Riddings Lane Solar and Storage

Welcome to the Riddings Lane Solar and Storage Community Consultation Event

Innova is proposing a 49.9MW (Megawatt) solar and 20MW energy storage development on land to the south of Riddings Lane, Gleaston. This proposal will connect into the local electricity grid and will have a generation capacity to power the equivalent of approximately 12,740 households and save approximately 10,700 tonnes in CO2 emissions per year.

This site has been selected and designed through 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.

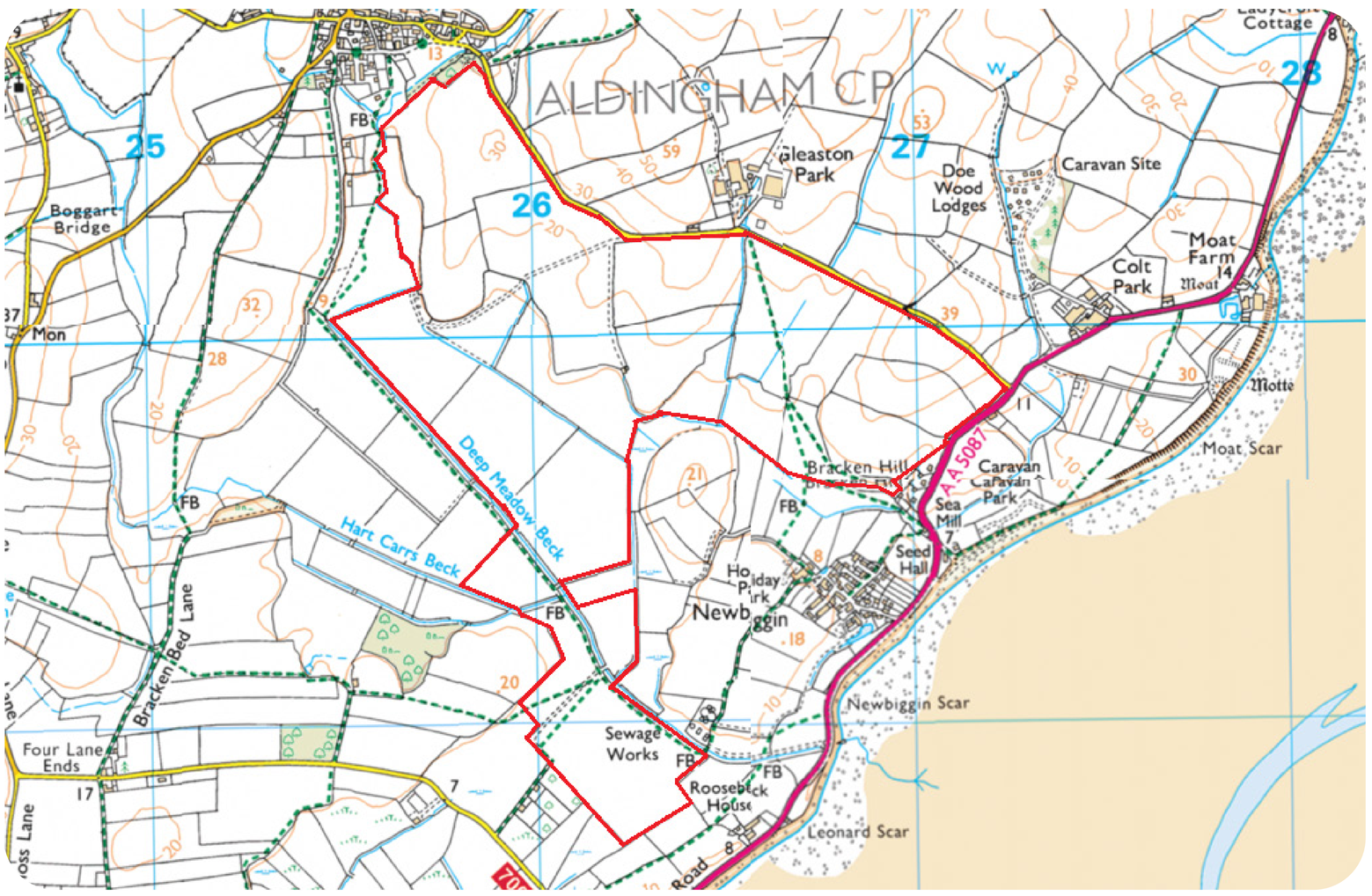
About Innova

Innova is a leading independent renewable energy company 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.

It is our aim that Innova will build, own and operate Riddings Lane Solar and Storage.

We look forward to discussing the proposal with you.



Site Location Plan

49.9MW Solar
20MW Energy Storage

Energy capacity

10,700 tonnes

approx. carbon saved per year

12,740

approx. homes powered per year

Need for Renewable Energy Developments

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 a crucial component of the delivery of net zero targets.

Westmorland and Furness Council have committed to ensuring that the area it serves is carbon net zero by 2037. 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 Riddings Lane development will play a key role in reaching these committed targets and addressing the Climate Emergency and energy security in the UK.

