

Bellway Homes Ltd (Strategic Land)

Integrated Sustainable Transport Strategy

Former Thakeham Mushroom Site

Reference: V4

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This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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1. Introduction

1.1 Overview

Ove Arup & Partners Limited (“Arup”) has been appointed by Bellway Homes Ltd (Strategic Land) (the “Applicant”) to develop an Integrated Sustainable Transport Strategy for the proposed development at the former Thakeham Mushroom site.

The site is located in the village of Thakeham, to the north of Storrington. A planning application was submitted in 2024 (ref: DC/24/0021) for the development of the site comprising 247 homes and flexible non-residential floorspace. Planning permission was refused by the Local Planning Authority, Horsham District Council, in 2024 and an Appeal against this decision was subsequently dismissed in 2025 (ref. APP/Z3825/W/24/3350094).

The Appeal was dismissed primarily due to concerns about the site’s sustainability, in terms of access to facilities and services, and the ability of the development, as proposed at that time, to minimise the reliance on private vehicles by future residents.

This report has been prepared to support a revised planning application for the site comprising of 150 dwellings. To support these proposals, Arup has been appointed to research and develop more innovative approaches to promote sustainable transport uptake from residents of the proposed future development and to ensure that the wider local population in the village benefit from proposed upgrades.

This Integrated Sustainable Transport Strategy seeks to demonstrate that there are feasible sustainable transport interventions that can be delivered as part of the proposed development that will maximise the opportunity for taking up sustainable transport options for the future residents. This report sets out the proposed sustainable transport measures. These will be discussed with key stakeholders during the determination period of the planning application to ensure that a suitable package of measures is secured.

1.2 Structure of the report

This report is structured as follows:

- **Chapter 2: Site context** – provides details of the site location, a summary of the baseline transport (walking, cycling, public transport and highway) conditions and a summary of the original planning application.
- **Chapter 3: Stakeholder engagement** – sets out details of the stakeholder engagement that has taken place during the preparation of this Integrated Sustainable Transport Strategy.
- **Chapter 4: Package of integrated measures** – sets out the package of integrated sustainable transport measures that are proposed.
- **Chapter 5: Summary and next steps** – provides a summary to this report and the next steps in terms of the delivery and funding mechanism for the proposals.

2. Site context

2.1 Location

The Thakeham Mushroom site is located on the western edge of the B2139 Storrington Road in Thakeham, a village in the Horsham District of West Sussex, as shown in **Figure 1**. It lies 3km west of the A24, 3km north of Storrington and ~8km south of Billingshurst. Other nearby villages with amenities include West Chiltington, West Chiltington Common and Ashington.

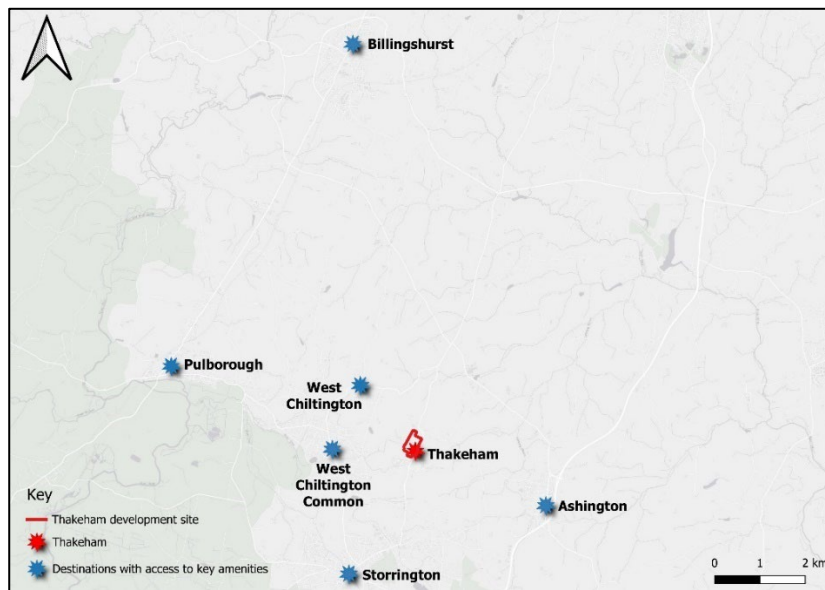


Figure 1: Location of the development site and other key destinations

The development area measures circa 13.23ha, with access from the B2139 Storrington Road. The site is bound to the north by farmland / industrial units, residential properties to the south, open fields to the west, and Storrington Road to the east. The site was formerly used as for the growing and distribution of mushrooms for commercial sale, and consists of agricultural shed buildings, office buildings and the footprints of demolished buildings.

Thakeham has experienced recent growth following residential development at Abingworth Meadows. It is within a short walk of the development's facilities and the centre of Storrington, which has several local shops and amenities. It is also within a 5-minute drive of several primary and secondary schools in Storrington and West Chiltington.

The site is in a rural location, with accessibility by sustainable modes naturally limited constraints such as the local topography and limited services. However, there are still significant opportunities to deliver innovative approaches to promote sustainable transport uptake from residents of the proposed development and to ensure that the wider local population in the village benefits from proposed upgrades.

2.2 Baseline transport conditions summary

2.2.1 Walking

Within Thakeham, people can walk to the café / shop, open spaces and village hall. A slightly longer walk can be made to the public house and church on The Street via a tarmac public right of way (PRoW); the bus stops are also conveniently located on Storrington Road in the village centre.

To the south of the existing site access, there are two footways extending towards Abingworth. They are not present throughout the entirety of Abingworth, with the western footway ending circa 90m south of the existing southern access. The western footway does restart further to the south, but an eastern footway is not present along the entire route.

The settlement of Thakeham / Abingworth is separated from Thakeham (The Street) by a section of Storrington Road which exists within a cutting, and which is relatively narrow with high banks either side. There is no footway along the carriageway edge, though PRoW 2480 connects the two parts of the settlement, as shown in **Figure 2**.

On leaving Thakeham / Abingworth and heading in a southerly direction, Storrington Road descends and winds through a cutting which allows for two-way traffic but is absent of footways. The footway resumes around halfway between the outer edges of Thakeham / Abingworth and Storrington.

