

# Northacre

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## RENEWABLE ENERGY

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The Northacre Energy from Waste  
Facility, Stephenson Road, Northacre  
Trading Estate, Westbury  
Amended Proposal

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### ENVIRONMENTAL STATEMENT VOLUME 4: NON-TECHNICAL SUMMARY

This Document has been prepared in support of the application of full planning permission in accordance with the provisions of the Town and Country Planning Act 1990 for the development of an amended iteration of the Northacre Energy from Waste facility. The application and associated documentation have been produced and co-ordinated by AXIS with technical inputs from:

- AXIS –, Landscape and Visual, Socio-Economics;
- Fichtner – Air Quality and Human Health;
- A D Ecology and Argus Ecology – Ecology and Nature Conservation;
- NVC – Noise and Vibration;
- Wessex Archaeology -Archaeology / Cultural Heritage –
- Floodline - Surface Water and Flood
- IMA Transport Planning - Traffic and Transportation

August 2020

The logo for the company 'axis' is displayed in white lowercase letters inside a dark blue square.

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## FOREWORD

This Environmental Statement is submitted in support of a planning application made by Northacre Renewable Energy Limited for the construction and operation of an amended iteration Northacre Energy from Waste Facility (the 'Northacre Facility') on land off Stephenson's Road, Westbury.

The Environmental Statement has been prepared in accordance with the Town and County Planning (Environmental Impact Assessment) Regulations 2017 and comprises the following documents:

- The Environmental Statement Main Report (Volume 1), which contains the detailed project description; an evaluation of the current environment in the area of the Northacre Facility; the likely significant environmental impacts of the scheme; and details of the proposed mitigation measures which would alleviate, compensate for, or remove adverse impacts identified in the study. Volume 1 also includes a summary of the overall likely significant environmental impacts of the Northacre Facility;
- Illustrative Figures (Volume 2) which contains all relevant schematics, diagrams and illustrative figures;
- Technical Appendices (Volume 3), which include details of the methodology and information used in the assessment, detailed technical schedules and, where appropriate, raw data;
- This Non-Technical Summary (Volume 4), contains a summary of the Environmental Statement, expressed in non-technical language.

All of the planning application documentation, including the Environmental Statement, can be downloaded free of charge from the planning portal on Wiltshire Council's web site. Hard copies of the Environmental Statement, as a four Volume set, are available at a cost of £400 by writing to AXIS, Camellia House, Water Lane, Wilmslow, Cheshire, SK9 5BB. Alternatively, the Non-Technical Summary can be purchased on its own from the same point of contact for £15, with the entire Environmental Statement available for purchase on a CD for £15.

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## **1.0 INTRODUCTION AND BACKGROUND**

### **1.1 Introduction**

- 1.1.1 This Non-Technical Summary of the Environmental Statement is submitted in support of the planning application made by Northacre Renewable Energy Limited for the construction and operation of the amended energy from waste facility (the 'Northacre Facility') on land to the west of Stephenson Road, on the Northacre Trading Estate in Westbury (the 'Application Site' or 'Site') see Figure NTS 1.1). This document summarises the findings of the Environmental Impact Assessment undertaken for the Northacre Facility in non-technical language.
- 1.1.2 As set out in detail within the Planning Statement, that also supports the application, the Northacre Facility already benefits from an existing, live (extant) planning permission, albeit for a different design solution to that for which permission is now being sought. This extant permission (reference: 18/09473/WCM), was granted by Wiltshire Council on 17<sup>th</sup> June 2019 and is hereafter referred to as the '2019 Permission'.
- 1.1.3 The Environmental Statement has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. The Environmental Impact Assessment also updated the environmental baseline to reflect contemporary conditions on and around the Application Site.
- 1.1.4 The Environmental Statement has been prepared as a complete standalone document for the amended Northacre Facility proposal, rather than an Addendum to the 2019 Environmental Statement. It assesses the likely significant effects of the Northacre Facility, as now proposed, on the environment during the construction and operation of the facility and compares the effects to those that would arise from the scheme approved under the 2019 Permission.

