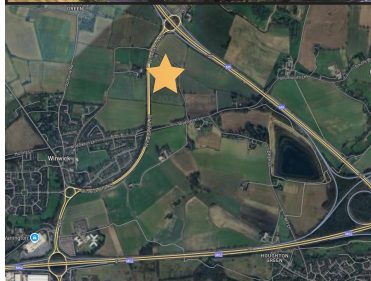




Renewable energy...

Your opportunity
to find out more



Severn Trent Green Power is an established renewable energy provider with more than 15 years' expertise in food waste recycling through anaerobic digestion.

We're a non-regulated subsidiary of Severn Trent Plc, working throughout the UK to help the country transition to 'net zero' by providing energy security and contributing to a circular economy.

Food waste enables us to make clean renewable energy, by diverting food from landfill, capturing gas and returning it to the national grid.

As well as gas, the food waste creates an organic nutrient-rich fertiliser that can be used for sustainable agriculture and to grow new crops.

We propose to submit a planning application for a new food waste recycling facility on land between the M6 and M62 near Winwick.

...for a
sustainable
future



Green Power

THE UK'S LARGEST PRODUCER
OF ENERGY FROM FOOD WASTE





Tell us your views

Join us...



We're holding a public drop-in event, to which all are welcome. Please join us to learn more about the proposal and to share your comments with a member of our team.

Monday 27 January, 2pm - 7pm
Winwick Leisure Centre
Myddleton Lane
Winwick
WA2 8LQ

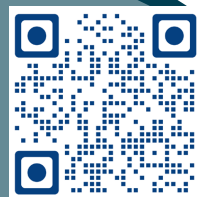
No need to register, just come along.
Free tea and coffee will be available

THE UK'S LARGEST PRODUCER
OF ENERGY FROM FOOD WASTE

feedback@stgreenpower.co.uk
sites.google.com/view/winwick/home



Green Power



Scan the QR code to visit our project website



Transforming food waste into renewable energy

A proposed food waste anaerobic digestion facility
near Winwick, Cheshire

Welcome to our project website

Here you can find all the information about our proposal to build a brand new anaerobic digestion facility near Winwick, where food waste from households and businesses can be transformed into renewable energy.



What is anaerobic digestion?

It is a sustainable waste management technique and is the preferred method for managing organic waste.

When food waste breaks down it emits methane, a greenhouse gas. Anaerobic digestion allows us to capture that gas and turn it into a sustainable source of biomethane. This in turn creates renewable energy that can be exported to the national gas grid.

Document library

Here you can view and download key documents about our project.

Proposed site layout

[Click to view](#)

Public event display boards

[Click to view](#)



FAQs

1. Why this site? Have brownfield sites been considered?

This site has been selected as it has good access to the major road network, available connection to the electricity and gas networks, proximity to farmland, and is a reasonable distance away from residential areas.

We have undertaken an Alternative Site Assessment on a wide variety of sites and reviewed them thoroughly before selecting the proposed location that would provide the best balance for the requirements of a food waste AD facility.

2. How will increased traffic be managed?

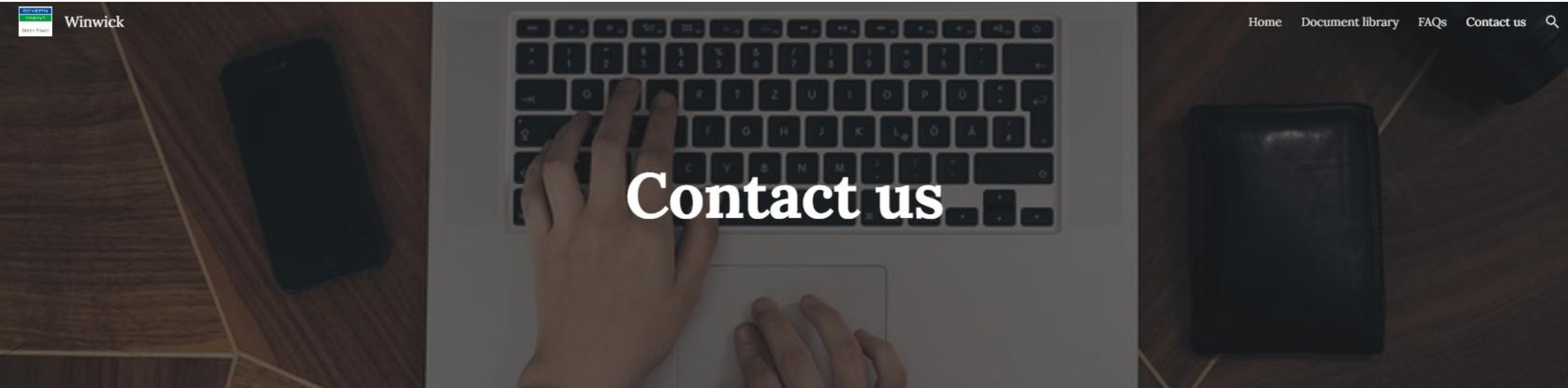
The proposed route for waste vehicles and HGVs is via A49 / Winwick Link Road and these vehicles will be subject to strict routing plans so that there will be no traffic through the village or residential areas.