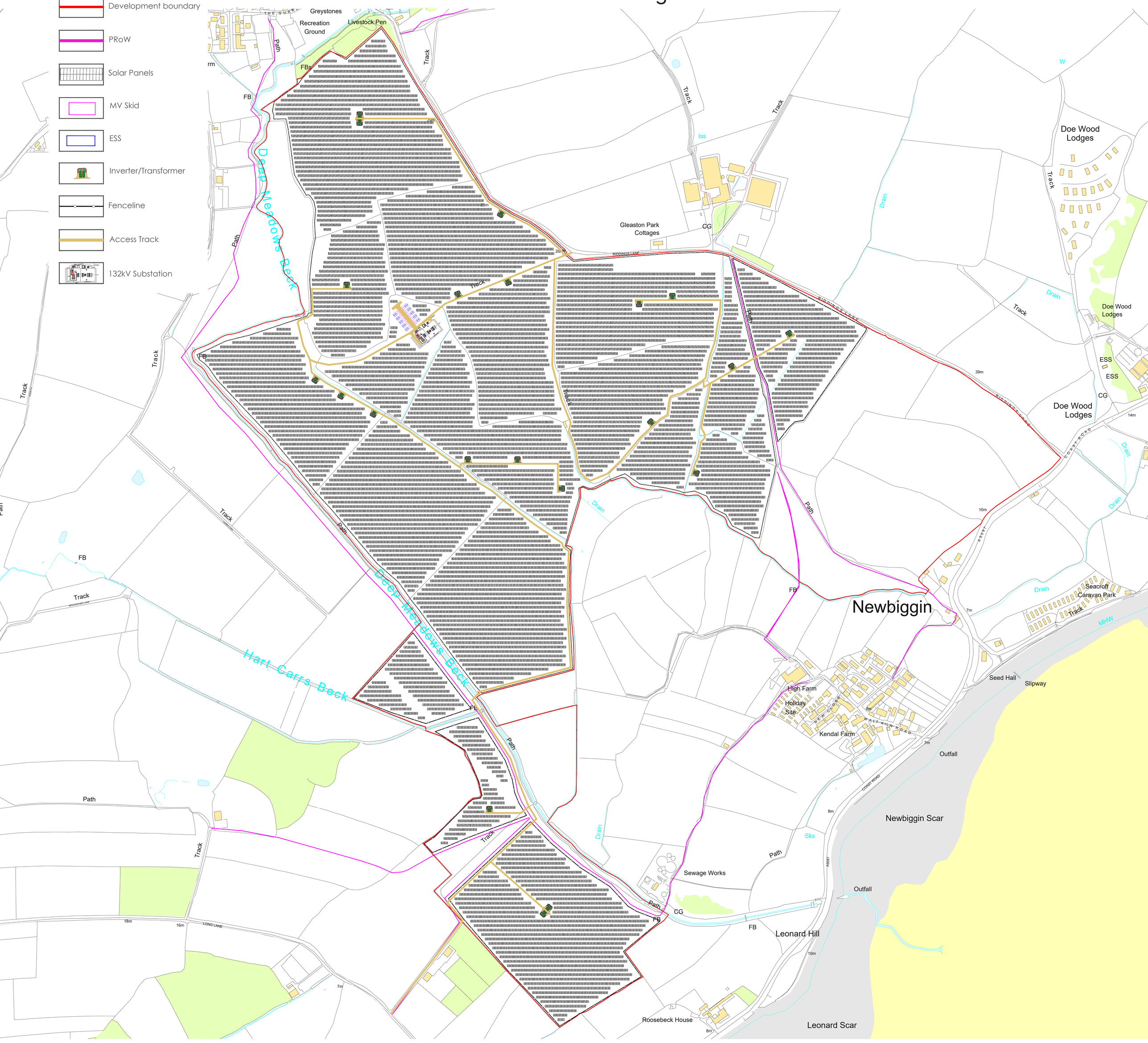
The Proposal

We are proposing a Solar and Storage development at land south of Riddings Lane, Gleaston.

The site has been carefully selected and the design to date has been informed by a number of desktop and on-site surveys.

This selected site has the following benefits:

- A confirmed grid offer for the 49.9MW solar and 20MW energy storage into the local distribution network
- Suitable access off the A5087 and Riddings Lane for construction vehicles.
- The site is located outside of any statutory and local planning designations, and any landscape designations.



Proposed Layout

Proposed Equipment

Solar arrays

The solar array is proposed to consist of ground-mounted solar photovoltaic panels with a generating capacity of up to 49.9MW. This will offset the annual energy needs of approximately 12,740 homes and save around 10,700 tonnes of CO2.

Energy storage units

The energy storage is proposed to consist of a containerised energy system and 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 20MW of electricity.

Frames, Panels and Inverters

The solar panels will be installed on frames that are approximately three metres tall and fixed to the ground via ground screws. 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

It is proposed that access to the site will be from Riddings Lane, off the A5087. Within the site, internal access tracks are proposed to allow suitable access throughout. 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 incorporating mammal gates. CCTV will be positioned along the fenceline, facing inwards and the substation and energy storage area will be enclosed by palisade fencing.

Transport

The below figure illustrates the indicative construction traffic route. We welcome feedback on the proposed routes.

