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TABLES

3.0 THE SITE AND SURROUNDING AREA

3.1 Site Location

3.1.1 The Proposed Development Site comprises land within and adjacent to the boundary of the existing Keadby Power Station site near Scunthorpe, Lincolnshire and falls within the administrative area of North Lincolnshire Council (NLC). The Keadby Power Station site currently encompasses the operational Keadby 1 Power Station and Keadby 2 Power Station (under construction), both owned and under control of the Applicant. The location of the Proposed Development Site, which is approximately centred on national grid reference (NGR) 482351, 411796 is shown in **Figure 1.1:** Site Location (ES Volume III - **Application Document Ref. 6.4**).

3.1.2 The Proposed Development Site boundary is shown on **Figure 3.1**: The Order Limits and **Figure 3.2**: Aerial Photo of the Order Limits (ES Volume III, **Application Document Ref. 6.4**). The area within the Order Limits is defined as the 'Proposed Development Site' for the purposes of the ES. The final Proposed Development Site boundary for the purposes of the DCO Application, including land for associated connections and temporary land required during construction of the Proposed Development, has been refined through ongoing studies and taking into account the responses to the Applicant's consultation.

3.1.3 This Chapter is supported by **Figure 3.1** to **Figure 3.5** (ES Volume III - **Application Document Ref. 6.4**).

3.2 The Proposed Development Site and existing land-use

3.2.1 The Proposed Development Site encompasses an area of approximately 69.4 hectares (ha), of which approximately 20.7ha of land is proposed for construction laydown.

3.2.2 Multiple components together make up the Proposed Development Site, with the different areas described in turn below. These terms have been used throughout the ES to describe land use zones within the Proposed Development Site. Distances to environmental receptors reported within the ES are measured relative to the areas illustrated on **Figure 3.3** (ES Volume III - **Application Document Ref. 6.4**).

3.2.3 The Proposed Development Site is divided into the following areas of permanent and temporary land use (the proposed use described in more detail in **Chapter 4**: Proposed Development (ES Volume I - **Application Document Ref. 6.2**):

- Proposed Power and Carbon Capture Site (Proposed PCC Site);
- Electrical Connection Area to National Grid 400 kilovolt (kV) Substation;
- Gas Connection Corridor;
- Emergency Vehicle Access Road;

- Potential Electrical Connection to Northern Powergrid 132kV Substation;
- Land within the Keadby Power Station site for the purposes of facilitating connections to the Proposed Development for natural gas supply, and other necessary infrastructure (including 'Water Connection Corridor');
- Water Connection Corridor including River Water Abstraction Option and Canal Water Abstraction Option);
- Water Discharge Corridor;
- Waterborne Transport Offloading Area;
- Additional Abnormal Indivisible Load (AIL) Route;
- Construction Laydown Areas;
- New permanent access from the A18 ('A18 Junction Improvement');
- Construction and Operational Vehicular Site Access Route, Mabey Bridge replacement and gatehouse; and
- Additional Area for Landscaping and Biodiversity Provision.

The 'Proposed PCC Site'

3.2.4 The Proposed PCC Site, on which the built development associated with the combined cycle gas turbine (CCGT) and carbon capture plant (CCP) is proposed, is located approximately 4.1km to the west of the town of Scunthorpe. The village of Keadby is the nearest settlement which lies immediately adjacent to the Proposed Development Site boundary and approximately 1km east of the Proposed PCC Site at its closest point (refer to **Figure 3.2** (ES Volume III - **Application Document Ref. 6.4**).

3.2.5 The Proposed PCC Site covers an area of approximately 18.7ha of the Keadby Power Station site that is located within an area called Keadby Common, although this is not defined as Common Land. This part of the Keadby Common was historically associated with a former coal-fired power station that was demolished in the 1990's. Until circa 2017/ 2018, this area was used for arable production but has since been re-seeded. The northern areas of Keadby Common where the CCGT and CCP are proposed (referred to as the 'Main Site') are occupied by improved grassland. Keadby Common has a drain on each boundary (four drains in total). The drain across the north of the Main Site is referred to in the ES as 'Drain 1'; it forms part of Glew Drain and is designated as a local wildlife site (LWS) immediately north-east of the Main Site. A further field drain crosses Keadby Common between a northern field and the southern area of the Main Site; this is currently temporarily being used for soil storage during construction of the Keadby 2 Power Station.

3.2.6 The Proposed PCC Site is bisected by overhead electricity transmission lines associated with the existing National Grid 400kV Substation to the east of the Proposed PCC Site. In the vicinity of the overhead lines, a swathe of unmanaged semi-improved grassland and pockets of scattered scrub occur

within the Proposed PCC Site. To the south of these areas, existing land within the Proposed PCC Site comprises extensive hardstanding areas associated with the Keadby 2 Power Station laydown and construction site.

3.2.7 The southern extent of the Proposed PCC Site, north of North Soak Drain includes an existing high pressure (HP) gas pipeline which runs along Bonnyhale Road and is operated by National Grid Gas plc ('NGG') ('7 Feeder Eastoft'). Subject to agreement with NGG, natural gas will be supplied via a tie-in to this HP gas transmission network. It is proposed that a minimum off-take connection (MOC) will be constructed, and natural gas will be transferred via a below ground pipeline corridor within the Proposed PCC Site to connect to National Grid's apparatus , where the gas would be metered and conditioned to that required for the Proposed Development. The indicative pipeline route is wholly within the Proposed Development Site (Work **Area 2A** on **Application Document Ref. 4.3**) as shown on **Figure 3.3** (ES Volume III - **Application Document Ref. 6.4**).

3.2.8 The approximate central point of the area where the main operational components of the Proposed Development would be sited in the Proposed PCC Site is NGR 482019, 412027.

Electrical Connection Area to National Grid 400kV Substation

3.2.9 The existing 400kV Substation owned and operated by National Grid Electricity Transmission (NGET) is included within the Proposed Development Site for the purposes of providing an electrical connection for the Proposed Development into the National Grid electricity transmission system. The 400kV Substation comprises electrical generation and transmission equipment on a hardstanding surface within a secure fenced compound.

