Centre





NOTES

Site Location

Walking Route 2

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

TAYLOR WIMPEY

PROJECT:

GLEN DIMPLEX, WHISTON

DRAWING TITLE:

PEDESTRIAN WALKING ROUTE TO PRESCOT

SCALES: SCALE @ A3			
DRAWN: SC	CHECKED: GM	DATE: JUN 26	

BTG Eddisons
340 Deansgate
Manchester
M3 4LY

Email: info@eddisons.com
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER: 4726-R2	REVISION: -
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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
1. ATTRACTIVENESS - 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.	1	Few overgrown vegetation observed along the A57 Warrington Road.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along A57 Warrington Road, a moderately trafficked road with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				6		
5. COMFORT - 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.	2		

6. COMFORT - 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.	2		
7. COMFORT - 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.	2		
8. COMFORT - 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.	1	Occasional instances of pavement parking.	No action proposed.
9. COMFORT - 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).	2		
10.COMFORT - other	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		
COMFORT				11		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	2		

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				12		
17.SAFETY - 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.	1	The route runs along A57 Warrington Road where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre, with a range of amenities, services and jobs along the route.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	2	Dropped kerbs and tactile paving are provided at most key crossing points, with dropped kerbs generally provided along whole route.	
COHERENCE				2		
Total Score				35		

ROUTE SUMMARY

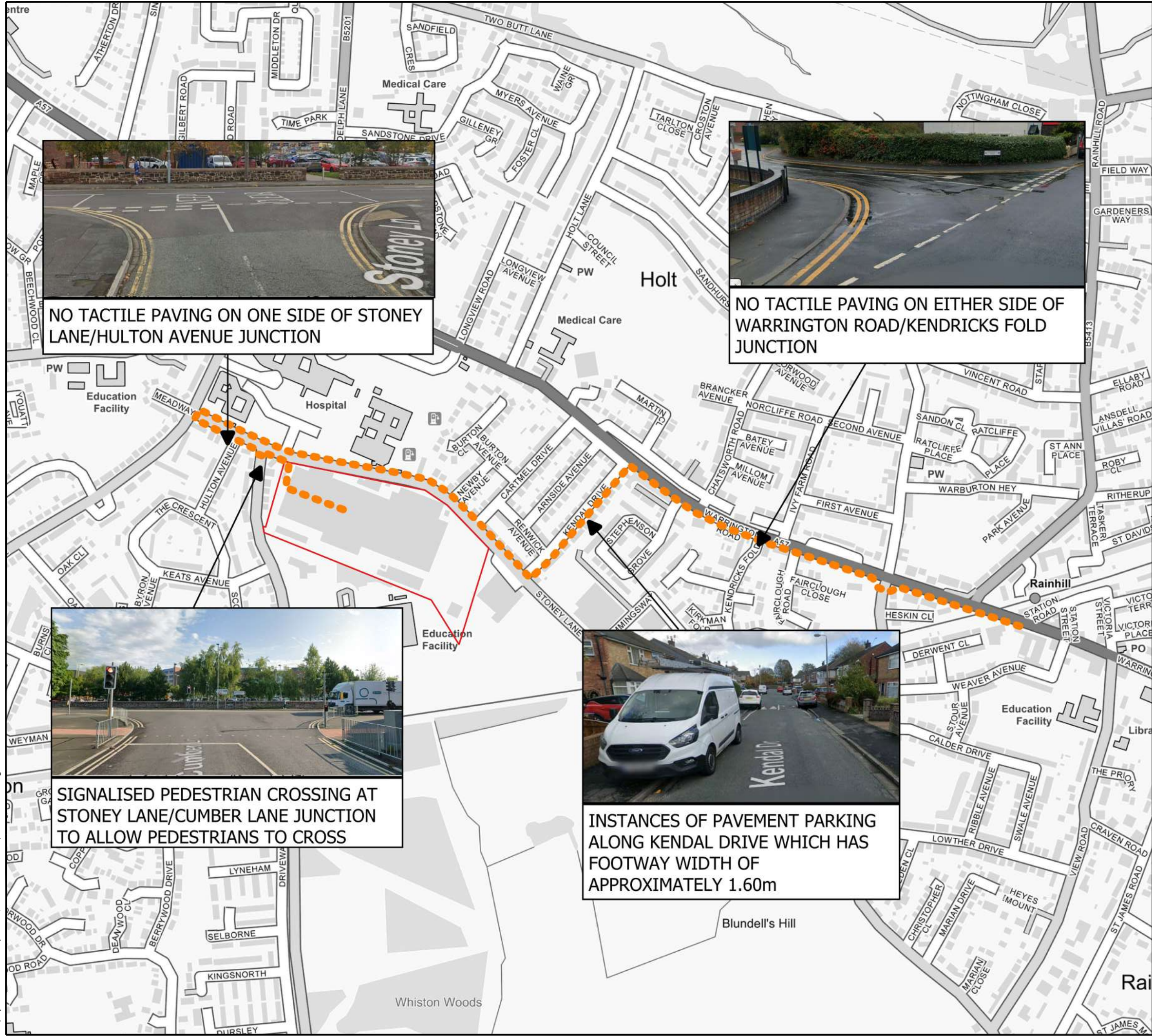
Route Name	Route 2 - Proposed Walking Route to Prescott Town
Length	Circa 2km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	21 May 2026

Criterion	Performance Scores
Attractiveness	6
Comfort	11
Directness	12
Safety	4
Coherence	2
Total	35

Comments	The route is generally direct and well connected, with good footway provision and crossing facilities. Whilst sections along the A57 Warrington Road experience moderate traffic and noise, this is typical of an urban environment and does not significantly impact the overall quality of the route.
Actions	No off-site improvements are proposed at this stage.

Proposed Site to Prescott Town





NOTES

Site Location

Walking Route 3

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

TAYLOR WIMPEY

PROJECT:

GLEN DIMPLEX, WHISTON

DRAWING TITLE:

PEDESTRIAN WALKING ROUTE TO RAINHILL

SCALES:	SCALE @ A3		
DRAWN:	SC	CHECKED:	GM
		DATE:	JUN 26

BTG Eddisons
340 Deansgate
Manchester
M3 4LY

Email: info@eddisons.com
Tel: 0161 837 7380
Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	4726-R3	REVISION:	-
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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
1. ATTRACTIVENESS - 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.	1	Very limited overgrown vegetation observed along Warrington Road.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along A57 Warrington Road, a moderately trafficked road with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				6		
5. COMFORT - 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.	2		

6. COMFORT - 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.	1	Footway width of approximately 1.60m along Kendal Drive.	No action proposed.
7. COMFORT - 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.	2		
8. COMFORT - 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.	1	Some instances of pavement parking, especially on Kendal Drive leading to the need of occasional 'give and take'.	No action proposed.
9. COMFORT - 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).	2		
10.COMFORT - other	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		
COMFORT				10		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	1	Crossings are not fully aligned with pedestrian desire lines. Users are required to travel along east Stoney Lane rather than crossing directly towards Rainhill	No action proposed.

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				11		
17.SAFETY - 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.	1	The route runs along A57 Warrington Road where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre, with a range of amenities, services and jobs along the route.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	1	Dropped kerbs and tactile pavings are provided at most key crossing points. Some minor junctions are missing tactile paving.	Additional tactile paving could be provided at more minor junctions on route. Potential proportionate improvements can be discussed with the Council as the application