## 1.2 The Proposed Development

### *The Main Scheme Amendments*

1.2.1 The Application Site and the overall disposition of the main building remain similar to that approved in 2019. A comparison between the Northacre Facility and the scheme approved under the 2019 Permission is set out Table 4.1. A series of drawings illustrating the amendments as overlays in plan and elevation view, are provided in NTS Figures 1.2a - e.

### **Summary of Table 4.1: comparison of Northacre Facility now Proposed and Scheme Approved under the 2019 Permission**

Description of item / feature	Northacre Facility as now Proposed	Scheme approved under the 2019 Permission
Application Site area	2.88 hectares	2.74 hectares
Use	Residual waste treatment with energy recovery	Residual waste treatment with energy recovery
Technology	Single line, moving grate combustion	Gasification
Throughput capacity	Circa 243,000 tpa	Circa 160,000 tpa
Gross electricity generation	28.6 MW	25.5 MW
Primary Building Footprint	6,477 m <sup>2</sup>	6,535 m <sup>2</sup>
Maximum Building Height	40.0 m	36.8 m
Stack	Main stack 75 m high 2.55 m diameter Odour control stack 43 m high	Main stack 75 m high 4 m diameter Odour control stack 40 m high
Average daily HGV numbers servicing facility	78 movements	56 movements
Net Additional HGV numbers as a result of the development taking into account reduced movement to the Northacre RRC <sup>1</sup>	54 movements	42 movements
Employee numbers	40 permanent on-site jobs	40 permanent on-site jobs
Estimated capital cost	£200 million	£200 million

### *The Northacre Facility as Now Proposed*

1.2.2 The Northacre Facility, as now proposed (also referred to as the 'Proposed Development', see Figure NTS 1.3), comprises a conventional, single line, moving grate combustion plant for the recovery of energy from residual waste. The residual waste would be non-hazardous waste primarily from commercial

<sup>1</sup> Often referred to as the MBT Facility.

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and industrial sources and may include some municipal waste. Residual waste is the waste which remains after re-use and recycling / composting operations have taken place.

1.2.3 The Northacre Facility would generate 28.6 Megawatts. After subtracting the power used to run the facility itself, it would have the ability to export 25.6 Megawatts of electricity to the local electricity grid, which is enough to meet the annual needs of approximately 54,000 homes. The Northacre Facility would also be capable of exporting heat, in the form of steam or hot water, to local heat users. A significant proportion of the energy produced by the Proposed Development would be classed as renewable energy.

1.2.4 If the planning application is approved, the overall construction period would last approximately 36 months and the Proposed Development would be operational in 2025.

### **1.3 The Site and Its Context**

1.3.1 The Application Site comprises circa 2.88 hectares (ha) of vacant land located on the Northacre Trading Estate and is between the Arla Foods Westbury Dairies to the north-west and the Northacre RRC to the south east. Stephenson Road is immediately north east of the site whilst there are fields to the south west. On the opposite side of Stephenson Road, are various other industrial/business units and uses and a sewage works, and a few remaining vacant plots awaiting new industrial / business uses.

1.3.2 The Site is broadly rectangular in shape, and slopes gently to the west. The overall development site varies in level from 62.85m AOD at the south-west corner; approximately 65.00m AOD at the south-east corner; 60.40m AOD along the northwest perimeter and 62.30m AOD at the entrance to the site. The Site lies within an established industrial area and is situated 600m south of the West Wiltshire Trading Estate.

1.3.3 The Site boundary is currently defined by galvanised steel palisade fencing and chain link fencing. The western boundary has a gappy and remnant hedgerow. Within the Site the land comprises a mosaic of rank grassland, tall herb/ruderal vegetation, scrub vegetation and open, hard-standing (including a car-park and

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tarmac access road). Also, within the site there are five spoil mounds also supporting a mixture of rank grassland, tall herb/ruderal and scrub vegetation.

