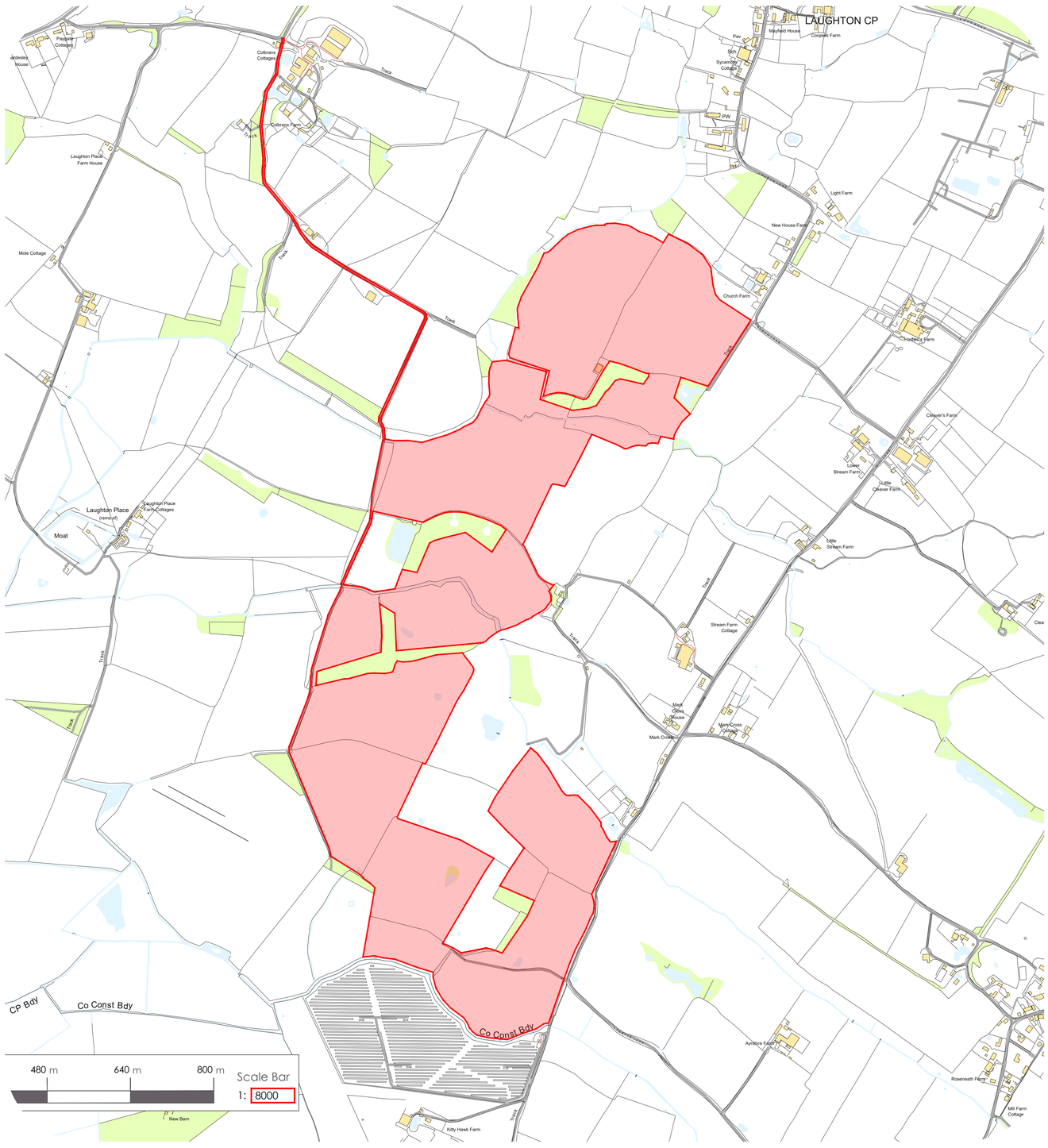
Colbrans Solar and Storage

Welcome to the Colbrans Solar and Storage Community Consultation Event



Site Location Plan

Innova is proposing a 40MW (Megawatt) solar and 30MW energy storage development on land at Colbrans Farm, Laughton. This proposal will connect into the local electricity grid and will have a generation capacity to power the equivalent of approximately 65,000 households and save approximately 6,900 tonnes in CO2 emissions per year.

