

Inspector's Report ABP-301923-18

Development Construction of a new 220kV

substation compound, associated underground 220kV cables and

associated works to facilitate a new

data centre campus.

Location Townlands of Portan, Gunnocks and

Clonee, Co. Meath.

Planning Authority Meath County Council

Applicant(s) Runways Information Services

Limited.

Type of Application Application under the provisions of

Section 182A of the Planning and

Development Act 2000 (as amended).

Observer(s) Meath County Council; Sean

Gallagher; Transport Infrastructure Ireland (TII); Irish Water; Inland Fisheries Ireland; Health Service

Executive.

Date of Site Inspection 9th October 2018.

Inspector Karen Kenny

Contents

1	.0 INT	FRODUCTION	4			
2	.0 SIT	TE LOCATION AND DESCRIPTION	4			
3	.0 PR	OPOSED DEVELOPMENT	6			
4	.0 PL	ANNING HISTORY	7			
5	5.0 SUBMISSION OF APPLICATION TO AN BORD PLEANALA9					
	5.1.	Application Details	9			
	5.2.	Circulation of Application to Prescribed Bodies	9			
	5.3.	Written Submissions / Observations	. 10			
	5.4.	Planning Report from Meath County Council	. 13			
6	.0 RE	SPONSE TO WRITTEN SUBMISSIONS / OBSERVATIONS	. 18			
7	7.0 POLICY CONTEXT20					
	7.1.	National Planning Framework	. 20			
	7.2.	Energy Policy Framework 2007-2020 – Delivering a Sustainable Energy				
	Futui	re for Ireland (Energy White Paper)	. 21			
	7 0					
	7.3.	Ireland's Transition to a low carbon Energy Future 2015-2030	. 21			
	7.3. 7.4.	Ireland's Transition to a low carbon Energy Future 2015-2030				
	7.4.		on			
	7.4.	Government Policy Statement on the Strategic Importance of Transmission	on			
	7.4. and 0 7.5.	Government Policy Statement on the Strategic Importance of Transmission	on . 22			
	7.4. and 0 7.5. susta 7.6.	Government Policy Statement on the Strategic Importance of Transmission Other Energy Infrastructure, July 2012	on . 22 . 22 se			
	7.4. and 0 7.5. susta 7.6. Strat	Government Policy Statement on the Strategic Importance of Transmission Other Energy Infrastructure, July 2012	on . 22 . 22 se . 22			
	7.4. and 0 7.5. susta 7.6. Strat 7.7.	Government Policy Statement on the Strategic Importance of Transmission Other Energy Infrastructure, July 2012	on . 22 . 22 se . 22			

7	'.9.	Volume 5: Dunboyne, Clonee and Pace (inc. Variation 2 and 3)	26		
7	'.10.	Dunboyne, Clonee and Pace Local Area Plan 2009-2015	28		
8.0	PLA	ANNING ASSESSMENT	29		
8	3.1.	Introduction	29		
8	3.2.	Compliance with Legislation and Land Use Policy	30		
8	3.3.	Landscape and Visual Impact	35		
8	3.4.	Impact on Amenity	37		
8	8.5.	Cultural Heritage	40		
8	3.6.	Traffic & Transportation	42		
8	3.7.	Energy Demand / Climate Change	43		
8	8.8.	Other Issues (Water Services, Flood Risk, Airport)	44		
9.0 ENVIRONMENTAL IMPACT ASSESSMENT					
9).1.	Introduction	47		
9).2.	Consideration of Alternatives	49		
9).3.	Environmental Factors	49		
9).4.	Interactions between the Factors and Cumulative Impacts	64		
9).5.	Reasoned Conclusion on the Significant Effects	65		
10.	0	APPROPRIATE ASSESSMENT	66		
11.0		Recommendation	70		
12.	0	Reasons and Considerations	70		
13	Λ	Conditions	74		

1.0 **INTRODUCTION**

- 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 a 220kV substation and associated 220kV underground cables to serve a proposed data centre on lands in the townlands of Portan, Gunnocks and Clonee in County Meath.
- 1.2. Pre-application consultations were initiated on behalf of the applicant to assess whether or not the proposed substation development constituted strategic infrastructure under the provisions of the Act (ABP-301188-18).
- 1.2.1. On foot of a determination by the Board that the development is a strategic infrastructure development, the applicant has submitted an application under the provisions of Section 182A of the Planning and Development Act 2000 (as amended). The application is accompanied by an EIAR prepared in respect of both the substation development and the data centre development.
- 1.2.2. A separate planning application for the data centre development was submitted to Meath County Council under the provisions of Section 34 of the Planning and Development Act 2000 on 27th July 2018 (Meath County Council Ref. RA180671). Meath County Council issued a final grant of planning permission for the data centre on 24th September 2018. The subsequent appeal (Ref. ABP-302393-18) was withdrawn. The approved data centre comprises two single-storey data centre buildings with a gross floor area (GFA) of circa 57,400m2 connected by a single storey administration / office building with a GFA of circa 5,710m2.

2.0 SITE LOCATION AND DESCRIPTION

2.1. The proposed substation and cables are to be located within a 108-hectare site in the environs of Clonee Village in County Meath and adjacent to the Dublin / Meath County Border. The overall site is to accommodate a permitted data centre and the associated substation development. The data centre is an expansion of the applicants existing data centre on lands directly to the east of the site (ABP Ref. PL17.245347). The existing data centre is connected to the grid by a loop in

- connection and sub-station from the 220kV overhead line that crosses the southern margins of the site. The total site area for the proposed data centre is circa 83 hectares, while the total site area for the proposed substation and cables is circa 35 hectares. The sites overlap with an area of c. 10 hectares common to both applications.
- 2.2. The substation comprises of the construction of a new 220kV substation compound within the proposed data centre site and the laying of 2 no. 220kV underground cables that will connect the proposed substation to an existing substation to the east (ABP Ref. PL17.VA0018). The development is referred to by the applicant and in this report as the substation development. The existing substation to the east is connected to a 220kV power line that crosses the southern portion of the site and thus, the proposed substation will be connected to the national grid via the existing substation.
- 2.3. The data centre and substation site is a greenfield site comprising a number of agricultural fields. The proposed substation compound is to be located near the north western boundary of the site. The fields are bounded by dense mature hedgerows or mature trees and a network of drainage ditches along the field boundaries.
- 2.4. The entire site is located to the north of the M3 motorway adjacent to the Junction 4 (Clonee) intersection. A local slip road (R147) leading to the N3 runs along the southern boundary of the data centre site. The Kilbride Road (L5028) runs north-south between the existing and proposed data centre sites. The substation, at its closest point, is approximately 500 metres to the west of the Kilbride Road, while the cables will run from the substation, under the Kilbride road and into the existing data centre site to the east.
- 2.5. There are a number of dwelling houses and farmyards located adjacent to the Kilbride Road in this area. The closest dwellings are on the western side of the Kilbride road, with one single dwelling situated directly to the south of the site and a cluster of four dwellings located directly to the north. The most proximate dwellings on the eastern side of the Kilbride Road are within the applicant's landholding and are not occupied. There is a small cul-de sac of approximately 10 houses to the north of the landholding with access from the eastern side of the Kilbride Road.

