South Humber Bank Energy Centre Development Consent Order

Proposed new low carbon energy centre at South Humber Bank Power Station

Welcome

This consultation event is intended to provide you with information about the proposed South Humber Bank Energy Centre (SHBEC) Project and seeks your comments and views on EP Waste Management Limited's proposals.

Aims

The aims of this event are to:

- provide up-to-date information on the SHBEC Project;
- explain the differences between what has already been approved and what is now proposed;
- show where SHBEC will be located and what it could look like;
- explain how SHBEC will work and why it is needed;
- explain the studies being undertaken to assess the environmental impacts of the proposals;
- outline how the consenting process works; and
- gather feedback to help shape our proposals as they are developed in more detail.

About EP Waste Management Limited

EP Waste Management Limited (EPWM) is a subsidiary of EP UK Investments (EPUKI), which acquired the South Humber Bank Power Station (SHBPS) site from Centrica in 2017. The SHBPS site accommodates a combined cycle gas turbine (CCGT) power station with a gross electrical output of around 1,400 megawatts (MW).

EPUKI owns and operates a number of other power stations in the UK. These include Langage Power Station, a CCGT power station near Plymouth in Devon; Lynemouth Power Station, a biomass fuelled power station in Northumberland; and power generation assets in Northern Ireland. EPUKI also owns sites with consent for new CCGT power stations in Norfolk and North Yorkshire.

Project Benefits

SHBEC will produce low carbon electricity from Refuse Derived Fuel (RDF). It will make use of up to approximately 750,000 tonnes of fuel per year, producing up to 95 MW gross output - enough electricity to supply the needs of close to 100,000 homes.

SHBEC will directly employ around 50 people during its operation and create around 600 jobs during construction. It represents an investment of around £300 million in North East Lincolnshire and will provide supply chain opportunities for local businesses.

Through the generation of low carbon electricity SHBEC will make a positive contribution towards the UK Government's climate change commitments and the security of national electricity supply. It will also make a positive contribution to waste management by making use of waste material that would otherwise go to landfill or be exported overseas.



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April 2019 Planning Permission

Full planning permission was granted by North East Lincolnshire Council (NELC) under the Town and Country Planning Act 1990 on 12th April 2019 (the 'Planning Permission') for SHBEC. The Planning Permission approved the construction of an energy from waste (EfW) power station at the SHBPS site with a gross electrical output of up to 49.9 MW (the 'Consented Development').

It is anticipated that EPWM will develop the detailed design of the Consented Development and seek approval of these details by NELC during Quarter 1 (Q1) of 2020. Construction is expected to start later in Q1 2020.

Development Consent Application

Since the Planning Permission was granted, EPWM has been assessing potential opportunities to improve the efficiency of the Consented Development and is now proposing an EfW power station at the Site with a gross electrical output of up to 95 MW (the 'Proposed Development'). The Proposed Development will require some additional works at the Site (additional to those covered by the Planning Permission), however, no changes are proposed to the maximum building dimensions and annual fuel throughput that were approved by the Planning Permission.

As the Proposed Development will have a gross electrical output of more than 50 MW, it is classed as a 'nationally significant infrastructure project' under the Planning Act 2008, which requires development consent from the Secretary of State for Business, Energy and Industrial Strategy before it can be constructed and operated. EPWM anticipates submitting its application for development consent during Q1 2020.

Prior to submitting any application for development consent, EPWM needs to carry out this pre-application consultation in accordance with the Planning Act 2008. The consultation involves the local community and other stakeholders and is taking place from 31st October to 13th December 2019.

