

TIDBURY GREEN CUMULATIVE IMPACT ASSESSMENT AND MITIGATION FRAMEWORK

INITIAL DRAFT

July 2026

Notice

This document and its contents have been prepared and are intended solely as information for Solihull Metropolitan Borough Council and use in relation to the Tidbury Green Cumulative Impact Assessment and Mitigation Framework

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The report has been prepared as a snap shot in time, reflective of the applications that were submitted and under consideration at the point of its development. It is intended to remain a live document and be further updated to reflect subsequent applications and wider growth proposals covered within the draft Local Plan. The inclusion of sites within the study is not intended to predetermine any planning application that may remain live. It is intended to consider a worst case scenario should such applications be approved either by the council or via an appeal process.

Document History

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Client Signoff

Client	Solihull Metropolitan Borough Council	Client Signature / Date	
Project	Tidbury Green Cumulative Impact Assessment and Mitigation Framework		
Job number	100095659		



Background and Report Purpose

Several live planning applications are currently emerging within the Tidbury Green area of Solihull. These proposals are being brought forward at a time when **Solihull Metropolitan Borough Council (SMBC) is in the process of preparing its Local Plan** and associated Infrastructure Delivery Plan (IDP).

Consequently, SMBC is not yet in a position to establish a comprehensive strategic framework to address the cumulative transport impacts arising from these developments. This creates a **risk that individual, piecemeal mitigation measures could be implemented**, potentially constraining the Council's ability to deliver integrated and genuinely sustainable transport solutions across the area.

In response to this challenge, AtkinsRéalis has been commissioned by SMBC to **assess the anticipated transport impacts of the proposed developments** in Tidbury Green and to **develop a high-level intervention framework. This framework will seek to mitigate the cumulative impacts and support the delivery of coordinated, sustainable transport infrastructure.**

The purpose of this assessment is to:

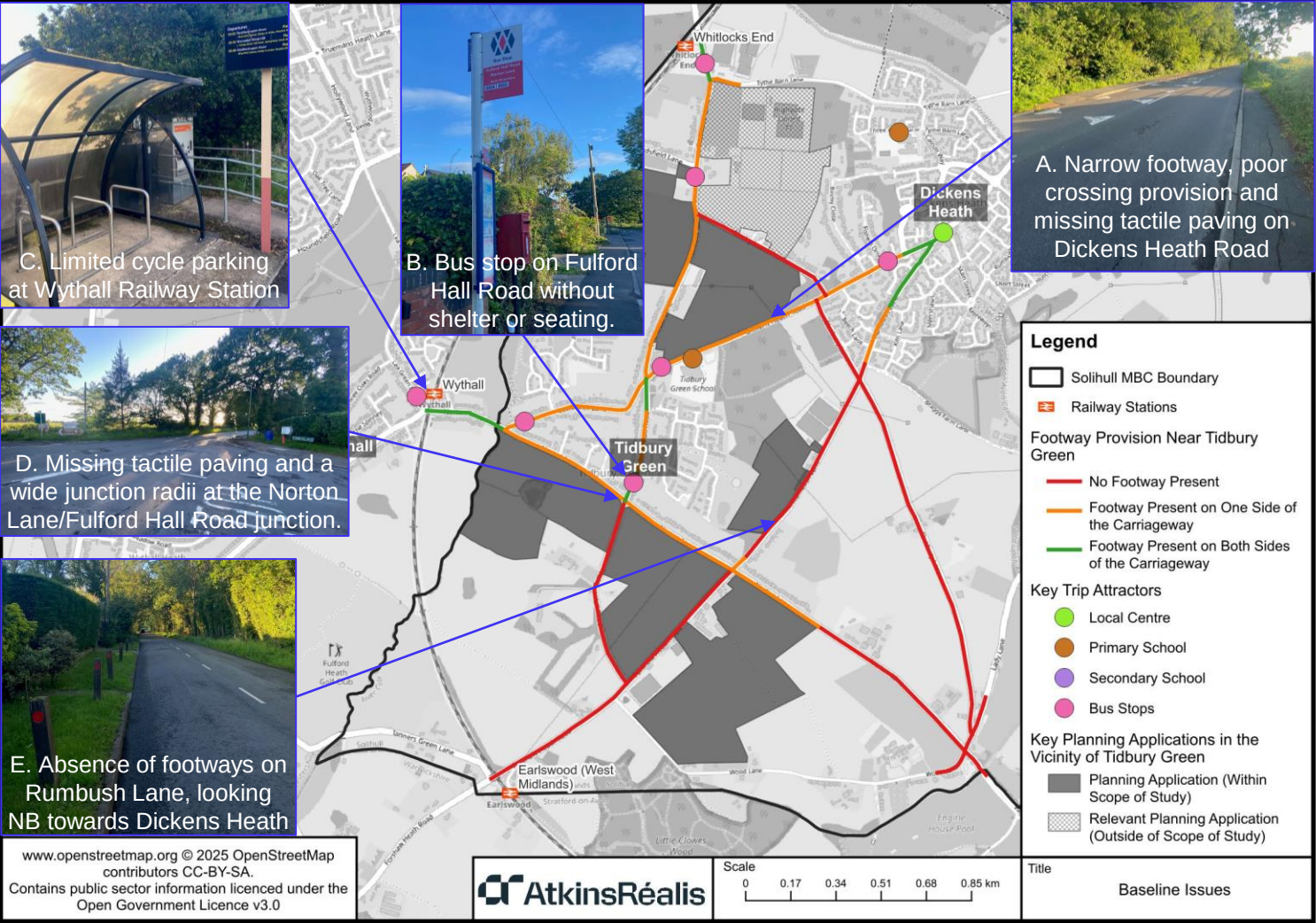
- **Understand cumulative multi-modal trip generation** arising from live and emerging planning applications in Tidbury Green;
- **Identify priority interventions** to support safe, suitable and sustainable access to the proposed developments; and
- **Define a clear mitigation framework**, that can be used consistently across planning applications, in the absence of an adopted Local Plan or Infrastructure Delivery Plan.

This report summarises the outcome of the assessment, including:

- Summary of baseline issues;
- Results of the cumulative vehicular trip generation assessment;
- Review of the future demand corridors and the associated constraints and opportunities;
- Intervention strategy for all key modes including active travel, public transport and highways; and
- Mitigation framework.

Supporting evidence to the assessment is included within the Technical Appendices.

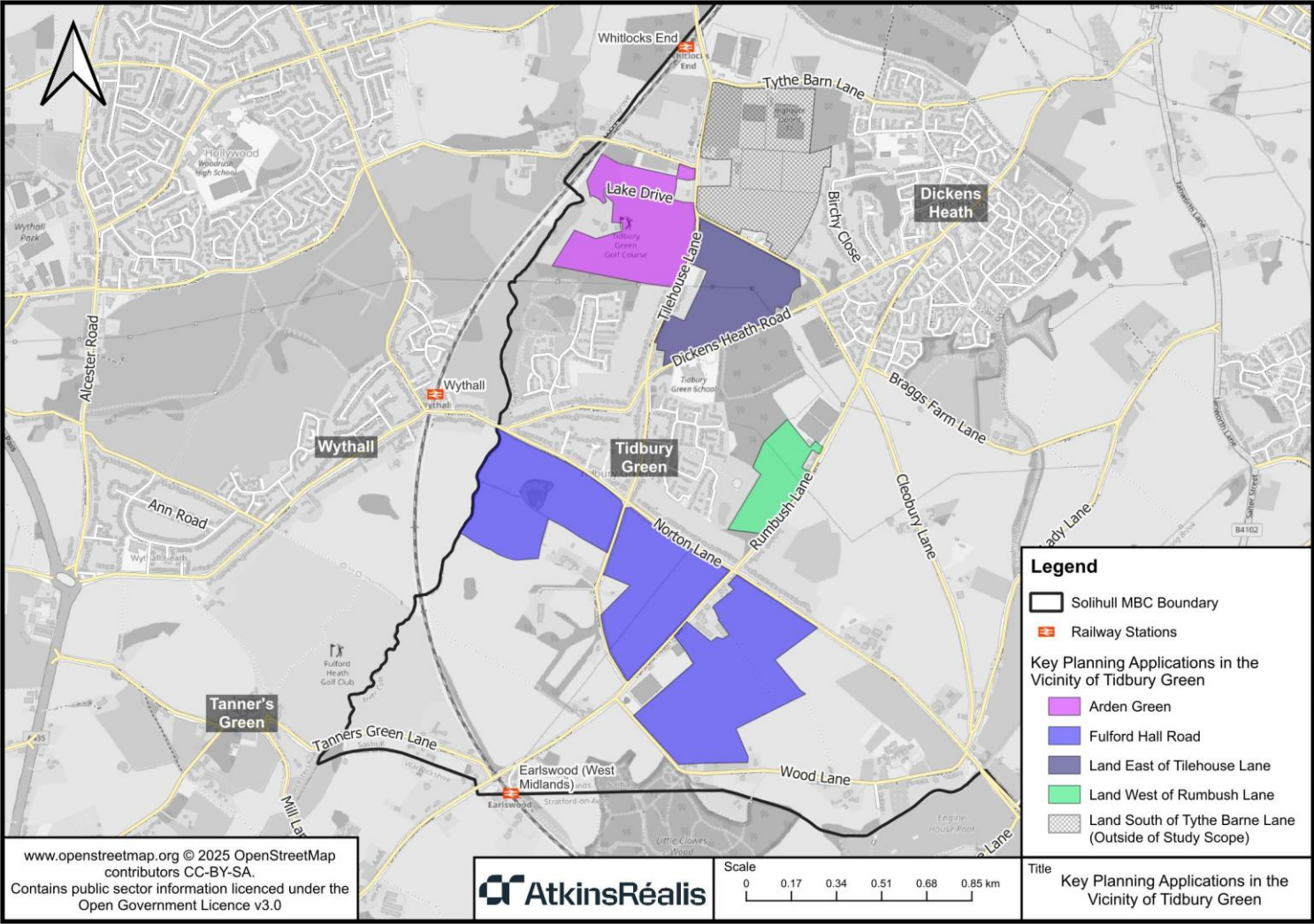
Existing Accessibility



An accessibility audit of the existing transport infrastructure in Tidbury Green has identified several barriers to active travel, as well as factors that make public transport a less attractive option. Some of the key barriers identified are as follows:

- Where footways are present, they are often narrow and not to LTN 1/20 standard. Overgrown vegetation also often constrains the available width for pedestrians.
- The quality of bus stops in Tidbury Green is poor, as they do not include shelter or seating for waiting passengers.
- There is limited cycle parking provision at Wythall Railway Station, and stands in Dickens Heath are uncovered with limited natural surveillance.
- Walking routes are of poor quality. Poor crossing provision, missing tactile paving and wide junction radii are common issues. Some footways are in poor condition, such as on Lowbrook Lane.
- There are several links towards key trip attractors which have no footway, or a footway present on just one side of the carriageway.
- There is currently no segregated cycling infrastructure within the Tidbury Green area and an absence of traffic calming measures along several key links makes on-road cycling unattractive.
- The service provision at Earlswood and Wythall Railway Station (1 train per hour to Birmingham Moor Street) is relatively poor. This may encourage passengers to travel further to Whitlocks End, where the service frequency is two per hour.

Forecast Housing Growth



There are several live applications coming forward in the Tidbury Green area, including the following four applications, which have been assessed specifically within the scope of this study:

- Arden Green (PL/2025/01402/PPOL) – 200 dwellings;
- Fulford Hall Road (PL/2025/01937/MAODW) – 850 dwellings;
- Land East of Tilehouse Lane (PL/2026/00759/PPOL) – 190 dwellings; and
- Land West of Rumbush Lane (PL/2025/01502/PPOL) – 110 dwellings.

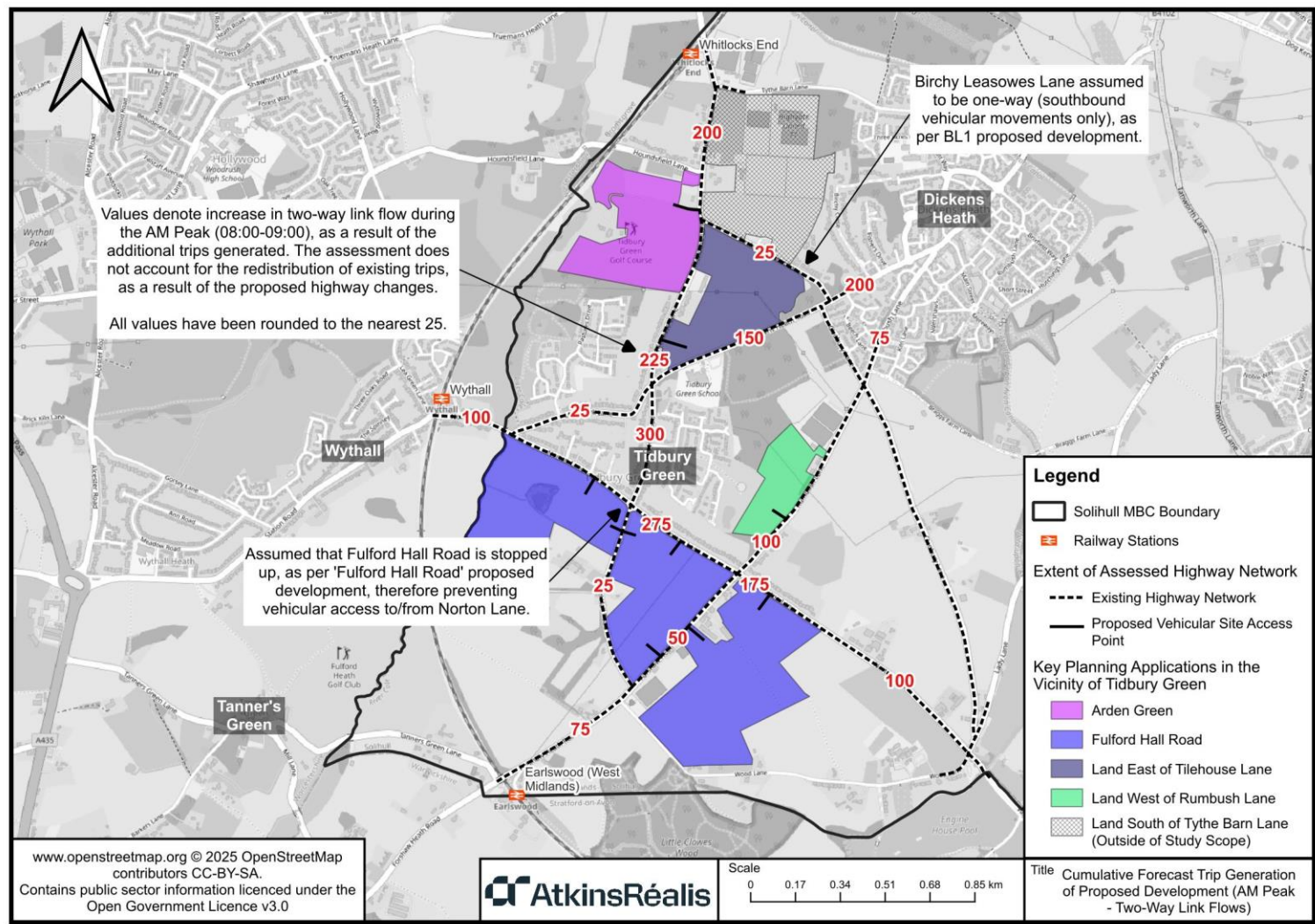
In addition, a further application in Tidbury Green (Land South of Tythe Barn Lane, PL/2023/02656/PPOL – 450 dwellings), has previously been submitted in 2023. Whilst not included within the scope of this study specifically, the potential impacts of this application have been considered.

Beyond Tidbury Green:

In addition to the above five applications, there are several other potential developments that may come forward in nearby residential areas, both within SMBC's boundary, and in neighbouring Wythall. These developments have the potential to increase traffic demand within Tidbury Green.

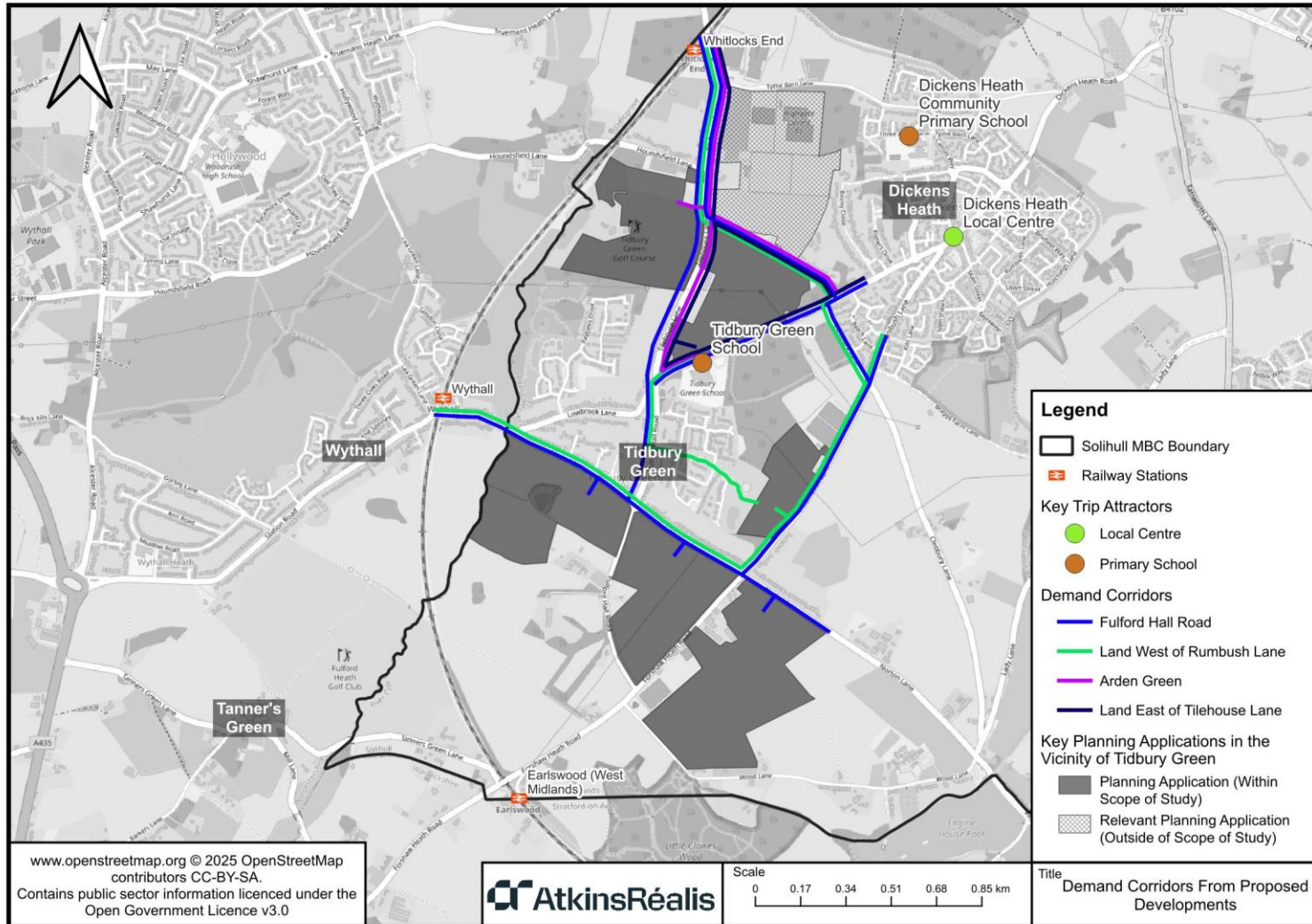
An initial high-level assessment of the potential traffic impacts of these developments has shown that the additional vehicular trips generated are likely to fall within typical daily variation (see Appendix D, Pg. 41). The impact of these developments has therefore been accounted for using TEMPro background growth factors.

Cumulative Vehicular Trip Generation



- As per the trip rates included within each application's Transport Assessment, the cumulative vehicular trip generation of the four sites, which together comprise 1,350 dwellings, is forecast to be 722 in the AM Peak, and 745 in the PM Peak (see Appendix B, Pg. 35).
- These additional trips have been assigned onto the existing highway network, following a vehicular trip distribution assessment (see Appendix B, Pg. 36).
- The figure shows the results of the cumulative vehicular trip generation assessment for Tidbury Green, in the AM Peak. The assessment indicates that the proposed developments are likely to place **particular pressure on Norton Lane, Fulford Hall Road and Tilehouse Lane.**
- The largest increase in two-way vehicular trips is forecast along Fulford Hall Road (297 trips) and Norton Lane (266 trips).
- Significant vehicle trip increases are also forecast on Dickens Heath Road (161 trips) and Rumbush Lane (92 trips).

Routes to Key Trip Attractors



Key trip attractors within walking distance of at least one of the proposed developments within the study scope are:

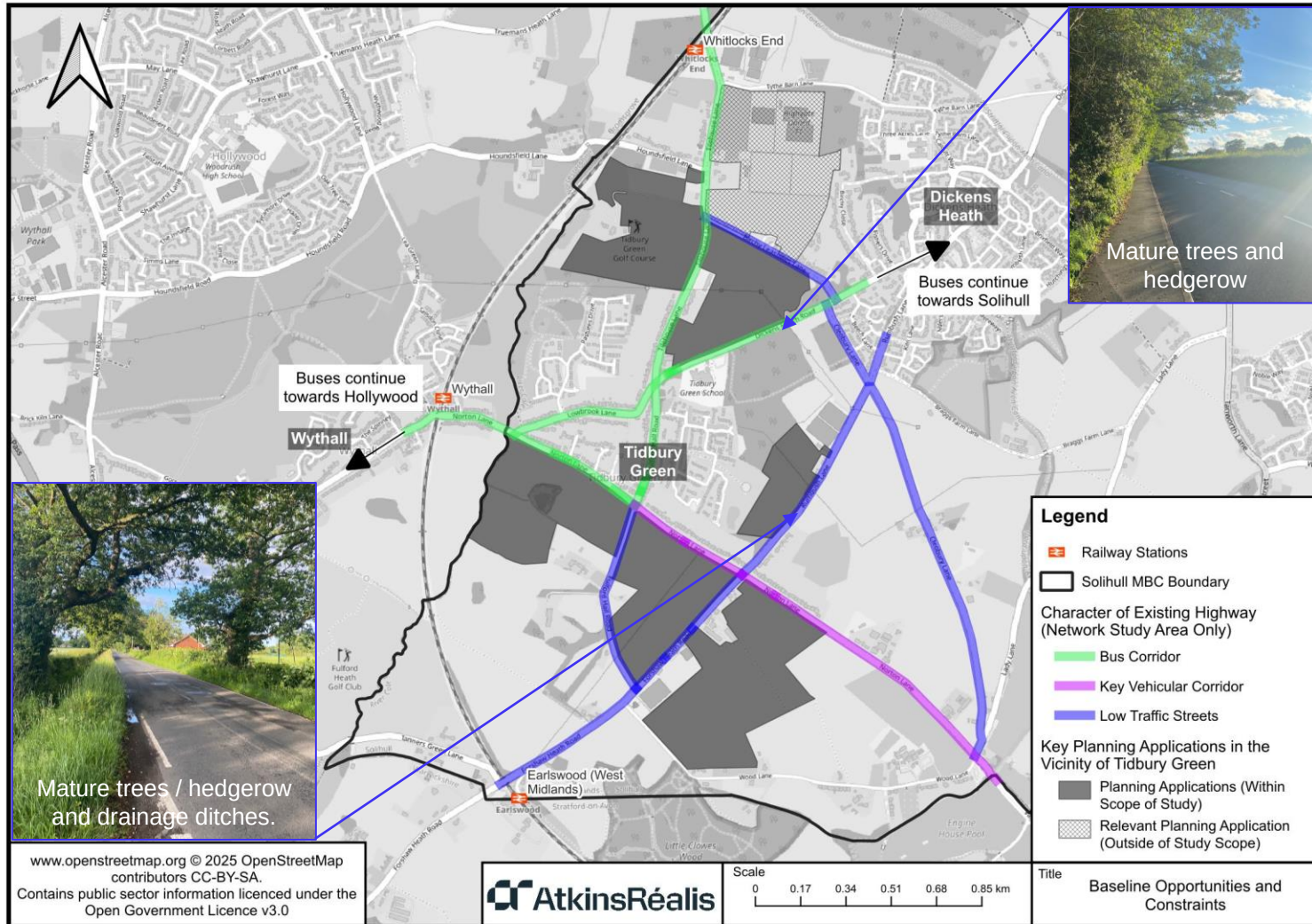
- **Education:** Tidbury Green School;
- **Public Transport:** Whitlocks End Railway Station, Wythall Railway Station;
- **Amenities:** Dickens Heath Local Centre; and
- **Retail:** shops within Dickens Heath.

In addition, Light Hall School is accessible via the existing 664/665 bus service.

Analysis of the most direct routes from the proposed development sites indicates that the **key demand corridors converge on Tilehouse Lane and Birchy Leasowes Lane** in particular. Demand from multiple sites is also generated on **Cleobury Lane, Rumbush Lane, Norton Lane and Dickens Heath Road**.

Interventions are therefore likely to be required across Tidbury Green, to support these movements by sustainable modes.

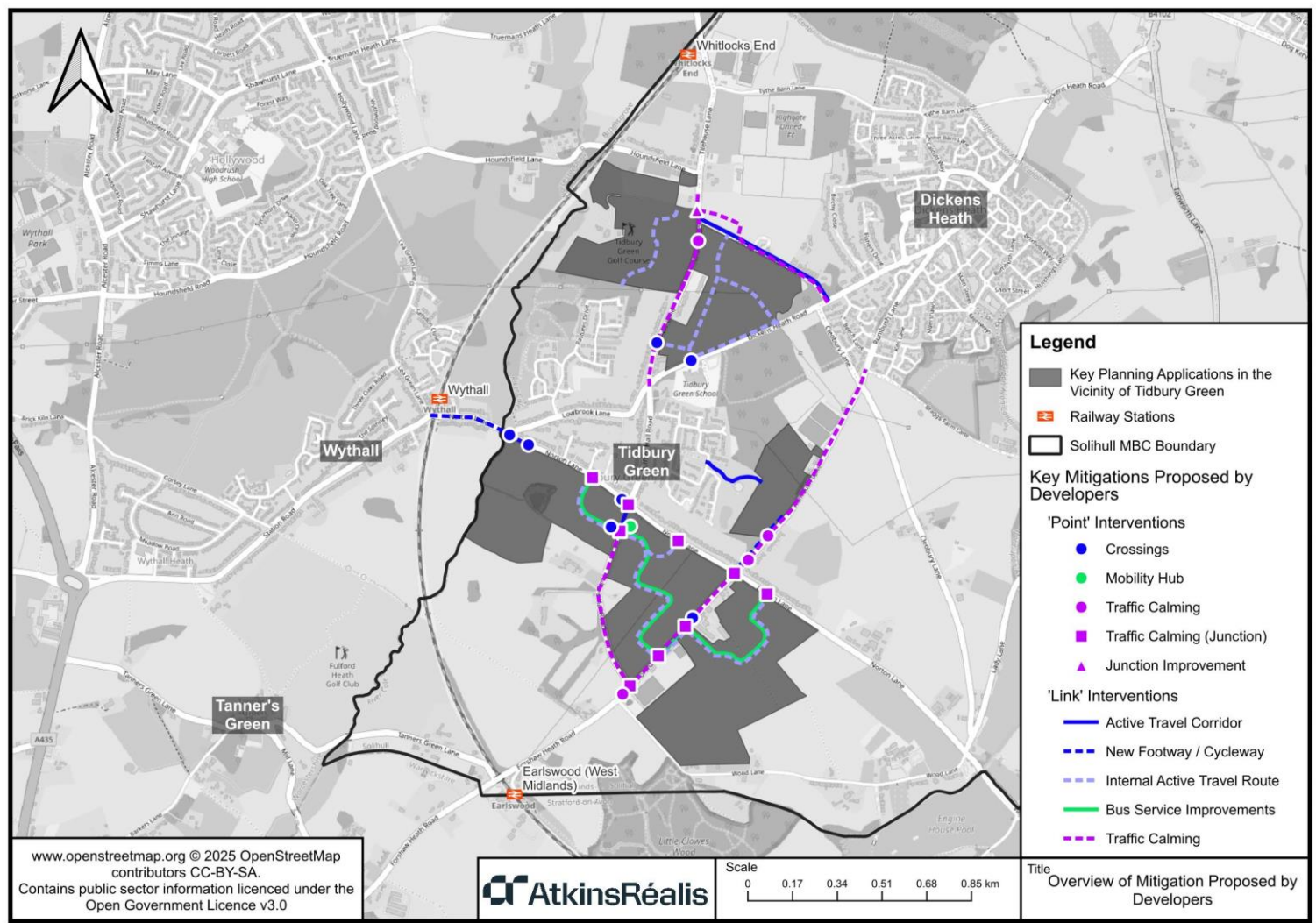
Existing Opportunities and Constraints



Opportunities and constraints have been identified based on the outcome of the analysis of accessibility and cumulative trip generation:

- **CONSTRAINT:** the rail service frequency at Wythall and Earlswood Railway Station is poor. Improving the service frequency would require significant investment and it is unlikely to be feasible in the short to medium term.
- **CONSTRAINT:** whilst the 664/665 bus services route through the heart of Tidbury Green, their limited frequency reduces their effectiveness in supporting mode shift. Notwithstanding, as the services do somewhat connect residents to nearby destinations there is a requirement to ensure journey time consistency. This limits the ability to deliver some transport interventions, as junctions must remain sufficiently wide and the highway relatively free flowing.
- **CONSTRAINT:** several roads in the vicinity of Tidbury Green are lined by drainage ditches, mature trees and hedgerow, which constrains the ability to widen the carriageway, in order to deliver active travel infrastructure.
- **OPPORTUNITY:** several development sites coming forward are located adjacent to the carriageway, providing an opportunity to deliver active travel routes within sites, that may be more direct, safe and attractive for users. This will be reliant however on design measures to secure active surveillance of routes from new development
- **OPPORTUNITY:** roads such as Birchy Leasowes Lane, Cleobury Lane and Rumbush Lane experience relatively low traffic flows, although traffic speeds can be high, which acts as a barrier to on-road cycling. Given these low flows though, there may be an opportunity to better support and prioritise active modes on these links.