This site has been selected and designed via a detailed assessment process. An important part of this process is to engage with the local community and this event provides the opportunity for you to ask questions and provide feedback on the proposals.

Key Project Elements

- Onsite delivery of Biodiversity Net Gain through an increase in habitats for local wildlife and additional planting.
- Potential direct and indirect employment opportunities in the local area during the construction period.

About Innova

Innova is a leading independent renewable energy consultancy who have been active in the development of solar projects since 2010. Our mission is to support the delivery of utility-scale renewable energy projects using multi-technologies fit for the transition to Net Zero.

Our in-house team of renewable energy industry experts and trusted consultants have extensive experience delivering and operating renewable energy projects across the United Kingdom.

We look forward to discussing the proposal with you.

40MW Solar
30MW ESS

Energy capacity and storage

6,900 tonnes

approx. carbon saved per year

65,000

approx. homes powered by the energy storage

Need for Renewable Energy Developments

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There is widespread awareness of the need to reduce our dependence on fossil fuels and transition to renewable energy sources.

The United Kingdom is the first major economy to pass a Net Zero emissions law, requiring nationwide greenhouse gas emissions to reach Net Zero by 2050, with a target to decarbonise the electricity grid by 2035. Energy Storage Systems (ESS) are leading the way in balancing demand for electricity and providing flexibility to the supply of electricity in terms of where this can be stored on the network, and times when it can be utilised. ESS is crucial component of the delivery of Net Zero targets.

Wealden District Council declared a climate emergency in July 2019 and have made a commitment to pursue efforts to make the district Net Zero by 2050. The proposed development will provide a significant amount of renewable energy which will help in meeting local and national climate targets.

An important step in achieving Net Zero is the rapid decarbonisation of the UK electricity network, as this will enable the decarbonisation of other sectors, such as heat and transport. To achieve a low carbon energy network the UK Government has a target of 50 Gigawatts (GW) of offshore wind by 2030 and the UK energy minister wants to increase solar generation from 14GW to 50GW and onshore wind from 15GW to 30GW, all by 2030.

Solar farms and Energy Storage Systems like the proposed Colbrans Lane development will play a key role in reaching these committed targets and addressing the Climate Emergency and energy security in the UK.

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The Proposal

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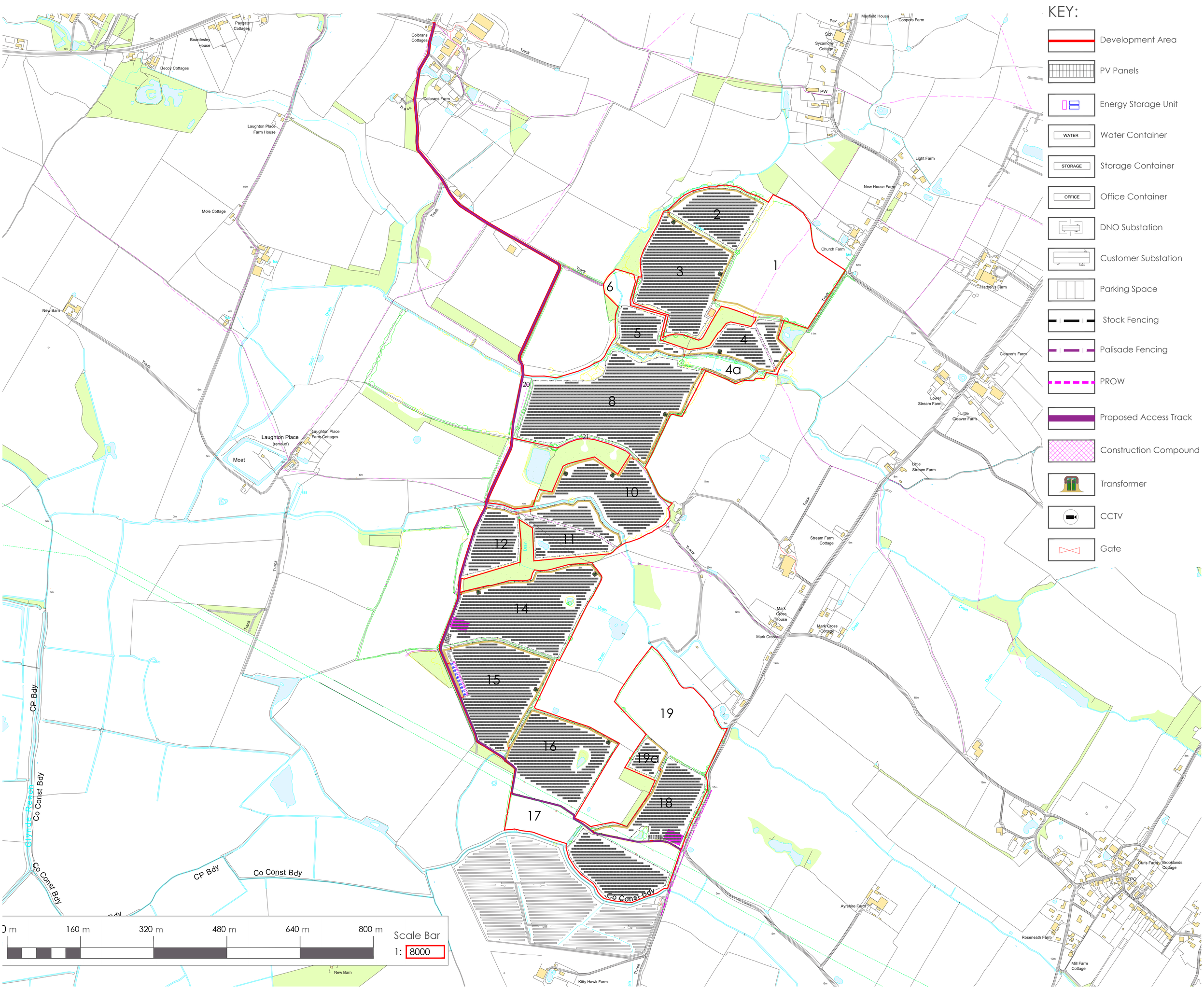