In a wider context, West Chiltington and West Chiltington Common are separated from the site by fields, over which pass PRoWs 2473 and 3676. The alternative routes by rural roads to West Chiltington/Common are around 2km.

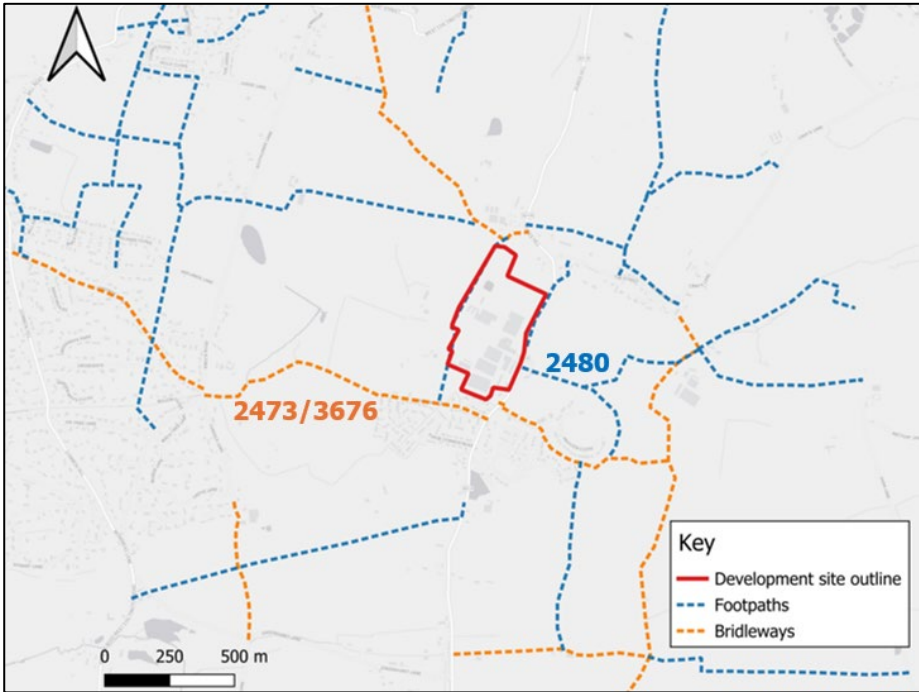


Figure 2: Existing Public Rights of Way around the site

2.2.2 Cycling

The routes to the south of the development along the B2139 Storrington Road, High Bar Lane and Northlands Lane have some narrow, constrained and difficult to navigate sections, making the option to cycle to Storrington from the site for experienced cyclists only. There is potential to improve surface conditions along the road and nearby PRoWs to improve conditions for cyclists. The West Sussex Walking and Cycling Strategy 2016-2026 (2016) suggests improvements to existing bridleways to deliver a cycle-able, all-weather route connecting central Thakeham with Storrington, however this has not yet been delivered.

2.2.3 Public transport

The closest bus stops are located immediately outside of the site on Storrington Road (High Bar Lane). Presently, these bus stops are comprised of a flag and pole.

The stops are served by route numbers 71, 74a and 74b, with frequencies shown in **Table 1**. There is a further route accessible available in West Chiltington (Route Number 1 between Worthing and Midhurst) to the west of site, ~1.8km (24 mins walk, assuming a walk speed of 4.5kph) utilising the PRoW network available, which offers a more regular (hourly) service.

Table 1: Bus service frequency near the site

Service and route		Typical frequency		
		Weekdays	Saturday	Sunday
High Bar Lane				
71	Storrington Bus Station – Thakeham – Pulborough – Bury – Slindon – Chichester	Wed only (once daily)	-	-
74a	Storrington Bus Station – Thakeham – Coolham – Barns Green – Horsham	(Once daily)	-	-
74b	Storrington Bus Station – Thakeham – Coolham – Barns Green – Horsham	Thursday only (once daily)	-	-
West Chiltington				
1	Midhurst – Petworth – Fittleworth – Pulborough – West Chiltington – Storrington – Washington – Findon – Broadwater – Worthing	Hourly	Hourly	Every 2 hours

The closest train station is Pulborough Station, 8.2km from the site, followed by Billinghamurst Station which is 9.5km from the site. The 71 bus connects Thakeham and Pulborough station, though note it only runs once a week in each direction. Both Pulborough and Billinghamurst stations can be reached via car / taxi journey.

2.2.4 Highway network

Access for the current site is from the B2139 Storrington Road to the east and comprises two large priority-controlled bellmouth arrangements. The southernmost junction is inbound only, whilst the northernmost is outbound only.

The B2139 Storrington Road borders the site to the east, extending in a north / south alignment. Storrington Road is a single carriageway road, formed of two running lanes and used as a bus route.

Adjacent to the site frontage, the carriageway is subject to a 40mph speed limit. However, the speed limit decreases to 30mph immediately south of the southernmost access. Approximately 165 metres south of the southernmost access, Storrington Road includes a formalised kerb build out with give-way marking, giving priority to southbound traffic and acting as a traffic calming measure on the approach to the site from the south.

2.2.5 Access to amenities

Key amenities in surrounding towns and villages including rail stations, schools, retail and healthcare facilities are mapped in **Figure 3**. As the figure shows, there are several amenities in nearest settlements to Thakeham, including a post office and convenience store in West Chiltington Common and a post office, pre-school and primary school in West Chiltington. Storrington has several key amenities including several preschools, two primary schools, a secondary school, pharmacy, supermarket, bank, post office, convenience stores, a petrol station and electric vehicle (EV) charging facilities. Similarly, Ashington has two preschools, two convenience stores, a primary school, pharmacy, post office and two EV charging facilities. Finally, Pulborough is the closest rail station to Thakeham, and also has two supermarkets, a primary school, petrol station, convenience store and several EV charging facilities.