- 1.3.4 Stephenson Road runs along the north eastern boundary of the Site and provides access to surrounding industrial / commercial development. Stephenson Road also offers the principle point of access to the Site via an existing priority junction. Other development along or served off Stephenson Road include industrial and manufacturing units, Arla Dairies, a solvent recovery firm, Network Rail Recycling depot and the Northacre RRC. There is additional consent at the RRC site for a Waste Management building and expansion of the vehicle depot.
- 1.3.5 Immediately beyond the southern western boundary of the Site is farmland, but this also identified as part of the Northacre Trading Estate and a Principal Employment Area in the Wiltshire Core Strategy and as a location for Strategic Scale waste facilities in the adopted Wiltshire and Swindon Waste Site Allocations Local Plan.
- 1.3.6 The nearest residential properties to the east are Brookfield and Crosslands, which front Brook Lane approximately 60m from the Site. To the south west beyond open farmland, approximately 300m from the site, are two further residential properties, Brook Farm and Orchard House. There are a number of semi-detached houses on Storridge Road to the north-east.
- 1.3.7 The Site falls within Flood Zone 1 (the lowest category of flood risk), is not directly constrained by any statutory or non-statutory ecological designations, nor does it contain or form part of any designated heritage asset, such as a Scheduled Monument or a Listed Building. There are no public footpaths / rights of way within the Site.

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## **2.0 ALTERNATIVES CONSIDERED**

2.1.1 A number of alternative options were considered when developing the Northacre Facility, including alternative: technology solutions; direct combustion technologies; and design solutions.

### **2.2 Alternative Technology Solutions**

2.2.1 Alternative technology options in relation to energy from waste recovery, include: advanced thermal treatment (i.e. pyrolysis and gasification); and direct combustion.

2.2.2 Based on technical and financial assessments a stand-alone direct waste combustion process with the ability to export electricity, heat or a combination of both was selected. This was on the basis that it represents a technology that is a credible and proven, capable of meeting environmental standards and financially and technically viable.

### **2.3 Alternative Direct Combustion Technologies**

Direct waste combustion facilities can be delivered through a variety of sub-technologies. Moving grate is the leading technology in the UK and Europe for the combustion of municipal and other similar wastes and is used in 90% of UK and 98% of European incinerators. It is a proven and developed design, with a number of suppliers available. For these reasons moving grate technology was chosen. Maintaining the footprint of the development and the mass of the buildings within the parameters that were acceptable when the 2019 Permission was granted, led to the single line facility choice.

### **2.4 Alternative Design Solutions**

2.4.1 Prior to selecting the current proposals, a range of design options were developed. This design evolution encompassed: overall facility layout; shape and form of the main building; maximising the most efficient use of land; and proximity of receptors and overall appearance of the facility in the Site's context.

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## 3.0 SCHEME DESCRIPTION

### 3.1 Site Layout

3.1.1 The Northacre Facility would be based around a main building which would contain the following areas:

- Reception Hall;
- Bunker;
- Boiler Hall;
- Turbine Hall;
- Incinerator Bottom Ash (IBA) Storage; and
- Offices, Workshop, Stores and Staff Welfare Facilities.

3.1.2 A plan of the overall layout of the Northacre Facility is shown in Figure NTS 1.3, with a series of elevations are shown on Figures NTS 1.4a - d.

3.1.3 The Flue Gas Treatment (FGT) facility, which cleans up gases from the combustion process, would sit separate from the main building and adjacent to it would be the freestanding stack (chimney), which would be 75m high. The stack would be circa 2.55m in diameter.

3.1.4 The Air Cooled Condenser (ACC), which condenses steam back to water for re-use, would form a rectangular shaped structure situated to the north west of the main building. The structure is separate from the main building in order to allow sufficient air flow through the units.

3.1.5 The Northacre Facility would also include the following ancillary / infrastructure:

- Vehicle weighbridges and weighbridge Gatehouse;
- Transformer and Substation buildings
- A separate DNO substation;
- Odour Control Plant and Stack
- Fire water tank and associated pump house;
- Tanks / silos (containing fuel oil, ammonia hydroxide, FGT residues);
- Internal circulation roadways / ramps and manoeuvring areas;
- High level conveyor from the MBT building
- Employee and visitor parking / bicycle parking including EV charging;

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- Fencing and gating;
  - Service connections;
  - Surface water drainage;
  - Lighting and CCTV; and
  - Areas of hard and soft landscaping.

### ***Employment***

- 3.1.6 During the construction of the Northacre Facility peak staff numbers would be approximately 450. During operations the facility would employ approximately 40 people, the majority of which would be skilled operative or technical engineers..