A detailed Transport Statement will be provided as part of our planning application, providing an assessment of the existing transport network, identifying any potential conflicts and proposing suitable mitigation measures to address any impacts.

3. How will odours be managed?

The proposed facility will have a sophisticated air filtration system and is a closed system - where all food waste is processed within the reception building with fast-closing roller shutter doors and is moved around via a network of pipes within a highly controlled environment.

All liquid digestate produced will be contained in a fully covered store, and silage clamps will be sheeted with multi-layer covers.



Contact us

If you have any questions or comments about our proposal, please send your email to:

feedback@stgreenpower.co.uk

You can also write to us at this address:

Winwick Project Team
Severn Trent Green Power
The Stables
Radford
Chipping Norton
Oxfordshire
OX7 4EB

ABOUT SEVERN TRENT GREEN POWER

Severn Trent Green Power (STGP) is a **renewable energy provider, operating across the UK**. Our portfolio includes 10 food waste anaerobic digestion facilities, 1 crop-fed anaerobic digestion facility, 33 solar parks, 6 wind turbines and 3 hydro electric turbines. We also operate 3 green waste composting sites in Oxfordshire.

From this portfolio we generate 335GWh of renewable energy for the National Grid every year, **enough to power more than 120,000 homes**. We've been operating for 15 years and are a non-regulated business within Severn Trent Plc.

Local relationships are very important to us.

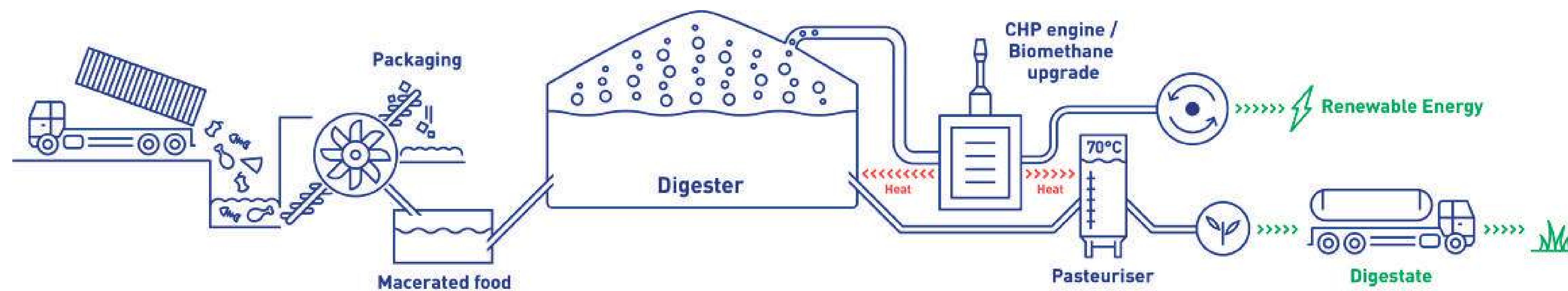
We understand that people living near to one of proposed facilities may have questions or concerns. We aim to engage with communities and be a good neighbour, listening to and addressing concerns at a local level, while maintaining the highest operational standards to ensure minimal impact to nearby residents.

We're known for our **exceptional compliance record and our stringent approach to health and safety**, and we're consistently highly rated by our local authority and commercial customers.



WHAT IS ANAEROBIC DIGESTION?

Anaerobic digestion (AD) is the **process of treating food waste to create renewable energy and a nutrient-rich fertiliser**. It is a sustainable waste management technique and is the most preferred method for managing organic waste.