						progresses.
COHERENCE				1		
Total Score				35		

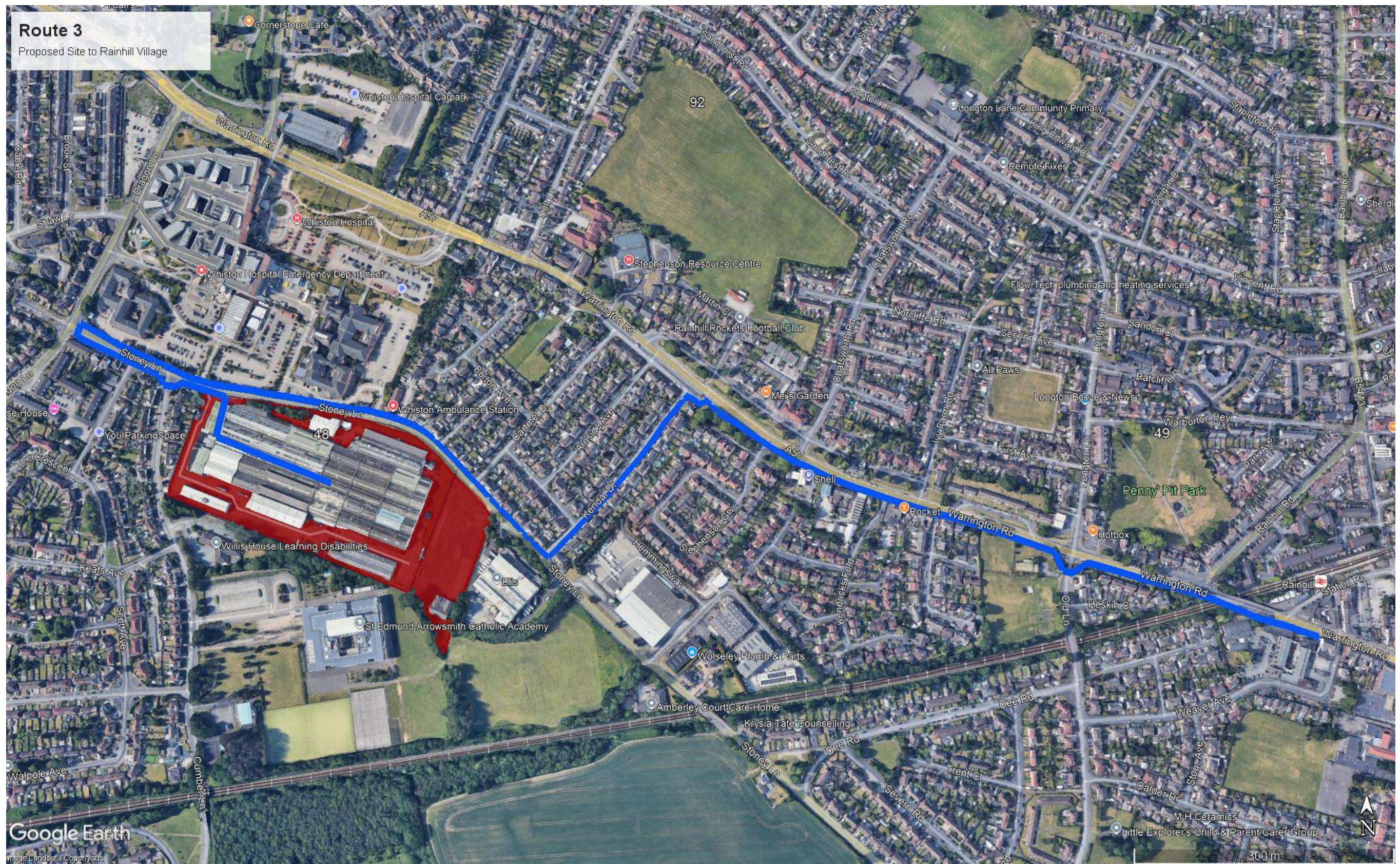
ROUTE SUMMARY

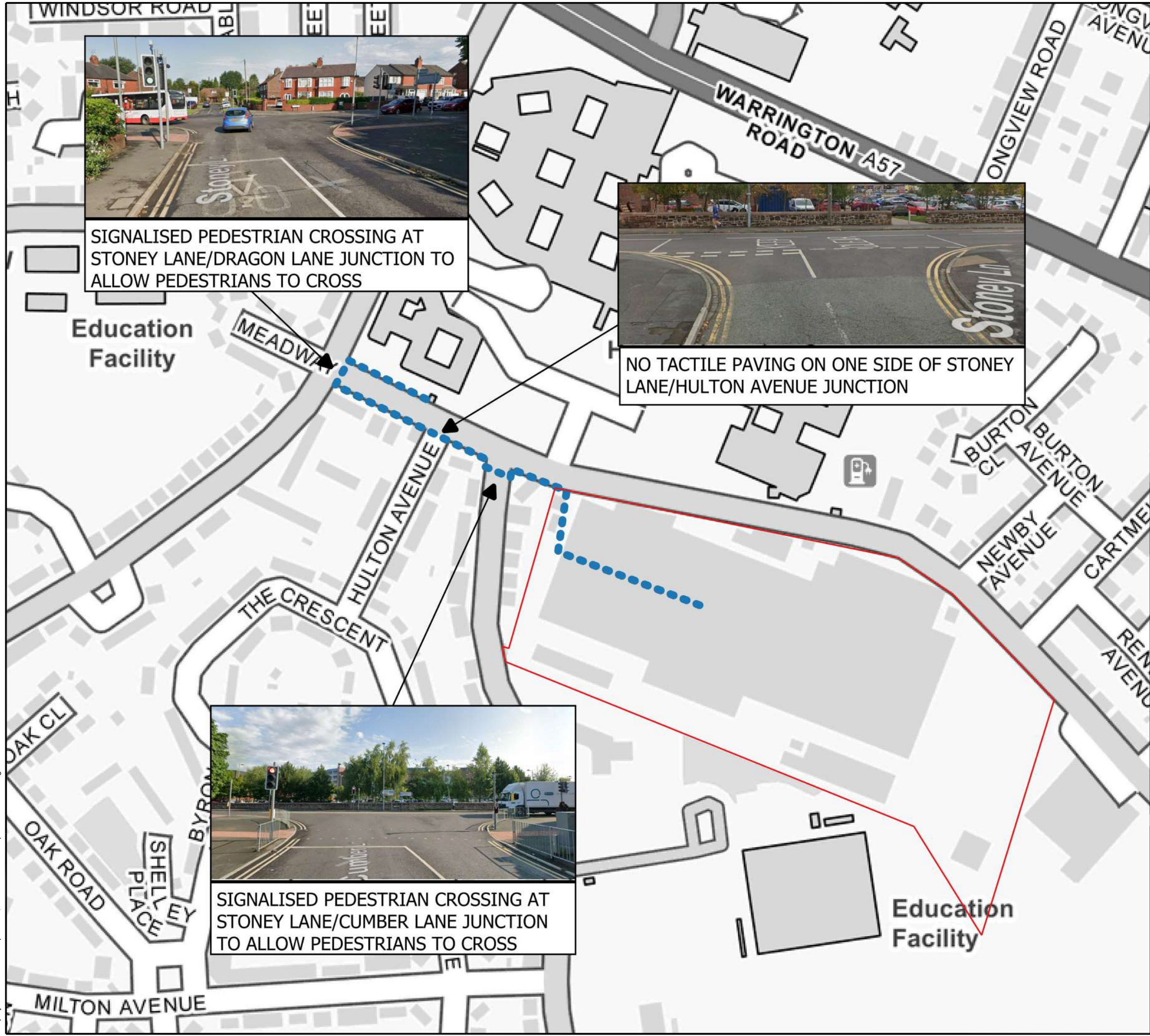
Route Name	Route 3 - Proposed walking route to Rainhill Village
Length	Circa 2.12km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	21 May 2026

Criterion	Performance Scores
Attractiveness	6
Comfort	10
Directness	11
Safety	4
Coherence	1
Total	32

Comments	Tactile paving could be improved at some minor - low trafficked roads along the route, however, these are not considered critical as the route is considered of a sufficient quality to encourage sustainable travel to and from the site.
Actions	Potential off-site improvements are to be discussed with the Council as the application progresses.

Proposed Site to Rainhill Village





NOTES

- Site Location
- Walking Route 4

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
TAYLOR WIMPEY

PROJECT:
GLEN DIMPLEX, WHISTON

DRAWING TITLE:
PEDESTRIAN WALKING ROUTE TO WHISTON HOSPITAL BUS STOPS

SCALES:	SCALE @ A3		
DRAWN:	SC	CHECKED:	GM
		DATE:	JUN 26

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Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	4726-R4	REVISION:	-
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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
1. ATTRACTIVENESS - 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.	2	Well maintained footways along route.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along Stoney Lane, a moderately trafficked road with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				7		
5. COMFORT - 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.	2		

6. COMFORT - 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.	2		
7. COMFORT - 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.	2		
8. COMFORT - 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.	2		
9. COMFORT - 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).	2		
10.COMFORT - other	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		
COMFORT				12		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	2		

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				12		
17.SAFETY - 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.	1	The route runs along Stoney Lane where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	1	Dropped kerbs and tactile paving are provided at most key crossing points. Some minor junctions are missing tactile paving.	Additional tactile paving could be provided at more minor junctions on route. Potential proportionate improvements can be discussed with the Council as the application progresses.

COHERENCE				1		
Total Score				36		

ROUTE SUMMARY

Route Name	Route 4 - Proposed Site to Whiston Hospital Stop H and Stop J
Length	Circa 0.45km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	12 June 2026

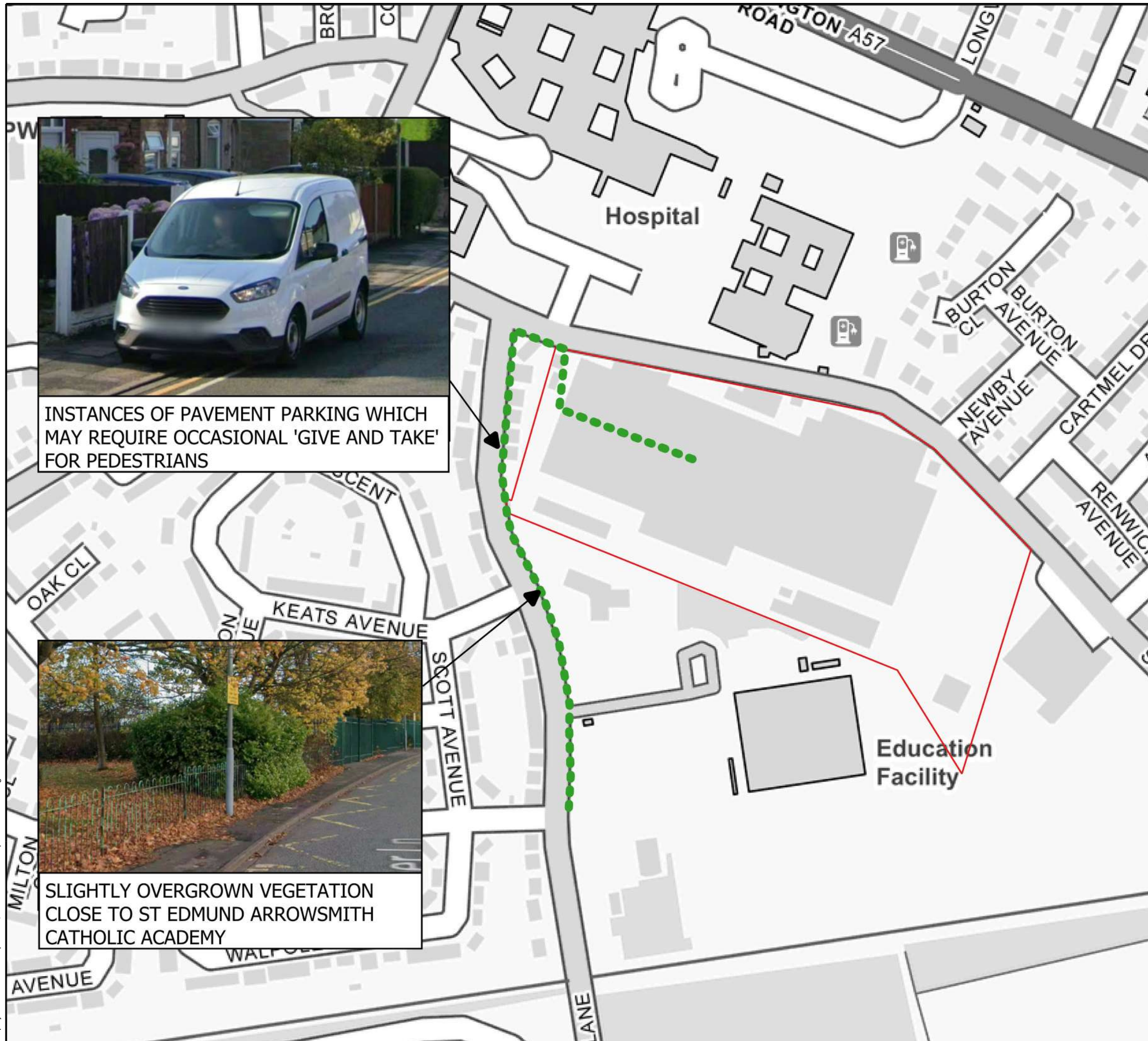
Criterion	Performance Scores
Attractiveness	7
Comfort	12
Directness	12
Safety	4
Coherence	1
Total	36

Comments	The route performs well overall, with good levels of comfort, directness and coherence. Minor issues relating to traffic noise, volume and speed are present along Stoney Lane but are typical of an urban environment and do not significantly impact walkability.
Actions	Potential off-site improvements are to be discussed with the Council Highways at a later stage of the planning application.

Route 4
Proposed Site to Whiston Hospital Stop H and Stop J



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INSTANCES OF PAVEMENT PARKING WHICH MAY REQUIRE OCCASIONAL 'GIVE AND TAKE' FOR PEDESTRIANS

SLIGHTLY OVERGROWN VEGETATION CLOSE TO ST EDMUND ARROWSMITH CATHOLIC ACADEMY

NOTES

- Site Location
- Walking Route 5

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:
TAYLOR WIMPEY

PROJECT:
GLEN DIMPLEX, WHISTON

DRAWING TITLE:
PEDESTRIAN WALKING ROUTE TO CUMBER LANE/MILTON AVENUE BUS STOP

SCALES:
SCALE @ A3

DRAWN:	SC	CHECKED:	GM	DATE:	JUN 26
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Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	4726-R5	REVISION:	-
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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
1. ATTRACTIVENESS - 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.	1	Slightly overgrown vegetation along Cumber Lane close to St Edmund Arrowsmith Catholic Academy.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along Stoney Lane and Cumber Lane, a moderately trafficked road with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				6		
5. COMFORT - 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.	2		

6. COMFORT - 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.	1	Footway width of approximately 1.87m along Cumber Lane.	No action proposed.
7. COMFORT - 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.	2		
8. COMFORT - 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.	1	Occasional instances of pavement parking but impact is considered minimal as it generally occurs on wider sections of footway (outside existing residential properties).	No action proposed.
9. COMFORT - 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).	1	Mostly gentle gradient with slight slope.	
10.COMFORT - other	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		
COMFORT				9		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	2		

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				12		
17.SAFETY - 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.	1	The route runs along Stoney Lane and Cumber Lane where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre, with a range of amenities, services and jobs along the route.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	2	Dropped kerbs and tactile paving are provided at adequate key crossing points.	
COHERENCE				2		
Total Score				33		