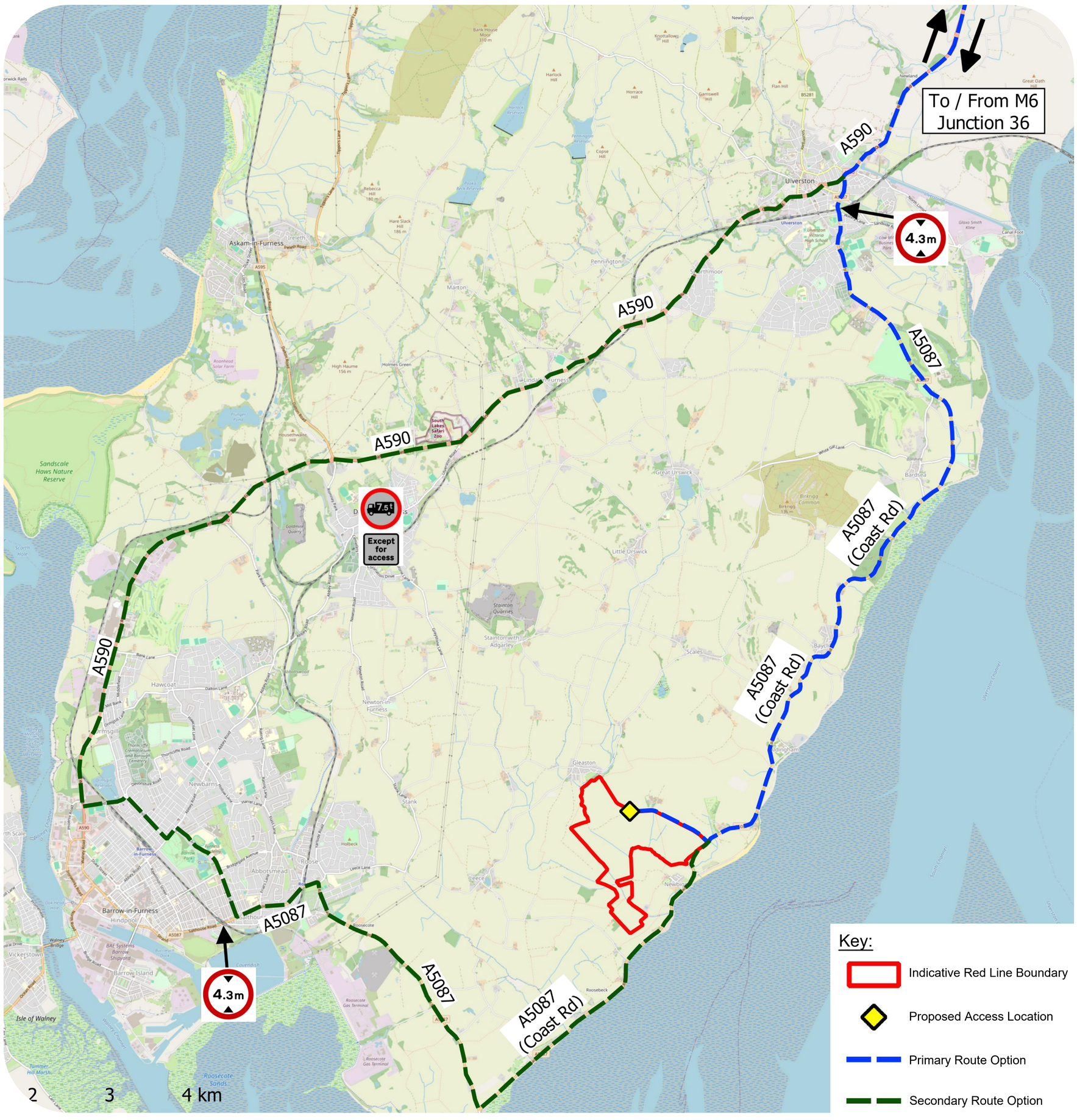
The planning application will be supported by a Construction Traffic Management Plan which will confirm the most suitable construction traffic route and site access points, for the construction vehicles.

The proposal will include two access points off Riddings Lane. This will allow suitable access to the site at all times.

The primary construction traffic route is shown in blue, routing from Junction 36 off the M6, via the A590, joining the A5087 at Ulverston.

The secondary construction traffic route, for use of tall vehicles, is shown in green, avoiding the height restriction on the A5087. This routes westbound on the A590, through Barrow-in-Furness and onto the A5087 towards Riddings Lane.

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.