- 2.6. There is a Kepak meet processing factory located to the south east of the site, with access from the R147. The Damastown Industrial Estate lies to the east of the overall site, in the administrative area of Fingal County Council. There is no direct road access between the application site and the industrial estate, save for an approved emergency access road into the existing data centre site. The various enterprises located within the industrial estate include pharmaceutical industries, meat processing industries and technology/engineering facilities. There are 3 no. Seveso sites located in the Damastown Industrial Estate¹ to the east that are within c. 500 metres of the site boundary.
- 2.7. The village of Clonee is located approximately 1 km to the south of the site, on the southern side of the M3 motorway. Lands to the west and the north of the site are characterised by good quality agricultural land interspersed with one-off dwellings and farms/farmyards.
- 2.8. There are two streams within the overall 108 ha site. The Portan Stream runs along the northern boundary of the substation site and flows into the Pinkeen River downstream of the site. The Pace Stream rises in the south eastern portion of the site at the confluence of a number of drainage channels and flows in a south east direction. Both streams are tributaries of the River Tolka.

3.0 PROPOSED DEVELOPMENT

- 3.1. The application made under the provisions of Section 182A relates to the substation element only. The substation is to serve a proposed data centre on contiguous lands. The application documentation indicates that the development will incorporate the following elements:
 - Outdoor Air Insulated Switchgear (AIS) equipment rated for the system voltage of 220kV equipment with 7 no. 220kV bays;
 - 15 no. lighting protection masts (height c. 25 metres);
 - 2 no. oil filled step-down power transformers positioned within bunded enclosures;

¹ Chemco (Ire) Ltd, Mallinckrodt Medical Imaging and Astellas Ireland Co., Ltd.

- 3 no. single storey buildings used for control and ancillary services;
- A 2.6 metre palisade fence around the perimeter of the substation.
- 2 no. 220kV underground cables (length of c. 2.5 km) that will connect the proposed substation to the existing 220kV substation on the adjacent data centre campus to the east.
- A c.0.5 km long access road to tie into the data centre internal road network,
 which in turn will connect to the Kilbride Road further east.
- 3.2. The EIAR indicates that the substation will be made up of:
 - a 220kV switching station, back-up generator and control building and two transformers, which will be owned and operated by the ESB / EirGrid,
 - a 220kV / 20kV transformer station with control building and two transformers,
 which will be owned and operated by the applicant.

4.0 PLANNING HISTORY

- 4.1. The planning history pertaining to the overall landholding is detailed in Section 6 of the Supporting Planning Statement submitted with the application. The planning history can be summarised as follows:
 - The applicant, Runways Information Services Limited, owns and operates the existing Facebook Data Centre campus at Portan. The development was granted permission by Meath County Council under MCC Ref. RA/150605 and by An Bord Pleanála on appeal under ABP Ref. PL17.245347. Minor alterations were approved by Meath County Council under MCC Ref. RA/160433, MCC Ref. RA/160937 and MCC Ref. RA/180048 and by Fingal County Council under FCC Ref. FW16A/0127 and FCC Ref. FW18A/0008.
 - Power to the data centre is currently provided by a loop in connection and sub-station from the 220kV overhead line that crosses the southern margins of the site. This development was approved by the Board under ABP Ref. PL17.VA0018 and subsequently altered under ABP Ref. PL17.301172.
 - MCC Ref. RA/180671 refers to an application for a data centre on the contiguous lands, that was submitted to Meath County Council on 27th July

- 2018. Meath County Council issued a notification to grant permission for the data centre on 27th July 2018. The subsequent appeal was withdrawn (Ref. ABP-302393-18). Meath County Council issued a final grant of planning permission on 24th September 2018.
- 4.2. There are two earlier applications that relate to the overall landholding.
 - ABP Ref. PL17.231392 / P.A. Ref. DA70730. Under this application and appeal planning permission was sought by Bennett Developments Ltd and Kilsaran Concrete for the development of warehousing, offices, storage areas (GFA 74,334) and for the demolition of two habitable houses on a 30 hectare site at Portan, Clonee, County Meath. Meath County Council issued notification to grant planning permission. This decision was the subject of a number of third party appeals. Planning permission was refused by An Bord Pleanála on appeal for three reasons summarised as follows:
 - (1) The proposed development will be premature pending the determination by the Planning Authority and Fingal County Council and the NRA of a road layout for the area particularly for the Clonee/M3/N3 and the absence of proposals to link the site with the adjoining Damastown Industrial Estate in County Fingal.
 - (2) The proposed development will be prejudicial to public health because the applicants failed to submit various details (listed in the reason for refusal) in relation to foul and surface water drainage details relating to the proposed development.
 - (3) The Environmental Impact Statement was considered to be deficient in relation to issues related to drainage, water supply, transport connections, air quality monitoring, hedgerow survey, flora and fauna survey, transport connections, archaeology and SEVESO.
 - DA70158: Under this application planning permission was refused to Bennett
 Developments Ltd and Kilsaran Concrete for an industrial / light industrial /
 warehouse development with a gross floor area of 22,311 square metres on
 an 11-acre site. The reasons for refusal related to the absence of an Action
 Area Plan and the capacity of the road network.

5.0 SUBMISSION OF APPLICATION TO AN BORD PLEANALA

5.1. **Application Details**

- 5.1.1. An application has been submitted to An Bord Pleanála for planning approval under the provisions of S182A of the Act. The application is accompanied by:
 - Completed planning application and detailed drawings.
 - Copies of the site notices erected on site and the published newspaper notice.
 - A letter from Eirgrid stating that, subject to a modified connection agreement,
 the proposed 200kV infrastructure can be accommodated by EirGrid.
 - A letter of consent from a landowner.
 - Letter of consent form the Roads Authority (Meath County Council).
 - A list of proscribed bodies to which details of the application were sent.
 - A copy of covering letter sent to Meath County Council with the SID application.
 - SID Supporting Planning Statement.
 - An Environmental Impact Assessment Report (3 Vols) including Non-Technical Summary.
 - A Report to inform Appropriate Assessment Screening.
 - An Outline Construction Environmental Management Plan.
 - 3D Visualisation.

5.2. Circulation of Application to Prescribed Bodies

- 5.2.1. In accordance with the provisions of Section 181A (4)(b), Meath County Council was served with a copy of the application. The following prescribed bodies were also served:
 - An Taisce
 - Commission for Regulation of Utilities (CRU)
 - Failte Ireland
 - Health and Safety Authority

- Health Service Executive
- Inland Fisheries Ireland
- Irish Water
- Minister for Communications, Climate Action and Environment
- Minister for Housing, Planning and Local Government
- Minister for Transport, Tourism and Sport
- Eastern & Midlands Regional Assembly
- The Heritage Council
- Minister for Agriculture, Food and the Marine
- Transport Infrastructure Ireland

5.3. Written Submissions / Observations

- 5.3.1. Submissions / observations were received from Meath County Council, the Health Service Executive, Inland Fisheries Ireland, Irish Water and Transport Infrastructure Ireland.
- 5.3.2. A third-party submission / observation was received from Mr. Sean Gallagher.

5.3.3. **Meath County Council Members**

Meath County Council considered the application at a Special Meeting on 25th of July 2018. The meeting minute submitted with the Council's Report states that: "The Councillors were in support of the application but said that the concerns of the local residents with regards to landscaping needed to be taken into consideration".