ROUTE SUMMARY

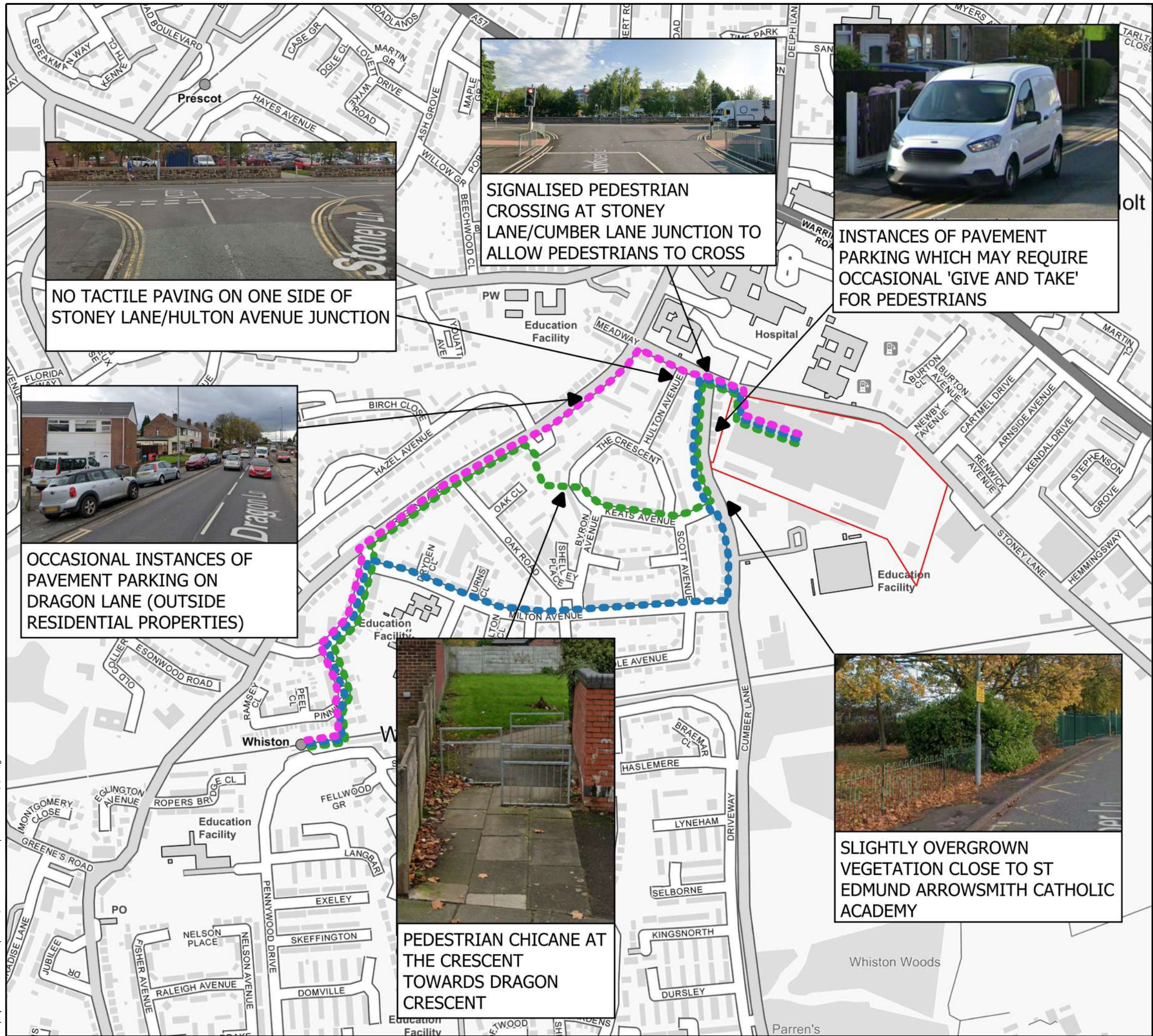
Route Name	Route 5 - Proposed Site to Dragon Lane/Milton Avenue Bus Stop
Length	Circa 0.6km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	14 June 2026

Criterion	Performance Scores
Attractiveness	6
Comfort	9
Directness	12
Safety	4
Coherence	2
Total	33

Comments	The route is generally direct, coherent, and of good quality, with adequate crossing provision and visibility. Some minor issues are present, including occasional pavement parking, moderate traffic exposure, and short sections of steeper gradient. Overall, the route is considered suitable for pedestrians.
Actions	

Route 5
Proposed Site to Dragon Lane/Milton Avenue Bus Stop





NOTES

Site Location

Walking Route 6 -
Via Keats Avenue
and Dragon Lane

Walking Route 7 -
Via Milton Avenue

Walking Route 8 -
Via Stoney Lane
and Dragon Lane

REV	DETAILS	DRAWN	CHECKED	DATE

CLIENT:

TAYLOR WIMPEY

PROJECT:

GLEN DIMPLEX, WHISTON

DRAWING TITLE:

PEDESTRIAN WALKING ROUTES TO
WHISTON RAILWAY STATION VIA
PRIMARY AND ALTERNATIVE ROUTES

SCALES:

SCALE @ A3		
DRAWN:	SC	CHECKED: GM
		DATE: JUL 26

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Web: www.eddisons.com/services/transport-planning

DRAWING NUMBER:	4726-R6,7,8	REVISION:	-
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Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)
1. ATTRACTIVENESS - 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.
2. ATTRACTIVENESS - 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).
3. ATTRACTIVENESS - 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
4. ATTRACTIVENESS - other	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		
ATTRACTIVENESS			
5. COMFORT - 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.

6. COMFORT - 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.
7. COMFORT - 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.
8. COMFORT - 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.
9. COMFORT - 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).
10.COMFORT - other	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		
COMFORT			
11.DIRECTNESS - 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.
12.DIRECTNESS - 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.

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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).
14.DIRECTNESS - 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.
15. DIRECTNESS - 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.
16.DIRECTNESS - other	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.		
DIRECTNESS			
17.SAFETY - 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.
18.SAFETY - 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.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.
SAFETY			
20. COHERENCE - 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.
COHERENCE			
Total Score			

ROUTE SUMMARY

Route Name	Route 6 – Primary route from proposed site to Whiston Railway Station
Length	Circa 1.6km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	15 June 2026

Criterion	Performance Scores
Attractiveness	7
Comfort	9
Directness	12
Safety	4
Coherence	2
Total	34

Comments	The route is direct, coherent and generally well maintained, with good visibility and appropriate crossing provision. Moderate traffic levels and occasional pavement parking present minor issues, but overall, the route is suitable for pedestrian use.
Actions	



Route 6
Primary route to Whiston Railway Station

Google Earth

200 m

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
1. ATTRACTIVENESS - 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.	2	Well maintained footways along route.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along Stoney Lane, Cumber Lane and Dragon Lane, moderately trafficked roads with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				7		
5. COMFORT - 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.	2		

6. COMFORT - 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.	1	Footway width of approximately 1.87m along Cumber Lane.	No action proposed.
7. COMFORT - 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.	2		
8. COMFORT - 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.	1	Occasional instances of pavement parking but impact is considered minimal as it generally occurs on wider sections of footway (outside existing residential properties).	No action proposed.
9. COMFORT - 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).	1	Mostly gentle gradient with slight slope.	
10.COMFORT - other	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		
COMFORT				9		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	2		

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				12		
17.SAFETY - 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.	1	The route runs along Stoney Lane, Cumber Lane and Dragon Lane where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre, with a range of amenities, services and jobs along the route.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	2	Dropped kerbs and tactile paving are provided at adequate key crossing points.	
COHERENCE				2		
Total Score				34		

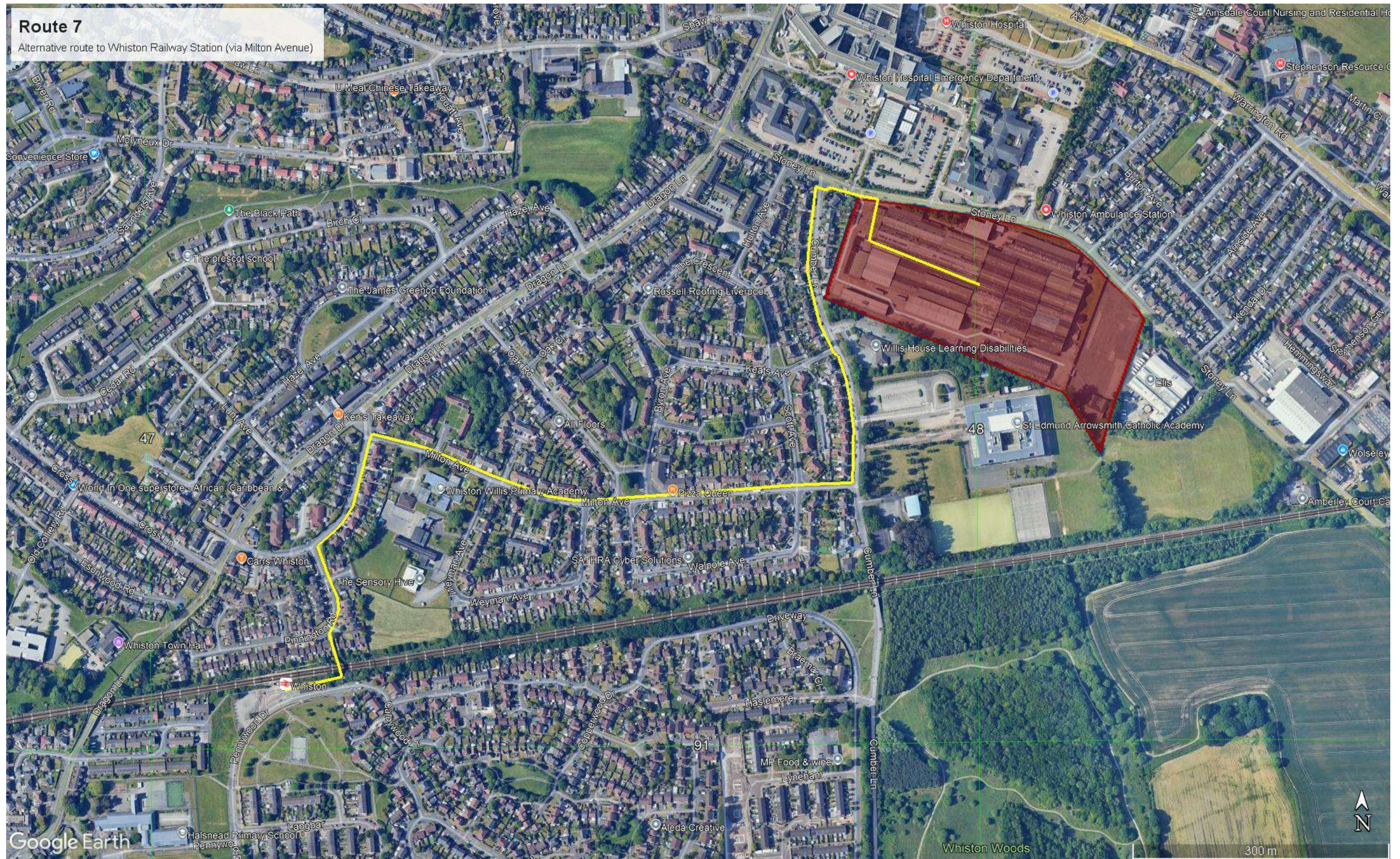
ROUTE SUMMARY

Route Name	Route 7 – Secondary route from proposed site to Whiston Railway Station
Length	Circa 1.62km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	15 June 2026