THE PROCESS

1. Separately collected food waste is delivered to site and deposited in an **enclosed reception building**. The waste is **tipped into a bunker** and **pre-treated** to begin breaking down the waste.
2. The waste is **ground up in a macerator** and separated from any packaging before being mixed with liquid. It is then **pipd into digestate tanks** where it breaks down, in a process which releases biogas. This is **collected** and **turned into biomethane** for the grid.
3. The remaining **digestate is pasteurised** and filtered, before heading to farmland to help grow new crops.

THE BENEFITS

Capture methane released from breaking down the food waste and turn it into a sustainable source of biomethane

Create digestate, a natural fertiliser for farmlands replacing chemical-based fertiliser

Recycle food waste and use it for beneficial use, rather than sending it to landfill

Capture CO2 from the process and stop it from entering the atmosphere, helping to reduce carbon emissions

THE NEED FOR AD

The UK produces 9.5 million tonnes of food waste every year. By March 2026, all local authorities in England must adopt separate food waste collections, with just under 50% of councils still needing to set these up. It is therefore essential that there is sufficient infrastructure to sustainably manage this waste.

At the same time, securing our energy production has become essential in the UK, as the Government commits to achieving Net Zero by 2030. Renewable energy technologies like AD will play a key role in our pathway to a cleaner, more sustainable economy.



WHY IS THIS SITE NEEDED?

By March 2026, all councils across England will need to offer a weekly food waste collection. This is to ensure that food waste is managed in the most sustainable manner possible.

AD is recognised as the most sustainable way to manage food waste, taking the waste and converting it into renewable energy, a valuable nutrient-rich fertiliser and other by-products.

Why Winwick?

- Limited AD capacity in and around Warrington and the North West
- Good access to major roads (M6 and M62)
- Available connection to the electricity and gas networks
- Minimal planning constraints

Key Benefits of the AD Facility



Sustainable waste management - enabling food waste to be managed in the most sustainable way possible, converting waste into valuable by-products.



Renewable energy - the facility would produce around 38GWh of renewable electricity per year, enough to power about 14,000 homes.



Biomethane - the facility would convert food waste into as much as 7.5MWth of biomethane, which would be injected directly into the gas grid.



Digestate fertiliser - the liquid and solid matter produced would be used as a nutrient-rich fertiliser and soil improver - more sustainable alternative to traditional chemical fertiliser.



Carbon capture and storage - the carbon dioxide produced in the AD process would be captured and exported from the site for positive use in various industries.



New habitats and landscaping - the southern section of the site would be used for habitat creation, offering significant new opportunities for wildlife.



