

Appendix B

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1 Ensuring land is safe for development

A Geo-Environmental Report (by Redrock) has been submitted in support of the planning application which includes a desk-based contamination and land stability investigation. It concludes that there is low likelihood of extensive contamination on the Site and unlikely to pose risk to future users of the Site, and therefore an intrusive investigation and assessment is not required with respect to human health or the environment. With regards to land stability, there is the potential for natural subsidence hazards as a result of dissolution features in the chalk bedrock. Whilst no signs were recorded within the Site during a walkover, the desk study recommends that a geophysical study of the Main Site be undertaken prior to the commencement of works, which can be secured by a suitably worded planning condition.

Refer to the submitted Planning, Design and Access Statement and the Geo-Environmental Report for more details.

The Proposed Development therefore accords with Objective 1.

2 Ensuring access to and protection of the natural environment

The submitted LSP and indicative layout include proposals for enhanced hedgerow planting with trees, mixed scrub planting with small urban trees in the north-west, modified grassland around the ESS compound in the south, and other neutral grassland in the north. This would result in over +80% habitat units and +20% hedgerow units, well in excess of the 10% mandatory BNG, and an Urban Greening Factor >4. Biodiversity net gains will be secured via a suitably worded planning condition for a Habitat Management and Monitoring Plan (HMMP).

Refer to the submitted Planning, Design and Access Statement, Illustrative Landscape Masterplan and Ecological Impact Assessment.

The Proposed Development therefore accords with Objective 2.

3 Reducing negative impact of development on the local environment

The nearest noise sensitive receptors (NSR) to the Main Site are approximately 230 m to the west 120 m to the west and 250 m north of the Site boundaries. The Noise assessment submitted with the application concludes that the Proposed Development would not result in significant adverse effects on any NSR and no further mitigation measures are required.

Any operational lighting will be motion activated security lighting and due to separation distances and design measures is unlikely to give rise to local amenity concerns. A lighting strategy could be secured via planning condition if required.

The Proposed Development would not result in any emissions to air during its operation other than those from vehicles associated with periodic maintenance/inspection visits to the Site.

The design and layout of the Proposed Development would be developed in accordance with the National Fire Chief Councils (NFCCs) 'Draft Guidance on Grid Scale Battery Energy Storage Systems' (2024), and an Outline Energy Storage Safety Management Plan (OESMP) would be submitted with any future planning application.

The Flood Risk Assessment and Drainage Strategy submitted with the planning application confirms that, apart from the access track, the Proposed Development is not within areas of surface water flood risk, and would not result in significant adverse impacts on surface water movements. The proposed Drainage Strategy incorporates SuDS incorporating gravel bases beneath the ESS compound infrastructure to provide storage and an infiltration basin to provide a discharge destination.

The Proposed Development therefore accords with Objective 3.

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4 Conserving natural resources and reducing carbon emissions

The proposed North Cray Road ESS would be standalone energy storage, effectively charging up from the grid during periods of low demand (when there is surplus) and releasing the energy back to the grid (via Hurst Substation) during times of higher demand. It will take energy from the electricity grid when demand is higher or supply is lower, thus operating in either 'energy charge', 'energy storage' or 'energy discharge' modes while providing support balancing services to the National Grid. Standalone energy storage is recognised as renewable energy generation and contributes to stabilising the grid. Over time it also means there will be a lower emphasis on 'switching on' fossil fuel burning assets to meet demand during peak times (such as during the evening), because energy stored up during the day can be placed back onto the grid sustainably.

Energy storage recognised in policy as essential to meeting the Government's legally binding Net Zero target. The Government's recent 'Clean Power 2030' document (released in December 2024) forecasts how much energy storage we need to decarbonise the grid by 2030 – being 23-27 Gigawatts of battery capacity and 4-6 GW of long duration energy storage. Essentially there is a need to build out a lot of these types of installations across the UK in order to meet grid demand and increase our security of supply by 2030, so considerable weight is being attached to ESS proposals provided they can be mitigated sufficiently.

Energy storage was redefined by the Government under the Energy Security Bill (2023)¹ and subsequent Energy Act 2023 to form a distinct subset of generation, it defined the storage as energy that was converted from electricity and is stored for the purpose of its future reconversion into electricity. In essence, Energy Storage under UK law is considered as low carbon energy generation.

In terms of Megawattage the North Cray Road ESS can store and release (i.e. generate) 200MW. To put the above into perspective, 200MW being released to the grid would be enough to power approximately 647,590 homes for 2 hours.

Further to the above, whilst a maximised version of the plant and infrastructure is to be assessed in each planning application, the final details of the energy storage kit (such as manufacturer information) is yet to be selected and would be secured by planning condition. Importantly, the final plans to submitted to discharge the planning condition would not exceed the assessed maximum and would stipulate the units/manufacturer from which they are to be procured. This approach is often called 'the Rochdale Envelope' and is applied to energy/infrastructure planning proposals (including storage and solar) nationwide. Accordingly, the Applicant is not able to make any statements in regard to the exact energy storage units coming forward at this time.

The Proposed Development therefore accords with Objective 4.

¹ Energy Security Bill factsheet: defining electricity storage (2023), Department for Energy Security and Net Zero, Accessed via <https://www.gov.uk/government/publications/energy-security-bill-factsheets/energy-security-bill-factsheet-defining-electricity-storage>

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5 Ensuring comfort and security in and around the development

As mentioned above under Objective 3, the Flood Risk Assessment and Drainage Strategy submitted with the planning application confirms that, apart from the access track, the Proposed Development is not within areas of surface water flood risk, and would not result in significant adverse impacts on surface water movements. The proposed Drainage Strategy incorporates SuDS incorporating gravel bases beneath the ESS compound infrastructure to provide storage and an infiltration basin to provide a discharge destination.

Access to the Proposed Development Site will be strictly controlled. Operational security of the Proposed Development will be achieved by providing suitable fencing around the ESS compound Area perimeter (up to approximately 2.4 m above AGL). Site security will be continuously remotely monitored via the use of CCTV/ security cameras utilising infra-red (invisible) lighting (attached to emergency lighting columns, approximately 3.0 m AGL in height).

The remaining principles associated with internal air quality, natural lighting, and accessibility within buildings are not relevant to the Proposed Development which is for energy development and does not comprise habitable buildings.

The Proposed Development therefore accords with Objective 5.

6 Minimising adverse effects of the construction process on site and surroundings

Construction noise from the Proposed Development would not be significant at the nearest sensitive receptors, and any noise mitigation measures could be included in a Construction Environmental Management Plan (CEMP) secured by way of a suitably worded planning condition. Construction lighting would be limited to the construction hours stated in Table 3.2 in the PDAS. While the number of construction vehicle trips is expected to be quite limited, the CTMP submitted with the planning application includes measures to manage and mitigate construction traffic including appropriate construction routing arrangements on roads which can accommodate the safe and efficient movement of HGVs, hours of construction, banksmen and HGV booking system. Further to this, a Construction Environmental Management Plan (CEMP) can be secured by a condition to minimise and manage effects during the construction process.

The Proposed Development therefore accords with Objective 6.

7 Encouraging sustainable living through building design and information provision

The Principles within Objective 7 relate to habitable buildings for residential and non-residential development, including waste minimisation and management, car parking controls, and the provision of cycle storage and low carbon vehicle nodes. This Objective is therefore not relevant to the Proposed Development which is for energy storage.