Indicative Planning Layout

We are proposing a Solar and Storage development at land at Colbrans Farm, Laughton.

This selected site has the following benefits:

- Suitable access, off Darp/Mill Lane for the southern access and off Cow Lane for the Northern access for construction vehicles.
- The site is located outside of any statutory or local planning designations, nor landscape designations.
- Suitable available land for the development and for the delivery of on-site Biodiversity Net Gain.

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Proposed Equipment 4

Solar arrays

The solar array is proposed to consist of ground-mounted solar photovoltaic panels with a generating capacity of up to 40MW. The solar element will offset the annual energy needs of approximately 6,900 homes and save around 6,900 tonnes of CO2.

Energy storage units

The energy storage unit is proposed to consist of two containerised modular energy systems which contains a heating, ventilation, and air-cooling unit, a fire suppression system, and a transformer. The energy storage will be able to store up to 30MW of electricity.

Frames, Panels and Inverters

The solar panels will be installed in frames that are approximately three metres tall and fixed to the ground. The solar panels generate Direct Current (DC) electricity, which is converted to electricity with Alternating Current (AC) for export into the local grid by inverters. Inverter units will be mounted on the rear of the solar panels at intervals.

Buildings

Transformer units will be required to step the voltage up to a suitable export level.
These will be located within the solar farm, close to the internal access tracks. A customer substation building is required to export the energy from the transformers in a single cable to a substation operated by the District Network Operator (DNO).

The DNO substation building is required to meter the production of energy and export it directly to the local grid.

All electrical cabling to the substation will be underground and the substation buildings will seek to have a green finish to coordinate with the surroundings.

Access tracks

Within the site, internal access tracks are proposed to allow suitable access throughout the site. These are likely to comprise of gravel tracks.

Security

A deer-style fence will be installed around the perimeter of the development at a height of approximately two metres, consisting of wooden posts supporting traditional wire stock fencing. Suitable mammal gates will be included within the fence line where required, following conclusion of the ecology surveys. There will be inward facing infra-red CCTV along the fence. Palisade fencing will surround the substations and energy storage areas.