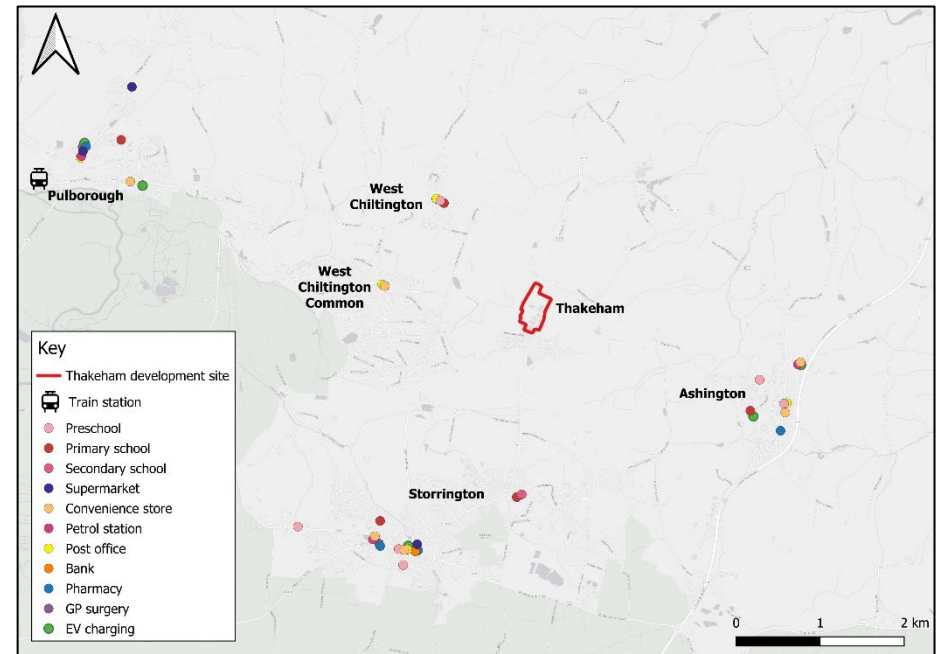


Figure 3: Key amenities around the site

2.3 Original planning application – transport proposals

Various sustainable transport proposals were put forward as part of the original planning application (ref: DC/24/0021). These included:

- The development is to be served by a priority T-junction with a segregated ghost island right-turn lane from Storrington Road. The existing access points will be stopped up as part of the development.
- Improvements to upgrade existing Public Right of Ways (PROWs) to bridleways which allows for cyclists, pedestrians and horses and riders to use them both external and on the site of the proposed development.
- A ‘Bus Service Improvements’ contribution totalling an amount not exceeding £869,660.
- Contribution towards the provision and / or maintenance of an Electric Bus or procurement of the service.
- Provision of electric car club and charging infrastructure.
- Production of a Travel Plan, containing a broad range of measures to promote active travel and public transport use.

2.4 Refusal

The application was refused by the Local Planning Authority, Horsham District Council, in 2024, and was subsequently dismissed at Appeal in 2025 (ref. APP/Z3825/W/24/3350094). One of the Inspector’s concluding remarks regarding sustainability was that “...*the proposal would not be sustainably located to minimise the reliance of such a high number of future residents on private vehicles and would not robustly secure appropriate realistic or attractive alternative travel choices to mitigate against the serious resultant harm, contrary to the aforementioned HDPF settlement strategy policies and Policy 40 of the HDPF.*”

This Integrated Sustainable Transport Strategy seeks to address some of the issues raised throughout the planning process and to support the revised planning application for 150 homes. This has been produced following informal discussions and consultation with West Sussex County Council (WSCC), Thakeham Parish Council (the Clerk and a Councillor), and a public consultation event held in January 2026.

3. Stakeholder engagement

3.1 Overview

Engagement with West Sussex County Council, Thakeham Parish Council and local residents has highlighted priorities such as exploring alternatives to traditional bus services, upgrading PRowS, improving east-west connectivity and road safety along the B2139 Storrington Road through the village.

3.2 Engagement with West Sussex County Council Highway Officer on Transport Options

Informal engagement was undertaken with Stephen Gee (on 24 October 2025), the relevant WSCC Highway Officer, to discuss various sustainable Transport Options that could be workable and would be worth developing in more detail as part of an Integrated Sustainable Transport Strategy.

This involved discussion of the challenges from a transport planning perspective of improving walking / cycling (in part due to surrounding topography), and of concerns with the long-term viability of the public bus service. The Package of Integrated Measures outlined in **Chapter 4** have been informed by this engagement.

3.3 Engagement with Thakeham Parish Council

The developed transport options were presented to Thakeham Parish Clerk Andrew Brown and Parish Councillor Alan Hunt in an in-person engagement session (on 12 November 2025) to discuss the proposals. The main takeaways from the session are outlined in the following sub-sections.

3.3.1 Overview

A key priority raised by the Parish Council is improving east-west connections across the B2139 Storrington Road for pedestrians, cyclists and horse riders to reduce the severance caused by the road, ensure facilities are accessible, and improve road safety. The Parish Council shared that they had commissioned an independent transport consultancy, Motion, to investigate options to for introducing traffic calming infrastructure on the B2139, which was followed by consultation with residents and businesses on different options, and then a shortlisting of proposals. The prioritised traffic calming proposals have widespread support in Thakeham, including the Parish Council themselves. Further details of the proposals developed by Motion are outlined in **Section 4.4.1**.

The Parish Council also highlighted the increase in eco-tourism (cyclists and walkers) around Thakeham in recent years, and the opportunities this presents to support local businesses.

3.3.2 Walking network

The Parish Council expressed their support for improvements to Public Rights of Way (PROWs), both in terms of upgrading existing PROWs and extending others. They stressed the importance of upgrading PROW surfaces as in their current condition they can become muddy and unusable in the winter. They also emphasised the importance of ‘filling the gaps’ in the PROW and footway network, particularly the connections between Thakeham and Storrington, so that people aren’t forced to walk in the highway due to the lack of continuous safe, separated routes.

The Parish Council raised their view that even with these upgrades, PROWs would likely be used more for recreation and leisure than for commuting, but they were still positive about the opportunity for these upgrades to improve health and wellbeing for all and facilitate greater community cohesion.

3.3.3 Public transport

As outlined in **Section 2.3**, the original application included a proposed contribution towards 'Bus Service Improvements (totalling an amount not exceeding £869,660) to be paid to the Bus Service Operator to fund the improvements through a Bus Service Contract between the Operator and Owner.

This contribution would enable bus service improvements, including at least a peak hour service to Horsham and Storrington, and three other off-peak services to both destinations. It would also enable improvements to bus stops in the village, including the provision of digital bus service information boards and bus shelters. This would have needed to be agreed with the Parish Council, who would be responsible for the maintenance of the shelter.

