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Department of Development
Council Offices
Church Walk
Clitheroe
Lancashire
BB7 2RA

4245 Park Approach
Thorpe Park
Leeds
LS15 8GB

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Dear Sir or Madam,

REQUEST FOR A SCREENING OPINION – PROPOSED BATTERY ENERGY STORAGE UNIT, LAND OFF BURNLEY ROAD, SIMONSTONE, BURNLEY, BB12 7ND.

I write to request a Screening Opinion under Regulation 5 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017 (the EIA Regulations), to establish whether or not a proposed development for a battery energy storage unit should be subject to an Environmental Impact Assessment (EIA).

The EIA Regulations state that requests for Screening Opinions shall be accompanied by a plan to identify the land, a brief description of the nature and purpose of the proposal and, if possible, effects on the environment. The following commentary provides a description of the proposal, and a location drawing is attached for reference purposes.

Introduction

As we move forward and aim to achieve a carbon neutral economy and mitigate the risks and effects of climate change, cleaner and more sustainable methods of power generation are being brought online which are intermittent in character (e.g. wind and solar PV) and place certain demands on the electricity grid due to fluctuations in power generation and demand.

The National Grid experiences a large fluctuation of demand throughout the day and throughout different times of the year. During periods of high demand, the National Grid aim to increase supply to maintain a 20% supply margin which is essential in eliminating, as far as possible, the risk of power shortages and blackouts, when there is an unexpected change in demand, or a sudden loss of supply. Historically, conventional power stations could be operated with some certainty. However, as the UK moves towards a more environmentally sustainable energy supply system, with an increase in renewable energy sources, there is an increased risk of electricity supply fluctuations, depending on prevailing weather conditions, and therefore an increased need for facilities to store energy, in order to try and match the supply to the demand. Such storage facilities include Battery Energy Storage Systems (BESS).

BESS do not emit Carbon Dioxide or generate electricity but provide a balancing mechanism drawing electricity (charging) when levels on the Network are above that of demand. When levels of electricity on the grid are

below that of demand the electricity stored in the batteries can be fed back (discharged) onto the network to meet the demand so that there is no loss of power to end users. Smooth grid operation relies on the provision of rapid reactive power services either by generation or dedicated facilities to enable frequency stabilisation. BESS provides sub-second response times, so offer a reliable solution to a number of the Grid's balancing issues thus supporting the development and deployment of low carbon Intermittent energy technologies upon which society must increasingly rely on to satisfy its energy requirements.

The Department for Business, Energy and Industrial Strategy stated in a press release in July 2020¹ that

"...flexible technologies like batteries will form part of the UK's smarter electricity grid, supporting the integration of more low-carbon power, heat and transport technologies..."

The key to capturing the full value of renewables is in ensuring homes and businesses can still be powered by green energy even when the sun is not shining, or the wind has stopped blowing."

The National Grid note:

*"battery storage technologies are essential to speeding up the replacement of fossil fuels with renewable energy. Battery storage systems will play an increasingly pivotal role between green energy supplies and responding to electricity supplies."*²

Sirius Renewable Energy Limited seeks to support the increase in renewable energy generation and the transition to a lower carbon energy supply system through developing a BESS on land approximately 1km to the south of Simonstone.

The Site

The proposed development site is located on land to the northwest of Burnley Road, Simonstone, Burnley, BB12 7ND. Burnley Road in Simonstone is situated on the A678 between Blackburn and Burnley. The application site is a former colliery/coal mine slag heap which has been levelled and has naturally vegetated within an existing industrial estate area. To the west of the site is number of old former mine buildings which have been previously used for light engineering works. To the north and east are industrial and office buildings such as Fort Vale Engineering company. To the west and beyond the A678 to the south is the River Calder.

Beyond the immediate site area to the west and south is predominantly agricultural land used for stock grazing. Approximately 0.5km to the southwest is Altham Industrial Park. The nearest settlements are Simonstone approximately 1km to the north and Padham approximately 1.5km to the east.

The site, although located adjacent to Time Technology Park, has not been allocated for any specific land use within the Adopted Local Plan. In addition, there is no information found within the Core Strategy concerning

¹ <https://www.gov.uk/government/news/battery-storage-boost-to-powergreener-electricity-grid>

² <https://www.nationalgrid.com/stories/energy-explained/what-is-battery-storage>

any particular development purpose for the site. There are no major constraints within or surrounding the site, including ecological statutory designations, heritage designations or a higher risk of flooding.