Review of Developer-Proposed Interventions

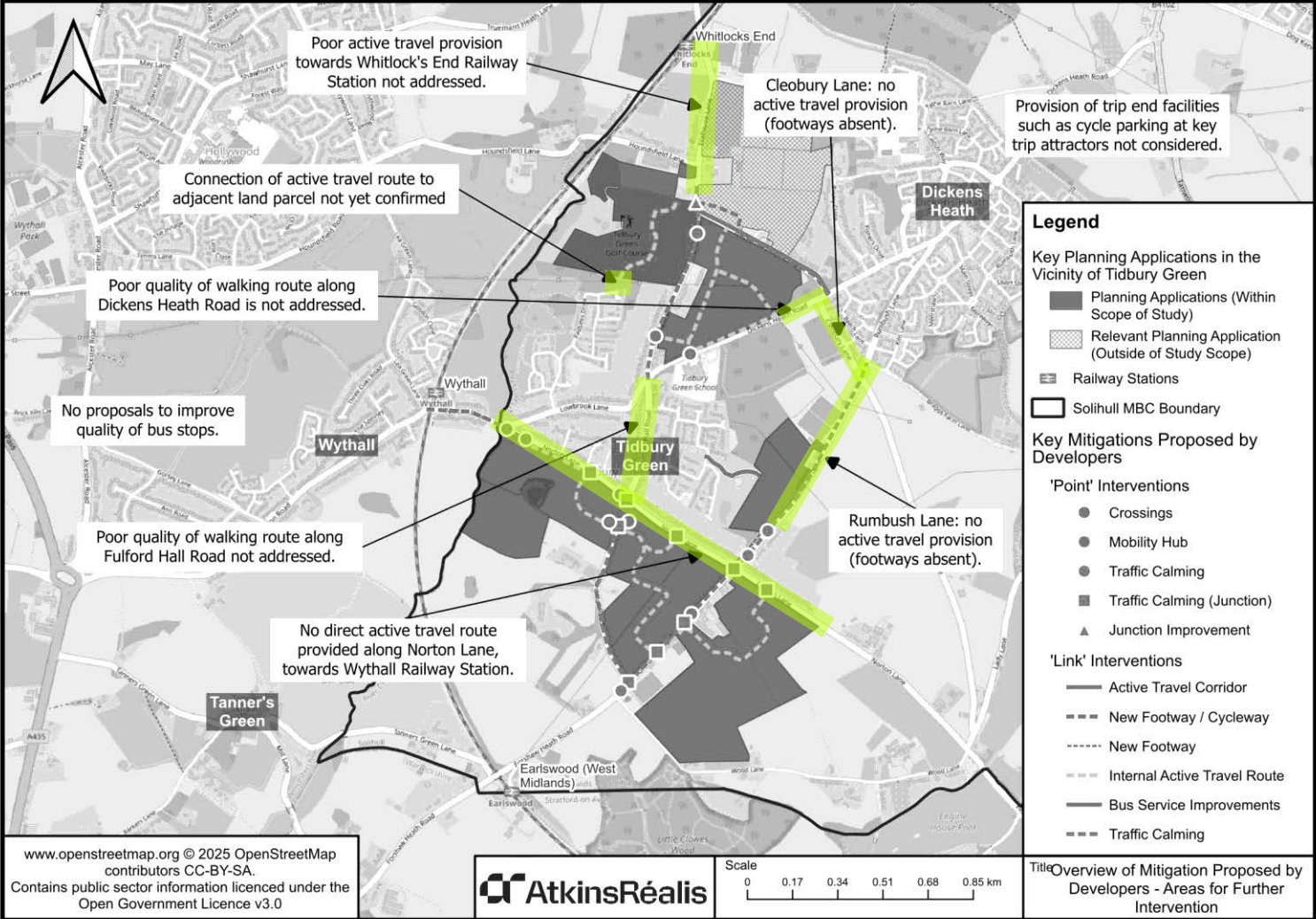


Overall, approximately **36 mitigations have been proposed** by the developers of the four planning applications.

The mitigations proposed relate to several different modes, including active travel, bus and highways. Several of these interventions improve the existing provision of active travel infrastructure in the vicinity of Tidbury Green.

However, these interventions are **not sufficiently coordinated** and leave **several key gaps in provision for active and sustainable travel**.

Priority Areas for Intervention



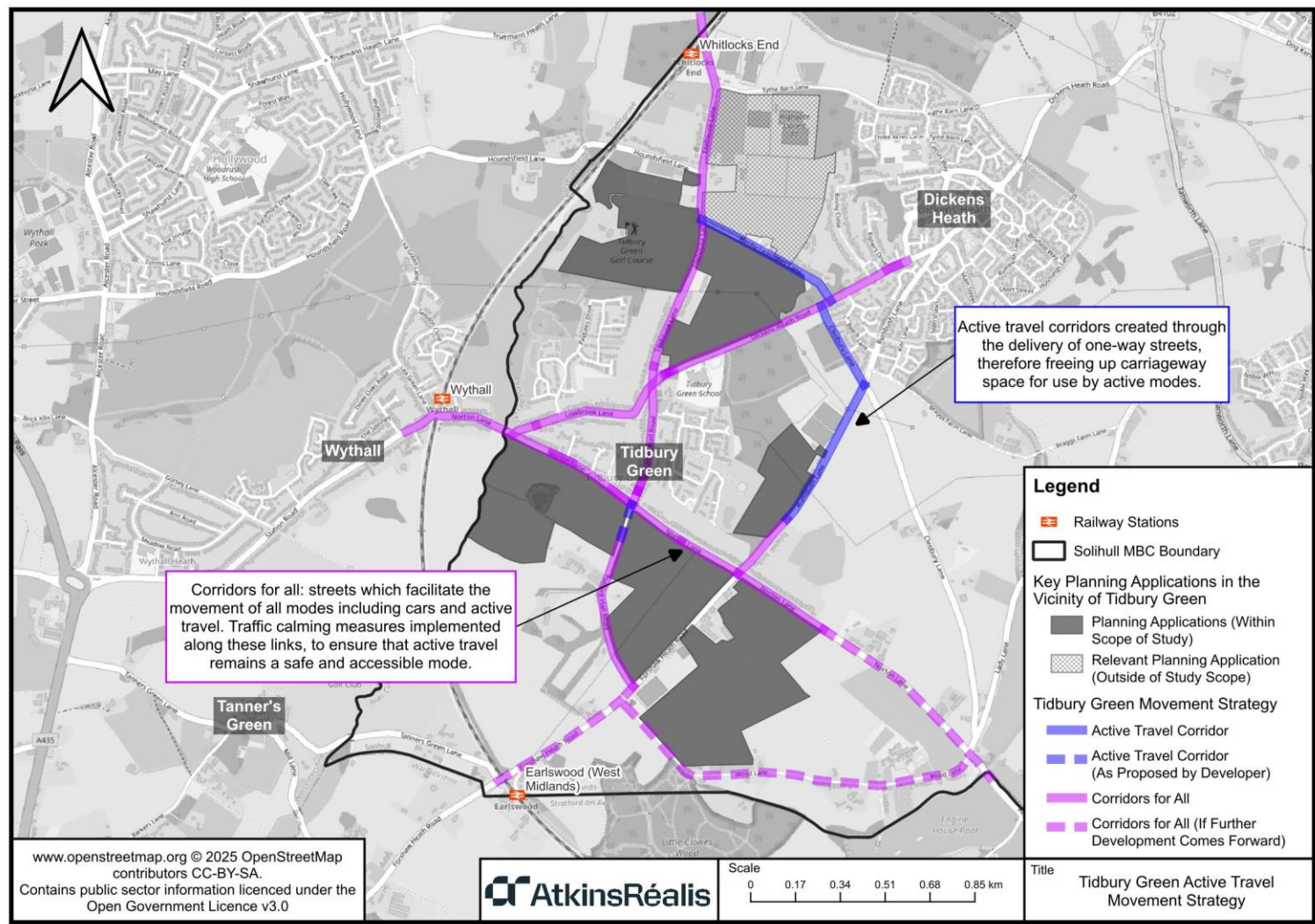
There is a **clear need to improve accessibility by active modes** by addressing severance along key links.

Priority areas for intervention have been identified where accessibility deficiencies coincide with key demand corridors, particularly along routes serving the key attractors:

- **Connectivity to Whitlocks End Railway Station from the south** – providing a safe route for active travel between the proposed sites and Whitlocks End Railway Station, whilst maintaining routes which bus services use.
- **East-West active travel route** – providing a direct active travel route for access to Wythall Railway Station from Fulford Hall Road and Land West of Rumbush Lane.
- **Access to Dickens Heath** – providing safe and direct active travel provision on Rumbush Lane for access to Dickens Heath from Fulford Hall Road and Land West of Rumbush Lane. Improved crossing provision on approaches to Dickens Heath.
- **Bus stop improvements** – including seating and shelter, to improve user experience.
- **Increased cycle parking / travel hubs** – at key locations to facilitate end to end journeys.

Note: whilst there are deficiencies on Norton Lane on approach to Wythall Railway Station, this section is outside of the remit of SMBC and any upgrades would require liaison with Worcestershire.

Active Travel Strategy

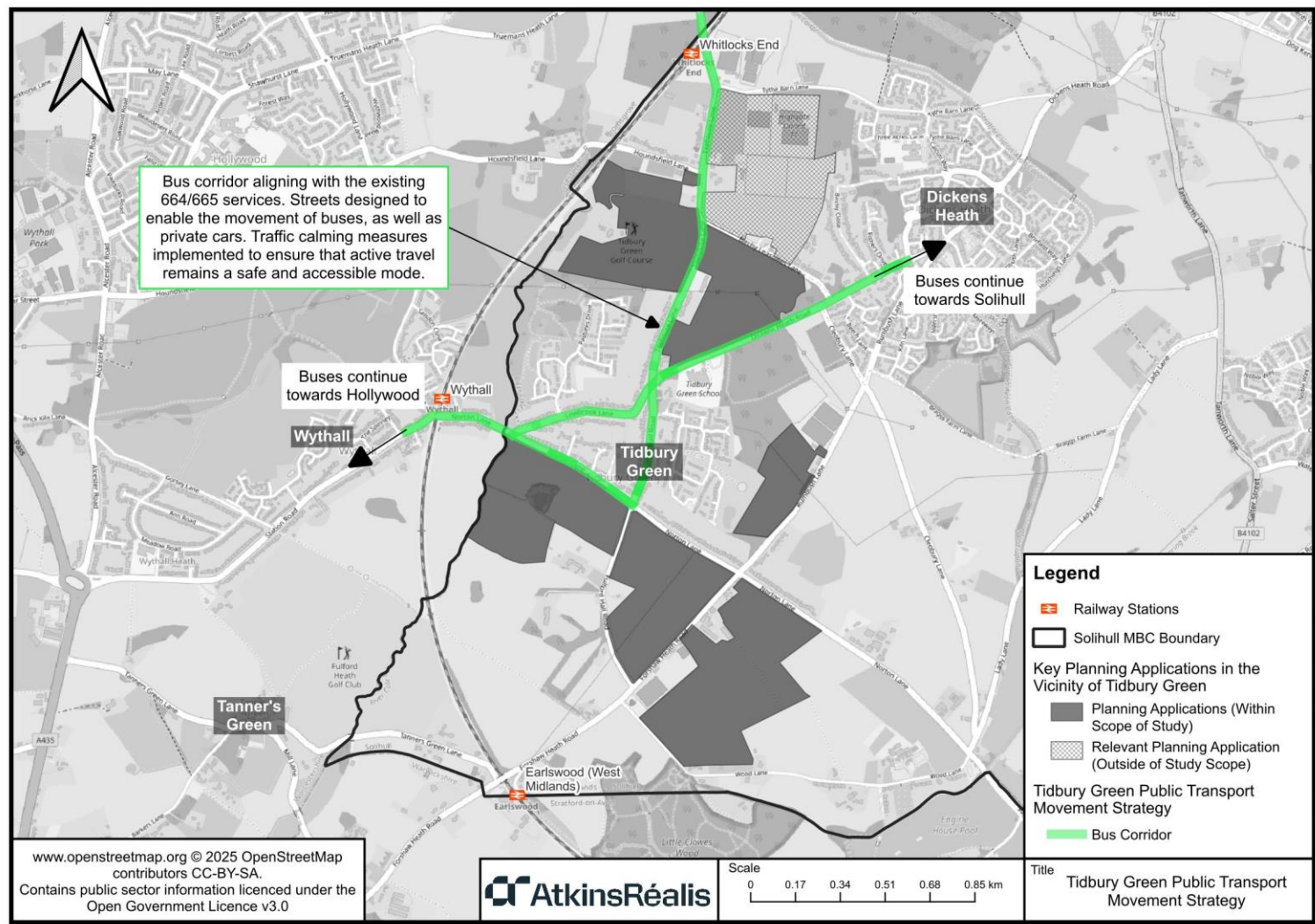


The **active travel movement strategy** reflects the findings of the baseline review of existing conditions, the assessment of future multi-modal demand, and the review of the mitigations currently proposed by developers.

The strategy comprises:

- An **Active Travel corridor** between Tilehouse Lane and Norton Lane, via Birchy Leasowes Lane, Cleobury Lane and Rumbush Lane.
- Provision of direct Active Travel routes** within development sites where the delivery of on-carriageway infrastructure is not possible without significant impact on traffic. This includes the addition of a link within the Fulford Hall Road site to provide connectivity to Wythall Railway Station.
- Traffic calming measures on Fulford Hall Road, Tilehouse Lane and Dickens Heath Road** to provide mixed streets for all modes - complementing developer proposals for Fulford Hall Road south of Norton Lane. There is the potential to extend this to Earlswood via Norton Lane or Wood Lane if further proposals come forward in that area.
- Footway and crossing improvements** on Lowbrook Lane and Rumbush Lane on approach to Dickens Heath to complement existing provision on other desirable routes
- Cycle parking / travel hubs at Wythall Railway Station and Dickens Heath** to facilitate end to end journeys

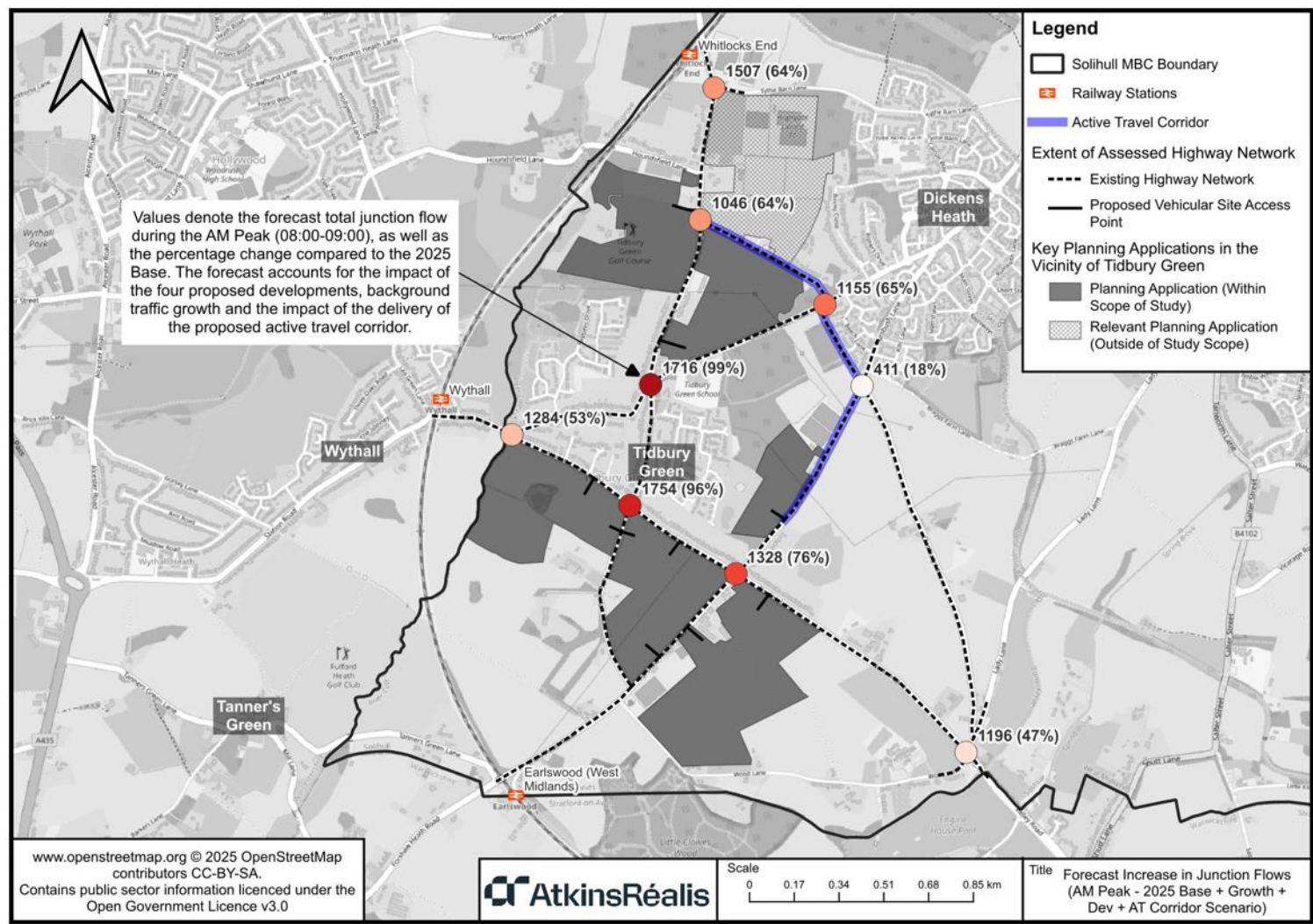
Public Transport Strategy



- The **public transport strategy** focuses on increasing the attractiveness of existing services.
- In addition to the improvements in active travel connectivity to bus stops and Railway Stations, the strategy comprises:
- **Improvements to bus stops**, to include seating and shelter as a minimum.
 - **Maintain the free movement of buses** along the existing corridor, to ensure that the current 664/665 bus service is not negatively impacted by the proposed transport improvements.
- Applicants should assess and provide for the needs of their sites, for example provision of a Sunday service or increased frequencies if required by users.
- The immediate priority for this strategy complements this, by providing more attractive waiting / interchange facilities to grow use of the existing services.



Highway Mitigation Strategy



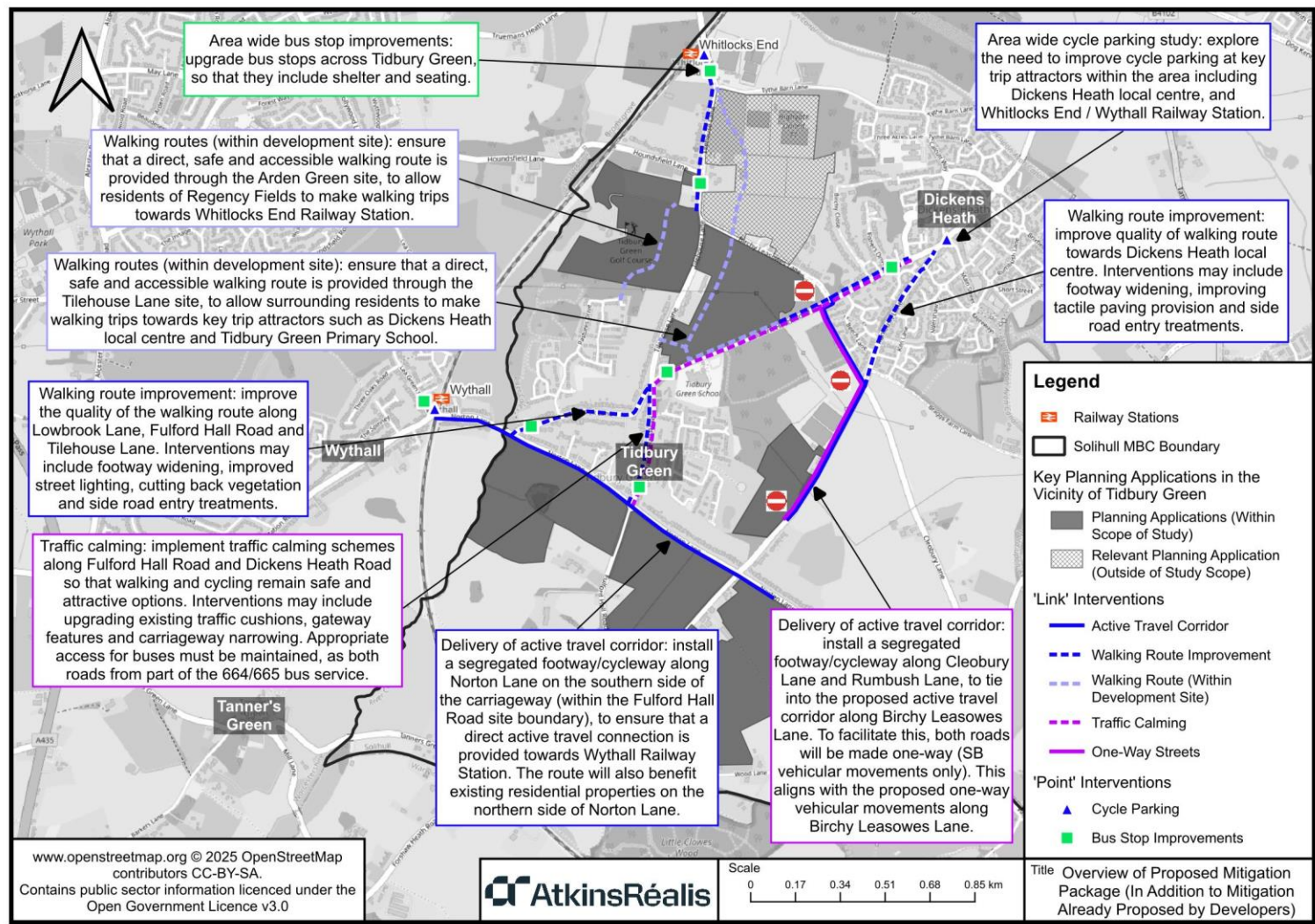
A cumulative highways assessment has accounted for the impact of the proposed development, background traffic, and the impact of the proposed active travel corridor on redistributing existing trips.

The assessment indicates that link flows are expected to remain within theoretical capacity. However, the increase in vehicular trips is likely to **place pressure on capacity at several key junctions** in the vicinity of Tidbury Green including:

- Norton Lane/Fulford Hall Road junction - Fulford Hall Road is anticipated to operate approaching practical capacity and Norton Lane East may experience additional queues and delays. It is recommended that a cumulative assessment, which takes account of realistic growth within the local area, is undertaken and the junction design proposed as part of the Fulford Hall Road application reviewed against this;
- Tilehouse Lane/Dickens Heath Road/Fulford Hall Road/Lowbrook Lane junction - additional queues and delays may be experienced on Dickens Heath Road and Lowbrook Lane is anticipated to operate close to practical capacity. It is recommended that a cumulative assessment, which takes account of realistic growth within the local area, is undertaken to understand if a further improvement scheme is required in this location; and
- Tilehouse Lane/Tythe Barn lane junction – it is understood that there is an improvement scheme being progressed separately.

Mode shift, enabled by sustainable transport interventions, has the potential to **moderate any highway impact**. This demonstrates the **importance of a vision-led approach**, that, in line with national and local policy, delivers future residents with genuinely sustainable alternatives to travel by car.

Proposed Mitigation Framework



A coordinated sustainable transport mitigation package has been developed to **address identified gaps in provision**, and support cumulative development impact within the Tidbury Green area.

The key components are:

- **An active travel corridor along Cleobury Lane and Rumbush Lane**, providing a continuous high quality route towards Dickens Heath and Whitlocks End Railway Station, while avoiding any impact on the existing bus corridor. This includes reallocation of carriageway space to one-way for vehicular traffic (north-south), with crossings at major intersections.
- **Targeted walking improvements along key demand corridors**, including Fulford Hall Road, Dickens Heath Road and Norton Lane.
- Direct **active travel routes within development sites**, enabling safe and convenient connections to existing active travel infrastructure where the existing carriageway is constrained.
- **Area wide bus stop improvements**, including shelter and seating, to enhance the attractiveness of existing services.
- **Cycle parking and travel hubs at key destinations**, supporting end-to-end journeys by sustainable travel modes.

This package supports a shift towards sustainable travel patterns, helping to moderate highway impacts and enabling genuine travel choice in line with national and local policy objectives.

TECHNICAL APPENDICES

APPENDIX A – BASELINE REVIEW AND ISSUES SUMMARY

Review of Current Planning Applications

Arden Green - 200 Dwellings

- Outline Planning Application submitted in July 2025 (PL/2025/01402/PPOL). The proposed development includes plans for *“up to 200 dwellings, including affordable housing, with means of access from Tilehouse Lane for consideration and all other matters (layout including internal access, appearance, scale, and landscaping) reserved for subsequent approval; drainage, landscaping, car parking and all ancillary and enabling works.”*

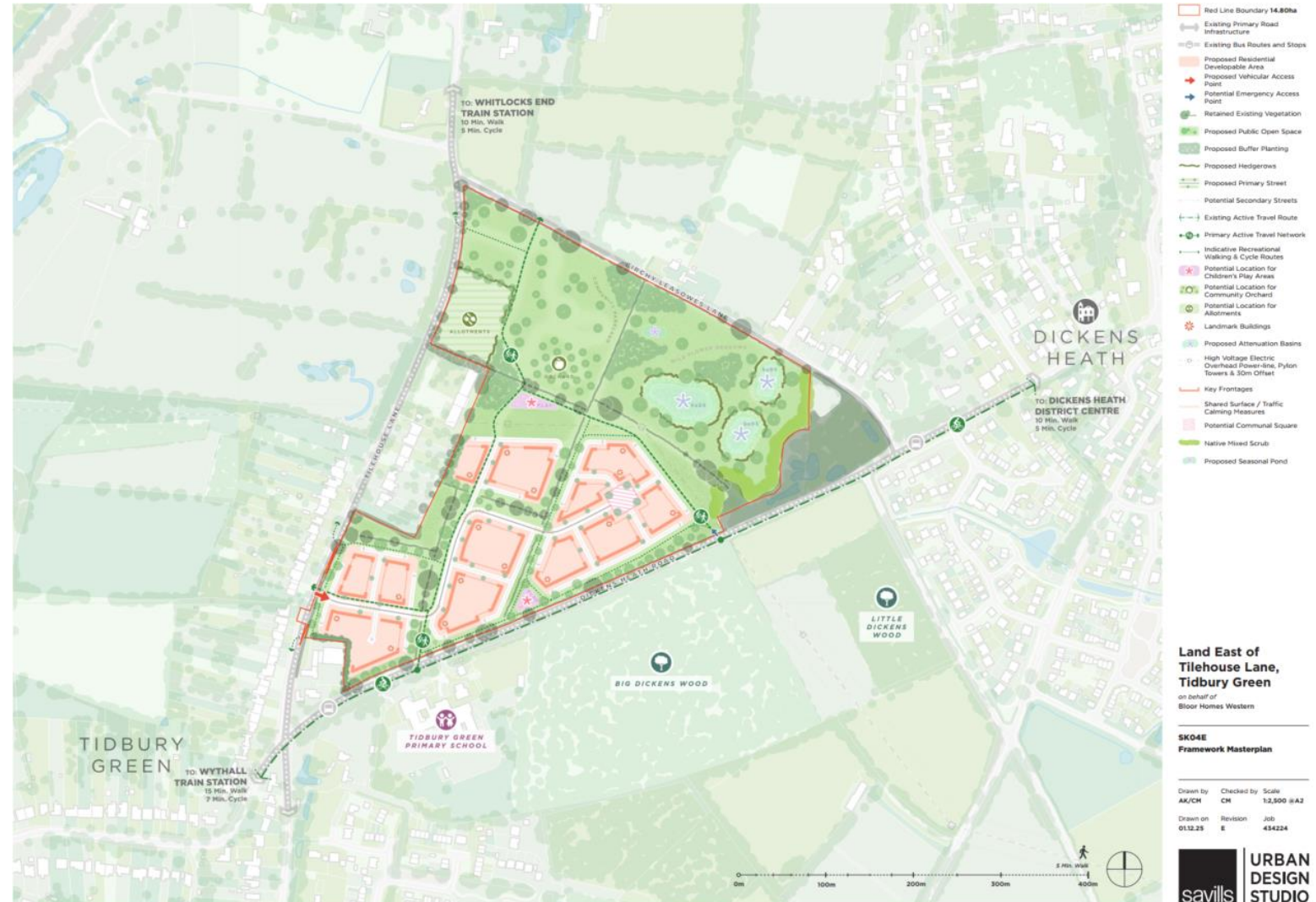


- Outline Planning Application submitted in October 2025 (PL/2025/01937/MAODW). The proposed development includes plans for *“up to 850 residential dwellings (Use Class C3), a mixed-used local centre (Flexible Class (E/F2), associated car parking, public open space, hard and soft landscaping, SUDS, flood alleviation infrastructure, and highways works, with all matters reserved except for access.”*



Land East of Tilehouse Lane– 190 dwellings

- Outline Planning Application submitted in April 2026 (PL/2026/00759/PPOL). The proposed development includes plans for “up to 190 residential dwellings (Use Class C3) (all matters reserved except for access, with access taken off Tilehouse Lane, public open space and associated infrastructure.”



Land West of Rumbush Lane – 110 Dwellings

- Outline Planning Application submitted in August 2025 (PL/2025/01502/PPOL). The proposed development includes plans for “up to 110 dwellings, provision of a sports pitch, the creation of associated vehicular and pedestrian accesses onto Rumbush Lane, pedestrian footway to Dewberry Road, highway improvements, parking, landscaping, drainage features, open space, and associated infrastructure (All matters reserved except for access into the site from Rumbush Lane (southern access only) and Dewberry Road).”

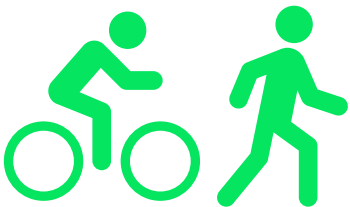
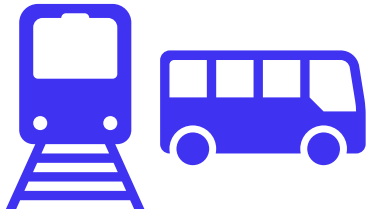


Land South of Tythe Barn Lane – 450 Dwellings

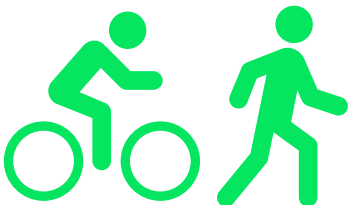
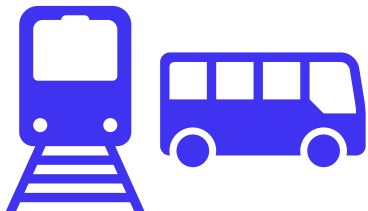
- Whilst not specifically highlighted during the scoping stage scope of this study, the Land South of Tythe Barn Lane is an important planning application in the vicinity of Tidbury Green. The scheme has therefore been considered in the context of this assessment.
- This site was previously proposed as an allocated site within the previously drafted Local Plan, which was withdrawn in October 2024.
- Outline Planning Application submitted in December 2023 (PL/2023/02656/PPOL). The proposed development includes plans for the “erection of up to 450 dwellings (Class C3), including affordable housing and custom/self-build homes, together with a care or retirement home accommodation (Class C2); vehicular accesses from Tythe Barn Lane, Birchy Leasowes Lane and Tilehouse Lane; roundabouts at the junctions of Tilehouse Lane/Tythe Barn Lane and Tilehouse Lane and Birchy Leasowes Lane; vehicular/pedestrian/cycle accesses from Tythe Barn Lane, Tilehouse Lane and Birchy Leasowes Lane; a footway/cycleway on land to the north of Tythe Barn Lane; blue and green infrastructure including sustainable drainage, children's play areas, incidental greenspaces and ecological areas; ancillary structures such as a foul water pumping stations and sub-stations; associated infrastructure and the demolition of the existing sports club and stables structures (All matters reserved except for access).”
- In relation to transport, comments have been provided by SMBC Highways on several occasions. As per conversations with the SMBC Planning team, as of June 2026, it is understood that the delivery of the development is currently on pause, due to unresolved issues relating to highways, and the appropriate relocation of sports pitches which currently occupy the site. However, it is understood that there remains an ambition by the developer to deliver the scheme.
- The proposals include plans to realign Birchy Leasowes Lane and make it one-way, for southbound vehicular movements only. This is to enable the delivery of an active travel corridor towards Dickens Heath local centre. Throughout this cumulative impact assessment, it has been assumed that this mitigation will be delivered, as it is considered an important measure to enable the delivery of active travel infrastructure between Whitlocks End Railway Station and the proposed developments in Tidbury Green.