Criterion	Performance Scores
Attractiveness	7
Comfort	9
Directness	12
Safety	4
Coherence	2
Total	34

Comments	The route is direct, coherent and generally well maintained, with good visibility and appropriate crossing provision. Moderate traffic levels and occasional pavement parking present minor issues, but overall, the route is suitable for pedestrian use.
Actions	

Route 7
Alternative route to Whiston Railway Station (via Milton Avenue)



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
1. ATTRACTIVENESS - 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.	2	Well maintained footways along route.	No action proposed.
2. ATTRACTIVENESS - 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).	2		
3. ATTRACTIVENESS - 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	1	The route runs along Stoney Lane and Dragon Lane, a moderately trafficked road with traffic noise and air quality typical of an urban environment.	No action proposed.
4. ATTRACTIVENESS - other	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	Generally, well maintained route.	
ATTRACTIVENESS				7		
5. COMFORT - 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.	2		

6. COMFORT - 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.	2		
7. COMFORT - 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.	2		
8. COMFORT - 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.	1	Occasional instances of pavement parking but impact is considered minimal as it generally occurs on wider sections of footway (outside existing residential properties).	No action proposed.
9. COMFORT - 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).	2		
10.COMFORT - other	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		
COMFORT				11		
11.DIRECTNESS - 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.	2		
12.DIRECTNESS - 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.	2		

13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	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		
14.DIRECTNESS - 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.	2		
15. DIRECTNESS - 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.	2		
16.DIRECTNESS - other	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		
DIRECTNESS				12		
17.SAFETY - 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.	1	The route runs along Stoney Lane and Dragon Lane where traffic volumes are moderate however this is typical of a sustainable urban location, close to a town centre, with a range of amenities, services and jobs along the route.	No action proposed.
18.SAFETY - 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.	1	The route is subject to a 30mph speed limit.	No action proposed.
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.	2	Visibility is generally good along whole route.	
SAFETY				4		
20. COHERENCE - 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.	1	Dropped kerbs and tactile paving are provided at most key crossing points. Some minor junctions are missing tactile paving.	Additional tactile paving could be provided at more minor junctions on route. Potential proportionate improvements can be discussed with the Knowsley Highways as the

						application progresses.
COHERENCE				1		
Total Score				35		

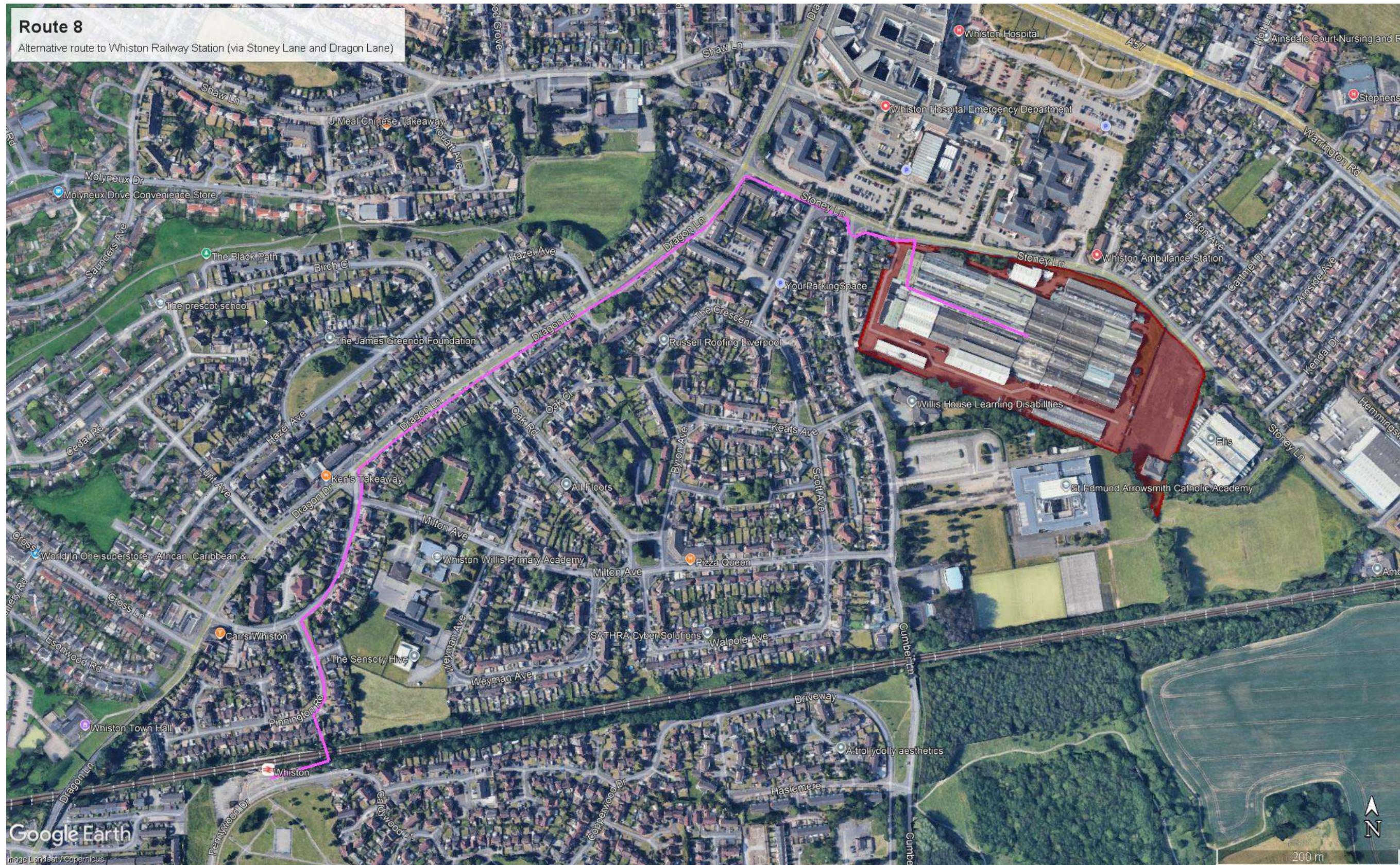
ROUTE SUMMARY

Route Name	Route 8 – Alternate route from proposed site to Whiston Railway Station
Length	Circa 1.37km
Name of Assessor(s)	Shanid Chalil
Date of Assessment	15 June 2026

Criterion	Performance Scores
Attractiveness	7
Comfort	11
Directness	12
Safety	4
Coherence	1
Total	35

Comments	Tactile paving could be improved at some minor - low trafficked roads along the route, however, these are not considered critical as the route is considered of a sufficient quality to encourage sustainable travel to and from the site
Actions	Potential off-site improvements are to be discussed with the Knowsley Highways as the application progresses.

Route 8
Alternative route to Whiston Railway Station (via Stoney Lane and Dragon Lane)



Appendix 10

Revised Accident Analysis

Accident Analysis

Introduction

- 1 In order to consider the potential impact of the development on road safety, a brief review of the most recently available personal injury accident data has been undertaken following receipt of the detailed statistics from Knowsley Metropolitan Borough Council for the most recent 5-year period.
- 2 Consideration of the data indicates that there have been only six reported accidents on the wide road network assessed as part of this TA over the last 5 years. The accident statistics are contained within **Appendix 1**.
- 3 For the purposes of this analysis, the study area has been split into the following areas to establish whether there are any particular accident hotspots on the local highway network.
 - Site frontage along Stoney Lane.
 - Stoney Lane/Cumber Lane signalised junction.
 - Dragon Lane/Stoney Lane/Meadway signalised junction.
 - Cumber Lane
- 4 The study area is shown on Figure 1 below, whilst a detailed accident plot is **Appendix 1**.

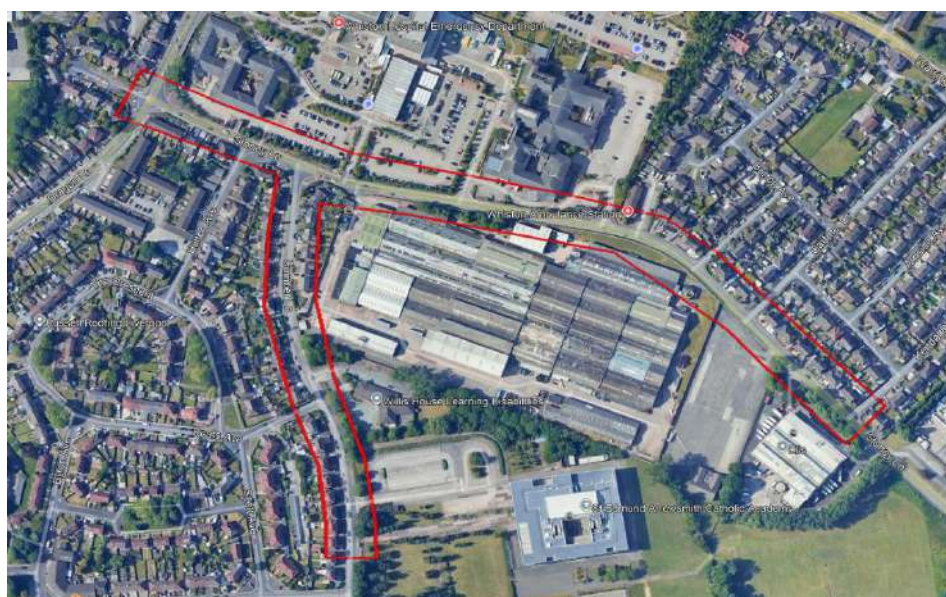


Figure 1 Accident Analysis Study Area

Site Frontage along Stoney Lane

- 5 The Stats19 data provided by Knowsley Metropolitan Borough Council confirms that there have been no accidents along the site frontage in the past 5 years.

Stoney Lane/Cumber Lane Signalised Junction

- 6 There has been 1 accident recorded in the latest 5-year time period. The accident occurred due to a pedestrian entering the carriageway without looking properly and colliding with a car. The accident occurred in daylight on a wet road surface. This resulted in slight injuries to the pedestrian.

Dragon Lane/Stoney Lane Signalised Junction

- 7 There has been a total of 5 accidents have been recorded at the Dragon Lane/Stoney Lane signalised junction.
- 8 The first accident occurred due to a driver of a vehicle failing to see a cyclist in the carriageway and colliding with them. This accident occurred during daylight on a dry road surface. This resulted in slight injuries to the cyclist.
- 9 The second accident occurred due to a driver looking away from the road and because of this, mounting the kerb and then colliding with a brick wall. This accident occurred during daylight on a dry road surface. This resulted in serious injuries to the driver.
- 10 The third accident occurred due to one vehicle failing to stop and colliding with the back of another vehicle. This accident occurred during daylight on a dry road surface. This resulted in slight injuries to the driver of the second vehicle.
- 11 The fourth accident occurred due to one vehicle emerging onto the carriageway and colliding with another vehicle that is in the act of turning. This happened during daylight on a wet road surface and resulted in slight injuries.
- 12 The fifth accident occurred due to a driver being under the influence and becoming impaired causing the driver to collide with two vehicles waiting at a red light. The accident occurred during daylight on a wet road surface resulted in slight injuries.
- 13 All of the accidents that have occurred at the Dragon Lane/Stoney Lane signalised junction have been caused due to driver error.

Cumber Lane

- 14 The location of the study area concentrates from the Stoney Lane/Cumber Lane junction to St Edmund Arrowsmith Catholic High School.
- 15 There have been no recorded accidents along this part of Cumber Lane. This was confirmed by a Knowsley highways engineer, and the email correspondence is shown in **Appendix 2**.