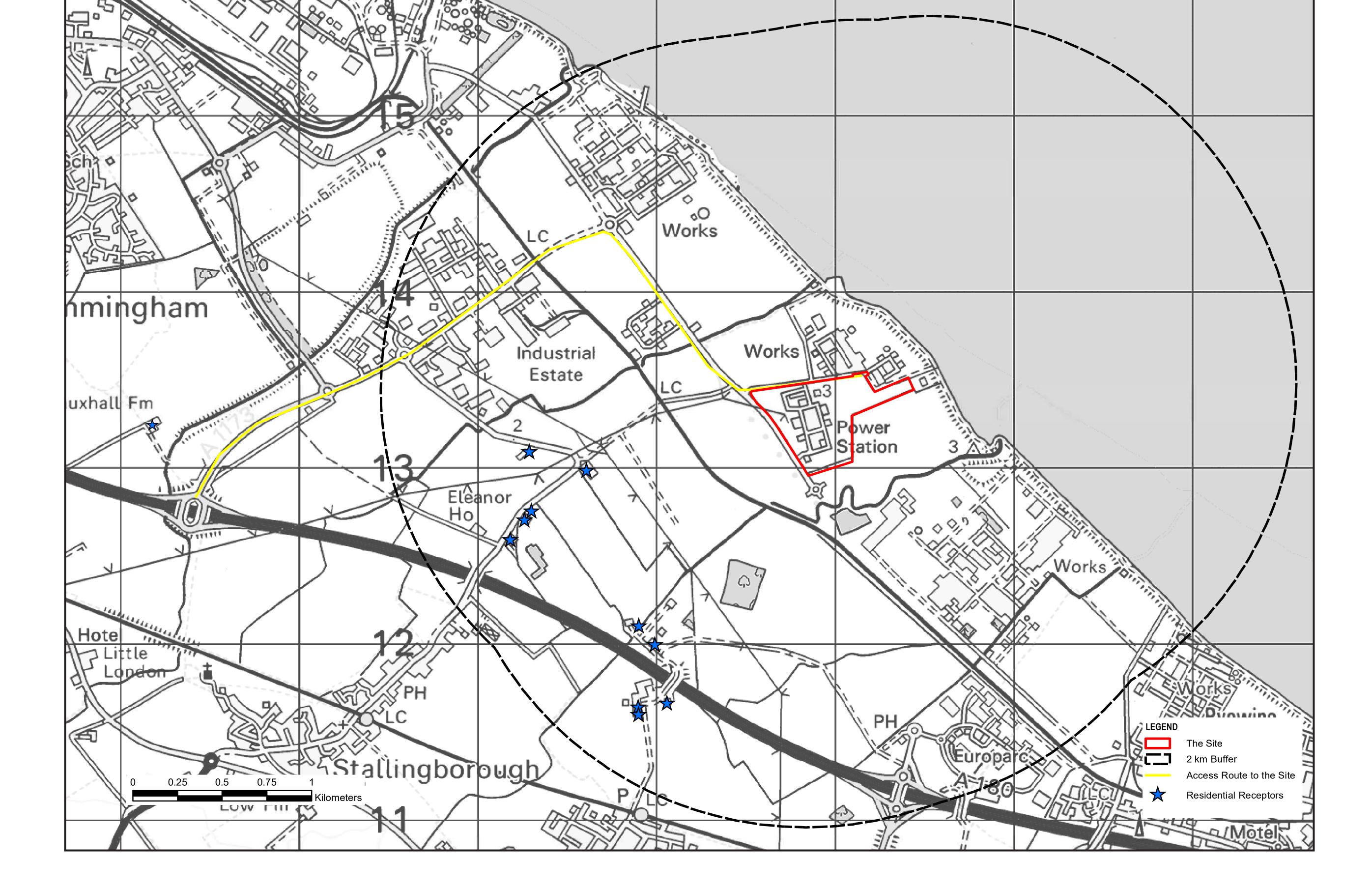


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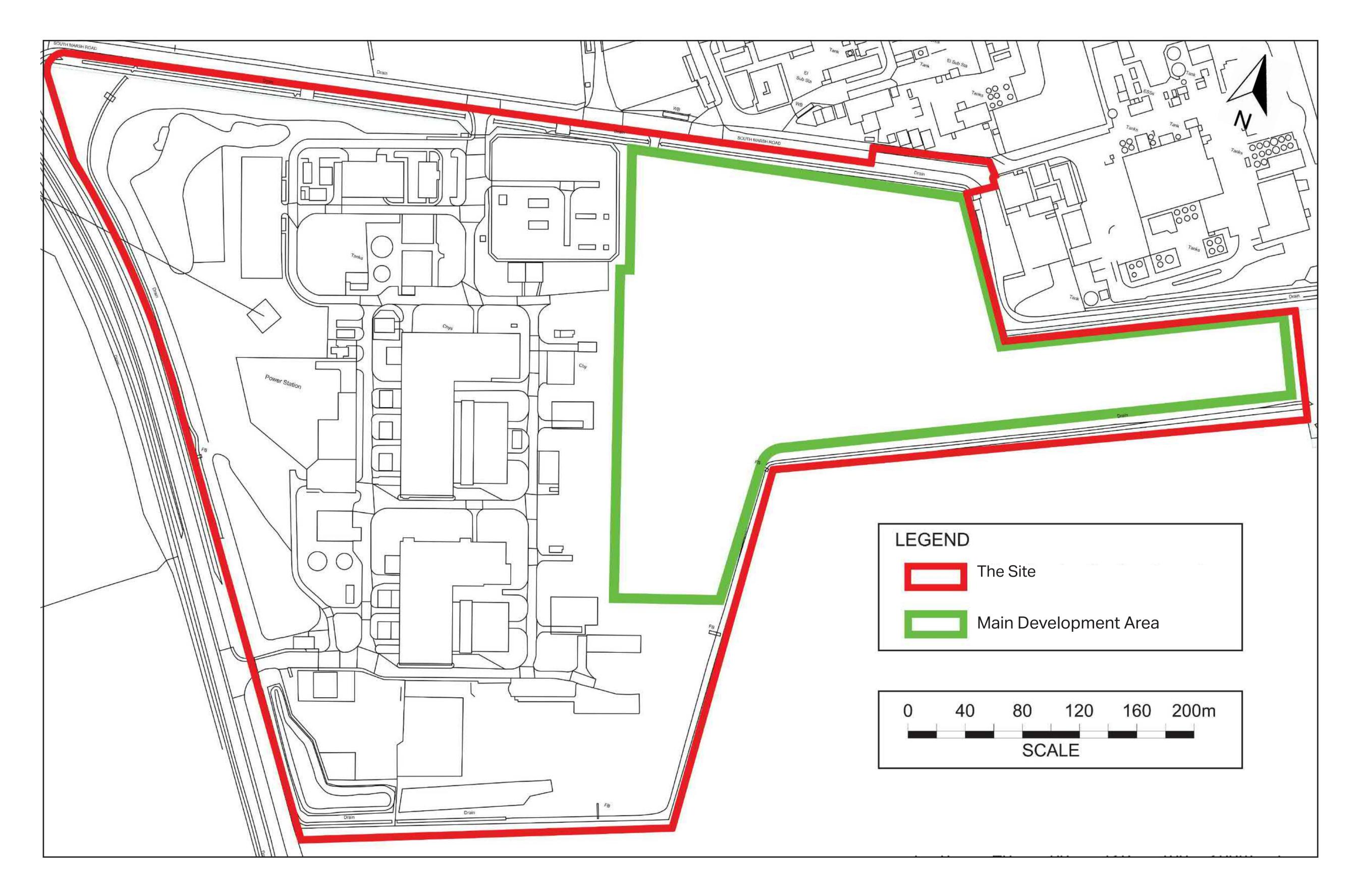
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The Site

SHBEC will be built on available land within the boundary of the SHBPS site on South Marsh Road, near Stallingborough, between Immingham and Grimsby in North East Lincolnshire. The application boundary is referred to as 'the Site'.



The Main Development Area for SHBEC is located to the east of the existing CCGT power station and comprises largely undeveloped land. Cooling water pipelines (associated with the CCGT power station) and other utilities cross the Main Development Area below ground and these have influenced the layout of the EfW power station.



The remainder of the Site (outside the Main Development Area) comprises the operational SHBPS Site. Some of the land within this area will be used in connection with SHBEC for construction laydown purposes, ecological mitigation and access.