Review of Current Planning Applications

Mode	Arden Green – 200 Dwellings	Fulford Hall Road – 850 Dwellings
	- Active travel access points have not yet been confirmed at outline stage. It is important that users can access/egress the site to the south east, so that they can make direct trips to/from trip attractors in Tidbury Green, such as the primary school, by active modes. - No provision has been made for off-site interventions despite the provision to nearby trip attractors being relatively poor. For example, the walking route towards Whitlocks End Railway Station is of poor quality (issues include narrow footway and a lack of dropped kerbs or tactile paving provision at the junction with Houndsfield Lane). There is also no direct access for pedestrians towards Dickens Heath, as there is no footway provision along Birchy Leasowes Lane.	- Missing footways beyond the site frontage must be addressed, particularly towards Wythall and Earlswood Railway Station, as well as along Rumbush Lane (towards Norton Lane). - The lack of controlled crossings in the vicinity of the site, particularly along Norton Lane is a critical issue, due to the traffic flows. Several other critical issues have also been identified by ATE, due to the standard of crossings proposed / the volume of motor traffic, lane widths, conflict at side roads, and a lack of tactile paving (see ATE Inspector's Comments). - The proposed shared use path along Norton Lane towards Wythall Railway Station offers a poor level of service. - The site currently does not meet the criteria within Policy P7 Accessibility and Ease of Access.
	- The bus stops on Tilehouse Lane (220m north of existing site access point) do not include shelter or seating and do not therefore meet the expectations outlined in LTN 1/24. - The combined service frequency of the 664/665 service is also poor and unlikely to encourage mode shift (1 per hour on weekdays and Saturdays). - Whitlocks End Railway Station is within 550m of the site which is a significant benefit.	- Bus stops on Fulford Hall Road (north of Norton Lane) do not include shelter or seating and do not therefore meet the expectations outlined in LTN 1/24, nor do the school bus stops on Norton Lane. - As above, appropriate active travel links to the nearby railway stations are not proposed, reducing the opportunities to encourage rail travel.
	- The highway capacity assessment within the TA takes account of only one committed development (Lowbrook Farm, 200 dwellings) and therefore underestimates traffic flows within future scenarios. - No off-site highway improvements are proposed, aside from an extension of the 30mph speed limit along Tilehouse Lane, to include the site access point.	Aside from the stopping up of Fulford Hall Road, there are no proposals to mitigate the residual impacts of the development on highway capacity.

Review of Current Planning Applications

Mode	Land East of Tilehouse Lane – 190 Dwellings	Land West of Rumbush Lane – 110 Dwellings
	- Low quality walking routes beyond the site must be addressed, particularly towards Dickens Heath and Whitlocks End Railway Station. Both routes are characterised by narrow footways which are impacted by overgrown vegetation and missing tactile paving. - Dwellings are located within the south-western corner of the development site, therefore placing residents further away from key trip attractors such as Dickens Heath local centre and Whitlocks End Railway Station, and discouraging trips by active modes.	- Missing footways beyond the site frontage must be addressed, particularly towards Dickens Heath. There is currently no footway provision along Rumbush Lane, which is a key missing link given the presence of several key trip attractors in the village. - The site currently does not meet the criteria within Policy P7 Accessibility and Ease of Access. - There are concerns related to the suitability of on-road cycling in the vicinity of the site, due to the speed of motor vehicles. - Active travel connectivity between the site and Tidbury Green relies on an off-road connection between Tidbury Heights and the proposed development, which is currently isolated and unlit. Following comments from SMBC, the developer has agreed to provide lighting and a hard surface along this link, which is a positive for accessibility.
	- The bus stops on Dickens Heath Road do not include shelter or seating and do not therefore meet the expectations outlined in LTN 1/24. - The combined service frequency of the 664/665 service is also poor and unlikely to encourage mode shift (1 per hour on weekdays and Saturdays). - Whitlocks End Railway Station is within 800m of the site which is a significant benefit (although the proposed dwellings within the site are located further away than this).	- Accessibility to nearby public transport is poor – the site is located further than a 400m walk from a bus stop, and further than 800m from a railway station. - Wythall Railway Station also has a relatively low service frequency, when compared to Whitlocks End. - As outlined in relation to Fulford Hall Road, the bus stops on Fulford Hall Road (north of Norton Lane) do not include shelter or seating and do not therefore meet the expectations outlined in LTN 1/24, nor do the school bus stops on Norton Lane.
	The highway capacity assessment within the TA takes account of only one committed development (Tythe Barn Lane) and therefore is likely to underestimate traffic flows within future scenarios.	No immediate highways issues identified but there are concerns that the development is likely to be car-dependent, due to the poor active travel and public transport accessibility in the vicinity of the site.

Mitigation Proposed by Developers

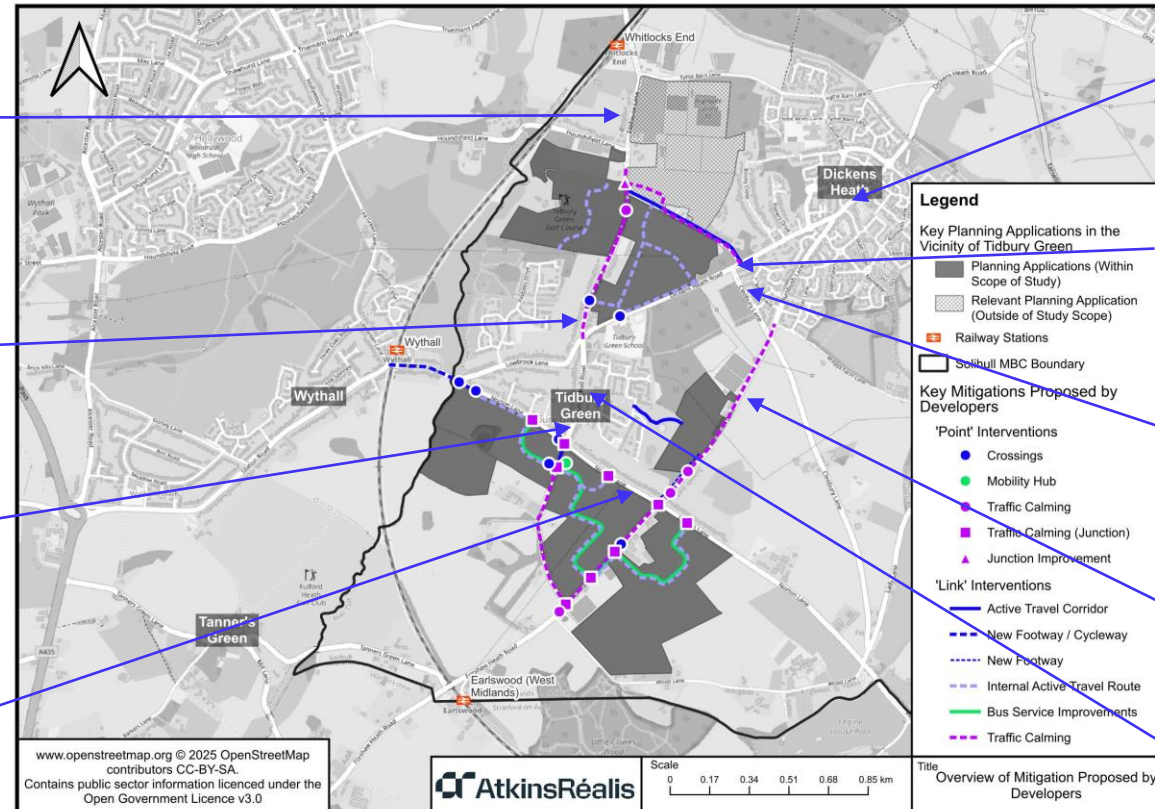
- The figure provides an indicative overview of the mitigations already proposed by developers as part of their planning applications. Overall, approximately **36 mitigations have been proposed**, relating to several different modes, including active travel, bus and highways. Several of these interventions improve the existing provision of active travel infrastructure in the vicinity of Tidbury Green.
- Overall, the mitigations **are not sufficiently coordinated and several gaps in provision are likely to remain**. As a result, they are **unlikely to result in a meaningful uptake of sustainable modes** of travel amongst future residents.

The current **active travel provision towards Whitlocks End Railway Station is poor** and there are **no interventions proposed to overcome this**. The footway is narrow and impacted by overgrown vegetation and there is no provision for cyclists.

In general, the proposals put forward by developers can be said to include a **focus on traffic calming**, without delivering sufficient improvements to sustainable modes, which are required to enable a shift away from the private car.

There are **no proposals to improve the quality of bus stops** in Tidbury Green, despite no stops having seating or shelter.

There is an **absence of a direct cycling route along Norton Lane**, towards Wythall Railway Station. Whilst an active travel route is proposed through the Fulford Hall Road development, it is indirect and will not benefit existing residents of Norton Lane.



Interventions proposed **do not consider trip end facilities** such as cycling. Improvements are likely to be required at key trip attractors, such as Dickens Heath local centre and at the railway stations.

The **quality of the walking route along Dickens Heath Road is poor**, as the footway is narrow and impacted by overgrown vegetation. There is a gap in the proposed provision, between the active travel route within the Land East of Tilehouse Lane and Dickens Heath.

No proposals overcome the **lack of provision for active travel along Cleobury Lane**, and it therefore remains a clear gap in the provision of active travel infrastructure.

No footway is proposed along Rumbush Lane, preventing future residents of the Fulford Hall Road and Land West of Rumbush Lane developments from making direct walking trips to Dickens Heath.

The current **provision along Fulford Hall Road is sub-standard** as the footway is not continuous, and it is narrow in places.

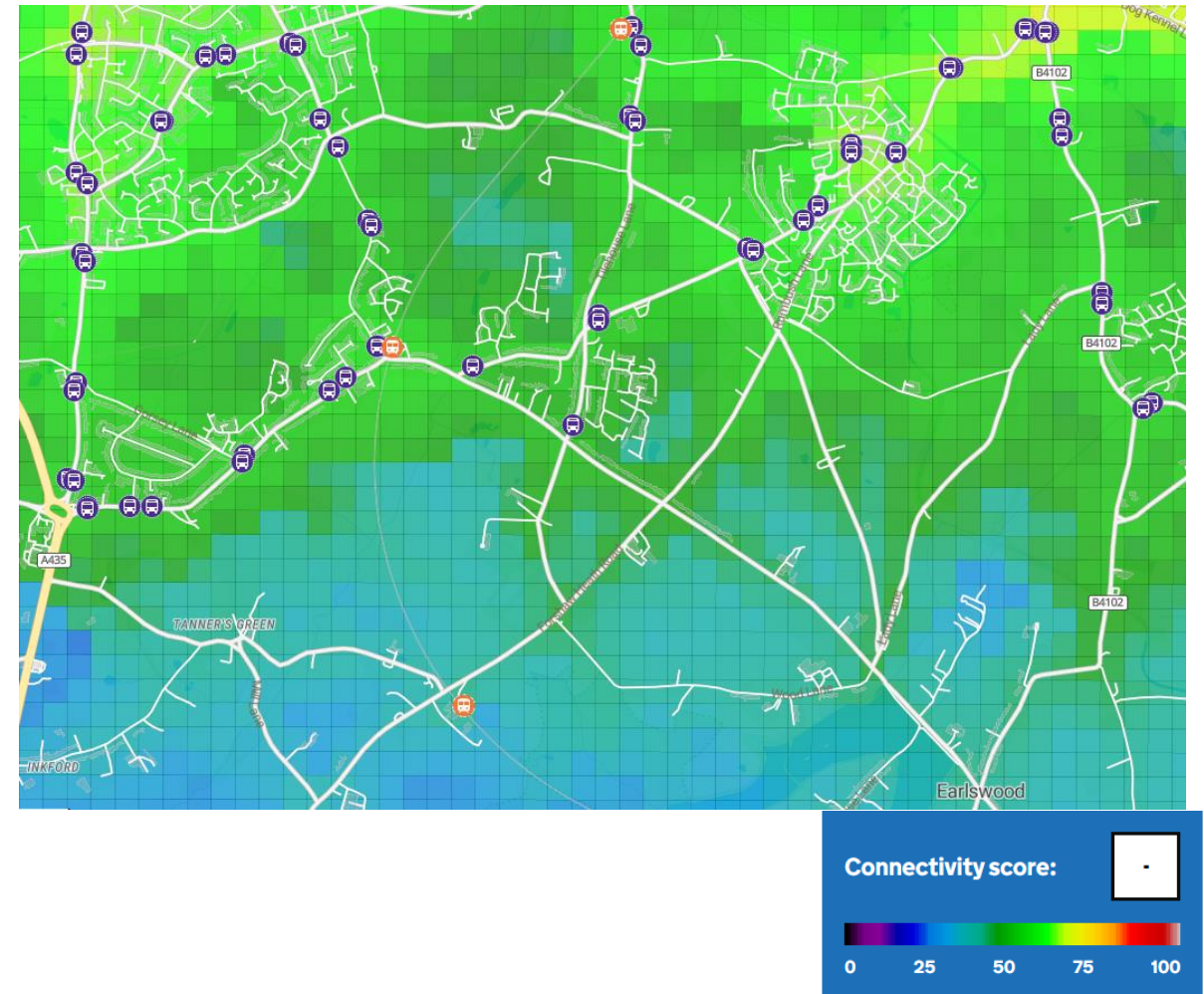
List of Off-Site Mitigations Proposed

Reference	Location	Mode	Type	Planning Application	Detail
Link_FHR_AT_1	Fulford Hall Road	Active Travel	Active Travel Corridor	Fulford Hall Road	Active travel corridor along the north of Fulford Hall Road which is being stopped up to vehicular traffic.
Link_RL_AT_1	Land West of Rumbush Lane	Active Travel	Active Travel Corridor	Land West of Rumbush Lane	Active travel connection to Tidbury Heights, which will have a hard surface and be lit.
Link_TBL_AT_1	Birchy Leasowes Lane	Active Travel	Active Travel Corridor	Land to the South of Tythe Barn Lane	Active travel corridor along Birchy Leasowes Lane, which is being made one-way.
Point_FHR_AT_1	Norton Lane/Lowbrook Lane Junction	Active Travel	Crossings	Fulford Hall Road	Junction narrowing and uncontrolled crossing with pedestrian refuge.
Point_FHR_AT_2	Norton Lane	Active Travel	Crossings	Fulford Hall Road	Parallel crossing to connect segregated footway/cycleway to the south of Norton Lane to the SUP to the north of Norton Lane.
Point_FHR_AT_3	Norton Lane	Active Travel	Crossings	Fulford Hall Road	Zebra crossing to connect active travel corridor along Fulford Hall Road to footway to the north of Norton Lane.
Point_FHR_AT_4	Rumbush Lane	Active Travel	Crossings	Fulford Hall Road	Parallel crossing across Forshaw Heath Road for those moving east-west along segregated footway/cycleway.
Point_FHR_AT_5	Fulford Hall Road/Site Access Junction	Active Travel	Crossings	Fulford Hall Road	Parallel crossing to connect the internal segregated footway/cycleway to the new active travel corridor along Fulford Hall Road.
Point_TL_AT_1	Tilehouse Lane	Active Travel	Crossings	Land East of Tilehouse Lane	Toucan crossing to connect users of the site to the existing footway to the west of Tilehouse Lane.
Point_TL_AT_2	Dickens Heath Road	Active Travel	Crossings	Land East of Tilehouse Lane	Zebra crossing to connect users of the site to Tidbury Green Primary School, to the south of Dickens Heath Road.
Link_AG_AT_1	Arden Green	Active Travel	Internal Active Travel Route	Arden Green	Internal active travel corridor through the development, routing north-south.
Link_FHR_AT_3	Fulford Hall Road Parcels	Active Travel	Internal Active Travel Route	Fulford Hall Road	Internal active travel corridor routing east-west through the development. Comprised of a segregated footway/cycleway.
Link_TL_AT_1	Land East of Tilehouse Lane	Active Travel	Internal Active Travel Route	Land East of Tilehouse Lane	Internal active travel corridor through the development.
Link_RL_AT_2	Rumbush Lane	Active Travel	New Footway	Land West of Rumbush Lane	New footway along the south of Rumbush Lane connected the development to Norton Lane.
Link_FHR_AT_2	Norton Lane	Active Travel	New Footway / Cycleway	Fulford Hall Road	Introduction of a new shared footway/cycleway along the north of Norton Lane.
Point_FHR_A_1	Off Fulford Hall Road	All	Mobility Hub	Fulford Hall Road	Mobility hub comprising of shared transport services such as cycle hire, EV charging points, cycle tool stations, local information etc.
Link_FHR_B_2	Fulford Hall Road Parcels	Bus	Bus Service Improvements	Fulford Hall Road	Rerouting of existing 664/665 bus service through the Fulford Hall Road development and an increase in service frequency.
Point_TBL_H_1	Tilehouse Lane/Arden Green Junction	Highways	Junction Improvement	Land to the South of Tythe Barn Lane	Delivery of new roundabout to connect Tilehouse Lane, Birchy Leasowes Lane and the access to Arden Green.
Link_AG_H_1	Tilehouse Lane	Highways	Traffic Calming	Arden Green	Extension of 30mph speed limit along Tilehouse Lane.
Link_FHR_H_1	Fulford Hall Road/Forshaw Heath Road	Highways	Traffic Calming	Fulford Hall Road	New 30mph speed limit.
Link_RL_H_1	Rumbush Lane	Highways	Traffic Calming	Land West of Rumbush Lane	Traffic calming along Rumbush Lane including speed cushions and priority narrowing (see point interventions).
Link_TBL_H_1	Birchy Leasowes Lane	Highways	Traffic Calming	Land to the South of Tythe Barn Lane	Prevention of northbound vehicular movements along Birchy Leasowes Lane making it one-way for southbound vehicles.
Link_TL_H_1	Tilehouse Lane	Highways	Traffic Calming	Land East of Tilehouse Lane	Traffic calming along Rumbush Lane to include speed cushions and a build out with priority give way (see point intervention).
Point_FHR_H_10	Forshaw Heath Road	Highways	Traffic Calming	Fulford Hall Road	Proposed settlement gateway feature and road markings.
Point_RL_H_1	Rumbush Lane	Highways	Traffic Calming	Land West of Rumbush Lane	Narrowing with priority for southwest bound traffic.
Point_RL_H_2	Rumbush Lane	Highways	Traffic Calming	Land West of Rumbush Lane	Narrowing with priority for southwest bound traffic.
Point_TL_H_1	Tilehouse Lane	Highways	Traffic Calming	Land East of Tilehouse Lane	Build out with priority give-way for northbound traffic.
Point_FHR_H_1	Rumbush Lane/Fulford Hall Road Junction	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Forshaw Heath Road/Fulford Hall Road junction.
Point_FHR_H_2	Rumbush Lane/Site Access Junction	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Forshaw Heath Road/site access junction.
Point_FHR_H_3	Rumbush Lane/Site Access	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Forshaw Heath Road/site access junction.
Point_FHR_H_4	Internal Road/Fulford Hall Road Junction	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Fulford Hall Road/site access junction.
Point_FHR_H_5	Norton Lane/Site Access	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Norton Lane/site access junction.
Point_FHR_H_6	Norton Lane/Rumbush Lane Junction	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Norton Lane/Rumbush Lane junction.
Point_FHR_H_7	Norton Lane/Site Access	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Norton Lane/site access junction.
Point_FHR_H_8	Norton Lane/Fulford Hall Road Junction	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Norton Lane/Fulford Hall Road junction, which will become a three-arm priority junction.
Point_FHR_H_9	Norton Lane/Site Access Junction	Highways	Traffic Calming (Junction)	Fulford Hall Road	Introduction of a raised table at the Norton Lane/site access junction.

Baseline Accessibility Issues

Accessibility

- Tidbury Green's rural location means that some reliance on car travel is likely.
- The DfT Connectivity Tool indicates scores in the order of 50 – 70 indicating that there is access to some key destinations, but connectivity is more limited than in larger urban centres.
- Whilst the village benefits from public transport links to destinations such as Birmingham and Stratford-upon-Avon, several nearby and regional centres are not directly served by rail or all-day bus. This means some car use is likely to remain necessary for longer-distance trips, particularly to places such as Redditch and Coventry.
- There are however opportunities to support more local trips by sustainable modes. Targeted accessibility improvements could help reduce car dependency for shorter everyday journeys, while recognising that car use will remain important for some longer-distance trips.

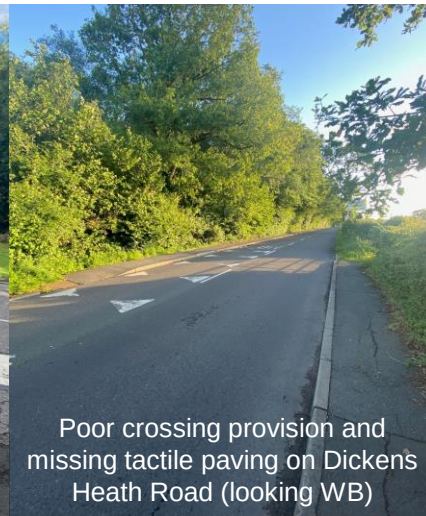


Active Travel Summary

- Poor footway provision, with footways missing along key links such as Rumbush Lane, Birchy Leasowes Lane, and Fulford Hall Road.
- Poor accessibility characterised by lack of dropped kerbs and tactile paving. There is limited wayfinding for pedestrians.
- Absence of any segregated cycling infrastructure. Cycling is only currently supported by isolated examples of traffic calming, which is unlikely to encourage mode shift.
- Absence of controlled crossings for active travel users.
- There is a need to achieve a balance between maintaining the rural character of some of the roads in Tidbury Green, whilst ensuring that the necessary active travel infrastructure is provided to serve the local community.



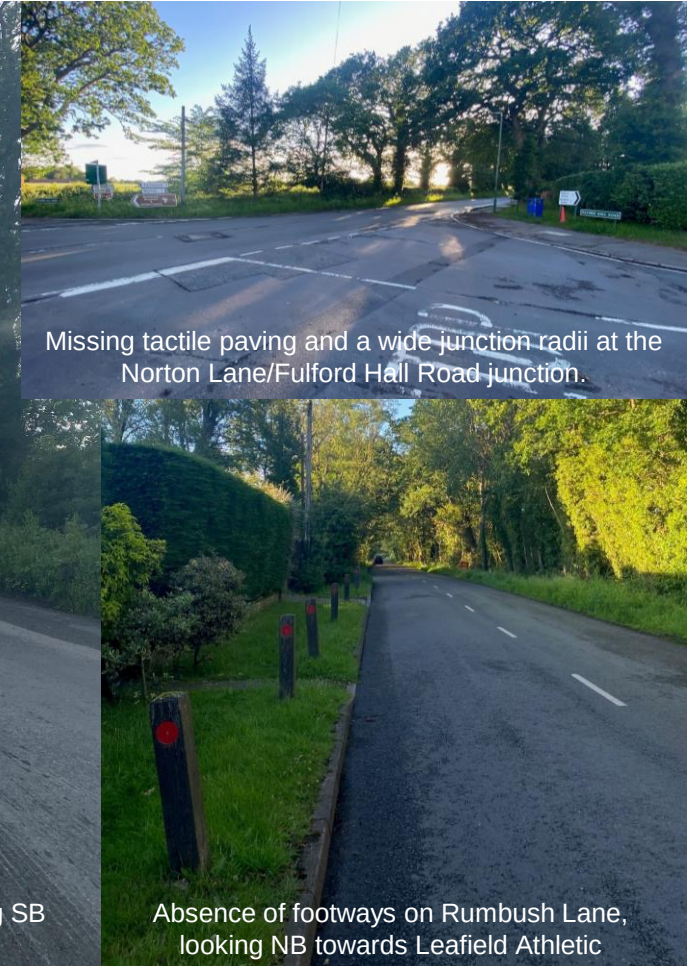
Absence of footways and tactile paving at the Rumbush Lane/Norton Lane junction



Poor crossing provision and missing tactile paving on Dickens Heath Road (looking WB)



Absence of footways on Rumbush Lane, looking SB towards Earlswood Station



Absence of footways on Rumbush Lane, looking NB towards Leafield Athletic

Missing tactile paving and a wide junction radii at the Norton Lane/Fulford Hall Road junction.

Bus Summary

- Existing bus service frequency is relatively low and unlikely to encourage meaningful mode shift.
- Bus shelters are substandard, mostly without seating, shelter or real-time passenger information. There are feasibility constraints in several locations, such as narrow footways and limited available width, which may constrain the delivery of bus shelters.
- Multi-modal connections with the three local railway stations are limited (see following slide).



Bus stop on Fulford Hall Road without shelter and seating.



Bus stop on Tilehouse Lane, outside Whitlocks End Railway Station, without shelter or seating.



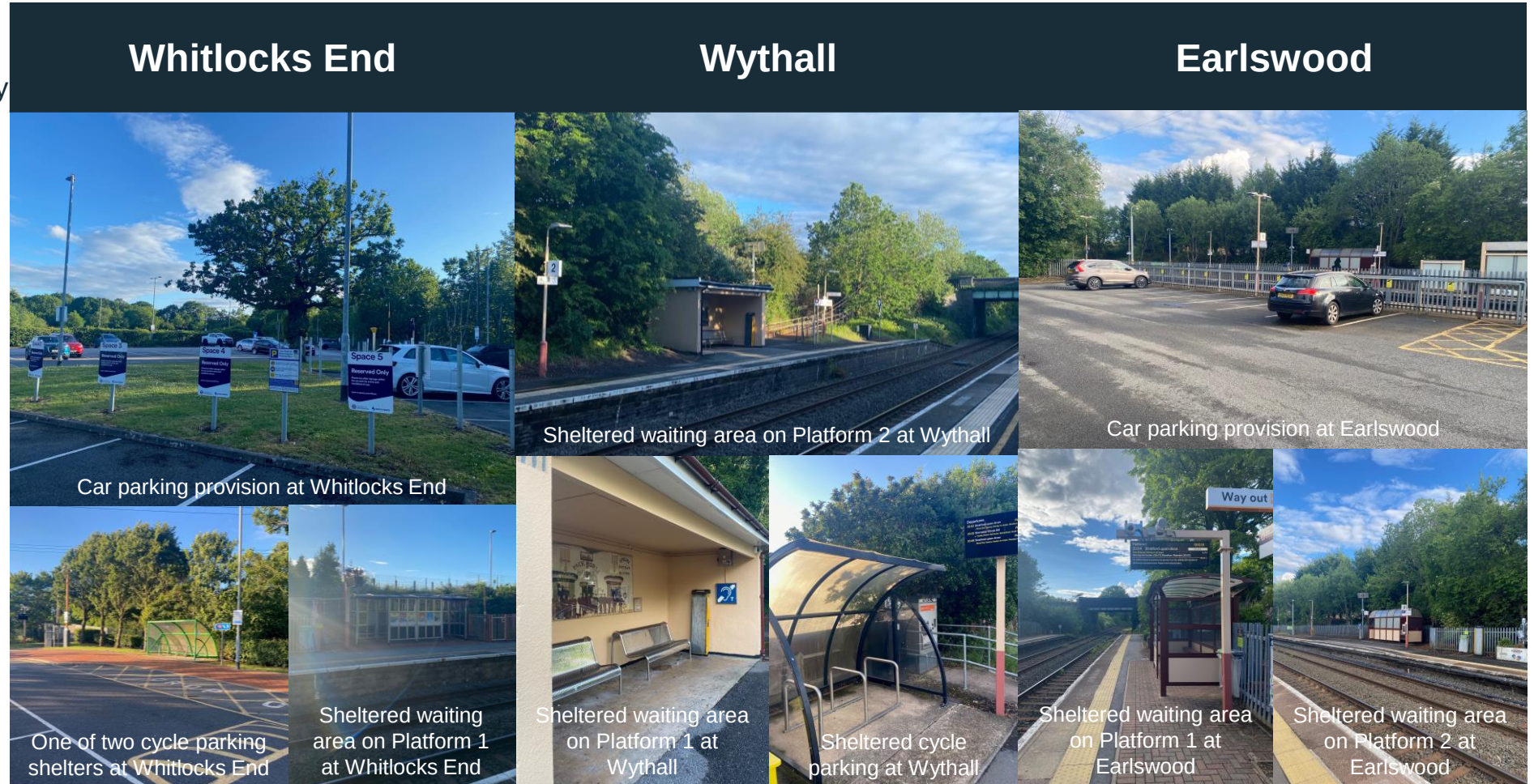
Bus stop on Station Road, outside Wythall Railway Station, without shelter or seating.

Summary of Bus Stop Provision (Applies to all bus stops in the vicinity of Tidbury Green)

Services	664/665 (Solihull to Wythall, via Shirley – clockwise and anticlockwise, respectively)
Combined Service Frequency	One per hour, Monday to Saturday. No Sunday service.
Seating Provision	✗
Sheltered Waiting Area	✗
Real-Time Passenger Information	✗

Rail Summary

- The service frequency at Wythall and Earlswood Railway Stations is relatively low and unlikely to encourage meaningful mode shift.
- Active travel connections to railway stations are poor – no segregated cycle infrastructure exists within the area and there is no footway to/from Earlswood Railway Station.
- Station facilities could be improved – all stations would benefit from lifts to improve accessibility, and improved cycle parking.



