Inspector's Report ABP-311528-21.

Development	A two-storey 220kV electricity GIS substation, underground cabling and all associated and ancillary site works.
Location	Lands adjacent Huntstown Power Station, North Road, Finglas Dublin 11.
Planning Authority	Fingal County Council
Applicant	Huntstown Power Company Limited.
Type of Application	Application under the provisions of Section 182A of the Planning and Development Act, 2000, as amended
Dates of Site Inspection	04 February 2022 and 06 March 2023.
Inspector	Mairead Kenny.

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1.0 Overview

1.1.1. An application has been made under the provisions of Section 182A of the Planning and Development Act 2000, as amended, for the development of an 220kV substation and associated electrical infrastructure. The Board determined that the proposal constitutes Strategic Infrastructure following pre-application consultations under ABP-306723-20.

1.1.2. The proposed substation will be known as Mooretown Substation and it will serve the data centre proposed at lands to the east. The subject data centre is subject of a concurrent appeal under ABP-313583-22. The two reports and the application documentation contain a degree of overlap and it would be appropriate that the cases be simultaneously considered.

2.0 Site Location and Description

2.1. The site is located in an industrial area to the north-west of the junction of the N2 and M50. It is located in the townlands of Johnstown and Coldwinters on lands adjacent to Huntstown Power Station, North Road, Finglas.

2.2. The proposed development site is located due east of the southern side of Huntstown Power Station and north of Quarry Road. Huntstown Quarry is further to the west. Huntstown Bioenergy an anaerobic digestion plant is to the south. The site of the proposed date centre which is to be served by the proposed development is due east of the proposed development site. The lands further to the east have been developed in recent years and include commercial and industrial / warehousing uses. In the wider environment are some individual residential dwellings and a Dogs Trust centre. Beyond those developments is the N2.

2.3. The access to the site from the south is by way of a one-way slip road from the N2 and from there onto the former N2 North Road / R135 and onto internal roads associated with the planned data centre. The primary egress from this area is by way of North Road/R135 and northwards to a loop of the R135 and a slip road which connects with the N2.

2.4. The site is part brownfield and partly under grass and contains an intermittent drainage ditch which runs north south within the site. This is the main channel for

conveying water from the overall site and indeed is stated to drain a 30 ha catchment. The existing ditch originates adjacent the southern substation site boundary and flows in a northerly direction where it forms Huntstown Stream which drains to the Ward River.

2.5. At the time of my second site inspection works were ongoing in relation to the undergrounding of overhead powerlines across of the overall site.

3.0 Proposed Development

3.1. The proposed development comprises **a two-storey 220 KV GIS substation and associated external equipment**. On completion the proposed substation and associated cable connections would be operate by Eirgrid and owned by ESB Networks.

3.2. The proposed development forms part of a wider development which will include the development of a data centre consisting of two data halls and ancillary structures which is subject of a concurrent appeal. In combination the data centre and the substation are referred to as the overall development.

3.3. The application is accompanied by an Environmental Impact Assessment Report (EIAR).

3.4. The GIS substation would comprise:

- a two-storey 220kV gas insulated switchgear (GIS) substation to be known as ‘Mooretown’
- this will consist of 4 no. 220 KV transformer bays within a GIS room
- to include 5 no. 20kV switchgear buildings, a series coil and 1 no. 20kV control room building
- other infrastructure including 20m high lightning finials and monopoles
- the stated total gross floor area of the GIS substation is 2,068m^2 and its overall height is 17m – 20m when lightning electrodes attached to the roof are included
- the substation will be within the overall Eirgrid and Customer compound, which is 2,068m^2 and which will be surrounded by a 2.6m high palisade fence.

3.5. Details of the **underground cabling** is as follows:

- Cable no. 1 takes a southerly route from the proposed development site then follows a private road which serves Huntstown Power Station and Huntstown quarry and terminates at a proposed joint bay on the Corduff cable route. This route is 300m long.
- Cable no. 2. Follows a similar route terminating at a proposed joint bay at the existing Finglas cable route. This route is 125m long.
- Cable no. 3 takes a southerly route then heads west to terminate at the existing ESB Huntstown A AIS Station.
- Cable no. 4 takes a southerly route then heads west to terminate at the existing ESB Huntstown B AIS Station.
- Removal of redundant sections on the existing 220kV cables.

3.6. **Other elements** of the proposed development include:

- all associated and ancillary site development and construction works
- extension of road to connect with the data centre campus road to the east including an alternative new entrance to the south
- site landscaping including a triple staggered row of 4m high native trees and retention of hedgerows to south of the proposed development site
- 9 no. car parking spaces.

3.7. The planning application documentation includes the following:

- Application drawings (AECOM).
- Planning Application Report (Brock McClure)
- Flood Risk Assessment (AWN Consulting)
- Drainage and Water Services Report (AECOM).
- Arboricultural Report (Rik Pannett, C&G Arboriculture)
- Architectural Design Statement (AECOM)
- Appropriate Assessment Screening (Moore Group – Environmental Services)

- Construction Environmental Management Report (AECOM)
- COMAH Land Use Planning Assessment (AWN Consulting)

3.8. A stand-alone website has been set up.

4.0 Further Information Request

4.1. On 11 February 2022 in the context of the then ongoing consideration of the data centre application by the planning authority further information was requested of the applicant. This addressed the following:

- The connections between the planned substation and datacentre including reliance on the datacentre site for construction access and surface water drainage. The applicant was invited to consider an amendment to the site boundary so that the defined site area encompassed a complete development which would be capable of implementation in dependent of the planned data centre.
- Response to the observations received.
- Clarify the maps submitted with respect to letters of consent.
- Provide a strong justification for the 10 year permission.

4.2. The applicant provided a brief response which was received by the Board on 28 February 2022.

5.0 Submissions and Observations

5.1. Planning Authority

5.1.1. Chief Executive's Report

The main points of this report are:

- There is an extensive planning history. Of relevance in terms of recent planning history are:

FW21A/0144 for installation of electrical infrastructure between Finglas substation and Huntstown Power Statement to facilitate retirement of overhead power lines and site clearance.

FW21A/0151 for 2 no. data hall buildings and associated development, which was subject of a request for further information on 15 October 2021.

- The policy context includes NSO 5A of the NPF and RPO 8.25 of the EMRSES. Relevant development plan policy from Chapters 1, 6, 7, 9 and 12 is presented.
- The proposed development will form part of the national electricity network and is supported by national, regional and local planning policy which is referenced.
- Given the site context (and noting the proposed data centre) there is no objection with respect to visual impact.
- The comments of the Transportation Planning Section refer.
- Waste management can be addressed by condition.
- The comments of the Water Services Section refer. The proposals for surface water is acceptable. There is no likely flood risk associated with the proposed development. The planning authority will defer to the opinion of Irish Water in respect of foul drainage and water supply.
- The request for further information under FW21A/0151 included information in relation to the accompanying EIAR. The planning authority considers that the proposed development and that subject of FW21A/0151 constitute a single project for the purposes of EIA albeit that they require separate consent procedures. An addendum to the EIAR was requested. This was to ensure that the full characteristics, impacts and mitigation measures required, for the development as a whole, including the GIS substation and associated development.
- The further information requested also related to visual impact and the zoning.
- The AA screening report identifies an intermittent hydrological link between the application site and the Malahide Estuary SPA and SAC by way of a land drain along the western site boundary. This is a matter for the Board as the competent

authority to determine. The further information issued under application reg. ref. FW21A/0151 for the data centre on adjoining lands requested clarification in the form of an updated AA screening report.

- The proposed development would facilitate a substantial data centre which infrastructure is a key part of the national economy and has a significant impact on energy demand and use. There is a synergy between the overall proposal and the current approach towards sustainable energy provision and usage in the context of climate change.
- No development contributions levied on underground works. A bond is requested to ensure reinstatement works to satisfactory standard. There are no section 49 supplementary contribution schemes or special contributions.

5.1.2. **Internal Reports**

Water Services Section

5.1.3. No objection with respect to foul sewer, surface water, water supply or flooding.

Transportation Planning Section

5.1.4. The transport delivery options described are acceptable. The potential impacts of construction and operation measures have been described and will be included in the CEMP. The potential impact associated with construction traffic will have short term negative impact which would not be considered significant.

5.1.5. No objection subject to a detailed Construction Management Plan and Construction Traffic Management Plan being agreed. The latter to include full details regarding safety issues include signage, traffic management and abnormal load routes and avoidance of peak hour traffic periods and measures to manage HGVs and avoid queuing.

5.2. **Transport Infrastructure Ireland**

The Board is referred to official policy as set out by DoECLG Guidelines.

5.3. Dublin Airport Authority

The proposed development may cause concerns in relation to flight safety. Further detailed assessment is required. DAA requests that a condition be attached to any grant of permission requiring the developer to agree any proposals for crane operations (whether mobile or tower crane) in advance of construction with DAA and with the Irish Aviation Authority.

5.4. Department of Housing Local Government and Heritage

The main points of this submission include:

- The site comprises parts of the two fields separated by a treeline. Habitats present are not of high conservation value. Site drainage is to ditches including a large ditch along the treeline. Surface water run-off into the ditches mainly seeps into the ground but water flows from the main ditch intermittently reach the Huntstown Stream 800m to the north and by this watercourse runs into the Ward River 6.6 km away. The latter having joined the Broadmeadow Water eventually enters the Malahide Estuary over 15 km from the proposed development site.
- Seven common bird species will suffer a loss of nesting habitat due to removal of 150 m of treeline and hedgerow. The incorporation of large-scale tree and shrub planting in the landscaping of the wider site will in the long run compensate. However removal of woody vegetation during the bird breeding season could potentially lead to direct destruction of nests, eggs and nestlings.
- Bat surveys identified foraging over the east of the site by the three most common bat species in Ireland and single record of more light-sensitive species have been made over the wider development site. The applicant proposes to design lighting in conformity with the guidelines to avoid light spillage which might detrimentally affect bats.
- The AA Screening report determines that because of the significant distance between the proposed development and the Malahide Estuary SAC and SPA and the very weak ecological pathway involved, the present proposal will not result in any likely changes to the European sites. The Department accepts the AA Screening conclusion.

- A condition is recommended that clearance of vegetation only be carried out outside of the main bird breeding season.
- A condition is recommended relating to review of the lighting scheme to ensure that it is in accordance with relevant guidance for bats and is signed off by a bat specialist.

5.5. Health and Safety Authority

HSA states that it does not advise against granting permission.

5.6. Other Prescribed Bodies Notified

The applicant also referred to this application to the following prescribed bodies none of which made a submission:

- Minister for Environment, Climate and Communications
- Irish Water
- An Chomhairle Ealaion
- Failte Ireland
- An Taisce
- Heritage Council
- Commission for Regulation of Utilities, Water and Energy
- Health Services Authority.

5.7. Third Party Observations

None received.

6.0 Planning History

6.1. Overall Site

6.1.1. FW21A/0151 / concurrent appeal ABP-313583-22. This relates to the 2 no. data hall buildings and associated development. The application is accompanied by an EIAR. The concurrent Inspector's report refers.

6.1.2. FW21A/0144 refers to a grant of permission for installation of electrical infrastructure between Huntstown power plant and a nearby substation to facilitate retirement of overhead power lines and to facilitate site clearance for the future development of the data centre and substation subject of separate planning applications. This project has commenced.

6.1.3. ABP-313564 relates to an invalid appeal relevant to proposed data centre.

6.1.4. **Huntstown and other nearby sites**

6.1.5. FW13A/0089 refers to a grant of permission for a **renewable bioenergy plant** to generate up to 3.4 MW of electricity from 90,000 tons of non-hazardous biodegradable waste per annum using anaerobic digestion technology on a 2.3 ha site. Two related applications provided for the substitution of the permitted wastewater treatment plant (FW 18A/0082) and for an increase in the annual volume of waste allowing 99,900 tons to be imported to the permitted bioenergy plant (FW 18A/0159).

6.1.6. FW19A/0015 refers to a grant of permission for development of a **battery energy storage system** within Huntstown Power Station.

6.1.7. FW 20A/0063 relates to a 2.85 ha site to the south of the site of the proposed development which is zoned HI. Permission was refused for a 5000 m² **research and development building** to specialise in developing pilot scale circular economy solutions for a range of discarded resources. The overall site is to be developed as a circular economy hub/business Park. The reasons for refusal related to possible need for EIA, consent to use surface water sewer and undertake other works.

6.1.8. FW 20A/0211 relates to a grant of permission for development of **industrial / warehouse / logistics** uses at the site to the north-east of the Dog's Trust and at the

opposite side of the R135. The works included a dedicated footpath and cycle way along the eastern side of the R135.

6.1.9. FW 13A/0143 refers to works at the 2.63 ha site to the north of the proposed development site, which is occupied by **Dogs Trust** and where the permitted development provided for new lighting, landscaping and other works related to the exercise runs.

6.1.10. ABP-301908 relates to an application for a major infrastructure project known as the **Greater Dublin Drainage scheme**. Part of the pipeline corridor route adjoins the site of the proposed data centre. At lands to the north of the existing Dog's Trust facility is the site of a permitted Regional Biosolids Storage Facility which was subject of the same application. The GDD application has been subject to judicial review and was remitted to the Board (under ABP-312131) and remains under consideration. The Regional Biosolids Storage Facility has a further separate permission.

7.0 Policy Context

7.1. A more detailed consideration of legislative and policy context is required in relation to the data centre case and is included in my report on the concurrent appeal. The following comprises the relevant policy context of most relevance to this case.

7.2. Climate Action Plan 2021

7.2.1. Published in the context of the European Green Deal the plan sets out the context of climate change, including the evidence for and consequences and the 'limited window for real action to reduce emissions'. The plan is a roadmap for taking decisive action to secure the reduction of emissions as set out in national policy and legislation. It notes that considerable investment will be required to reduce our greenhouse gas emissions by 51% by 2030 and that this must influence both public and private capital investment.

7.2.2. With respect to the electricity sector in particular the increase in the proportion of renewable electricity to up to 80% by 2030 is described as one of the most important measures in the plan. In the context of this statement it is highlighted that the government will review its strategy on data centres to ensure that the sector aligns with sectoral emission ceilings and supports renewable energy targets which provide

for a reduction in emissions by 2030 in the order of 62% – 81%. With respect to data centres it is stated that the forecast growth in this sector clearly represents a challenge to Ireland's emission targets. It is also stated that the impact of data centre growth on security of supply will be considered.

7.2.3. Action 20 is to develop and coordinate regional and local strategic partnerships in the Midlands region to address the specific challenges posed by the transition to a low-carbon economy.

7.2.4. Action 99 is to review the policy context for large energy users including data centres ensuring alignment of enterprise policy and wider regulatory environment with electricity emissions targets and security of supply.

7.2.5. A commitment to the publication of a roadmap for CPPA is made.

7.2.6. In Chapter 12 it is stated that enterprise policy related to high demand sectors such as data centres will be aligned and consistent with the renewable energy and carbon abatement targets in the electricity sector. The target is for a reduction in Ireland's enterprise emissions by approximately 40% between 2018 and 2023.

7.3. National Planning Framework - Project Ireland 2040.

7.3.1. National Strategic Outcome 8 relates to transition to a low carbon and climate resilient society.

7.3.2. National Policy Objective 54 is to reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and GHG emissions reductions.

7.3.3. National Policy Objective 55 is to promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

7.4. National Development Plan 2018 – 2027.

7.4.1. The National Development Plan identifies the transition to a low carbon and resilient society as a national strategic outcome. Amongst the measures included are some which will decarbonise energy generation, enhance energy efficiency, increase energy security and facilitate the more variable electricity generation on the grid. It

supports the development of a strong and resilient economy which is supported by enterprise, innovation and skills. The acceleration of digital technologies and their integration into all sectors of the economy and society is envisaged and supported. There are multiple references to the role of ICT and related infrastructure including with respect to modernisation of education, health, security and other services. A shared government datacentre is to be developed.