The Site is located within an area that comprises a mix of industrial and agricultural land use, with the Humber Estuary to the east. The nearest residential properties are located approximately 1 kilometre west of the Site on South Marsh Road. The nearest settlement is the village of Stallingborough over 2 kilometres to the south-west.

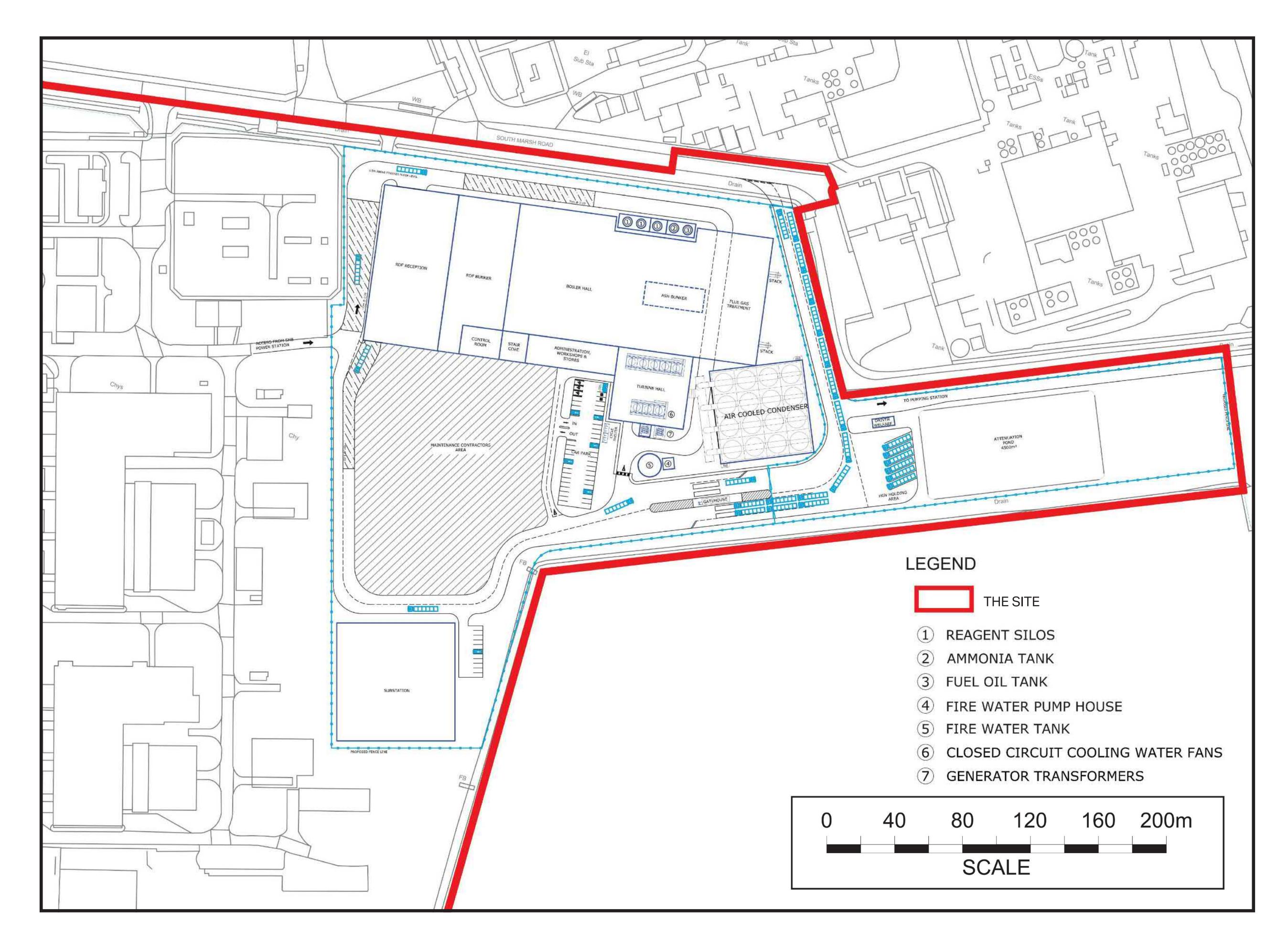
The Site is accessed from both the west, along Hobson Way, and from the north, along South Marsh Road and has good access to the A180, which avoids traffic having to pass through residential areas.

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The EfW Power Station

SHBEC will comprise a number of buildings and structures. These include a fuel reception hall, fuel storage bunker, boiler house, a flue gas treatment facility, emissions stacks, turbine hall, air-cooled condensers and an administration block. There will also be vehicle weighbridges, internal access roads and parking, a heavy goods vehicle (HGV) holding area and an electrical substation.