### ***Access***

- 3.1.7 Vehicular access to the Site (for both the construction and operational phases) would be provided via revisions to the existing access off Stephenson Road (as shown on Figure 4.6). It is proposed that all operational HGV traffic to / from the Northacre Facility would route via Stephenson Road, the Storridge Road roundabout, to Quartermaster Road, to Link Road, which connects to the B3097 Hawkeridge Road at a roundabout. The B3097 provides a connection to the A350.

### ***Drainage***

- 3.1.8 The Northacre Facility would give rise to surface water run-off from roads, vehicle parking areas, roofs of buildings and other hard standings. Most surface water would flow into the proposed surface water drainage system. However, some roof water would be diverted to a rainwater harvesting tank located within the main building. Surface water flows from areas susceptible to pollution e.g. roads and parking areas, would pass through petrol / oil interceptors prior to being discharged at an agreed rate into the appropriate sewers.

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## 3.2 Proposed Site Operations

### *Operating Hours and Vehicle Numbers*

3.2.1 The Northacre Facility would process residual waste and generate electricity and heat on a 24-hour basis. In line with 2019 Permission, waste and material deliveries would only take place between the hours of 07:00 and 22:00 weekdays and 07:00 to 17:00 on Saturdays.

3.2.2 The operation of the Northacre Facility would give rise to the following average daily HGV movements / numbers:

- **Input:** Residual Waste 61 HGV movements (30 in + 31<sup>2</sup> out)  
Consumables: 2 HGV movements (1 in + 1 out)
- **Output:** Ash / APCR Exports: 15 HGV movements (8 in + 7 out)
- **Total (Input + Output):** 78 HGV movements (39 in + 39 out)

3.2.1 However, the facility also receives Solid Recovered Fuel (SRF) and residual waste direct from the adjacent Northacre RRC via a conveyor which forms part of the application and by direct transfer in a vehicle. This removes the HGVs historically associated with managing these materials from the local highway network. These movements average 24 HGVs per day at the RRC.

3.2.2 Therefore, the net HGV as a result of the proposals is an average of 54 HGV movements per day. The current consent for the site proposed an average of 42 net HGV movements per day, so the proposal results in an average increase of 12 HGV movements across the 15 hour working day.

### *Energy Recovery Process*

3.2.3 Figure NTS 1.5 illustrates the processes involved within the energy recovery process, these are then described in more detail below.

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<sup>2</sup> Numbers rounded to avoid part HGVs

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### *Waste Reception and Handling*

3.2.4 Residual waste would be delivered to site primarily in bulk articulated HGVs, with some smaller refuse collection vehicles. These would enter the enclosed reception (tipping) hall, where they would tip into the bunker. The residual waste from the Northacre RRC operations (described as “heavies and fines”) will be transferred directly in suitable containers such as roll on offs (roro), on a purpose built access from the Northacre RRC. The SRF will be transferred from the MBT building in a purpose designed enclosed high level conveyor leading from the MBT directly to discharge in the bunker.

3.2.5 A crane grab would then mix and stack the residual waste / refused derived fuel into the feed chute of the furnace.

### *Combustion Process*

3.2.6 The residual waste / refused derived fuel would be burned on a moving grate, which turns and mixes the residual waste to ensure full exposure to the combustion process.

### *Flue Gas Treatment and Stack*

3.2.7 Gases generated during the combustion process would be cleaned in the flue gas treatment plant before being released into the atmosphere via the stack (chimney). The treatment plant works by using a number of filters and chemicals to remove pollutants from gases and ensures that the plant operates within the emission limits set out in the Environmental Permit issued by the Environment Agency that will be required prior to operations commencing. As a minimum, the Environmental Permit will meet the requirements of the Industrial Emissions Directive. Emissions from the stack would be monitored continuously and reported in accordance with the Environment Agency’s requirements.

### *By-Product Handling and Disposal*

3.2.8 Two types of solid by-products would be produced from the operation, ash and Air Pollution Control Residues, each of which would have separate handling and disposal arrangements.