5.3.4. Submission from the Health Service Executive

The submission dated 13th July 2018 states the following:

- Meaningful public consultation with the local community should be carried out.
 All legitimate concerns from the public shall be fully addressed and evaluated.
 The EIAR should clearly demonstrate how the outcome of consultation with the public influenced decision making within the EIA.
- The impact of noise on sensitive receptors during the emergency operation of the development should be further examined. Noise monitoring during emergency operation should be carried out and noise arising from any emergency operation must be thoroughly assessed in line with BS 4142:1997, Method for Rating Industrial Noise Affecting Mixed Residential and Industrial Areas. If necessary, further mitigation measures for the control of noise during emergency operation situations must be implemented.

 The EIAR should include proposals for dealing with issues of noise nuisance from the operation of the development should they arise. Details of a procedure to fully follow up and investigate complaints from members of the public should be outlined, along with specific contact details of whom complaints should be made to.

5.3.5. Submission from Inland Fisheries Ireland

The submission dated 6th July 2018 states the following:

- The development is within the catchment of the Tolka River, an important salmonid system with brown trout throughout and Salmon in the lower reaches.
- All measures necessary shall be taken to ensure comprehensive protection of the local aquatic ecological integrity, in the first instance by complete impact avoidance and as a secondary approach through mitigation by reduction and remedy.
- IFI policy is to maintain watercourses in their natural state in order to prevent habitat loss, preserve biological diversity and aid in pollution detection. Any river or stream manipulation works must be submitted to IFI for consultation and approval.
- Any laying of cables that involves crossing of waterbodies should be conducted in a manner that does not allow any deleterious material to discharge to any watercourse. IFI have a preference for directional drilling when laying cable under rivers and streams.
- All discharges must be in compliance with the European Communities (Surface Water) Regulations 2009 and the European Communities (Groundwater) Regulations 2010.

5.3.6. Submission from Irish Water

The submission dated 15th August 2018 states the following:

- The information provided during the consultation process for the data centre application is still applicable.
- If it is proposed to connect to the public water supply network, then further
 information (i.e. proposed water demand) is required before an assessment
 can be made as to whether there is sufficient water supply capacity to service
 the proposed development.

 Any connection to a public water supply or wastewater network is subject to a connection agreement with Irish Water and connected water services infrastructure must be designed and provided in accordance with Irish Waters Standards and codes of practice.

5.3.7. Submission from Transport Infrastructure Ireland (TII)

The submission dated 7th August 2018, states the following:

- The proposed 220kV substation and associated cabling is located off the local road network and alone will have minimal interaction with the national road operational phase.
- In the interests of maintaining the safety and standard of the national road network the applicant / developer shall be required to identify any works traversing / in proximity to the national road network and methods / techniques proposed to protect the national road network.
- Separate structure approvals / permits, and other licences may be required in connection with the proposed haul route and all structures on the haul route should be checked by the applicant / developer to confirm their capacity to accommodate any abnormal load proposed.

5.3.8. Submission from Mr. Sean Gallagher

The submission dated 15th August 2018 focuses on energy demand and national energy policy and targets. The issues raised can be summarised as follows:

- Energy demand and the sourcing thereof, will have a serious impact on Ireland's emission targets and commitments for a transition to green energy under the renewable energy directive.
- The proposed data centre would be a major consumer of energy. This
 coupled with present consumption from the existing data centre places the
 application beyond consideration without appropriate assessment of CO2
 emission targets for 2030.
- Latest EPA reports show an increase in greenhouse gas emissions across all sections and that Ireland is not on path to meet binding commitments.
- The data centre claims to use renewable energy in generic promotional material. This is aspirational. In a constrained market the development would

- push other users onto fossil fuels as the country has limited renewable production.
- Applications for high energy demand development should stipulate that
 energy be sourced from a direct renewable power source generated on site or
 if connected to the grid, to a dedicated new renewable source with the output
 required by the development.
- The application should be rejected until there is a monitoring programme and strong evidence that energy is supplied from a standalone renewable source.
- Question in relation to legality of "splitting" development.

5.4. Planning Report from Meath County Council

- 5.4.1. The Meath County Council Planning Report was submitted to the Board on 30th July 2018. This report sets out the views of the Authority on the proposed development and suggests appropriate conditions, including financial conditions, to be attached in the event of permission being granted.
- 5.4.2. Section 2 of the report sets out details of both the site location and the proposed development description.
- 5.4.3. Section 3 sets out a review of planning policy with specific reference to:
 - The National Planning Framework (NPF), Project Ireland 2040,
 - The Regional Planning Guidelines for the Greater Dublin Area, 2010, and
 - Local Planning Policy.
- 5.4.4. With regard to the Meath County Development Plan reference is made to the following sections:
 - Core Strategy,
 - Economic Development Strategy,
 - Energy and Communications,
 - Development Management Guidelines and Standards,
 - Landscape Character Assessment Appendix 7.

- 5.4.5. The Report notes that the subject site lies between two landscape character areas 'Ward Lowlands' and 'South-East Lowlands', with the majority of the proposed development located in the 'South East Lowlands'. It states that the 'South-East Lowland' landscape character area would have medium capacity to accommodate overhead cables, substations and communication masts. The Report notes that the connection from the existing substation to the proposed substation is located in the 'Ward Lowlands' and that this development would be underground.
- 5.4.6. The report goes on to make reference to policy and objective statements contained in the Dunboyne Pace / Clonee Local Area Plan 2009.
- 5.4.7. The Report refers to the Meath County Council Economic Strategy and states that it sets out clear, concise, innovative and evidence-based measures aimed at accelerating the economic transformation, revitalisation and sustainable development of the county. The strategy sets out 8 key actions/recommendations designed to achieve projected employment growth (7,500 jobs) in Meath by 2022 in order to broaden Meath's economic base.
- 5.4.8. Reference is also made to Variation No. 2 and Variation No. 3 of the Meath County Development Plan 2013-2019. Variation No. 2 introduced land use zoning objectives and an order of priority which will manage the release of residential and employment lands for 34 no. centres / groups of centres, including objectives for the settlement grouping of Dunboyne / Dunboyne North / Clonee. Variation No. 3 sought to align the Development Plan with the Economic Strategy.

5.4.9. Assessment

Section 5 of the report is the assessment of the proposal. In terms of the **principle of development**, it states that the accommodation of employment uses on these lands, based on regional employment policy, is logical and entirely appropriate. The proposal is fully in accordance with the land use zoning objectives and the Planning Authority is satisfied that the Masterplan which was prepared and submitted by the applicant accords with the specific objective CER OBJ 3 of the Development Plan (as varied). There is an existing substation and associated infrastructure on the existing campus site and the principle of the additional electrical infrastructure is deemed to be acceptable. Overall it is stated, in respect of principle of development,

- that the nature of the wider development (expansion of an existing data centre) is one that is supported by national, regional and local planning policy.
- 5.4.10. The report notes the submission of a single EIAR for the substation application and the concurrent planning application for the data centre. With regard to the examination of alternatives, the report states that the new substation located within the proposed development, connecting to the existing substation would satisfy all the technical requirements for energy feed and that the primary driver in selecting the location within the zoned lands was to reduce the distance between the proposed substation and existing substation.
- 5.4.11. In terms of **population and human beings**, it is noted that the proposed data centre will create both direct and indirect employment. It is noted that limited impact is predicted from the substation development.
- 5.4.12. The proposal is deemed to be acceptable in terms of soils, geology and hydrogeology. It is recommended that the applicant explore the extent of made ground including contamination and remove this material to an authorised site. It is also recommended that the applicant should carefully consider the end destination for surplus soil and stone.
- 5.4.13. Details of the proposed **water and wastewater** arrangements are set out in the report and it is stated that there is no objection to these proposals.
- 5.4.14. With regard to biodiversity and appropriate assessment, it is stated that substantial ecological survey work was carried out and it is concluded that the footprint of the proposed substation development is relatively small in relation to the surrounding agricultural system and that predicted impacts would not be significant. It is noted that a screening statement in respect of appropriate assessment has been provided with the application and it concluded that there would be no significant impacts caused to the closest Natura 2000 sites. No suitable link was available to transfer the effects of any impacts associated with the development site to the qualifying interests associated with the Natura 2000 sites in the wider area.
- 5.4.15. In terms of air quality and climate, it is concluded in respect of impacts arising during the construction phase, that the implementation of appropriate dust control measures would be sufficient to control dust and particulate matter emissions at source and that impacts would not be significant.