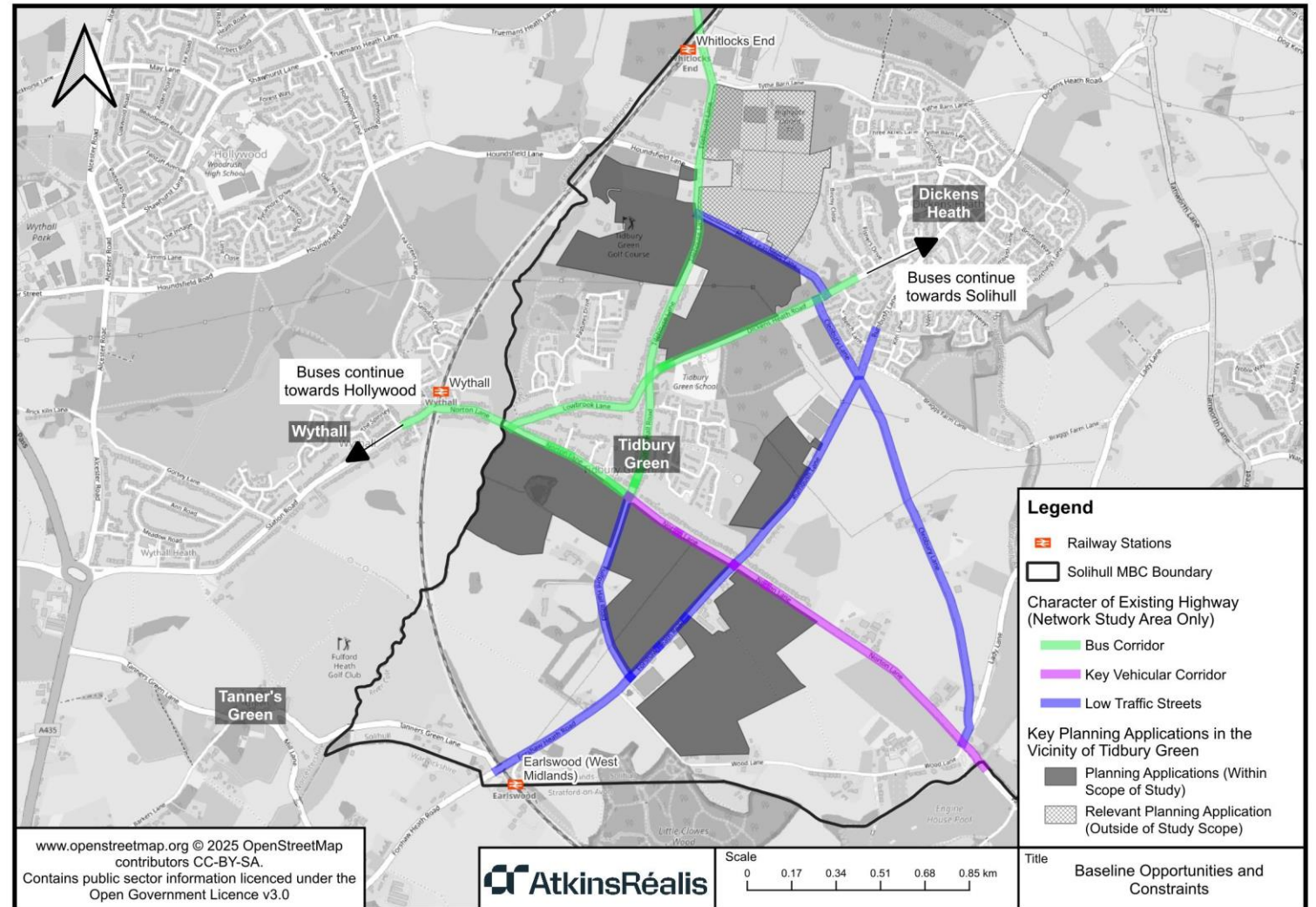
Rail Stations Summary

Station Characteristics	Whitlocks End	Wythall	Earlwood
Weekday Service Frequency (to Birmingham Moor Street)	Two services per hour	1 service per hour	1 service per hour
Accessible by Foot	✓	✓	✗ (No footway on Rumbush Lane)
Step Free Access	✓	✓	✓
Sheltered Waiting Area	✓	✓	✓
Cycle Parking	✓ (20 spaces)	✓ (6 spaces)	✗ (0 spaces)
Onward Bus Connections	✓ (664/665 service, Solihull to Wythall, via Shirley: combined frequency of 2 buses per hour)	✓ (Bus connections align with those at Whitlocks End)	✗ (No bus connections)
Car Parking	✓ (119 spaces)	✗ (0 spaces)	✓ (13 spaces)



Highways

- Key vehicular corridors include Norton Lane, Tilehouse Lane and Dickens Heath Road. The latter two roads align with the bus corridor through Tidbury Green.
- There are several low traffic streets in the vicinity of Tidbury Green including Rumbush Lane, Cleobury Lane and Birchy Leasowes Lane.

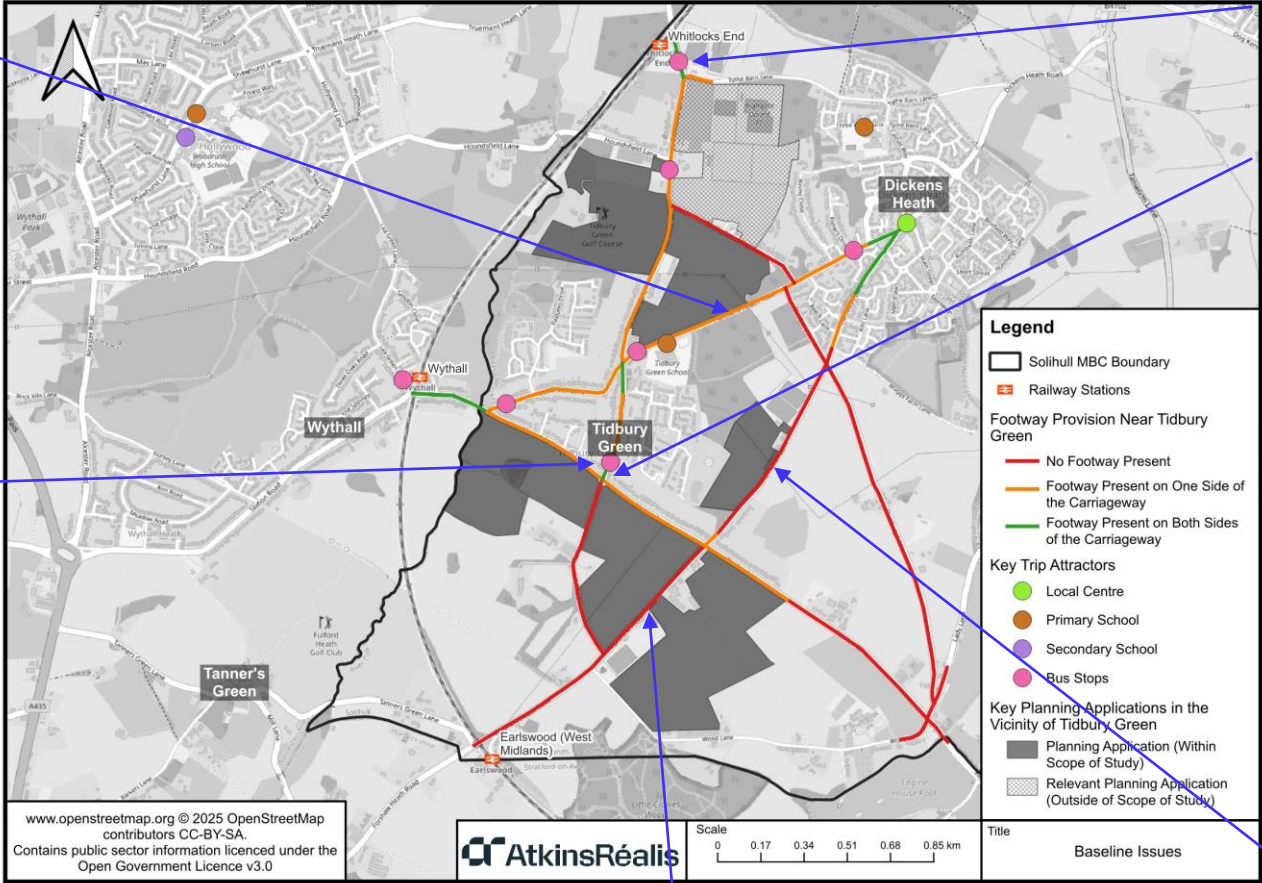


Gaps in Provision

Where footways are present, they are often narrow and not to LTN 1/20 standard. Overgrown vegetation often constrains the available width for pedestrians.



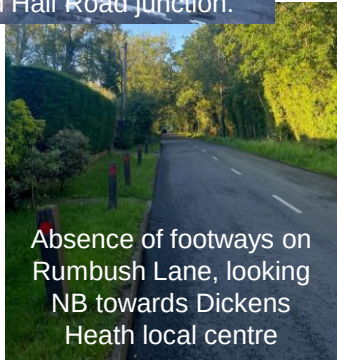
The quality of bus stops in Tidbury Green is poor, as they do not include shelter or seating for waiting passengers.



There is currently no segregated cycling infrastructure within the Tidbury Green area and an absence of traffic calming measures along several key links makes on-road cycling unattractive.

The service provision at Earlswood and Wythall Railway Station (1 train per hour to Birmingham Moor Street) is relatively poor, pushing passengers to Whitlocks End, where the service frequency is two per hour.

Walking routes are of poor quality. Poor crossing provision, missing tactile paving and wide junction radii are common issues.



Footway provision across the Tidbury Green area is poor. There are several links towards key trip attractors which have no footway, or a footway present on just one side of the carriageway.

APPENDIX B – CUMULATIVE TRIP GENERATION

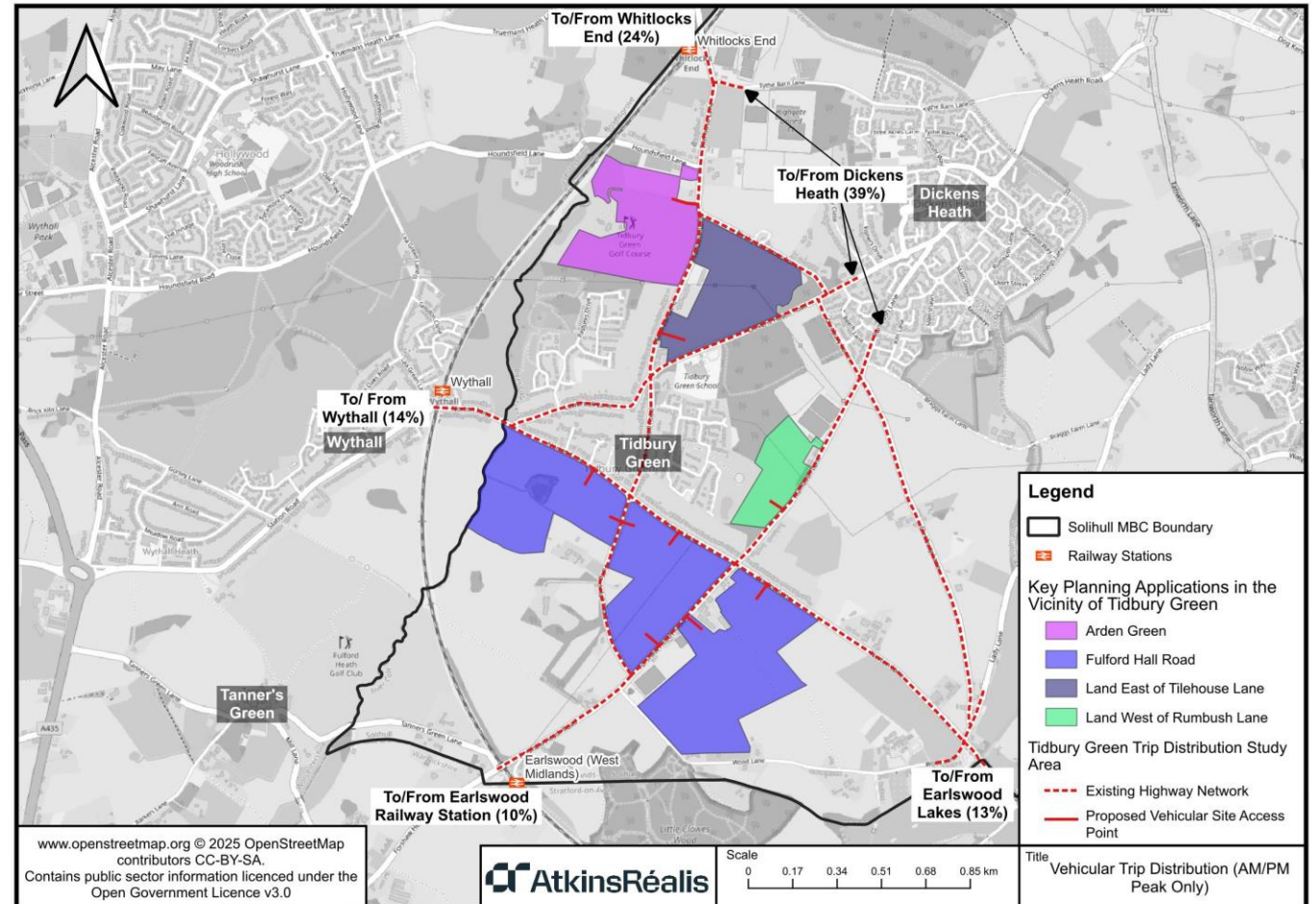
Cumulative Vehicular Trip Generation

- The table below shows the cumulative vehicular trip generation associated with the applications coming forward within Tidbury Green.
 - N.B. the trip rates have been extracted directly from each application's Transport Assessment (TA). Both the Fulford Hall Road and Arden Green TA undertook their vehicular trip generation assessment based on a higher number of dwellings than that eventually proposed within their planning application. For accuracy, AtkinsRéalis has therefore revised the trip generation down, based on the actual number of dwellings now proposed.
 - N.B. numbers may not add up due to the impact of rounding.
- As detailed, the **cumulative vehicular trip generation** of the four sites is forecast to be **722** in the **AM Peak**, and **745** in the **PM Peak**.

Development	Dwellings	Time Period	Trip Rates (Per Dwelling)			Trips Generated (Per Site)		
			Arrivals	Departures	Total	Arrivals	Departures	Total
Arden Green	200	AM Peak	0.138	0.347	0.485	28	69	97
		PM Peak	0.316	0.145	0.461	63	29	92
Fulford Hall Road	850 (Approx. 283 dwellings per phase)	AM Peak	0.189	0.381	0.569	161	324	484
		PM Peak	0.335	0.231	0.566	285	196	481
Land East of Tilehouse Lane	190	AM Peak	0.104	0.364	0.468	20	69	89
		PM Peak	0.440	0.213	0.653	84	40	124
Land West of Rumbush Lane	110	AM Peak	0.129	0.350	0.479	14	39	53
		PM Peak	0.293	0.140	0.433	32	15	48
Total	1,350	AM Peak				222	501	722
		PM Peak				464	281	745

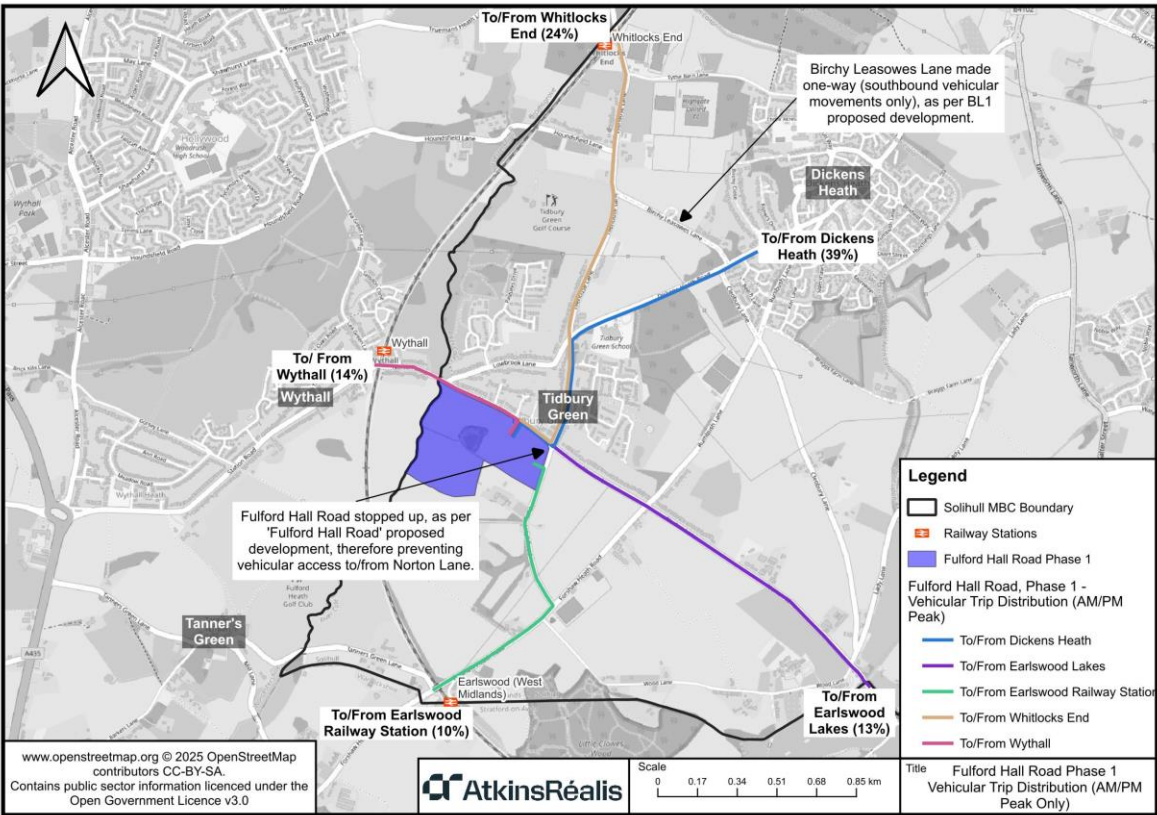
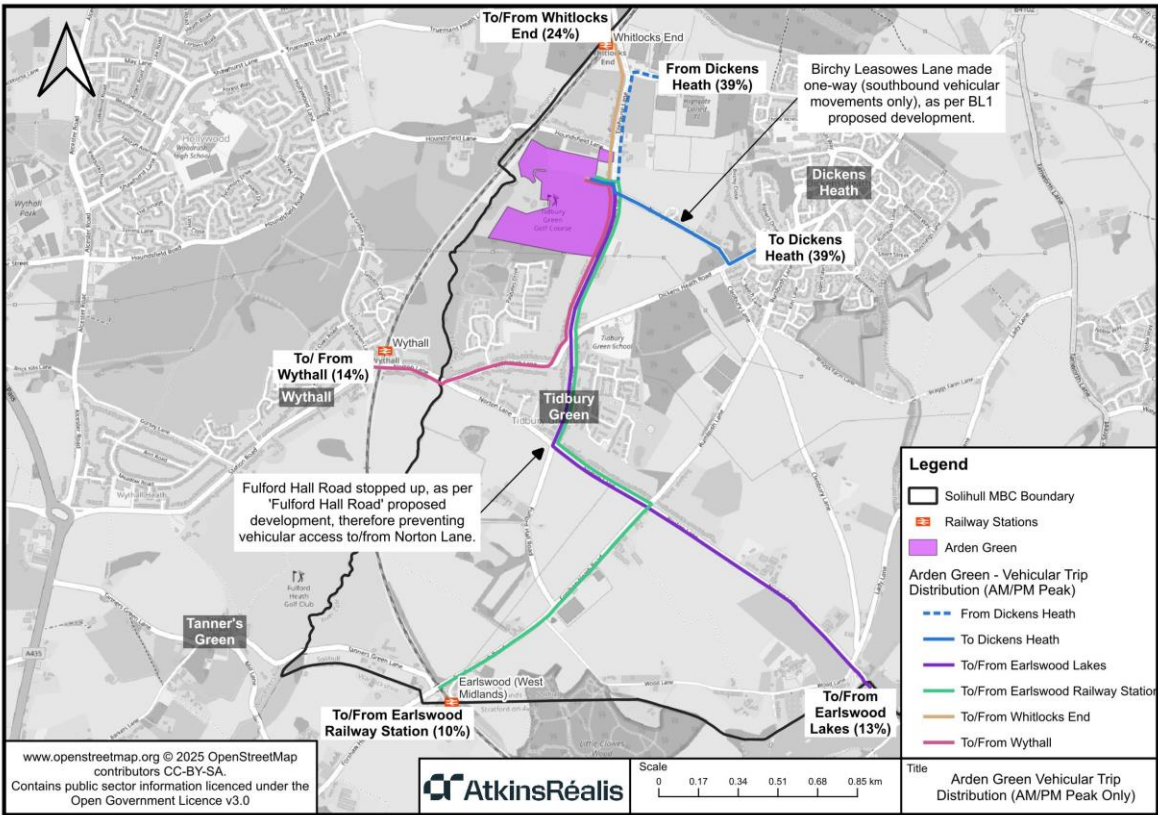
AM/PM Peak Vehicular Trip Distribution

- Whilst the trip rates within each of the four site's TAs are broadly comparable, the results of their trip distribution show a high degree of variance. The geographic extent of each application's trip distribution also varies significantly, preventing a cumulative assessment from being undertaken. As a result, a new overall vehicular trip distribution has been established for the AM and PM peak period, which has been applied to the trips generated by all sites.
- The vehicular trip distribution has been calculated using Journey to Work data from the 2011 Census. This data details the locations where people who live in the Solihull 029 MSOA (which includes Tidbury Green) drive to work.
- This methodology assumes that vehicular trips in the AM and PM peak are 'commuting' trips and subsequently provides an indicative estimate of vehicular trip distribution only.
- To determine which route a vehicle would take from Tidbury Green to the respective workplace locations, online journey planning software has been used, based on typical highway conditions.
- As shown in the figure to the right, the following AM and PM peak vehicular trip distribution has been established for the Tidbury Green area:
 - To/From Whitlocks End: **24%**;
 - To/From Dickens Heath: **39%**;
 - To/From Earlswood Lakes: **13%**;
 - To/From Earlswood Railway Station: **10%**; and
 - To/From Wythall: **14%**.
- This vehicular trip distribution has subsequently been applied to the vehicular trip generation detailed on the previous slide.



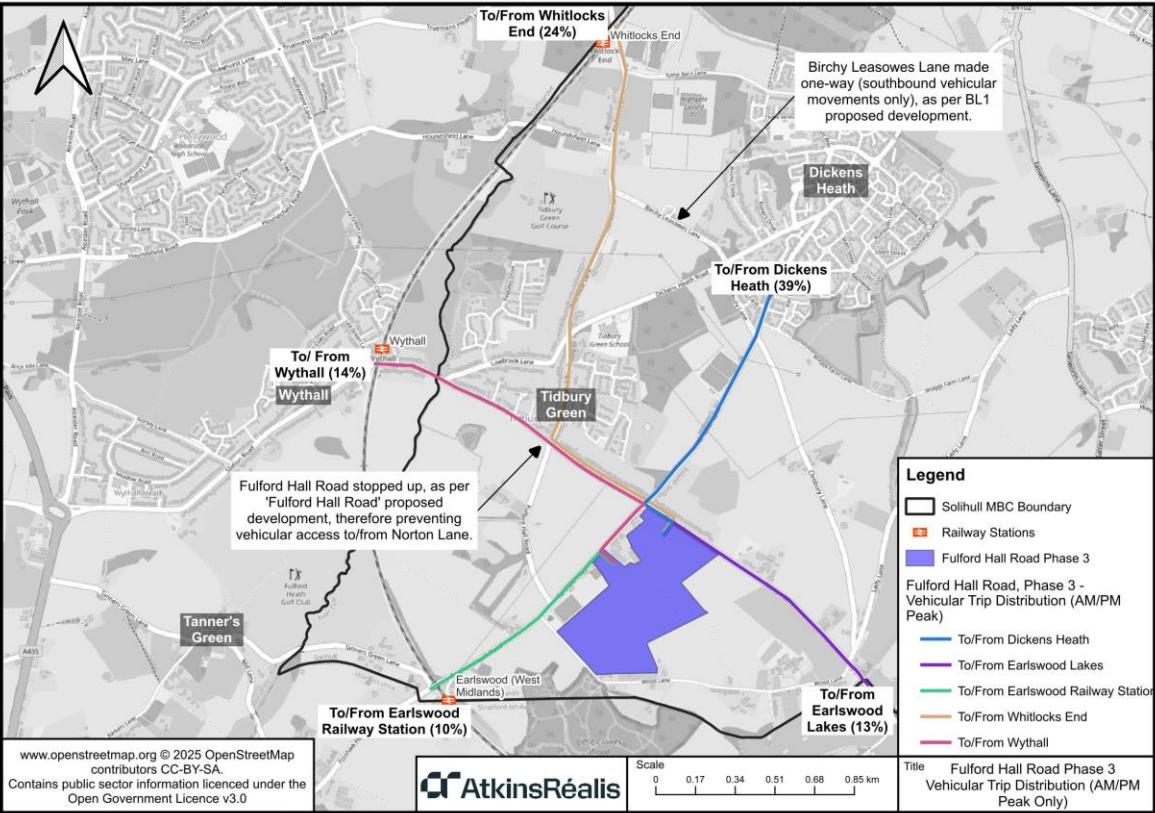
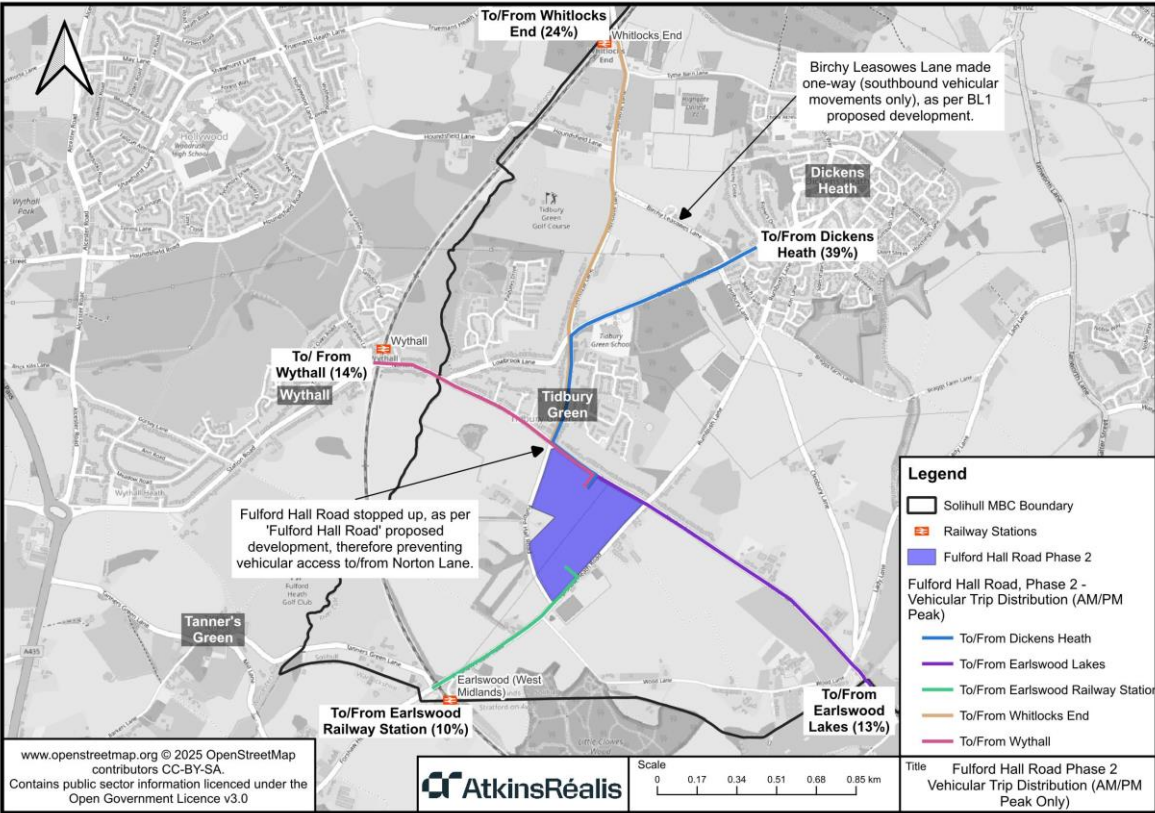
Trip Routing From Development Sites

- The below figures demonstrate the vehicular trip routing from the Arden Green and Fulford Hall Road (Phase 1) proposed developments, respectively.



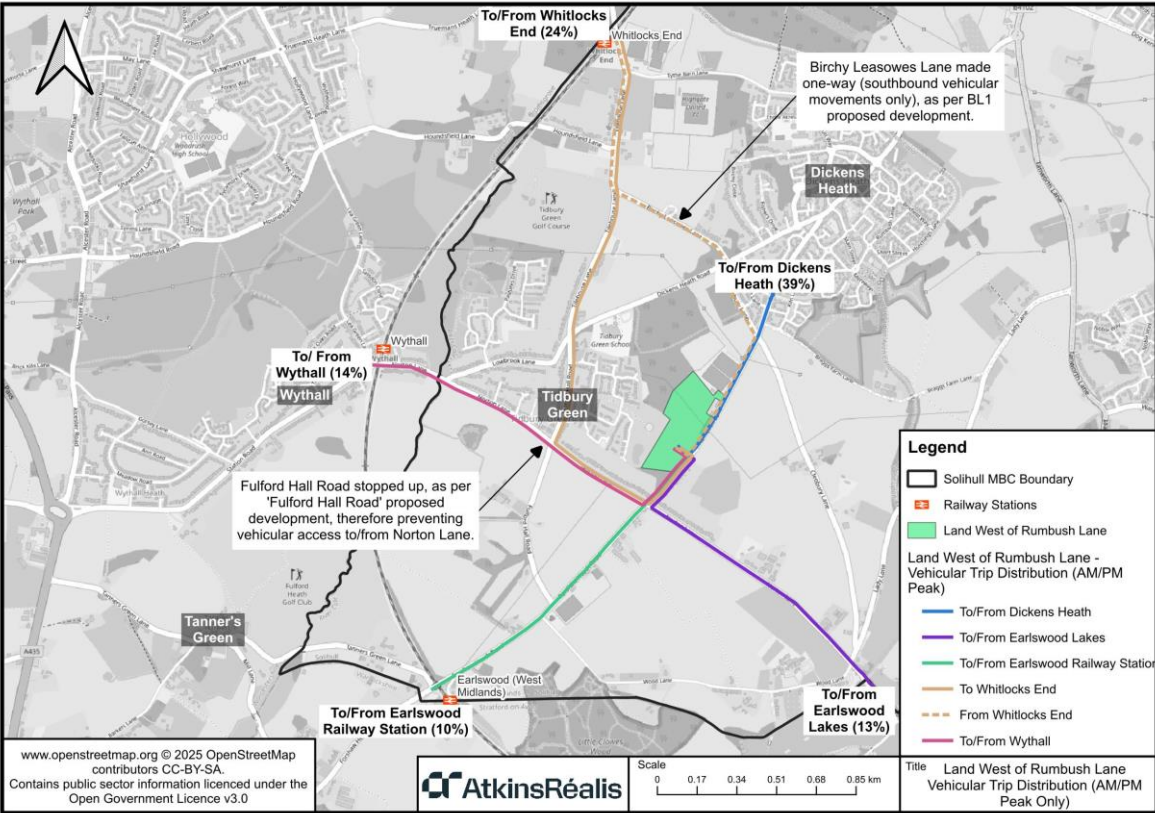
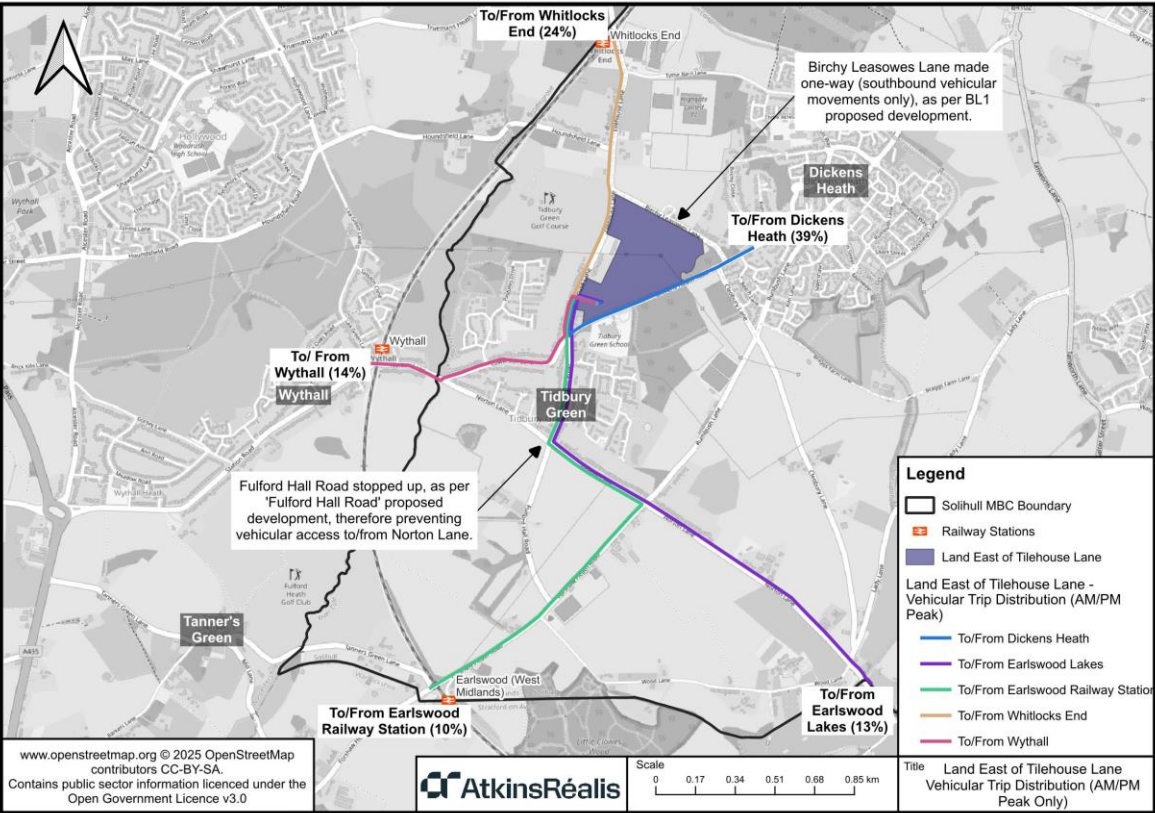
Trip Routing From Development Sites

- The below figures demonstrate the vehicular trip routing from the Fulford Hall Road (Phase 2 and Phase 3) proposed development, respectively.