7.4.2. With respect to data centres in general it is noted that the electricity demand from large energy users including data centres is forecast to grow up to 20% of total power demand in 2030.

7.5. The Planning System and Flood Risk Management, 2009

These Guidelines seeks to avoid inappropriate development in areas at risk of flooding and avoid new developments increasing flood risk elsewhere and they advocate a sequential approach to risk assessment and a justification test.

7.6. Regional Spatial and Economic Strategy for Eastern and Midland Regional Assembly (RSES) 2019-2031

7.6.1. This includes strategies that support the creation of quality jobs, provides for sustainable growth and competitiveness of the Dublin Metropolitan Area and supports accelerated action on climate. Dublin is perceived as the national economic engine and is supported by a network of regional growth centres and key towns. The transition to a low carbon climate resilient and environmentally sustainable region is supported.

7.6.2. Regarding data centres in particular it is stated that local authorities shall support the national objective to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities at appropriate locations.

7.6.3. RPO 10.20 relates to energy infrastructure including facilitating new transmission infrastructure projects.

7.6.4. RPO 10.22 relates to supporting the reinforcement and strengthening of the electricity transmission and distribution network.

7.7. **Fingal County Development Plan 2017 – 2023.**

7.7.1. Fingal County Council's website (as on 28 February 2023) envisages adoption of the Fingal Development Plan 2023 -2029 in February. It will take effect 6 weeks later.

7.7.2. Under the current **Fingal County Development Plan 2017-2023** the site is zoned HI the objective of which is to 'provide for heavy industry'. 293 hectares is the total amount zoned HI and this is mainly in the vicinity of Huntstown quarry. Uses which are described as permitted in principle include 'Utility Installations'.

7.7.3. The car parking policies set out do not set any standards for utility installations.

7.7.4. Objective ED21 refers to supporting infrastructure including energy supply and is to ensure that zoned lands are serviced in a timely fashion.

7.7.5. Objective EN22 is to facilitate energy infrastructure at suitable locations, so as to provide for the further physical and economic development of Fingal.

7.7.6. Objective DMS19 is to require new utility structures such as electricity substations to be of high-quality design and to be maintained to a high standard.

7.8. **Natural Heritage Designations**

The Royal Canal pNHA is over 3km to the south.

Santry Demesne pNHA is over 4km to the east.

Liffey Valley pNHA is 6km to the south-west.

European sites are identified in the Appropriate Assessment Section of this report.

8.0 **Assessment**

The planning issues raised in the application fall under the following headings:

- Policy and Principal
- Roads and Traffic
- Flood Risk and Surface Water
- Biodiversity
- Other Issues.

8.1. Policy and Principal

8.1.1. I propose to examine the proposed development under the following headings:

- Policy
- Purpose of project
- Site suitability
- Conclusion.

8.1.2. **Policy**

8.1.3. I consider that there is high level support for the proposed development in the National Planning Framework and the Eastern and Midlands Regional Spatial and Economic Strategy. The proposed development would support future development in the area including, if permitted, the planned data centre and it provides for 4 no. connections for other future development. Mooretown substation will function as a new node on the transmission network. The proposed development accords with national objectives relating to the timely development of enabling infrastructure and facilitating new transmission infrastructure projects. I conclude that proposed substation is in accordance with national and regional policy.

8.1.4. A number of provisions in the Fingal Development Plan are referenced in section 5.2(ii) of the Applicant's Planning Report. I note the complete list provided and I would highlight the following as being of particular relevance in this case:

- Objective ED21 which refers to supporting infrastructure including energy supply and to ensure that zoned lands are serviced in a timely fashion.
- Objective DMS19 which is to require new utility structures such as electricity substations to be of high-quality design and to be maintained to a high standard.

8.1.5. I am satisfied that there is ample development plan support for the proposed development. I revert later to policy DMS 19 with respect to landscape and visual impacts.

8.1.6. The matter of the site zoning is assessed in detail in the Planning Application Report. The site is within lands zoned HI the objective of which is 'to provide for heavy industry'. Under this zoning objective 'utility installations' are permitted in principle.

The definition of utility installations under the development plan includes reference to a facility designed to provide a public utility service including the provision of electricity. The applicant's submission is that the purpose of the proposed development includes strengthening and increasing the resilience of the network. Therefore, the development of a substation is stated to be within the definition of 'utility installation'. I accept the applicant's submissions on this matter and refer to the discussion below relating to the purpose of the project.

8.1.7. I conclude that the proposed development accords with national, regional and local policy provisions.

8.1.8. **Purpose of project**

8.1.9. The need for a grid connection for the planned data centre is the impetus for development of Mooretown substation and this is the main rationale provided by the applicant in the most recent submissions including in response to the Board's request for further information. The substation and cabling are essential for the operation of the planned data centre.

8.1.10. However, it is also evident that the proposed Moortown substation would strengthen the electricity network in the area and increase resilience. Once operation Mooretown substation would facilitate shutdowns of other substations for maintenance or due to fault without the need to cease electricity exportation from one of the Huntstown power plants. As such, although the substation has other purposes including in relation to the planned data centre, it will also function as part of the transmission network and support one of the country's largest power plants. The function of Mooretown substation is clarified in the Technical Note submitted to the Board as part of the pre-application documentation. This states that in the Connection Offer issued by EirGrid for the project, EirGrid have proposed the development of a new strategic node named Moorestown 220 kV substation. The new arrangements will provide improved resiliency and security of supply to Dublin as either of the power stations at Huntstown will be able to export to either Finglas or Corduff substations, subject to the maximum export capacity of those circuits.

8.1.11. In the further information submission it is clarified that the secondary benefits including the formation of a new node adjacent the existing Huntstown AIS would result from the connection of new cables to the existing Huntstown AIS equipment

and new cables to the proposed data centre transformers. As such as the applicant points out these secondary benefits would only be realised if the data centre project is permitted.

8.1.12. If the Board agrees with my recommendation on the concurrent appeal case and decides to refuse permission for the development of the data centre the Board may wish to consider whether it would be appropriate to consider a grant of permission for the substation. Based on the above it may be concluded that the while proposed development would in principle be in accordance with the proper planning and sustainable development of the area, even the secondary benefits in terms of reinforcing the network are reliant on the data centre development.

8.1.13. During the pre-application consultation the Board's representatives did not set out any requirement relating to concurrent submission of the planning applications to the planning authority and the Board. Nor was it indicated that the Board would decide on the application for Mooretown substation only in the context of the data centre being permitted. As both applications are subject of EIA there is no question of project splitting.

8.1.14. Notwithstanding the acceptability of a substation development at this site and the absence of concerns relating to project splitting I consider that the Board is precluded from granting permission in this case. In this regard I would draw attention to the very significant interconnection between the design of the two developments. The substation is part of the overall development and is inextricably connected with the development proposed at the data centre site including with respect to access, surface water and foul sewer arrangements.

8.2. The applicants further information response commented that the Board could consider granting a condition that the proposed substation cannot be built until permission is granted for the planned data centre in the event of the substation being determined prior to the data centre. That suggestion was made in the context of the timing of the planning processes and the fact that the data centre application was then being considered by the planning authority. In the interim given the lodgement of an appeal the concurrent consideration of the two cases is appropriate. There has been no indication by the applicant that it would consider separately pursuing the

development of the substation or that such option is feasible without a substantial revision to the design and EIA and AA aspects of the application.

8.3. I do not recommend that the Board seek further information and I conclude that it is not open to the Board to grant permission in this case

8.3.1. **Site suitability**

8.3.2. I refer in this section to the suitability of the site in terms of compatibility with the existing and proposed developments and likely significant impacts. This includes comments on the amenity issues relevant to existing development.

8.3.3. The site is directly east of and in the immediate vicinity of Huntstown power plant which is a lower tier COMAH site. Part of the proposed development site is within the LUP outer zone and a miniscule plot is within the LUP middle zone. The Planning Application Report references the unmanned nature of the proposed substation in support of its conclusion that the level of individual risk is acceptable. I consider that the evidence supports this overall conclusion and, in this respect, I note two particular matters. Firstly, I refer to the submission of the HSA, which does not advise against a grant of permission. Secondly, I refer to the Land-Use Planning assessment prepared by AWN, which examines the hazards associated with Fuel Oil, LPG and natural gas installations on the power station site and reports on the modelling undertaken to identify mortality risks. I accept the conclusion presented that the risk is acceptable as the substation is unmanned and subject to only occasional maintenance visits. I do not consider that there are any relevant issues for the Board in terms of potential for major accidents. I conclude that the proposed development is an acceptable form of development for this site in the context of the risks associated with the power plant.

8.3.4. I consider that the proposed Mooretown substation would constitute a compatible form of development which would not adversely affect the amenities of the area or interfere with the existing and planned activities at these sites. To the north is Dogs Trust, which is the only sensitive receptor in the immediate vicinity and within the likely zone of influence of impacts. It is stated in the Planning Application Report that the protection of the amenity of this facility has been a key consideration in the design process. The aim has been to achieve a balance between the amenity of sensitive receptors and the functional requirements of the proposed development. I

accept that this is achieved and I note the submissions of the operator of the facility in this respect.

8.3.5. The site is within the Outer Airport Noise Zone. I consider that due to the nature of the development proposed it would not be considered to be an inappropriate form of development and that there would be no requirements for adaptive measures. There is no objection in principle from DAA in relation to the proposed development.

8.3.6. With respect to the general site suitability, I am satisfied that the nature and scale of Mooretown substation is such that it would be compatible with existing development.

8.3.7. **Conclusion**

To conclude I consider that the selected site is suitable for the proposed development in the context of its zoning, the pattern of development and the proximity to major electricity installations and having regard to the separation from sensitive receptors. The proposed development is supported by national and regional and local policy provisions.

8.4. **Roads and Traffic**

In my report on the concurrent appeal case I provide a more comprehensive assessment of the roads and traffic issues relevant to the overall site the construction and operation of which in terms of implications for roads and traffic is dominated by the data centre. As outlined in more detail therein the arrangements for construction and operational phase traffic between the two sites is intertwined. The review below places emphasis on issues pertaining to the substation.

In relation to the substation I reference in particular the construction phase assessment including as summarised in section 13.4.1 of the EIAR which is supported by the OCECMP presented as appendix 6.5. I am satisfied that the left it left out priority road will suitably serve the construction of the proposed substation. In this respect I note the maximum of 200 construction parking spaces for workers on the overall site and the overall level of traffic which has been assessed in terms of peak numbers and distribution and the level of HGV traffic. I agree with the conclusion presented that subject to implementation of the detailed CEMP which will be prepared it may be concluded that the site access for construction purposes is

suitable and secondly that the potential impacts on nearby junctions at North Road in terms of additional traffic on the nearby road network will not be of significance.

8.4.1. I note the recommendation of the relevant officials of Fingal County Council relating to the detailed CEMP and the TMP and that they should contain full details regarding safety issues include signage, traffic management and abnormal load routes and avoidance of peak hour traffic periods and measures to manage HGVs and avoid queuing. These matters can be addressed by condition.

There are two proposed vehicular entrances to the Mooretown substation in the operational phase, one of which will serve the GIS building compound which will be accessed by way of the Huntstown Power Station link road on the western side. The remainder of the substation infrastructure which is associated with the data centre will be accessed from the data centre campus internal road. The new access road off Huntstown quarry road which is at the southern boundary of the substation site will be for temporary construction purposes only and once completed will be used only on occasion including for emergencies. The proposed substation has been assessed as having a long-term but imperceptible effect on the road network and I accept this conclusion.

I am satisfied that the proposed substation and indeed the overall development would not have a significant adverse effect in terms of roads and traffic issues and that it would be in keeping with the proper planning and sustainable development of the area.

8.5. Flood Risk and Surface Water

8.5.1. The application submissions include a Flood Risk Assessment and a Drainage and Water Services Report prepared by AWN and lodged with the EIAR as Appendix 7.2 in Volume 3. This references the associated work by Clifton Scannell Emerson in relation to the adjacent data centre development and has taken this into account. Having regard to the interconnected nature of the existing natural drainage conditions as well as the proposals for surface water drainage it is necessary to consider the substation in the context of the data centre proposals.

8.5.2. Running north-south in the centre of the substation site is a drainage ditch to which a 30.77-hectare catchment drains. The proposed development includes details of the

design of a new culvert to be installed along the western site boundary (Drainage and Water Services Report / section 5). The new culvert is stated to be in accordance with the OPW Guidelines and to cater for a 1 in 1000-year event thereby allowing for diversion of the existing ditch (which is required in order to facilitate the development) without raising concerns relating to flooding.

8.5.3. The proposed surface water drainage network within the overall site has been designed to include a significant pond to the north of the proposed substation building which will cater for the site. This would be one of two ponds catering for the data centre lands to the east (Drawing 713 and Drainage and Water Services Report Drawing 2117).

The AWN FRA indicates that there is no history of flooding of this site which is identified as being within flood zone C, which is in keeping with the conclusions drawn by Clifton Scannell Emerson in relation to the data centre proposal. The proposed substation ground levels take into account the predicted flood levels. Having regard to the information presented in the FRA and the proposals for surface water drainage I agree that there is no need for a detailed flood risk assessment .

8.5.4. I note the application documentation relevant to the overall site identifies areas where permeable paving is to be used and describes the need for two attenuation basins which will be located in the north and west of the site. I am satisfied that the applicant's proposals are sufficient in this respect and that the standard condition relating to surface water discharge is appropriate in this case.

8.5.5. To conclude, I consider that having reviewed the information submitted by the applicant that there is no significant risk of flooding associated with the proposed development and the proposals for surface water drainage are acceptable. I note that proper operation and maintenance of the proposed drainage system is highlighted in the consultants reports and I recommend that this be addressed by condition in the event of a grant of permission.

8.6. **Biodiversity**

8.7. In terms of biodiversity the key features of the site of the proposed substation are the brownfield nature of the western side, the drainage channel which bisects the site in a north-south direction, and which contains trees and hedgerow and the greenfield

nature of the eastern side. The site is of low ecological value. In terms of biodiversity the significant planning impacts include the location of the substation over the drainage channel and the removal of associated hedgerow which may be used by bats and birds. I accept the submission of the applicant that potential impacts on birds and bats are not significant and can be mitigated and I note the recommendation of prescribed bodies in this respect. In addition, I consider that on maturation the proposed replacement planting to the north and south of the substation will make up for the loss of trees and hedgerows.

8.8. The development plan policy WQ05 requires establishment of riparian corridors free from new development along all significant watercourses and streams. I agree with the applicant's submission that this policy is not relevant to the subject watercourse as it is a manmade intermittent feature and not a significant watercourse or stream (EIAR Vol. 2 / 7.3.1).

8.9. I note the submission of Inland Fisheries Ireland on the concurrent appeal case which references good practice measures including maintenance of buffers to protect surface water drainage during construction. This may be deemed to be necessary to the two development sites. IFI states that filling of old field boundaries must be avoided. I consider that the latter recommendation should be considered in the context of my conclusions in the above paragraph including with respect to the nature and lack of significance of the drainage ditch including in terms of fisheries.

8.10. In terms of biodiversity impacts I conclude that the proposed development is in accordance with the proper planning and sustainable development of the area.

8.11. **Other issues**

8.11.1. The applicant's submissions relating to **landscape and visual impact** note that the proposed development would result in a significant shift in landscape character from its current peri-urban character to an employment dominated urban character. A significant landscape change is an inevitable consequence of the zoning of the site. The substation building and the site layout and landscaping proposals will assist formation of a new urban development whose character is compatible with the surrounding area and its emerging character. The architectural design of the proposed development is driven by the utilitarian nature of the proposed

development and the requirements of EirGrid have influenced the site layout and the boundary details. Within these constraints it is stated that the layout ensures that the buildings and the high voltage installations are focused on part of the site thereby maximising landscape opportunities. I have no objection to the architectural design and site layout proposed. The proposed development would have very limited visibility and would not impact on sensitive receptors or views of any significance and is entirely in accordance with the adjacent development including the power station which would be within the backdrop of any views. I consider that the development is acceptable in terms of landscape and visual impacts and is in accordance with the development plan policies including DMS 19.