The proposed contribution was for 5-years of funding, with the first balance payable prior to the occupation of the 25th dwelling, and the rest payable upon occupation of the 125th dwelling.

The Parish Council raised their concerns over Bus Service Improvement contributions, questioning the long-term viability of improvements to bus services, particularly after the initial five-year financial support period ended. They raised that the existing demographics of the area; largely retirees or executive-level professionals who are potentially more likely to commute by car, raises issues for the patronage of any bus improvements.

3.3.4 Electric minibus

The provision of an electric minibus is viewed more favourably by the Parish Council than bus service improvements. However, they raised concerns over who the minibus would cater for, its commercial viability given electric vehicle charging costs, and when it would begin operation, which are concerns that would be built into our package of integrated measures.

The Parish Council also suggested that the development could allocate space for a maintenance depot where the minibus could be stored and charged safely overnight, with space for an additional maintenance vehicle.

3.3.5 Highway network

The Parish Council noted there has been an increase in Heavy Goods Vehicle (HGV) traffic on the B2139 post-COVID, with concerns raised over road width.

They also raised concerns over the proposed site entrance and suggested a pelican crossing or mini roundabout rather than a T-junction entrance.

3.4 Public consultation

A public consultation session was held on 14 January 2026 to engage with Thakeham residents on the development proposals, including the sustainable transport measures. The session was well-attended and provided valuable insight into local priorities, helping to inform the package of integrated measures.

Like the Parish Council, a key concern raised by residents at the consultation was the safety of the B2139 Storrington Road, particularly concerning the road width, congestion and the use of the road by HGVs. This highlights the importance of the traffic calming measures to help reduce vehicle speeds and discourage the road being used for rat running (to avoid the A24). It also emphasises the importance of providing attractive and viable alternatives to private vehicles to limit the development's impact on congestion along this road.

Residents also raised concerns over the deliverability and viability of minibus services (whether Demand Responsive Transport or dial-a-ride) given delays delivering the minibus for a nearby development. This highlights the importance of ensuring transport measures are implemented early on in development phasing to help build trust in new transport services and embed more sustainable transport habits from early on.

4. Package of Integrated, Sustainable Transport Measures

4.1 Package of sustainable transport measures

Following the decision on the original planning application and the stakeholder engagement on sustainable transport measures, this chapter sets out details of an alternative package of integrated, sustainable transport measures to create an improved transport network for the proposed development and surrounding community.

4.2 Public Rights of Way upgrades

Several improvements to routes are proposed, including upgrading some Public Rights of Way (PRoWs) to bridleways, which allows for cyclists, pedestrians, horses and riders to use them. These include:

- Bridleway 2483 improvements: improvements to the surface of a 250 metre section of Bridleway 2483 in the vicinity of the site and the works will be undertaken in such a manner that wildlife such as badgers and badger setts are fully safeguarded, with appropriate mitigation provided where required.
- Footpath 2405 improvements: works to Footpath 2405 in the vicinity of the Site to widen and upgrade it such that it meets a suitable specification for a bridleway.
- Footpath 2448 improvements: works to Footpath 2448 including resurfacing and any other works necessary to upgrade Footpath 2448 such that it meets a suitable specification for a bridleway.
- Extension to Footpath 2463_1 up to the track heading westwards off the B2139 opposite Abingworth Hall.
- Footpath 2474 improvements: works to Footpath 2474 within the red line boundary of the site such that it meets a suitable specification for a bridleway.

Existing PRoWs around the development site, and those identified for improvement, are shown in **Figure 4**.

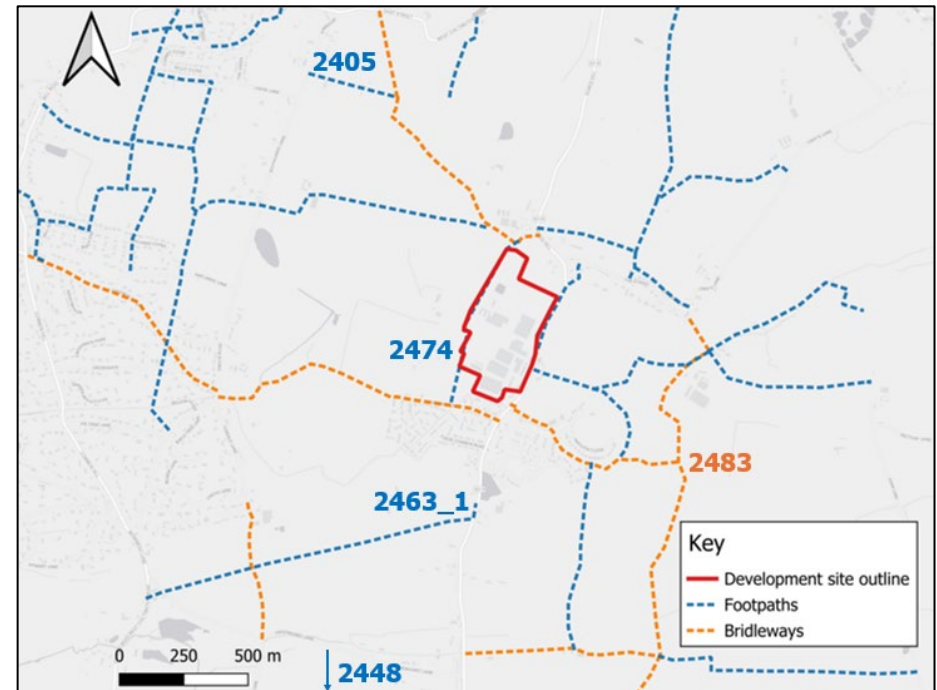


Figure 4: Existing Public Rights of Way around the site, and those identified for improvements

These improvements to PRoWs will improve connectivity between Thakeham and nearby settlements including West Chiltington Common, improving access to local facilities. They will also improve safety for pedestrians, cyclists and horse users by providing safer alternatives to walking along narrow or high-speed rural roads.

Providing safer and more attractive public rights of way will help encourage active travel and a mode shift away from private vehicles, improving health and wellbeing, and can help support increasing levels of eco-tourism in Thakeham. Finally, surface improvements will enhance the year-round usability of paths by ensuring they don't become muddy and unusable during winter.