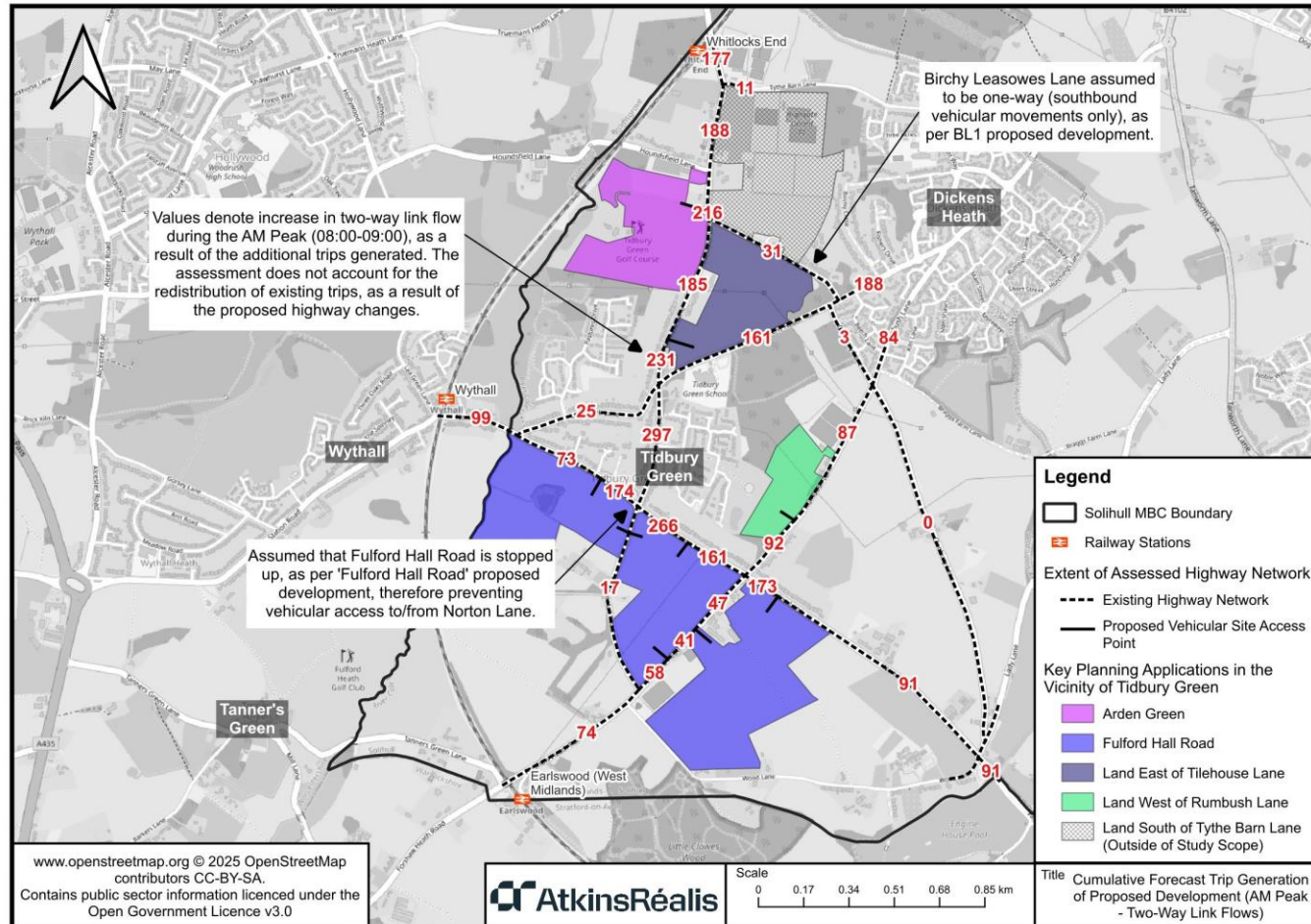


Trip Routing From Development Sites

- The below figures demonstrate the vehicular trip routing from the Land East of Tilehouse Lane and Land West of Rumbush Lane proposed developments, respectively.



Cumulative Trip Generation



The figure shows the two-way links flows in the vicinity of Tidbury Green (AM Peak, 08:00-09:00) for the additional trips generated by the four proposed developments.

- The largest increase in two-way vehicular trips is forecast along Fulford Hall Road (297 trips) and Norton Lane (266 trips).
- Significant vehicle trip increases are also forecast on Dickens Heath Road (161 trips) and Rumbush Lane (92 trips).

Consideration of Background Growth

In addition to the applications coming forward within Tidbury Green, there are a number of potential developments in neighbouring areas (including outside of the Solihull boundary) which have the potential to increase traffic demand in the local area.

It is noted that the respective local authority areas will need to undertake their own assessments and the applicants will need to consider cross boundary movements as part of their respective Transport Assessments.

An initial review has considered whether trips associated with nearby committed and emerging developments are likely to route through Tidbury Green:

- **Hockley Heath:** development is considered too distant to have a material impact on traffic through Tidbury Green.
- **Hollywood and Wythall:** whilst some local trips may route through Tidbury Green (for example to/from Dickens Heath), the dominant strategic traffic movements are likely to be to the north east, towards Birmingham, or south west, towards M42 Junction 3.
 - Further, as these sites come forward, it is expected that an increased number of services and local trip attractors will be delivered. This will potentially focus cross-border trips towards railway stations rather than centres like Dickens Heath.
- **Locations to the south:** limited interaction is expected, with trips unlikely to route through the village to travel to local destinations such as Dickens Heath.

Development	Proposals
26/00365/OUT - Land At Lea Green Lane Wythall	120 dwellings
26/00252/OUT - Land At Packhorse Lane Hollywood	110 dwellings
25/01400/OUT - Land At Houndsfield Lane, Hollywood	44 dwellings
25/01503/OUT - Land West Of Alcester Road, Wythall	110 dwellings
23/00403/OUT - Land At South Side Of Houndsfield Lane, Hollywood	50 dwellings & flexible commercial / community use building
PL/2025/00661/PPOL - Wood Farm Bills Lane, Shirley	450 dwellings
26/00273/OUT - Land Bounded By Haslucks Green Road, Bills Lane	150 dwellings
PL/2025/01937/MAODW - Land Off Norton Lane Earlswood Solihull	850 dwellings
26/00365/OUT - Land at E409210 N276350, Lea Green Lane Wythall	120 dwellings
26/00387/FUL - Land at Middle Lane, Wythall	4355sqm industrial and logistics building
WY03 South of Station Road	300 dwellings
WY01 Land South of Houndsfield Lane	875 dwellings
170 Station Road	178 dwellings
Ex-Phoenix Site	500 dwellings

Consideration of Background Growth

Census Travel to Work data indicates that for commuters living in Hollywood, Wythall [Bromsgrove (004)]:

- 63% regularly travel to a work location by car;
- 2.1% work in Solihull (029); and
- Of those who work in Solihull (029), 92% travel by car.

In a worst-case, if 3,000 dwellings were to come forward within the Hollywood area, it is assumed that approximately 1,500 peak hour additional vehicle trips would be generated.

Applying the Travel to Work data, it is assumed that approximately 30 additional peak hour commuting trips would be generated towards Solihull (029), some of which may route through Tidbury Green.

This level of additional traffic is likely to fall within typical daily traffic variation. As a result, it is considered appropriate for these developments to be considered alongside wider background growth, using TEMPro growth rates.

Consideration of Background Growth

In TEMPro, the background assumption is that the number of dwellings in the Solihull 029 MSOA will increase by 578 dwellings from 2025-2036 (an increase from 4,492 to 5,072).

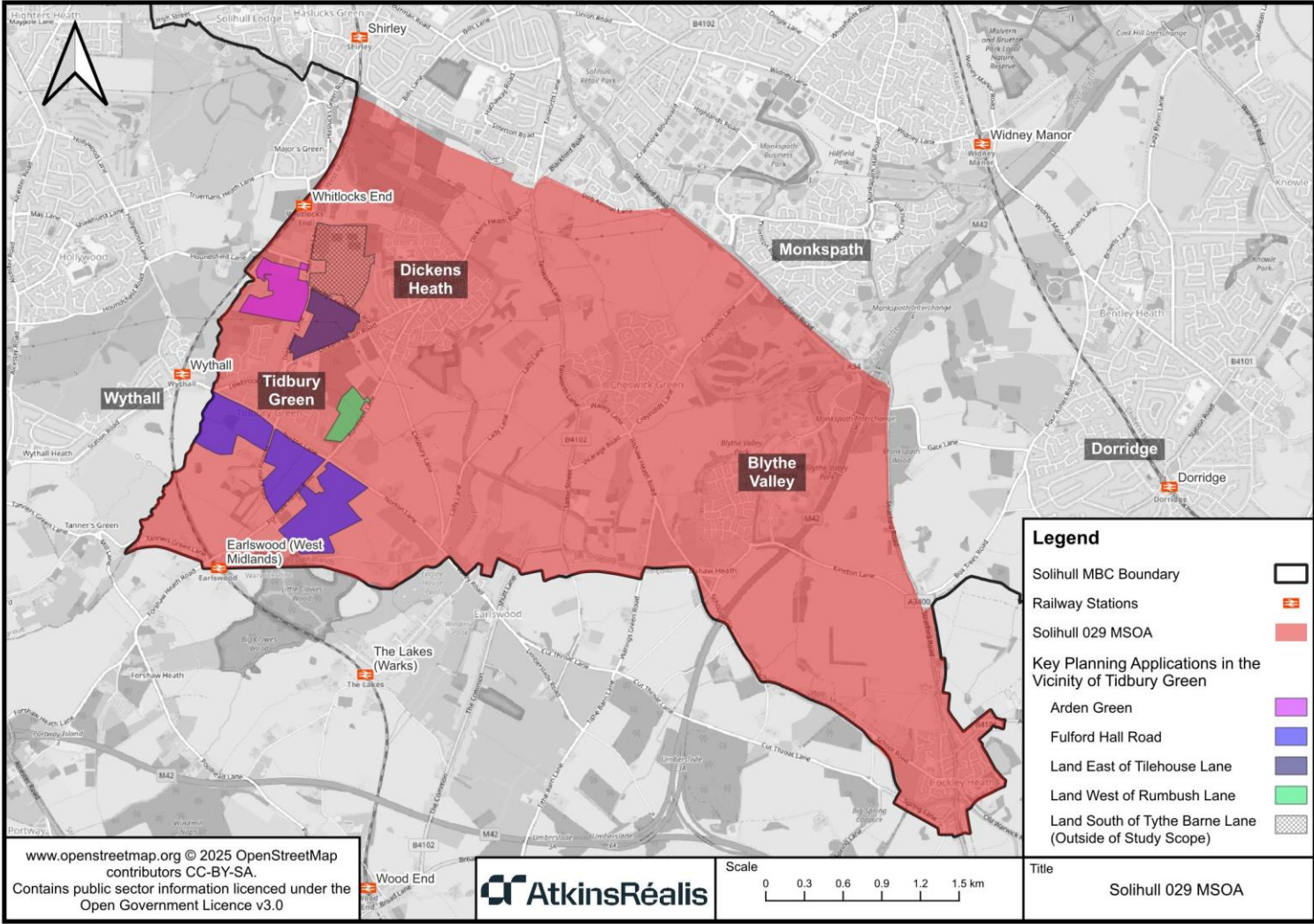
In reality, the current level of planned growth in Solihull 029 over that period, calculated by assessing live or recently determined applications within the planning system, is for approximately 4,000 dwellings.

As a result, alternative assumptions have been used within TEMPro, to account for this forecast growth.

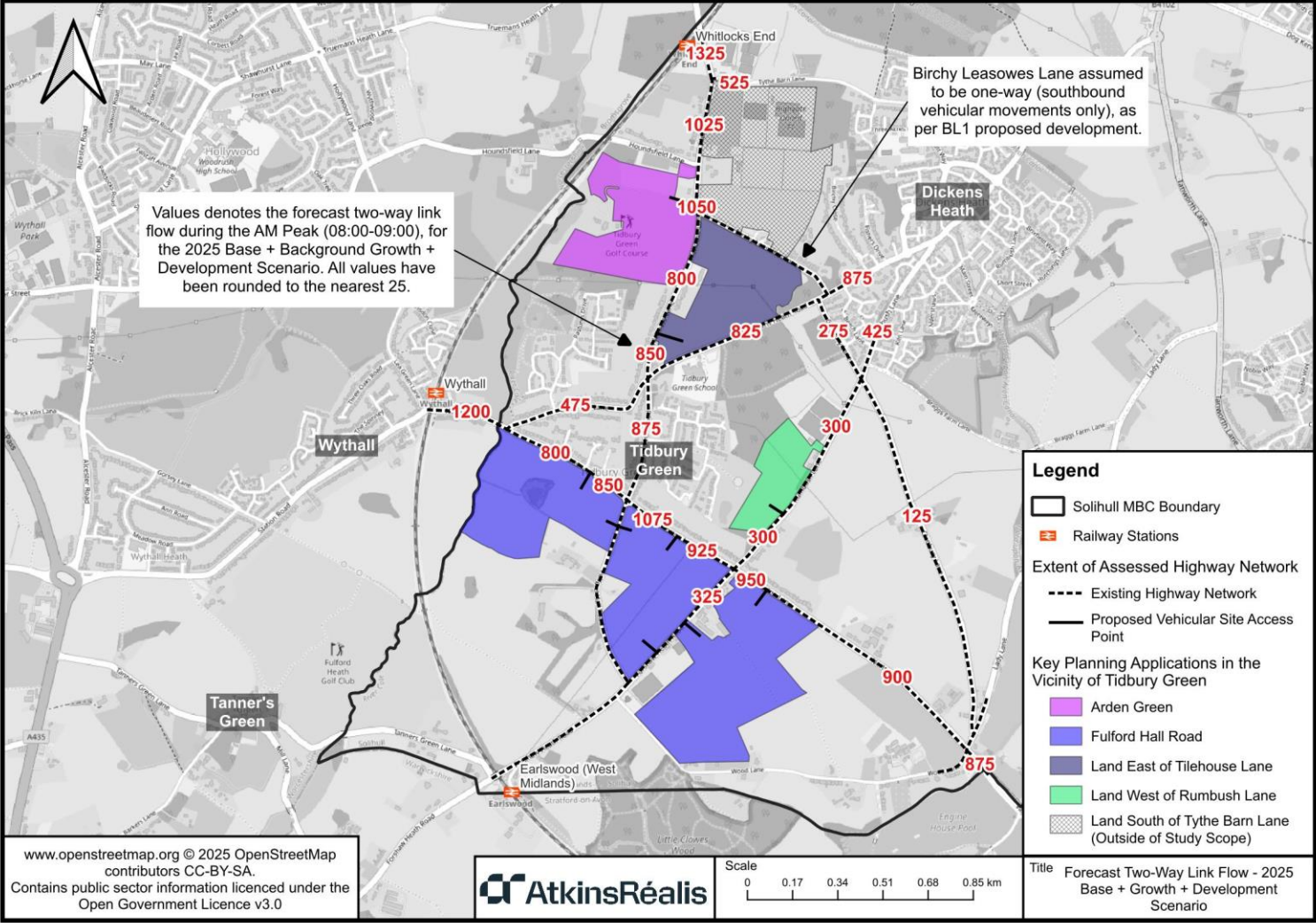
To ensure the remaining forecast growth is accounted for, the TEMPro assumptions have therefore been overwritten, to assume that 2,650 dwellings (an increase from 4,492 to 7,142) will be delivered across the MSOA, from 2025-2036. This is in addition to the cumulative trip generation assessment within this report, which accounts for the delivery of 1,350 dwellings within the Tidbury Green area.

The growth factors extracted from TEMPro for the Solihull 029 MSOA, using the above alternative assumptions are as follows:

- AM Peak Period (07:00-10:00): **1.3581**
- PM Peak Period (16:00-19:00): **1.3805**



Cumulative Impact on Highways - Links



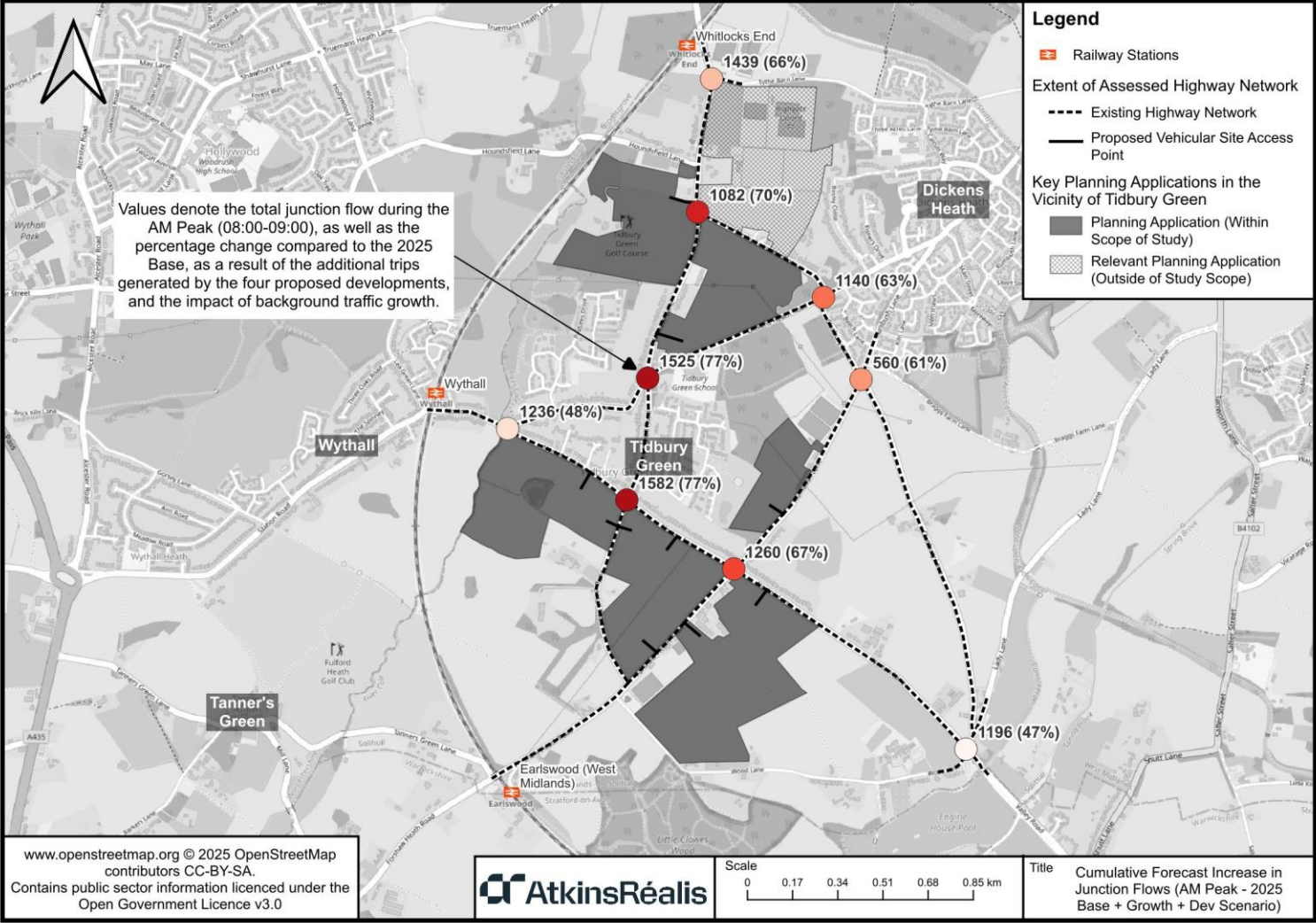
The figure shows the forecast increase in two-way link flows in the vicinity of Tidbury Green (AM Peak, 08:00-09:00), accounting for the additional trips generated by the four proposed developments, as well as for background traffic growth.

- The highest traffic volumes are forecast on **Norton Lane** (1,075 vehicles) and **Tilehouse Lane** (1,325 vehicles).
- Significant vehicular movements are also forecast on Dickens Heath Road (875 vehicles) and Fulford Hall Road (875 vehicles).

The analysis shows that **link flows are likely to remain within theoretical capacity, although the onus is on developers to confirm this** within their individual assessments. The following slide considers the cumulative impact on junction capacity specifically.



Cumulative Impact on Highways - Junctions



The figure shows the forecast increase in junction flows in the vicinity of Tidbury Green (AM Peak, 08:00-09:00), accounting for the additional trips generated by the four proposed developments, as well as for background traffic growth. This represents the same Scenario / time period as has been assessed on the previous slide.

- The highest traffic volumes are forecast at the **Norton Lane/Fulford Hall Road junction** (1,582 vehicles) and the **Tilehouse Lane/Dickens Heath Road/Fulford Hall Road/Lowbrook Lane junction** (1,525 vehicles). This represents an increase of 77% at both junctions, when compared to the 2025 Base flows.
- The significant increase in junction flow at the Norton Lane/Fulford Hall Road junction, the Tilehouse Lane/Dickens Heath Road/Fulford Hall Road/Lowbrook Lane junction and on approach to Whitlocks End Railway Station suggest that they **may approach theoretical capacity, if all the planned growth is realised**.

Further analysis of the forecast impact is presented in Appendix C.



APPENDIX C - STRATEGIES

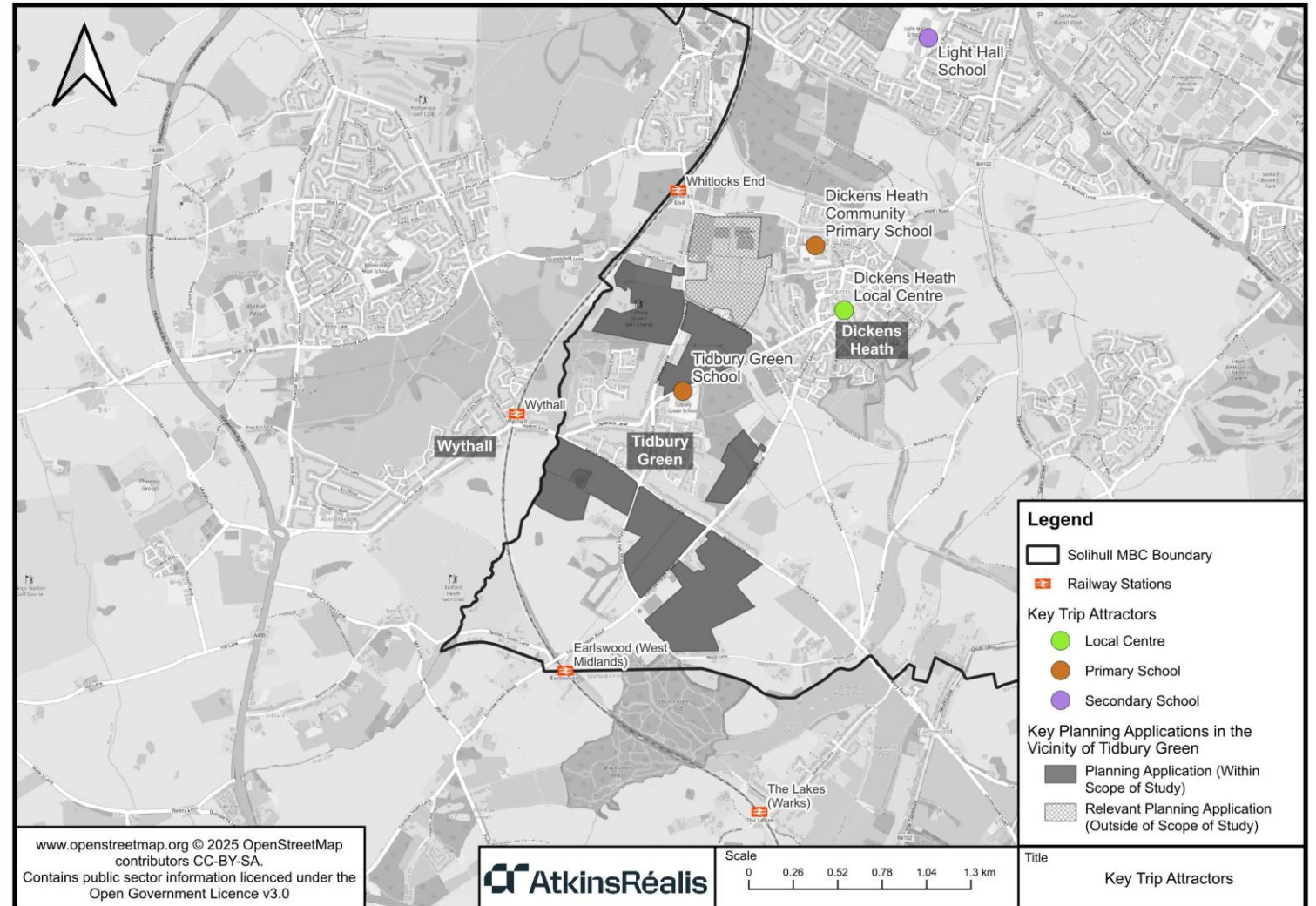
Access to Amenities

Key Attractors

Key attractors in the local area include:

- Whitlocks End, Wythall and Earlswood Railway Stations. Whitlocks End Railway Station is likely to be the most attractive given higher frequency services and facilities.
- Local schools include Tidbury Green Primary School and Light Hall School.
- Dickens Heath provides access to a range of retail and leisure facilities.
- Local bus stops provide access to the wider transport network.

Whilst Coppice Primary School and Woodrush High School are also located in relatively close proximity to Tidbury Green, the two schools are located in Bromsgrove, and therefore cannot be relied upon to provide school places for children living within Solihull's authority.



Isochrone Mapping – Methodology

Active Travel England’s Planning Application Assessment Toolkit sets out criteria relating to the recommended maximum distances that proposed residential developments are located from key trip attractors.

In line with this guidance, AtkinsRéalis has drawn walking isochrones from key trip attractors in the vicinity of Tidbury Green, to establish how the proposed planning applications perform in relation to the guidance.

The table below sets out the key trip attractors which have been considered within the assessment, along with the recommended maximum distance set out within ATE’s guidance. The exception to this is the recommended walking distance to secondary schools. A distance for this is not provided by ATE, and subsequently, guidance by CIHT (Providing for Journeys on Foot, 2000) has been used.