8.11.2. With respect to the overall topic of **cultural heritage** I note that the main potential impact relates to archaeology and that this primarily relates to the datacentre site. The geophysical surveying and the archaeological testing undertaken are reported in the EIAR and related to particular locations in the overall site. No features of archaeological potential were identified. The substation site itself has been subject to development and I accept the conclusion that the risk of subsurface archaeological features surviving is negligible. Archaeological monitoring will be required along the route of the north-south drainage channel which was not subject of geophysical survey or archaeological testing to date. There are no potential impacts on architectural heritage. I conclude that the development is acceptable in terms of archaeological, architectural incurred cultural heritage.

8.11.3. A **ten-year permission** is sought having regard to the scale of the overall data centre project. The applicant states that the development will be constructed in tandem with the data centre and the delivery of site infrastructure and landscaping. The commissioning and completion of the substation will be carried out in multiple phases. The substation and switchyard have multiple electrical connection points with the power plants, local high voltage and the data centre campus. Therefore, in the opinion of the applicant a 10-year permission as appropriate and furthermore it would be consistent with other similar developments. I have concluded that the independent construction of the substation is not a realistic proposition. The duration of permission should therefore be considered in the context of the data centre proposal and in that respect, I consider that a 10-year permission is acceptable.

8.11.4. In response to further information query the applicant submitted a composite map in relation to land ownership, folio numbers and site boundaries. This provides clarity on the matter of **legal consent** to undertake the development.

8.11.5. With respect to the potential for impact on the **operation of the airport** I note the standard requirements set out by prescribed bodies relating to prior agreement in writing with DAA and the IAA a strategy for the use of cranes on site. The standard requirements can be addressed by condition.

8.11.6. The **conditions recommended in the Chief Executive's report** include:

- Prior connection agreement with Irish Water to be signed.
- Requirements relating to landscape and arboriculture, including tree pruning and tree felling and protective fencing.
- CEMP and CTMP to be agreed in writing with the planning authority.
- Details of various waste streams and exportation or importation of stone and soil to be agreed.
- Noise and hours of operation.
- Other standard measures with respect to utilities and infrastructure including surface water.
- Contribution under the development contribution scheme.
- Establishment of a community gain fund to support and education and awareness programme in respect of renewable energy and energy conservation and to benefit the community in the general catchment area.

8.11.7. I agree with all of the above conditions with the exception of the recommendation to establishment a community gain fund. In the context of the site location in the nature of the development I consider that such a requirement is not reasonable.

8.12. Conclusions

The development of the substation at this site would be acceptable in terms of the national, regional and local planning policy provisions and would be compatible with the land uses in the immediate and wider area and not give rise to any significant

adverse effects. While the proposal is described as having functions other than serving the proposed development of a data centre at the overall site the realisation of these improvements are dependent on the data hall development. The proposed development does not constitute an independent project which could be developed separate to the data centre. If the Board agrees with my recommendation to refuse permission for the data centre on the concurrent appeal case under ABP–313583–22 the Board would be precluded from a grant of permission for the development subject of this application.

9.0 Environmental Impact Assessment

9.1. Introduction

9.1.1. The application submissions include an Environmental Impact Assessment Report entitled “Environmental Impact Assessment Report – Development of 220kV ‘Mooretown’ Substation and Ancillary Structures”. In considering the EIA section of this report I have also had regard to the Addendum EIAR presented in relation to the concurrent appeal case which provides an assessment individually of the substation and data centre and the two developments in combination which is referred to as the overall development and also relies on revised surveys which have been undertaken.

9.1.2. This section of this report comprises an assessment of the likely significant effects of the proposed development. It addresses compliance with legislation, describes and assesses the likely significant direct and indirect effects of the development against the factors set out under Article 3(1) of the EIA Directive 2014/52/EU. It considers cumulative effects and interactions and the vulnerability of the proposed development to major accidents and disasters.

9.1.3. Except where otherwise explicitly the statements below reflect my own conclusions which were reached following consideration of all documentation with particular reliance on the EIAR and the submissions of prescribed bodies.

9.1.4. For the purposes of EIA I consider that the appropriate approach is to mirror the assessment undertaken in my report on the concurrent data centre case. In this respect I agree with the comments of the chief executive of Fingal County Council

that while there are separate planning procedures involved, they relate to different parts of the same overall development. This approach also ensures that all of the relevant topics are assessed individually and in combination and in the context of the up-to-date information contained in the EIAR addendum for the data centre.

9.2. Compliance with Legislation

9.2.1. The legislation relevant for the purpose of considering whether the information contained in the EIAR is adequate is A94 of the Planning and Development Regulations 2001, as amended, and the provisions of A5 of the EIA Directive 2014.

9.2.2. The EIAR is in three volumes. Volume 1 comprises the non-technical summary. Volume 2 is the EIAR Main Text and Volume 3 presents the Appendices. I have also taken into account the Addendum EIAR presented in relation to the data centre.

9.2.3. Following examination of these documents I consider that the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental factors:

(a) population and human health;

(b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;

(c) land, soil, water, air and climate;

(d) material assets, cultural heritage and the landscape

and equally considers the interaction between factors referred to in points (a) to (d).

9.2.4. In accordance with article 5 and Annex IV, the EIAR provides a description of the project comprising information on the site, design, size, characteristics and other relevant features. It also provides a description of the likely significant effects of the project on the environment and a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment.

9.2.5. The EIAR provides a description of the evidence used to identify and assess the significant effects on the environment and the guidance which has been taken into account in its preparation. The EIAR provides an adequate description of baseline information used to identify and assess the significant effects on the environment. I

consider that the documents presented are sufficient for the assessment of likely significant impacts. Any difficulties which were encountered in compiling the required information are identified.

9.2.6. Regarding the adequacy of the EIAR and with particular reference to the Addendum EIAR, I consider that it is based on high-quality data and relies on and uses recognised guidance and assessment methodologies. I am satisfied that the EIAR has been prepared by competent experts and note the inclusion of full details in this respect (Volume 2/Chapter 1/1.3.1). The appendices presented include a number of the original reports on which the EIAR is based. I consider that the EIAR complies with legislative requirements and is sufficiently comprehensive and is up to date.

9.2.7. My assessment below takes into account the submissions made in the course of the application. I note that these are all relevant to prescribed bodies and the planning authority and that no submissions from individual members of the public or representative groups were received.

9.3. Alternatives

9.3.1. There is a requirement under the 2014 EIA Directive that an EIAR include a description of reasonable alternatives studied and an indication of the main reasons for the selected option must be given. The extent to which alternatives are required to be studied is addressed in the Guidelines for Planning Authorities and An Bord Pleanála on carrying out EIA. The applicant references extracts from the guidelines. In the submitted EIAR alternatives are addressed in Chapter 4.

9.3.2. The site suitability of the adjacent lands for a data centre is referenced in the context of the co-locational benefits adjacent the power station, the short grid connection and other matters. To the extent that the proposed substation a wider and more strategic benefit in relation to operational issues at the power station I consider that there is no reasonable alternative location for Mooretown substation and I have concluded under the planning assessment above that it is a suitable site for this form of development.

9.3.3. The consideration of alternative designs and layouts is limited due to the requirements of Eirgrid for substations. I accept the point made that the applicant did not have any flexibility on these matters. Similar conclusions may be drawn in relation to the alternative processes.

9.3.4. The do-nothing alternative is discounted in the context of the zoning of the land and also the purpose of the proposed substation. The strengthening and increased resilience of the electricity grid which results from the proposed development and the provision of facilitative infrastructure for a data centre and other development is a viable alternative and the do nothing alternative would not be reasonable or result in significant beneficial impacts.

9.3.5. To conclude, I consider that the EIAR complies with the legislative requirements relating to consideration of alternatives.

9.4. Public participation.

9.4.1. I have summarised earlier the observations received in response to this application. The submissions of prescribed bodies raise issues which are of a standard nature.

9.4.2. There was no request for an oral hearing. On foot of my recommendation to the Board it was decided that there was no need to hold an oral hearing in this case.

9.4.3. My review of the EIAR indicates that the approach to public consultation did not extend beyond the minimum legal requirements but did meet those requirements. The reported consultation is limited to reference to the pre-application consultation and meetings with representatives of the Board. There was also targeted consultation prior to the making of the application involving various consultations with prescribed bodies and other interested parties.

9.4.4. On the broader issue I note that the application was referred to various prescribed bodies for the purposes of eliciting specialist knowledge. In this report I respond to all significant matters raised. In the circumstance of the proposed development, the site context and the EIA requirements relating to consultation, which have been met, I consider that the EIAR complies with all relevant requirements relating to public consultation.

9.5. Environmental Impact Assessment Overview

9.5.1. The issues arising can be addressed under the following headings:

Population and Human Health

Biodiversity

Land, Soil and Water

Air & Climate including Noise and Vibration

Landscape and Visual Impact

Archaeology, Architectural and Cultural Heritage

Material Assets including Waste and Roads and Traffic

Interaction of the foregoing

Transboundary Effects

Major Accidents and Disasters.

The remainder of this section of this report is identical to the same section of the concurrent report.

9.6. Population and Human Health

Existing Environment

9.6.1. The submitted information shows that the socio-economic profile of the area largely follows national trends save for the fact that it is generally marginally below average under the deprivation index and is also an area of relatively high population and activity. The nearest residential site locations are one off houses to the south and east. The Dogs Trust facility has overnight staff accommodation. It employs 83 staff members and volunteers. Other employers include a home and garden centre, the power plant, the quarry and AD facility. The nearest schools are 2 km from the site.

Potential Impacts

9.6.2. The main potential impacts on population and human health are assessed in a range of relevant chapters of the EIAR and are separately considered therein and are now discussed in summary.

9.6.3. The data centre has potential air quality, noise, visual and traffic related impacts which could have consequences for human beings and human health.

9.6.4. There will be a positive economic impact due to employment (1050 construction and 181 full-time staff) as well as indirect positive impacts on the wider economy.

9.6.5. The data centre would result in adverse impacts on local amenity as a result of the change from an agricultural environment to a built environment.

9.6.6. The substation will have an imperceptible positive effect on local businesses during construction. It will have air quality, noise, visual and traffic related impacts. There would be no impact on local amenities or the local population and no noticeable long-term changes to landscape character.

9.6.7. As the data centre will require electric power supply from the national grid and this will be drawn directly from the national grid the applicant's submission in section 5.5.3 is that there is no anticipated impact on local businesses or business users. I accept this conclusion in general. However, the more significant matter is the potential for threats to security of supply in the wider region which the applicant states does not arise as indicated by the granting of a grid connection by Eirgrid. The EIAR does not contain an assessment of the impact of data centres as a subset of all developments in the region and I do not consider that this would be a normal part of the EIAR process.

9.6.8. The proposed development will not impact groundwater source protection zones. There are no significant population or human health impacts relevant to water as a result of the data centre.

9.6.9. The EIAR statement with respect to there being no impact from the data centre on mineral resources is accepted. It follows therefore that there is no impact on population by reason of loss or sterilisation of a mineral resource which might otherwise generate employment.

9.6.10. There are potential impacts on human health during construction of the data centre as a result of fugitive dust emissions, engine emissions and change in traffic flows on adjacent roads and for air emissions during operation of the on-site emergency generators. Any dust impacts would be short-term, negative and imperceptible. Noting the contents of Chapter 9 and taking into account my comments below under the Air section, I do not consider that it is evident that there is human health impacts related to the emergency generators can be excluded. In Chapter 9 the applicant acknowledges that running of the emergency generators for over 33 hours per annum will breach air quality standards which are based on protection of human health and makes no commitments to mitigate this effect. On the other hand it is stated in Chapter 5 that the operation complies with the ambient air quality standards. The information in the two chapters appears contradictory.

9.6.11. There are potential impacts on human health during construction of the substation as a result of fugitive dust emissions, engine emissions and change in traffic flows on adjacent roads. Any dust impacts would be short term, negative and imperceptible.

9.6.12. There are potential impacts on human health from noise and vibration as a result of construction of the data centre. I consider that the assessment of noise associated with construction activities as negative, moderate and short term is reasonable based on the information presented in chapter 10 and I concur that the associated vibration levels are likely to be neutral, not significant and short-term. The long-term impacts on the nearest residential and commercial properties across the road would mainly arise due to operational traffic and would not be significant. As further considered later I do not consider that the operation of the data centre would result in levels of noise or vibration which would significantly impact the small local population or the operation of the businesses nearby including Dogs Trust.

9.6.13. The potential impacts on human health from noise and vibration as a result of construction of the substation would be not significant having regard to the items of plant that would be used and the location of the site which is remote from houses. Operational phase impacts as assessed in chapter 10 would be not significant, negative long-term impacts at the closest residences and businesses.

9.6.14. Regarding health impacts from traffic no significant construction or operation impacts are likely with respect to the data centre taking into account the site context and the pattern of development. With respect to the effect of additional traffic movements on human beings there will be short-term slight and negative impacts during construction and long-term slight and negative impacts during operation as may be concluded from the information presented in Chapter 13.

9.6.15. With respect to the potential health impacts due to traffic associated with construction and operation of the substation I consider that predicted impacts would be short-term, neutral and not significant and long-term neutral and imperceptible.

9.6.16. The construction of the data centre has potential for impacts on the health and safety of workers during the construction phase. These activities will be subject to relevant legislation thereby minimising the likelihood of impacts on health and safety.

9.6.17. The construction of the substation will be undertaken in accordance with relevant health and safety legislation. There is potential for impacts on health and safety of

workers during construction. The substation site is proximate to the power station which is a lower tier COMAH site. The HSA does not advise against a grant of permission. The relevant LUP risk contours for the outer and middle zone of the power station extend to the development site. The individual risk contours corresponding to the inner LUP zone does not extend to the development site and therefore the site is acceptable in accordance with land-use planning guidance under COMAH.

9.6.18. Having regard to the assessment presented in policy documents of the Eirgrid and ESB as well as the location of the site relative to residential development it may be concluded that there is no likelihood of potential impacts associated with electromagnetic fields from the data centre or the substation.

9.6.19. The demolition of two houses which fall within the data centre site would not have a significant effect on the housing stock available to the local population.

Mitigation

9.6.20. The construction of the data centre is of relatively short duration and it may be reasonably concluded that nuisance impacts on the receptors in the vicinity of the site will be short-term and temporary. The requirement for mitigation is stated to be limited to normal landscaping, noise and construction mitigation outlined in other sections of the report and implementation of a CEMP. The landscape and visual impacts which are of particular concern to local residents have been subject of a number of design iterations and the changed character is in line with the zoning of the site. Nearby residents have objected to the EIAR conclusions with respect to operational phase noise which I assess further under the relevant topic. It may be concluded that (other than the air quality impacts noted below) no specific remedial or reductive measures are required for the operation phase.

9.6.21. No mitigation is proposed in relation to the breach of air quality standards which may occur in the event of the running of emergency generators. There is no assessment provided of any potential human health consequences.

9.6.22. Having regard to the pattern of development and the nature of the substation development it may be concluded that there is no requirement for additional remedial or mitigation measures to protect human health and population subject to implementation of the measures outlined in the individual chapters of the EIAR. This

would include normal landscaping, noise and construction mitigation and implementation of a CEMP.

9.6.23. To minimise the potential for impacts on soils and geology as a result of the data centre a number of adopted mitigation measures are presented in the relevant chapter. It is reasonable to conclude that no significant impacts on natural resources or material assets would be anticipated. This means that there is no adverse effect on the local economy and the population reliant on employment.