3.2.10 Any works undertaken within the substation would be the responsibility of NGET.

Potential Electrical Connection from Northern Powergrid Substation

3.2.11 An existing substation owned by Northern Powergrid on Chapel Lane is included within the Proposed Development Site boundary for the purposes of providing an option for lower voltage electrical connection to supply the Proposed PCC Site during plant start-up (refer to **Chapter 4**: The Proposed Development (ES Volume I – **Application Document Ref. 6.2**)). This compound includes existing buildings and an adjacent area of compacted hardstanding. Two potential routes for the connecting cable between the compound and the Proposed PCC Site are included within the Proposed Development Site boundary and illustrated on **Figure 3.3** (ES Volume III - **Application Document Ref. 6.4**). One route crosses Chapel Lane – an adopted highway - and runs through an area of semi-improved grassland south of existing overhead electricity transmission lines associated with the existing National Grid 400kV Substation to the north. The alternative cable route runs along Chapel Lane and north and west towards the Main Site, utilising farm

access tracks previously used during the construction of the existing SSE Renewables Keadby Windfarm. Keadby Common Drain and Glew Drain are present within this corridor, which is also crossed by overhead electricity transmission lines associated with the existing National Grid 400kV Substation to the south.

Emergency Vehicle Access Road

3.2.12 An emergency vehicle access road from the northern boundary of the Proposed PCC Site is also included in the Proposed Development Site boundary. This route would cross the existing Drain 1 (Glew Drain) bounding the north of Keadby Common using a new bridge crossing (shown on **Application Document Ref. 4.17**) and then utilise existing farm access tracks previously used during the construction of the existing SSE Renewables Keadby Windfarm, connecting towards Chapel Lane. The indicative location of the route is shown on **Figure 3.3** (ES Volume III - **Application Document Ref. 6.4**).

3.2.13 This access track and new bridge would not be utilised during construction or normal operation of the Proposed Development; it would only be utilised as a secondary point of access and egress for emergency vehicles and/ or pedestrians in the event of an emergency.

Land within the wider Keadby Power Station site

3.2.14 The Proposed Development Site includes land within both Keadby 1 and Keadby 2 Power Stations for the purposes of facilitating connections to the Proposed Development for electricity, water and other necessary infrastructure as well as to provide temporary access during construction for AIL. A description of land use within the wider Keadby Power Station Site is provided in Section 3.4 below. As the design has progressed, the Applicant has refined the Order Limits in these areas, noting that all these areas are within the control of the Applicant.

Water Connection Corridors and Water Discharge Corridor

3.2.15 The Applicant has assessed two potential cooling options for the Proposed Development. Both are therefore included within the Proposed Development Site boundary and both have been considered within the assessments presented in this ES. The preferred option is to utilise water abstracted from the Stainforth and Keadby canal; the alternative option is to utilise water abstracted from the River Trent. Whichever water source is utilised, treated return cooling water will be directed to the River Trent and discharged through the existing Keadby 1 Power Station outfall which is also proposed to be utilised for treated water from Keadby 2 Power Station, once operational.

3.2.16 The Proposed Development Site therefore includes pipework corridors currently associated with the cooling operations for the Keadby 1 Power Station. One corridor relates to the potential water abstraction from the River

Trent. The other corridor relates to the intended water discharge back to the River Trent. The indicative pipeline routes are shown on **Figure 3.3** (ES Volume III - **Application Document Ref. 6.4**).

3.2.17 The existing discharge pipeline and outfall to the River Trent follows a route of an existing easement north-east referred to herein as the 'Water Discharge Corridor'. The Water Discharge Corridor crosses Chapel Lane adjacent to the curtilages of residential properties before crossing fields which are managed for arable crop production, and traversing beneath a number of unnamed dry ditches and/ or wet drains including Eastoft Moors Drain/ Warping Drain, an ordinary watercourse maintained by the Isle of Axholme and North Nottinghamshire Water Level Management Board (IoAaNNWLMB) ('the IDB') before its outfall location on the western bank of the River Trent. No construction works are proposed on the existing discharge pipeline, although some maintenance works may be undertaken (refer to **Chapter 5**: Construction Programme and Management (ES Volume I – **Application Document Ref. 6.2**)).

3.2.18 A second corridor running east-west from the existing cooling water intake from the River Trent is also included in the Proposed Development Site (referred to herein as the 'River Water Abstraction Option'). This corridor spans Trent Road and encompasses the existing Keadby 1 Power Station pumping station and below ground cooling water pipework beneath areas of improved grassland and Trent Road. An engineered flood embankment maintained by the Environment Agency is present along the eastern bank of the River Trent in this location. The Order Limits for the River Water Abstraction Option extend into the River Trent to allow for a cofferdam to be installed, should this be required for upgrade works to the intake to make it compliant with the Eels (England and Wales) Regulations 2009 (HMSO, 2009). The River Trent is a large tidal navigable river (circa 150m wide at this location) with marginal mud banks exposed at low tide and is subject to several statutory nature conservation designations described in Section 3.6. Further detail on the 'River Water Abstraction Option' is provided in **Chapter 4**: The Proposed Development and **Chapter 12**: Water Environment and Flood Risk (ES Volume I – **Application Document Ref. 6.2**).

3.2.19 Additional land associated with the potential cooling water intake from the Stainforth and Keadby Canal is included in the Proposed Development Site to facilitate the option to use this infrastructure for the Proposed Development (referred to herein as the 'Canal Water Abstraction Option'). The canal will also supply cooling water to Keadby 2 Power Station via a new pumping station and interconnecting pipework.

3.2.20 The channel of the canal is navigable, approximately 35m wide and several metres deep with low vertical artificial banks formed of stone. This part of the canal falls within the boundary of the Stainforth and Keadby Canal Corridor local wildlife site (LWS), which is designated for its aquatic flora and associated bankside habitats.

Waterborne Transport Offloading Area

3.2.21 This existing level hardstanding area of the Proposed Development Site comprises a river wharf owned by PD Port Services Ltd with a short stretch of access road, bounded by grassed earth embankments directly adjacent to the River Trent and to the north of Keadby Lock which provides access to the Stainforth and Keadby Canal. The area incorporates a reinforced concrete slab which can be used for the positioning of temporary cranes for lifting and transfer of AIL components/ equipment. Use of this area for the Proposed Development would be consistent with the existing use of this area for AIL deliveries during construction of Keadby 2 Power Station. The Waterborne Transport Offloading Areas includes a small (circa 5m wide) section of the River Trent to allow for temporary oversail associated with the unloading by crane from moored vessels.

Additional Abnormal Indivisible Load (AIL) Route

3.2.22 The Proposed Development Site incorporates land currently used as a temporary construction haul road for Keadby 2 Power Station from the Waterborne Transport Offloading Area into the Keadby Power Station site for the purposes of transporting AIL that have been delivered and unloaded at the Waterborne Transport Offloading Area.