The site had previously been granted planning permission for the installation and operation of 25 containerised battery units for the storage of electricity (planning application ref. 3/2018/0106). However, the planning permission has since lapsed and was never implemented by the previous developer.

The proposal

Our client, Sirius Renewable Energy Limited, is seeking to develop a battery storage compound across approximately 1.5 hectares of land with a maximum export capacity of 70MW.

The proposal will comprise the following:

- 28 No. battery containers and 28 No. transformers/inverter units;
- Developer and Distribution Network Operator (DNO) substation compound and associated cabins including a switchgear / meter room;
- Acoustic barrier;
- Underground cable to the point of connection with the local distribution network;
- Perimeter fencing 2.4m high and inward facing infra-red CCTV; and
- Internal service road.

The proposed development is for the installation and operation of a BESS with capacity to store and export up to 70MW of power to the local distribution network for up to 2 hours. The facility will provide balancing services to maintain the sufficient power on the 'grid' at times of high demand for electricity and to support the continuing deployment of renewable energy.

The proposed development will consist of battery containers units which will have a similar appearance to shipping containers and measure typically 12m long by 3m wide and 3m high. Transformers, feed pillars, substations and control cabins will be no higher than 3m. The exact container unit is yet to be determined. From the onsite substation, the point of connection with the local distribution network will be via the pylon tower on to the existing 132kv overhead powerlines within the adjacent field to the west. The overhead powerlines are already connected to Electricity North West Padiham substation which is approximately 1km to the east of the proposal site.

As mentioned above, as the UK moves towards a more environmentally sustainable energy supply system, with an increase in renewable energy sources, there is an increased risk of electricity supply fluctuations, depending on prevailing weather conditions, and therefore an increased need for energy storage developments. The batteries will have zero emissions to atmosphere, limited noise generation and once constructed, minimal traffic movements to site.

EIA criteria

The EIA Regulations contain two development schedules (Schedule 1 development and Schedule 2 development). Schedule 1 contains a list of development where EIA is mandatory. The proposal does not fall within Schedule 1 development. Although battery storage developments are not specifically listed under either Schedule 1 or Schedule 2 developments of the EIA Regulations, Schedule 2 refers to *"Energy Industry"* categories and it is considered that the proposal falls within the category of *"Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)"*. The applicable threshold for consideration of Schedule 3 criteria is if the site exceeds 0.5 hectares.

The selection criteria for screening Schedule 2 development are considered below.

Characteristics of development

- a) The site of the proposal covers a small area of the former coal mining site, which has since been cleared and levelled, and is now vacant land with naturally vegetated scrubland. The limited height of the units (less than 3m above ground level), their non-intrusive structure and their benign, modular and ephemeral nature means that they will be well screened from the surrounding area and therefore not have a significant impact on the receiving environment. The construction and operational phases do not include any complex or hazardous works or operations and will not lead to any potential adverse environmental effects;
- b) The site is situated within an existing business park area with industrial/office units to the north and south. Given the proximity of the two residential properties to the south of the application site, there is potential for cumulative effects through noise generation. However, attenuation measures (close boarded wooden fence/soil bund) can be put in place to ensure no adverse effects will be experienced; this will be demonstrated through a detailed noise assessment as part of the planning application. Visually, the site benefits from established vegetation that screens views from public areas;
- c) The construction and operation of the proposed development requires limited maintenance, thus consuming limited resources. Furthermore, given the site's former use as a coal mining site, and thus limited future uses, the proposal is considered an efficient use of the land;
- d) During the lifespan of the proposal, little or no waste will be generated. The site will be used as an energy storage facility which will provide 'grid balancing services' supporting zero emission energy generation;
- e) The development would not create pollution or nuisance given the benign nature of the battery units and proposal. Any noise generation can be appropriately attenuated to acceptable levels;
- f) The scale and nature of the proposal could not lead to major accident and / or disaster; and,
- g) The modular and contained nature of the development would not involve the application of substances or technologies that would create a significant risk to human health.