Residual Impacts

9.6.24. I agree that the amenity of the Dogs Trust has been considered in the design and mitigation and that no significant residual effects are likely.

9.6.25. The proposed data centre will result in a positive, moderate and long-term impact in relation to increased job opportunities during construction and in the long-term.

9.6.26. The residual impacts related to the substation fall under the topics of air quality, noise and visual effects and are not relevant to local businesses.

9.6.27. There are no residual effects on population and human health as a result of noise and visual effects.

9.6.28. The applicant concludes that the overall development of the data centre and substation will have a residual positive, moderate to major and long-term impact due to job opportunities and accessibility to jobs during construction and operation. I largely accept this conclusion. However as the land is zoned and the nature of the development is not intensive in terms of employment levels, I consider that the impact is moderate rather than major.

9.6.29. Having regard to the zoning of the site a business or industrial use or is envisaged and the experience of local residents in terms of the visual amenity of the datacentre has to be considered in this context. Taking into account the design of the development and the treatment of the eastern side of the site in terms of landscaping and the building line adopted, I agree with the conclusion presented that the impacts on local amenities will be neutral, not significant and long-term.

9.6.30. The substation due to its location will have an imperceptible impact which is neutral and long-term in terms of the population and human health.

9.6.31. Subject to compliance with the ambient air quality legislative limit values the impact of construction of the data centre will be neutral, imperceptible and short term with respect to human health.

9.6.32. The air quality impacts on human health as a result of the construction of the substation, subject to compliance as envisaged with the ambient air quality legislative limit values will be temporary and imperceptible and for the operation phase will be long-term and imperceptible.

9.6.33. The air quality of effects which were assessed in chapter 9 will meet relevant national and EU ambient air quality limit values and therefore not result in a significant impact on human health during normal operation. The impact can be assessed as negative, slight and long-term. There is an acknowledged breach of air quality standards related to the emergency generators which has not been properly assessed and in relation to which the residual effects are not described. The effects on human health relating to air quality have not been assessed fully either in Chapter 5 or Chapter 9.

Cumulative Impacts

9.6.34. I consider that it may be concluded that the residual impact of construction of the overall development will be neutral, imperceptible and short term with respect to human health having regard to the information presented in Chapter 9, the mitigation measures to be implemented during construction and the nature of the works.

9.6.35. Regarding the operation of the overall development taking into account the dispersal of emissions and subject to adherence to national and EU ambient air quality limit values it may be concluded that the residual impact is likely to be negative and short term with respect to human health. The EIAR has clearly indicated that adherence to national and EU ambient air quality limit values will not be achieved and the significance of the effect on human health cannot be assessed.

9.6.36. The cumulative impacts of the overall development together with any relevant existing or permitted developments during construction as relevant to human health relate mainly to potential for cumulative dust emissions and simultaneous construction of permitted developments within 350m. Relevant in this respect is the permitted developments relating to overhead power lines and the operation and restoration of Huntstown quarry. It is considered that taking into account the

mitigation measures to minimise environmental impacts there is limited potential for cumulative impact on human health and no significant cumulative impact anticipated.

9.6.37. The cumulative impacts of the overall development with any relevant existing or permitted developments during the operation as relevant to human health relate mainly to air and noise. The nearby power station is a licensed facility under the Industrial Emissions Directive. The air emissions were assessed in the cumulative assessment in chapter 9. It is demonstrated that the limit values may not be met for the worst-case scenario. The consequences for human health needs further assessment.

9.6.38. Cumulative noise emissions from the overall development are predicted based on noise modelling to meet the adopted criteria. As the baseline assessment takes into account existing developments in the locality and there are no other permitted developments which are likely to be relevant to the noise assessment, the cumulative assessment scenario is predicted to be within the relevant noise criteria.

9.6.39. It is therefore concluded that there will be no significant cumulative impact associated with the operation phase of the permitted developments and the overall development subject to mitigation measures being implemented.

Monitoring

9.6.40. I accept the applicant's position that there is no requirement for monitoring in relation to population and human health.

Conclusion

9.6.41. In conclusion the main impacts relevant to the topic of population and human health are as follows. In the foregoing I have relied on some information and conclusions from some of the later sections in this report.

> Positive moderate long-term economic impacts from increased employment as a result of the data centre which is facilitated by the substation.
>
> Neutral moderate long-term effects on local amenities due to the change in the visual environment of the area which is the place of residence for a small population as a result of the construction of the data centre.

Short-term effects on human beings due to noise, air and traffic related disruption during construction of the data centre and substation, which will be mitigated by adherence to relevant guidance and measures in the EIAR.

Negative long-term air quality effects on human health as a result of the operation of the data centre and in particular the use of on-site emergency generators, which is facilitated by the substation.

Negative, slight and short-term air quality effects as a result of construction of the data centre.

9.7. Biodiversity

Existing Environment

9.7.1. The site is of low local ecological value as reported in the surveys undertaken.

9.7.2. The data centre site comprises farmland which is divided into six relatively small fields. The fields are bounded by relatively small hedgerows.

9.7.3. The substation site includes some brownfield lands adjacent the power station and some farmland.

9.7.4. Within the data centre site there are small drains which connect to a deep drainage ditch which bisects the substation site. This ditch is the main channel to take water from the overall site and it is intermittently hydraulically connected to Huntstown stream to the north.

Following a number of inspections of the large ditch within the substation site it is reasonably concluded that it has no fisheries value. The species recorded during the habitats survey do not include rare species. One area of Japanese knotweed identified in May 2019 was subject of a treatment programme in 2020.

With respect to fauna at the data centre site, the surveys targeted badgers, otters and bats, birds and amphibians. Two mature ash trees show bat roosting potential but no bats were recorded in the surveys which were updated in 2022. There were no signs of winter bird species, no signs of Peregrine Falcon and the breeding birds recorded included regular passerines. The drainage ditch surveys which were updated in 2022 did not find any common frogs or newts.

Regarding fauna at the substation site known badger setts or signs of otter were identified. Bat calls were recorded from the central east – west hedgerow (four number species in all). Bird species recorded included regular passerine is and there were no signs of winter bird species or Peregrine Falcon. The drainage ditches were deemed unsuitable for newt and frogs and none were recorded.

Potential Impacts

Impacts on habitats at the data centre site include loss of arable and modified grassland habitats which in terms of ecology would be considered a neutral and imperceptible impact. There will be a loss of 730 m of low value internal hedgerow while 1.7 km of hedgerow would be retained and conserved. Potential for downstream effects on surface water during construction could arise. There is no potential for impacts on badgers, otters or amphibians as a result of the construction. There are potential impacts on bats as a result of disturbance, loss of feeding and loss of potential roosting habitat is possible. There may be impacts on nesting birds as a result of vegetation removal.

At the substation site a minor loss of modified grassland habitats would not be considered to be significant in terms of ecology. There will be a loss of 150 m of internal hedgerow which is predominantly of low value. There are potential downstream effects on surface water which could be negative. There is no potential for impacts on badger, otter or amphibians. There are potential impacts on bats as a result of disturbance, loss of feeding and loss of potential roosting habitat is possible. There may be impacts on nesting birds as a result of vegetation removal.

Operation phase impacts at the data centre site resulting from deterioration in water quality could significantly impact on downstream habitats and species. Operational phase lighting could alter the behaviour of bats and their prey.

Operation phase impacts at the substation site resulting from deterioration in water quality could significantly impact on downstream habitats and species. Operational phase lighting could alter the behaviour of bats and their prey.

Mitigation

9.7.5. In order to mitigate potential impacts on birds the standard approach of avoiding cutting of vegetation within the nesting season is proposed. Felling of mature trees which may host bat roosts will be within the appropriate period and under

supervision of a bat specialist. If roosting bats are confirmed to be present an application for a derogation licence will be made. The landscape strategy to be employed at the data centre site will provide for increased biodiversity as a result of the additional planting which is proposed. Further measures include native species rich treelines, wildflower meadows and hedgerow planting. Shallow sloping margins and native planting are to be installed at the edges of surface water ponds. Thus the EIAR indicates that the existing ecological corridors will be strengthened to support local wildlife and I accept this conclusion. Lighting design and control will minimise the extent of light spill.

9.7.6. Potential impacts at the substation site include standard measures to protect birds and bats, similar to those engaged for the data centre site. The landscape strategy relevant to the substation site includes enhancement and strengthening of existing hedgerows, retention of existing trees and planting of new native hedgerows. In this way the existing ecological corridors are stated to be strengthened and I accept this conclusion. Planting of woodland along the site boundaries and on earth and berms will create dense belts of native woodland which will act as habitat and form ecological corridors connecting with other landscape elements in the site. Light overspill will be minimised through design and control of operation.

Residual Impacts

It may be reasonably concluded that the residual impact on birds and bats after mitigation would be described as neutral, imperceptible and long term at the data centre site. While there will be a loss of relatively low value habitats including 730 m of hedgerow these are low value habitats which are not host to rare flora or many mammals. The commuting and feeding habitats at the edge of the site would be retained and the ecological value enhanced through the planted areas proposed. Due to the retention of the outer perimeter boundary and having regard to the proposed lighting the original impact on bats is considered neutral, imperceptible and long term. The development of substantial green belts along the northern, eastern and southern boundaries and integration of surface water attenuation ponds, landscaping and planting is stated to be a positive, moderate and long-term impact. I would agree with this conclusion.

At the substation site the residual impact on birds after mitigation would be described as neutral, imperceptible and long term. Due to the retention of the outer perimeter boundary and having regard to the proposed lighting the impact on bats is considered neutral, imperceptible and long term. The development of substantial green belts along the northern, eastern and southern boundaries and integration of surface water attenuation ponds, landscaping and planting is stated to be a positive, moderate and long-term impact and I agree with this conclusion.

The conclusion set out above in relation to the positive, moderate and long-term impact arising from the green belts along the northern, eastern and southern boundaries is particularly important with respect to the overall development site.

Monitoring

Apart from the supervisory role of the bat specialist during the felling of trees there are no ecological monitoring proposals presented for the data centre or substation site. Subject to appropriate water quality monitoring this is acceptable.

Cumulative Impacts

I agree with the assessment undertaken in section 8.9.1 that during construction the potential in combination effects from the permitted underground cabling and the proposed overall development would be neutral and imperceptible having regard to the conditions attached to the extant permissions. I consider that this conclusion may also be drawn for the operation phase in combination effects. I consider that it is highly likely that the ongoing undergrounding of overhead cabling will in any case be completed prior to commencement of the proposed development.

Conclusion

9.7.7. In conclusion the main impacts relevant to the topic of biodiversity are as follows.

Positive moderate and long-term impacts on biodiversity due to enhancement of ecological value of the data centre site as a result of landscape proposals.

Positive moderate and long-term impacts on biodiversity due to enhancement of ecological value of the overall site as a result of landscape proposals.

9.8. Hydrology, Land, Soil, Geology and Hydrogeology

Existing Environment

9.8.1. The data centre and substation site hydrology are hydrologically interconnected. There is a series of shallow ditches which run along the field boundaries within the data centre site and which would be intermittent in nature. The site drainage would flow in a northerly direction towards Huntstown stream 800m to the north passing in the first instance through an internal ditch which is within the substation site. Huntstown stream discharges to the Ward River 6.6 km downstream which in turn discharges to Malahide estuary. The EIAR reports the most recent status recorded by the EPA in 2017 in the Ward River as 'good' at a location 1.2 km downstream from the merge with Huntstown stream. The hydrological features are classified as of local importance.

9.8.2. Within the site is a ditch which will have to be diverted and this will be undertaken in accordance with OPW guidelines to avoid flood risk. As considered under the planning assessment above I am satisfied that there is no flood risk associated with the development of the data centre or substation or the overall development.

9.8.3. I note the comments with respect to the connectivity to Malahide estuary, the limited potential for emissions and the likelihood of containment within the first 1 km of Huntstown stream. I agree that the hydrological connection to the estuary 9.5 km away is of imperceptible significance.

9.8.4. Site investigations show that the vulnerability of the data centre site is described as High (3-5m overburden) at the north-east of the site and Moderate (5-10m) throughout the remainder.

9.8.5. The substation site vulnerability is High and Moderate.

9.8.6. The Dublin Groundwater Body status is 'good'. The bedrock and soil features are rated as of high importance. In the absence of wide use of the aquifer for public water supply the hydrogeological features at the data centre and the substation sites may be rated as of low importance. There are no wells drilled or springs at the site or surrounding area and the nearest recorded wells are 0.5 km to the east. The closest groundwater source protection zone is 10 km to the west.

9.8.7. Following analysis of soil samples the EIAR records clay subsoil, no fill material and no recorded contamination at the data centre site.

9.8.8. The conceptual site model presented in 6.3.16 records highly varied bedrock depth throughout the site and groundwater levels varying between 1.85 mbgl to the north-east and 4.07 mbgl to the west.

Potential Impacts

9.8.9. The potential for construction phase impacts due to both the construction of the data centre and the substation on the hydrological environment would relate to excavations, possible discharge of rainwater/dewatering and potential for spillages. As a result of these activities there is potential for increased sediment loading and contamination with pollutants associated with construction including hydrocarbons, wastewater and concrete and, if encountered, by contaminated soil.

9.8.10. In the operation phase the notable features of the data centre include the increase in hardstanding and the storage of substances within the datacentre, mainly related to the emergency generators and transformers, which will be situated at ground floor level within a generator compound which is an area of hardstanding. The risks to water would be low having regard to the mitigation for containment, delivery and distribution and the use of interceptors on the stormwater system. The surface water network would contain and convey surface water associated with the one in 100-year event and avoid overland flooding and provide for discharge at greenfield rates to Huntstown stream.

9.8.11. Cooling water drainage will involve pumping of flows to a water treatment plant and reuse of this water within the site. The process demand for the data centre is estimated overall as 4842.4 m^3 per annum and of this the 48-hour evaporative cooling demand is 2590 m^3. Irish Water has given confirmation of feasibility in relation to water and wastewater services for the overall development.

9.8.12. At the substation site there is potential for construction phase impact on the hydrological environment as a result of excavations, discharges of collected rainwater/dewatering and potential spillages of hydrocarbons and other substances. As a result of these activities there is potential for increased sediment loading and contamination with pollutants associated with construction including hydrocarbons, wastewater and concrete.

9.8.13. The key operational activities relevant to hydrogeological impacts are the increase in hardstanding, storage of hazardous material in bunded areas, the surface water management proposals for the site involving drainage into two separate sites catchments and foul drainage and water supply requirements. There is shown to be sufficient capacity to ultimately outfall to the Huntstown stream. The foul drainage from the substation building will be pumped off site into the adjacent data centre development private sewer and from there to the foul sewer on the R135. Water supply including for fire purposes will be provided from the data centre connection.

9.8.14. The relevant characteristics of the development of the data centre include excavation of 35,616 m³ of material. An additional excavation of 12,045 m³ is proposed for the substation development. The majority of material will be reused on site. A net import of suitable engineering fill of up to 81,929 m³ for the data hall site and 5,000 m³ for the substation development is estimated.

9.8.15. The planned earthworks for the data hall buildings will require excavations of up to depths of 3.5 mbgl and thus may encounter some localised areas of subsoil and bedrock and possible groundwater ingress. The proposed development will result in an overall increase in hardstanding of 8 ha at the data centre site.

9.8.16. The overall site will be served by two separate surface water drainage networks flowing to surface water attenuation ponds including one which is largely within the substation site and ultimately discharging to Huntstown stream 800 m to the north.

9.8.17. Storage of hazardous material is associated with the 29 emergency generators at each of the data halls within the data centre site.