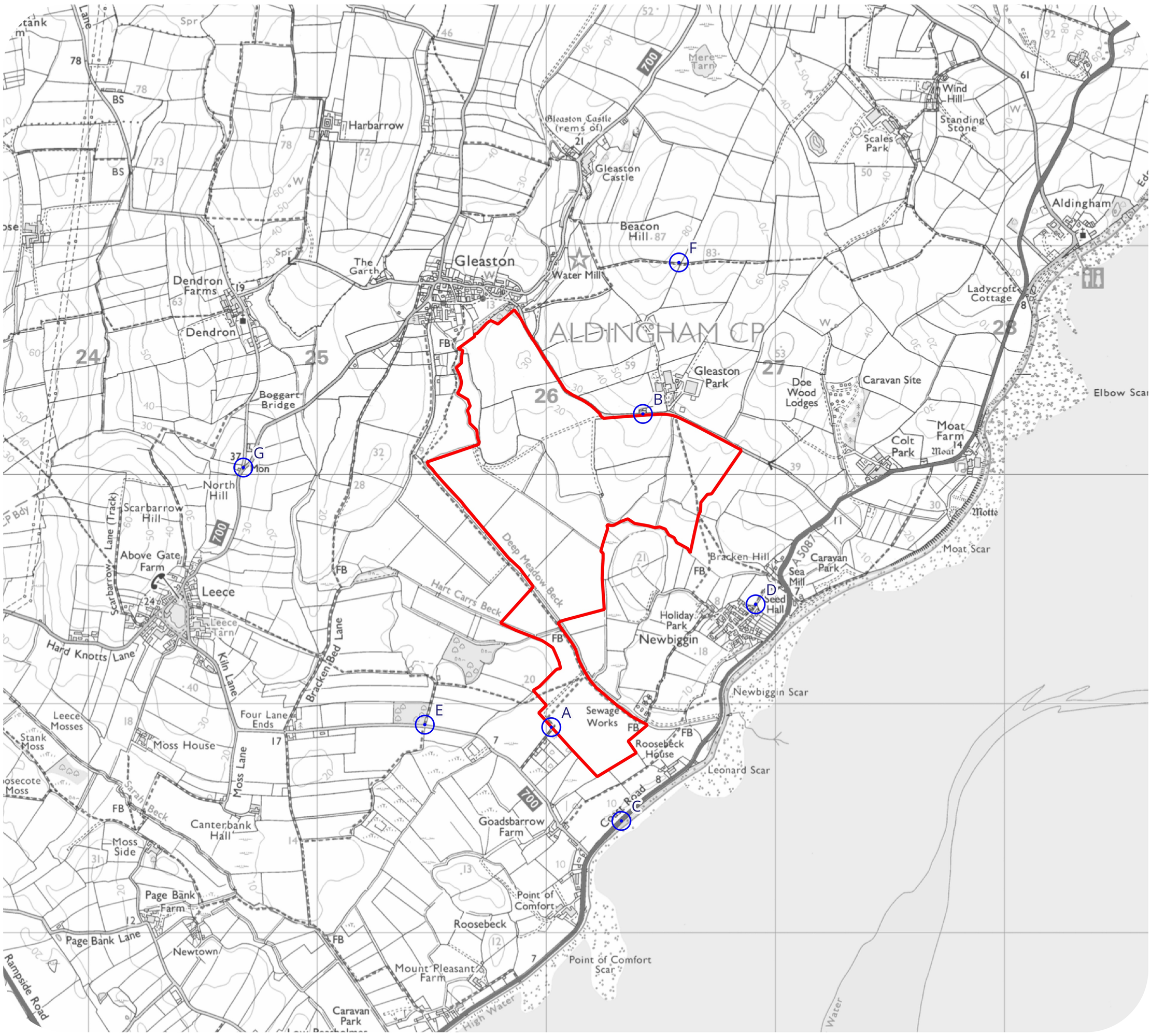


Proposed Construction Traffic Route

Landscape and Visual

We are currently undertaking a full Landscape and Visual Impact Assessment which will accompany the planning application. To date, we have engaged with the Council and have agreed the below viewpoint locations which will be assessed within the LVIA. We welcome any comments on these and opinions on additional viewpoint locations.