Accident Analysis Summary

- 16 The data reviewed has not identified any untypical accidents.
- 17 The evidence shows that there are no particular engineering issues, accident patterns or problems with the road network or junction layouts. The data also shows that there are no issues with Whiston Hospital, which is located to the north of the site.
- 18 It is not considered that the proposals for a residential development will unduly change the characteristics or nature of the surrounding highway network and as such will not have a detrimental impact on overall road safety.
- 19 In view of this information, it can be concluded that the local highway network in the vicinity of the site does not have an unduly poor safety record, and it is highly unlikely that this situation should be materially worsened as a consequence of the development proposals.

Enclosures

Appendix 1

Stats19 Data

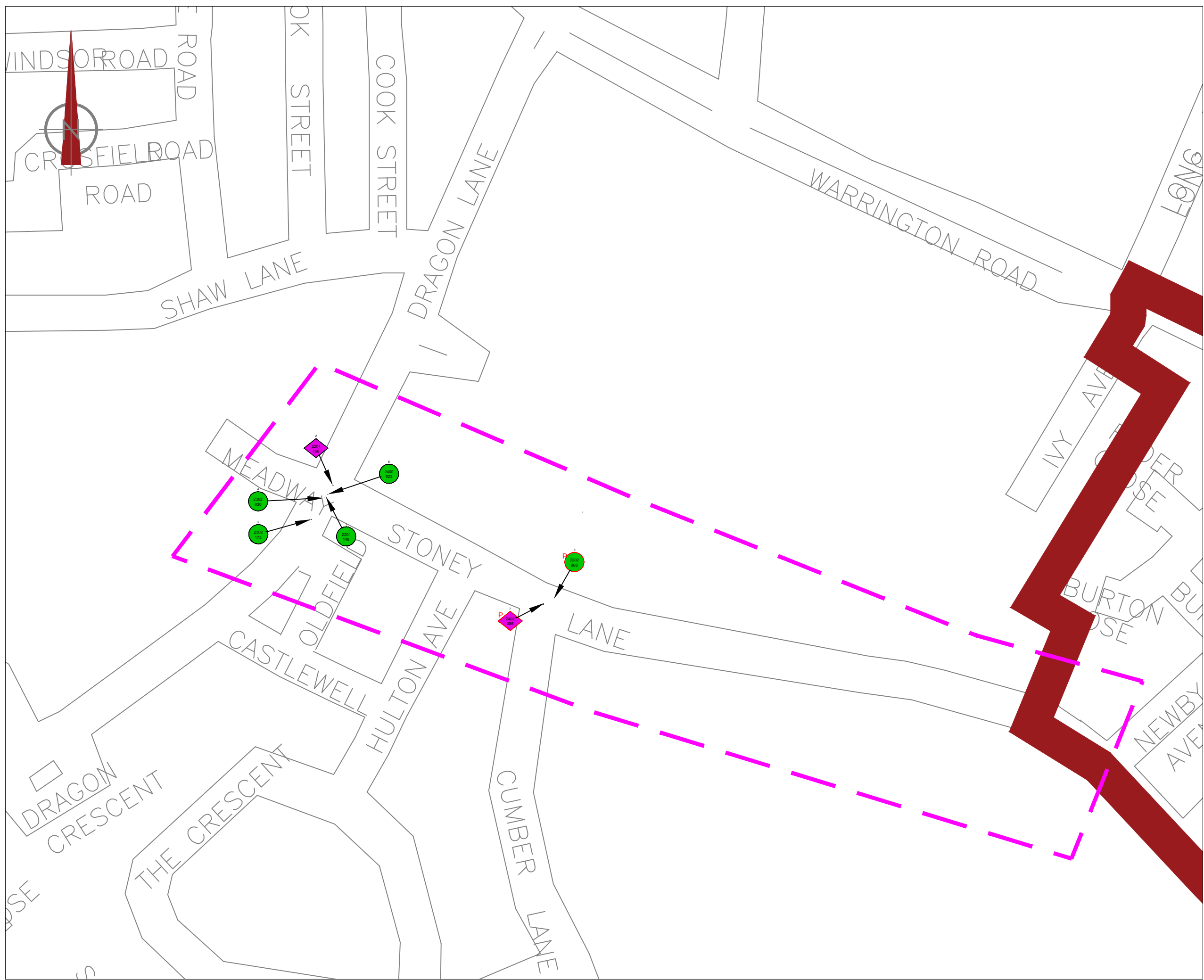
Appendix 2

Email Correspondence from Knowsley Metropolitan Borough Council

Enclosures

Appendix 1

Stats19 Data



NOTES:

P 2201 105

SLIGHT COLLISION

P 2402 098

SERIOUS COLLISION

SEARCH EXTENTS

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STATUS:			

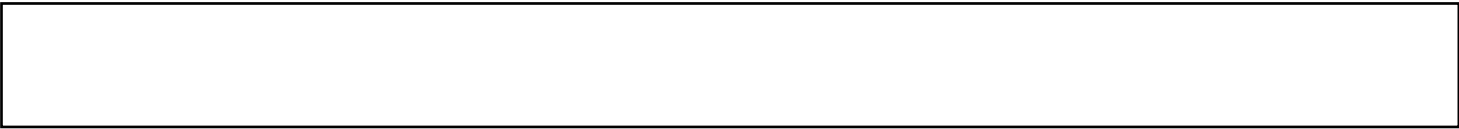


Knowsley Council

HIGHWAYS & CAPITAL DELIVERY
HIGHWAYS MAINTENANCE
PO Box 21 | Archway Road | Huyton | L36 9YU
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EDDISONS STATS19			
PROJECT NAME:			
SHEET 1 of 1			
PROJECT NAME:			
PT/TM/8729			0
DRAWING NUMBER:			REV:
MT			1:500
DRAWN:	CHECKED:	APPROVED:	
JUN 26			
DATE:	DATE:	DATE:	SCALE @A3:

No.	Area	L/A	Reference	Severity	Day	Date	Time	Grid Coordinates		
1		E08000011	2201148	Slight	Wednesday	11/05/2022	19:00	347698 / 391735		
1st Rd: U 2nd Rd: U										
Location: DRAGON LANE and STONEY LANE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl T/Stag	Give	Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: VEH001 HAS PULLED OUT OF A GIVE WAY, HAVING NOT SEEN CYCLIST. KNOCKED HIM FROM HIS BIKE CAUSING SLIGHT INJURY, DRIVER HAS STOPPED.										
User Information:										
2		E08000011	2201166	Serious	Saturday	14/05/2022	16:39	347702 / 391741		
1st Rd: U 2nd Rd: U										
Location: DRAGON LANE and STONEY LANE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl X-Rds	ATS	Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: MALE WAS TURNING RIGHT AT TRAFFIC LIGHT CROSSROAD JUNCTION AND DURING THE TURN HAS LOOKED DOWN AT THE CURB AND EVENTUALLY HAS COLLIDED WITH THE CURB MOUNTING THE PAVEMENT INTO A BRICK WALL.										
User Information:										
3		E08000011	2202068	Slight	Friday	19/08/2022	17:30	347842 / 391726		
1st Rd: 2nd Rd:										
Location: WHISTON HOSPITAL DRAGON LANE										
Speed 30 MPH	C'Way 0.00	Jct Det/Ctrl Not JCT		Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: V001 HAS BEEN TRYING TO PARK IN A PARKING SPACE IN THE HOSPITAL CARPARK. C001 WHO WAS THE FSP IN VEHICLE WAS OUT OF THE VEHICLE GUIDING HIM INTO THE SPACE WHEN V001 LURCHED BACKWARDS AND COLLIDED WITH C001 AND KNOCKED HER TO THE FLOOR MECHANICALLY TRAPPING HER BELOW THE VEHICLE										
User Information:										
4		E08000011	2302030	Slight	Sunday	27/08/2023	17:45	347697 / 391734		
1st Rd: U 2nd Rd: U										
Location: DRAGON LANE and STONEY LANE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl T/Stag	ATS	Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac Ped Phase	Special None	Hazard None
Description: RTC SLIGHT INJURY CAR VS CAR WITNESSED RTC V1 HAS COLLIDED INTO THE REAR OF V2, SHUNTING IT FORWARDS. DAMAGE CAUSED TO V2 AND NECK/ BACK PAIN TO THE DRIVER. V1 HAS FAILED TO STOP, VRM OBTAINED.										
User Information:										
5		E08000011	2302175	Slight	Tuesday	12/09/2023	09:15	347690 / 391722		
1st Rd: U 2nd Rd:										
Location: DRAGON DRIVE SEGMENT 21 DRAGON DRIVE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl Not JCT		Lighting Daylight	Weather Rain	Rd Surf Wet	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: RTC SLIGHT INJURY CAR VS CAR V2 HAS BEEN EMERGING ONTO THE ROAD, WHEN V1 HAS BEEN TURNING INTO THE CAR PARK, AT IT HAS DONE SO IT HAS COLLIDED INTO V2, CAUSING THE COLLISION. ALL PARTIES HAVE EXCHANGED DETAILS AT SCENE, DRIVER OF V2 HAS SLIGHT INJURIES.										
User Information:										



No.	Area	L/A	Reference	Severity	Day	Date	Time	Grid Coordinates
6		E08000011	2400923	Slight	Friday	26/04/2024	14:45	347699 / 391736

1st Rd: U 2nd Rd: U

Location: DRAGON LANE and STONEY LANE

Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
30 MPH	Single c'way	T/Stag ATS	Daylight	Fine	Dry	None	Ped Phase	None	None

Description: THE DRIVER OF V001 SUFFERS MENTAL HEALTH ISSUES AND IS PRESCRIBED MIRTAZIPINE. HIS PRESCRIPTION WAS RECENTLY INCREASED AND THE DRIVER TOOK MEDICATION PRIOR TO DRIVING. THIS CAUSED THE DRIVER TO BECOME IMPAIRED AND HE WAS SEEN MOUNTING THE PAVEMENT BY WITNESSES. THE DRIVER OF V001 COLLIDED INTO THE REAR OF TWO VEHICLES WAITING AT A RED ATS RESULTING IN TOTAL LOSS OF ALL THREE VEHICLES

User Information:

7		E08000011	2402086	Serious	Monday	23/09/2024	08:10	347820 / 391674
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1st Rd: U 2nd Rd: U

Location: CUMBER LANE and STONEY LANE

Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
30 MPH	Single c'way	T/Stag ATS	Daylight	Rain	Wet	None	Ped Phase	None	None

Description: C001 HAS RAN FROM THE PAVEMENT INTO THE ROAD WITHOUT LOOKING PROPERLY AND COLLIDED WITH THE SIDE OF V001

User Information:

ACCIDENT SEVERITY UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	1	0	1	0	2
Slight	0	0	2	2	1	0	5
Damage	0	0	0	0	0	0	0
Total	0	0	3	2	2	0	7

ACCIDENTS BY MONTH AND YEAR UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	1	0	1
May	0	0	2	0	0	0	2
June	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0
August	0	0	1	1	0	0	2
September	0	0	0	1	1	0	2
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
Total	0	0	3	2	2	0	7
%	0%	0%	43%	29%	29%	0%	100%