Location of development

- a) The proposed development site comprises part of the former coal mining site, which is no longer operational and has been cleared and levelled. The proposed development will be designed so that they

are non-intrusive to the existing ground conditions. The site is a restored brownfield land with limited development prospects and thus the proposal would constitute an efficient use of the site.

- b) Although the proposal site is located within an existing business park, it is currently undeveloped with naturally vegetated scrubland. The proposal will have a lifespan of 40 years, after which all equipment will be removed from the site and returned to its former state.
- c) The proposal site is located c. 1km from the village Simonstone to the north. The nearest statutory ecological designation is Lockwood Gorge SSSI 2.8km to the southeast of the site, given the distance and intervening land-uses the proposal is unlikely to have a significant impact on this designation. The site is within Flood Zone 1 and therefore has a low risk of flooding. The nearest Listed Buildings are The Corn Mill and Mill Cottages (now one) Mill House, located approximately 270m to the south of the site. The benign nature of the proposal, its enclosed and screened location will provide limited opportunity to create significant environmental effects on identified receptors.

Types and characteristics of the potential impact

- a) The site measures c. 1.5 ha and located approximately 1km from the nearest residential area (Simonstone to the north). The diminutive scale of construction and benign nature of operation means the battery storage facility within the rural setting is unlikely to significantly affect an area of population;
- b) Due to the benign nature of the proposal impacts are not expected to be significant;
- c) The development site would not cross or impact upon local authority boundaries as impacts beyond the site boundary would be limited in extent;
- d) The magnitude or complexity of any impacts resulting from the proposal would not be significant due to the modular nature of the facility and that there are no emissions to atmosphere once operational;
- e) Technical and environmental assessments that will accompany planning application will demonstrate the probability of any potential impacts will be limited;
- f) Once the proposal has reached the end of the operational period, the site can be fully restored back to farmland reflecting the context of the surrounding area;
- g) Although the proposal site is located within an existing industrial/business park area, it is currently undeveloped with naturally vegetated scrubland. Given the proximity of the two residential properties to the south there is potential for cumulative effects through noise generation. However, attenuation measures can be put in place to ensure no adverse effects will be experienced; this will be demonstrated through a detailed noise assessment as part of the planning application. Visually, the site benefits from established vegetation that screens views from public areas; and,
- h) Technical and environmental assessments that will accompany planning application will demonstrate the potential impacts will be limited to the receiving environment;

It is therefore considered that the characteristics of the proposed development (as detailed in Schedule 3) are not likely to have the potential for 'significant' environmental effects beyond that already consented and thus

would not constitute EIA Development. It has been demonstrated that an EIA is not required in connection with the above application.

Notwithstanding the above, the planning application submission documents will consist of the following key documents and technical assessments:

The planning application submission documents will consist of the following:

- Supporting Statement including the planning policy appraisal;
- Drawings including:
 - site location plan;
 - general site layout;
 - application boundary plan;
 - infrastructure details (elevations of battery containers/transformers/feed pillars/substation cabins);
 - fencing and security arrangements; and
 - surface water drainage provisions.
- Appropriate technical and environmental assessments will be provided to support the planning application:
 - Preliminary Ecological Appraisal;
 - Arboricultural Survey;
 - Flood Risk Assessment & Drainage Management Strategy;
 - Noise Assessment;
 - Heritage Statement;
 - Coal Mining Risk Assessment; and
 - Ground Conditions Report.
- A Statement of Community Involvement describing stakeholder engagement will be provided.

In conclusion, with regards to all aforementioned factors, we respectfully request the Council's formal response on the nature of the development in the form of a Screening Opinion.