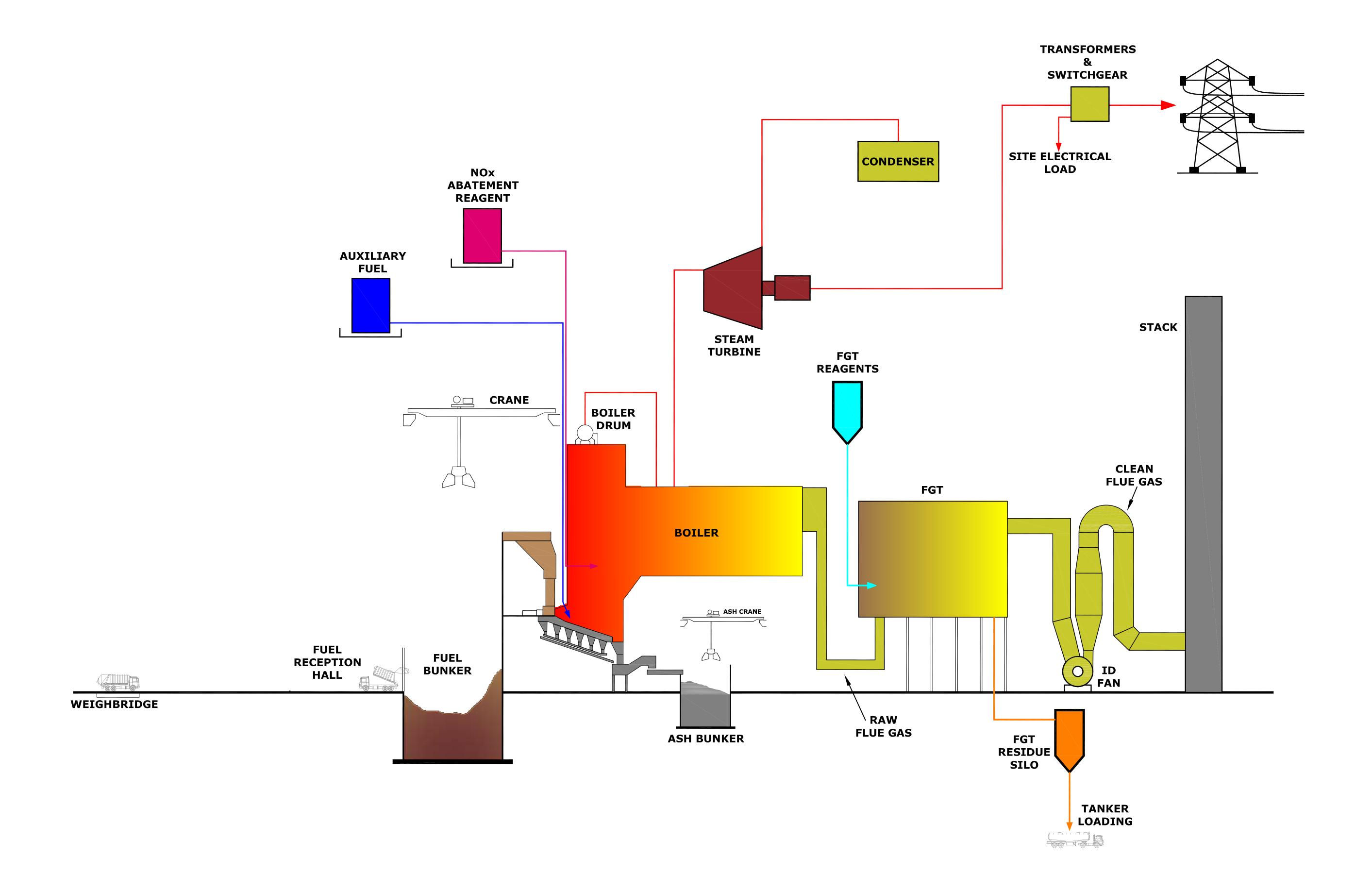


SHBEC will operate 24 hours per day, seven days per week with occasional shutdown

periods for planned maintenance work. All fuel will be delivered to the Site by road, using HGVs, via a new access road created from South Marsh Road.

Fuel will be combusted within SHBEC at temperatures above 850°C. The heat created will be used to create steam, which can then generate electricity with a steam turbine. Some of the steam could potentially be used to provide heat to local users.

Emissions from SHBEC will be cleaned by a sophisticated flue gas treatment facility before being released into the atmosphere and will be carefully controlled and monitored to ensure that they meet the stringent limits set by the Environment Agency and relevant legislation.



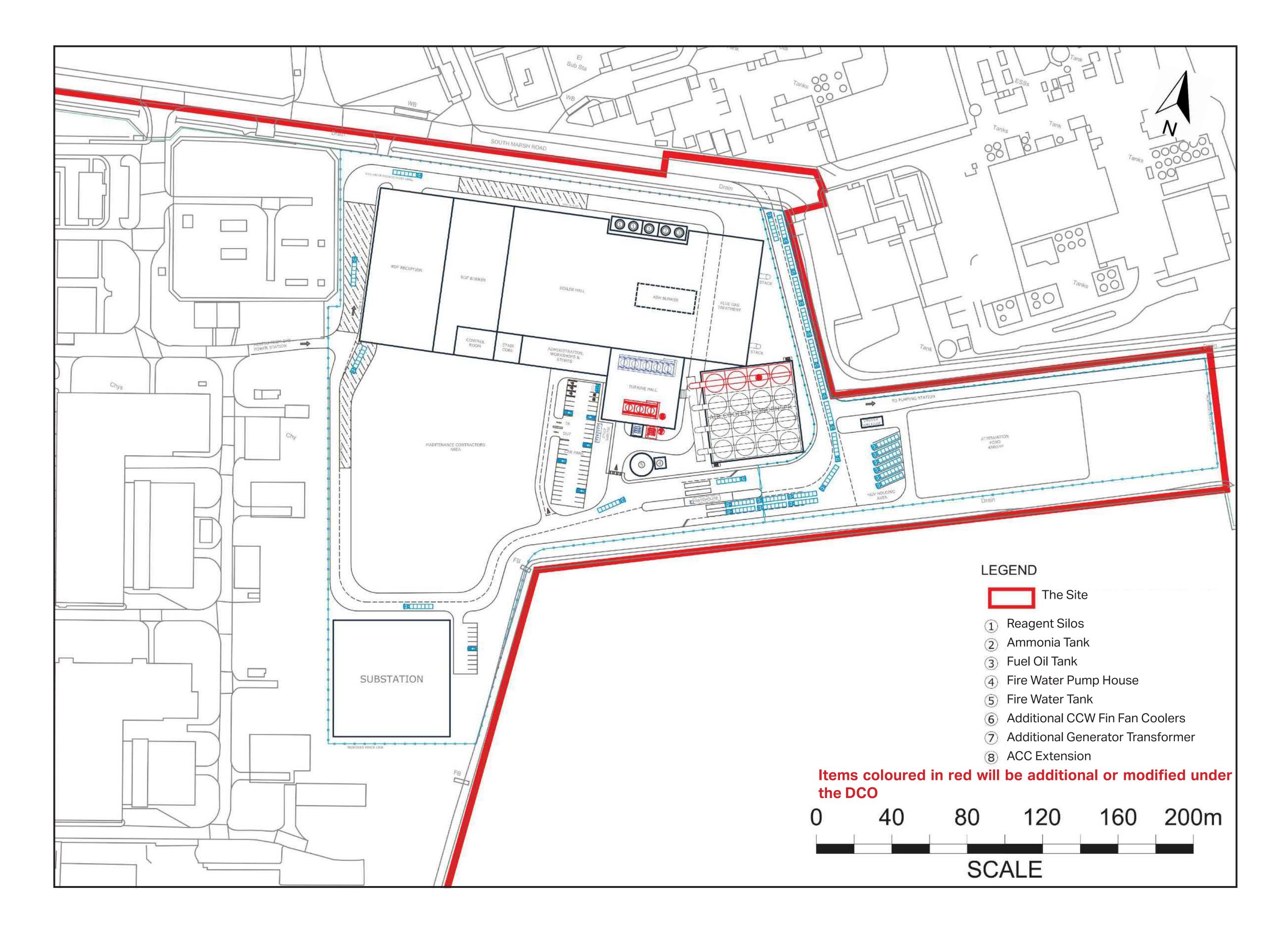
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Why is another application being submitted for SHBEC?