3.2.23 This Additional AIL route commences at the Waterborne Transport Offloading Area, crosses a short section of the B1392 and then incorporates an existing temporary haul road that runs to the east of PD Port Services freight yard, through an agricultural field (owned by the Applicant). The temporary haul road has been constructed using geotextile separation membrane with granular compacted stone laid on top, using temporary steel bridges to span over drainage ditches. The additional AIL route then crosses the existing hardstanding 'Outage' car park and into the existing Keadby 1 Power Station Site.

3.2.24 This temporary haul road is the subject of a planning permission (PA/2021/188) granted by NLC in March 2021 which amends conditions 7 and 8 of PA/2019/1595 to extend the time period for the restoration and decommissioning of the haul road (previously required to be restored following completion of construction of Keadby 2 Power Station). The haul road will therefore be temporarily retained following completion of Keadby 2 Power Station construction in order that it can be beneficially used for the Proposed Development, prior to its restoration as part of the Proposed Development. It is therefore included within the Order Limits. Effects associated with its retention as a temporary haul road during construction of the Proposed Development, use by the Proposed Development for the purposes of AIL deliveries and subsequent restoration are included in the environmental assessments of this ES (**Chapters 8-19** (ES Volume I – **Application Document Ref. 6.2**)).

Construction Laydown Areas

3.2.25 A number of construction laydown areas are included within the Proposed Development Site boundary (refer to **Chapter 5**: Construction Programme and Management (ES Volume I – **Application Document Ref. 6.2**)). It is anticipated that up to approximately 20.7ha of land will be required for construction laydown (refer to **Figure 3.3** and **Figure 5.1** (ES Volume III – **Application Document Ref. 6.4**)) which would be provided in different parts of the Proposed Development Site.

3.2.26 To the south of the Stainforth and Keadby Canal, adjacent to the construction and operational access road from the A18, an area of farmland under intensive arable management is included within the Proposed Development Site boundary for use as temporary construction laydown. South of the Stainforth and Keadby Canal and west of North Pilfrey Bridge, an area of mown improved grassland and land used for Keadby 2 Power Station laydown is also included as a laydown area. It is anticipated that these areas would be used as a contractor's compound and include construction staff car parking, with a park and ride system to transport workers between this compound and the Proposed PCC Site.

3.2.27 The existing hardstanding construction laydown areas currently utilised by Keadby 2 Power Station are also included in the Proposed Development Site. The former site of the previous substation for Keadby 1 Power Station is also included for laydown where all equipment has been removed and the remaining site is flat and mostly concrete. An overhead line crosses this land and a pylon within the area would provide some constraints for working.

Construction and Operational Access Route and Gatehouse

3.2.28 Access to the Proposed Development Site during construction and operation would be via the existing access roads from the A18. Perpendicular and skewed construction access points off the A18, built for construction vehicles during construction of Keadby Wind Farm and currently used by all construction vehicles associated with the Keadby 2 Power Station, would be used to access the Proposed Development Site. The skewed access would be used, where required, to transport certain oversized AIL into the Proposed Development Site during construction. Other than the replacement of Mabey Bridge, it is not anticipated that the existing carriageway of the access road requires improvement for the Proposed Development. Circa 1.5km of recently planted hawthorn hedgerow runs for along the access road between the A18 and North Pilfrey Bridge; this will be undisturbed by the Proposed Development.

3.2.29 North Pilfrey Bridge has a capacity of circa 40 tonnes and was constructed in 2012/3 for the Keadby Windfarm Project. It passes over the Scunthorpe to Doncaster passenger rail line, the Stainforth and Keadby Canal and towpath, and North and South Soak Drains (Main Rivers) and is proposed to be utilised for construction and permanent access into the Proposed Development Site. Site access continues via Bonnyhale Road and onwards towards the Proposed

Development Site along existing private access roads. It is not proposed to undertake any works to North Pilfrey Bridge; rather it is included in the Order Limits for the purposes of providing temporary access during construction and permanent access to the Proposed PCC Site during operation.

3.2.30 Alongside the access road to the Proposed Development Site from the A18, a small permanent gatehouse/ security building is proposed to replace the current temporary building utilised by Keadby 2 Power Station on this road. This gatehouse will include a vehicle waiting area - refer to **Figure 3.3**: Indicative Work Areas Referred to in the ES (ES Volume III – **Application Document Ref. 6.4**) and **Application Document Ref. 4.14**.

A18 Junction Improvement and Mabey Bridge replacement

3.2.31 The A18 is an adopted highway subject to the National Speed Limit. It is bordered on its southern carriageway by North Engine Drain and the River Torne (Main Rivers). It is proposed that this will form the primary new permanent access for the Proposed Development. The existing junction with the A18 will be widened in the vicinity of Mabey Bridge along the north of the existing A18 carriageway alignment in order to accommodate a ghost island for traffic turning right into the Proposed Development Site from the A18, permitting traffic to continue along the carriageway. This northern carriageway is bordered by grass verge habitats and beyond this an existing bridge, Mabey Bridge, which provides access over Hatfield Waste Drain (Main River). Mabey Bridge will be replaced in order that it is capable of serving the Proposed Development over its 25 year lifetime. Further details are provided in **Chapter 4**: The Proposed Development and **Chapter 5**: Construction Programme and Management (ES Volume I - **Application Document Ref. 6.2)**.

Additional Area for Landscaping and Biodiversity Provision

3.2.32 An area of existing road verge along the Proposed Development Site access road and additional areas of improved grassland south of the South Soak Drain and the Stainforth and Keadby Canal are included in the Proposed Development Site boundary for landscaping and biodiversity provision. The road verge is in parts bounded by existing hedgerow. Areas to the south of the canal comprise species poor improved grassland. These additional areas are within the Applicant's ownership and further described in the Landscape and Biodiversity Management and Enhancement Plan (LBMEP) (**Application Document Ref. 5.10**).

3.3 Proposed Development Site Topography

3.3.1 Land within and surrounding the Proposed Development Site is generally low lying at elevations below 10m Above Ordnance Datum (mAOD) and with very shallow gradients. Surrounding area topography is illustrated on **Figure 14.2** (ES Volume III - **Application Document Ref. 6.4**).

3.3.2 According to the Environment Agency Digital Terrain Model, the ground level varies from a low point of approximately -0.6m AOD, to a high point of 6.7m AOD within the Proposed PCC Site, with average levels of circa 1.0m AOD across.