ACCIDENTS BY DAY AND TIME

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
Midnight - 00:59	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0
08:00 - 08:59	0	1	0	0	0	0	0	1
09:00 - 09:59	0	0	1	0	0	0	0	1
10:00 - 10:59	0	0	0	0	0	0	0	0
11:00 - 11:59	0	0	0	0	0	0	0	0
12:00 - 12:59	0	0	0	0	0	0	0	0
13:00 - 13:59	0	0	0	0	0	0	0	0
14:00 - 14:59	0	0	0	0	0	0	0	0
15:00 - 15:59	0	0	0	0	0	1	0	1
16:00 - 16:59	0	0	0	0	0	0	0	0
17:00 - 17:59	0	0	0	0	0	0	1	1
18:00 - 18:59	1	0	0	0	0	1	0	2
19:00 - 19:59	0	0	0	0	0	0	0	0
20:00 - 20:59	0	0	0	1	0	0	0	1
21:00 - 21:59	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
%	1	1	1	1	0	2	1	7
	14%	14%	14%	14%	0%	29%	14%	100%

JUNCTION DETAIL	
	Number %
CROSS ROADS	1 14
NOT AT JUNCTION	2 29
T OR STAGGERED	4 57
TOTAL	7

JUNCTION CONTROLS	
	Number %
AUTOMATIC TRAFFIC SIG	4 57
GIVE WAY SIGN	1 14
NOT AT JUNCTION	2 29
TOTAL	7

SPEED LIMIT	
	Number %
30 MPH	7 100
TOTAL	7

ROAD CLASS	
	Number %
Unclassified	6 100
TOTAL	6

--

**NUMBER OF ACCIDENTS INVOLVING
PEDESTRIANS**

Number %
2 29

**NUMBER OF ACCIDENTS INVOLVING
SKIDDING**

Number %
0 0

WEATHER

Number %
FINE 5 71
RAIN 2 29
TOTAL 7

ROAD SURFACE

Number %
DRY 5 71
WET 2 29
TOTAL 7

LIGHT CONDITIONS

Number %
Light 7 100
TOTAL 7

--

CASUALTY SEVERITY UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	1	0	1	0	2
Slight	0	0	2	2	1	0	5
Total	0	0	3	2	2	0	7
%	0%	0%	43%	29%	29%	0%	100%

CASUALTIES BY MONTH AND YEAR UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	1	0	1
May	0	0	2	0	0	0	2
June	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0
August	0	0	1	1	0	0	2
September	0	0	0	1	1	0	2
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
Total	0	0	3	2	2	0	7
%	0%	0%	43%	29%	29%	0%	100%

CASUALTIES BY DAY AND TIME

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
Midnight - 00:59	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0
08:00 - 08:59	0	1	0	0	0	0	0	1
09:00 - 09:59	0	0	1	0	0	0	0	1
10:00 - 10:59	0	0	0	0	0	0	0	0
11:00 - 11:59	0	0	0	0	0	0	0	0
12:00 - 12:59	0	0	0	0	0	0	0	0
13:00 - 13:59	0	0	0	0	0	0	0	0
14:00 - 14:59	0	0	0	0	0	1	0	1
15:00 - 15:59	0	0	0	0	0	0	0	0
16:00 - 16:59	0	0	0	0	0	0	1	1
17:00 - 17:59	1	0	0	0	0	1	0	2
18:00 - 18:59	0	0	0	0	0	0	0	0
19:00 - 19:59	0	0	0	1	0	0	0	1
20:00 - 20:59	0	0	0	0	0	0	0	0
21:00 - 21:59	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
%	1	1	1	1	0	2	1	7
	14%	14%	14%	14%	0%	29%	14%	100%

CASUALTIES BY TYPE AND AGE GROUPING

	Unknown Age	0 to 4	5 to 15	16 to 19	20 to 29	30 to 59	60 Plus	Total	%
Pedestrian	0	0	1	0	0	0	1	2	29
Pedal Cyclist	0	0	0	0	0	0	1	1	14
PTW Rider	0	0	0	1	0	0	0	1	14
Car Driver	0	0	0	0	1	1	1	3	43
TOTAL	0	0	1	1	1	1	3	7	
%	0	0	14	14	14	14	43		

Number of Casualties with unknown age: 0

VEHICLES INVOLVED BY TYPE AND AGE OF DRIVER

	1 to 15	16 to 19	20 to 29	30 to 59	60 Plus	Unknown	Total	%
Pedal Cycle	0	0	0	0	1	0	1	8
PTW	0	1	0	0	0	0	1	8
Car	0	0	1	4	3	1	9	75
Goods < 3.5T	0	0	0	0	0	1	1	8
TOTAL	0	1	1	4	4	2	12	
%	0	8	8	33	33	17		

VEHICLE MANOEUVRES

	Number	%
GOING AHEAD OTHER	4	33
STARTING	2	17
REVERSING	1	8
STOPPING	1	8
TURNING RIGHT	2	17
WAITING TO GO AHEAD BUT HELD UP	2	17
TOTAL	12	

BREATH TEST

	Number	%
NOT APPLICABLE	1	8
NEGATIVE	5	42
NOT REQUESTED	1	8
DRIVER NOT CONTACTED	5	42
TOTAL	12	

Appendix 2

Email Correspondence from Knowsley Metropolitan Borough Council

George Monks

From: George.Monks@eddisons.com
Subject: RE: Stat 19 Data Request

From: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Sent: 29 June 2026 11:57
To: George Monks <George.Monks@eddisons.com>
Subject: RE: Stat 19 Data Request

 External email >

Hi George,

I had a look and there had been no accidents in past 5 years for the area shown except the one at junction with Stoney Lane which is on the previous data request. I haven't put invoice in as no new data unless you need the reports and plans to show this.

Thanks,

Matthew Trainor
Graduate Highways Engineer
Highways and Capital Delivery

Telephone: 0151 443 2087
Mobile: 07350400541

Knowsley Council, Stretton Way Depot, Stretton Way, Huyton, Knowsley, L36 6JF



From: George Monks <George.Monks@eddisons.com>
Sent: 29 June 2026 11:32
To: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Subject: RE: Stat 19 Data Request

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Hi Matthew,

Do you know when we expect the Stats19 data?

Thanks.

George Monks | Transport Planner | Transport Planning and Design



340 Deansgate, Manchester, M3 4LY | T: 0161 831 9444 | [Visit our website](#)

This email is from BTG Eddisons, which is a trading name of Eddisons Commercial Ltd, a company registered in England and Wales (No. 3280893).

Registered office: 340 Deansgate, Manchester, M3 4LY.

A member of BTG Consulting plc. www.btguk.com

From: George Monks <George.Monks@eddisons.com>
Sent: 23 June 2026 16:34
To: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Subject: RE: Stat 19 Data Request

Hi Matthew,

Please proceed with this. The invoice details will be the same as the ones previously used.

Cheers.

George Monks | Transport Planner | Transport Planning and Design



340 Deansgate, Manchester, M3 4LY | T: 0161 831 9444 | [Visit our website](#)

This email is from BTG Eddisons, which is a trading name of Eddisons Commercial Ltd, a company registered in England and Wales (No. 3280893).

Registered office: 340 Deansgate, Manchester, M3 4LY.

A member of BTG Consulting plc. www.btguk.com

From: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Sent: 19 June 2026 11:25
To: George Monks <George.Monks@eddisons.com>
Cc: Rhiannon Cowan <Rhiannon.Cowan@eddisons.com>
Subject: RE: Stat 19 Data Request

Hi George,

This will be additional data request so will be charged £220 + VAT as per highways fees. [Highway fees and charges | Knowsley Council](#)

Can you also confirm invoicing details and that the area attached covers what you need please.

Thanks,

Matthew Trainor
Graduate Highways Engineer
Highways and Capital Delivery

Telephone: 0151 443 2087

Mobile: 07350400541

Knowsley Council, Stretton Way Depot, Stretton Way, Huyton, Knowsley, L36 6JF

From: George Monks <George.Monks@eddisons.com>
Sent: 19 June 2026 11:04
To: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Cc: Rhiannon Cowan <Rhiannon.Cowan@eddisons.com>
Subject: RE: Stat 19 Data Request

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Hi Matthew,

Thanks for this.

Could you also provide us with the Stats19 data from the Stoney Lane/Cumber Lane junction down to St Edmund Arrowsmith Catholic Academy please?

Thank you.

George Monks | Transport Planner | Transport Planning and Design



340 Deansgate, Manchester, M3 4LY | T: 0161 831 9444 | [Visit our website](#)

This email is from BTG Eddisons, which is a trading name of Eddisons Commercial Ltd, a company registered in England and Wales (No. 3280893).

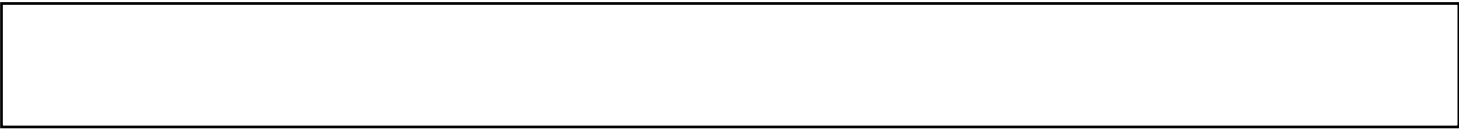
Registered office: 340 Deansgate, Manchester, M3 4LY.

A member of BTG Consulting plc. www.btguk.com

Appendix 1

Stats19 Data

No.	Area	L/A	Reference	Severity	Day	Date	Time	Grid Coordinates		
1		E08000011	2201148	Slight	Wednesday	11/05/2022	19:00	347698 / 391735		
1st Rd: U 2nd Rd: U										
Location: DRAGON LANE and STONEY LANE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl T/Stag	Give	Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: VEH001 HAS PULLED OUT OF A GIVE WAY, HAVING NOT SEEN CYCLIST. KNOCKED HIM FROM HIS BIKE CAUSING SLIGHT INJURY, DRIVER HAS STOPPED.										
User Information:										
2		E08000011	2201166	Serious	Saturday	14/05/2022	16:39	347702 / 391741		
1st Rd: U 2nd Rd: U										
Location: DRAGON LANE and STONEY LANE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl X-Rds	ATS	Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: MALE WAS TURNING RIGHT AT TRAFFIC LIGHT CROSSROAD JUNCTION AND DURING THE TURN HAS LOOKED DOWN AT THE CURB AND EVENTUALLY HAS COLLIDED WITH THE CURB MOUNTING THE PAVEMENT INTO A BRICK WALL.										
User Information:										
3		E08000011	2202068	Slight	Friday	19/08/2022	17:30	347842 / 391726		
1st Rd: 2nd Rd:										
Location: WHISTON HOSPITAL DRAGON LANE										
Speed 30 MPH	C'Way 0.00	Jct Det/Ctrl Not JCT		Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: V001 HAS BEEN TRYING TO PARK IN A PARKING SPACE IN THE HOSPITAL CARPARK. C001 WHO WAS THE FSP IN VEHICLE WAS OUT OF THE VEHICLE GUIDING HIM INTO THE SPACE WHEN V001 LURCHED BACKWARDS AND COLLIDED WITH C001 AND KNOCKED HER TO THE FLOOR MECHANICALLY TRAPPING HER BELOW THE VEHICLE										
User Information:										
4		E08000011	2302030	Slight	Sunday	27/08/2023	17:45	347697 / 391734		
1st Rd: U 2nd Rd: U										
Location: DRAGON LANE and STONEY LANE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl T/Stag	ATS	Lighting Daylight	Weather Fine	Rd Surf Dry	PedX - Human None	- Phy Fac Ped Phase	Special None	Hazard None
Description: RTC SLIGHT INJURY CAR VS CAR WITNESSED RTC V1 HAS COLLIDED INTO THE REAR OF V2, SHUNTING IT FORWARDS. DAMAGE CAUSED TO V2 AND NECK/ BACK PAIN TO THE DRIVER. V1 HAS FAILED TO STOP, VRM OBTAINED.										
User Information:										
5		E08000011	2302175	Slight	Tuesday	12/09/2023	09:15	347690 / 391722		
1st Rd: U 2nd Rd:										
Location: DRAGON DRIVE SEGMENT 21 DRAGON DRIVE										
Speed 30 MPH	C'Way Single c'way	Jct Det/Ctrl Not JCT		Lighting Daylight	Weather Rain	Rd Surf Wet	PedX - Human None	- Phy Fac None	Special None	Hazard None
Description: RTC SLIGHT INJURY CAR VS CAR V2 HAS BEEN EMERGING ONTO THE ROAD, WHEN V1 HAS BEEN TURNING INTO THE CAR PARK, AT IT HAS DONE SO IT HAS COLLIDED INTO V2, CAUSING THE COLLISION. ALL PARTIES HAVE EXCHANGED DETAILS AT SCENE, DRIVER OF V2 HAS SLIGHT INJURIES.										
User Information:										