Since the Planning Permission was granted for the Consented Development in April 2019, EPWM has been assessing potential opportunities to improve SHBEC's efficiency. It is now proposed that SHBEC would have a gross electrical output of up to 95 MW. In order to achieve this, the following works (additional to those which have been approved by the Planning Permission) would be required:

- extended air-cooled condenser an additional row of fans and heat exchangers will be added to the air-cooled condenser;
- increased cooling capacity for the generator to allow the generator to operate at an increased load and generate more power;
- increased transformer capacity to allow the generator to achieve up to 95 MW;
- ancillary works the above works will require ancillary works and operations, such as new cabling or pipes and commissioning.



EPWM is not seeking any changes to the maximum building dimensions or fuel throughput that were approved by the Planning Permission and assessed as part of the Environmental Impact Assessment and Transport Assessment that accompanied the planning application submitted to NELC. This is because of the conservative assumptions used in the Consented Development's concept design.

As the Proposed Development would have a gross electrical output of more than 50 MW, it is classed as a nationally significant infrastructure project under the Planning Act 2008. This means that it requires development consent from the Secretary of State for Business, Energy and Industrial Strategy before it can be constructed and operated. The application process is administered by the Planning Inspectorate.

EPWM anticipates submitting its application for development consent to the Secretary of State for Business, Energy and Industrial Strategy toward the end of Q1 2020. Development consent is granted by the Secretary of State in the form of a 'Development Consent Order' (a 'DCO'). Information on the development consent application process can be found at the Planning Inspectorate website: http://infrastructure.planninginspectorate.gov.uk/

Construction

It is anticipated that construction of the Consented Development will commence in early 2020. The construction phase is expected to last for approximately 36 months, with the EfW power station entering operation in early 2023. If development consent for the Proposed Development is granted in mid-2021, the additional works would also be completed within the same construction programme.

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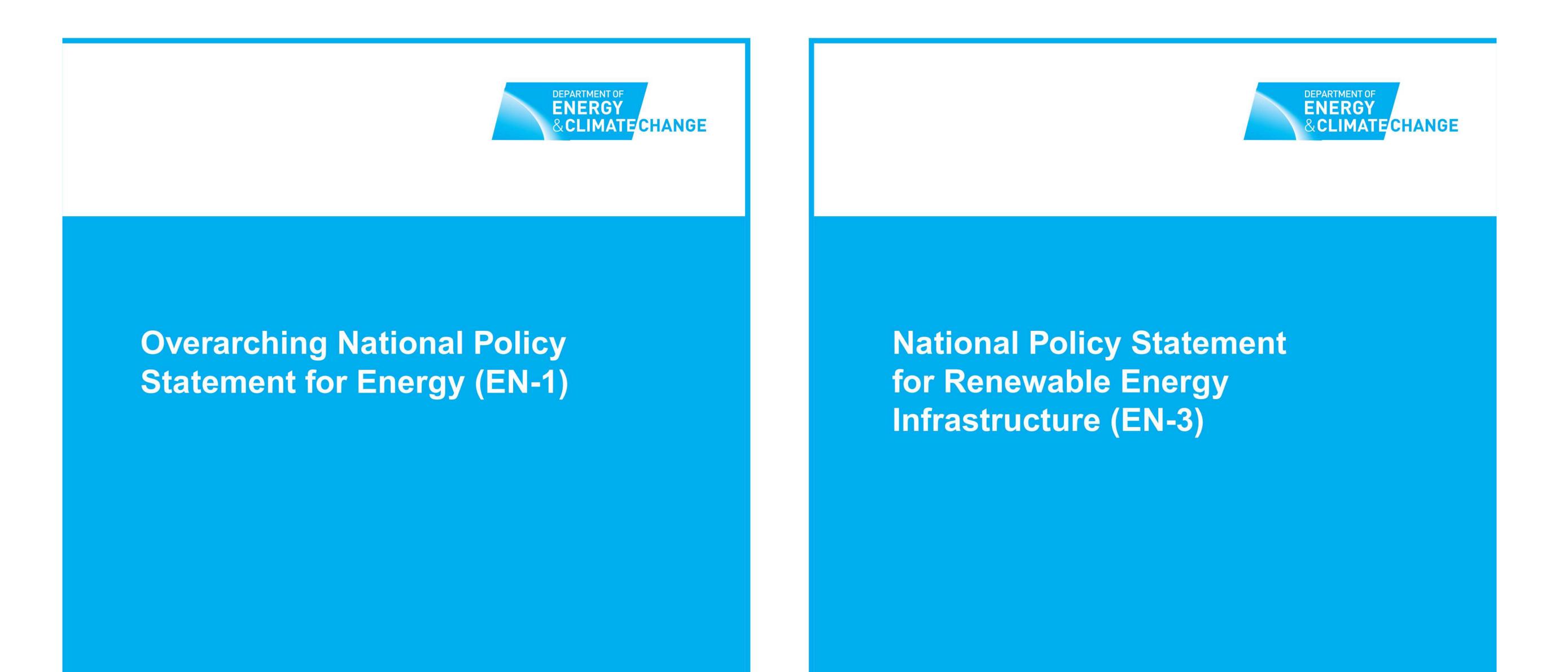
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Why is SHBEC needed?