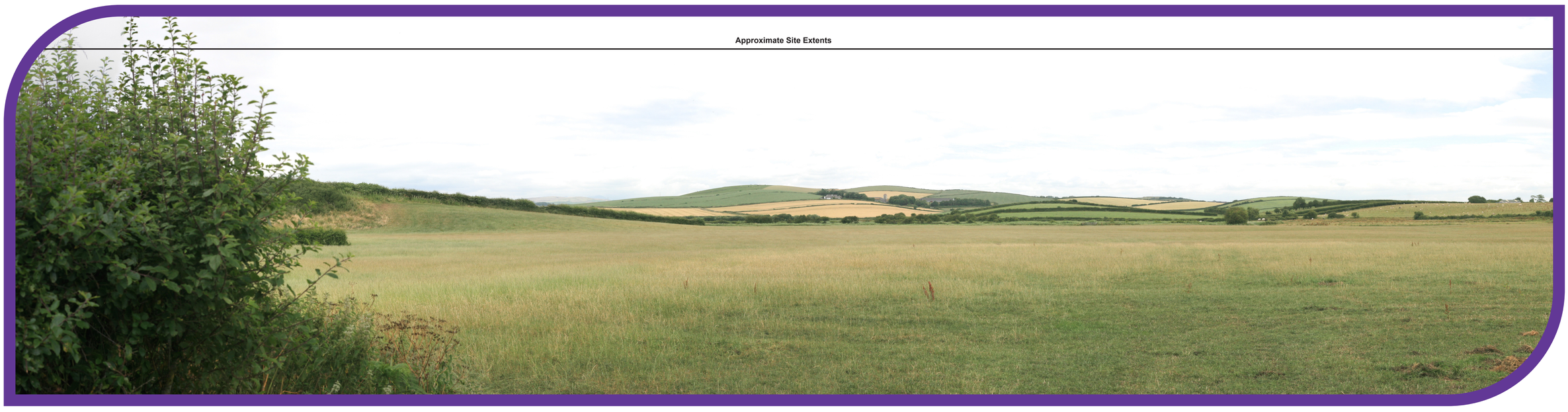
A selection of images from the below viewpoints will be taken and photomontages produced to provide a visual representation of how the project will look once construction has been completed and then 10-15 years into its operation.



Viewpoint Locations

Viewpoints

The following viewpoint location photsheets have been prepared from Viewpoints Aa, Ba, C and F, and demonstrate the proposed development extents.