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### **3.3 Energy Recovery**

3.3.1 One of the major benefits of the Northacre Facility would be the ability to generate 25.6 Megawatts of electricity from burning the waste. This would be exported to the local electricity grid. This is sufficient to meet the entire annual domestic electricity needs of around 54,000 homes. The facility would also be capable of exporting heat, in the form of steam or hot water, to local heat users.

### **3.4 Construction**

#### ***Timetable and Hours***

3.4.1 The overall construction period is anticipated to take approximately 36 months, with operation starting in 2022.

3.4.2 Construction operations would occur between 07.00 to 19.00hrs weekdays and 08:00 to 14:00 Saturdays, with no construction work on Sundays or Bank Holidays. It is possible that some construction activities would be undertaken outside these hours e.g. delivery of abnormal loads, continuous concrete pours. During commissioning, works would be undertaken 24 hours a day, seven days a week.

#### ***Construction Environmental Management Plan***

3.4.3 A Construction Environmental Management Plan would be developed to manage and report environmental effects of the Northacre Facility during construction. This would typically cover elements such as drainage, water quality and hydrology, dust, emissions and odours, health and safety / site management, waste and traffic management and contaminated materials.

### **3.5 Operational Environmental Management**

3.5.1 An Environmental Management System would be in place during operation to manage and monitor rodents and pests, dust and odour, fire and litter. In addition, an Environmental Permit (issued and enforced by the Environment Agency) will also be required to operate the Northacre Facility.

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## **4.0 SUMMARY OF EFFECTS**

### **4.1 Introduction**

4.1.1 The likely significant environmental effects of the Proposed Development are fully described within the Environmental Statement Main Report (Volume 1), with a brief summary of the overall findings detailed below in non-technical language.

### **4.2 Cumulative Impacts**

4.2.1 Each of the technical assessments considered cumulative effects of the Northacre Facility along with other major schemes committed to planning in the area. All technical assessments found there to be no significant cumulative effects together with the Northacre Facility.

### **4.3 Landscape and Visual Effects**

4.3.1 Chapter 5.0 of the ES, together with the supporting figures and appendices, sets out an assessment of the likely significant landscape and visual effects of the Proposed Development.

4.3.1 The Proposed Development would be located on a vacant plot of land at the edge of an extensive industrial area, to the north of Westbury. Agricultural land to the west of the Site is allocated for further industrial development in local planning policy documents. As such, the Proposed Development would be in keeping with existing and future industrial development in this part of Westbury. The Site already benefits from planning consent for a similar scale facility that was granted in 2019.

4.3.2 Construction activities would be temporary and localised and would take place in the context of existing activity on the wider industrial estates. The most prominent construction elements would be the cranes used to construct the taller parts of the Proposed Development. However, construction activity would be temporary and intermittent, having only a limited short term influence upon the character of the surrounding landscape and upon views, which would not be significant.

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- 4.3.3 The landscape character to the immediate north, east and south of the Proposed Development is defined by existing industrial development. The more rural area to the west of the Site is defined by existing industrial development along its eastern boundary. The Proposed Development would be seen in this context as an intensification of existing industrial uses and this would not result in significant effects on the wider landscape character to the west of the Site.
- 4.3.4 From viewpoints immediately to the west of the Proposed Development there is potential for some localised significant visual effects. However, from most viewpoints within the wider landscape setting, visual effects would not be significant. This is due to the Proposed Development occupying a modest proportion of the overall views available and being seen in the context of other large scale industrial development and the wider developed area of Westbury. This is consistent with the findings of the LVIA for the 2019 Permission.
- 4.3.5 In comparison to the consented 2019 Permission the Proposed Development would be of a similar scale and form. The increase in maximum building height would barely be perceptible from most viewpoints due to the revised position of the boiler house and the reduced height/location of other elements. The most significant improvement associated with the Proposed Scheme would be the reduction in the diameter of the proposed stack from 4m to 2.55m. This reduces the prominence of the stack in a number of views and reduces the visual impact of the development compared to the previously consented scheme.