4.3 Mobility Hub

Mobility hubs integrate transport by creating shared locations for different mobility options, which can include parking for cycles, shared mobility (Car Clubs etc) and private cars. They are an increasingly popular transport intervention because they allow easy interchanging between different forms of transport, improve integration and act as a focal point to access community services.

The provision of a mobility hub at the proposed development site aligns with the West Sussex Transport Plan (2022-2036)'s active travel infrastructure priorities, as a means of improving the attractiveness and efficiency of the network of shared transport services. A dedicated space in the development site has been allocated for the Mobility Hub (refer to the Site Layout Plan, drawing P24-2268_DE_010_A_003. Further details of the proposed elements of the mobility hub are outlined below.

4.3.1 Cycle hire

An electric bike hire scheme will be provided on-site as part of the mobility hub. This will be part of wider cycle provision including secure and covered cycle parking and lockers (which may be hosted in community centres), aligned with Council standards.

This reflects the increasing popularity of cycle hire schemes as a travel option, particularly with the expansion of electric bikes (e-bikes). Cycle hire schemes provide affordable, flexible transport options, reducing reliance on private vehicles and encouraging active travel for short local journeys without the need to own a cycle. Alongside the provision of safe and secure cycle parking, they reduce the barriers to entry to cycling for short distances and encourage mode shift towards cycling.

E-bikes in particular can make cycling more accessible for wider demographics of users and more desirable through overcoming topographical constraints and enabling users to make journeys that would otherwise be challenging by bike, which is relevant in Thakeham given the elevation when cycling towards areas such as Storrington. Alongside the improvements to PRoW, this will make cycling a more attractive transport option for residents.

A dedicated cycle maintenance point, including a pump and basic tools, will be provided on site, helping to support active travel by making it easier for residents to keep their bicycles in good working order and encouraging more everyday cycling as a convenient, reliable option.

4.3.2 Delivery Hub

The mobility hub will also feature a parcel hub with secure lockers, enabling companies to consolidate shipments, reduce the need for last-mile deliveries and avoid failed drop-offs when residents are not home. This will also reduce the need for residents to make trips for shopping, reducing the number of trips generated by the development.

4.3.3 Car club

A car club vehicle will also be provided as part of the mobility hub. This will be a shared electric vehicle to maximise environmental benefits.

Car clubs are organisations which own cars for members to hire on a pay-as-you-go basis. They provide access and opportunities to people where public transport options are limited, allowing residents to access vehicles without owning one, reducing the need for multiple private cars per household.

Several car clubs have been successfully launched in Sussex, highlighting the demand for these schemes in the local area. For example, the nearby village of Henfield successfully launched its Electric Community Car Club, which now has over 80 members, in 2023. Other examples of nearby car clubs include Co Wheels Shared Cars in Horsham, Littlehampton and Worthing.

4.4 Demand Responsive Transport

A Demand Responsive Transport service will be provided as part of the development to improve shared mobility options for the site and reduce reliance on private vehicles.

4.4.1 Demand Responsive Transport introduction

Demand Responsive Transport (DRT) is a form of shared mobility that allows users to specify their desired location, pick-up time and drop-off time, usually through an online platform, app or phone service. Service provision is therefore determined by responding to the demand of users, rather than through fixed routes or timetables.

DRT services can be used for a range of types of journeys, including for commuting, socialising, health and social care and education, and can be set up to cover a defined geographical area. They can help people in rural communities access key services and amenities in the local area, providing ‘socially necessary’ services aligned to community needs, as highlighted in the DfT’s Bus Back Better guidance¹.

A DRT service will be provided as part of the development, which is intended to follow a similar model to the ‘Book-a-Bus’ service run by West Sussex County Council (which covers rural areas in West Sussex, however does not currently cover Thakeham or the immediate surrounding area), and West Sussex Minibus, a community minibus service which runs on a schedule and is mostly aimed at facilitating outings to reduce social isolation and promote independence.

The proposed DRT service will complement, rather than compete with, the electric minibus operating between Thakeham and Storrington, which is to be funded through the Abingworth Meadows development. The electric minibus will be dedicated to transporting students with special needs during the morning and evening school run, limiting its availability for commuter travel at those times. In contrast, a DRT service would be expected to be available for a larger proportion of the day. Together, these services will provide a co-ordinated and mutually supportive transport offer for the local area.

4.4.2 Benefits of Demand Responsive Transport

There are several benefits of DRT services. As a form of shared mobility, DRT increases vehicle occupancy, therefore reducing the need for private cars and the number of vehicles on the road. Case studies of the West Sussex County Council DRT and HertsLynx, both successful DRT schemes in similar rural contexts, are provided in **Appendix B**.

Most recent DRT services have been rolled out together with a smartphone app that can be accessed from anywhere with internet connectivity. Alongside the flexibility of pick-up and drop-off points, this can enable optimal vehicle use, more efficient, dynamic routing of vehicles and reduced journey times. Using an app and tracking of vehicles, users can monitor the progress of their vehicle in real time via the app. Despite running without a fixed schedule and route, most DRT services offer pick-up and drop-off within set timeframes, reconciling the requirements for flexibility, reliability and certainty.

New developments in particular present a prime opportunity to maximise the mode-shift potential of DRT, as new residents move in and adapt to new travel behaviours.

¹ <https://assets.publishing.service.gov.uk/media/6086912fd3bf7f013c8f4510/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf>

DRT services can therefore present a viable alternative, responding to sporadic demand at new development sites with smaller vehicles, providing a more sustainable and cost-efficient way to maintain quality transport services than traditional fixed bus services through more efficient use of vehicles, fuel and driver time. High quality DRT services can also help increase user confidence in public transport, with the potential to build enough demand for commercially viable fixed bus routes in the future.

With its flexible scheduling and routing, DRT has the potential to operate as a feeder service timed to connect into the fixed timetables, enabling smooth interchanges between different modes of transport, positioning it as a mobility option for first and last mile connections. For Thakeham, this could include services to more frequent bus connections from Storrington centre, or rail services to London, Southampton, Portsmouth and other regional hubs from Pulborough station. DRT feeder services can therefore also improve the viability of other public transport services by increasing patronage.