Viewpoint Aa

Viewpoint Ba

Viewpoint C

Viewpoint F

Surveys to date

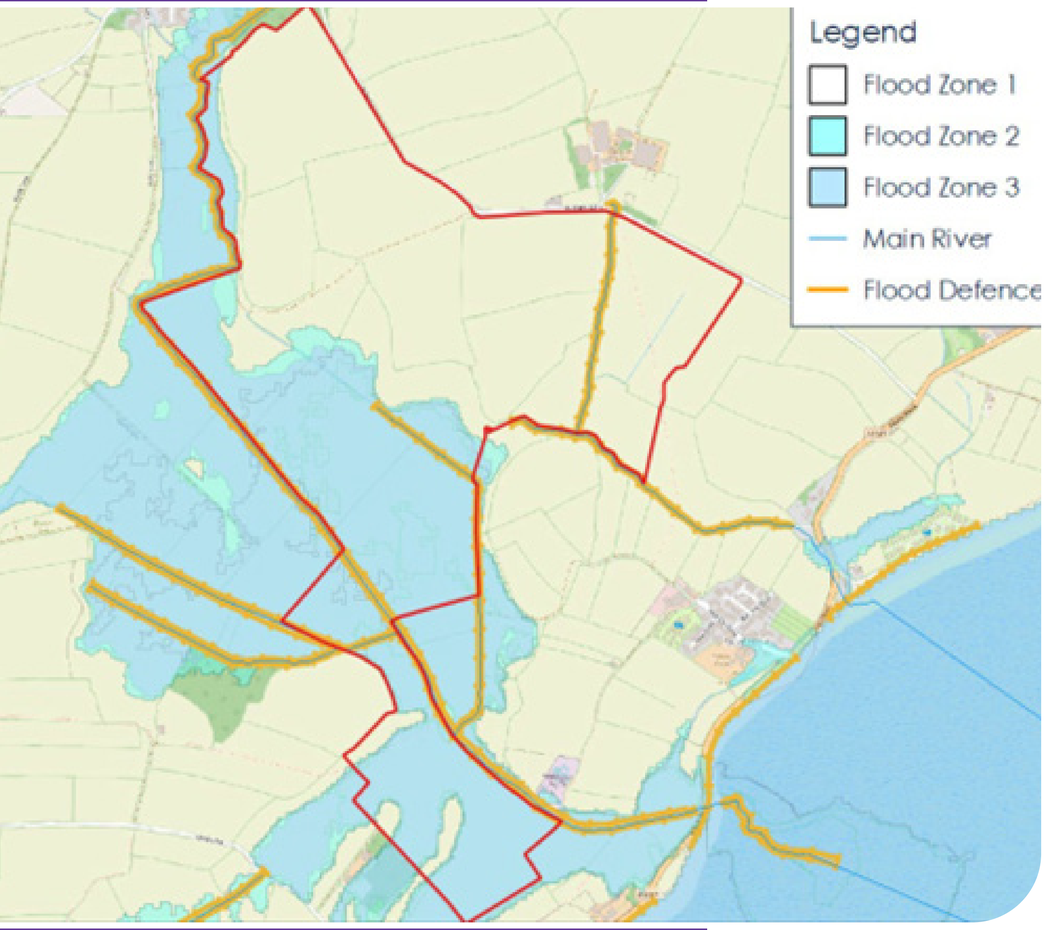
We are undertaking a number of surveys which will support the planning application. Details of the key surveys undertaken to date are shown below.

Ecology

The site is not located within any local or national ecological designations; however we have undertaken a number of site specific ecological surveys and the details of these will form part of the planning application. As the site is located within close proximity to the Morecambe Bay Site of Special Scientific Interest (SSSI)/Ramsar/Special Area of Conservation (SAC), we have undertaken a number of surveys, including wintering and breeding bird surveys and the planning application will be supported by a shadow Habitats Regulations Assessment.

Based on these surveys, the proposed development will include mitigation areas forming of:

- Wet grassland outside of the development area.
- Better quality grassland within the development area.
- Buffers from the hedgerows, woodland and the two becks.



Hydrology

The site is partially located within Flood Zones 2/3, therefore we are currently undertaking flood modelling work to ensure the proposed development will not increase flooding on or off site and to establish the proposed height of the panels within these zones. To date we have engaged with the Environment Agency and the Lead Local Flood Authority.

Due to the location within the Flood Zone, the planning application will include a Sequential Test and Exception Test, which are currently being progressed.

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 that the Grade I listed Gleaston Castle, Grade II listed Gleaston Cornmill and Grade II listed Goadsbarrow are likely to have their significance preserved by the proposed development.

The site has low potential to contain finds and features from all periods, however we have undertaken a geophysical survey in December 2023 which will be submitted as part of the planning application.

Enhancements and Benefits

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 49.9MW solar and 20MW storage Riddings 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:

per MW of storage

£50 To the local community

£20 Charitable donation

per MW of solar

£250 To the local community

£100 Charitable donation

Boosting Biodiversity

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

Riddings 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

Pre-application and community consultation - current

We engaged with the then South Lakeland District Council through pre-application discussions which has guided the surveys undertaken on the site and agreed the viewpoint locations for the Landscape and Visual Impact Assessment.

We will consolidate the feedback from this consultation event and from Westmoreland and Furness 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 - mid 2024

The planning application is expected to be submitted to Westmoreland and Furness Council in mid-2024.

Construction and operation

The construction period is expected to take 4-6 months and the proposed planting will be implemented in the first planting season following the construction activities.

Contact us

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Scan the QR code to visit the project website