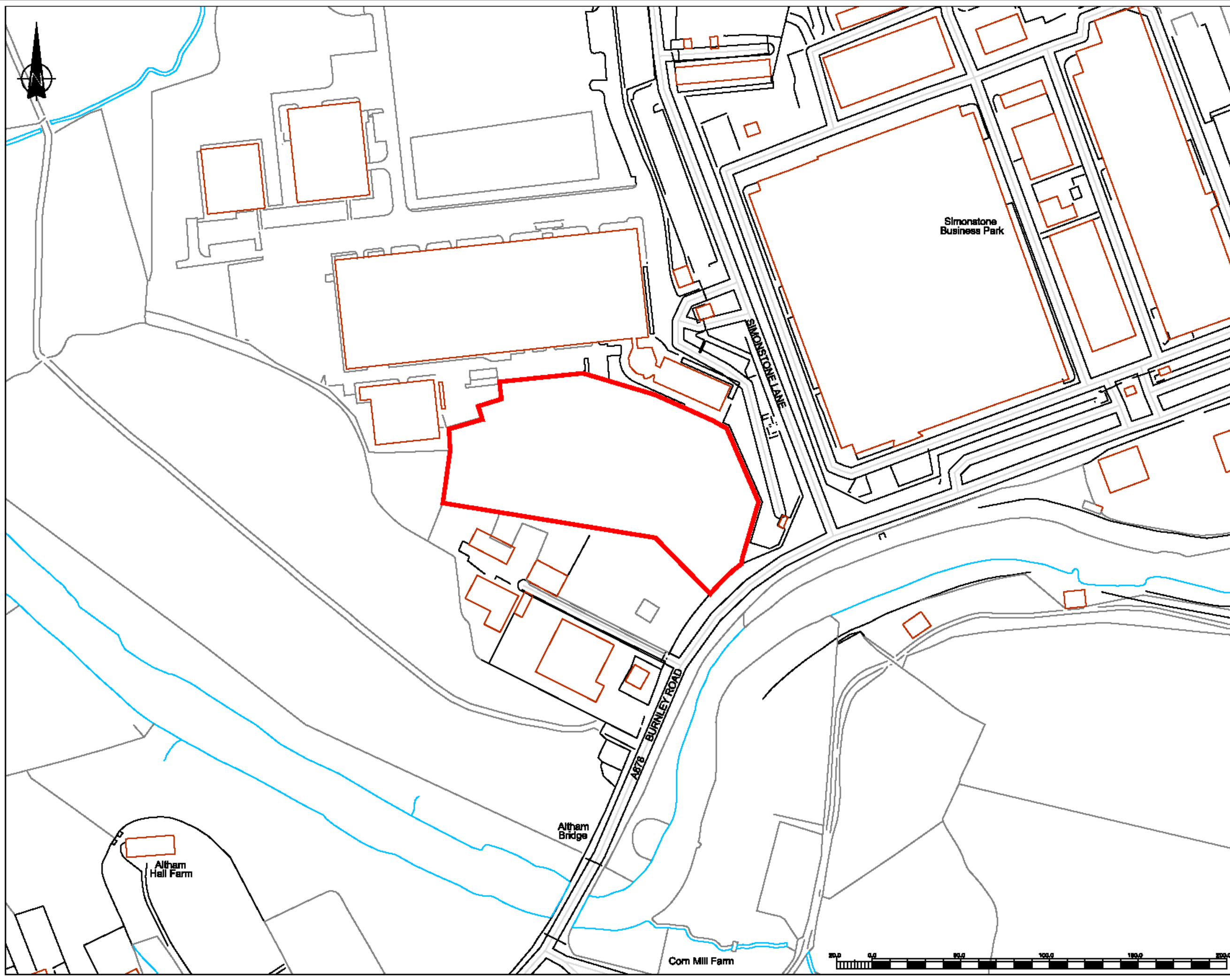
We look forward to receiving an acknowledgement of this request. If you would like to discuss any of the above matters, please contact the undersigned.