- 5.4.16. With regard to **noise and vibration**, the majority of impacts are envisaged during the construction phase and not the operational phase. The mitigation measures proposed during the construction phase are deemed to be acceptable and conditions are recommended.
- 5.4.17. With regard to landscape and visual issues, it is noted that the LCA must be read in the context of a wider landscape containing significant existing light industrial developments to the east, infrastructure such as motorways, railways, transmission infrastructure, as well as established settlements and dispersed housing. It is considered that the lower parts of the substation complex will be screened by existing hedgerows while the upper structures will be visible until landscaping matures. It is concluded that the development will extend the existing long established urban landscape to this location and that such change has been envisaged for a significant timeframe through the zoning of the lands for employment / industrial development.
- 5.4.18. With regard to archaeology and cultural heritage, the details contained in the EIS are noted, as are mitigation measures to avoid impacts on unrecorded archaeological deposits. The conservation officer's comments are included in the report, which concludes that the proposed development will have no direct impact or significant impact on protected structures or any protected view or other architectural designations in the surrounding area.
- 5.4.19. With regard to access and transport, it is noted that the data centre will be the main generator of transport during the operational phase. Construction activity and construction staff will generate traffic. It is noted that Objective CER OBJ 3 of the Development Plan requires the delivery of a distributor road, but that the application does not include the delivery of a major distributor road with an alternative route proposed. The application includes improvements to the Kilbride Road. The Transportation Section of Meath Co. Council has no objection to the proposed development.
- 5.4.20. With regard to **waste management** it is stated that waste management will form part of the overall Environmental Management Plan for the construction phase of the development. Conditions are recommended in relation to waste management.
- 5.4.21. Reference is also made to **material assets** and **interactions** in the Planning Report.

5.4.22. In relation to **flooding**, it is noted that the applicant carried out a site-specific flood risk assessment.

Conclusion

- 5.4.23. In conclusion it is stated that the subject lands have historically been earmarked for economic development due to their strategic location. It is intended that the proposed data centre expansion in Clonee will create additional hi technology jobs on appropriately zoned land within the County and will act as a catalyst for similar type developments in the area. The Planning Authority have fully assessed the data centre proposal and is satisfied that it accords with the primary zoning objective, assimilates well into the surrounding landscape and is acceptable from an environmental and traffic perspective.
- 5.4.24. Based on an examination of the EIAR and documents accompanying the application, in relation to the context of national, regional and local planning policy, this report is recommending to An Bord Pleanála that planning permission be granted.

Conditions

- 5.4.25. Section 7 sets out conditions which are recommended to be attached in any grant of planning approval issued by the Board. In total 16 conditions are suggested relating to:
 - The carrying out of the development in accordance with the plans and particulars submitted with the application.
 - The implementation of mitigation measures set out in the Environmental Impact Assessment Report.
 - Finished floor levels.
 - Landscaping requirements.
 - Provision of road infrastructure.
 - Ecological monitoring, avoidance and mitigation measures.
 - Air emission / monitoring.
 - Noise emission / monitoring.
 - Protocols for managing accidental spillages.
 - Earthworks.
 - Waste management.
 - Construction environmental management arrangements.

- Emergency response.
- Complaints register.

Appendix I of the submission sets out the planning history associated with the site.

6.0 RESPONSE TO WRITTEN SUBMISSIONS / OBSERVATIONS

6.1.1. The applicant submitted a response to the submissions / observations on 21st
September 2018. It notes the broad consensus in submissions of support for, no objection to, or no comments on the proposed development. It also states that a large amount of supporting documentation has been submitted with the application that either inherently or explicitly addresses the points raised and therefore no further comment is provided in relation to such matters. The response thereafter, concentrates on the submission of Mr. Sean Gallagher.

The response to issues raised can be summarised as follows:

- The submission relates to national energy policy and targets rather than the specific details of the application.
- In relation to energy demand and energy targets, the Inspector's Report under ABP Ref. PL17.VA0018 (existing substation on the landholding) states the following:

"that it is a matter for national government policy to achieve the above (renewable energy and environmental – sic) targets, as opposed to levying the responsibilities on individual developments through planning applications, particularly having regard to the availability of renewable energy sources in a specific geographical area to cater for the developments in question."

The applicant fully supports the Board's prior stated view which is considered relevant in the context of the submission.

- The response refers to the Governments Strategy Paper on Data Centres dated June 2018.
 - The strategy paper states that: "data centres desire for 'green' electricity supply could stimulate supply and technology innovation in the renewable energy sector that attracts investment in Ireland and

- increases the pace of transition to low carbon technologies. Given the pace of technological advances, it is also possible that innovative solutions will enable further energy efficiencies and network utilisation over coming years."
- The strategy paper called for a plan-led regional approach to the development of data centre projects outside of Dublin. The proposed development is situated in the mid-east region and is the only known transmission connected data centre project which aligns with the siting recommendation of the Governments Data Centre Strategy.
- The application before the Board relates solely to the 220kV substation, associated 220kV cables and ancillary works, which have a negligible energy consumption. The application for the data centre was submitted to Meath County Council who issued a notification to grant approval.
- The EIAR is a cumulative assessment of the entire data centre expansion and considers the cumulative impacts, including energy usage, of both the proposed development and the existing adjacent data centre. An assessment of the direct and indirect impacts on Ireland's targets for CO2 emissions and renewable energy is contained in Volume 2 Chapter 15. In addition, as outlined in Volume 2 Section 3.1 of the EIAR 'Material Assets' the EIAR acknowledges that the developments are directly inter-related, with the data centre being entirely dependent on its energisation by the substation.
- EirGrid have confirmed that the proposed infrastructure "can be
 accommodated". In addition, EirGrid's All-Island Generation Capacity
 Statement (Capacity Statement) 2017-2026 reports that the key driver for
 growth in electricity demand will be from data centres. The report
 considers three scenarios where additional data centre load is connected
 to the grid. This application is well within the bounds of all three of
 EirGrid's projected scenarios'.
- Ireland has an abundant renewable resource and there is ample potential for renewables to meet Ireland's needs. Volume 2, Section 15.5.4 of the EIAR is quoted. Since the lodgement of the application, EirGrid has awarded connections to over 1,000MW of new solar projects, providing further

- confidence that increased renewable generation capacity should be available in an appropriate timescale to meet the increased demand. The proposed development will not therefore, adversely affect the availability of renewables for other users and could enhance utilisation of renewable energy resources.
- The applicant and its affiliates have a stated goal of sourcing operations with 100% renewable energy and have contracted over 3 gigawatts of new renewable energy globally.
- The request to withhold approvals until additional monitoring of emissions and renewable energy is in place is not practical nor required as emissions and renewable energy are already monitored and reported by state entities at a national level. At a facility level, while it is not a requirement of planning to monitor these items, the applicant is already reporting details of their energy, water and carbon footprint for all of their operational sites.
- In conclusion, the applicant is of the view that the application can be fully assessed and is consistent with the proper planning and sustainable development of the region and country.