The UK needs to develop new low carbon electricity generation capacity to replace its aging coal-fired and nuclear power stations, which are in the process of closing down and being decommissioned. There is also a need for alternative forms of generation to those renewable technologies that are limited by weather conditions, to provide back-up. This is important to ensure that UK homes and businesses benefit from secure and reliable electricity supplies. The need for new electricity generation capacity, such as that which will be provided by SHBEC, is set out in government policy - the Overarching National Policy Statement for Energy ('EN-1') and the National Policy Statement for Renewable Energy ('EN-3').



SHBEC will also make a positive contribution to waste management by making use of waste material that would otherwise go to landfill or be exported overseas. The adopted North East Lincolnshire Local Plan (2018) identifies there is a need to ensure there are sufficient waste management facilities within North East Lincolnshire to meet the requirements of the area. The Local Plan identifies that waste disposal through means such as landfill is the least desirable waste management option available.





Planning for new energy infrastructure

July 2011

Planning for new energy infrastructure

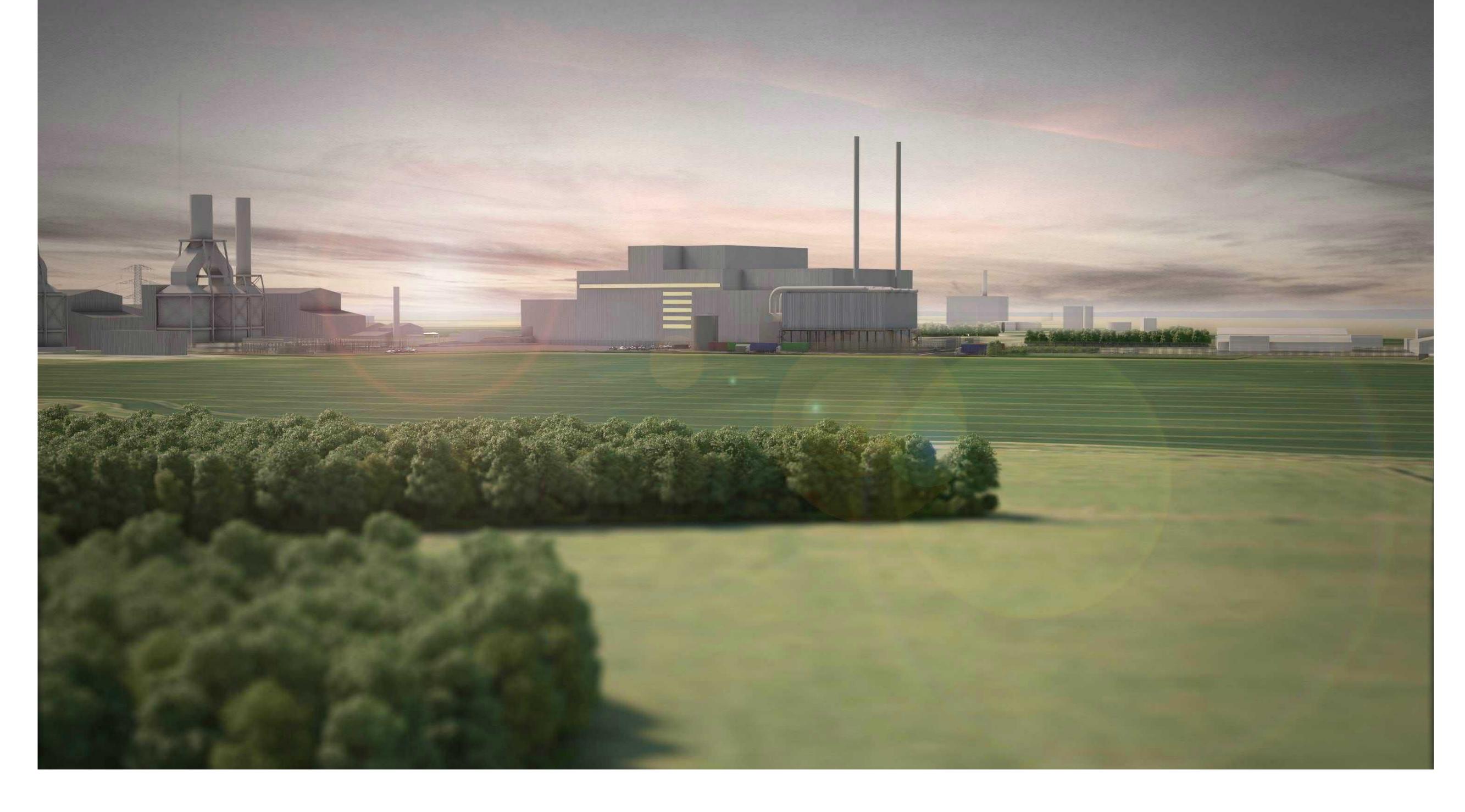
July 2011

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What could SHBEC look like?

Below are some images that provide a representation of what SHBEC could look like. The detailed design of the EfW power station, including the types of materials used, will require the approval of NELC.



The stack height has been fixed at 102 m Above Ordnance Datum (approximately 100 m above the ground level).



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Environmental Impact Assessment

An Environmental Impact Assessment (EIA) was undertaken in 2018 to consider the likely effects of the construction, operation (including maintenance) and eventual decommissioning of the Consented Development, as part of the planning application process. This EIA has informed the development of impact avoidance and mitigation measures, which have been incorporated into the SHBEC design, including:

- air emissions during operation will be carefully controlled through an Environmental Permit regulated by the Environment Agency;
- the stack height will be set at 100 m to disperse emissions effectively;
- piling will be controlled during construction to avoid disturbance of water birds using adjacent fields for roosting during winter;
- species-rich grassland will be created within the Site; and
- traffic management plans will be implemented during construction and operation, including designated HGV routes.