DRT also has the potential to provide transport services for people with disabilities who may find it difficult or impossible to use conventional passenger transport. Users with wheelchairs or other disabilities can book designated wheelchair spaces (where available). Most DRT services have a maximum 400m walk to pick-up and drop-off points, but these can be overridden for users with mobility requirements. Given that in the 2021 Census, 31% of the population of the West Chiltington, Ashington and Thakeham ward were aged 65 or over, there is significant potential for the local population to benefit from the accessibility of DRT.

Several key considerations to design and operate a successful DRT scheme are outlined in **Appendix A**. Case studies of the West Sussex County Council DRT and HertsLynx, both successful DRT schemes in similar rural contexts, are provided in **Appendix B**. The West Sussex County Council DRT is also discussed below in **Section 4.4.4**.

4.4.3 Potential coverage area

As **Figure 5** shows, there are several local destinations with access to amenities and other transport links including Pulborough, Storrington, Ashington, West Chiltington & West Chiltington Common all within 10km of Thakeham, which could be the potential coverage area of a future demand responsive transport service.

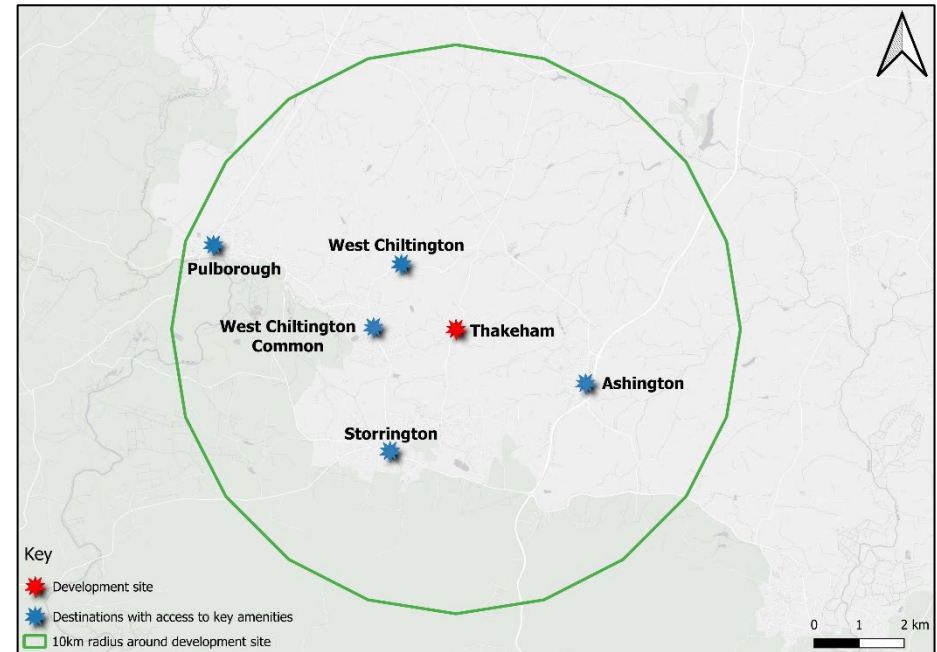


Figure 5: Destinations with key amenities near the development site

Figure 6 shows potential routes a Demand Responsive Transport service for Thakeham could cover, including destinations with key amenities and public transport services as outlined in **Section 2.2.5**.



Figure 6: Key routes DRT could cover

4.4.4 Delivery

It is proposed to work collaboratively with West Sussex County Council to seek to deliver the DRT. West Sussex County Council has delivered trial “Book-a-Bus” Digital DRT (DDRT). According to the West Sussex Bus Service Improvement Plan (BSIP) – 2024 (2024)² Section 3.6 this “*aims to enhance residents’ access to employment opportunities and essential services in areas which have limited to no access to conventional, scheduled public transport.*”. This is a similar context to Thakeham, which benefits from limited access to conventional scheduled public transport.

DDRT services currently operate in four zones. It is understood that these are operated by a combination of local bus company Compass Travel and community transport operator, Community Transport Sussex (CTS). A similar model could be implemented to cover the area surrounding Thakeham (as indicatively shown in **Figure 6**). It is noted that part of the vision of the West Sussex Transport Plan 2022 to 2036 (2022)³ is for rural communities to have access to the services they need. The intention of the DRT, working collaboratively with West Sussex County Council to appropriately deliver it, aligns with that vision.

Refer to **Appendix B** for more details of the West Sussex County Council DDRT.

² https://www.westsussex.gov.uk/media/mcwfbdcg/ws_bus_service_improvement_plan2024.pdf

³ <https://www.westsussex.gov.uk/media/17428/wstp.pdf>

4.5 Highway network upgrades

4.5.1 Traffic calming proposals

Concerns with the safety of the B2139 Storrington Road led the Parish Council to commission Motion to carry out a safety review for the road. This involved circulating a consultation document outlining different traffic calming options, alongside a survey to gather feedback, to residents and local businesses in February 2025. Following this, Motion issued the Final Proposals for traffic calming measures in Thakeham in July 2025.

The Parish Council has expressed their support for their final proposals, and their desire to pursue the following traffic calming measures with West Sussex County Council (WSCC), the local highway authority:

- An extension of the 30mph speed limit to the north of North Town Farm (for the length of the B2139 north of the former Mushroom Farm, i.e. the development site), maintaining the existing road markings. This will seek to improve pedestrian and road safety.
- The provision of four Flat Top Road Humps through the village along with the provision of a 20mph speed limit within the village. This will seek to improve road safety while ensuring the DarkSky initiative can be maintained within the village.

Figure 7 shows the location of proposed traffic calming measures (put forward by the Motion study commissioned by the Parish Council) and the extension of the 30mph speed limit in relation to the site.