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Transport

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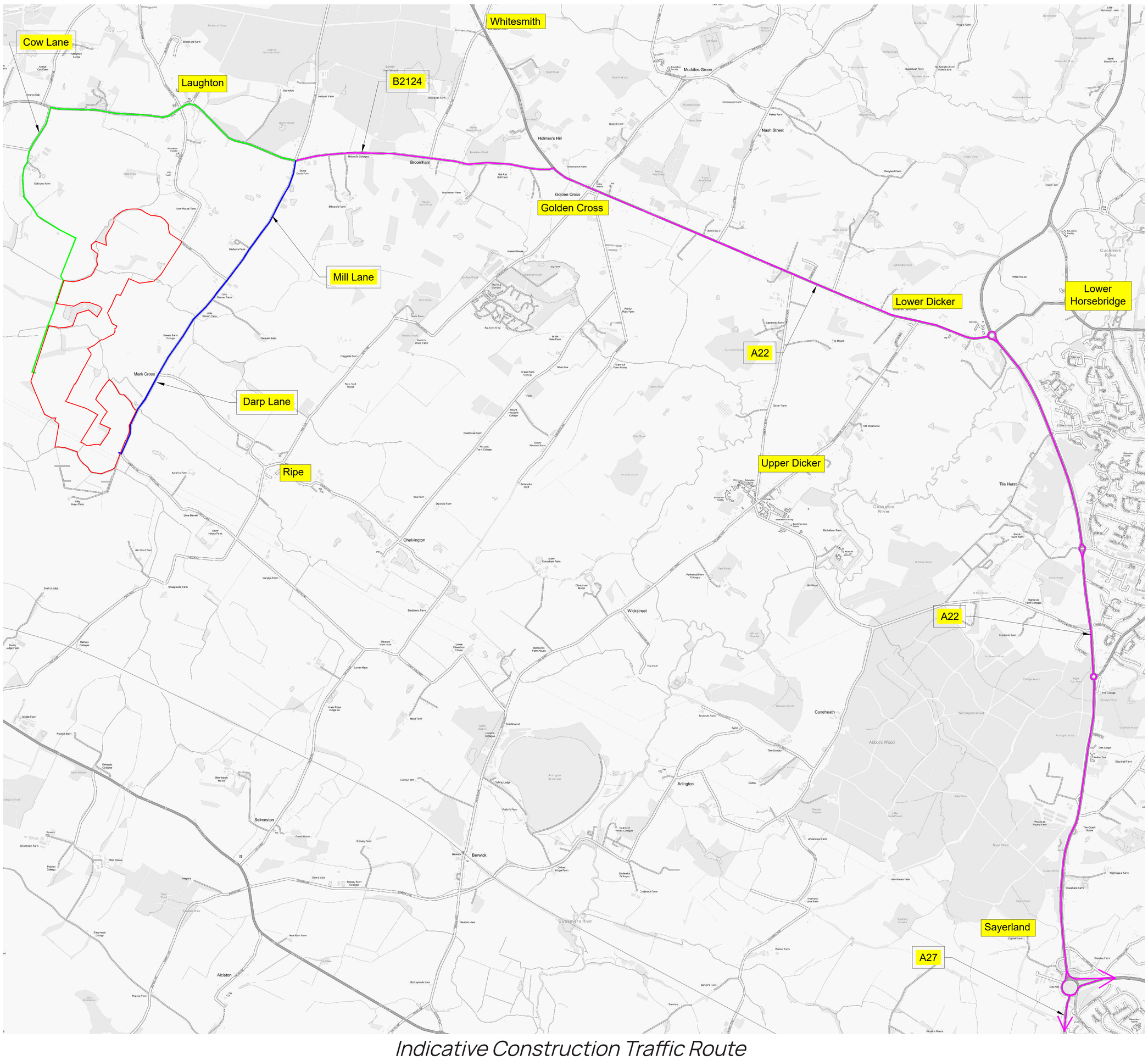


Indicative Construction Traffic Route

The above figure illustrates the indicative construction traffic route. We welcome feedback on the proposed routes. The planning application will be supported by a Construction Traffic Management Plan which will confirm the most suitable construction traffic route, based on swept path analysis for the delivery vehicles of the equipment for the solar and storage proposal.

It is proposed to have two access points to the site, off Mill/Darp Lane and off Cow Lane. This will allow suitable access to the site at all times.

The primary construction traffic route is shown in blue which provides access to the southern site access point. The majority of the construction traffic will use this route.

The secondary construction traffic route has been included to allow construction vehicles to access the northern parcel of the site. This is shown in green and seeks to use Cow Lane. Both accesses will remain throughout the operational period, however operational traffic will use the southern access.