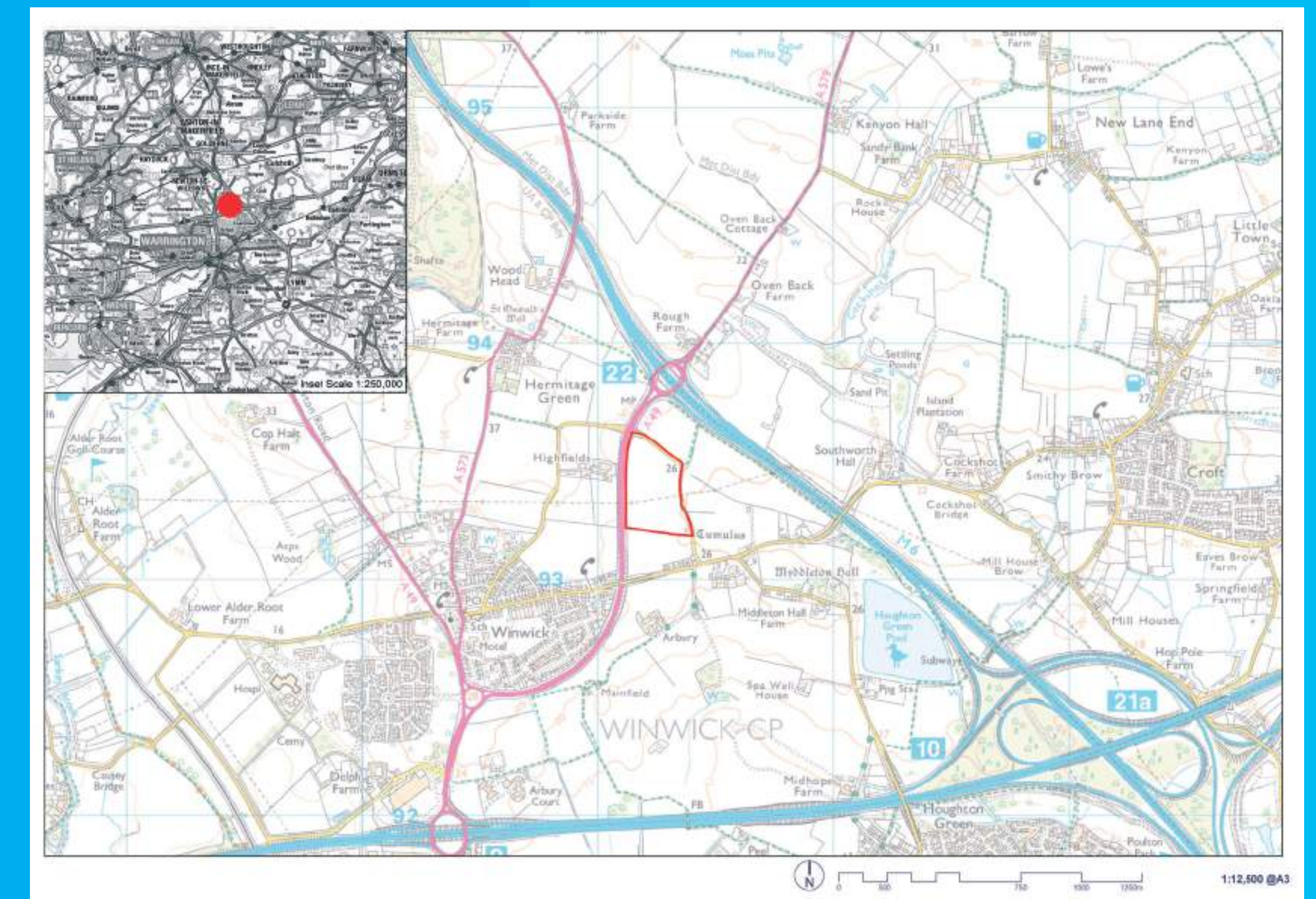
Protection of archaeology - a neolithic bowl barrow, an ancient funerary monument, occupies the south-eastern corner of the site. This Scheduled Monument would be protected, helping to preserve it for generations to come.

THE SITE AND PROPOSED FACILITY

The site measures approximately **8.5 hectares (21 acres)**. It is located to the north-east of the village of Winwick, to the east of Winwick Link Road (A49 /A572) close to the M6 and M62. The site is located within the Green Belt.

The proposed AD facility would be located **north of the electricity pylons** that cross the site.

Substantial **landscaping** and a **drainage pond** would be provided to the south of the pylon. Tree planting would be delivered along all site boundaries, which would supplement the existing planting and offer visual screening to the facility.



Key Elements of the Proposal

- **A waste reception building**, 12.5m in height and with fast-closing doors, an air filtration system to prevent odour from escaping. Food waste would be dropped off here by waste vehicles.
- **5 digester tanks** with a diameter of 32.5m and a height of 13.5m, located towards the northeast of the site.
- **A gas upgrade unit** to purify the biomethane so it can be injected into the national gas grid.



- **Office and workshop**, with parking facilities to provide space for staff and welfare facilities, and for storage and maintenance of equipment.
- **Extensive landscape planting** to deliver visual screening and habitat benefits.
- **Gas flare** to safely burn off any gas that cannot be processed and is only used when absolutely necessary.
- **Carbon capture and storage unit** to store carbon dioxide extracted from the process, later exported for use in various industries.
- **Combined heat and power unit** to turn the biomethane into renewable heat and energy, which would be injected into the national grid or used to heat and power the AD plant.