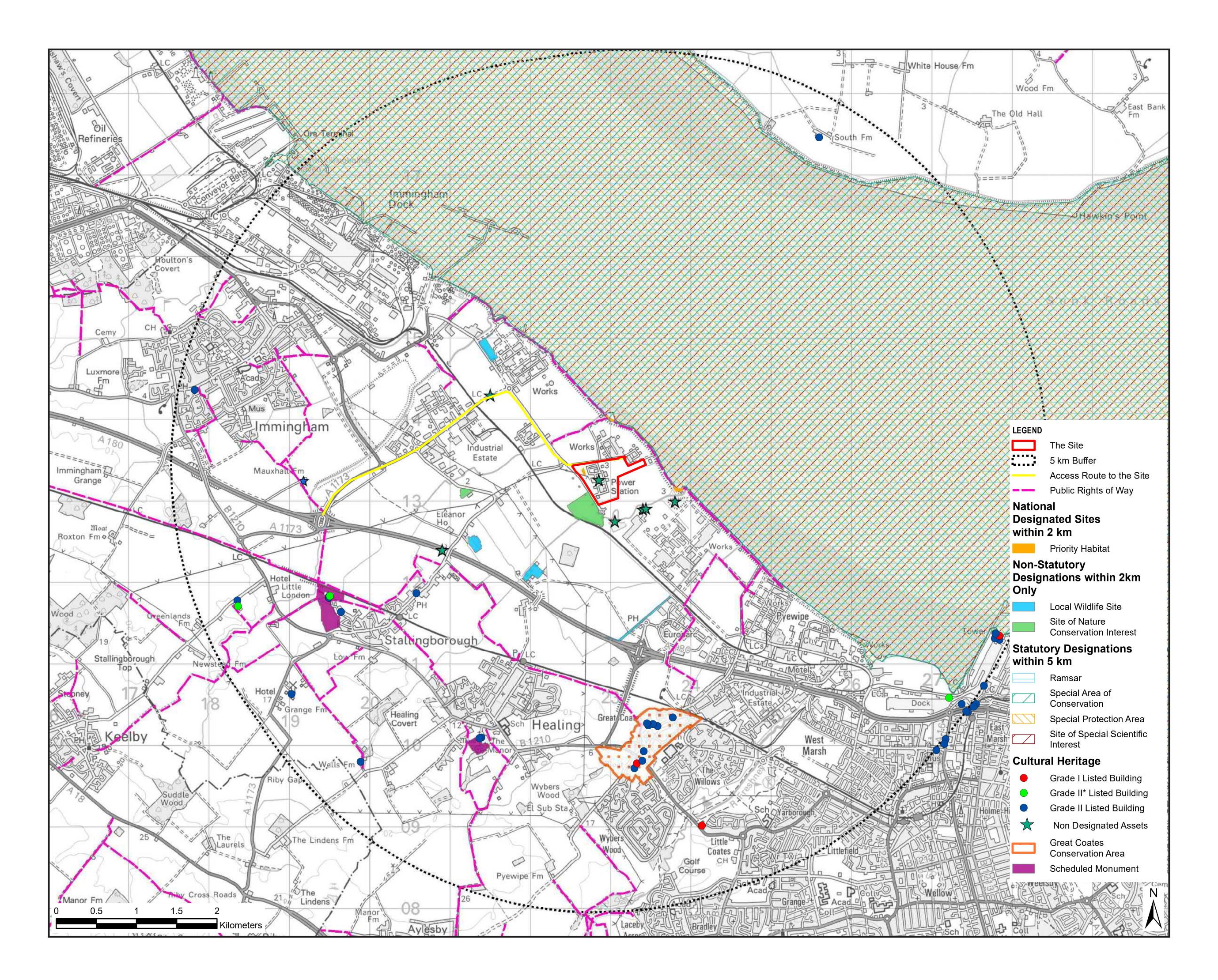
A revised EIA is now being undertaken for the Proposed Development. This will include an assessment of the effects of the Proposed Development compared to no SHBEC development, and also a comparison of the effects of the Proposed Development against the Consented Development.

The topics to be included in the revised EIA will match the previous EIA and take account of the EIA Scoping Opinion issued by the Planning Inspectorate on 2nd October 2019.

The EIA scope includes assessment of effects on air quality, noise and vibration, traffic and transport, ecology, landscape and visual amenity, geology, hydrogeology and land contamination, cultural heritage, water resources, flood risk and drainage, socioeconomics, and waste management.

The EIA will also include an assessment of cumulative effects with other developments that are proposed in the local area, such a cumulative air quality and transport effects.

The preliminary findings of the EIA are reported in the Preliminary Environmental Information Report which has been published for consultation.



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Air Quality

Emissions will be released from the stacks, and also from vehicles associated with the Proposed Development. Modelling is being undertaken so that the air quality effects on people and ecological receptors can be assessed. Mitigation measures are embedded into the design and operation of the Proposed Development including appropriate stack heights to disperse pollutants, flue gas treatment, and continuous emissions monitoring in accordance with an Environmental Permit regulated by the Environment Agency. These ensure there will be no significant adverse effects on human health or ecological habitats.

Traffic and Transport

All HGV traffic will arrive and depart the Site via the A180, A1173, Kiln Lane, Hobson Way and a new dedicated access from South Marsh Road to the east of the SHBPS entrance. Traffic counts have been undertaken on these roads. Traffic associated with the construction and operation of the Proposed Development has been forecast based on similar construction projects and information on the number of staff and volume of fuel/ other consumables required during operation. No significant adverse effects on the highway network have been identified.

Ecology and Noise

Whilst the closest residential properties are too far from the Site to be affected by noise, disturbance of water birds associated with the Humber Estuary during noisy construction activities (i.e. piling) does require further consideration. Piling noise during construction will need to be controlled (by timing and/ or method) to avoid disturbing water birds and a visual screen will also be installed for construction and operation to avoid visual disturbance to water birds using fields to the south of the Site. EPWM will also be making a financial contribution towards the creation of mitigation habitat for water birds in accordance with Local Plan policy.

Landscape and Visual Amenity

Using the proposed stack height and topographical information, the visibility of the Proposed Development from the surrounding area has been determined. Impacts on landscape character and views from representative locations (including residential properties and footpaths) are being assessed, and photomontages (such as the one below for the view from Beechwood Farm Carvery to the north of the Site) have been prepared for a selection of viewpoints to inform the landscape and visual impact assessment.