3.3.3 A notable steep ridge is present immediately to the west of the Proposed PCC Site (outside the Proposed Development Site boundary) where land associated with the former Keadby Ash Tip is in excess of 19m AOD.

3.3.4 Levels on the Keadby 1 and Keadby 2 Power Station sites are slightly elevated compared to the surrounding land within the Proposed Development Site, with levels typically between 1.0 - 3.0m AOD. Levels within the construction laydown areas (farmland) south of the Stainforth and Keadby Canal are typically circa 1.0m AOD.

3.3.5 The A18 carriageway is also at slightly higher levels (circa 2.5m AOD) than surrounding lower lying land, whilst levels at the proposed small permanent gatehouse/ security building on the Proposed Development Site access road are circa 1.5m AOD.

3.4 Wider Keadby Power Station

3.4.1 Keadby 1 Power Station was built on the site of a former coal fired power station which was operational between 1952 and 1984. The Keadby 1 Power Station was commissioned in 1996 and comprises two F Class gas turbines (230MWe each) fitted with dry low NO_x burners. Each gas turbine exhausts through a heat recovery boiler with the combined steam output passing to the condensing steam turbine (nominal capacity of 260MW). The windshields for the 2 combined cycle gas turbine (CCGT) stacks are 60m high and the 2 gas turbine stacks are 47m high.

3.4.2 The total thermal input for the Keadby 1 gas turbines and steam turbine is approximately 1,329MWth. A standalone auxiliary gas turbine of 25MW electrical output (75MW thermal input) operates in open cycle mode, with a 50m high stack and provides additional supply to the grid during high demand periods and for main plant start up during black start conditions.

3.4.3 Keadby 1 Power Station is fuelled by natural gas which is supplied via an underground pipeline from an Above Ground Installation (AGI). Within the AGI is the local gas treatment plant that consists of a storage vessel, injection unit, instrumentation and associated pipework, mercaptan (odorant) storage and injection, pressure/ temperature regulation, pig trap facilities (inspection of the spur), filtration, metering, boiler house, heat exchangers, gas chromatograph, flow computers and associated telemetry.

3.4.4 The River Trent provides water for direct cooling for Keadby 1 Power Station. Boiler make-up water is sourced from the Stainforth and Keadby Canal. The River Trent is used for discharge of treated cooling water from Keadby 1 Power Station.

3.4.5 All electrical output from Keadby 1 Power Station is exported to the National Grid Electricity Transmission System via the existing 400kV Substation.

3.4.6 Adjacent to the west of Keadby 1 Power Station is Keadby 2 Power Station; a 910MW CCGT power station currently under construction, following the grant of a variation to an existing Section 36 consent in 2016. Construction by the Applicant's Engineering, Procurement and Construction (EPC) contractor commenced in April 2019 and is ongoing; expected completion is by quarter 1 (Q1), 2022.

3.4.7 Keadby 2 Power Station comprises the following components:

- an H Class gas turbine generator;
- waste heat recovery boiler;
- a condensing steam turbine generator;
- hybrid cooling towers;
- control room and instrumentation system;
- water treatment plant; and
- cooling water abstraction and discharge pipework.

3.4.8 Once operational, combustion gases from Keadby 2 Power Station will be released through a single stack (75m in height). The key elements of the power station are distributed between two areas: a main power island in the eastern part of the Keadby 2 Power Station site which incorporates the power generating equipment including the turbines, boilers and associated buildings; and a western part of the Keadby 2 Power Station site, which contains the hybrid cooling towers and an area of land set aside for carbon capture readiness purposes.

3.4.9 Keadby 2 Power Station will be fuelled by natural gas supplied from the existing National Gas Transmission System, via a new AGI. A new pipeline within the boundary of the Keadby 2 Power Station site has been built to connect into the existing AGI used by Keadby 1 Power Station.

3.4.10 Cooling water for Keadby 2 Power Station will be sourced from the Stainforth and Keadby Canal.

3.5 Site History

3.5.1 Available historic Ordnance Survey (OS) maps have been studied to determine the previous land uses within and surrounding the Proposed Development Site, as detailed in **Appendix 13A**: Phase 1 Desk Based Assessment (ES Volume II – **Application Document Ref. 6.3**). The mapping shows no notable development within the Keadby Power Station site until 1967 – 1969 editions when a power station is shown as having been developed in the central/ eastern area of the Proposed Development Site, with electricity transmission cables and pylons originating from the power station, that span across the centre of the

Proposed Development Site. This was a former coal fired power station which was operational between 1952 and 1984, and which was demolished by the early 1990's.

3.5.2 On the 1967 – 1969 editions, railway lines are shown to occupy the south-western area of the Proposed Development Site north of the Stainforth and Keadby Canal, leading towards and terminating at the power station. Adjacent to the railway lines is a conveyor system, which is likely to have been used for the transport of materials and fuels, such as coal, from trains to the power station.

3.5.3 An area of marshland is shown as present on the 1967 – 1969 editions in the south-west of the Proposed Development Site north of the Stainforth and Keadby Canal, along with a small refuse heap, with tracks leading to and from this. Three tanks of unknown contents are also shown south and east of the power station and are inferred to be associated with the former power station. Keadby Common Farm is shown as present at the centre of the Proposed Development Site. Drains are mapped within the Proposed Development Site boundary. To the east of the Proposed Development Site, an increase in properties on the 1967 – 1969 editions is noted. A pond and a tank are also shown as present on the eastern-most spur of the Proposed Development Site. Multiple tanks occupy the land south of the power station on the 1978 – 1982 mapping.

3.5.4 No notable changes occur at the Proposed Development Site until 1991 – 1994 editions when the power station is mapped as disused. Within the Proposed Development Site to the east, jetties are shown as now present on the River Trent, with a pumping station located inland where the pond and tanks are located. Keadby Common Farm is now absent from mapping.

3.5.5 Mapping from 1995 shows that the power station previously present (and disused) is now an electricity generation station and a change in site layout is noted. The railway and conveyor system that was previously present terminating at the power station is now absent from the mapping. A set of small tanks and a single tank is located to the west; five tanks run parallel to the south, and an additional set of tanks are located east of the electricity generation station. Further west from the electricity generation station, towards the centre of the Proposed Development Site, are three large tanks. The refuse heap and area of marsh land to the south-west of the Proposed Development Site are now absent from mapping. A large electricity substation is now present within the north of the Proposed Development Site with electricity transmission cables and pylons connected to the electricity generation station and associated overhead cables leading off-site to the north, south and west. A building and mast are present to the north of the electric generation station. No notable changes are shown on Google Earth imagery from 2003, 2008 and 2015.