ACCESS ARRANGEMENTS

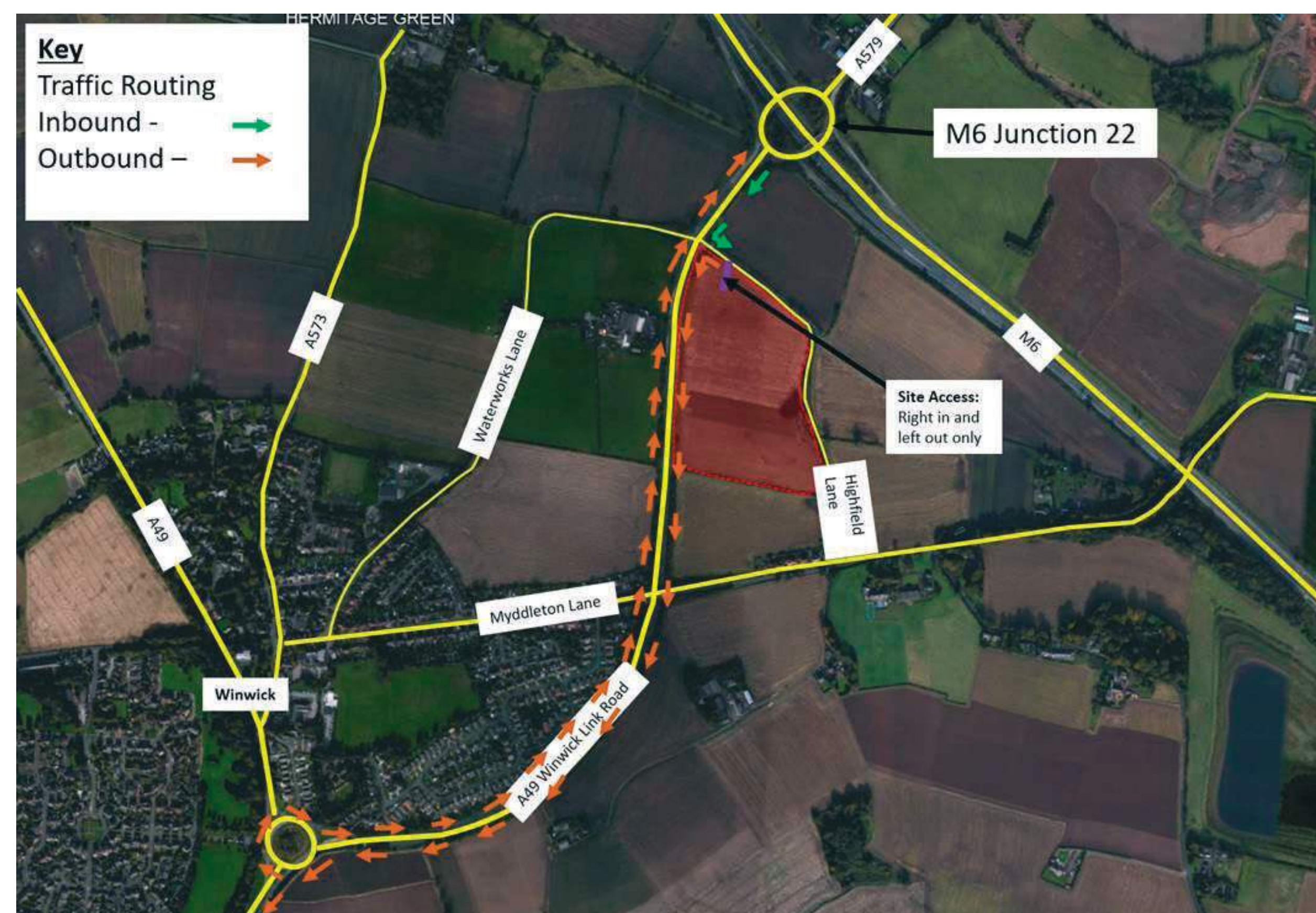
The planning application will be supported by a transport statement, which provides full analysis of the transport network and the effects of the proposed AD facility. This includes an assessment of the existing transport network, identifying any potential conflicts and proposes suitable mitigation measures to address any impacts.

Proposed site access

The site would be accessed via an improved junction in the existing location along Highfield Lane to the north of the site.

Improvements to the existing access arrangements include:

- **New road surfacing** to make the access suitable for vehicles entering the site.
- **Widening of the access point** and works to improve visibility to ensure vehicles can safely access the site and be seen by other vehicles.
- **Minor widening of the corner at the junction** to allow vehicles to slow down before turning onto Highfield Lane without impacting other users of Winwick Link Road.



Vehicle routing

Waste vehicles and HGVs will be subject to strict routing plans. These vehicles would only enter and exit the site via the Highfield Lane / Winwick Link Road junction.