7.0 **POLICY CONTEXT**

7.1. National Planning Framework

The National Planning Framework (NPF), 2018, is the overarching national planning policy document for Ireland. The NPF is a high level strategic plan that sets out a vision for Ireland to 2040, expressed through ten National Strategic Outcomes (NSO).

• National Strategic Outcomes no. 6 is "a strong economy supported by enterprise, innovation and skills". Digital and data innovation is recognised as a key priority for future economic growth and it is a specific action of the NPF "to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities". The document states that this sector (digital infrastructure) underpins Ireland's international position as a location for ICT and creates added benefits in

- relation to establishing a threshold of demand for sustained development of renewable energy sources.
- National Strategic Outcomes no. 8 is "the transition to a low carbon and climate resilient society". The NPF acknowledges that Ireland's energy policy is focused on the pillars of sustainability, security of supply and competitiveness. It is an action of the NPF under NSO no. 8 to "reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres".

7.2. Energy Policy Framework 2007-2020 – Delivering a Sustainable Energy Future for Ireland (Energy White Paper).

7.2.1. This white paper sets out a strategic energy policy framework to deliver a sustainable energy future for Ireland. One of the key elements is to ensure the delivery of security of supply, which is considered to be essential for all sectors of the economy, for consumers in general and for society as a whole. The key items needed to deliver a secure supply of electricity on a consistent basis are identified as robust networks and electricity generating capacity. To this end, it is an overall objective to strongly support electricity investment programmes in the high voltage transmissions network and the distribution network, in order to facilitate regional development. The white Paper also sets the target of 33% of electricity being produced from renewable generation by 2020.

7.3. Ireland's Transition to a low carbon Energy Future 2015-2030.

This white paper on energy policy (Department of Communications, Energy and Natural Resources – Dec 2015) provides a complete energy policy update for Ireland, which sets out a framework to guide policy and the actions of Government in the energy sector. It includes a vision to reduce greenhouse gas (GHG) emissions by between 80% and 95% by 2050, compared to 1990 levels, falling to zero or below by 2100. This paper notes the core objectives of energy policy, namely sustainability, security of supply, and competitiveness, in addition to the need for affordable energy for domestic and business consumers.

7.4. Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure, July 2012

7.4.1. In this policy statement the Government acknowledges the essential need to meet the demand for energy in a safe, secure and continuous manner as it is the lifeblood of the economy and society. It reaffirms the imperative need for development and renewal of the energy networks, in order to meet both economic and social policy goals. The Government endorses, supports and promotes the strategic programmes of the energy infrastructure providers, particularly EirGrid's Grid 25 investment programme across the regions. The benefits are identified as securing electricity supply to homes, businesses, factories and farms; underpinning sustainable economic growth in the regions and enabling Ireland to meet its renewable energy targets. It is acknowledged, however, that there is a need for social acceptance and the statement endorses the inclusion of community gain considerations into project planning and budgeting.

7.5. Grid 25 - A strategy for the development of Ireland's electricity grid for a sustainable and competitive future (2008)

- 7.5.1. EirGrid's Grid25 strategy provides a strategic overview for the development of the electricity transmission system to 2025 and beyond. It is based on a vision of delivering a strong, cost efficient transmission system, which will be essential for facilitating regional economic growth and to facilitate the achievement of Ireland's renewable energy goals.
- 7.5.2. A review of Grid25 completed in 2015 confirmed inter alia the urgent need for investment in the electricity transmission system. The overall scale of Grid25 was reduced on foot of reduced projected demand and the availability of new technologies.

7.6. Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy, DBEI, 2018.

The Statement outlines the role of data centres in Ireland's ambition to be a digital economy hot-spot in Europe, stating that data centres are central to the digital economy. It notes that data centre presence in Ireland raises its visibility

internationally as a technology-rich, innovative economy and in turn, places Ireland on the map as a location of choice for a range of sectors and activities that are increasingly reliant on digital capabilities (inc. manufacturing, financial services, animation, retail and global business services). The statement notes that data centres directly contribute to job creation and that they also generate significant added economic benefit by providing a range of services to other firms that undertake production, research and development, marketing, sales, service, and support activities in locations with no physical/geographic connection to the data centre.

7.6.1. In relation to energy, the statement notes that data centres are large consumers of electricity and pose challenges for the future planning and operation of a sustainable power system. It is stated that the Government recognises these challenges and will take steps to mitigate them.

7.7. Regional Planning Guidelines for the Greater Dublin Area 2010 – 2022

- 7.7.1. While Clonee is not mentioned in the Guidelines, Dunboyne is designated as a Tier 2- Large Growth Town in the regional settlement hierarchy.
- 7.7.2. The Draft Regional Spatial & Economic Strategy (RSES) for the Eastern and Mid-Land Regional Assembly area was published on 5th November 2018. This Strategy will replace the Regional Planning Guidelines when adopted. The Strategy includes Strategic Regional Outcomes, that include "a strong economy supported by enterprise and innovation". The site is within the Dublin Metropolitan Area. The settlement strategy detailed in Section 4.2 identifies 'Key Towns' (Bray, Maynooth and Swords) within the metropolitan area of Dublin. Settlements below this level are to be defined at a Development Plan level.

7.8. Meath County Development Plan 2013-2019

- 7.8.1. The Meath County Development Plan 2013-2019 is the relevant plan for the area. The following provisions of the Development Plan are considered to be relevant.
 - Core Principle1: To develop Meath's critical role in the Dublin and Mid-East Region and its role as part of the Dublin City National Economic Gateway maximising on its proximity to Dublin Airport.

- Core Principle 2: To promote sustainable economic development to support the population of County Meath in accordance with the guidance and recommendations set out in the Economic Development Strategy for County Meath 2014-2022.
- Core Principle 5: To encourage mixed use settlement forms and sustainable centres, in which employment, housing and community services are located in close proximity to each other and to strategic public transport.
- Core Principle 9: To consolidate population growth and employment in areas best served by public transport and a range of transport modes.
- Clonee is identified as a village (Tier 5) in the Core Strategy Settlement Hierarchy, while Dunboyne is designated as a Large Growth Town (Tier 2).
- Clonee is part of the 'Dunboyne Ashbourne' Secondary Economic Growth Area. Objective CS OBJ 2 is "to facilitate and encourage the sustainable development of designated core economic areas, such as would allow the creation of a critical mass, in terms of residential population and economic activities, sufficient to service the proposed expanded economic function of such centres. The promotion and facilitation of large scale employment generating developments will occur within the Primary Economic Areas/Primary Economic Growth Areas and Secondary Economic Growth Areas.

Chapter 4 of the Development Plan relates to economic development. Section 4.1.4 relates to the Ashbourne/Dunboyne Corridor (in which Clonee is situated). The Ashbourne/Dunboyne Corridor is seen as having an important supporting and complementary role in developing regional economic growth in tandem with primary economic growth. The sectors targeted include high technology/biotechnology.