3.5.6 Extensive historical landfilling has been identified on-site and off-site in close proximity (to the west) (refer to **Appendix 13A**: Phase 1 Desk Based

Assessment (ES Volume II - **Application Document Ref. 6.3**). This is illustrated on **Figure 3.4** (ES Volume III - **Application Document Ref. 6.4**).

3.5.7 **Appendix 13A**: Phase 1 Desk Based Assessment (ES Volume II - **Application Document Ref. 6.3**) also describes the historical land-use associated with the construction laydown areas (agricultural fields) according to maps from the National Library of Scotland dated 1885, 1905 – 1906 and 1948. These indicate that the access road from the A18 and the proposed construction laydown areas in adjacent agricultural fields were agricultural fields during this time period. Historical maps viewed on Google Earth Pro indicate that this area has been agricultural land and contained a track since 2002. On these maps, North Pilfrey Farm and Pilfrey Farm have been present since 1885. Although there is a data gap between 1948 and 2002, given the surrounding land uses, it is considered likely that the land use remained agricultural during this period.

3.6 Potential Sensitivities/ Receptors within the Surrounding Area

3.6.1 When undertaking an EIA, it is important to understand which receptors should be considered as part of the assessment. A number of environmental receptors relevant to the EIA have been identified within and outside the boundary of the Proposed Development Site, as shown on **Figure 3.4** (ES Volume III - **Application Document Ref. 6.4**). Each of these is detailed in the relevant topic chapter of the ES, and as such, this list is not exhaustive. Where distances are quoted in this ES, the distance is defined (unless otherwise stated) as the shortest distance between the receptor and the closest point of the boundary of the Proposed Development Site or part thereof (e.g. Main Site).

3.6.2 Key receptors for each topic area have been identified as part of the assessment process and details are included in the relevant technical chapters (**Chapters 8 - 19** (ES Volume I - **Application Document Ref. 6.2**)). A summary is also provided below.

Surrounding Land-Use

3.6.3 Beyond the current Keadby Power Station Site, land uses are predominantly arable farming. Various types of power infrastructure have been developed near to the Proposed Development Site in recent years, including overhead electricity transmission and distribution infrastructure and the Keadby Windfarm to the north which became operational in 2014. Additional wind turbines and electricity transmission and distribution infrastructure is present over the wider surrounding area. Residential uses and canal and river related uses are found in the nearby villages of Keadby and Gunness. The former Keadby Ash Tip is located immediately west of the Proposed PCC Site.

Residential Receptors

3.6.4 The nearest settlement is the village of Keadby which is located immediately adjacent to the Water Discharge Corridor and approximately 1km east from the Proposed PCC Site at its closest point.

3.6.5 Other settlements nearby include: Crowle (3.6km) and Ealand (2.2km) to the west; Althorpe (1.7km) to the south-east and Gunness (580m) to the east on the eastern bank of the River Trent. Closer to the Proposed PCC Site are a small number of residential areas and individual residential properties. Those closest residential and other sensitive receptors to the Proposed Development Site include:

- properties along Trent Road including Blacksmiths Cottage (former Trentvale Preparatory School), No. 7 and 8 Mariners Arms Flats and No. 19 Trent Side – the closest of this group of properties is located immediately adjacent to (within 5m of) the Water Connection Corridor (River Water Abstraction Option);
- a pair of semi-detached residential properties 'Holly House' and 'Hawthorn House' located 0m (Hawthorn House) and 35m (Holly House) west of the Water Discharge Corridor;
- properties along Chapel Lane, located 50m east of the Water Discharge Corridor;
- a single residential property (No. 5 Trent Side), approximately 35m east of the Additional Abnormal Indivisible Load Route;
- an individual property at Vazon Bridge, approximately 50m south of the Proposed Development Site boundary, adjacent to the Stainforth and Keadby Canal;
- an individual property at Roe Farm located approximately 55m south of the Proposed Development Site boundary adjacent to the Stainforth and Keadby Canal;
- Scunthorpe Sea Cadets – Boat Station located approximately 55m south of the Proposed Development Site boundary, adjacent to the Stainforth and Keadby Canal;
- Pilfrey Farm, approximately 250m east of the skew construction access road from the A18;
- farms along Bonnyhale Road including Ealand Warpings approximately 190m north-west of the Construction and Operational Access Route and North Pilfrey Farm located 225m west of North Pilfrey Bridge;
- North Moor Farm located approximately 520m north of the Potential Electrical Connection to the Northern Powergrid Substation;
- Keadby Grange, approximately 510m east of the Construction Laydown Areas, within the agricultural fields north of A18;
- Boskeydyke Farm located approximately 1.1km north of the Water Discharge Corridor;
- Amcotts Grange located approximately 1.4km north of the Water Discharge Corridor; and

- Ealand Poultry Farm, located on Bonnyhale Moor Road, approximately 1.6km west of the Proposed PCC Site.

3.6.6 A property 'Red House' shown on OS base planning was demolished in 2019 and is therefore not included as a receptor.

3.6.7 Potential effects on residential receptors are considered in a number of chapters including **Chapter 8:** Air Quality, **Chapter 9:** Noise and Vibration, **Chapter 10:** Traffic and Transport, **Chapter 14:** Landscape and Visual Amenity (ES Volume I - **Application Document Ref. 6.2**) and **Appendix 16A**: Human Health Signposting (ES Volume II - **Application Document Ref. 6.3**).

Ecological Receptors

3.6.8 Designated nature conservation sites within 15km of the Proposed Development Site are presented in Table 3.1. **Figure 11.1** (ES Volume III – **Application Document Ref. 6.4**) indicates the locations of these sites.