Yours faithfully,



For and on behalf of Sirius Planning Ltd

ENC – SRE1140/03/01 – Site Location Plan; SRE1140/03/02 – Aerial Location Plan



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KEY

— SITE BOUNDARY

REV	DESCRIPTION	DATE	BY

CLIENT





4542 Park Approach, Thropia Park, Leeds, LS11 8BB, 0113 284 8888

JOB TITLE

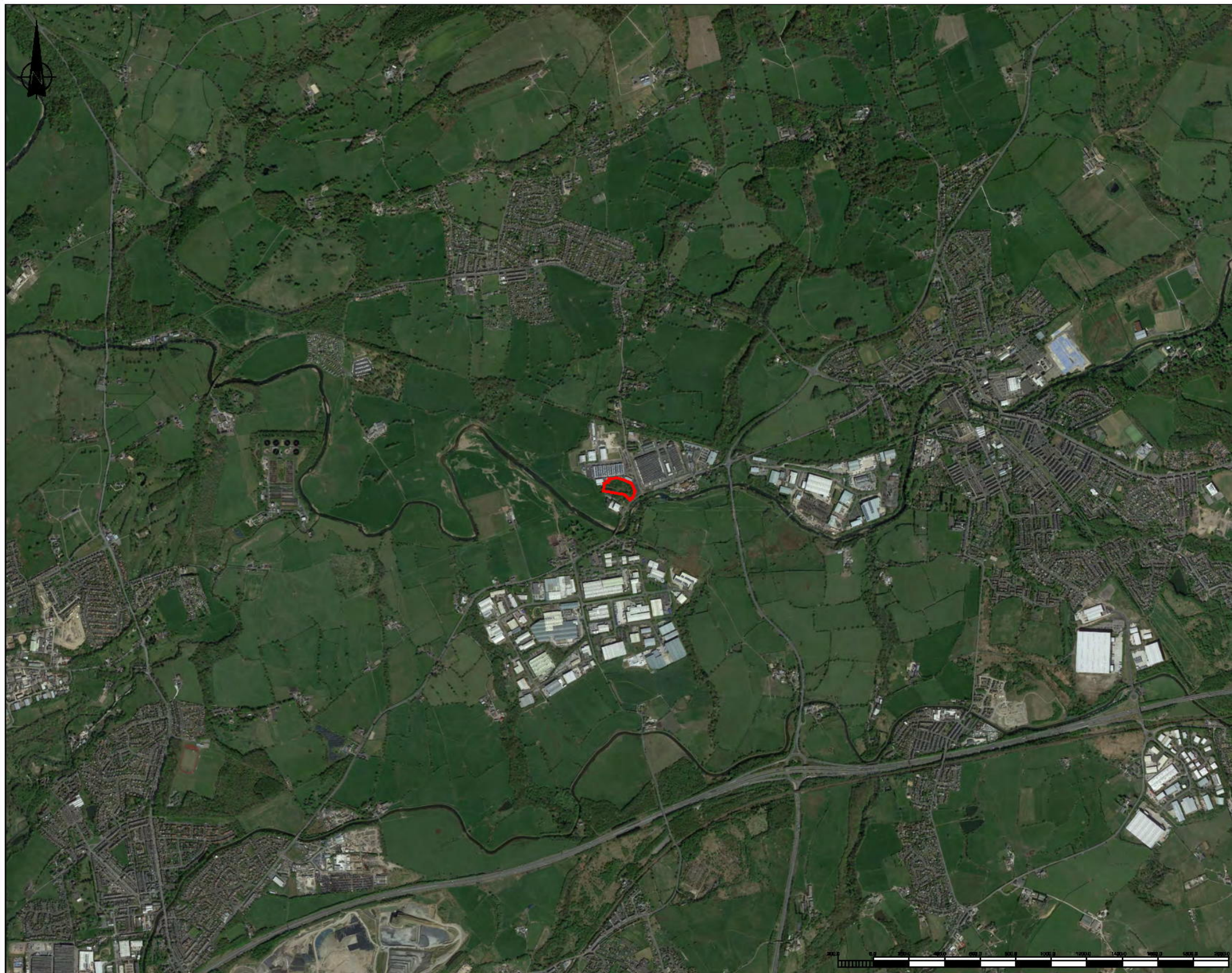
CALDER WORKS

DOCUMENT TITLE

SITE LOCATION PLAN

NAME	DATE	APPROVED BY	DATE
S.T.	3/8/2021	D.B.	3/8/2021

SCALE	DATE	PROJECT NUMBER	REVISION
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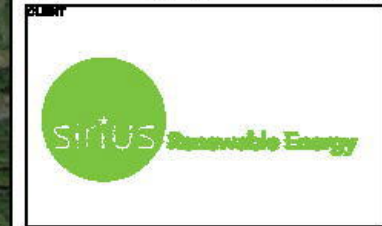


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KEY

— SITE BOUNDARY

REV	DESCRIPTION	DATE	BY
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JOB TITLE

CALDER WORKS

PROJECT TITLE

SITE LOCATION PLAN - AERIAL

DATE	3/8/2021	DATE	3/8/2021
BY	S.T.	BY	D.B.
SCALE	1:20,000	SCALE	ASL
PROJECT NUMBER	SRE1140/01/02	REVISION	0