Type	Trip Attractor	Max. Recommended Walking Distance
Education	Primary School	400m
	Secondary School	2,000m (CIHT)
Public Transport	High Frequency Bus Stop	400m
	Railway Station	800m
Amenities	Local Centre including food shops and community buildings	800m

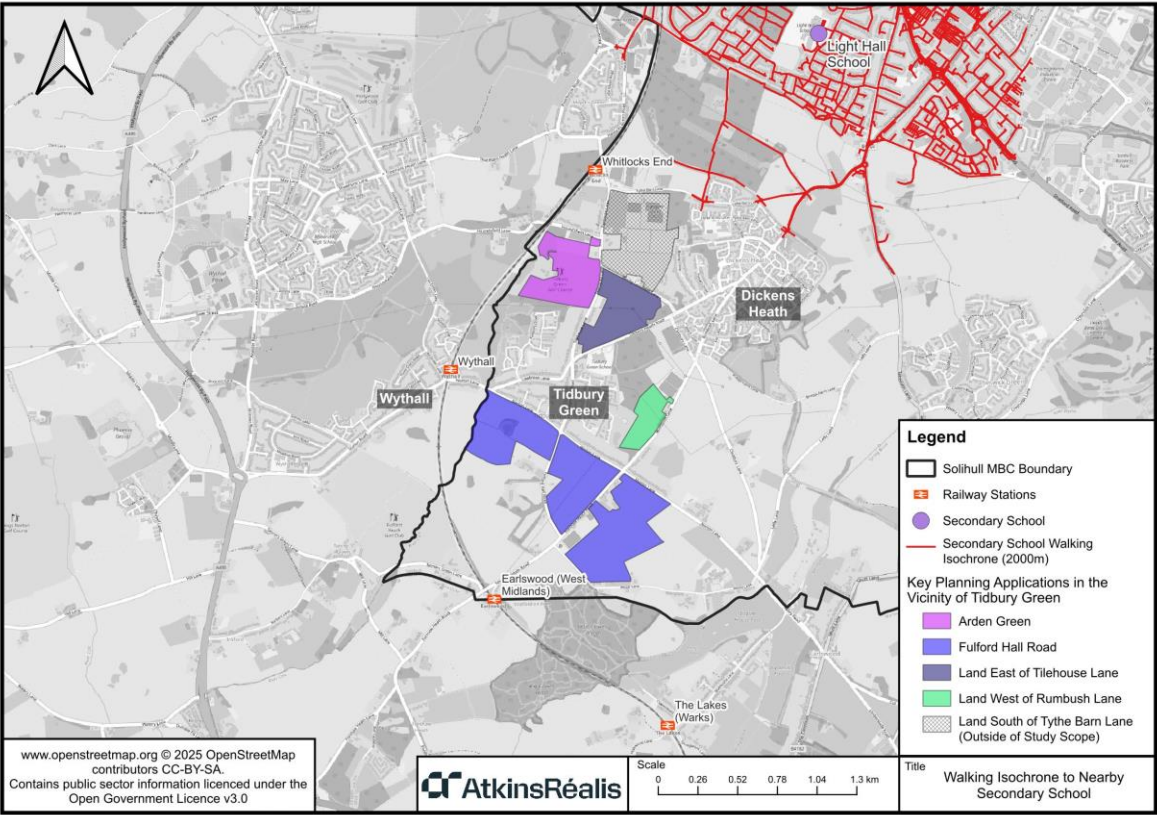
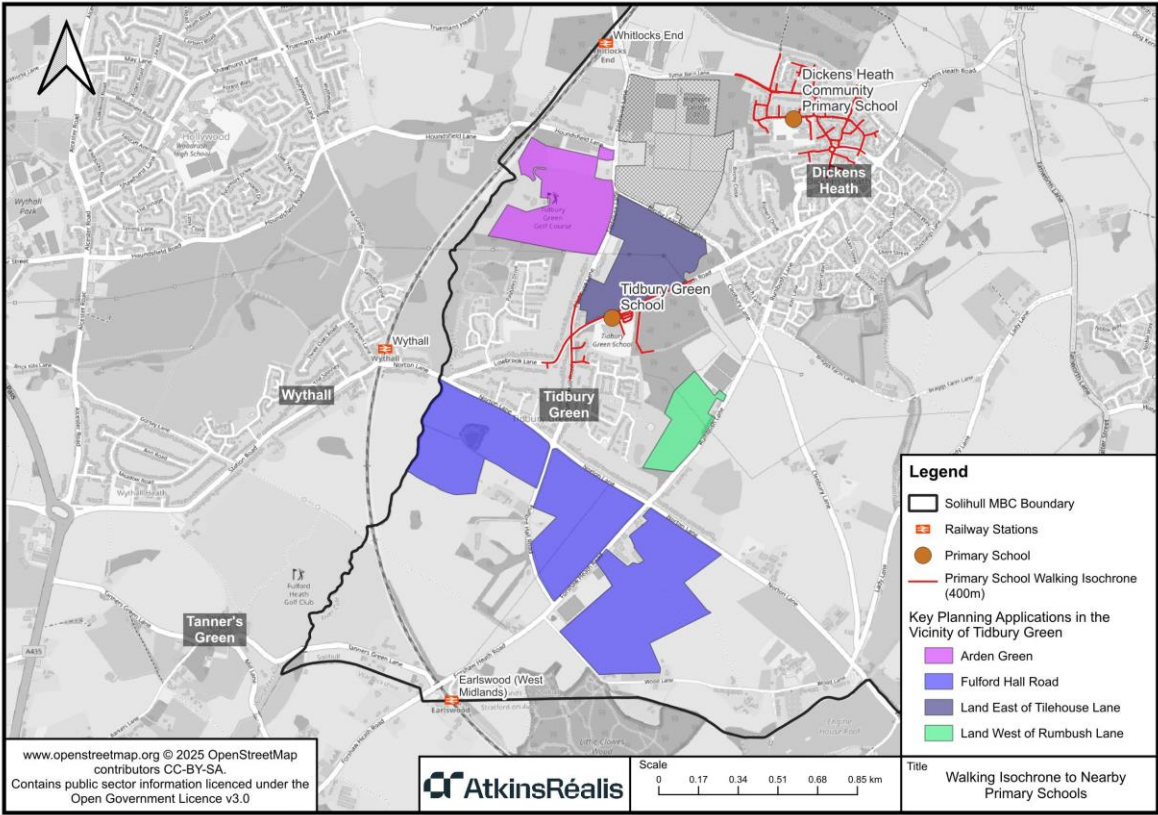
The isochrone analysis on the subsequent pages highlights a key issue relating to the rurality of the proposed development sites, which do not meet several of the recommended maximum walking distances to key trip attractors. As a result of this, the mitigations put forward by developers must be particularly robust, in order to encourage and enable travel by active modes, as active travel is unlikely to be the first choice for future residents unless high quality infrastructure is provided which increases its attractiveness. Car dependency is a key risk to the sustainability of the sites.



Isochrones

The below figures demonstrate a 400m walking isochrone from the three primary schools in the vicinity of Tidbury Green, and a 2,000m walking isochrone from Light Hall School.

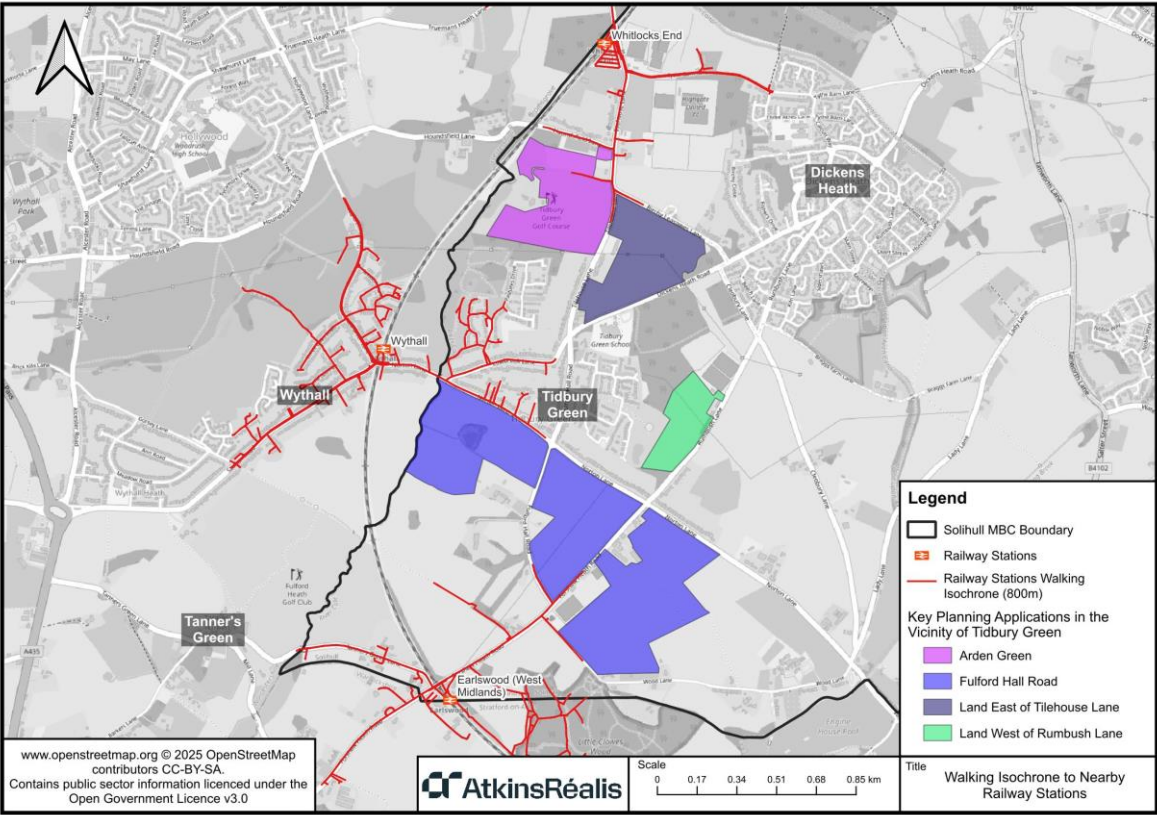
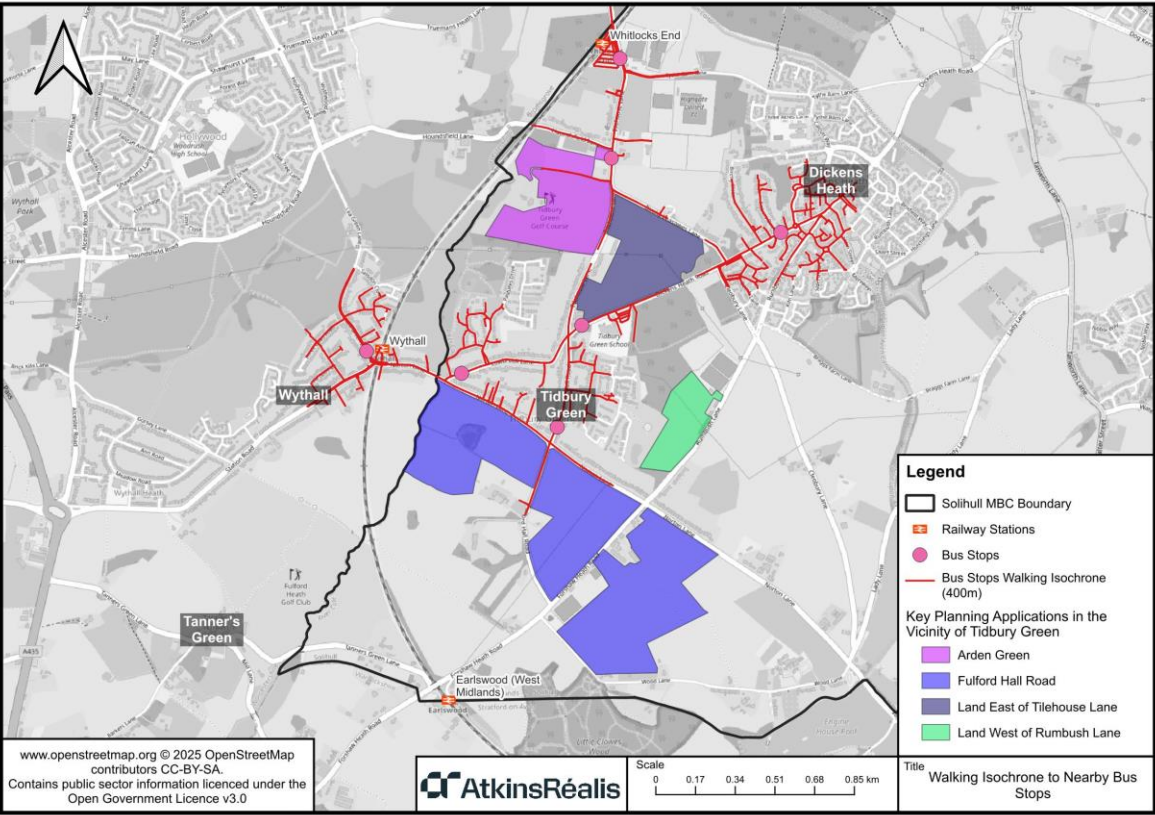
The analysis indicates that the proposed planning applications are poorly located in relation to education provision. No application is within 2km of a Secondary School, and just one application (Land East of Tilehouse Lane) is within 400m of a primary school.



Isochrones

The below figures demonstrate a 400m walking isochrone from the bus stops in the vicinity of Tidbury Green, and an 800m walking isochrone from the nearby railway stations.

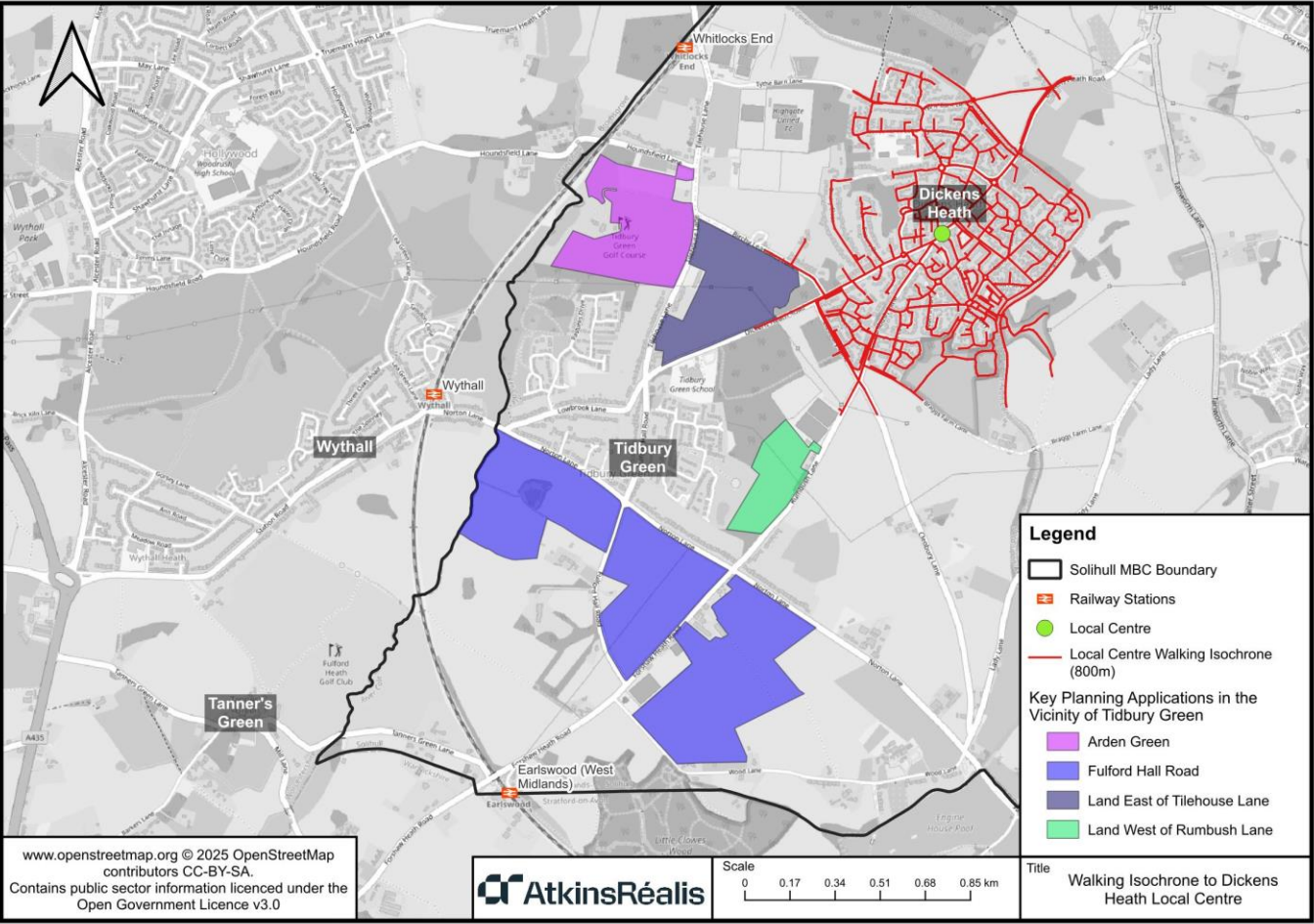
The analysis indicates that the proposed planning applications experience differing levels of connectivity to the existing public transport provision. Comparatively, Arden Green is the best-connected site, whilst the Land West of Rumbush Lane is the worst-connected site, as it is outside of the maximum walking distance to both the nearest railway station and bus stop.



Isochrones

The figure demonstrates an 800m walking isochrone from Dickens Heath local centre, which contains several key trip attractors, including a shop, village hall, medical centre, as well as restaurants, bars and a small gym.

The analysis shows that the proposed planning applications are located poorly in relation to Dickens Heath local centre, as none are located within 800m. Whilst part of the Land East of Tilehouse Lane is within 800m, this part of the site is proposed to form part of the site's sustainable urban drainage system and will therefore not be home to residents.

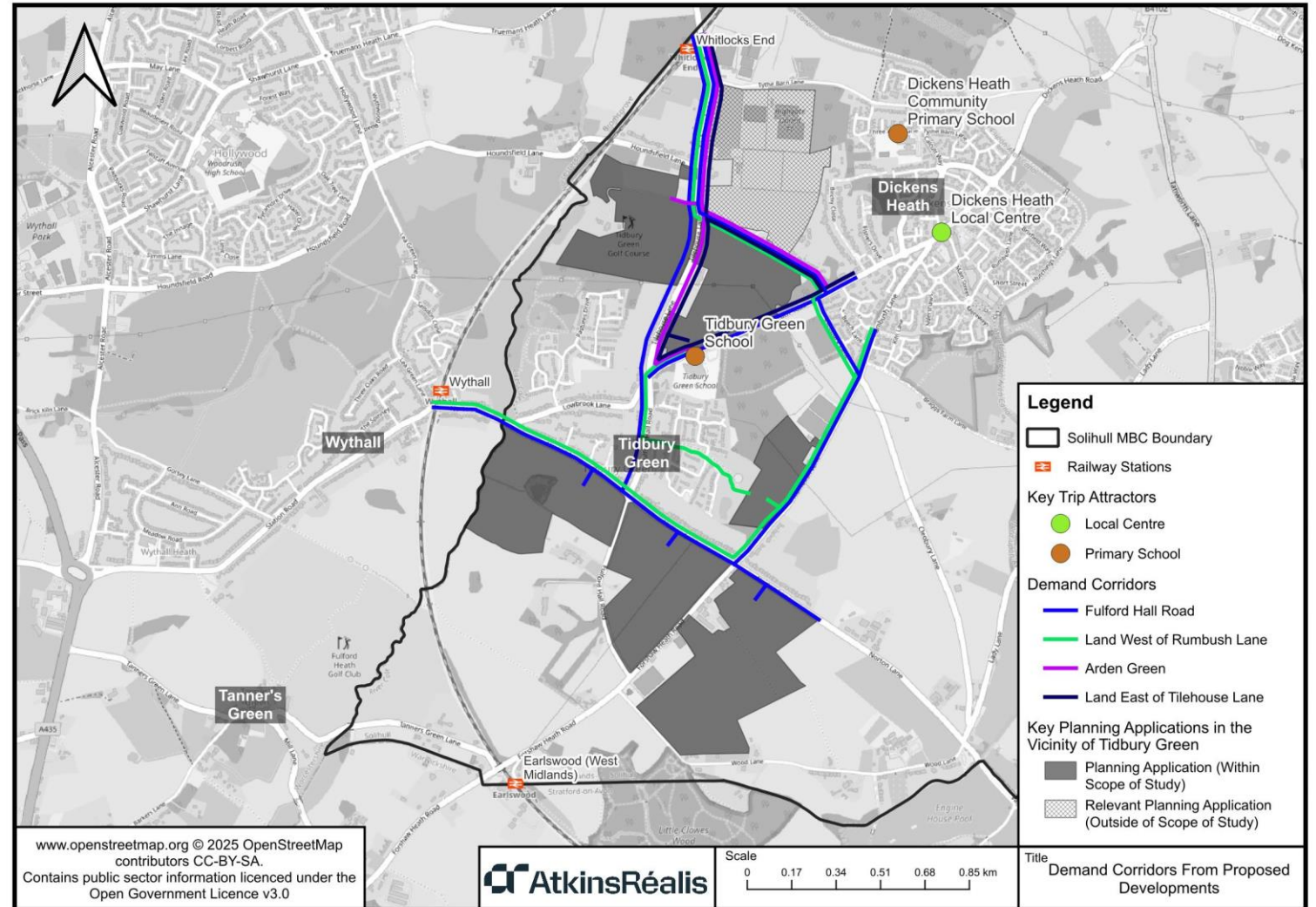


Key Routes

Whilst the developments are located outside of the recommended distances from facilities, there is still opportunity to increase active travel mode share through the provision of safe and suitable links.

Analysis of direct routes from the proposed development sites to key destinations indicates that routes from multiple sites converge on:

- Tilehouse Lane
- Birchy Leasowes Lane
- Cleobury Lane
- Rumbush Lane
- Norton Lane

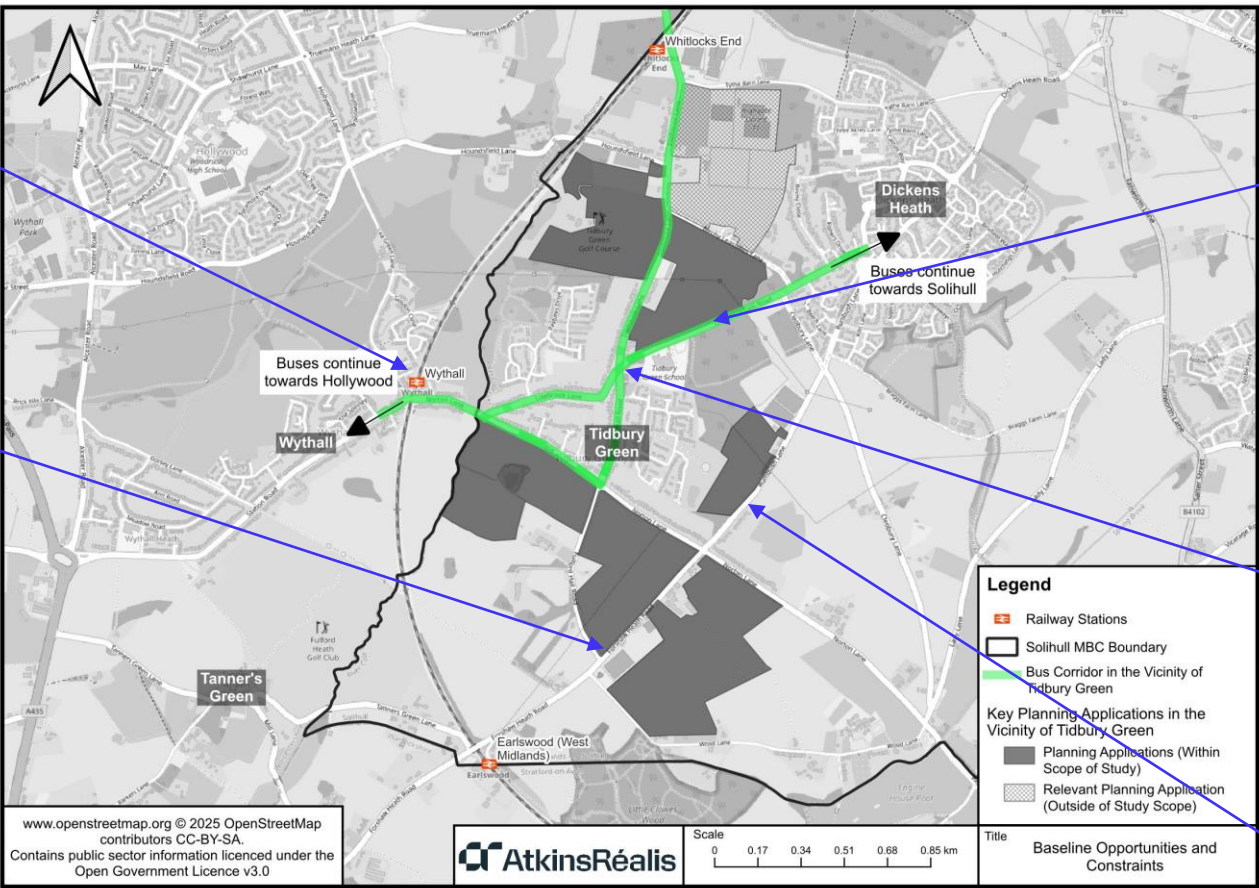


Opportunities and Constraints

Opportunities and constraints have been identified based on the outcome of the analysis of accessibility and cumulative trip generation.

CONSTRAINT: the rail service frequency at Wythall and Earlswood Railway Station is poor. Improving the service frequency would require the installation of new points and signalling to allow trains to turn round at the respective stations. The cost of this would be significant, and it is unlikely to be feasible in the short to medium term.

CONSTRAINT: several roads in the vicinity of Tidbury Green are constrained by drainage ditches, mature trees and hedgerow, which constrains the ability to widen the carriageway, in order to deliver active travel infrastructure.



OPPORTUNITY:

several development sites coming forward are located adjacent to the carriageway, providing an opportunity to deliver active travel routes within sites, that may be more direct, safe and attractive for users.



CONSTRAINT: the 664/665 bus service routes through the heart of Tidbury Green. Whilst positively connecting residents to Solihull Town Centre, the requirement to enable bus movements constrains the ability to implement some transport interventions, as junctions must be sufficiently wide, and the highway must remain relatively free flowing.

OPPORTUNITY: roads such as Birchy Leasowes Lane, Cleobury Lane and Rumbush Lane experience relatively low traffic flows, providing opportunities to support and prioritise travel by active modes.



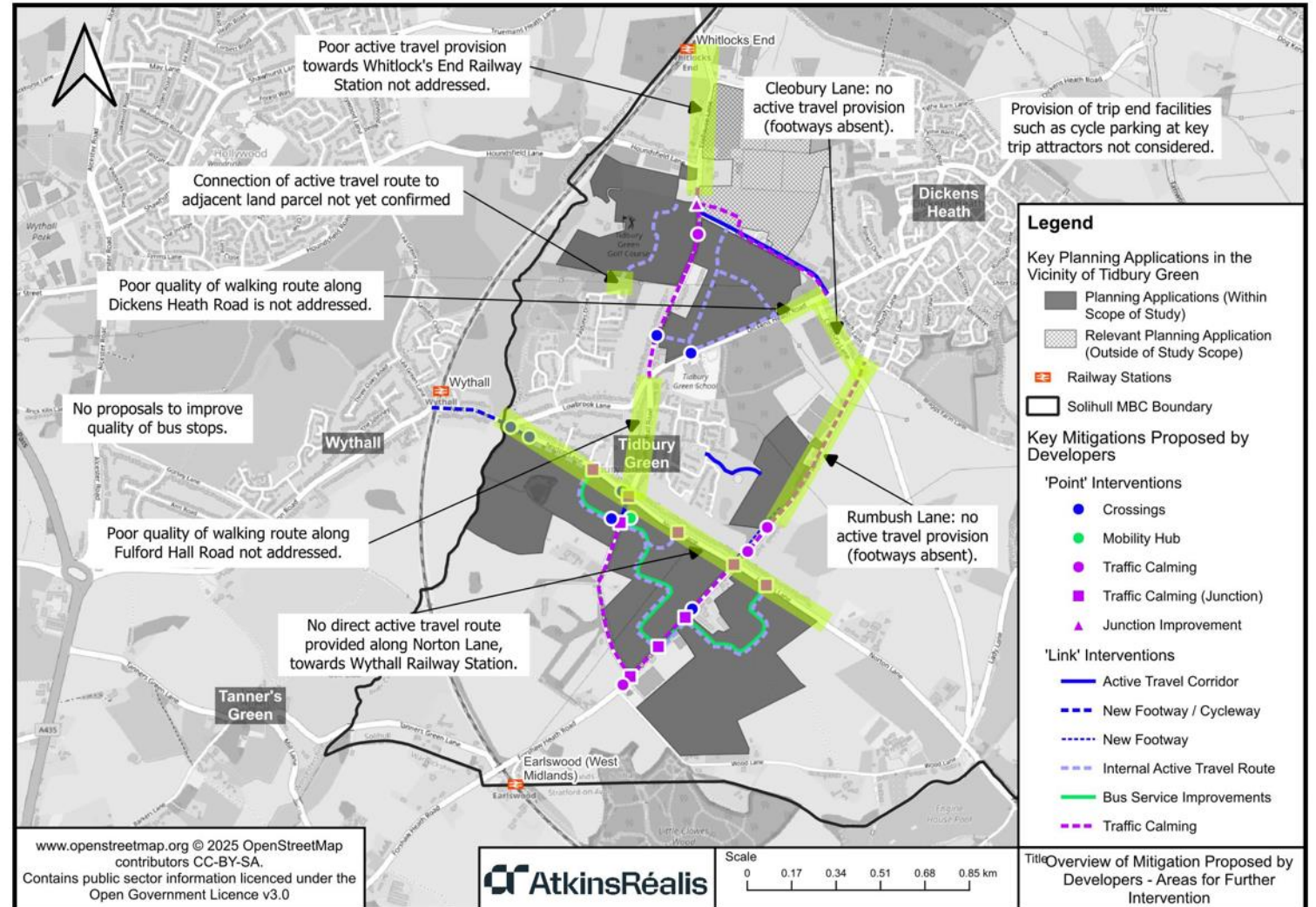
Priority Areas for Intervention

Priority Areas for Intervention

Priority areas for intervention have been identified where accessibility deficiencies coincide with key demand corridors, particularly along routes serving the key attractors:

- Providing a safe route for active travel between the proposed sites and Whitlocks End Railway Station, whilst maintaining routes which bus services use.
- Providing a direct active travel route for access to Wythall Railway Station from Fulford Hall Road and Land West of Rumbush Lane.
- Providing safe and direct active travel provision on Rumbush Lane for access to Dickens Heath from Fulford Hall Road and Land West of Rumbush Lane. Improved crossing provision on approaches to Dickens Heath.
- Bus stop improvements – including seating and shelter, to improve user experience.
- Increased cycle parking / travel hubs – at key locations to facilitate end to end journeys.

Note: whilst there are deficiencies on Norton Lane on approach to Wythall Railway Station, this section is outside of the remit of SMBC and any upgrades would require liaison with Worcestershire.