Table 3.1: Statutory Ecological Designations within 15km (shown by distance from the Proposed Development Site)

Name	Type	Approximate distance from the Proposed Development Site
Humber Estuary	Ramsar	0.0
Humber Estuary	SSSI	
Humber Estuary	SAC	Within the land required by the Proposed Development, the River Trent has been identified as a potential water abstraction location and discharge, and during construction the existing infrastructure associated with the Waterborne Transport Offloading Area adjacent to the River Trent is proposed to be used to facilitate offloading of AIL, as has been undertaken for Keadby 2 Power Station construction.
Crowle Borrow Pits	SSSI	1.2

Name	Type	Approximate distance from the Proposed Development Site
Hatfield Chase Ditches	SSSI	1.4
Eastoft Meadow	SSSI	3.6
Belshaw	SSSI	5.3
Thorne & Hatfield Moors	SPA	5.5
Thorne Moor	SAC	5.5
Thorne, Crowle and Goole Moors	SSSI	5.5
Conesby (Yorkshire East) Quarry	SSSI	7.0
Epworth Turbary	SSSI	7.4
Risby Warren	SSSI	7.6
Hatfield Moor	SAC	8.2
Hatfield Moors	SSSI	8.2
Messingham Heath	SSSI	8.9
Tuetoes Hills	SSSI	9.1
Haxey Turbary	SSSI	9.5
Rush Furlong	SSSI	9.7
Hewson's Field	SSSI	10.5
Messingham Sand Quarry	SSSI	10.7
Manton and Twigmoor	SSSI	10.8
Scotton and Laughton Forest Ponds	SSSI	11.3
Broughton Far Wood	SSSI	12.2
Broughton Alder Wood	SSSI	12.5
Scotton Beck Fields	SSSI	13.0
Scotton Common	SSSI	13.0
Laughton Common	SSSI	13.0
Manton Stone Quarry	SSSI	13.5
Haxey Grange Fen	SSSI	14.0
Cleatham Quarry	SSSI	14.3
Castlethorpe Tufas	SSSI	14.6
Mother Drain, Misterton	SSSI	14.7

Name	Type	Approximate distance from the Proposed Development Site
Misson Training Area	SSSI	14.7
Cliff Farm Pit	SSSI	14.8

3.6.9 Non-statutory ecological sites in the vicinity of the Proposed Development Site are presented in Table 3.2 and illustrated on **Figure 11.2** (ES Volume III – **Application Document Ref. 6.4**).

Table 3.2: Non-Statutory Ecological Designations (Local Wildlife Sites) within 2km (shown by distance from the Proposed Development Site)

Name	Approximate distance (metres) from the Proposed Development Site
Hatfield Waste Drain	0 - crossed by the existing Mabey Bridge to be replaced
Keadby Boundary Drain	0 - adjacent, to the west of Keadby Common
Keadby Warping Drain	0 - crossed by the buried pipeline for the existing line of discharge from Keadby 1 Power Station
North Engine Drain, Belton	0 - vicinity of the A18 access road, subject to junction improvement by carriageway widening to the north
Stainforth and Keadby Canal Corridor	0 - if used, the Canal Water Abstraction Option would take water from the LWS and may use infrastructure adjacent to that installed for Keadby 2 Power Station
River Torne	20 - south of the A18 access road junction improvement
South Soak Drain, Keadby	25 – south of the Canal Water Abstraction Option
Keadby Wetland	30 – south of the Canal Water Abstraction Option
Keadby Wet Grassland	50 – south of the Canal Water Abstraction Option
Three Rivers	105 - south of the Waterborne Transport Offloading Area
South Engine Drain, Belton	105 - south of the existing A18 access road
Gunness Common	1.3km – east

3.6.10 The potential effects of the Proposed Development on designated ecological sites and other ecological receptors are considered in **Chapter 11:** Biodiversity and Nature Conservation (ES Volume I – **Application Document Ref. 6.2**), with supporting information provided in **Chapter 8:** Air Quality, **Chapter 9:** Noise and Vibration and **Chapter 12**: Water Environment and Flood Risk (ES Volume I – **Application Document Ref. 6.2**).

Transport Receptors

3.6.11 Access to the Proposed Development Site during the construction and operation would be via the existing tarmacadam access road from the A18. Two construction access points off the A18 were built for accessing Keadby Windfarm and are currently used by construction vehicles associated with the Keadby 2 Power Station construction project. The access road crosses Hatfield Waste Drain via the existing Mabey Bridge and continues north and then east towards the Proposed PCC Site, crossing the Stainforth and Keadby Canal and the Scunthorpe to Doncaster passenger rail line on the North Pilfrey Bridge, constructed in 2012. The access road then links to Bonnyhale Road and onwards towards the Proposed PCC Site along existing private access roads. This access road is shown on **Figure 3.2** and **Figure 3.3** (ES Volume III – **Application Document Ref. 6.4**).

3.6.12 The wider Keadby Power Station site is accessed from the B1392, a single-carriageway road that serves the village of Keadby. The B1392 joins the A18 trunk road approximately 1.2km south of the Waterborne Transport Offloading Area at a junction to the west of the village of Althorpe. This access is not proposed to be used for the Proposed Development.

3.6.13 Plans showing the highway network in the vicinity of the Proposed Development Site are presented in the Transport Assessment (**Appendix 10A** (ES Volume II – **Application Document Ref. 6.3**)).

3.6.14 Chapel Lane is an adopted highway providing local access from Keadby village through the land associated with Keadby 2 Power Station and Keadby 1 Power Station towards Vazon Bridge. Chapel Lane bridge and level crossing (NGR 482501 411528) located approximately 20m south of the Proposed Development Site boundary provides access for local residents at Vazon Bridge and Roe Farm. Sections of Chapel Lane are included in the Proposed Development Site where crossings are required, for example, to the potential Electrical Connection to the Northern Powergrid 132kV Substation or to construct the Water Connection Corridor. Proposals for temporary traffic management during works to provide connections across Chapel Lane are described in **Chapter 5**: Construction Programme and Management (ES Volume I – **Application Document Ref. 6.2**). With the exception of such works, Chapel Lane will not be used by construction traffic or construction staff during construction of the Proposed Development.

3.6.15 Other roads within the Proposed Development Site include Ealand Road/ Bonnyhale Road which runs east-west along the southern edge of Proposed PCC Site and Electrical Connection Area to National Grid 400kV Substation.

3.6.16 Trent Road, North Road and West Road are all roads facilitating the movement of site traffic within the current Keadby 1 Power Station site and the Keadby 2 Power Station construction site within the Proposed Development Site boundary. These are not public roads.

3.6.17 The Stainforth and Keadby Canal, managed by the Canal and River Trust, is located immediately to the south of the Proposed Development Site. At the intersection with the River Trent, Keadby Lock is present which provides access to the Stainforth and Keadby Canal from the River Trent for freight and pleasure craft.

3.6.18 To the south of the Proposed Development Site (and running beneath Pilfrey Bridge, which provides access into the Proposed Development Site), the Scunthorpe to Doncaster passenger rail line is present; there are no existing connections or sidings into the Keadby Power Station site. A passenger service is provided by TransPennine Express every hour in each direction.