Once the site is operational, light goods vehicles or 4x4 vehicles will access the site 1-2 times a month and will utilise the existing access track. Existing internal access tracks will be upgraded for use of the delivery vehicles.

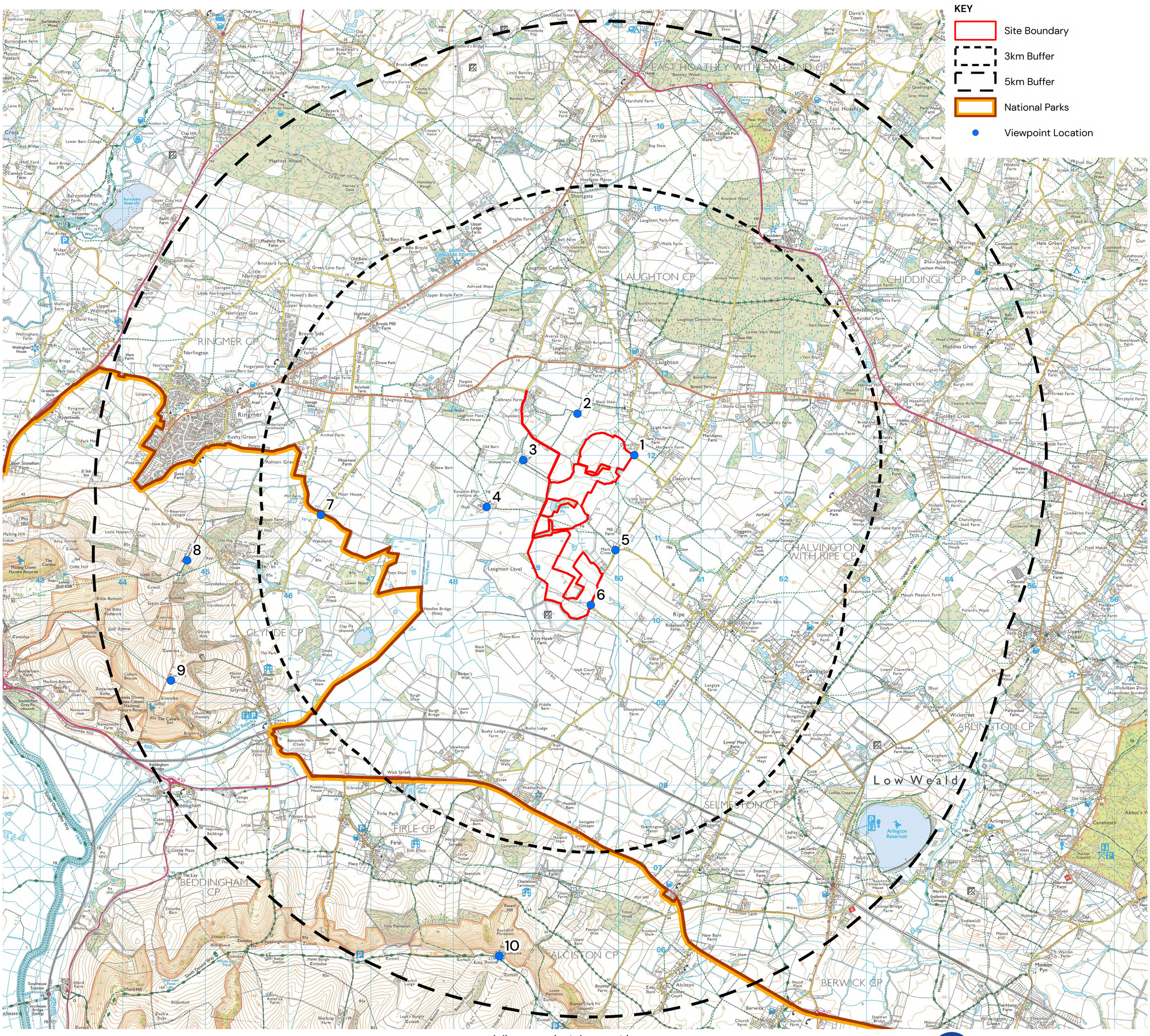
Landscape and Visual 6

We are currently undertaking a full Landscape and Visual Impact Assessment which will accompany the planning application.

A selection of images from the below viewpoints will be taken and photomontages produced to provide a visual representation of how the project will look once construction has been completed and then 10-15 years into its operation.