All HGVs and waste vehicles would use Winwick Link Road to access the motorways and other major roads. These vehicles would not be permitted to use the stretch of Highfield Lane to the east, avoiding traffic through residential areas.

The number of waste vehicles and HGVs accessing the site would not be excessive - on average around 60 per day. Most trips would occur outside of rush hours and our assessment shows that vehicle movements would not impact on highway safety or cause congestion.

LANDSCAPING

The proposed development will deliver extensive landscaping, which will **deliver new habitats and offer visual screening**. An assessment of landscape effects will be submitted as part of the planning application.

Landscape Scheme

The majority of the existing boundary planting (trees and hedges) will be retained. **New native woodland and hedgerows** will be provided along the site boundary. This will create a physical and visual buffer between the proposed facility and the surrounding area and provide new habitats.

The existing and proposed **boundary planting** would help to screen the facility from view, which will minimise the impact on the landscape.



Illustrative view of the site from Waterworks Lane to the south west



Illustrative view of the site from Myddleton Lane to the south

ECOLOGY AND BIODIVERSITY

The proposed development would deliver significant ecological benefits by introducing **new landscape features and habitats**. This would deliver significant biodiversity net gain.

There are **no protected habitats** on the site, meaning there would be no direct impact on important ecological areas.

An ecological review of the site has found limited potential for protected species. Nevertheless, measures will be taken to ensure no adverse impact on any wildlife.



The Benefits



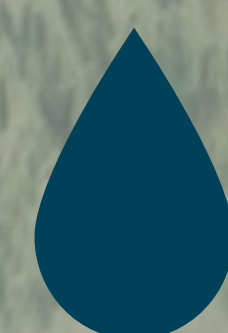
Around 1.5 hectares (3.7 acres) of new native woodland planting - including trees and shrubbery to support woodland creatures



Around 3.5 hectares (8.6 acres) of species-rich grassland - providing habitat for insects, birds and reptiles



Around 150m of native hedgerow which would provide opportunity for further wildlife and foraging birds



A surface water drainage pond

ENVIRONMENTAL CONSIDERATIONS

All relevant environmental factors would be assessed as part of the planning application, and appropriate measures to avoid impact on the environment and local residents would be delivered as part of the proposed development.

Air quality

STGP has extensive experience in operating AD facilities around the country and have measures to avoid odour, protect the environment and avoid risk to human health, which would be put in place for the proposed development.

Odour

The AD facility would have a sophisticated air filtration system, designed to minimise odour emissions. All waste entering the system would be deposited within the reception building, which would include fast closing roller shutter doors and is kept under negative pressure to contain odours. All waste material is moved around the facility through a network of pipes.

Environmental permit

The facility would be subject to an Environmental Permit. This would strictly regulate its design and operation to ensure that there would be no unacceptable impacts to the environment or local residents from emissions.

Noise

The proposed AD facility has been designed to minimise noise impacts and would be operated to avoid any adverse impacts from noise. The treatment facility would be operational at all times, but waste deliveries would be limited to the following hours:

- **Monday – Friday: 0700 – 1800**
- **Saturday: 0700 – 1630**
- **Sundays and Bank Holidays (if required): 0800 – 1630**

During the construction period restricted hours would also be in place and measures would be used to minimise construction noise. The level of noise experienced by the nearest residents has been assessed to be no greater than the existing background sound levels.

Drainage

The site is located within a low risk Flood Zone and appropriate drainage would be put in place to manage surface water and foul water. Surface water would be collected for use in the AD process and stored in liquid storage tanks or in the surface water drainage pond in the southern part of the site. On rare occasions when the storage basin becomes full, clean surface water in the drainage pond would be discharged to a nearby drainage ditch.

Traffic emissions

The vehicle movements and routing associated with the proposed development would be assessed as part of the planning application. Based on the number of vehicles, site setting and set-back distances of properties to the local road network, the development would not give rise to significant impacts on air quality as a result of vehicle emissions.

Archaeology

The site boundary includes a Scheduled Monument comprising a buried neolithic bowl barrow, located in the south-eastern corner of the site. No development would take place in the area covered by the Scheduled Monument and tree planting has also been avoided in this area. The proposed development would have a positive impact on the Scheduled Monument, by taking it out of active agricultural use and helping to preserve it for the future.