#### **4.4 Ecological and Nature Conservation**

- 4.4.1 There is no European or nationally designated nature conservation site located within 1km of the study area. The nearest European site is the Salisbury Plain Special Area of Conservation (SAC) and Special protection Area (SPA), which is located >3.5 km south east of the study area. The nearest nationally designated site is Westbury Iron Stone Site of Special Scientific Interest (SSSI), which is located >1 km south of the study area. Picket and Clanger Wood SSSI lies out of the 2 km screening boundary in terms of process emissions but was assessed.
- 4.4.2 The land within the study area comprises a mosaic of rank grassland, tall herb/ruderal vegetation, scrub vegetation and open, hard-standing (including a

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car-park and tarmac access road). The habitats on-site are common/widespread and of no specific conservation concern (i.e. not rare, scarce or threatened). The habitats on-site are not a constraint for the proposed development.

4.4.3 In addition, the Phase 1 surveys did not find any suitable habitats or signs of protected species within the site. Badger setts had been previously identified on the boundaries. There is no evidence that badgers inhabit the interior of the development site. The site was visually inspected in September 2014, April 2018, November 2018, April 2019 and May 2020.

4.4.4 No significant effects are predicted on statutory or locally designated sites, including air quality impacts of emissions from the Northacre Facility, or effects of noise and human disturbance.

4.4.5 Mitigation measures embedded into the design of the facility would avoid other significant indirect effects occurring during construction and operation. Additional mitigation measures are proposed during the construction phase to protect foraging badgers and nesting birds.

4.4.6 Given the absence of any residual adverse impacts combined with the integration of a range of linked new semi-natural habitats that diversify habitat niches for a range of local wildlife, the residual ecological effect of the Proposed Development is concluded to be positive at the local scale, as the scheme contributes a net gain for local biodiversity.

## **4.5 Noise and Vibration**

4.5.1 Noise and vibration levels have been considered and assessed for the construction and operational phases of the Proposed Development. Relevant and appropriate noise and vibration guidance and standards have been used to determine the impact.

4.5.2 In accordance with appropriate standards, best practical means would be employed to control noise generation during the construction period. Measures may include restrictions on construction working hours, sensible routing of equipment to site and careful choice of piling rigs to minimise noise. Such

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measures would be defined within the Construction Environmental Management Plan.

4.5.3 In relation to the operational phase a number of measures to control noise are proposed to ensure noise levels are within the Local Authority standards. The measures would be based on the employment of Best Available Techniques to mitigate any potential peak noise sources.

4.5.4 The assessment shows that there would be no significant noise impacts during construction or operation of the Northacre Facility following the implementation of appropriate mitigation. The conclusions of this assessment for the Northacre Facility remain materially unchanged from those conclusions found in the Environmental Statement to support the 2019 Permission.

#### **4.6 Air Quality and Human Health**

4.6.1 The main air emissions associated with the construction and operation of the Northacre Facility would be dust and stack process emissions. Detailed modelling of emissions has been undertaken to assess potential impacts.

4.6.2 The assessment found that the effects of stack process emissions on human health and ecological receptors to be negligible. The Proposed Development is not predicted to give rise to significant environmental effects on air quality, human health and odour in the local area either during the construction or operational phases.

4.6.3 The Northacre Facility also has the potential to cause impacts associated with the release of dust during the construction phase. Mitigation has been proposed and it was concluded that these impacts would not be significant.

4.6.4 The increase in operational vehicles associated with the Northacre Facility is minimal, when compared to the scheme consented under the 2019 Permission, such that they are not expected to have a measurable impact on local air quality, and the effect is considered to be negligible.

4.6.5 The impact of process emissions is less than the previously consented scheme due to the reduction in the Emission Limit Values (ELVs) associated with the

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implementation of the most recent Waste Incineration Best Available Techniques Reference documents or “BREF”. The Environmental Statement to support the 2019 Permission concluded that the impact of the Proposed Development would be not significant – i.e. the same as this assessment for the revised scheme.

#### **4.7 Surface Waters and Flood Risk**

4.7.1 The Site is in Flood Zone 1 which is the lowest flood risk designation in the UK. All forms of flood risk at the Site has been assessed and resulting risk considered to be low to very low.