9.8.18. The construction and operation phases of the data centre is as described in summary in table 6.6.

9.8.19. Having regard to the site investigation results it may be concluded that there is a low risk of encountering contaminated soils during construction of the data centre. Bedrock will only be encountered towards the north-east of the site. Groundwater ingress can be expected and this will require localised dewatering during construction but the volumes will be low. The deepest excavation within the data centre site is 5 mbgl. There is potential for accidental spills and leaks including of suspended solids, concrete, hydrocarbons and wastewater and these may result in localised contamination of soils and geology within the data centre site. The potential

for significant downstream impacts is considered highly unlikely as any emissions would be assimilated in the freshwater environment of the first 500 to 1 km of Huntstown stream.

9.8.20. At the substation site there is a low risk of contaminated soils being encountered during construction as confirmed by site investigation. Maximum excavation level would be 4 mbgl and bedrock would not be encountered at this depth. An estimated 12,045 m^3 of excavated soil will be generated and import of 5,000 m^3 of engineering fill required. Groundwater ingress would be expected where excavations below 4 mbgl occur but water volumes would be low. The potential for accidental spillages related to construction are as described for the data centre. The potential for downstream impacts is considered highly unlikely.

9.8.21. The loss of agricultural soil is considered to be small in the context of the overall region and the site is zoned for development. There will be no impact to mineral resources in the area.

9.8.22. During the operation phases no discharges to ground or water abstraction are associated with the data centre. The source of process water is from the mains and with provision for on-site storage. There are no issues with the provisions of an adequate supply having regard to the requirements of Irish Water.

9.8.23. Storage of potentially polluting material will be in suitable tanks and bunded areas. Accidental discharges would be likely to be contained by the hardstanding areas and drainage infrastructure. The increased hardstanding of 8 ha will have a minor effect on recharge of water due to the use of SUDs techniques and the impact on the overall groundwater regime will be insignificant.

9.8.24. During operation of the substation there is no requirement for bulk fuels or chemical storage or for discharge to ground or abstraction of groundwater. Accidental spillages are likely to impact the stormwater drainage and to be contained and mitigated through petrol interceptors. The increased hardstanding area of 2245 m^2 will have a minor effect on local recharge considering the limited scale of the area.

Mitigation

9.8.25. The employment of the CEMP as relevant to mitigation for land, soil and hydrogeology is relevant also to hydrology due to the interrelationship between these environmental resources. Mitigation relevant to the surface water environment during

construction of the data centre is outlined in section 7.6.1.2 and includes discharge of construction water to the foul sewer (if required), silt reduction measures, hydrocarbon interceptors, discharge after monitoring of small quantities of groundwater and collected rainfall to the stormwater sewer network. Consideration of weather conditions will be undertaken to minimise risk of run-off and the distance of topsoil piles from surface water drains. A range of standard measures relevant to fuel and chemical handling are outlined including with respect to undertaking of a risk assessment for wet concrete. Ongoing inspections will be made to detect contaminated soil.

9.8.26. Similar measures are presented with respect to the construction mitigation for the substation site including the adoption of a CEMP and measures relevant to surface water run-off, fuel and chemical handling and soil removal and compaction including separation and suitable disposal of any identified contaminated soil.

9.8.27. The operational phase mitigation for the data centre as described in the EIAR essentially requires the implementation of an Environmental Management Plan and application of proper environmental procedures throughout the site including with respect to fuel storage. Discharges to the sewer will all be in accordance with the licence requirements of Irish Water. Regarding stormwater and foul sewer drainage design measures incorporated include measures to minimise the likelihood of spills entering the water environment, including from refuelling areas and car parks.

9.8.28. Regarding the operational phase of the substation there is no requirement for bulk fuels or chemical storage and no requirement for discharge to ground or abstraction of groundwater. The installation of petrol interceptors as part of the SUDs will ensure capture of oil or hydrocarbon contamination prior to discharge. The site will be operated in accordance with the ESB networks EMS and there will be a comprehensive emergency response and standard operating procedures.

9.8.29. Within the overall development site there will be full attenuation for the increase in hardstanding area in accordance with the requirements of the GDSDS as well as measures put in place to minimise the likelihood of spills entering the water environment including with respect to the design of the car park and fitting of hydrocarbon interceptors.

9.8.30. The Construction Environmental Management Plan which is included in Appendix 6.5 of the EIAR contains mitigation measures to be implemented. This will be a live document and will include all mitigation measures outlined in the EIAR and planning conditions and will be formulated in accordance with best international practice. During works control of soil excavation will be in accordance with best practice and all soil and aggregate to be imported will be from suitable vetted suppliers. All fuel storage will be in bunded areas and refuelling practices will include use of a designated area away from surface water gullies drains. Ready mixed concrete will be brought to site by truck wash down and wash out will take place at an appropriate off-site facility. The control of water during construction will be as described in 6.6.1.5 and will include measures to minimise erosion and deal with any required localised pumping.

9.8.31. At the substation site to reduce impacts on soils and geology measures which will be adopted will include control of soil excavation and export, fuel and chemical handling and control of water during construction. A CEMP will be adopted as the main mitigation measure and will remain a live document. It will incorporate requirements and standards to be met during construction and include the relevant mitigation outlined in the EIAR.

9.8.32. During the operation of the data centre the potential for accidental discharge related to the emergency generators and diesel fuel belly tanks will be contained by the on-site drainage network and associated hydrocarbon interceptors installed as part of the SUDs and these will capture potential oil or hydrocarbon contamination prior to discharge. An Environmental Management Plan will apply during the operational phase incorporating mitigation and emergency response measures.

9.8.33. During operation of the substation there would be no requirement for bulk fuels or chemical storage and no requirement for discharge to ground or abstraction of groundwater. The risk of accidental discharge arises but can be contained by the hardstanding area and retention interceptors before discharge to the attenuation system. Emergency response procedures will accord with ESBN requirements.

Residual Impacts

9.8.34. I accept the assessment in the EIAR which concludes that the predicted residual impacts on the hydrological environment would be short-term, imperceptible and

neutral and that the same conclusion can be drawn for both the data centre and the substation sites and the combined development for the construction phase. I find that this conclusion is robust taking into account the nature of the site conditions and the construction involved in the development of the data centre and substation and I conclude that there can be considered to be a high likelihood of successful implementation of the mitigation measures which are described.

9.8.35. With respect to the operational phase taking into account the nature of the data centre and substation operations the predicted impacts on the hydrological environment can be mitigated and the residual impact will be long-term imperceptible and neutral for the individual developments and the overall development.

9.8.36. There is no evidence to support any concerns which are expressed by third parties in relation to the usage of water for the operation of the data centre. In this respect I note also that the consideration of alternatives by the applicant has significant reduced the requirements for process water.

9.8.37. Following mitigation the applicant's assessment is that the predicted impact on hydrology, land, soil, geology and hydrogeology as a result of construction of the data centre will be short-term, imperceptible and neutral. I concur with this conclusion having regard to the information provided relating to the receiving environment, the nature of the proposed development including the depth of excavation, the standard construction techniques involved and the mitigation measures which are described.

9.8.38. Following the implementation of mitigation measures and during the construction of the substation the predicted impact on land, soil, geology and hydrogeology can also reasonably be assessed as being short term, imperceptible and neutral for the same reasons.

9.8.39. With respect to the operational impacts the potential for impact on lands, soils geology and hydrogeology are limited to spillages associated with the generators and diesel at the data halls and this would be regulated by an Environmental Management Plan incorporating mitigation and emergency response measures. I consider that the conclusion of a long-term, imperceptible and neutral impact is reasonable.

9.8.40. Regarding the operation of the substation there is limited potential for accidental discharge as there is no requirement for bulk fuels or chemical storage. Any accidental impact would be mitigated by the stormwater drainage system and implementation of an Environmental Management Plan incorporating mitigation and emergency response measures and following these it is in my opinion reasonable to conclude that the residual impact would be long-term, imperceptible and neutral.

9.8.41. With respect to the overall development subject to the implementation of mitigation measures outlined the residual impact during the construction phase would be likely to be short-term, imperceptible and neutral and during operation to be long-term imperceptible and neutral. I consider that this conclusion may be accepted.

Monitoring

9.8.42. Monitoring during the construction phase as described in the EIAR is of standard nature for both the data centre and substation sites. Monitoring will be required to ensure that surface water run-off and sediment controls are operating successfully. Also, regular inspection of activities involving concrete pouring and refuelling will be undertaken as well as inspections to ensure that no contaminated soil is present.

9.8.43. In the operation phase the maintenance of the surface water drainage system and foul waters will be undertaken. There would be no requirement for groundwater monitoring but there will be a requirement for maintenance of the surface water drainage system including the hydrocarbon interceptors and foul sewers. No measures are required in relation to flood risk or water abstraction.

Cumulative Impacts

During the construction of the overall development the applicant's submission is that the potential for cumulative impacts due to contaminated run-offs to local surface waters is low because of the week indirect hydrological connection to the local drainage network and onto Huntstown stream and the Ward River. I consider that this conclusion is reasonable. In the event of overlap between the construction phases of the data centre and the substation and the undergrounding of cables there is potential for cumulative impacts which are assessed in the EIAR as being neutral and imperceptible. I accept this assessment noting the limited scale of the underground cabling works, the likelihood that these will be undertaken prior to the substantive development in any case and having regard to the planning conditions

attached to the relevant permissions. I consider that it is highly likely that the ongoing undergrounding of overhead cabling will in any case be completed prior to commencement of the proposed development.

9.8.44. Huntstown quarry is in a separate catchment and there is no potential for in combination effects due to the lack of hydrological connections. It may be reasonably concluded that there is no cumulative impact on surface water status as a result of the conclusions drawn earlier in relation to the overall development. Subject to implementation of mitigation measures as described including management of water quality run-off it can be concluded that there would be a short-term neutral imperceptible residual impact on hydrology relevant to the construction phase of the overall development.

9.8.45. With respect to the operational phase there is no potential for increased flooding due to the compliance with the GDSDS and provision of suitable attenuation on site. Apart from Huntstown quarry there are no significant existing or permitted projects capable of a significant cumulative impact on the hydrological regime. There is no likelihood of cumulative impacts as a result of the water supply requirements and foul drainage loading from the overall development. It may be concluded that the residual cumulative impact on water and hydrology for the operation phase is long-term neutral and of imperceptible significance.

There is limited potential for cumulative impacts associated with the undergrounding of cables which has been permitted within the site and in relation to which planning conditions have required measures to minimise environmental impacts. I consider that it is highly likely that the ongoing undergrounding of overhead cabling will be completed prior to commencement of the proposed development. There is potential for a neutral and imperceptible cumulative impact according to the EIAR, which is a reasonable conclusion.

9.8.46. The EIAR also notes the dewatering occurring at the quarry 300 m to the west and that this is likely to have a local influence and groundwater flow. Having regard to the limited depth of excavation associated with the data centre and substation projects and limited anticipated dewatering it is reasonably concluded that no cumulative effects on the groundwater regime would be anticipated due to the operation of the quarry and construction of the data centre, the substation or the overall

development. Again, I consider it is reasonable to conclude that the cumulative impact would be neutral and imperceptible as stated in the EIAR.

9.8.47. With respect to the operation phase potential cumulative impacts could be associated with the overall increase in hardstanding and the associated reduced recharge to ground and increase in surface water run-off and from accidental spillages of potentially contaminating material. No activities within the operational phase of the overall development would further impact in cumulative terms with the dewatering effect of the quarry. The power station is regulated and incorporates design measures to prevent contamination of groundwater or soil environment in the event of accidental releases of fuel. I concur with the assessment in the EIAR that there will be no cumulative impact to groundwater quality and that the overall development would have a long-term, imperceptible significance with a neutral impact on soil and water quality.

Conclusion

9.8.48. In conclusion the main impacts relevant to the topic of hydrology, land, soil, geology and hydrogeology are as follows.

Short-term effects on hydrology, land, soil, geology and hydrogeology during construction which can be mitigated by measures including the implementation of a Construction Environmental Management Plan resulting in an imperceptible residual effect. This is relevant to the data centre and substation individually and to the overall development.

Potential long-term effects on hydrology, soil and hydrogeology during the operation of the data centre in the event of accidental spillages, which will be mitigated by the incorporated design features which will contain potential pollutants and by the implementation of an Environmental Management Plan and will be imperceptible. This is particularly relevant to the operation of the data centre but has relevance also to the substation and the overall development.

9.9. Air and Climate including Noise and Vibration

9.9.1. Air and Climate

Existing Environment

9.9.2. The environs of the site include a number of heavy industrial uses and there is a relatively high use of adjacent roads by HGVs. There are a number of sensitive receptors in the area which would be susceptible to dust and vibration effects if they occurred including residents and the animal welfare facility.

9.9.3. The existing air quality information presented is that levels of relevant compounds and particulars are well below national and EU ambient air quality standards.

9.9.4. A submission on file from the EPA to the planning authority states that from the documentation it is not possible to determine if Class 2.1 of the EPA Act applies to the emergency generators.

Potential Impacts

9.9.5. The proposed development by reason of the large scale of the data centre construction site has the potential to give rise to significant dust impacts during construction. The particular activities relevant would include excavation works, infilling and landscaping activities and storage of spoil and demolition of 2 no. dwellinghouses all of which could adversely impact the amenities of the limited number of nearby residential properties for the duration of construction. The greatest impacts would be experienced within 50m of the site of deposition but impacts at up to 350m are possible. Based on the location of the houses there is 'low' potential for adverse effects due to dust.

9.9.6. During the construction phase there is also potential for impacts associated with vehicular traffic emissions.

9.9.7. The assessment of the data centre operational air quality impacts involved air quality modelling in accordance with recognised approaches and guidance. The worst-case scenario involved the running of all 56 diesel operated emergency generators. The combined effect of the nearby power plant was also taken into account. Modelling of different stack heights was undertaken to assess dispersion effects. The results of this assessment showed that in the event of the worst-case scenario described there would be exceedances of the ambient air quality standards in the event that the standby generator is operated for over 33 hours.

9.9.8. The character of air quality impacts associated with the construction of the substation would be similar to that of the data centre site but the significance of effects is reduced by reason of the greater separation to residential development.

9.9.9. There are no significant air quality effects associated with the substation in the operation phase.

9.9.10. There is potential for indirect, long-term negative impacts on climate.

9.9.11. The baseline environment described with respect to climate includes EPA data on national emissions and the likelihood of exceeding EU targets. I accept the conclusion drawn that the potential impact on climate change and transboundary pollution from the construction of the datacentre and the substation individually and in combination would be short-term and imperceptible in relation to these EU targets for national emissions.

9.9.12. During operation of the datacentre the EIAR addresses climate effects under section 9.5.2.2 which states that the electricity supplier for the site holds a CRU certified fuel mix disclosure guaranteeing every megawatt-hour that they supply in the market is from renewable sources. This statement is not contained in any other part of the application documentation and does not seem compatible with the sourcing of electricity from the adjacent gas-fired power plant. In the event permission is granted the Board may wish to query this matter. I consider it appropriate to rely on section 9.7.2.2 in terms of the climate impacts of the operation of the datacentre. This provides information based on the national fuel mix and translates the amount of CO2 equivalent per year as have been described under the planning assessment above. This concludes that there would be an indirect, long-term, negative and slight impact on climate without mitigation. There are no significant direct climate impacts due to the operation of the proposed substation.

Mitigation

9.9.13. As mitigation for air quality impacts which are likely during the construction of the data centre the applicant proposes to employ standard mitigation techniques including good site planning and management and other standard dust minimisation measures. A performance measure will be developed to ensure that the plan is successful.

9.9.14. During normal operation of the data centre there is no need for further specific mitigation measures as the stack height has been selected to ensure that air emissions are sufficiently dispersed so as to comply with relevant standards. In the event of the running of emergency generators for over 33 hours air quality standards would be exceeded and no mitigation is provided by the applicant in respect of this impact other than to state that UK guidance recommends there should be no running time restrictions placed on backup generators which provide power on site only during an emergency power outage.