 Policy ED4: To pursue the sustainable development of attractive business and industrial parks that accommodate mixed use business located in identified primary and secondary economic growth centres advocating the least restrictive enterprise land use approach to zoning of land consistent with good planning practice.

- Policy ED 8: To promote innovative economic sectors and encourage clustering which positively exploits synergies between interconnected companies and/or which forge synergies with adjoining third level educational institutions.
- ED Objective 5 seeks to explore joint ventures with developer/ industrialists/ landowners to develop strategic sites in designated economic growth areas/ centres consistent with the Regional Planning Guidelines for the Greater Dublin Area. The fast tracking of statutory planning consents shall be facilitated and encouraged. This process should include the reservation of prized sites which would be suitable for or comparable to the IDA "Strategic Sites" which could support investment from large foreign investment firms which may have significant space requirements.

Chapter 8 relates to energy infrastructure. Section 8.1.2 relates to electricity and gas networks.

- EC Policy 1: To facilitate energy infrastructure provision, including the development of renewable energy sources at suitable locations so as to provide for further physical and economic development of Meath.
- EC POL11 seeks to support and facilitate the development of enhanced electricity gas supplies and associated networks to serve the existing and future needs of the county.
- EC POL 13: EC POL 13 To ensure that energy transmission infrastructure follows best practice with regard to siting and design particularly to ensure the protection of all important recognised landscapes.
- EC POL 16: To require that the location of local energy services such as electricity, be underground, where appropriate.
- EC POL19: To seek to promote the undergrounding of existing overhead cables and associated equipment where appropriate.
- EC POL 25: To facilitate the delivery of a high capacity Information and Communications Technology (ICT) infrastructure and broadband network and digital broadcasting throughout the county.

- EC POL 31: To require the provision of communications cables underground, especially in the urban environment, and generally within areas of public open space, in the interest of visual amenity.
- 7.8.2. Details of electricity transmission infrastructure is indicated on Map 8.1 of the Development Plan.
- 7.8.3. In terms of Landscape, the Meath Landscape Character Assessment detailed in Appendix No. 7 designates the site under two separate landscape character areas; LCA 10 'Ward Lowlands' (north-eastern part of the site) and LCA 11 'South East Lowlands' (south-western part of the site). Map 4 Landscape Capacity considers LCA 10 to have a low potential to accommodate overhead cables, substations and communication masts. In LCA 11 the landscape is considered to have a medium capacity to accommodate overhead cables substations and communication masts.

7.9. Volume 5: Dunboyne, Clonee and Pace (inc. Variation 2 and 3)

- 7.9.1. Volume 5 of the County Development Plan 2013-2019 sets out a written statement and land use zoning maps for centres in County Meath. Volume 5 was incorporated as Variation no. 2 of the County Development Plan in May 2014 and was subsequently varied through Variation no. 3 of the County Development Plan in May 2016. Variation no. 3 introduced additional E2/E3 zoned lands at Parton, Clonee.
 - The site is zoned E2/E3. The E2 zoning objective is "to provide for the creation of enterprise and facilitate opportunities for employment through industrial, manufacturing, distribution, warehousing and other general employment / enterprise uses in a good quality physical environment; the E3 zoning objective is "to facilitate logistics, warehousing, distribution and supply chain management inclusive of related industry facilities which require good access to the major road network". Residential properties in this area are zoned F1 with an objective "To provide for and improve open spaces for active and passive recreational amenities".
 - CER OBJ 2: To facilitate the development of lands at Portan, Clonee for E2
 'General Industry & Employment' and E3 'Warehousing & Distribution' as
 provided for in Volume I of the County Development Plan.

• CER OBJ 3: To facilitate the development of lands between Portan Clonee and Bracetown for E2 'General Industry & Employment' and E3 'Warehousing & Distribution' as provided for in Volume I of the County Development Plan. A Master Plan and a detailed Roads Needs Assessment of said lands shall accompany any planning application for the development of these lands. This Master Plan shall obtain the prior written agreement of the Executive of the Planning Authority. The Master Plan shall accompany any application for planning permission on these lands and shall address land use, transportation, connectivity, urban design, recreation, environmental impacts including flood risk, phasing and implementation issues to the satisfaction of the Executive of the Planning Authority. Development shall be contingent on the phased delivery of the distributor road.

The Master Plan shall address the following:

- A Design Concept for the lands;
- Guidance for high quality design throughout the development;
- Building heights and densities;
- A landscape plan for the development and landscape management plan (post-completion of the development);
- Flood Risk Assessment which takes account of the most up to date available CFRAM data Draft Variation No. 3 of the Meath County Development Plan, 2013-2019

A Transport Assessment which addresses the following issues:

- 1. Access arrangements to the Development Site;
- 2. Provision of safe cycle ways and pedestrian routes throughout the Development Site;
- Provision and access for Service Vehicles to the Site.
 The Master Plan shall be agreed in writing with the Executive of the Planning Authority in advance of the lodging of any planning application
- CER OBJ 4: Lands adjacent to Portan, Clonee: To facilitate the development of lands between Portan Clonee and Bracetown for E2 "General Industry & Employment" and E3 "Warehousing and Distribution" purposes solely for the

development of major employment proposals, primarily FDI, requiring a significant site area, having regard to this strategic location within the county, as provided for in Volume I of the County Development Plan.

7.10. Dunboyne, Clonee and Pace Local Area Plan 2009-2015

- 7.10.1. This Local Area Plan was amended in March 2015 to insure consistency with the changes to the land use zoning map for the area arising from Variation No. 2 of the County Development Plan. The LAP has not been amended to reflect changes to the land-use zoning map introduced through Variation no. 3.
- 7.10.2. The following policies / objectives are considered to be relevant to the subject site:
 - SDV POL 1: Identify, protect and promote important strategically located employment lands in the Dunboyne/Clonee/Pace corridor.
 - EMP OBJ 1: Encourage predominantly lower density employment uses (industrial, warehousing, logistics and associated uses) on lands zoned for E2 'General Enterprise & Employment' Category 1 (Primary & Secondary Economic Centres) and E3 'Warehousing & Distribution' as provided for in Volume I of the Meath County Development Plan 2013-2019.
 - EMP OBJ 7: It is a requirement of the Local Area Plan that the development of the employment generating lands at Portan, Clonee identified on Map Number 3 will be subject to the provisions of a Framework Plan to be agreed with the Executive of the Planning Authority and specific servicing and access arrangements set out in the Movement Section of this Local Area Plan. Any uses proposed shall have regard to and be consistent with the range of uses indicated as being appropriate to E2 'General Enterprise & Employment' Category 1 (Primary & Secondary Economic Centres) and E3 'Warehousing & Distribution' as provided for in Volume I of the Meath County Development Plan 2013-2019.
 - ENG POL 2: To support and facilitate the development of enhanced electricity supplies and associated networks to serve the existing and projected residential, commercial, industrial and social needs for the Corridor.
 - ENG POL 3: To locate service cables, wires and piping, including electricity, telephone and television underground were possible, and that existing

- overhead cables and associated equipment should be located underground with future capacity considered and appropriate ducting put in place.
- MOV OBJ 3: The Local Roads Layout for the employment generating lands at Portan to the north east of the Clonee Bridge shall generally adhere to the layout shown on Map Number 3 (Clonee), which roads layout has been agreed with the National Roads Authority and Fingal County Council. The Local Roads Layout shall make provision for connectivity between the subject lands and the adjoining industrially zoned lands at Damastown in the administrative area of Fingal County Council.
- MOV OBJ 4: The Local Authority shall co-operate with Fingal County Council to achieve road connections between the employment generating lands at Portan, Clonee and the adjoining industrial development at Damastown. The development of the employment generating lands at Portan, Clonee shall ensure that the provision of such connectivity (or the reservation of lands to provide such connections) as part of their development proposals for the subject lands. Meath County Council is committed to use the statutory powers conferred under Section 212 of the Planning and Development Acts 2000-2014 to provide such connections within the administrative area of Meath County Council.
- LAN POL 1: To protect existing ecological corridors including rivers, streams, hedgerows, trees, wooded areas, scrub and traditional stone walls. All proposals for development shall be required to identify all ecological corridors, assess the impact of the proposal on these and set out detailed mitigation measures to offset any negative impact.