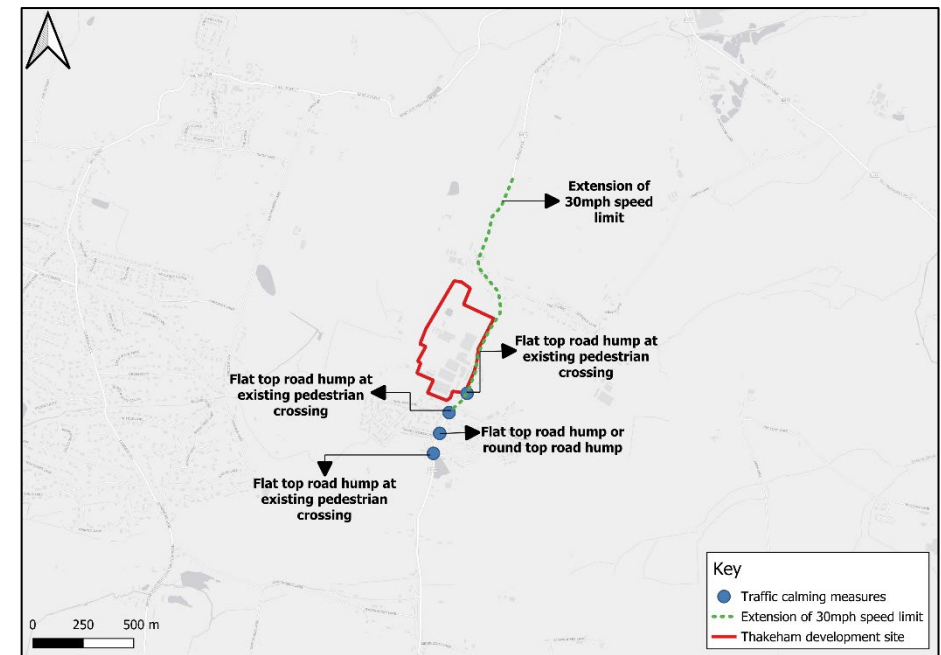


Figure 7: Location of proposed traffic calming measures and the site

These traffic calming measures will seek to lower vehicle speeds, improving road safety and reducing rat running (to bypass the A24), especially by HGVs. The flat top road humps will also improve crossings for pedestrians.

The Applicant proposes to make a financial contribution through the Section 106 agreement to help the delivery of these proposals. In accordance with the National Planning Policy Framework (2025) Paragraph, any such contribution would need to be (inter alia) fairly and reasonably related in scale and kind to the development.

4.6 Innovative solutions to improve transport in rural areas

The Department for Transport (DfT) commissioned Connected Places Catapult to deliver the Rural Transport Accelerator in partnership with Transport East. From November 2023 to March 2025, eight consortia projects trialled innovative solutions tackling transport challenges in rural areas⁴. The accelerator aimed to support Small and Medium-sized Enterprises (SMEs) and local authorities to speed up the uptake of rural transport innovative solutions.

Several of the solutions may be relevant to the context of the former Thakeham Mushroom Site. These have been included as indicative measures in the Framework Travel Plan that has been submitted in support of the planning application. A Full Travel Plan is expected to be secured via a Planning Obligation which will contain the final proposed travel planning measures. These (or other similar innovative measures) will be included in the Full Travel Plan if deemed suitable.

4.6.1 You.Smart.Thing:

- A smart travel planning platform, offering users curated, multimodal journey options combining DRT, public transport, taxis and active travel.
- Personalised messaging in the travel plans, along with automated travel alerts, help nudge people towards net-zero travel plans.
- Following the Rural Transport Accelerator trial, 22% of surveyed users changed their travel behaviour as a result of using the tool.
- This could be used in tandem with the rollout of the DRT service to increase uptake, as the You.Smart.Thing trial increased DRT usage (Liftango) from 500 to 3000 monthly users.

4.6.2 Intelligen's powerPOD:

- Intelligen's powerPOD is a solar-powered, off-grid storage and charging station specifically for Light Electric Vehicles.
- The powerPOD provides off-grid, built-in-solar-powered e-bike charging in a range of sizes for standard bicycles, e-bikes and e-scooters, accessible e-trikes, electric wheelchairs and mobility scooters and e-cargo bikes.
- Solar panels on the roof generate clean renewable energy, stored in an integrated battery system, meaning no ongoing electricity costs – which could be implemented as part of the Mobility Hub to reduce operational costs.

4.7 Travel Plan

A Framework Travel Plan setting out a package of measures to promote access to the development by sustainable modes of transport has also been developed, which has been submitted in support of the planning application. This will be secured through a Planning Obligation, to ensure that the measures (including those highlighted in this report) are implemented.

The Framework Travel Plan sets out clear aims and objectives for a shift towards active and sustainable travel, and targets for vehicular mode share reductions. Monitoring would take place to ensure that the vehicular mode share reductions are realised. The proposals outlined in this report (as well as the 'soft' measures outlined in the Travel Plan) have been proposed to help facilitate the vehicular mode share reduction in order to enable a sustainable future development.

⁴ https://www.transporteast.gov.uk/wp-content/uploads/CPC00977_Improving-Connectivity-in-Rural-Communities.pdf

5. Summary and next steps

In summary, this report outlines a proposed package of integrated transport measures which offers significant benefits for the Thakeham Mushrooms development and the wider community.

The report outlines details of the site location, a summary of the baseline transport (walking, cycling, public transport and highway) conditions, and a summary of the original planning application.

It details stakeholder engagement undertaken with West Sussex County Council Highway Officers, Thakeham Parish Council and local residents. It outlines some of the key considerations discussed, including the long-term commercial viability of a fixed bus service, shortcomings of the existing Public Rights of Way network, and safety concerns with the B2139 Storrington Road.

These considerations have informed the package of integrated sustainable transport measures proposed, namely Demand Responsive Transport, Mobility Hub, upgrades to Public Rights of Way and traffic calming measures. These measures will reduce emissions, improve accessibility, support healthier lifestyles and enhance social inclusion, while aligning with sustainability objectives and addressing previous planning concerns. Together, they create a forward-thinking, resilient transport network to help support the revised planning application, meeting the needs of a rural setting and promoting long-term community wellbeing.

Table 2 sets out the proposed delivery or funding mechanism for all the proposals referenced in this report. This will be subject to discussion with key stakeholders during the determination period of the planning application, to ensure that a suitable package of sustainable transport measures is secured.