9.9.15. There requirement for mitigation related to the construction of the substation is limited to standard measures as presented for the data centre. There are no requirements for mitigation relevant to the operation of the substation.

9.9.16. The applicant submission is that by the use of the proposed offsetting arrangement there will be a mechanism to secure additional renewable energy generation which will offset the power consumption for the data centre and will mitigate the climate impacts.

9.9.17. **Residual Impacts**

9.9.18. Following on from my earlier discussion relating to human health and the considerations above relating to use of the emergency generators I conclude that there is potential for adverse long-term residual air quality effects.

9.9.19. Following earlier discussion under the planning assessment section of this report I accept that the offsetting mechanisms which are planned could constitute mitigation leading to a reduction in climate impacts. However, my conclusion is that the climate impacts would not be offset in their entirety and that there is potential for significant adverse effects including in the detail of those arrangements and the grid connections agreement and therefore the migration is uncertain.

9.9.20. The licencing of the project by the EPA, if undertaken, could result in reduction of residual air quality effects but there is uncertainty in relation to this process.

Conclusion

9.9.21. In conclusion the main impacts relevant to the topic of air and climate are as follows.

9.9.22. Potential for adverse residual air quality effects related to the operation of the emergency generators. I note the EIAR conclusion that the impact on human health

related to air quality is long-term, slight, negative but this is based on the conclusion that the relevant air quality limit values are complied with, which is not demonstrated.

9.9.23. Potential for significant adverse climate effects which will be mitigated by the provision of offsetting renewable energy resulting in a residual effect on climate.

9.9.24. **Noise and Vibration**

Existing Environment

9.9.25. The receiving environment includes a limited number of noise sensitive receptors at locations proximate to the site of the data centre. Background noise levels are dominated by traffic and are high. The levels of traffic at the adjacent roads to the east and south of the overall site would include significant numbers of HGVs and observers describe noise and vibration effects from the existing developments which are attributed to nonadherence to existing speed limits.

9.9.26. The site context of the substation site is somewhat at a remove from noise sensitive receptors.

Potential Impacts

9.9.27. The construction of the data centre will result in typical construction activity related noise on the site and works will be undertaken in general in daytime hours with occasional weekday or evening works. The plan is to ensure that evening activities will be managed by reducing the amount of work undertaken. In the daytime hours during construction there is potential for significant levels of noise from traffic and the works on site as well as for vibration which would be associated with heavy vehicles travelling on roads proximity to sensitive locations. Based on the nature and location of the work and taking into account the plant which will be used there is no potential for significant impacts except at the Dogs Trust in relation to site preparation works. Potential construction noise at this location are predicted to be 58 to 68 $dBL_{Aeq, 1hr}$ which is not out of keeping with the ambient levels at this location.

9.9.28. With respect to the noise -related impact of vehicle traffic this is of concern to 3rd parties who comment on the existing effects and referenced the lack of adherence to speed limits. The submission in the EIAR notes that for there to be a 1dB noise increase there would have to be an increase in 25% of traffic volumes, and on that basis there will not be a significant noise impact. I agree with this conclusion.

9.9.29. Overall it may be concluded that the likely noise impacts associated with the construction on the site would be negative, moderate and short-term. I accept this conclusion which is presented in the EIAR are based on the existing conditions, the adherence to daytime working hours and the measures set out relating to weekend working or evening working, if required, which can be subject of further agreement in the final CEMP.

9.9.30. Regarding the construction impacts due to vibration it may be concluded that vibration impacts would be neutral, not significant and short-term. This conclusion presented in the EIAR is robust based on adherence to relevant TII guidance and allowable vibration limits and also having regard to the nature of the works which comprise standard construction methodology.

9.9.31. Relating to the construction of the substation this will involve typical construction activity and will primarily be undertaken during daytime hours on weekdays and on Saturday mornings with occasional weekday evening works being possible. There is potential for generation of significant levels of noise from the construction and from the flow of vehicular traffic. Traffic movements along the roads will give rise to vibration effects at sensitive locations proximate to the road. The baseline environment is dominated by heavy traffic and roads in the vicinity and noise levels are high. No items of plant would be expected to give rise to noise levels in exceedances of those in the area and on that basis construction noise impact can be deemed to be not significant based on relevant guidance.

9.9.32. The operation of the data centre will introduce additional building services plant and additional traffic on the existing roads. Modelling for three different scenarios including the day-to-day, emergency situations and generation testing is undertaken. The modelling undertaken includes the substation development in terms of the noise predictions presented. The results of the modelling scenarios is presented in the form of noise contour maps. When compared with the relevant daytime noise criteria all locations are within the relevant limits. I note that the text of the EIAR refers to the predicted levels at the nearest commercial operations. It is clear from the noise contour maps that the residential locations will not experience noise levels which exceed the adopted criteria. It is also confirmed in the assessment that there are no tonal noises associated with the facility. I note that some of the assessment scenarios cover very short durations. Table 10.19 presents a review of the predicted

changes in existing noise levels and based on the EPA glossary of impacts all of the changes in noise level are imperceptible.

Mitigation

9.9.33. The outlined mitigation measures for the construction and operation phases of the datacentre and substation include adherence to standard guidance on the control low noise and vibration from demolition and construction and implementation of practicable noise control measures such as selection of low noise generating plant and erection of barriers as necessary. Similar measures are presented for the data centre and the substation during construction.

9.9.34. A noise and vibration management plan is presented in Appendix II 10.4 and this states that mitigation measures should be implemented where necessary in order to control impacts to nearby sensitive areas within acceptable levels. It sets out general parameters as to how this can be achieved including with respect to screening and monitoring.

9.9.35. In the operation phase mitigation for the datacentre includes minimising noise from external plant by careful selection of generating equipment and suitable design of attenuators for stacks and exhausts.

9.9.36. There is no requirement for traffic -related mitigation measures associated with the datacentre or the substation having regard to the limited additional traffic which will be generated.

9.9.37. The operation of the substation will not give rise to significant noise or vibration and no mitigation measures are required.

Residual Impacts

9.9.38. It is relevant to note that the residual noise impacts will vary including as the construction of the data centre reaches higher levels and having regard to the fact that one data hall is likely to be operational while the others being constructed and other factors. I accept the overall conclusion however that while noise impacts on sensitive receptors will occur it is demonstrated in the application documents that there would not be a significant impact at residential locations following implementation of the outlined mitigation measures.

9.9.39. During construction of the substation following mitigation the noise and vibration impacts would be not significant, negative and short-term. At this time the datacentre development site will be the main noise sources for the sensitive receptors to the east and north of the site.

9.9.40. In the operation phase ambient noise levels associated with the nearby heavily trafficked road network will continue to dominate the acoustic environment but there will also be audible levels of plant noise, notably when there is a lull in traffic noise. I accept the conclusion presented that the character of the noise environment in the vicinity of the data centre will not change and that the residual impact due to operation of the datacentre on sensitive receptors would be negative, not significant and long-term. A commitment is given to ensure that the adopted criteria is not exceeded at the façade of any nearby noise sensitive locations. This is a critical measure and it addresses the comments made by third parties.

Cumulative Impacts

9.9.41. The EIAR has assessed the noise and vibration impacts from the datacentre and substation facilities on a cumulative basis including with respect to the noise modelling undertaken. I consider that there is no likelihood of significant cumulative noise or vibration effects with other developments.

Monitoring

9.9.42. Two important monitoring initiatives are presented in the EIAR. During the construction phase noise and vibration monitoring at critical locations will be done as part of the construction noise and vibration management plan which is to be developed and which is presented in the draft.

9.9.43. During the commissioning of the data centre a commissioning noise survey is considered appropriate to ensure that relevant noise criteria are complied with.

9.9.44. Similar measures are outlined during the construction and commissioning of the substation.

Conclusion

9.9.45. In conclusion the main impacts relevant to the noise and vibration impacts are as follows.

9.9.46. Construction noise and vibration impacts from the data centre which will be managed under a Noise and Vibration Management Plan, implementing best practice and which will not exceed standard adopted criteria and may be considered to be slight, negative and temporary impacts.

9.9.47. A low level of plant noise associated with the operation of the data centre which in the context of existing noise levels is expected to be in audible and would be deemed to be negative, not significant and long-term impact.

9.9.48. The substation noise and vibration impacts are less significant.

9.10. Landscape and Visual Impacts

Existing Environment

9.10.1. The highly varied site context has been described above and includes major roads, large-scale heavy industrial uses, electrical infrastructure and small commercial and residential uses as well as farmland. The subject data centre site is dominated by grassed fields. Part of the substation site is brownfield. Trees and hedgerows contribute to the landscape character of the site as viewed in particular from the regional road. The trees are not visually prominent except in the context of the otherwise featureless and flat site character. I agree with the statement presented that the subject lands has no inherent aesthetic qualities of note. No specific landscape development plan policies are relevant to the site or wider landscape.

Potential Impacts

9.10.2. The data centre will result in significant landscape and visual impacts as a result of the removal of trees and vegetation and the introduction of features associated with construction and creation of a new landscape with new largescale buildings and structures. As part of the development there will be landscape and visual impacts due to the introduction of a new landscape involving significant belts of native woodland on undulating earth berms.

9.10.3. The significance of landscape and visual impacts at the substation site are relatively limited due to the location, size and character of that site and the scale of the proposed development.

Mitigation

9.10.4. The data centre mitigation measures are incorporated in the proposed development and have evolved through discussion with the planning authority and consideration of a number of design iterations for the data centre building as well as the incorporation of earth modelling and large tree planting which will provide a high level of visual screening. Construction phase mitigation will include protection of trees and vegetation. Visual impacts affecting residential properties nearby will be mitigated including by consideration of lighting effects and operation of a well-managed site. In the operation phase the main mitigation measures include management of new planting.

9.10.5. The screening of the substation site is stated to have derived from the measures which are incorporated in the data centre landscape strategy. Visual impacts will be mitigated including by consideration of lighting effects and operation of a well-managed site. In the operation phase the main mitigation measures include management of new planting.

Residual Impacts

9.10.6. I agree with the overall conclusion presented that the operation of the data centre while it will give rise to a notable change in landscape character which would be perceived as negative in the short term would following implementation of the landscape plan be acceptable as any negative visual impacts on residents would be reduced and a new landscape character formed. The applicant provides an assessment of visual impacts from specific locations in the form of photomontages and this explicitly addresses visual impacts. The general conclusion is that the predicted impact at the construction phase is a negative visual impact and during operation as the woodland screening matures the negative impact reduces. In terms of the building design iterations which were undertaken the conclusion presented in general is that there is no change to the visual impact and this conclusion is in my opinion indicative of the approach taken in the overall chapter which is precautionary with respect to the landscape and visual impacts.

9.10.7. With respect to the substation the removal of vegetation and change of landscape type are described as resulting in negative long-term effects of moderate significance which I consider is a reasonable assessment. When considered in isolation the substation would be viewed against the backdrop of the power station.

9.10.8. With respect to the overall development the residual impacts for the construction phase will be not unlike those for the data centre. I concur with the assessment that there would be negative short-term landscape and visual impacts of moderate significance. The overall development will alter the landscape character and existing views and visual amenity in the area consistent with emerging trends. I agree with the applicant's conclusions that the visual impact of the new landscape will be positive, significant and long-term while the introduction of the new built structures would result in negative long-term visual impacts of moderate significance.

Monitoring

9.10.9. Monitoring proposals presented by the applicant are in the form of construction site management and protection of existing trees and maintenance of the planned landscaping. No further measures would be needed.

Cumulative Impacts

9.10.10. Apart from the consideration of the overall development above I do not consider that the permitted undergrounding of cables, or any other development would result in a different conclusion with respect to landscape or visual impacts.

Conclusion

9.10.11. In conclusion the main impacts relevant to the topic of landscape and visual impacts are as follows.

Positive significant long-term impacts due to the introduction of new landscape features associated with the data centre and the overall development.

Negative long-term visual impacts of moderate significance due to the introduction of the new buildings associated with the data centre site.

9.11. Archaeology, Architectural and Cultural Heritage

Existing Environment

9.11.1. Utilising a 1.5 km study area the EIAR presents an assessment of archaeological, architectural and cultural heritage landscape. While there are a number of recorded archaeological sites within this zone, I agree with the EIAR conclusion that none of

these will be directly or indirectly impacted. The lands between the regional road and the large internal ditch (which encompasses all of the data centre site and the greenfield part of the substation site) was subject of geophysical survey which identifies the probable remains of an oval enclosure and possible remains of other ploughed damaged archaeology. Following that the same lands were subject to archaeological testing which confirmed the presence of an enclosure and associated linear features and pits. A further detailed programme of pre-development archaeological testing was undertaken under licence within the lands available, which constituted the majority of the data centre and substation sites.

9.11.2. There are no architectural resources or cultural heritage landscapes within the vicinity of the data centre or substation sites at locations where there is potential for impacts.

Potential Impacts and Mitigation

9.11.3. The site of the data centre will be affected only - no previously unrecorded features were identified during the geophysical survey and archaeological testing of the eastern portion of the substation site and the remainder has been previously developed in the past. The full archaeological resolution of the remaining lands will have direct, negative and profound impacts on subsurface archaeological features. The overall impact can be considered to be neutral and not significant following full excavation and reporting as it will add to academic knowledge. The approach in the EIAR and the conclusions drawn are in keeping with accepted practice and understanding relevant to archaeology and I accept the conclusions.

9.11.4. For the construction phase mitigation measures are set out in section 12.6.1 in relation to the data centre site. And archaeological monitoring brief should be implemented at Field 1 (which holds the drainage channel which runs through the substation site). Two areas which are defined as archaeological area one and area two (figure 12.11) will require archaeological excavation and preservation by record of features, deposits or structures identified. This will be undertaken under licence to the National Monuments Service.

9.11.5. There is no likelihood of architectural or cultural heritage impacts at the site of the datacentre or substation.

Cumulative Impacts

9.11.6. The cumulative impact of the overall development is considered neutral and significant. Previously unrecorded archaeological features which have been discovered will be fully excavated under licence and preserved by record thereby contributing to academic and cultural knowledge. I consider that there is no likelihood of cumulative impacts with any relevant existing or permitted developments

Conclusion

9.11.7. There will be a neutral significant archaeological impact as a result of the full excavation under licence of previously unrecorded archaeological features.

9.11.8. There is no likelihood of impacts on architectural or cultural heritage.

9.12. Material Assets, Waste and Roads and Traffic

9.12.1. Material Assets

Existing Environment

9.12.2. The 150MW data centre development will constitute a large energy user in the area which will be served by an on-site substation with provision for connection to the adjacent future substation subject of the concurrent application. The positioning of the data centre site adjacent to Huntstown Power Station is outlined by the applicant as providing certain advantages with respect to loss of drop of power and the availability of direct connection and avoidance of a need for provision for example of a gas fired power plant on the site.

9.12.3. The matter relevant to EIA and material assets relates to the potential for disruption to the electricity supply in the area, which is known to be constrained. The applicant relies on the connection agreement in terms of demonstrating that there is sufficient power supply in the area.

9.12.4. There are proposals to install some renewable generating infrastructure as part of the design of the data centre. There is provision for emergency generators to provide backup power at the data centre in the event of power outages.

9.12.5. The lands are traversed by overhead power lines in relation to which permissions have been granted for their relocation. To serve the construction of the data centre a temporary substation will be put in place.

9.12.6. There is no existing public surface water infrastructure available. The planned surface water drainage for the overall development will discharge northwards to Huntstown stream and the Ward River. At the data centre site two separate surface water drainage networks and two separate surface water attenuation basins are to be developed. Surface water from the substation development would be accommodated within the surface water drainage system for the data centre development.