8.0 PLANNING ASSESSMENT

8.1. Introduction

8.1.1. I have examined the file and the submissions / observations received, considered national, regional and local policy and guidance and I have inspected the site. I consider that the key issues for consideration by the Board in this case are as follows: -

- 1. Compliance with Legislation and Land Use Policy
- 2. Landscape and Visual Impact
- 3. Impact on Amenity
- 4. Cultural Heritage
- 5. Traffic and Transportation
- 6. Energy Demand and Climate Change
- 7. Other Issues
- 8.1.2. Furthermore, I have carried out Environmental Impact Assessment and Appropriate Assessment in respect of the proposed development, as detailed in Sections 9.0 and 10.0 below.
- 8.1.3. Each section of the report is structured to guide the Board to the relevant section of the EIAR, AA Screening Report, relevant policy, substantive issues raised in the submissions / observations and the applicant's response as appropriate. In view of the fact that the application is accompanied by an EIAR and given the interrelationship between the subject application and the adjacent data centre development, the amenity and environmental impacts of the overall development are considered in the planning assessment below.

8.2. Compliance with Legislation and Land Use Policy

- 8.2.1. The application before the Board is made under the provisions of Section 182A of the Planning and Development Act 2000 (as amended). It relates to a 220kV substation development and associated underground cables. This development is referred to by the applicant and in this report, collectively, as the substation development.
- 8.2.2. The substation and associated cables are required to power an approved data centre on contiguous lands. An application was made to Meath County Council under Section 34 of the Planning and Development Act 2000 (as amended) for the data centre and permission was granted in September 2018 (MCC Ref. RA180671).
- 8.2.3. One submission raises the issue of 'project splitting'. In this regard, 'data centres' are not a listed use class in the 7th Schedule of the Act and do not therefore, constitute strategic infrastructure development. In addition, for the purposes of EIA

the cumulative impacts of the overall development are considered. I am therefore satisfied that the applications have been made under the appropriate sections of the Act and that the issue of project splitting does not arise.

National Policy

- 8.2.4. The National Planning Framework (NPF), 2018, is the overarching planning policy document for Ireland. It sets out a vision for Ireland to 2040, expressed through ten National Strategic Outcomes (NSO).
- 8.2.5. One of the NSO's is "A Strong Economy Supported by Enterprise, Innovation and Skills". Digital and data innovation is identified as a key area of future economic growth and it is an action of the framework "to promote Ireland as a sustainable international destination for ICT infrastructures such as data centres and associated economic activities". The document states that this sector underpins Ireland's international position as a location for ICT. The document also refers to added benefits in relation to establishing a threshold of demand for renewable energy sources. In relation to energy, the NPF includes an action to "reinforce the distribution and transmission network to facilitate planned growth and distribution of a more renewables focused source of energy across the major demand centres".
- 8.2.6. The proposed development, which is a critical piece of ancillary infrastructure associated with the data centre, will help to facilitate and support the aims of the NPF with regard to promoting economic development. The proposal would also support the development of ICT infrastructure and strengthen and reinforce the transition and distribution network along the Corduff / Woodland 220kV line. The proposal is, therefore, fully in accordance with national policy in relation to supporting and strengthening the electricity transmission system as detailed in the NPF and in the various Government Publications referenced in Section 7 above.

Regional Planning Guidelines

8.2.7. With regard to general enterprise and employment creation, the Regional Planning Guidelines for the Greater Dublin Area designate Dunboyne as a Tier 2 - Large Growth Town. There is no specific reference to Clonee as a strategic growth centre in the Regional Guidelines but Clonee, is in close proximity to Dunboyne and would in my view contribute to the critical mass associated with this designated Large Growth Town. Furthermore, both Dunboyne and Clonee are located within the

- confines of the Metropolitan Area associated with Dublin City (Figure 12 of Settlement Strategy for the GDA refers). The designated large growth towns in the Regional Guidelines are deemed to be critical in developing the Region. The RPGs envisage that the growth towns will continue to accommodate significant new investment in transport and economic and commercial activity and in housing. These towns act as "important self-sustaining regional economic drivers for the GDA, capitalising on their international connectivity and high-quality connections to Dublin City Centre whilst also supporting and servicing a wider local economy". (page 94).
- 8.2.8. In terms of energy utilities, the Guidelines note that the demand for electricity in the GDA region is expected to increase by over 80% by 2025 and that energy demand in the region will represent 30% of the demand for the Island of Ireland (page 61). The planned electricity transmission networks are referred to in Section 6.62 of the Guidelines. This section includes reference to the construction of new transmission circuits associated with 220/110kV substations in west and north Dublin to cater for additional demands within these locations, which I consider relevant in the case of the subject application.
- 8.2.9. It is apparent therefore that the proposed development sits comfortably within the policies and objectives contained in the Regional Planning Guidelines for the Greater Dublin Area, having particular regard to the aims of delivering enabling infrastructure to allow the planned development and consolidation of designated growth towns within the Region.

Local Planning Policy Context

- 8.2.10. Both the County Development Plan and the Local Area Plan (Dunboyne/ Clonee/ Pace LAP) are more detailed and prescriptive in relation to policies affecting the site and its surroundings.
- 8.2.11. The land use zoning map for "Dunboyne North / Dunboyne / Clonee" is set out in Volume 5 of the Meath County Development Plan (as varied). The site has a combined E2 and E3 zoning (save for lands around former residential properties). The E2 zoning objective is "to provide for the creation of enterprise and facilitate opportunities for employment through industrial, manufacturing, distribution, warehousing and other general employment / enterprise uses in a good quality physical environment; the E3 zoning objective is "to facilitate logistics, warehousing,

- distribution and supply chain management inclusive of related industry facilities which require good access to the major road network". The E2/E3 zoning on the lands to the west of the Kilbride Road was introduced on foot of Variation No. 3 of the Meath County Development Plan in May 2016. Section 2.9.5 of the Development Plan indicates the land uses that are permitted under the various zoning provisions. Energy installations are listed as a permitted use in both the E2 and E3 zoning objectives. I am therefore satisfied that the proposed development fully complies with the land use zoning objectives for the site.
- 8.2.12. Furthermore, the County Development Plan has identified the site and its environs as a 'Secondary Economic Growth Area' being located within the Ashbourne/Dunboyne Corridor. Objective CS OBJ 2 of the Core Strategy seeks "the promotion and facilitation of large scale employment generating developments within primary economic areas / primary economic growth areas and secondary economic growth areas". The proposed data centre and the electricity substation which enables and supports the data centre are fully in accordance with this objective. The proposal is also in accordance with policy ED POL 4, which seeks "To pursue the sustainable development of attractive business and industrial parks that accommodate mixed use businesses in identified primary and secondary economic growth centres".
- 8.2.13. In terms of electrical energy supply, the proposed substation fully accords with Policy ED POL 1 which seeks "To facilitate energy infrastructure provision...so as to provide for the further physical and economic development of Meath" and with Policy ED POL 11 which seeks "to support and facilitate the development of enhanced electricity and gas supplies and associated networks".
- 8.2.14. The Local Area Plan contains a number of policy statements which again support the development of the lands in question. Policy SDV POL 1 seeks to "identify, protect and promote important strategically located employment lands in the Dunboyne / Clonee / Pace corridor". Policy ENG POL 2 "seeks to support and facilitate the development of enhanced electricity supplies and associated networks to serve the existing and projected residential, commercial, industrial and social needs of the corridor".