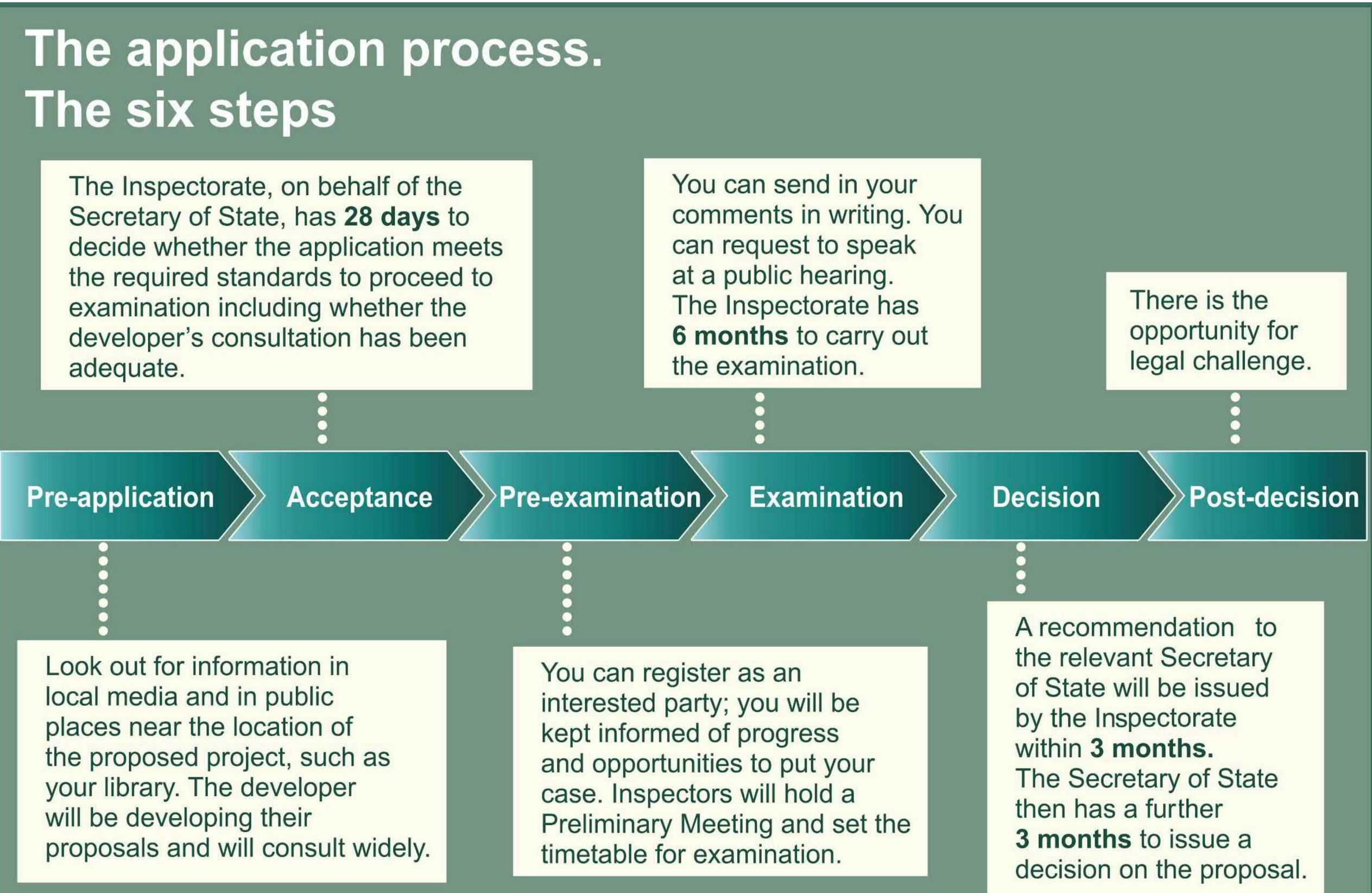
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The Development Consent Application Process

Before an application for development consent can be submitted to the Planning Inspectorate there is a statutory duty on the applicant under Sections 42, 47 and 48 of the Planning Act 2008 to consult the local community within the vicinity of the site in question, certain 'prescribed persons' (such as local authorities, the Environment Agency etc.) and to publicise the proposed application.

The development consent application process is summarised in the diagram below.



Following submission of the application the Planning Inspectorate will first decide, on behalf of the Secretary of State for Business, Energy and Industrial Strategy, whether to accept the application for examination. If accepted, the Planning Inspectorate will then appoint an independent inspector or panel of inspectors, also known as the Examining Authority, who will examine the application on behalf of the Secretary of State.

There will be the opportunity for the local community and other stakeholders to be engaged in the examination process and to express their views on the application. Following an examination process, the Examining Authority will write a report setting out a recommendation as to whether development consent should be granted. The report is then sent to the Secretary of state to make a final decision on whether to grant development consent.

We intend to submit the application for development consent during Q1 2020. It is anticipated that the Secretary of State would make a decision on the application during Q3 2021.

Information on the development consent application process can be found at: https://infrastructure.planninginspectorate.gov.uk/

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Please let us have your comments

Please use one of the feedback forms available to provide us with your comments on our proposals.

Alternatively, you can submit your comments by post or email:

Post: South Humber Bank Energy Centre Consultation, c/o DWD LLP, 6 New Bridge Street, London EC4V 6AB

Email: consultation@shbenergycentre.co.uk

There is also a link to an online comment form on the project website www.shbenergycentre.co.uk home page.

If writing or e-mailing with comments, please also indicate if you agree to receive occasional project related communications.

If you have any questions, please ask a member of the project team here today.

Please let us have your comments in writing no later than **5pm on Friday 13th December 2019**.

We will consider views and information provided in response to this consultation

The information presented at this event is also available on our website at www.shbenergycentre.co.uk.

Thank you for attending this exhibition and for your feedback.