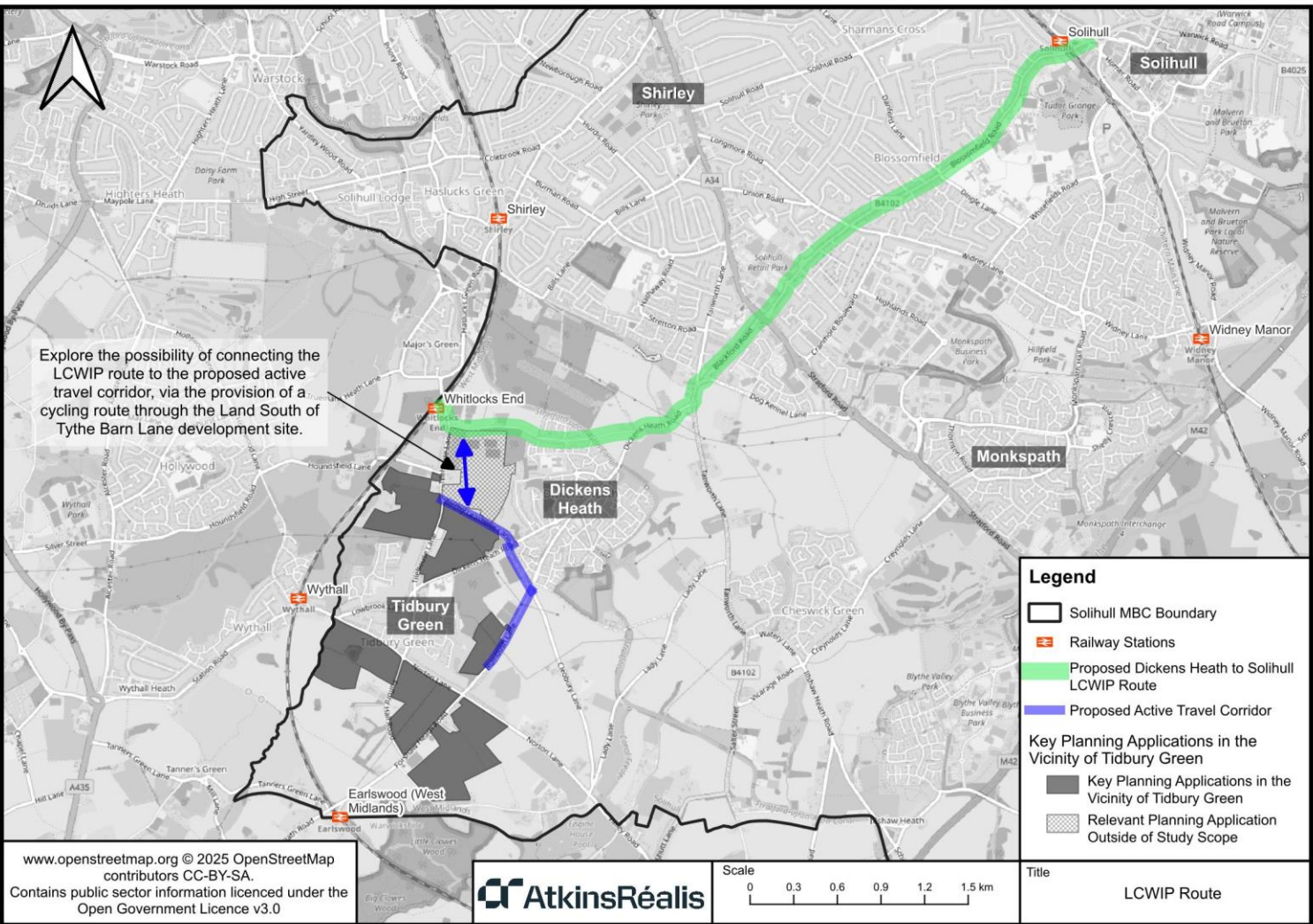
Active Travel

Typical Constraints

- Overall, active travel provision is poor, with gaps in footways, limited crossing facilities and accessibility barriers such as missing dropped kerbs and tactile paving. Without safe and easy to access active travel routes, it is unlikely that these modes of transport will be attractive enough to encourage mode shift.
- Private land ownership, drainage ditches, mature trees and hedgerows constrains the ability to widen the existing carriageway. As such, any infrastructure provision will need to be within the existing highway boundary or contained within development sites.
- Carriageway widths typically vary between 5 and 11 meters, meaning that a reallocation of existing highway space away from vehicles would be required to implement active travel infrastructure.
- Bus services route through the heart of Tidbury Green, which constrains the ability to implement some transport interventions which reduce available highway space. This is particularly relevant on Dickens Heath Road, Lowbrook Lane, Fulford Hall Road and Tilehouse Lane.
- In addition, Tilehouse Lane, Dickens Heath Road and Norton Lane have been identified as primary traffic routes. Interventions which reduce space available for traffic may result in a significant impact on traffic

Solihull LCWIP

- Tidbury Green is included in the Solihull Local Cycling and Walking Infrastructure Plan (LCWIP). While initial LCWIP delivery prioritises major urban corridors like the Dickens Heath to Solihull Town Centre route, the plan outlines future connections to nearby villages like Tidbury Green and Cheswick Green.
- Seven primary cycle corridors were identified, one of which was the Solihull Town Centre to Dickens Heath route (Route C). The initial ambition to connect the route to Wythall Railway Station has been revised, with the route now intended to connect to Whitlock's End Railway Station, as per the figure. As of July 2026, the design of the cycle route is being progressed.
- Whilst no routes within Tidbury Green are included as part of the LCWIP, it is recognised that the document focuses only on primary demand corridors, where there is the highest propensity for mode shift. The LCWIP notes that the importance of considering more rural connectivity and delivering secondary / rural corridors that connect into Solihull's key active travel routes.
- Any active travel interventions within Tidbury Green should therefore consider opportunities to tie into the LCWIP. The figure shows how the proposed active travel corridor could tie into the LCWIP route, if a cycle route is provided through the Land South of Tythe Barn Lane development site.

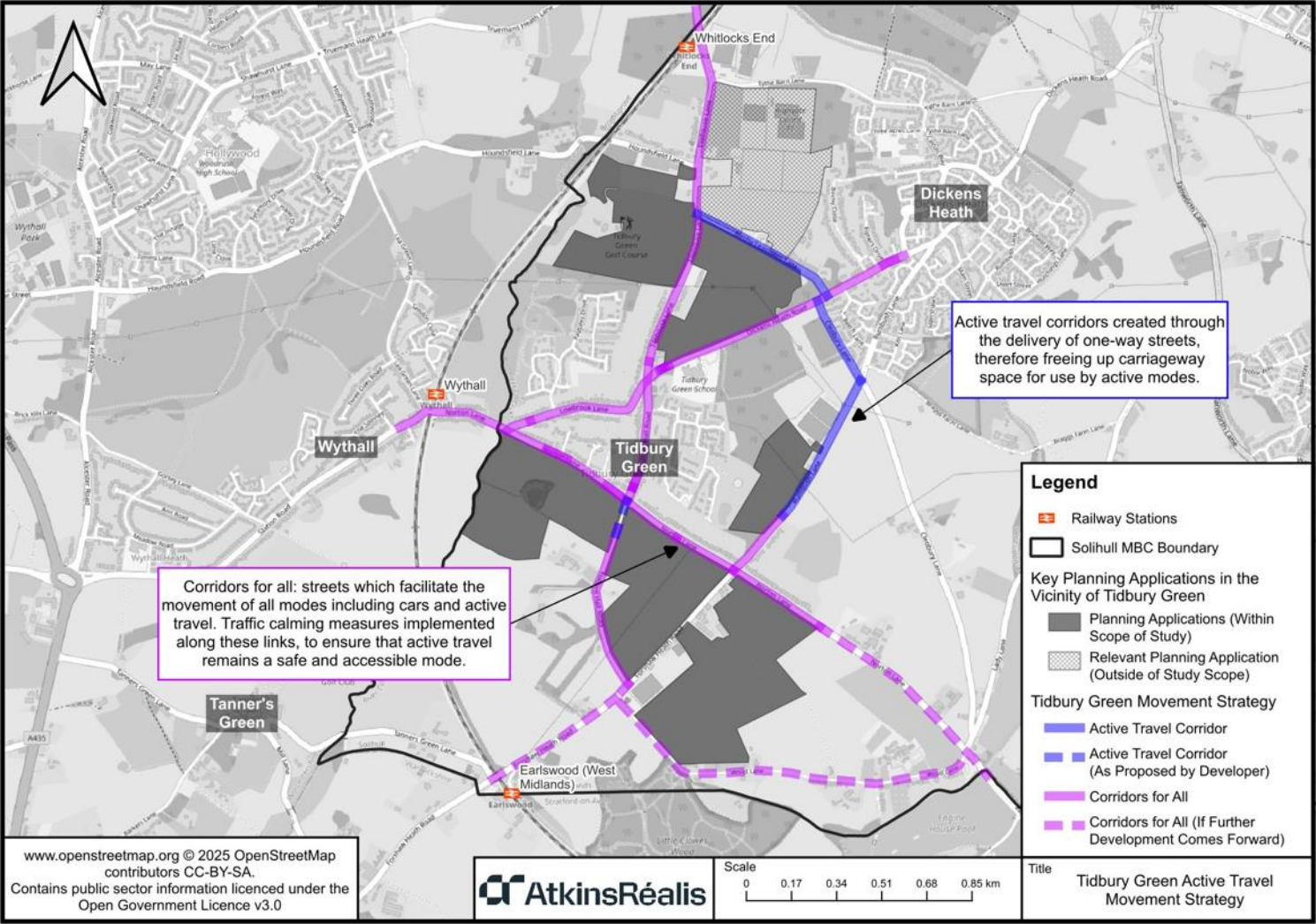


Intervention Principles

The active travel strategy has been developed on the basis of the following principles:

- The relative free movement of buses along the existing bus corridor must be maintained, to ensure that the current 664/665 bus service is not negatively impacted by the proposed transport improvements.
- Provision for two-way traffic should be maintained on primary traffic routes.
- There is a need to improve access to Dickens Heath and Whitlocks End Railway Station by active modes, by addressing the existing severance that is caused by an absence of footways and cycle links along key routes.
- A cycling route should be provided between Dickens Heath and Wythall Railway Station, considering wider aspirations including those considered within the Solihull LCWIP.
- As per LTN 1/20 two-way cycle tracks should be a minimum of 3m wide and segregated where possible. Only when this width is not possible due to physical constraints can the absolute minimum of 2m wide be considered.
- Shared footway/cycleways are less desirable than segregated infrastructure but are a useful option should segregation be impossible while maintaining sufficient carriageway width for vehicles. Shared footway/cycleway should not be implemented by default but are a more desirable option than on-road, or no, cycle infrastructure. It should be noted that anticipated cycle flows need to be sufficiently low for shared infrastructure to be acceptable.
- Only where the delivery of active travel infrastructure is not possible due to highway constraints (i.e. a lack of available width), or an equivalent direct route cannot be provided within a development site(s), traffic calming measures should be implemented to encourage and enable on-road cycling.

Strategy Plan



Public Transport

Typical Constraints

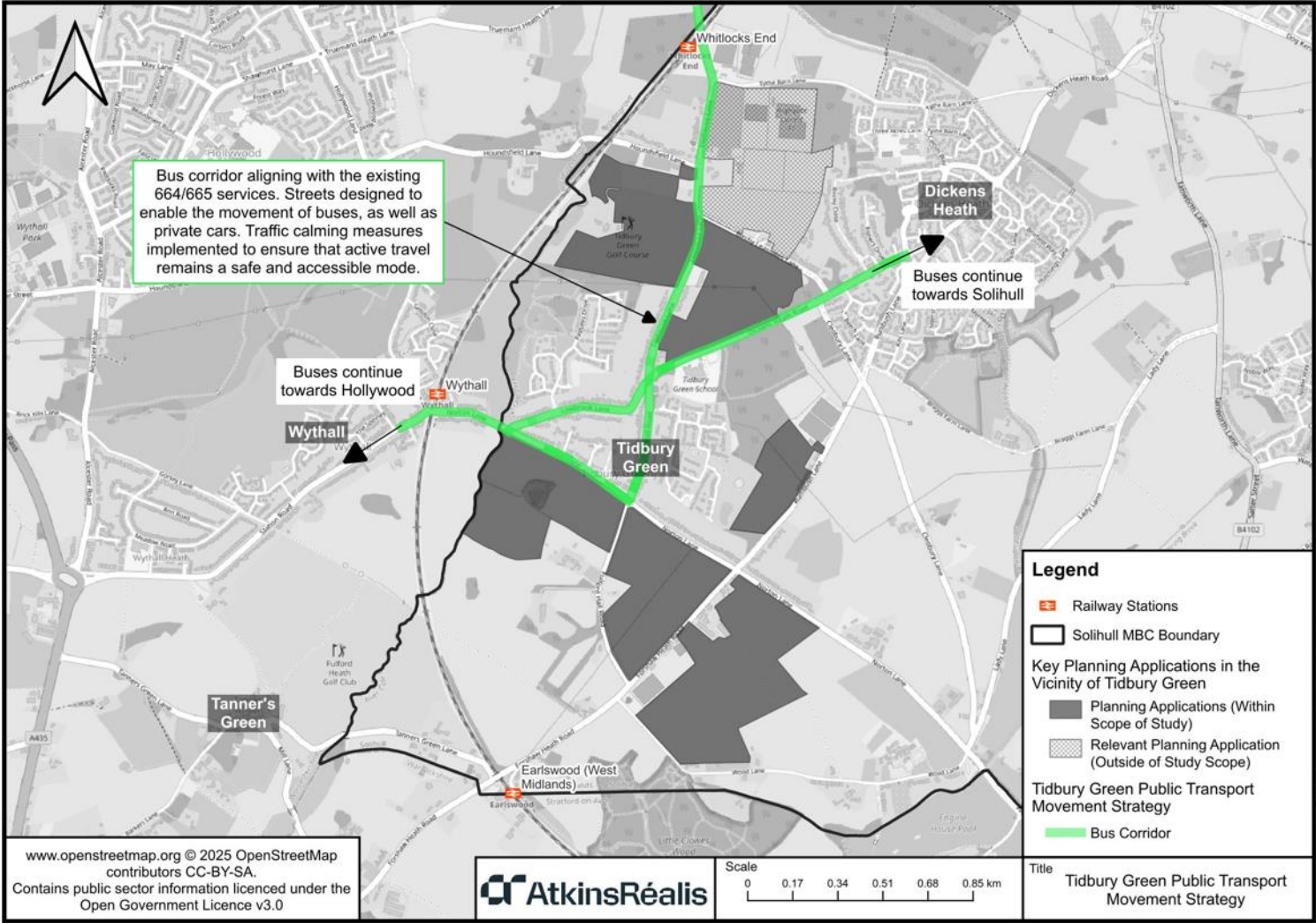
- Overall, public transport service provision is reasonable, with bus and rail links available to key destinations. A more frequent service is available at Whitlocks End, however access to the station is poor with constrained walking routes, limited crossing facilities and accessibility barriers reducing the attractiveness and ease of using it.
- There are currently two trains to Stratford-upon-Avon: one routes through Whitlocks End and one through Solihull. If a third train per hour were to be delivered towards Stratford-upon-Avon, then the stations in the vicinity of Tidbury Green would benefit.
- Whilst there is some flexibility at Whitlocks End, railway infrastructure beyond it is not as flexible. Additional signalling and points at Whitlocks end would enable trains to turn at this station, however installing similar at other stations would come at significant cost.
- There were previously plans from TfWM to increase the size of the car park at Whitlocks End (into land to the southern side of the car park which they own). This was subsequently put on hold due to decrease in demand after COVID-19. They are now exploring a wider package of measures to increase accessibility by different modes.
- Bus services route through the heart of Tidbury Green. Whilst positively connecting residents to the wider network, it constrains the ability to implement some active travel interventions because there is a need to continue to enable bus movements, with junctions remaining sufficiently wide and the highway remaining relatively free flowing.
- The lack of shelters and seating at bus stops represents a constraint to public transport use, reducing passenger comfort and making services less attractive, particularly during poor weather or for less mobile users.
- Bus services do not run seven days a week meaning that accessibility to the wider network can be constrained at times, especially on Sundays.

Intervention Principles

The public transport strategy has been developed on the basis of the following principles:

- The relative free movement of buses along the existing bus corridor must be maintained, to ensure that the current 664/665 bus service is not negatively impacted by the proposed transport improvements.
- Delivery of improved travel connections to Whitlocks End Railway Station, as this is likely to be more deliverable / cost effective than improvements to rail services at Wythall and Earlswood, at least in the short term.
- Applicants should assess and provide for the needs of their sites, for example provision of a Sunday service or increased frequencies if required by users. The immediate priority for this strategy complements this, by providing more attractive waiting / interchange facilities to grow use of the existing services which already provide access to destinations within Tidbury Green.
- There is a need to provide improved active travel connections to bus stops, and improvements to the bus stops themselves for waiting passengers.

Strategy Plan



Highways

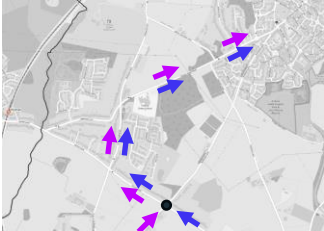
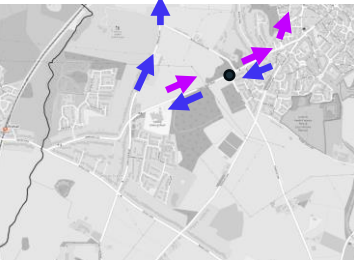
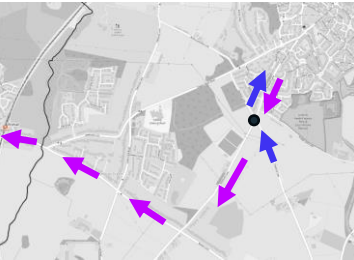
Impact of AT Corridor on Trip Distribution from Proposed Sites

A second highways scenario has been considered, based on a proposed active travel corridor along Birchy Leasowes Lane, Cleobury Lane and Rumbush Lane, which would make these roads one-way, for southbound vehicular movements only. The below table sets out how the vehicular trip routing from each site would be affected by this proposed active travel corridor.

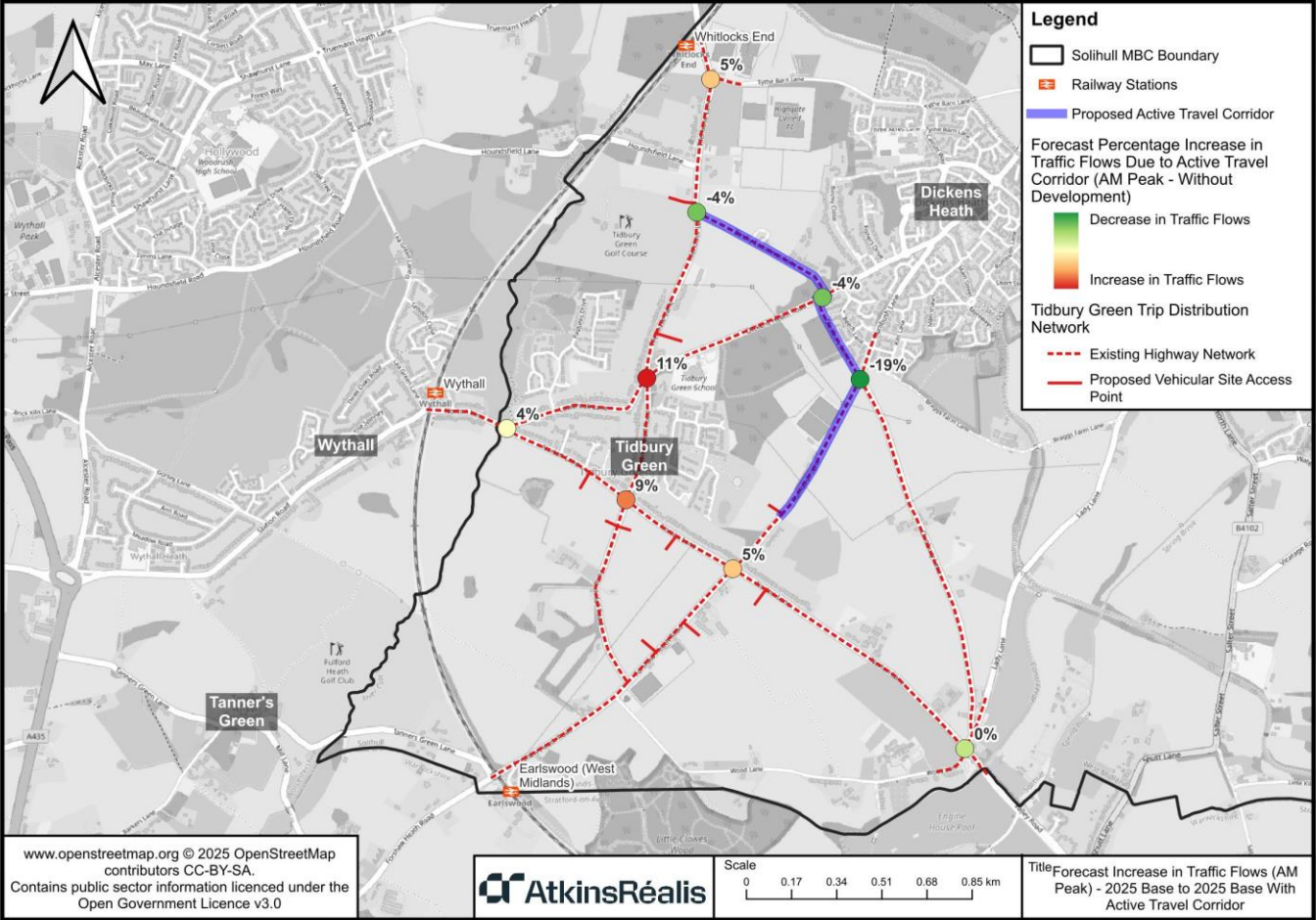
Site	Change in Trip Arrivals?	Change in Trip Departures?
Arden Green	x	x
Fulford Hall Road Phase 1	x	x
Fulford Hall Road Phase 2	x	x
Fulford Hall Road Phase 3	x	✓ (Route to Dickens Heath changes)
Land East of Tilehouse Lane	x	x
Land West of Rumbush Lane	x	✓ (Route to Dickens Heath changes)



Impact of AT Corridor on Existing Trips

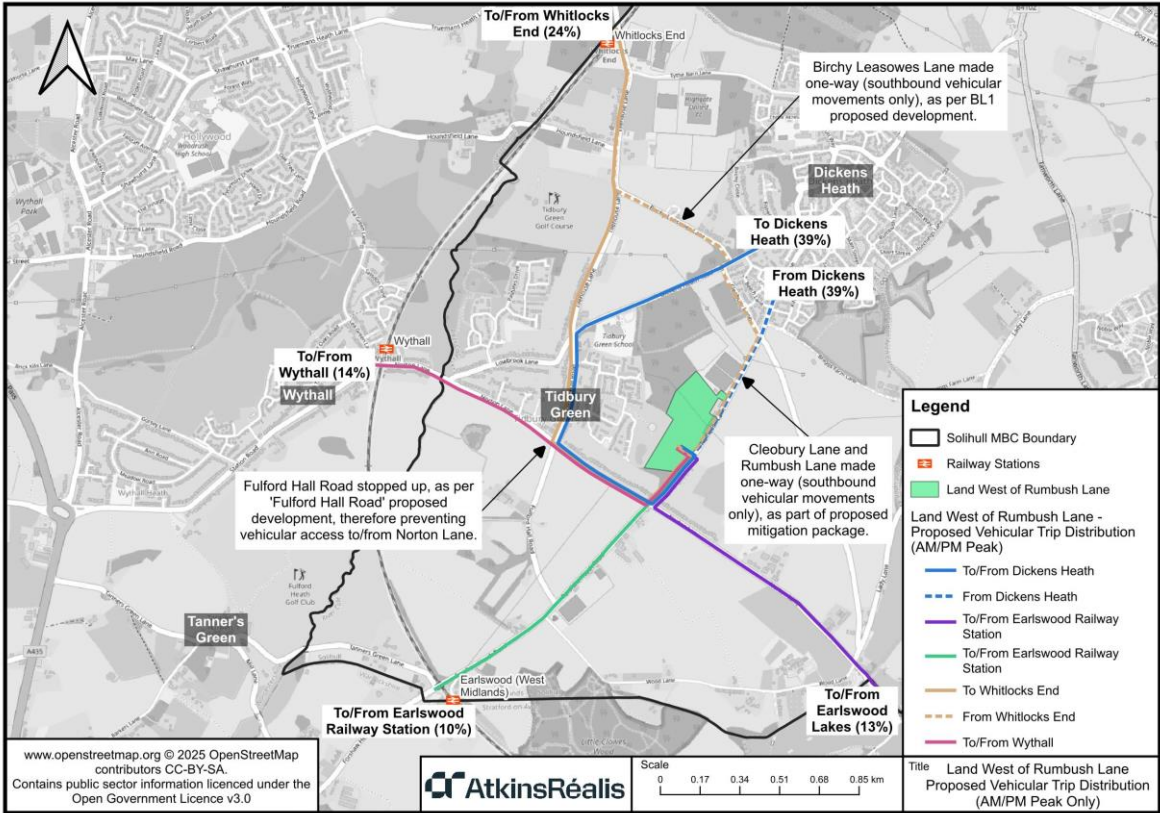
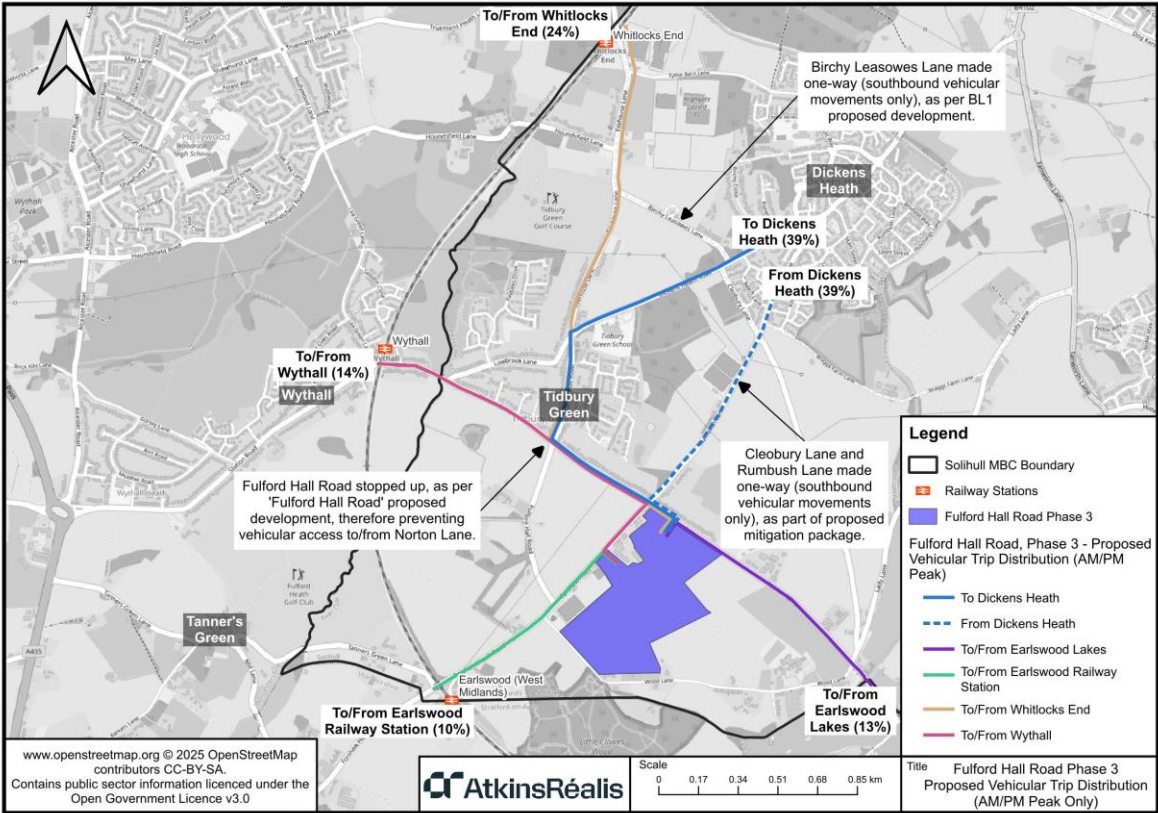
Junction	Changed in Permitted Movements	Assumption	Detail of Diverted Trips	Figure
MCC 33: Norton Lane/Rumbush Lane Junction	- No change to permitted movements at this junction specifically, as the southern end of Rumbush Lane will remain two-way. - However, beyond the site access point to the Land West of Rumbush Lane site, Rumbush Lane will be one-way (SB only), preventing vehicular trips towards Dickens Heath.	- Assumed that the majority of turning movements into Rumbush Lane are by vehicles travelling to Dickens Heath. - Left turn in movements from Norton Lane (Western Arm) remain, on the assumption that some trips into Norton Lane will be for the purpose of accessing the existing residential properties.	Right turn in movements from Norton Lane (Eastern Arm) and ahead movements from Rumbush Lane (Southern Arm) have been diverted. These trips now route along Norton Lane, Fulford Hall Road and Dickens Heath Road, towards Dickens Heath.	
MCC 38: Tilehouse Lane/Birchy Leasowes Lane/Tilehouse Lane Junction	Turning movements out of Birchy Leasowes Lane banned, as the road is due to become one-way (SB only).	No assumption required.	Turning movements out of Birchy Leasowes Lane have been removed but not diverted specifically. This is because these trips will be diverted at MCC 39, before they reach MCC 38.	No trips diverted.
MCC 39: Birchy Leasowes Lane/Dickens Heath Road/Cleobury Lane Junction	- Turning movements into Birchy Leasowes Lane banned, as the road is due to become one-way (SB only). - Turning movements out of Cleobury Lane banned, as the road is due to become one-way (SB only).	- Assumed that both right turn in movements from Dickens Heath Road (Eastern Arm) and left turn in movements from Dickens Heath Road (Western Arm) are routing northwards, towards Whitlocks End Railway Station. - No assumption required in relation to diverting trips out of Cleobury Lane.	- Turning movements into Birchy Leasowes Lane from Dickens Heath Road (Eastern Arm) diverted along Dickens Heath Road and Tilehouse Lane, towards Whitlocks End Railway Station. - Turning movements into Birchy Leasowes Lane from Dickens Heath Road (Western Arm) diverted along Dickens Heath Road, through Dickens Heath. - Turning movements out of Cleobury Lane have been removed but not diverted specifically. This is because these trips will be diverted at MCC 40, before they reach MCC 39.	
MCC 40: Rumbush Lane/Cleobury Lane Junction	- Turning movements into Cleobury Lane banned, as the road is due to become one-way (SB only). - Turning movements out of Rumbush Lane (Southern Arm) banned, as the road is due to become one-way (SB only).	- Assumed that right turn in movements from Rumbush Lane (Northern Arm) are routing south west, towards Wythall Railway Station. - Assumed that ahead movements from Cleobury Lane (Eastern Arm) are routing northwards, towards Whitlocks End Railway Station.	- Turning movements into Cleobury Lane from Rumbush Lane (Northern Arm) diverted along Rumbush Lane and Norton Lane, towards Wythall Railway Station. - Turning movements into Cleobury Lane from Cleobury Lane (Southern Arm) diverted along Rumbush Lane, towards Dickens Heath. - Turning movements out of Rumbush Lane (Southern Arm) removed but not diverted specifically. This is because these trips will be diverted at MCC 33, before they reach MCC 40.	

Impact of AT Corridor on Existing Trips (Continued)



Impact of AT Corridor on Trip Distribution from Proposed Sites (Continued)

The below figures illustrate the vehicular trip routing from the Fulford Hall Road (Phase 3) and Land West of Rumbush Lane proposed developments, respectively, based on a scenario in which an active travel corridor is delivered, thereby making Birchy Leasowes Lane, Cleobury Lane, and Rumbush Lane one-way, for southbound vehicular movements only.