9.12.7. There is an existing foul sewer located in the R135. For the duration of construction of the data centre it is envisaged that there will be use of portable sanitary facilities and subject to relevant approvals temporary connections to existing services will be established. The permanent arrangement will involve a private sewer and pumping station and a pre-connection enquiry form submitted to Irish Water received a favourable response.

9.12.8. For the construction of the substation there will be use of portable sanitary facilities and wastewater will be tankered off site. A permanent foul drainage from the substation will be pumped to the proposed data centre private sewer.

9.12.9. There is an existing watermain located in the R135. The data centre will require water for drinking and sanitary facilities as well as for the cooling system and the data hall air handling units. At full load the temporary evaporative cooling will have a peak demand of 56 l/sec which is estimated to be required for approximately 24 hours per annum. On site storage for 48-hour period is to be provided and this will be filled from the mains primarily but also from rainwater harvesting. The design iterations undertaken have reduced the water supply requirements. Irish Water has confirmed that the connection is feasible subject to off-site upgrade works which are described above.

9.12.10. The water supply requirements associated with the substation are insignificant and will rely on the proposed private water supply at the data centre.

9.12.11. The requirement for telecommunications will be met by way of temporary and permanent services. There are existing underground ducts adjacent the overall site that will be utilised.

Potential Impacts

9.12.12. In terms of material assets the EIAR assesses the full extent of the potential impacts some of which I consider to be of very minor nature and thus are not considered further in this report. I note for example the requirement to store diesel at levels which are below the COMAH thresholds, the loss of agricultural lands which is in keeping with the site zoning and the potential impacts including with respect to wastewater. I note the conclusion presented in the report of the planning authority that the overall development will not have any significant impact on material assets and in general I agree with this conclusion.

9.12.13. The potential for impact on the power supply in the region cannot however be dismissed for the purposes of EIA having regard to the supply constraints in the Dublin region. I consider that the proposed data centre by reason of its scale has the potential to reduce the capacity available within the local electricity network. I have drawn this conclusion in the context that while I did not conclude that this warranted a planning reason for refusal there is not sufficient information provided relating to the future regulation of operation of the data centre or the requirements of the grid connection agreement to rule out the potential for significant effects.

9.12.14. I consider that the provision of on-site renewables as part of the design of the development is adequate and sufficient and that while not catering for operational requirements it will support the operation of the facility and thereby reduce the pressure on the local supply and thus constitute a positive impact.

9.12.15. The topic of water supply impacts are subject of objections from third parties. In the absence of mitigation there is potential for significant adverse impacts on the local water supply, which is already stated to be deficient.

Mitigation and Residual Impacts

9.12.16. The EIAR sets out a range of mitigation measures which are relevant to the suite of potential impacts under the heading of material assets, which is broad in nature. These mitigation measures reinforce my earlier conclusion that setting aside the issues related to water and power, the potential for residual impacts on material assets does not warrant further consideration and I refer to the detail presented on this issue in the relevant EIAR chapter.

9.12.17. With respect to the potential for adverse impacts on power supply the EIAR relies on the direct connection to the adjacent power station. Third parties note that

there has been no assessment of the growth of data centres on a regional basis. The applicant has referenced the avoidance of an on-site power supply in terms of the proximity to the power station but has not set out why it is considered that there is no threat to security of supply other than to rely on the granting of a Transmission Connection Agreement. On that basis it is concluded in the EIAR that there is sufficient power available from the existing area network to facilitate the proposed development. While I have generally accepted that point from a policy and principal standpoint, it is not easy to draw the same conclusion for the purposes of EIA. In my opinion it is only with the benefit of some of the information underlying the TCA / some assessment of the capacity in the system in the region that the Board can be satisfied that the proposed development would not adversely affect the electricity supply assets in the area and only with that information can the Board complete its EIA and draw conclusions which are favourable to the applicant's case.

9.12.18. On this topic in addition I note the time period which will have elapsed since the TCA was sought and the growth of the demand for electricity in the region in the interim period. Based on the available information and in the absence of information relating to how the TCA would regulate the facility and having regard to the scale and location of the proposed data centre I conclude that there is potential for indirect adverse residual effects on power supply in the region. As stated earlier these effects would not warrant a refusal of permission but may be significant in the context of EIA and should be referenced as a potential significant effect if permission is granted.

Regarding the potential for residual effects on water supply specific remedial works have been set out by Irish Water and the detail of the information presented as part of the application documentation. I am satisfied that the proposed mitigation measures will address the water supply issues related to the proposed development and that there would be no significant adverse residual effects. In this respect also I have referred earlier to the design iterations and the reduction in water supply which have been achieved.

Cumulative Impacts

9.12.19. I accept the assessment presented in section 14.8 which addresses cumulative impacts on material assets insofar as it relates to permitted

developments in the immediate vicinity of the site and to the overall development. It may be concluded that there would be no significant cumulative impacts on material assets relevant to developments in the vicinity of the site.

Conclusion

9.12.20. In conclusion the main impacts relevant to the topic of material assets are as follows.

In the absence of information relating to the future regulation of the data centre operation and having regard to its scale and location of the proposed data centre I conclude that there is potential for indirect adverse residual effects on power supply.

Potential for a significant effect on water supply which is mitigated by the upgrade works which have been prescribed by Irish Water and which the applicant has agreed to implement.

9.12.21. **Waste**

Existing Environment

9.12.22. The proposed data centre development involves destruction of two dwellinghouses which together with the construction waste materials from the construction of the data site are described in detail in sections 15.4.1 and 15.4.2 of the EIAR. At the data centre site most surplus material from excavations is likely to be suitable for reuse on the site.

9.12.23. Excavated topsoil, subsoil tarmacadam and hardcore at the substation site will mainly be removed from the site.

9.12.24. The operational phase of the data centre waste streams includes a variety of hazardous and non-hazardous waste in relation to which proposals for management are described.

9.12.25. The operation of the substation will give rise to very limited amount of waste which will be in the form of food waste and office type waste primarily.

Potential Impacts

9.12.26. In the absence of mitigation there is potential that significant adverse impacts could result as a result of construction of the data centre, substation and the overall development.

9.12.27. In the absence of mitigation during the operation of the data centre there is potential for long-term, significant negative impacts on the environment.

9.12.28. Due to the low volume of waste which would be generated at the substation during operation there is potential for non-significant adverse effects.

Mitigation and Residual Impacts

9.12.29. Mitigation described for the data centre development is primarily in the form of the preparation of resource and waste management plans and implementation of good practice and suitable disposal of materials. Up-to-date EPA guidance is referenced as the basis for preparation of management plans.

9.12.30. Similar measures are set out for the construction of the substation.

9.12.31. Operational phase mitigation measures involves standard approaches to waste management in accordance with relevant regulations and relevant guidance.

9.12.32. I accept the conclusion presented that subject to the implementation of the mitigation measures outlined there will be high rates of reuse, recovery and recycling achieved at the overall site and the relevant legislation requirements will be met.

9.12.33. The residual impact of the proposed development of the data centre in the construction phase will be short-term, imperceptible and neutral.

9.12.34. A similar conclusion would be valid for the substation and for the overall development in the construction phase.

9.12.35. I accept the submission of the applicant that in the operational phase there will be long-term neutral and imperceptible impacts for the individual developments of the data centre and substation and for the overall development.

Cumulative Impacts

9.12.36. I note the availability of a good network of licensed waste management sites in the area. I agree with the conclusion presented that the cumulative impacts from the construction phase and operational phase and other permitted developments would be imperceptible or not significant.

Conclusion

9.12.37. In conclusion the main impacts relevant to waste would be as follows.

Construction phase impacts which will be short-term, imperceptible and neutral.

Operational phase long-term neutral and imperceptible impacts.

9.12.38. These impacts would not be considered to be significant.

9.12.39. **Roads and Traffic**

Existing Environment

9.12.40. The greenfield site of the data centre is served by a number of small entrances and will in the future have permanent access from a new entrance from the R135 and an emergency/secondary entrance by way of the power plant / quarry access road to the south-west. A temporary access for construction will be at the location of an existing entrance at North Road, located north of the proposed permanent entrance. There is a right of way at the location of the secondary entrance off the power plant road.

9.12.41. The proposed substation access will be by way of Huntstown Power Station internal road and the secondary access referred to above.

9.12.42. The data centre and substation sites are located close to the N2, accessed by way of North Road (R135). The priority junction at the N2 off slip / North Road. There is bus service connecting Ashbourne and Ratoath to the city centre with stops on North Road and generally at a 20-minute frequency. There are no collision hotspots in the vicinity of the site. However the off slip from the N2 to North Road and the signalised Kilshane Cross to the north are both at capacity. At the southern extremity North Road is a cul-de-sac as it was blocked off by the M50.

9.12.43. The baseline conditions were established by traffic surveys which are reported in the EIAR, which established the AM and PM peak hours, took into account permitted development and describes proposed road network improvements, including planned cycle path along North Road.

9.12.44. The construction of the data centre site will be served by a new entrance at the eastern site frontage. The construction stage traffic generation associated with

the data centre will be in the order of 200 cars per day and up to 110 HGV and 30 LGV movements.

9.12.45. The entrance to be used for construction of the substation will be from the southern boundary, off the main access road serving the existing power plant and quarry, which is heavily used by HGVs. On completion of construction this entrance would be reserved for exceptional circumstances and the main access would be through the data centre site. Peak daily construction traffic is estimated to be 20 HGV per day at peak and 50 number construction workers at peak. A 24-month construction period is predicted.

9.12.46. Planning permissions in the area have included financial contributions with respect to the improvement of the motorway/regional Road junction and upgrade of footpaths and provision of cycle routes.

Potential Impacts

9.12.47. As noted, the junctions which will be used to access the general area are heavily trafficked and in some cases are above capacity. There is potential for traffic congestion during construction as a result of the increased traffic levels at these junctions.

9.12.48. The construction of the data centre will contribute to traffic levels at the N2 North Road junction and at signalised Kilshane Cross both of which are above capacity as well as at other junctions. The data presented by the applicant shows that the proportional change in traffic levels at junctions in the wider area (including the N2 off slip road and Kilshane Cross) is in the order of 6% at most, below the 10% increase which would trigger a detailed assessment. However in view of the existing conditions a more detailed assessment was undertaken including for the site entrance, the N2 Off Slip and Elm Road , which is not signalised. I am satisfied that this approach is robust and I note that the permitted restoration at the quarry is likely to be completed and road upgrades in the area are planned but have not been taken into account and the assessment constitutes a worst-case scenario. The summary information presented in Table 13.9 demonstrates a relatively small decrease in network residual capacity for the N2 Off Slip and Kilshane Cross which would be over capacity in any case. I consider that the information presented may be accepted by the Board and that the impact of the traffic increases would be slight taking into

account the existing conditions. The other junctions including the site entrance would have spare capacity.

9.12.49. For construction of the data centre the site entrance will be 150m north of the planned permanent site entrance in order to allow for operation of Phase 1(Building B) while construction of Phase 2 is ongoing. There is limited visibility from this entrance and potential for traffic hazard. At the opposite side of North Road are small commercial developments with independent accesses which an observer states will be adversely impacted by the planned entrance to the data centre.

9.12.50. The substation construction traffic will utilise junctions in the wider area including N2 North Road junction and the signalised Kilshane Cross which are and will be lacking capacity and in addition there is potential that the construction of the substation could conflict with the existing high volumes of HGV traffic from the quarry and other development served by the road to the south. The assessment undertaken in relation to the impact of the substation construction traffic is that it will result in a proportional increase in traffic on the adjacent road network during peak times is generally of the order of under 2%, which is assessed as a negligible impact. I accept this conclusion for the junctions other than J3 (Kilshane Cross). In relation to the latter junction the additional flows are not high and as the junction is signalised there is no likelihood of traffic safety concerns but some additional delays are likely but would not be significant. I therefore agree with the conclusion presented in the EIAR that the overall impact on the road network as a result of the construction of the substation would be negligible. In the context of the overall traffic levels it is considered that the estimated increase associated with the construction phase of the data centre will result in short-term, negative and slight impacts.

9.12.51. The impact of the construction of the overall development may therefore be considered to be the same as for the construction of the data centre.

9.12.52. The impact of the data centre operational traffic will be negative as it will coincide with further future capacity issues. by 2032 the junction capacity of the N2 off slip and North Road will be exceeded and for a duration pending the putting in place of the planned upgrade measures there will be a slight negative impact on the road network associated with the operation of the data centre.

9.12.53. There is very little traffic associated with the operation of the substation and no likelihood of significant effects on the road network.

9.12.54. Observers reference potential for conflict with existing developments including the garden centre at the east side of North Road. This is relevant to the construction of the data centre and its operation and I have addressed it earlier and do not consider that there is a likelihood of significant adverse effects.

9.12.55. Comments in relation to operational traffic for the data centre are relevant to the overall development during operation.

Mitigation

9.12.56. The assessment presented in the EIAR and considered above was predicated on a range of assumptions which are in effect design mitigation measures including those outlined below.

9.12.57. It is intended that the substation and phase 1 of the data centre will be constructed at the same time and that the combined level of parking for workers will not exceed 200 (with 33 vehicles being parked at the substation site).

9.12.58. The mitigation measures outlined in the two separate OCEMP documents include a range of standard measures which are suitable for further future agreement with the planning authority. Workers will be bused from a nearby facility such as a DAA surface car park which will operate as a park-and-ride to avoid impact on the road network particularly the local roads. Staff arrivals and departures will not coincide with the peak hours. Due to limited visibility at the North Road entrance for the construction period a banksman will be in place and the entrance is addressed in the OCEMP.

Residual Impacts

9.12.59. I consider that the nature of the impacts arising are subject to mitigation through measures which are already planned and the specific measures set out in the EIAR. I accept the conclusion presented that the overall development of the datacentre and substation would have a long-term, slight negative impact.

Cumulative Impacts

I consider that it may be concluded having regard to the permitted development in the area that there would be no significant long-term cumulative effects in terms of roads and traffic.

Conclusion

9.12.60. In conclusion the main impacts relevant to the topic of roads and traffic are as follows.

9.12.61. Short-term, slight negative impacts due to construction of the data centre which will be mitigated by measures set out in the EIAR and the CEMP which is to be agreed in detail with the planning authority.

9.12.62. Short-term, not significant impacts due to construction of the substation.

9.12.63. Short-term, slight negative impacts from the overall development which will be mitigated by measures set out in the EIAR and the CEMP which is to be agreed in detail with the planning authority.

9.12.64. A long-term slight residual impact associated with the additional operational traffic associated with the data centre.

9.13. Interactions of the Foregoing

9.13.1. I consider that the main interactive impacts arising from the proposed development are adequately addressed in the EIAR in Chapter 17 wherein the majority of impacts are concluded to be neutral.

9.13.2. Some positive interactions are recorded including with respect to land use, alternatives and population as a result of employment creation.

9.13.3. A large proportion of the identified impacts are described as neutral and in general I agree with the assessment set out on these interactions which is in 17.3 of the EIAR. The negative interactions include population and human health and its interaction with air quality, noise and landscape. However, in relation to air quality it is again reiterated (contrary to the comments in Chapter 9) that the mitigation measures will ensure that the impact of the facility complies with air quality standards and am not satisfied that this is evident from the provided information.

9.13.4. The identified negative impacts are in section 17.4 and include interactions between population and human health and the environmental topics of air quality, noise and vibration and landscape and visual impacts, associated with the construction of the data centre.

9.13.5. Identified negative impacts associated with the substation project are in general not significant.

9.13.6. The conclusions drawn with respect to the data centre would be relevant to the overall development in my opinion.

9.13.7. I agree that the interactions arising would not give rise to significant negative impacts.

9.14. Transboundary Effects

9.14.1. Transboundary effects related to climate impacts would not be significant when considered in an international context. I do not consider that there are any other likely transboundary effects.