3.6.19 No public rights of way (PRoW) are located within the Proposed Development Site. The nearest PRoW are:

- KEAD 10: a bridleway which runs north-south from Chapel Lane to a point north of Warping Drain. The southernmost point of this footpath is approximately 40m from the Water Discharge Corridor;
- Footpath CROW11 located along Bonnyhale Road, approximately 250m north-west of the access road for the Proposed Development Site; and
- Footpath KEAD 9 which runs parallel to Warping Drain east-west from the northern terminus of Footpath KEAD 10 approximately 500m north of the Proposed PCC Site. Footpath LUDD9 joins Footpath KEAD 10.

3.6.20 A permissive 'traffic-free cycle route' south of the Stainforth and Keadby Canal is also noted together with a number of other PRoW located within the wider surrounding areas. These routes are shown on **Figure 3.4** (ES Volume III – **Application Document Ref. 6.4**).

Air Quality Receptors

3.6.21 There are no Air Quality Management Areas (AQMA) within the Proposed Development Site or surrounding areas. The closest AQMA is located approximately 6.2km to the east of the Proposed Development Site in Scunthorpe and is designated for the exceedance of the 24 hour PM_{10} limit value (refer to **Figure 3.4** (ES Volume III - **Application Document Ref. 6.4**)). Based on Defra forecast models and local authority monitoring data, no exceedances of the EU standards have been identified in the vicinity of the Proposed Development Site.

Geological and Hydrogeological Receptors

3.6.22 According to the Phase 1 Geo-Environmental Site Assessment (**Appendix 13A** (ES Volume II - **Application Document Ref. 6.3**)), the local geology is characterised by approximately 12m to 17m of alluvium and drift deposits of clay, silt and sand, with occasional peat layers recorded at various depths between 0.45m and 1.6m thickness. These superficial deposits overlie the Mercia Mudstone Formation which shows evidence of near surface weathering, the extent to which decreases with increasing depth. Although not mapped, made ground is expected across the Proposed Development Site, given the historical phases of development that have taken place.

3.6.23 The results of a hand augering survey across the northern part of the Proposed PCC Site and the construction laydown areas (refer to **Appendix 15C** (ES Volume II – **Application Document Ref. 6.3**)) provided results that were broadly consistent with the published geology.

3.6.24 The Environment Agency classifies the underlying superficial geology as Secondary A aquifer and the Mercia Mudstone as a Secondary B aquifer. The Proposed Development Site does not contain or lie within or in close proximity (<1km) to any Source Protection Zones (SPZ).

3.6.25 Groundwater levels within the historical borehole records indicate generally shallow groundwater levels within the superficial geology of between 0.9m - 3.0m below ground level (bgl). Occasionally, deeper groundwater strikes were recorded between 5.4m - 6.9m bgl.

Hydrological Receptors

3.6.26 **Figure 12.3** (ES Volume III - **Application Document Ref. 6.4**) illustrates that the Proposed Development Site and surrounding areas lie within the extensive floodplain of the tidal River Trent which flows in a northerly direction towards the Humber Estuary.

3.6.27 The Flood Map for Planning illustrates that the entire Proposed Development Site and surrounding environs is within the Environment Agency's indicative Flood Zone 3. Flood Zone 3 is land assessed as having a 1 in 100 or greater annual probability of river flooding (>1% Annual Exceedance Probability or AEP), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5% AEP) in any year. However, land north of the canal (which includes the majority of the Proposed Development Site) benefits from flood defences (embankments) along the River Trent. Further information can be found in **Appendix 12A**: Flood Risk Assessment (ES Volume II -- **Application Document Ref. 6.3**).

3.6.28 The study area has a complex surface water hydrology and a long history of land drainage. The Proposed Development Site and land north of the Stainforth and Keadby Canal is within the IoAaNNWLMB area.

3.6.29 The Water Discharge Corridor into which cooling water discharge is emitted from the existing Keadby 1 Power Station traverses beneath Warping Drain (also known as Eastoft Moor Drain) which is an artificial waterbody classified as an Ordinary Watercourse and flows east and into the tidal River Trent via sluice gates.

3.6.30 Approximately 160m west of the Proposed Development Site at its closest point is Keadby Boundary Drain, an Ordinary Watercourse, which runs south to north. At the point where Keadby Boundary Drain joins Warping Drain via a sluice, there are flood gates on Warping Drain.

3.6.31 The ANNWLMB maintained Glew Drain, an open watercourse, exists on the northern boundary of the Proposed PCC Site. Keadby 2 Power Station is permitted to discharge clean surface water into this drain under the consent of the IDB. A further ANNWLMB maintained open watercourse 'Keadby Common Drain' intersects Glew Drain along Chapel Lane. Keadby 1 Power Station maintains a consent to discharge surface water drainage and other non-process water to Keadby Common Drain, and then into the Trent via the IDB open water drains to the north of Chapel Lane.

3.6.32 Lying generally to the south of the Proposed PCC Site beneath North Pilfrey Bridge, there are a number of watercourses running parallel west to east. These include North Soak Drain and South Soak Drain which flow either side of the Stainforth and Keadby Canal. The watercourses flow via a sluice gate into the Three Rivers and flow on towards Keadby Pumping Station, a pumping station draining the Isle of Axholme located east of Station Road (B1392). Keadby Pumping Station connects with the River Trent via sluice gates and an outfall located approximately 100m south of the Waterborne Transport Offloading Area. These watercourses are classified as Main Rivers.

3.6.33 The Stainforth and Keadby Canal follows a relatively direct course from west to east, running for approximately 24km from Bramwith Junction, (where it meets the New Junction Canal and the River Don Navigation) to Keadby Lock, where it joins the River Trent. There is a lock at both ends with Keadby Lock controlling passage to the River Trent.

3.6.34 Although the majority of the Proposed Development Site, including the Proposed PCC Site, lies at a distance (1.3km) from the River Trent, small parts of the Proposed Development Site lie adjacent to or involve temporary works within the River Trent mean high water springs (MHWS) as shown on **Figure 3.5** (ES Volume III - **Application Document Ref. 6.4**). This includes the River Water Abstraction Option and Waterborne Transport Offloading Area, as well as very minor areas of the Water Discharge Corridor). The River Trent is a large (approximately 150m wide) tidal watercourse. An engineered flood embankment maintained by the Environment Agency is present along the eastern bank of the river.