4.7.2 The Proposed Development would increase the impermeable area of the Site resulting in an increase in surface water run-from the Site to the existing Wessex Water stormwater collector sewer in Stephenson Road. A comprehensive on-site stormwater attenuation system has been designed to accommodate manage flows off the Site.

4.7.3 Assuming good working practises are adopted throughout the construction phase, the predicted impact of the Northacre Facility in terms of flood risk, water quality, foul and surface water drainage and water supply are all considered to be negligible.

4.7.4 The potential impact on surface water and the risk of flooding of the Northacre Facility during operation would be negligible. This is the same effect as predicted for the scheme approved under the 2019 Permission.

#### **4.8 Traffic and Transportation**

4.8.1 Baseline traffic predictions have been established for the construction phase, peaking in 2023, and the operational phase, commencing in 2025, both including traffic from the facility permitted by the 2019 Permission. The transport effects are determined from changes in traffic from the levels accepted for the 2019 Permission.

4.8.2 Changes in operational traffic relative to the 2019 Permission are eleven HGV movements a day. Changes in the overall daily traffic during operation of the

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Northacre Facility range from 0 to 0.2% across the highway network, below the accepted 30% threshold for material environmental change set out in Rule 1 of the Institute of Environmental Management and Assessment guidelines.

4.8.3 The cumulative effects of increased traffic from other planned major development locally have no material effect and the effects remain not significant across the highway network.

4.8.4 There are no residual transport effects anticipated to arise from this development relative to the 2019 Permission, and the mitigation measures agreed as suitable for that scheme remain entirely applicable and adequate for the Proposed Development.

## **4.9 Socio-Economics**

4.9.1 During 2019, unemployment within the Study Area was lower than the figure for both the South West region and for Great Britain. Construction employment was similar to the regional average, but above the national average.

4.9.2 The experience of the Design Team on projects of a similar size and scale suggests that the Northacre Facility could create up to 450 direct construction jobs at any one time and would have a positive influence upon the continued viability of a range of contractor companies and their employees, as well as other businesses forming part of the supply chain in the Study Area. This would be of general benefit to the wider economy, in terms of retention and possible upgrading of skilled workers, and viability of construction sector businesses. Construction effects would be temporary, but construction activity (and the experience and skills gained / developed) has the potential to lead to further opportunities for both businesses and individual workers should further development in the area be progressed.

4.9.3 Once operational, the Northacre Facility would directly create approximately 40 jobs. A further 70 jobs are likely to be created or supported by indirect or induced expenditure (e.g. services bought-in to the Site, or spending outside the Site by employees). Once the effects of displacement and leakage are considered, it is estimated that within the Study Area approximately 86-87 jobs would be

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supported directly or indirectly, which would add an estimated £2.7 million to the economy each year.

- 4.9.4 There would be a medium magnitude of change from the baseline for both employment and Gross Valued Added, i.e. contribution to the economy made by the business. This would result in a moderate beneficial effect to the economy of the Study Area, Effects are likely to be significant for some businesses that supply bought-in goods and services, and for individuals including those employed at the Proposed Development.

#### **4.10 Cultural Heritage**

- 4.10.1 Within the 2km radius study area from the Site designated and non-designated heritage assets were assessed, as well as selected assets to 5km.
- 4.10.2 No direct effects have been assessed to occur for potential archaeological remains. Only one indirect effect of “minor” significance is identified in relation to the Grade II Listed Brook Farmhouse from development within its setting cause a reduction in its heritage significance. This is not considered significant for purposes of the EIA regulations. This considered to constitute “less than substantial harm” and at the lowest end of the scale.
- 4.10.3 The conclusions of the assessment for the Northacre Facility remain materially unchanged from those conclusions found in the Environmental Statement to support the 2019 Permission.

#### **4.11 Conclusion**

- 4.11.1 The ES has assessed and evaluated all potential significant, direct, indirect, cumulative and in-combination environmental effects of the Northacre Facility. Where adverse effects have been identified, measures to prevent, reduce, and if appropriate offset these have been described.
- 4.11.2 The assessment has concluded that the Northacre Facility would not give rise to any significant adverse residual environmental effects, beyond some limited localised visual effects from immediately west of the Application Site. These conclusions mirror those for the scheme approved under the 2019 Permission.

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## Figures