9.15. Major Accidents and Disasters

9.15.1. I am satisfied that the technical reports provided addresses all relevant aspects of the topic of major accidents and disasters. The only issues arise in the context that that the location of the substation site lies within the risk zone for the power plant which is the COMAH site and the datacentre site is within the notifiable zone. HSA has indicated that it does not pose a grant of permission. The technical assessments for the two developments show that the risk level is acceptable in the same conclusion may be drawn for the overall development. The development is therefore acceptable in terms of the risk of major accidents and disasters.

9.16. Reasoned Conclusion

Having regard to the examination of environmental information contained above, and to the submission by the planning authority and prescribed bodies and appellants and observers in relation to the two concurrent cases before the Board and to the EIARs particularly the Addendum EIAR, it is considered that the main significant

direct, indirect and cumulative effects of the proposed development on the environment are as listed below. In drawing up this list I have taken a precautionary approach and where the significance of impacts cannot be discounted based on the available information, I have assumed that they are significant and included them in the list below.

Positive moderate long-term economic impacts from increased employment as a result of the data centre which is facilitated by the substation.

Neutral moderate long-term effects on local amenities due to the change in the visual environment of the area which is the place of residence for a small population as a result of the construction of the data centre.

Negative long-term air quality effects on human health as a result of the operation of the data centre and in particular the use of on-site emergency generators, which is facilitated by the substation.

Positive moderate and long-term impacts on biodiversity due to enhancement of ecological value of the overall site as a result of landscape proposals.

Potential long-term effects on hydrology, soil and hydrogeology during the operation of the data centre in the event of accidental spillages, which will be mitigated by the incorporated design features which will contain potential pollutants and by the implementation of an Environmental Management Plan and will be imperceptible. This is particularly relevant to the operation of the data centre but has relevance also to the substation and the overall development.

Potential for indirect adverse residual effects on power supply.

Potential for a significant effect on water supply as a result of operation of the data centre which has been mitigated by design and will be further mitigated by the upgrade works which have been prescribed by Irish Water and which the applicant has agreed to implement.

10.0 **Appropriate Assessment Screening**

10.1.1. The application is accompanied by a report entitled ‘Report for the purposes of Appropriate Assessment Screening’. The report has been prepared by an

experienced ecologist and in accordance with guidance documents which are listed in section 2.1. The Screening Report has had regard to a number of sources of information for the purposes of compiling baseline information.

10.1.2. I have considered this report in the context of the suite of application documents presented. I am satisfied that the available information is sufficient to inform the Board's assessment.

10.1.3. Project Description and Site Characteristics

10.1.4. The site and the proposed development are as described earlier in my report and as further described in the application documentation. The Screening Report highlights one aspect of the proposed development namely the infilling of a section of the existing land drain and replacing it with a 900mm diameter pipe. It is noted that the land drain flows south to north. It is stated that the replacement pipe has been designed in accordance with OPW Guidelines.

10.1.5. The Screening Report records that the drainage ditch adjacent to Huntstown Power Facility is intermittently hydraulically linked by way of Huntstown Stream. The onward connection by way of the Ward Stream 6.6km downstream and the Ward River to Malahide Estuary over 15 river km downstream provides a limited connectivity between the proposed development and the Malahide Estuary SAC and SPA.

10.1.6. Natura 2000 Sites, Qualifying Interests and Conservation Objectives

10.1.7. The Screening Report describes Natura 2000 sites which are within 15km of the site. There are no Natura 2000 sites within the site of the proposed development, and none are in the immediate vicinity.

10.1.8. The proposed development has limited hydrological connectivity to Malahide Estuary resulting in Malahide Estuary SAC and SPA being of relevance.

10.1.9. The subject development is about 8km from the nearest Natura 2000 site, which is South Dublin Bay and River Tolka Estuary SPA.

10.1.10. The other Natura sites in the area are between 9.7km and 13.44 km from the site of the proposed development – the distances are direct distances and are not measured along hydrological pathways.

10.1.11. I have compiled a table which lists the relevant Natura sites, their conservation interests, their location relative to the proposed development and the potential pathways between the proposed development and the Natura sites.

10.1.12. **Conservation Objectives and Pathways.**

10.1.13. The development site is not located in or immediately adjacent to a European site. A summary of European Sites within a possible zone of influence of the proposed development is presented in the table below. This is based on the screening report, which I accept and consider to be accurate. Where a possible connection between the development and a European site has been identified, as is the case for the Malahide estuary sites, these are examined in more detail below.

European Site	**Conservation objectives.** **Qualifying interest /Special conservation Interest.**	**Distance. Source, pathway receptor.**
Baldoyle Bay SAC (000199)	**Conservation Objectives** *Version 1.0, 19 November 2012* To maintain the favourable conservation condition of the qualifying interests in Baldoyle Bay SAC, which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi)	Over 11km distant from proposed development site. No hydrological or other pathways or connectivity.
Malahide Estuary SAC (000205)	**Conservation Objectives** *Version 1.0, 27 May 2013* To maintain or restore the favourable conservation condition of the qualifying interests which is defined by a list of attributes and targets. **Qualifying interests**	Over 9km distance from proposed development site. There is a hydrological

	Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi) Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes)	connection – further consideration is therefore warranted. No other pathways or connectivity.
North Dublin Bay SAC (000206)	**Conservation Objectives** *Version 1.0, 06 May 2013* To maintain or restore the favourable conservation condition of the qualifying interests which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide Annual vegetation of drift lines Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi) Embryonic shifting dunes Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes) Humid dune slacks Petalophyllum ralfsii (Petalwort)	Over 10km from the proposed development site. There are no hydrological or other pathways or connectivity.
Rogerstown Estuary SAC (000208)	**Conservation Objectives** *Version 1.0, 14 August, 2013* To maintain or restore the favourable conservation condition of the qualifying	Over 12km from the proposed development site.

	interests, which is defined by a list of attributes and targets. **Qualifying interests** Estuaries Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonising mud and sand Atlantic salt meadows (Glauco-Puccinellietalia maritimae) Mediterranean salt meadows (Juncetalia maritimi) Shifting dunes along the shoreline with Ammophila arenaria (white dunes) Fixed coastal dunes with herbaceous vegetation (grey dunes)	There are no pathways or connections.
South Dublin Bay SAC (000210)	**Conservation Objectives** *Version 1.0, 22 August 2013* To maintain the favourable conservation condition of the qualifying interest, which is defined by a list of attributes and targets. **Qualifying interests** Mudflats and sandflats not covered by seawater at low tide	13km from the proposed development site. There are no pathways or connections.
Rye Water Valley / Carton SAC (001398)	**Conservation Objectives** *21 February 2018* To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected. **Qualifying interests** Petrifying springs with tufa formation (Cratoneurion) Vertigo angustior (Narrow-mouthed Whorl Snail)	12km from the proposed development site. There are no pathways or connections.

	Vertigo moulinsiana (Desmoulin's Whorl Snail	
North Bull Island SPA (004006)	**Conservation Objectives** *Version 1.0, 09 May 2015* To maintain the favourable conservation condition of the bird species listed as SCIs, which is defined by a list of attributes and targets. **Qualifying interests** Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Teal (Anas crecca) Pintail (Anas acuta) Shoveler (Anas clypeata) Oystercatcher (Haematopus ostralegus) Golden Plover (Pluvialis apricaria) Grey Plover (Pluvialis squatarola) Knot (Calidris canutus) Sanderling (Calidris alba) Dunlin (Calidris alpina alpina) Black-tailed Godwit (Limosa limosa) Bar-tailed Godwit (Limosa lapponica) Curlew (Numenius arquata) Redshank (Tringa totanus) Turnstone (Arenaria interpres) Black-headed Gull (Chroicocephalus ridibundus) Wetlands	Over 10km from the proposed development site. There are no hydrological connections and no ex-situ considerations and therefore no further consideration is warranted.
Rogerstown Estuary SPA (004015)	**Conservation Objectives** *Version 1.0, 20 May 2013* To maintain the favourable conservation condition of the waterbird population and wetland habitat in Rogerstown Estuary SPA, which is defined by a list of attributes and targets. **Qualifying interests**	Over 13km from the proposed development site. There are no hydrological connections and

	Greylag Goose (Anser anser) Light-bellied Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Shoveler (Anas clypeata) Oystercatcher (Haematopus ostralegus) Ringed Plover (Charadrius hiaticula) Grey Plover (Pluvialis squatarola) Knot (Calidris canutus) Dunlin (Calidris alpina) Black-tailed Godwit (Limosa limosa) Redshank (Tringa totanus) Wetland and Waterbirds	no ex-situ considerations and therefore no further consideration is warranted.
Baldoyle Bay SPA (004016)	**Conservation Objectives** *Version 1.0, 27 February 2013* To maintain the favourable conservation condition of the waterbird population and wetland habitat in Baldoyle Bay SPA, which is defined by a list of attributes and targets. **Qualifying interests** Light-bellied Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Ringed Plover (Charadrius hiaticula) Golden Plover (Pluvialis apricaria) Grey Plover (Pluvialis squatarola) Bar-tailed Godwit (Limosa lapponica) Wetlands	Over 11km from the proposed development site. There are no hydrological connections and no ex-situ considerations and therefore no further consideration is warranted.
South Dublin Bay and River Tolka Estuary SPA (004024)	**Conservation Objectives** *Version 1.0, 09 March 2015* To maintain the favourable conservation condition of waterbird population and wetland habitat in South Dublin Bay and River Tolka Estuary SPA, which is defined by a list of attributes and targets. **Qualifying interests**	Over 8km from the proposed development site. There are no hydrological connections and

	Light-bellied Brent Goose (Branta bernicla hrota) Oystercatcher (Haematopus ostralegus) Ringed Plover (Charadrius hiaticula) Grey Plover (Pluvialis squatarola) – proposed for removal Knot (Calidris canutus) Sanderling (Calidris alba) Dunlin (Calidris alpina) Bar-tailed Godwit (Limosa lapponica) Redshank (Tringa totanus) Black-headed Gull (Chroicocephalus ridibundus) Roseate Tern (Sterna dougallii) Common Tern (Sterna hirundo) Arctic Tern (Sterna paradisaea) Wetland	no ex-situ considerations and therefore no further consideration is warranted.
Malahide Estuary SPA (004025)	**Conservation Objectives** *Version 1.0, 16 August 2013* To maintain the favourable conservation condition of the bird species listed as SCIs, which is defined by a list of attributes and targets. **Qualifying interests** Great Crested Grebe (Podiceps cristatus) Light-bellied Brent Goose (Branta bernicla hrota) Shelduck (Tadorna tadorna) Pintail (Anas acuta) Goldeneye (Bucephala clangula) Red-breasted Merganser (Mergus serrator) Oystercatcher (Haematopus ostralegus) Golden Plover (Pluvialis apricaria) Grey Plover (Pluvialis squatarola) Knot (Calidris canutus) Dunlin (Calidris alpina)	Over 9km distance from proposed development site. There is a hydrological connection – further consideration is therefore warranted. No other pathways or connectivity.

	Black-tailed Godwit (Limosa limosa) Bar-tailed Godwit (Limosa lapponica) Redshank (Tringa totanus) Wetlands	

Submissions

The Department of Housing, Local Government and Heritage accepts the AA Screening conclusion.

The report of the Chief Executive of Fingal County Council referred to the Board's competency with respect to appropriate assessment and to assist in this regard provided an update of the progress in relation to the then ongoing datacentre appeal case.

10.1.14. **Identification of likely effects**

10.1.15. Taking into account the nature and extent of the development and the construction works involved at the data centre and substation sites I consider that it may be concluded that there is a very low likelihood of emissions of silt or any other potentially polluting substances to the surface water system. I am satisfied that the application of the best practice measures which are outlined in the CEMP documents prepared for the data centre and the substation would successfully contain any such emissions within a very close distance of the site. In this respect I refer to the nature of the Huntstown and Ward streams which would provide for easy containment of pollutants in the environment in the event of discharge/spillages. I note that the applicant has referenced the particular issue of dewatering, which is stated in the EIAR to comprise small volumes, if indeed there is any requirement for same. I am satisfied that it may be concluded that there is no likelihood of potential effects which would be of significance to the conservation objectives of the Malahide estuary SPA or SAC due to the downstream distance and nature of the local hydrology and having regard to the best practice measures to be implemented.

10.1.16. I note that the applicant has provided an assessment of other projects and concluded that there is no potential for in combination effects based on the AA screening reports and decisions of the consenting authorities in those cases. I accept this conclusion, which is reasonable and robust in the context of the permitted

developments in the area and my conclusions with respect to the proposed development.

Mitigation measures

10.1.17. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise. In drawing my conclusions above, I partly rely on the submitted CEMP documents which were presented with the applications and which are attached to the NIS. In the particular circumstances of this case it is necessary to further discuss these documents.

10.1.18. Separate CEMP documents were prepared for both the substation and the data centre sites. The Outline CEMP which was presented for the data centre facility defines the approach to environmental management during construction and promotes best environmental on-site practices. The nature of the construction works which are described involve site preparation activities such as site clearance, excavations and levelling which will be undertaken using a range of standard construction machinery. The building construction works will involve construction of foundations to construct the building is of standard structural steel frames. Moderate scale excavations and minor dewatering may be required. Temporary storage of spoil will be managed so as to prevent accidental release of dust and uncontrolled surface water run-off. Surplus material that is recovered from the site will be examined to ensure that it is not hazardous and if hazardous material is encountered it would be transported for appropriate disposal. With respect to dust management and specific mitigation measures this will be in accordance with standard guidance which is listed. Surface water management proposals described, are of standard nature and in compliance with CIRIA guidance. None of the measures outlined in the submitted CEMP document are anything other than standard mitigation which would be employed at any modern construction site. None of the measures can be described as bespoke or targeting any particular environmental effect.

10.1.19. The CEMP prepared in support of the Mooretown substation application contains a range of measures relating to the site preparation and building construction works phases. There are specific measures set out relating to concrete works, accidental spills and leaks, dust, land clearing and stockpiling. While the

approach in this document is different the essential essence of the measures is not dissimilar. The works involved are standard construction works to be undertaken in accordance with mitigation which would be found at any well-run building site. Although there is a section in this document which describes mitigation relevant to ecology these relate to bats, badger and trees and none of the measures outlined are in any way relevant to the European sites within the zone of influence but instead comprise measures to protect local ecology.

10.1.20. To conclude with respect to the contents of the CEMP and whether they would constitute mitigation under the meaning established by recent legal cases, my conclusion is that the documents do not comprise mitigation. In this respect I agree with the statement made in the AA screening report that these best practice construction methods are not required to avoid or reduce any effects on European site and that these measures are not relied on to reach a conclusion of no likely significant effects on any European site.

10.1.21. My conclusion with respect to Malahide estuary SAC and SPA is that it is highly unlikely that the proposed development would have an adverse effect on these European sites or their conservation objectives by reason of the very limited hydrological connection and taking into account the best practice measures outlined in the CEMP documents.

Screening Determination

10.1.22. The proposed development was considered in light of the requirements of 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) would not have a significant effect on European Sites 000199, 000205, 000206, 000208, 000210, 001398, 004006, 004015, 004016, 004024, 004025 or any other European site, in view of the sites' Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is therefore not required.

11.0 Recommendation

I recommend that the Board refuse permission for the proposed development for the reasons and considerations below, which are set out as a draft order.

12.0 **Reasons and Considerations**

It is considered that the proposed development constitutes infrastructure which is ancillary to the planned data centre development at lands to the east, which is subject of a concurrent appeal under ABP–313583–22 and that the proposed substation would not bring increased resilience to the electrical grid except as part of the overall development. Furthermore, the proposed development is physically and functionally connected to the proposed data centre and does not constitute an independent project for which permission could be granted.

Having regard to the Board's decision to refuse permission under ABP–313583–22, the Board considers that it is precluded from granting permission in this case.

Mairead Kenny
Senior Planning Inspector

6 March 2023