Table 2: Proposed sustainable transport approach

Proposal	Delivery / funding mechanism
Demand Responsive Transport	Collaborative engagement with West Sussex County Council, to deliver similar to the “Book-a-Bus” Digital Demand Response Transport schemes that are in place in the County Appropriate funding to be discussed with West Sussex County Council
Mobility Hub	Delivered on-site as part of the development
Public Rights of Way upgrades	Financial contribution secured in S106 agreement
Traffic calming measures	Financial contribution secured in S106 agreement (to cover part of the costs of the works)
Travel Plan measures	Secured through the S106 agreement

Appendix A - Considerations for Demand Responsive Transport scheme design

There are several key considerations to design and operate a successful DRT scheme, with lessons to be learnt from other schemes. These include:

- Deciding the main aims for the planned DRT service and ensuring these are well-defined.
- Establishing the area of operation & likely demand for the service.
- Ensuring consistent, long-term funding for the service to ensure operational costs can be covered. Costs include drivers (which make up around 60-80% of operational costs), any other staff (such as in call centres), vehicle purchase or leasing, vehicle maintenance and repairs, fuel, vehicle insurance, ongoing licensing fees for the technology and booking systems, costs of marketing and engagement, and other upfront setup costs.
 - Section 106 contributions have been highlighted in the Department for Transport (DfT)'s Bus Back Better Guidance as an important funding source for existing DRT schemes, including PickMeUp in High Wycombe, or for Milton Keynes City Council's services.
 - DRT services can also benefit from central grants or other public transport funds such as the Bus Service Operators Grant (BSOG), community infrastructure levies, contributions from local business or employers, or existing local authority bus funding.
 - There is also opportunity to broaden the application of DRT to take advantage of multiple funding mechanisms such as transport subsidies and grants associated with Special Educational Needs and Disabilities services, and the National Health Service (NHS).
- Ensuring those who may have difficulties with, or no access to, the latest technology by providing alternatives to online booking, such as telephone booking services. Similarly, while payment transactions are

becoming increasingly cashless through apps or payment over the phone, most DRT providers still allow for cash transactions on-board the vehicle.

- Developing the business case and procurement strategy for the service:
 - Procurement needs to consider zones of operation, hours of operation, criteria for stops, vehicle specification, technology requirements, accessibility, and service performance
 - Electric vehicles require more upfront infrastructure investment (for charging), but can be more cost-effective long-term to operate than diesel vehicles; operators of vehicles that hold a zero-emission bus certificate may also be eligible for a 22p per kilometre rate of BSOG funding for those vehicles
- Procuring the technology solution used for the services, which can be procured jointly or separately from the vehicles.
 - Several DRT technology providers are currently active in the UK, including Padam, Via, Loki, Liftango, Zeelo and Tandem.
- Consulting with other local transport providers, including the local taxi industry and trains or other bus services if DRT is designed to act as a feeder service to the fixed transport network.
- Ensuring the regulatory framework and licensing for the service is understood and adhered to
 - Most DRT services are specified as a 'flexible bus service', requiring them to be registered with the Office of the Traffic Commissioner.
 - Vehicles with under 8 seats will need PHV (Private Hire Vehicle) licenses, while those with over 8 seats require PSV (Public Service Vehicle) operator licensing
 - PHV licenses are mandatory permits for cars (not traditional black cabs) used to carry passengers for hire on a pre-booked basis, requiring the vehicle to meet

specific safety, emissions, and condition standards set by the licensing authority

- PSV licences regulate the safety and proper use of buses, coaches, and similar transport for payment
- Ensuring a sufficient number of passengers are attracted to ensure the viability and success of the service. The DfT Toolkit suggests implementing a communications strategy with the following actions to do so:
 - Organising face-to-face events to promote the service
 - Producing online and printed promotional materials
 - Ensuring the benefits of the service are communicated
 - Encouraging customer feedback, and adapting communications and operations as and when needed
- Setting up a monitoring and evaluation plan to assess the ongoing effectiveness and efficiency of the service.

Appendix B – DRT Case Studies

West Sussex Digital Demand Responsive Travel

“Book-a-Bus” is West Sussex County Council’s Digital Demand Responsive Travel (DDRT) service. The DDRT was originally launched in 2023, with expansions launched in subsequent years. The aim is to enhance residents’ access to employment opportunities and essential services in areas which have limited to no access to conventional, scheduled public transport. DDRT services currently operate in the following zones:

- Chichester – Petworth (Bus 99 Flex Services).
- North of Petworth (Bus 98 Flex Service).
- North West Chichester (Bus 96 Flex Service).
- East of Chichester (Bus 97 Flex Service).

The service has tested various technology configurations, including semi-flexible bus technology, to establish an efficient set up. The aim of this is to make use of existing under-utilised vehicles and designated Book-a-Bus vehicles.

The service is operated by a combination of local bus company Compass Travel and community transport operator, Community Transport Sussex (CTS). Booking can be made in a single app or by phone, up to 48 hours in advance of travel. Up to five seats can be booked per trip.

Services have proved very popular. Free fares have been offered at times as a promotion to encourage passengers to use sustainable transport. Data indicates that on the 98 Flex services, patronage tripled from the launch in 2023 to 2024.

HertsLynx

HertsLynx is Hertfordshire County Council’s DRT service. It was launched in North & East Hertfordshire in September 2021 and was implemented to serve the villages in North and East Hertfordshire with poor public transport accessibility and provide transport links between rural areas and designated ‘Key Hub Towns’ (and rail stations).

The service was initially launched with three buses, servicing around 1,400 passenger trips per month, but due to popularity and demand for the service, now operates with seven buses and averages over 5,000 passenger journeys a month. All dial-a-ride services in the area have been moved to the same platform to increase service efficiencies.

The service is operated by Uno, with Padam Mobility as the technology provider, and the operational period is 7am–7pm, Monday to Saturday, and 10am–4pm on Sundays. The council owns the vehicles, but the operator is responsible for insuring and maintaining them, and has KPIs around punctuality, customer service and vehicle maintenance. The fare is £3 and is free for concessionary pass holders, and all vehicles have the capacity for one wheelchair.

Bookings can be made via the HertsLynx app, web portal or by phone call live or up to 30 days in advance; approximately 80% of users book through the app, 15% book online and 5% use the call centre. Leisure uses make up 40% of all trips, followed by trips to the train station (34%), visiting friends and relatives (32%) and trips to/from work (24%).

The service is funded by a combination of S106 contributions, fare revenue and a £1.4 million grant as part of the DfT’s Rural Mobility Fund.