Cultural Heritage Receptors

3.6.35 **Figure 15.1** (ES Volume III - **Application Document Ref. 6.4**) illustrates that there are no World Heritage Sites, scheduled monuments, grade I or II* listed buildings, conservation areas, registered parks and gardens, registered battlefields or protected wreck sites within the Proposed Development Site. A number of non-designated heritage assets are recorded in the North Lincolnshire Historic Environment Record (HER) within the Proposed Development Site.

3.6.36 Outside of the Proposed Development Site boundary, the closest assets are the scheduled monument (also a grade II listed building) at Keadby Lock on the Stainforth and Keadby Canal [NHLE 1005204], located adjacent to the Waterborne Transport Offloading Area. One further scheduled monument lies approximately 4.4km north-east of the Proposed Development Site at Flixborough Saxon Nunnery and Site of All Saints Medieval Church and Burial Ground [NHLE 1009382].

3.6.37 The closest listed building to the Proposed Development Site is the Grade II listed Keadby Lock on the Stainforth and Keadby Canal [NHLE 1342734], which is also a scheduled monument as described above. Other listed buildings in the study area are concentrated in its settlements at Keadby, Althorpe, Gunness, Ealand and Crowle, as well as features associated with land improvement such as late-18th to early-19th century drainage syphons and sluices [1346690, 1084319 and 1076974]. The study area contains two notable Grade I listed buildings, both called the Church of St Oswald; one in Althorpe [1083258], and one in Crowle [1346672]. The remaining listed buildings are all Grade II and comprise church vicarages, rectories, houses, public houses, shops and small number of former farmhouses.

3.6.38 The nearest conservation area is located in Crowle approximately 3.2km west of the Proposed Development Site and provides the context and setting for some 14No. listed buildings including the Grade I listed Church of St Oswald [1346672].

3.6.39 The non-designated Isle of Axholme area of Special Historic Landscape Interest (saved policy LC14 of the North Lincolnshire Local Plan) is centered on Epworth, with a northern boundary approximately 2km south of the Proposed PCC Site.

3.6.40 A number of non-designated standing buildings are also identified in the North Lincolnshire HER within 1km of the Proposed Development Site.

3.6.41 A number of below ground non-designated heritage assets are recorded on the North Lincolnshire HER within or in the immediate vicinity of the Proposed Development Site. Within the Proposed Development Site, these include (refer to **Figure 15.2** (ES Volume III - **Application Document Ref. 6.4**)):

- a findspot comprising deer antlers - uncovered in peat of probable Bronze Age date during construction of the former Keadby Power Station in 1951 [HER 15717];
- a cropmark to the north-west of Pilfrey Farm – interpreted as a possible large rectangular enclosure, measuring c.80m across. Other linear marks within the field appear to be warping drains, so together may represent a warping compartment [HER 21639];
- peat deposits up to 2.4m deep, recorded during an auger survey in 2012. The peat contained fragments of birch and alder, together with large oak tree remain [MLS22432];
- a palaeochannel – representing a former pre-historic watercourse just west of the River Trent mapped from air photographs in 2003 [HER 22755];
- alignment of a post-medieval land improvement drain [HER 24691] – located within the Water Discharge Corridor; and
- the site of a former unnamed post-medieval farmstead, demolished in the 19th century [HER 25874].

3.6.42 Additional assets identified during geophysical survey are described in **Appendix 15A**: Desk Based Assessment (ES Volume II – **Application Document Ref. 6.3**).

3.6.43 Beyond the Proposed Development Site, additional non-designated assets include a possible former Romano-British settlement site, south of the Water Connection Corridor (River Water Abstraction Option) – interpreted from fieldwalking in 1982 which yielded a scatter of over 100 Romano-British pottery, [HER 17311] and a mid-18th century discovery of a late-Roman bog body in the vicinity of the site [HER 71] have been recorded. A number of finds are suggestive of favourable conditions for the survival of organic material afforded by the Proposed Development Site's marshland environment (peat).

Landscape and Visual Receptors

3.6.44 The Proposed Development Site lies within the Humberhead Levels National Character Area (NCA) which is a flat, low-lying and large-scale agricultural landscape (Natural England, 2014). There is widespread evidence of drainage history, in particular from the 17th century, in the evidence of ditches, dykes and canalised rivers. The flat landscape enables extensive, unbroken views where vertical structures including power stations and wind turbines, are prominent.

3.6.45 The Proposed Development Site lies within the Trent Levels Landscape Character Area (LCA) within the North Lincolnshire Landscape Character Assessment and Guidelines (Estell Warren Landscape Architects, 1999). This LCA is characterised as a flat, open floodplain landscape with long distance views with little diversity in character.

3.6.46 The Proposed Development Site and its immediate surroundings are heavily influenced by industrial structures of the existing Keadby Power Station Site as well as Keadby Wind Farm, overhead electricity pylons and transmission lines converging near the existing Keadby 1 and Keadby 2 Power Stations. There are no natural features of noteworthy landscape value within the Proposed Development Site.

3.6.47 The surrounding area is largely arable, with local villages including Keadby village directly east of the Proposed Development Site. The extent of views available to receptors range from close proximity to long distance views. A number of receptors are located at the edge of villages, along roads and along PRoW where the landform is low lying. The rising landform in the east and localised areas of slightly raised ground around the Isle of Axholme in the south-west allows for elevated long-distance views towards the Proposed Development Site.

3.6.48 Further information can be found in **Chapter 14**: Landscape and Visual Amenity (ES Volume I - **Application Document Ref. 6.2**).

Agricultural Land Classification

3.6.49 Provisional Agricultural Land Classification (ALC) plans available from magic.gov.uk and provide guidance on the ALC where agricultural land is to be developed. These plans indicate that the majority of the Proposed Development Site (including the Proposed PCC Site) is located within land classified as Grade 2 (very good).

3.6.50 Land within the Construction Laydown Areas south of the Stainforth and Keadby Canal, north of the A18 are classified as Grade 1 land (excellent quality) under the Provisional ALC. Consideration of temporary impacts and effects on soils during construction is provided in **Chapter 5**: Construction Programme and Management (ES Volume I - **Application Document Ref. 6.2**). A Soil Resources Survey will be covered in the final CEMP, proposed to be secured by a Requirement of the draft DCO (**Application Document Ref. 2.1**). A Framework Soil Resources Plan is included in the Framework CEMP (**Application Document Ref. 7.1**).

3.7 References

DEFRA *Magic Maps* (website accessed February 2021). Available online: https://magic.defra.gov.uk/

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