No.	Area	L/A	Reference	Severity	Day	Date	Time	Grid Coordinates
6		E08000011	2400923	Slight	Friday	26/04/2024	14:45	347699 / 391736

1st Rd: U 2nd Rd: U

Location: DRAGON LANE and STONEY LANE

Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
30 MPH	Single c'way	T/Stag ATS	Daylight	Fine	Dry	None	Ped Phase	None	None

Description: THE DRIVER OF V001 SUFFERS MENTAL HEALTH ISSUES AND IS PRESCRIBED MIRTAZIPINE. HIS PRESCRIPTION WAS RECENTLY INCREASED AND THE DRIVER TOOK MEDICATION PRIOR TO DRIVING. THIS CAUSED THE DRIVER TO BECOME IMPAIRED AND HE WAS SEEN MOUNTING THE PAVEMENT BY WITNESSES. THE DRIVER OF V001 COLLIDED INTO THE REAR OF TWO VEHICLES WAITING AT A RED ATS RESULTING IN TOTAL LOSS OF ALL THREE VEHICLES

User Information:

7		E08000011	2402086	Serious	Monday	23/09/2024	08:10	347820 / 391674
---	--	-----------	---------	---------	--------	------------	-------	-----------------

1st Rd: U 2nd Rd: U

Location: CUMBER LANE and STONEY LANE

Speed	C'Way	Jct Det/Ctrl	Lighting	Weather	Rd Surf	PedX - Human	- Phy Fac	Special	Hazard
30 MPH	Single c'way	T/Stag ATS	Daylight	Rain	Wet	None	Ped Phase	None	None

Description: C001 HAS RAN FROM THE PAVEMENT INTO THE ROAD WITHOUT LOOKING PROPERLY AND COLLIDED WITH THE SIDE OF V001

User Information:

ACCIDENT SEVERITY UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	1	0	1	0	2
Slight	0	0	2	2	1	0	5
Damage	0	0	0	0	0	0	0
Total	0	0	3	2	2	0	7

ACCIDENTS BY MONTH AND YEAR UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	1	0	1
May	0	0	2	0	0	0	2
June	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0
August	0	0	1	1	0	0	2
September	0	0	0	1	1	0	2
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
Total	0	0	3	2	2	0	7
%	0%	0%	43%	29%	29%	0%	100%

ACCIDENTS BY DAY AND TIME

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
Midnight - 00:59	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0
08:00 - 08:59	0	1	0	0	0	0	0	1
09:00 - 09:59	0	0	1	0	0	0	0	1
10:00 - 10:59	0	0	0	0	0	0	0	0
11:00 - 11:59	0	0	0	0	0	0	0	0
12:00 - 12:59	0	0	0	0	0	0	0	0
13:00 - 13:59	0	0	0	0	0	0	0	0
14:00 - 14:59	0	0	0	0	0	0	0	0
15:00 - 15:59	0	0	0	0	0	1	0	1
16:00 - 16:59	0	0	0	0	0	0	0	0
17:00 - 17:59	0	0	0	0	0	0	1	1
18:00 - 18:59	1	0	0	0	0	1	0	2
19:00 - 19:59	0	0	0	0	0	0	0	0
20:00 - 20:59	0	0	0	1	0	0	0	1
21:00 - 21:59	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
%	1	1	1	1	0	2	1	7
	14%	14%	14%	14%	0%	29%	14%	100%

JUNCTION DETAIL	
	Number %
CROSS ROADS	1 14
NOT AT JUNCTION	2 29
T OR STAGGERED	4 57
TOTAL	7

JUNCTION CONTROLS	
	Number %
AUTOMATIC TRAFFIC SIG	4 57
GIVE WAY SIGN	1 14
NOT AT JUNCTION	2 29
TOTAL	7

SPEED LIMIT	
	Number %
30 MPH	7 100
TOTAL	7

ROAD CLASS	
	Number %
Unclassified	6 100
TOTAL	6

--

**NUMBER OF ACCIDENTS INVOLVING
PEDESTRIANS**

Number %
2 29

**NUMBER OF ACCIDENTS INVOLVING
SKIDDING**

Number %
0 0

WEATHER

Number %
FINE 5 71
RAIN 2 29
TOTAL 7

ROAD SURFACE

Number %
DRY 5 71
WET 2 29
TOTAL 7

LIGHT CONDITIONS

Number %
Light 7 100
TOTAL 7

--

CASUALTY SEVERITY UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
Fatal	0	0	0	0	0	0	0
Serious	0	0	1	0	1	0	2
Slight	0	0	2	2	1	0	5
Total	0	0	3	2	2	0	7
%	0%	0%	43%	29%	29%	0%	100%

CASUALTIES BY MONTH AND YEAR UPTO 2025

	2020	2021	2022	2023	2024	2025	Total
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	1	0	1
May	0	0	2	0	0	0	2
June	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0
August	0	0	1	1	0	0	2
September	0	0	0	1	1	0	2
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
Total	0	0	3	2	2	0	7
%	0%	0%	43%	29%	29%	0%	100%

CASUALTIES BY DAY AND TIME

	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
Midnight - 00:59	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0
02:00 - 02:59	0	0	0	0	0	0	0	0
03:00 - 03:59	0	0	0	0	0	0	0	0
04:00 - 04:59	0	0	0	0	0	0	0	0
05:00 - 05:59	0	0	0	0	0	0	0	0
06:00 - 06:59	0	0	0	0	0	0	0	0
07:00 - 07:59	0	0	0	0	0	0	0	0
08:00 - 08:59	0	1	0	0	0	0	0	1
09:00 - 09:59	0	0	1	0	0	0	0	1
10:00 - 10:59	0	0	0	0	0	0	0	0
11:00 - 11:59	0	0	0	0	0	0	0	0
12:00 - 12:59	0	0	0	0	0	0	0	0
13:00 - 13:59	0	0	0	0	0	0	0	0
14:00 - 14:59	0	0	0	0	0	1	0	1
15:00 - 15:59	0	0	0	0	0	0	0	0
16:00 - 16:59	0	0	0	0	0	0	1	1
17:00 - 17:59	1	0	0	0	0	1	0	2
18:00 - 18:59	0	0	0	0	0	0	0	0
19:00 - 19:59	0	0	0	1	0	0	0	1
20:00 - 20:59	0	0	0	0	0	0	0	0
21:00 - 21:59	0	0	0	0	0	0	0	0
22:00 - 22:59	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
%	1 14%	1 14%	1 14%	1 14%	0 0%	2 29%	1 14%	7 100%

CASUALTIES BY TYPE AND AGE GROUPING

	Unknown Age	0 to 4	5 to 15	16 to 19	20 to 29	30 to 59	60 Plus	Total	%
Pedestrian	0	0	1	0	0	0	1	2	29
Pedal Cyclist	0	0	0	0	0	0	1	1	14
PTW Rider	0	0	0	1	0	0	0	1	14
Car Driver	0	0	0	0	1	1	1	3	43
TOTAL	0	0	1	1	1	1	3	7	
%	0	0	14	14	14	14	43		

Number of Casualties with unknown age: 0

VEHICLES INVOLVED BY TYPE AND AGE OF DRIVER

	1 to 15	16 to 19	20 to 29	30 to 59	60 Plus	Unknown	Total	%
Pedal Cycle	0	0	0	0	1	0	1	8
PTW	0	1	0	0	0	0	1	8
Car	0	0	1	4	3	1	9	75
Goods < 3.5T	0	0	0	0	0	1	1	8
TOTAL	0	1	1	4	4	2	12	
%	0	8	8	33	33	17		

VEHICLE MANOEUVRES

	Number	%
GOING AHEAD OTHER	4	33
STARTING	2	17
REVERSING	1	8
STOPPING	1	8
TURNING RIGHT	2	17
WAITING TO GO AHEAD BUT HELD UP	2	17
TOTAL	12	

BREATH TEST

	Number	%
NOT APPLICABLE	1	8
NEGATIVE	5	42
NOT REQUESTED	1	8
DRIVER NOT CONTACTED	5	42
TOTAL	12	

Appendix 2

Email Correspondence from Knowsley Metropolitan Borough Council

George Monks

From: George.Monks@eddisons.com
Subject: RE: Stat 19 Data Request

From: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Sent: 29 June 2026 11:57
To: George Monks <George.Monks@eddisons.com>
Subject: RE: Stat 19 Data Request

 External email >

Hi George,

I had a look and there had been no accidents in past 5 years for the area shown except the one at junction with Stoney Lane which is on the previous data request. I haven't put invoice in as no new data unless you need the reports and plans to show this.

Thanks,

Matthew Trainor
Graduate Highways Engineer
Highways and Capital Delivery

Telephone: 0151 443 2087
Mobile: 07350400541

Knowsley Council, Stretton Way Depot, Stretton Way, Huyton, Knowsley, L36 6JF



From: George Monks <George.Monks@eddisons.com>
Sent: 29 June 2026 11:32
To: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Subject: RE: Stat 19 Data Request

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Hi Matthew,

Do you know when we expect the Stats19 data?

Thanks.

George Monks | Transport Planner | Transport Planning and Design



340 Deansgate, Manchester, M3 4LY | T: 0161 831 9444 | [Visit our website](#)

This email is from BTG Eddisons, which is a trading name of Eddisons Commercial Ltd, a company registered in England and Wales (No. 3280893).

Registered office: 340 Deansgate, Manchester, M3 4LY.

A member of BTG Consulting plc. www.btguk.com

From: George Monks <George.Monks@eddisons.com>
Sent: 23 June 2026 16:34
To: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Subject: RE: Stat 19 Data Request

Hi Matthew,

Please proceed with this. The invoice details will be the same as the ones previously used.

Cheers.

George Monks | Transport Planner | Transport Planning and Design



340 Deansgate, Manchester, M3 4LY | T: 0161 831 9444 | [Visit our website](#)

This email is from BTG Eddisons, which is a trading name of Eddisons Commercial Ltd, a company registered in England and Wales (No. 3280893).

Registered office: 340 Deansgate, Manchester, M3 4LY.

A member of BTG Consulting plc. www.btguk.com

From: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Sent: 19 June 2026 11:25
To: George Monks <George.Monks@eddisons.com>
Cc: Rhiannon Cowan <Rhiannon.Cowan@eddisons.com>
Subject: RE: Stat 19 Data Request

Hi George,

This will be additional data request so will be charged £220 + VAT as per highways fees. [Highway fees and charges | Knowsley Council](#)

Can you also confirm invoicing details and that the area attached covers what you need please.