High Level Impact Assessment

MCC 38 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	638	
2025 Base + Dev	854	34%
2025 Base + Dev + AT Corridor	827	30%
2025 Base + Dev + AT Corridor + Growth	1,046	64%

MCC 36 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	837	
2025 Base + Dev	936	12%
2025 Base + Dev + AT Corridor	972	16%
2025 Base + Dev + AT Corridor + Growth	1,284	53%

MCC 35 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	894	
2025 Base + Dev	1,262	41%
2025 Base + Dev + AT Corridor	1,405	57%
2025 Base + Dev + AT Corridor + Growth	1,754	96%

MCC 41 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	921	
2025 Base + Dev	1,109	20%
2025 Base + Dev + AT Corridor	1,159	26%
2025 Base + Dev + AT Corridor + Growth	1,507	64%

MCC 37 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	860	
2025 Base + Dev	1,217	41%
2025 Base + Dev + AT Corridor	1,373	60%
2025 Base + Dev + AT Corridor + Growth	1,716	99%

MCC 39 (AM Peak)		
Scenario	Traffic Flow	% Increase

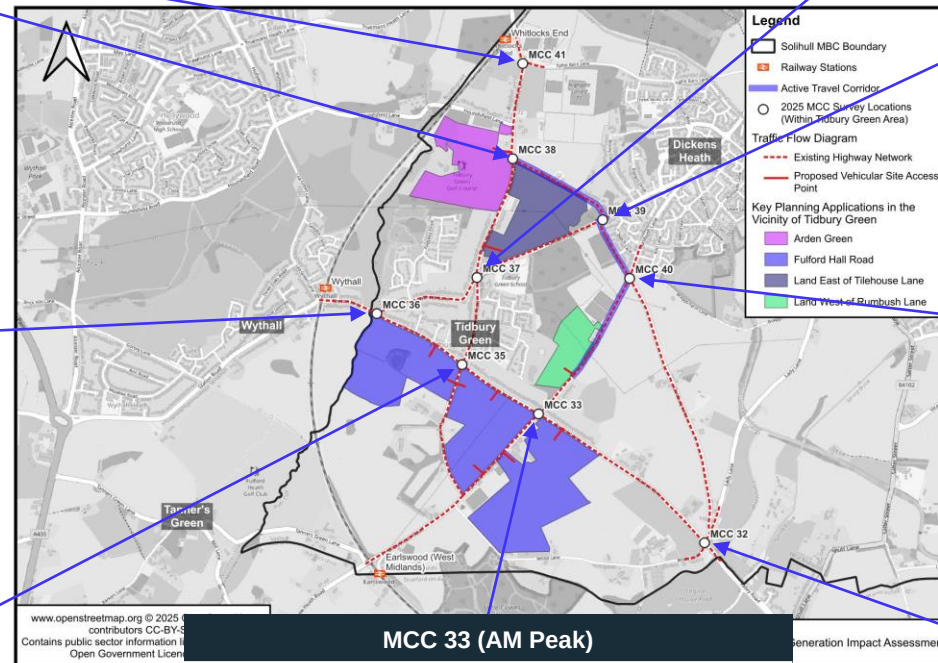
2025 Base	699	
2025 Base + Dev	890	27%
2025 Base + Dev + AT Corridor	915	31%
2025 Base + Dev + AT Corridor + Growth	1,155	65%

MCC 40 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	348	
2025 Base + Dev	435	25%
2025 Base + Dev + AT Corridor	309	-11%
2025 Base + Dev + AT Corridor + Growth	411	18%

MCC 32 (AM Peak)		
Scenario	Traffic Flow	% Increase

2025 Base	814	
2025 Base + Dev	905	11%
2025 Base + Dev + AT Corridor	905	11%
2025 Base + Dev + AT Corridor + Growth	1,196	47%



Scenario	Traffic Flow	% Increase
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2025 Base	754	
2025 Base + Dev	990	31%
2025 Base + Dev + AT Corridor	1,045	39%
2025 Base + Dev + AT Corridor + Growth	1,328	76%

High Level Impact Assessment

MCC 38 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	617	
2025 Base + Dev	822	33%
2025 Base + Dev + AT Corridor	775	26%
2025 Base + Dev + AT Corridor + Growth	992	61%

MCC 36 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	1,037	
2025 Base + Dev	1,139	10%
2025 Base + Dev + AT Corridor	1,177	13%
2025 Base + Dev + AT Corridor + Growth	1,586	53%

MCC 35 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	1,031	
2025 Base + Dev	1,398	36%
2025 Base + Dev + AT Corridor	1,579	53%
2025 Base + Dev + AT Corridor + Growth	2,025	96%

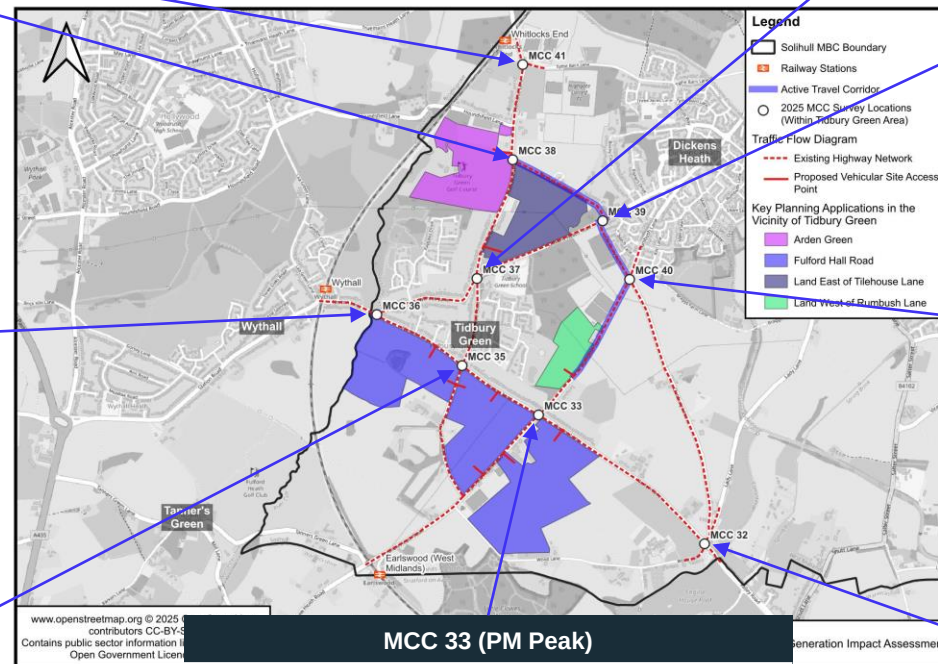
MCC 41 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	973	
2025 Base + Dev	1,180	21%
2025 Base + Dev + AT Corridor	1,229	26%
2025 Base + Dev + AT Corridor + Growth	1,618	66%

MCC 37 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	815	
2025 Base + Dev	1,189	46%
2025 Base + Dev + AT Corridor	1,381	70%
2025 Base + Dev + AT Corridor + Growth	1,750	115%

MCC 39 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	682	
2025 Base + Dev	875	28%
2025 Base + Dev + AT Corridor	903	32%
2025 Base + Dev + AT Corridor + Growth	1,165	71%

MCC 40 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	386	
2025 Base + Dev	475	23%
2025 Base + Dev + AT Corridor	311	-20%
2025 Base + Dev + AT Corridor + Growth	410	6%

MCC 32 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	1,048	
2025 Base + Dev	1,142	9%
2025 Base + Dev + AT Corridor	1,142	9%
2025 Base + Dev + AT Corridor + Growth	1,540	47%



MCC 33 (PM Peak)		
Scenario	Traffic Flow	% Increase
2025 Base	1,010	
2025 Base + Dev	1,245	23%
2025 Base + Dev + AT Corridor	1,297	28%
2025 Base + Dev + AT Corridor + Growth	1,695	68%

Cumulative Impact

For the purposes of preliminary assessment, indicative highway capacities have been derived based on established UK guidance (DMRB, TRL and industry-standard modelling tools) and industry practice. These values provide a basis for high-level benchmarking and are not intended to replace detailed junction modelling.

Type	Parameter	Typical Value	Notes / Source
Link capacity	Single lane	~1,800 PCU/hr/lane	Industry standard derived from DMRB
Signalised junction	Saturation flow	~1,850 PCU/hr/lane	Commonly adopted estimation (Kimber et al, TRRL Report RR67)
	Effective capacity	~900 – 1,400 veh/hr/lane	Dependent on green time, staging and turning mix
Priority junction	Minor arm capacity	~300 – 800 veh/hr	Dependent on major road flow and geometry (Industry estimation derived from TRL PICADY)
Roundabout	Single lane entry	~1,000 – 1,300 veh/hr	Dependent on circulating flow and entry width (Industry estimation derived from TRL Road Note 31 / Kimber)
	Multi-lane entry	~1,500 – 2,500 veh/hr	Dependent on flare length and geometry (Industry estimation derived from TRL Road Note 31 / Kimber)

These values are used to provide a high-level benchmark comparison against forecast flows (Slides 73–74) to identify where further analysis may be required



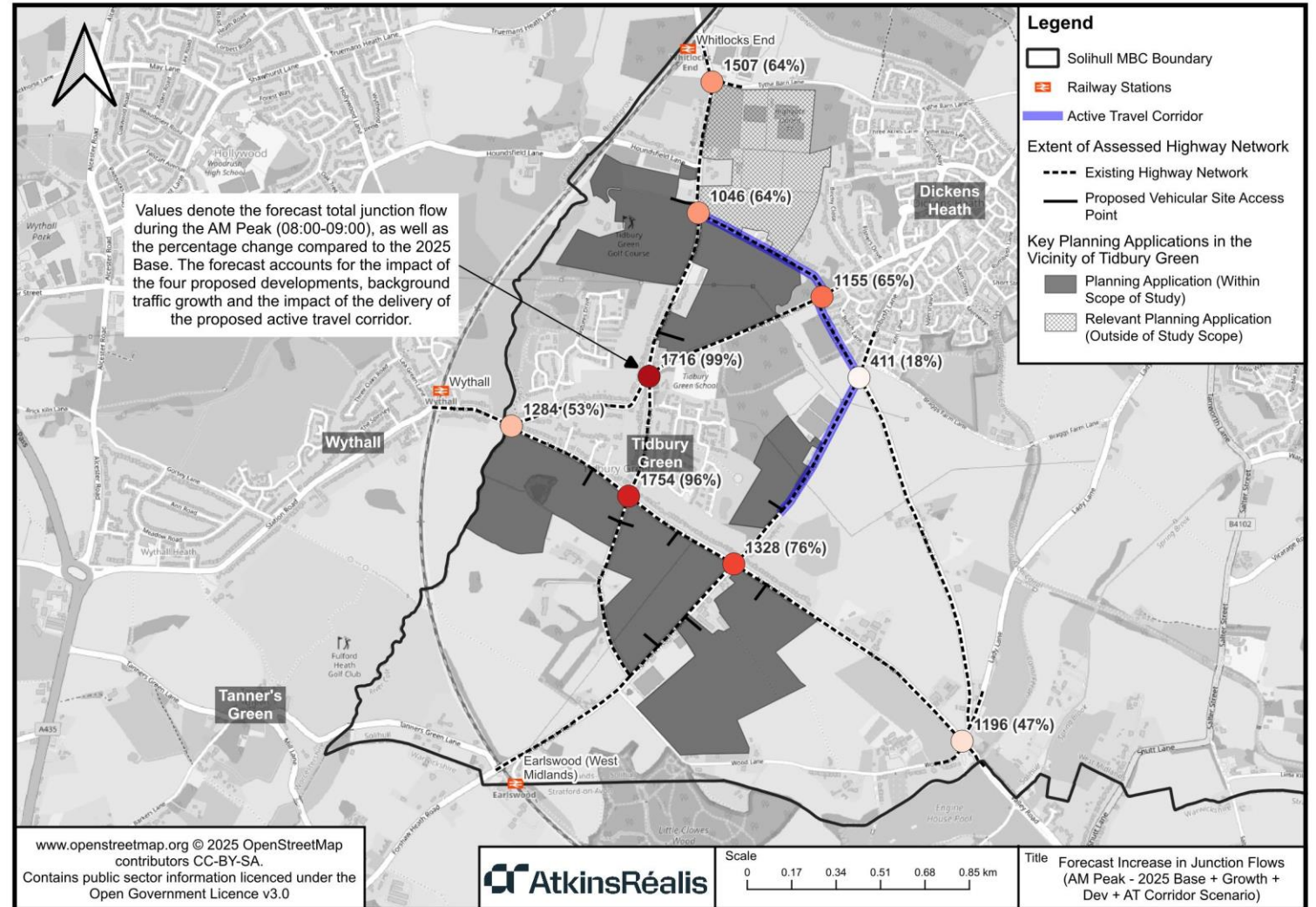
Cumulative Impact

Link flows are expected to remain within theoretical capacity (1,800 vehicles per hour, per lane), with planned development (including background growth).

The analysis indicates that junction flows increase significantly under cumulative development and background growth. This is further impacted by trips diverting due to the active travel corridor proposals.

- The highest traffic volumes are forecast at the **Norton Lane/Fulford Hall Road junction (1,754 vehicles)** and the **Tilehouse Lane/Dickens Heath Road/Fulford Hall Road/Lowbrook Lane junction (1,716 vehicles)**. This represents an increase of 96% and 99% respectively, when compared to the 2025 Base flows.
- Relatively high flows are also forecast at the **Tilehouse Lane/Tythe Barn Lane junction (1,507 vehicles)**, an increase of 64% on existing flows.

When compared with the indicative capacities set out in the previous slide, these flows may approach or exceed theoretical capacity, particularly on minor arms where capacity is more constrained.



Cumulative Impact

To understand the effects of cumulative development, junction assessments submitted as part of the four assessed planning applications in Tidbury Green have been reviewed against the cumulative flows identified in the high-level impact assessment.

Within each of the Transport Assessments, the applicants conclude that all assessed junctions operate within capacity, with minimal queues and delay, with the following exceptions:

- Tilehouse Lane/Lowbrook Lane/Dickens Heath Road/Fulford Hall Lane crossroads – Lowbrook Lane experiences significant levels of delay, although the junction is reported as operating with capacity overall.
- Fulford Hall Road / Norton Lane – operates over practical capacity, with significant delays on the Fulford Hall Lane south approach. It is noted that an alternative junction arrangement (Priority T Junction) has been proposed as part of the Rumbush Lane application, which provides a betterment compared to the existing arrangement in the base scenario.

These findings are broadly consistent with AtkinsRéalis' cumulative impact assessment, which also identified the Tilehouse Lane/Lowbrook Lane/Dickens Heath Road/Fulford Hall Road crossroads and Norton Lane/Fulford Hall Road junction as the locations most likely to experience pressure under cumulative development. These junctions have therefore been reviewed in further detail (see next slide).

Whilst the accuracy of junction modelling has not been reviewed in detail as part of this study, it is agreed that the modelling results presented indicate that remainder of local junctions tested do operate with significant reserve capacity.

It is not considered likely that these junctions would reach theoretical capacity if the increases in flows estimated as part of the cumulative impact assessment were applied. However, it is noted that it is for applicants to confirm whether these increases in traffic, which are a result of proposed development, are forecast to cause any existing junctions to operate over acceptable capacity thresholds.

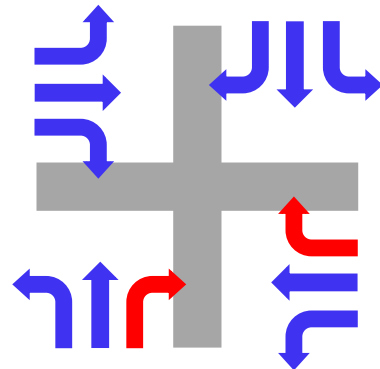
No junction modelling for the Tilehouse Lane / Tythe Barn Lane junction is available at the time of writing. It is understood that there is an improvement scheme being progressed separately as part of live applications in the Blythe area. As such, this study has not considered requirements for this location.

Cumulative Impact

The worst-case traffic flows assessed as part of the planning applications have been compared to the cumulative impact assessment (2025 Base + Dev + AT Corridor + Growth) to understand if the modelling outcomes reported remain applicable.

Tilehouse Lane/Lowbrook Lane/Dickens Heath Road/Fulford Hall Lane crossroads:

- Flows are broadly consistent or higher in the East of Tilehouse Lane assessment with the exception of Dickens Heath Road right and straight ahead, Fulford Hall Road right and Lowbrook Lane straight ahead.
- Flows are broadly consistent in the Arden Green assessment, except Dickens Heath Road right and left and Fulford Hall Road right and straight ahead.
- It is therefore considered that the modelled flows are representative for Tilehouse Lane and Lowbrook Lane (Arden Green application).
- Modelling results may underestimate traffic flows on the Dickens Heath Road and Fulford Hall Road right turns.



The modelling results indicate that:

- Tilehouse Lane will operate with significant reserve capacity, with minimal queues and delays.
- Dickens Heath Road will operate with some reserve capacity, although the anticipated higher right turn flows may result in additional queues and delays.
- Fulford Hall Road will operate with significant reserve capacity (0.09, with 0 queues and 7 seconds delay). Although the anticipated higher right turn flows may result in additional queues and delays, there is capacity to accommodate additional traffic.
- Lowbrook Lane will operate close to practical capacity, as summarised in the Arden Green application.

It is noted that there are minimal opportunities to improve the physical capacity of the junction, noting the limited highway land available.

A signalised crossing on Tilehouse Lane, to the north of the junction, has been proposed as part of the Arden Green application. This may assist to create gaps in traffic to allow vehicles to turn, thus reducing the levels of delay. Alternatively, a signalisation scheme may be required to manage turning flows.

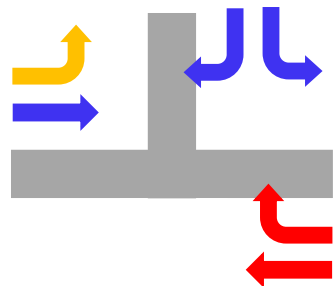
It is recommended that a cumulative assessment, which takes account of realistic growth within the local area, is undertaken to understand if a further improvement scheme is required in this location.

Cumulative Impact

Fulford Hall Road / Norton Lane junction:

The Priority T Junction proposed as part of the Fulford Hall Road application has been considered, given the poor baseline performance of the existing layout.

- Flows are broadly consistent or higher in the Fulford Hall Road application on Fulford Hall Road North and Norton Lane West and straight ahead.
- Flows are lower on Norton Lane East in the Fulford Hall Road application, both right turn and straight ahead.
- Flows are slightly lower in the Fulford Hall Road application for Norton Lane West left turn.
- It is therefore considered that the modelled flows are representative for Fulford Hall Road and Norton Lane West straight ahead.
- Modelling results may underestimate traffic flows on the Norton Lane East.
- Whilst slightly lower flows have been tested for the Norton Lane West left turn, it is noted that these are unlikely to have a significant impact on overall capacity due to scale of difference and the lack of need to give way to mainline traffic to complete the manoeuvre.



The modelling results indicate that:

- Fulford Hall Road will operate approaching practical capacity.
- Norton Lane West will operate with significant reserve capacity (0, with 0 queues and 1 second delay). Although the anticipated higher left turn flows may result in a small impact on delays, there is capacity to accommodate additional traffic. In addition, vehicles turning will also assist to create gaps in traffic to allow vehicles to turn into and out of Fulford Hall Road.
- Norton Lane East will operate with significant reserve capacity although some queues and delay are reported (in the order of 25 seconds delay). The AtkinsRéalis cumulative assessment indicates that flows could be in the order of 240 vehicles per hour higher, some of which would be turning.

Given that the junction arrangement has been proposed as part of the Fulford Hall Road application, it is assumed that the layout will be improved over time, particularly prior to entering detailed design. It is recommended that a cumulative assessment, which takes account of realistic growth within the local area, is undertaken and the design of the junction reviewed against this.

Highway Mitigation

The cumulative highways assessment indicates that some junctions in the vicinity of Tidbury Green are likely to experience increased pressure during peak periods, as cumulative development comes forward and due to the delivery of an active travel corridor, which will prevent northbound vehicular movements on Rumbush Lane, Cleobury Lane and Birchy Leasowes Lane.

A comparison between the forecast flows and indicative junction capacities suggests that the Norton Lane/Fulford Hall Road junction, Tilehouse Lane/Dickens Heath Road/Fulford Hall Road/Lowbrook Lane junction, and Tilehouse Lane / Tythe Barn Lane junction may experience particular pressure.

At the Tilehouse Lane/Lowbrook Lane/Dickens Heath Road/Fulford Hall Lane crossroads, additional queues and delays may be experienced on Dickens Heath Road and Lowbrook Lane is anticipated to operate close to practical capacity. The signalised crossing on Tilehouse Lane proposed as part of the Arden Green application may assist to create gaps in traffic to allow vehicles to turn, reducing the levels of delay. Alternatively, a signalisation scheme may be required to flows. It is recommended that a cumulative assessment, which takes account of realistic growth within the local area, is undertaken to understand if a further improvement scheme is required in this location.

The Fulford Hall Road / Norton Lane Priority T junction proposed as part of the Fulford Hall Road application has been considered, given the poor baseline performance of the existing layout. Fulford Hall Road is anticipated to operate approaching practical capacity and Norton Lane East may experience additional queues and delays. It is recommended that a cumulative assessment, which takes account of realistic growth within the local area, is undertaken and the proposed design of the junction reviewed against this.

It is understood that there is an improvement scheme for the Tilehouse Lane / Tythe Barn Lane junction being progressed separately as part of live applications in the Blythe area.

No allowance has been made to potential mode shift arising from the proposed mitigation package. Evidence from UK studies suggests that a population-level mode shift of circa 5% can be achieved, with further reductions possible, where high quality active travel and public transport measures are delivered. As such, it is reasonable to assume that a proportionate reduction in peak period traffic demand could be realised, helping to moderate forecast junction impacts.

The evidence supports the delivery of a vision-led approach, within which future residents are provided with genuinely sustainable alternatives to travel by car. The approach also aligns with national and local policy objectives to prioritise sustainable modes of transport over unconstrained traffic growth.

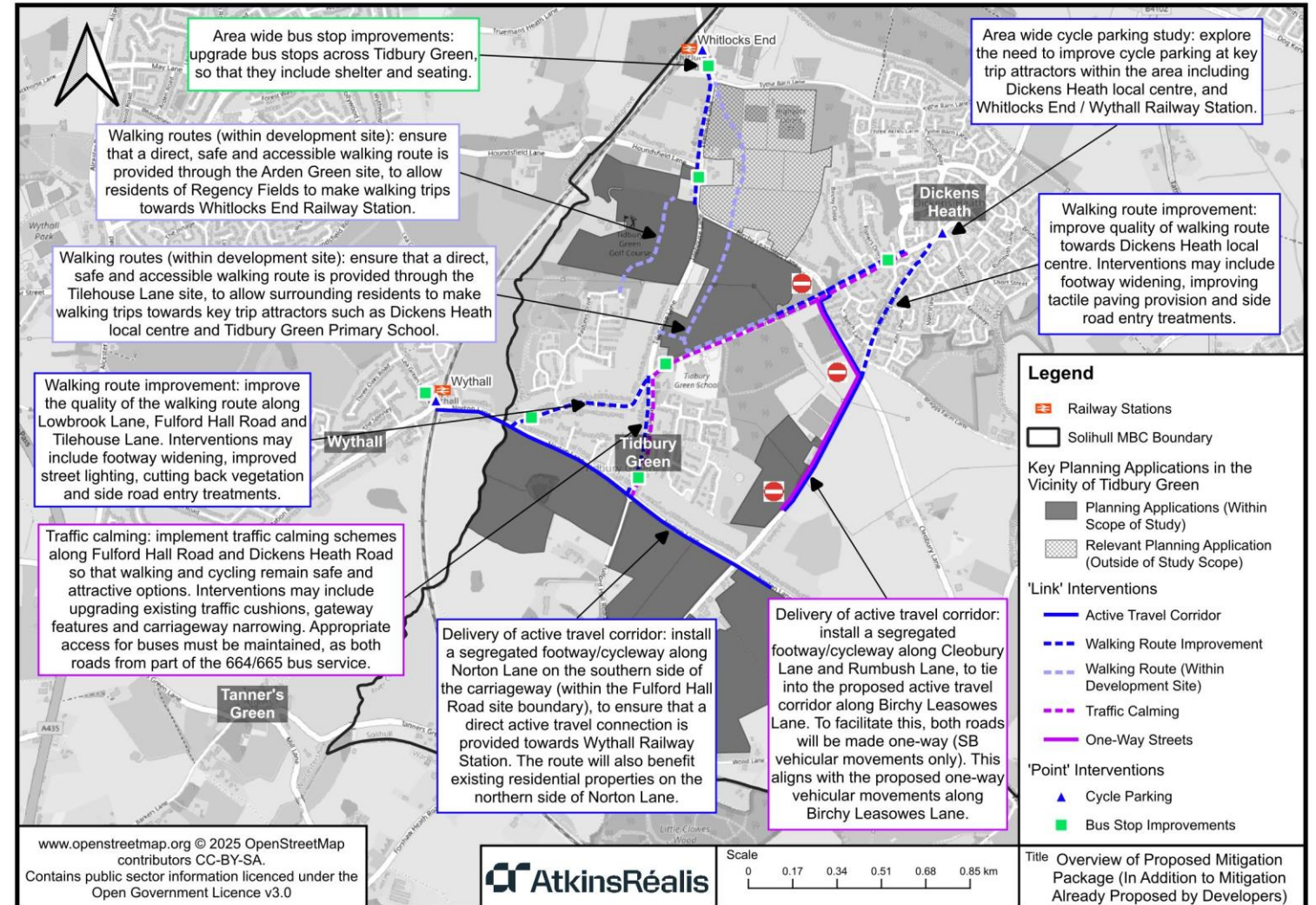
Overall, the findings of this assessment provide a framework for the completion of future detailed standalone junction capacity modelling. As subsequent planning applications come forward, the onus will be on developers to assess the impact of proposed development on highway capacity in the vicinity of Tidbury Green and propose appropriate mitigation where required.

APPENDIX D – MITIGATION PACKAGE

Mitigation Package

In order to **address the gaps in the mitigation proposed** by developers, a **sustainable transport mitigation package has been established** for Tidbury Green. The key features of the mitigation package are as follows:

- **Delivery of an active travel corridor along Cleobury Lane and Rumbush Lane**, which enables the delivery of a segregated active travel route towards Dickens Heath and Whitlocks End Railway Station, whilst avoiding any impact on the existing bus corridor.
- **Improvements to walking routes along the key demand corridors**, such as Fulford Hall Road, Dickens Heath Road and Norton Lane.
- The delivery of direct **active travel routes within development sites**, to connect to existing active travel infrastructure and enable the delivery of sustainable infrastructure where the carriageway is constrained.
- **Area wide bus stop improvements** so that they include shelter and seating.
- **Area wide cycle parking study**, to ensure that there are appropriate trip end facilities at key trip attractors.



Order of Scale Costs

Broad order of scale cost bands have been identified from the high-level information available at this stage, industry-standard benchmarks and comparable schemes. At this stage, they provide an appropriate basis for initial appraisal; however, they do not reflect site-specific constraints such as ground conditions, utilities or traffic management requirements, which may materially influence the final cost. Further design development and site-specific assessment will be required at a subsequent stage to confirm detailed requirements and refine these estimates.

Active Travel Contribution			
Measure	Assumptions	Unit cost (£)	Total Cost (£000)
Bus stop seating and shelters	7 No. stops Low range: basic installation with hardstanding, shelter and seating only High range: kerb realignment and accessibility improvements	£15,000 - £25,000	£105 - £175
Active travel corridor between Tilehouse Lane and Norton Lane, via Cleobury Lane and Rumbush Lane	1.8km light segregation to cycle lane & street lighting	£210,000	£1,985 – £2,185
	5 No. side road entry treatments	£20,000	
	3 No. controlled pedestrian / toucan crossing, wayfinding signage & benches / seating	£104,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	



Order of Scale Costs (continued)

Active Travel Contribution			
Measure	Assumptions	Unit cost (£)	Total Cost (£000)
Traffic calming measures on Fulford Hall Road, Tilehouse Lane and Dickens Heath Road	3.6km traffic calmed route with street lighting	£175,000	£2,085 – £2,295
	2 No. controlled pedestrian / toucan crossing	£100,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	
Footway and crossing improvements on Lowbrook Lane and Rumbush Lane	1.3km widen and update existing footway (2m width)	£100,000	£850 - £925
	2 No. controlled pedestrian / toucan crossing	£100,000	
	2 No. dropped kerbs and tactile paving	£4,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	

Order of Scale Costs (continued)

Active Travel Contribution			
Measure	Assumptions	Unit cost (£)	Total Cost (£000)
Cycle parking / travel hubs	2 No. hubs	£15,000	£96 - £105
	2 No. wayfinding signage & benches / seating	£4,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	

The cost ranges shown are indicative at this stage and have been developed from the information currently available, together with assumed scope, benchmark data and comparable schemes. They should be treated as an initial basis only, as site-specific factors, design development and delivery requirements may change the final outturn cost. These estimates will therefore need to be reviewed and refined as further information becomes available.

The estimated total cost of **£5.12m to £5.69m** for wider Active Travel measures should be apportioned between developments **in proportion to their contribution to cumulative impact**, for example based on dwelling numbers or trip generation.



Order of Scale Costs (continued)

Broad order of scale cost bands for direct routes within developer sites have been identified based on basic measurement and high-level assumptions. They do not reflect site-specific constraints such as ground conditions, utilities or other design considerations, which may materially influence the final cost. Further site-specific assessment will be required to confirm detailed requirements and refine these estimates.

Direct Active Travel Routes within Developer Sites			
Site	Assumptions	Unit cost (£)	Total Cost (£000)
Arden Green	0.8km new path & street lighting	£375,000	£785 - £860
	2 No. wayfinding signage & benches / seating	£4,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	
Land East of Tilehouse Lane	1.1km new path & street lighting	£375,000	£1,310 - £1,450
	1 No. controlled pedestrian / toucan crossing	£100,000	
	2 No. wayfinding signage & benches / seating	£4,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	



Order of Scale Costs (continued)

Direct Active Travel Routes within Developer Sites			
Site	Assumptions	Unit cost (£)	Total Cost (£000)
Fulford Hall Road	1.9km new path & street lighting	£375,000	£2,355 - £2,590
	2 No. controlled pedestrian / toucan crossing	£100,000	
	6 No. wayfinding signage & benches / seating	£4,000	
	Prelims / fees	40%	
	Site supervision, design and risk	56% (of construction cost)	

For completeness, the cost allowance for providing active travel routes within developer sites has been estimated in the above. However, these costs are not expected to be funded by the Council through pooled contributions. Overall delivery is likely to comprise a combination of in-kind works and financial contributions, with the precise apportionment determined on a site-by-site basis.



Priorities

The overall mitigation package should be delivered through a proportionate and coordinated approach, with contributions secured from developments based on their contribution to cumulative impact (e.g. trip generation or dwelling numbers). This approach allows early delivery of high-value, low-cost measures, progressive build-out of the strategic network and alignment of infrastructure delivery with the phasing of development.

Alongside the early priorities, assessment should be undertaken to understand any further improvements required at the Tilehouse Lane/Lowbrook Lane/Dickens Heath Road/Fulford Hall Lane crossroads.

- **Priority 1 – Early delivery / quick wins.** Early delivery should focus on area wide improvements, including bus stop upgrades and cycle parking / travel hubs. These measures provide immediate improvements to the attractiveness of sustainable modes at lower cost compared with the wider package, helping to establish early behavioural change.
- **Priority 2 – Supporting walking and crossing improvements.** Footway and crossing improvements on Lowbrook Lane and Rumbush Lane should be progressed early, as these measures form key components of the wider active travel network, addressing existing severance, improving safety and providing immediate benefits to access key local destinations. These works can be delivered incrementally, making them well suited to early-stage or proportionate developer contributions.
- **Priority 3 – Core active travel network.** The highest priority strategic intervention is the active travel route between Tilehouse Lane and Norton Lane, via Cleobury Lane and Rumbush Lane. This provides a continuous, high quality route connecting key attractors, and addresses a critical gap in provision. Given its scale and cost, delivery is likely to require pooled or phased contributions across multiple developments. The corridor could be delivered in sections (for example one road or link at a time), allowing incremental build-out aligned with development phasing and funding availability.
- **Priority 4 – Traffic calming on key corridors.** Traffic calming on Fulford Hall Road, Tilehouse Lane and Dickens Heath Road should be delivered where it supports mode shift and improves conditions for active travel, while ensuring that the operation of the existing bus corridor is not adversely affected. These measures should be targeted and aligned with the delivery of the wider active travel network, particularly along the key demand corridors.
- **Priority 5 – Developer-site connections.** Direct active travel routes within development sites are essential to the effectiveness of the wider network. These should be secured through individual planning applications and delivered by developers.