To date we have asked the Council and statutory consultees on their agreement with the proposed viewpoints. We have received comments seeking additional viewpoints from the South Downs National Park, which will be undertaken. The South Downs National Park boundary is located to the south and west of the Site, with the closest part lying over 1km from the Site boundary.

Once completed, these viewpoints will be assessed within the LVIA. We welcome any comments on these and opinions on additional viewpoint locations.



Viewpoint Locations

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Viewpoints

Viewpoint 1A

Viewpoint 5A

Viewpoint 6A

Viewpoint 10

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Surveys to Date

Ecology

The site is not located within any ecological designations; however we have undertaken a number of site specific ecological surveys to account for any species located on-site. The details of these and suitable mitigation measures will form part of the planning application.

Based on these surveys, the proposed development will likely include the following mitigation for local ecology:

- Breeding bird plot creation and habitat creation in the open green areas outside of the solar array.
- Improved neutral grassland within the development area and wildflower planting in field margins.
- Buffers from the hedgerows, woodland and additional planting on-site.

Hydrology

Areas of the site are located in Flood Zone 2/3. No equipment is located within these areas; however some areas will be required for internal access tracks to allow access throughout the site.

Surface water flood risk will be accounted for in the site design to ensure the development remains safe over its lifetime. A surface water drainage strategy will be developed to ensure surface water runoff from the site does not increase as a result of the development. The drainage strategy will manage surface water runoff from the proposed infrastructure on site, including the Energy Storage Units.
Suitable drainage measures may include use of infiltration trenches and sustainable drainage systems (SuDS) across the site.

Heritage

The site does not contain any designated or non-designated buildings or scheduled monuments. To date, we have undertaken a Historic Environment Desk-Based Assessment which concluded the proposal would not result in significant harmful effects on the Grade II* listed Laughton Place.

A geophysical survey has been undertaken which has identified a small number of potential below ground assets. A suitable report is currently being produced and will form a part of the planning application. If necessary to do so, It is proposed to have areas of ballasted panels over the areas of archaeology to ensure no ground disturbance.

Glint and Glare

We are undertaking a full Glint and Glare Assessment which will accompany the planning application. Our preliminary work has identified that the proposed development will not result in significant effects on the local properties and airfields/aerodromes/airports.

To date, we have approached the nearby airfields/aerodromes/airports to seek confirmation of the scope of the assessment. We will continue to engage with these consultees throughout the application preparation and application determination process.

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Enhancements and Benefits

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Our Community Promise

We believe it is important that local communities share in the benefit our project brings. For all of our solar and storage projects, we offer a community benefit fund which can be used to support local projects and priorities. We will work with our host communities to agree the best way to provide and administer the fund.

Every year, the 40MW solar and 30MW storage Colbrans Lane site will contribute £250 per MW of solar and £50 per MW of energy storage for the 40-year lifetime. Innova will also provide an annual charitable fund, where £100 per MW of solar and £20 per MW of energy storage will be provided to a chosen charity.

OUR COMMUNITY PROMISE

Every year the project will contribute:

£50 To the local community | **£20** Charitable donation

per MW of storage

£250 To the local community | **£100** Charitable donation

per MW of solar

Boosting Biodiversity

A bespoke Biodiversity Management Strategy is being prepared that ensures existing and new habitats are enhanced or created to benefit local wildlife.

Colbrans Lane Solar and Storage's landscaping planning, seeding and habitat creation plans will focus on native species. These initiatives will contribute to securing long term biodiversity net gain across the site.

Green Spaces

The solar farm has been designed to leave green spaces around the site boundaries and between the rows of panels to avoid shading and maximise electricity generation. This will leave the majority of the solar array as uncovered grassland.

Next Steps

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EIA Scoping Request and Community Consultation - Current

We have submitted an Environmental Impact assessment Scoping Request to Wealden District Council which will refine the scope of the Environmental Statement.

We will consolidate the feedback from this consultation event and from the Council. This helps us to formulate our submission of the planning application.

Environmental surveys - Ongoing

We are undertaking our site-specific assessments and these will feed in to the Solar and Storage design.

Planning application submission - Autumn 2024

The planning application is expected to be submitted to Wealden District Council in Autumn 2024.

Construction and operation

The construction period is expected to take six months and the proposed planting will be implemented in the first planting season following the construction activities.

Contact us

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