Thanks,

Matthew Trainor
Graduate Highways Engineer
Highways and Capital Delivery

Telephone: 0151 443 2087

Mobile: 07350400541

Knowsley Council, Stretton Way Depot, Stretton Way, Huyton, Knowsley, L36 6JF

From: George Monks <George.Monks@eddisons.com>
Sent: 19 June 2026 11:04
To: Trainor, Matthew <matthew.trainor@knowsley.gov.uk>
Cc: Rhiannon Cowan <Rhiannon.Cowan@eddisons.com>
Subject: RE: Stat 19 Data Request

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Hi Matthew,

Thanks for this.

Could you also provide us with the Stats19 data from the Stoney Lane/Cumber Lane junction down to St Edmund Arrowsmith Catholic Academy please?

Thank you.

George Monks | Transport Planner | Transport Planning and Design



340 Deansgate, Manchester, M3 4LY | T: 0161 831 9444 | [Visit our website](#)

This email is from BTG Eddisons, which is a trading name of Eddisons Commercial Ltd, a company registered in England and Wales (No. 3280893).

Registered office: 340 Deansgate, Manchester, M3 4LY.

A member of BTG Consulting plc. www.btguk.com

Appendix 11

Road Safety Audit



Eddisons

PROPOSED S278 HIGHWAYS WORKS GLEN DIMPLEX SITE, WHISTON

**STAGE 1/2 - ROAD SAFETY AUDIT
JUNE 2026**

Transport Planning /Traffic Surveys/ Road Safety Audits

Tel: +44 (0)2920 667663 Email: admin@go-surveys.co.uk Web: www.go-surveys.co.uk
go-surveys Ltd Registered in England and Wales No:5841452
Registered office: go-surveys Ltd, 72 Plasterton Avenue, Cardiff, CF11 9HJ

REPORT CONTROL

Document:	GS1714-2026 - Glen Dimplex Site, Whiston - Stage 1_2 RSA - Final.docx
Client:	Eddisions
Job Number:	GS-1714-2026
File Origin:	/Users/go-surveys/Road Safety Audits/GS1714 - Glen Dimplex, Whiston - Stage 1_2 RSA/GS1714-2026 - Glen Dimplex Site, Whiston - Stage 1_2 RSA - Final.docx

Document Checking:			
Primary Author:	T Brooks	Initialled:	TB
Contributor:	R Lister	Initialled:	RL
Reviewed By:	Initialled:		

Document Reference and Revision			
Issue	Date	Status	Checked for Issue
1	19/06/2026	Draft	TB
2	23/06/2026	Final	TB
3			
4			



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1	INTRODUCTION.....	2
2	ROAD SAFETY AUDIT FINDINGS FROM RSA 1/2	4
	PROBLEM 1	4
3	AUDIT STATEMENT	5

Appendices

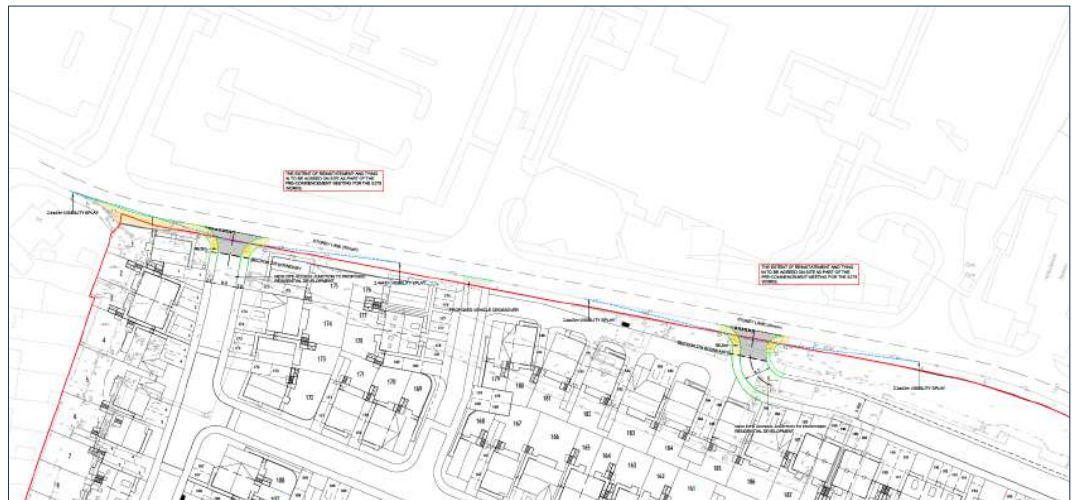
Appendix A – List of drawings and documents supplied for audit.

Appendix B – Location plan of identified problems.

1 INTRODUCTION

- 1.1 This report presents the findings from a combined Stage 1/2 Road Safety Audit (RSA) undertaken on the proposed S278 site access arrangements via Stoney Lane, Whiston which are associated with the proposed residential development on the former Glen Dimplex Site.
- 1.2 The audit was carried out by the following:
- | | |
|--|---------------------------------|
| T Brooks
BSc (Hons), MBA, CMILT, MCIHT, MSoRSA,
HE RSA Cert. of Competency | - Road Safety Audit Team Leader |
| R Lister
BSc (Hons), MSc, MRTPI, CMILT, MCIHT,
MSoRSA | - Road Safety Audit Team Member |
- 1.3 The RSA was commissioned by Eddisons who have designed the scheme and who provided the audit information and although there was no formal 'audit brief' the RSA team has accepted that sufficient information has been provided to undertake the Stage 1/2 RSA. The overseeing organisation is Knowsley Council who have approved the audit team to undertake RSA's on their highway network.
- 1.4 The site visit was undertaken by the audit team on Wednesday 17th June 2026 between 10:35-11:00 and comprised a walk and drive-throughs (where available) of the area covered by the schemes. During the site visit both the weather and carriageway surface were dry. Traffic in the vicinity of the scheme on Stoney Lane was relatively light. A small number of pedestrians and cyclists were observed during the site visit.
- 1.5 Stoney Lane in the vicinity of the scheme is subject to a 30mph speed limit and has street lighting throughout.
- 1.6 A review of the Personal Injury Collisions (PIC) data for the most recent 5 year period data is available for between 2020 to 2024 (based on information derived from Crashmap) has indicated that during this period there has been no PICs recorded in the immediate vicinity of the proposed access arrangements.
- 1.7 The drawings and documents supplied for audit are listed in **Appendix A**. An annotated drawing showing the locations of the problems identified is provided in **Appendix B**.
- 1.8 The scope of the RSA is limited to the proposed s278 site access arrangements as illustrated in **Figure 1**.

Figure 1: Proposed s278 site access arrangements.



- 1.9 The terms of reference of the audit are as that described in DMRB GG/119 Guidelines on Road Safety Audits. This standard has been used for guidance only. The exceptions to GG/119 are the inclusion (if applicable) of a notes/observation section at the end of the report and figure showing the scheme instead of a written description of the scheme. 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.
- 1.10 The audit team have not been made aware of any departures from standard within the design of the scheme nor any previous RSAs undertaken on the scheme.
- 1.11 The recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG/119. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

2 ROAD SAFETY AUDIT FINDINGS FROM RSA 1/2

PROBLEM 1

LOCATION: Stoney Lane – Western Site Access junction.

SUMMARY: Vehicles queuing through the junction could result in side-impact type collisions.

- 2.1 The location of the proposed western site access junction may result in vehicles queuing back through the junction due to its proximity to the Stoney Lane/Cumber Lane signalised junction which could result in vehicles wanting to turn right from the site access onto Stoney Road making injudicious turning manoeuvres through queuing vehicles due to potentially restricted visibility to the west and could result in an increased risk of side-impact type collisions.

RECOMMENDATION

- 2.2 It is recommended that 'keep clear' carriageway markings are provided on the Stoney Lane in front of the proposed site access.

3 AUDIT STATEMENT

3.1 We certify that this audit has been carried out in accordance with GG/119 unless otherwise noted.

Signed:



Date: 23 June 2026

T Brooks – BSc (Hons), MBA, CMILT, MCIHT, MSoRSA,
HE RSA Cert of Competency
Audit Team Leader
go-surveys Ltd
72 Plasturton Avenue
Cardiff
CF11 9HJ

Signed:



Date: 23 June 2026

R Lister - BSc (Hons), MSc, MRTPI, CMILT, MCIHT,
MSoRSA
Audit Team Member
go-surveys Ltd
72 Plasturton Avenue
Cardiff
CF11 9HJ



APPENDIX A

List of Drawings and Documents Provided for Audit

5078-D001 REV C

General Arrangement

5078-D002 REV C

Site Clearance

5078-D003 REV C

Construction Materials

5078-D004 REV C

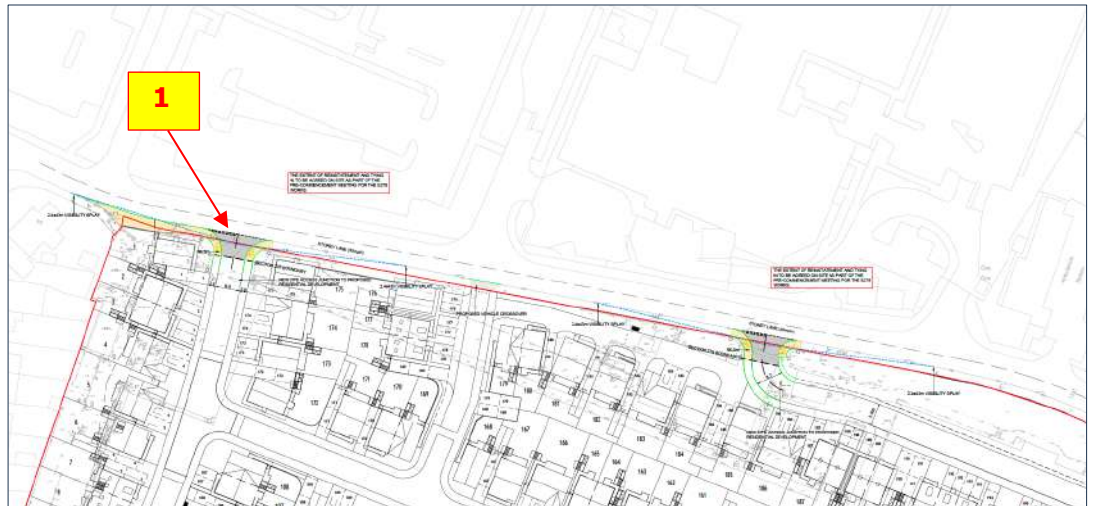
Signs And Markings

PIC Data

Jan 2020-Dec 2024

APPENDIX B

Location of Identified Problems



Appendix 12

Designer's Response

ROAD SAFETY AUDIT (RSA) DESIGNERS RESPONSE FORM

RSA Ref No : GS1714-2026

RSA Stage : 1&2

RSA Auditors : Go-Surveys

Scheme : Glen Dimplex, Whiston

Response By: BTG Eddisons Transport Planning & Design

Problem No. in RSA Report	Problem Accepted (Yes/No)	Recommended Measure Accepted (Yes/No)	Alternative Measure / Design Team Response
1	Yes	Yes	Problem and recommendation accepted, 'Keep Clear' markings provided in front of site access.

Name: Leon Blythe

Signed: Leon Blythe

Position: Senior Engineer

BTG Eddisons Transport Planning
& Design
340 Deansgate
Manchester
M3 4LY

Date: 24.06.26