- 8.2.15. I would draw the Board's attention to the fact that the land use zoning pertaining to the site in the Local Area Plan is at variance with the zoning in Volume 5 of the County Development Plan (as varied). The Local Area Plan has not been amended to incorporate the additional E2/E3 zoned lands introduced through Variation no. 3 of the County Development Plan in 2016 and these lands are not zoned in the LAP. While I note the variance between both Plans, I am of the view, having regard to the provisions of the Planning and Development Act, that the zoning objectives contained in the Development Plan take precedence and are the relevant zoning objectives for the site.
- 8.2.16. Objective CER OBJ 3 of Volume 5 of the Development Plan sets out a requirement to prepare a Masterplan for the lands at Portan, while Objective EMO OBJ 7 of the Local Area Plan refers to a requirement to prepare a Framework Plan for the lands at Portan. The application is accompanied by a masterplan that addresses the overall landholding, including the existing and approved data centres on contagious lands. The Meath County Council Planner's Report, prepared on foot of the data centre application (MCC Ref RA/180671) states that the masterplan, which was also submitted with the data centre application, represents an accurate description and outline of current land uses within the area and provides for the development of the lands in a manner sensitive to neighbouring uses, whilst also facilitating connections to the adjacent enterprise lands in a sustainable manner. The Planner's Report states that the Planning Authority is satisfied that the Masterplan provisions accord with objective CER OBJ 3. I would concur with this view. The submitted masterplan represents a comprehensive framework plan for the E2/E3 zoned lands at this location and addresses the requirements of Objective CER OBJ 3 of the Development Plan.

Conclusion

8.2.17. I consider the principle of the substation development to be acceptable in this instance as this development is permitted in principle under the County Development Plan zoning objectives for the site and is a vital element to serve an approved data centre development on adjoining lands. Furthermore, I consider that the proposed data centre complies with, and supports the wider strategic aims, zoning objectives and development objectives relating to the overall site set out in national, regional and local development plans, all of which seek to attract and develop employment

generating activities in designated economic centres and more specifically on the lands in question.

8.3. Landscape and Visual Impact

- 8.3.1. The relevant sections of the EIAR are Chapter 11, Appendix A.11.3 / Fig. 11.3 (Data Centre and Substation Photomontages) and Appendix A.11.4 / Fig. 11.4 (Substation Photomontages).
- 8.3.2. The receiving environment is a relatively flat rural landscape at the urban edge. The lands to the west of the Kilbride Road comprise medium sized fields that are divided by mature hedgerows and tree lines. The data centre approved in 2015 is under construction / partially complete on lands to the immediate east of the Kilbride Road. The M3 and associated road infrastructure is located to the south. The Damastown Industrial Estate is located to the east of the site, while the Macetown Industrial Estate is located to the west. There are agricultural fields to the west and north interspersed by farmyards, single houses and small clusters of housing. There are no protected views or prospects in the immediate vicinity of the site.
- 8.3.3. The Landscape Character Assessment for County Meath places the site into two separate Landscape Character Areas; LCA 10 'Ward Lowlands' (north-eastern part of the site) and LCA 11 'South East Lowlands' (south-western part of the site). The above ground elements comprising the substation compound and link road are within LCA 11 'South East Lowlands'. This landscape character area is recognised as being of high value, of moderate sensitivity and with medium capacity for large scale developments, including substations and masts (LCA Map 3 refers).
- 8.3.4. The proposed development (data centre and substation) involves a land-use change that would be a departure from the established agricultural land use. However, the site zoning and the wider industrial and urban context to the east and west is relevant in this respect. The substation development includes a line of underground cables that would not be visible in the surrounding environment after the construction phase and as such would have no lasting visual or landscape impacts. The proposed substation compound, has the greatest potential for impact given its overall height and scale. The compound is contained in a rectangular area of approximately 132 metres by 123 metres. The equipment within the substation can be described

- as high density latticed type masts and poles and electrical plant. Most of the equipment is around 10 metres in height. The lighting masts extend to 25-metres in height. The compound is located over half a kilometre from the R147 to the south and from the Kilbride Road to the east.
- 8.3.5. Having assessed the photomontages and carried out a detailed inspection of the site and the surrounding area I would come to the following conclusions:
 - The substation compound is located deep within the overall data centre site
 and is at a considerable distance from existing roads and public vantage
 points. This ensures that it would not represent a significant visual obtrusion
 when viewed from the public roadways in the vicinity.
 - The presence of screen planting within the site will screen all but the highest structures (lightening masts) associated with the substation and the visual impact will be largely contained within the site. Proposed landscaping associated with the data centre will further augment the screening and reduce the visual impact upon maturity.
 - In terms of the wider landscape, views from the east (within the jurisdiction of Fingal County Council) are already dominated by industrial and commercial land uses associated with the existing data centre approved in 2015 and the Damastown Industrial Estate, located on lands to the east and the Macetown Industrial Estate located on lands to the west. The development when viewed from this area will, in my view, be viewed as an extension to the existing industrial land uses.
 - Intermittent views of the substation will be apparent along the Kilbride Road.
 However, direct views of the substation, for the most part, will be screened by the existing hedgerows along the Kilbride Road and by the approved data centre development on contiguous lands.
 - Cumulatively, there can be little doubt that the overall development (i.e. the substation and the data centre) will result in a significant landscape change at a site level. However, I am of the view that the change will not be negative due to the fact that the data centre and substation will sit within a large landscaped site (108ha) which will retain much of the existing natural

amenities and will be augmented by further landscaping including surface water attenuation features in the form of artificial ponds.

8.3.6. The Board should, in assessing the visual impact, bear in mind the zoning provisions associated with the site which seek to develop the lands for employment generating uses. Furthermore, the proposed development should be seen in the context of existing contiguous and similar developments types in the form of the existing data centre to the immediate east and the adjacent industrial estates at Damastown to the east and Macetown to the west. It is considered that the proposed development will result in a slight intensification of the wider enterprise / light industrial character of the area. Therefore, in my opinion the cumulative impacts from a visual point of view cannot be considered significant.

8.4. Impact on Amenity

8.4.1. I consider that potential for impacts on the amenity of the area arises primarily from noise and vibration and air quality and lighting impacts, that would arise during both the construction and operational phases of the development. Each of these factors is considered in turn below.

Noise & Vibration

- 8.4.2. In relation to noise and vibration, potential impacts could arise from both the substation and the proposed data centre during both the operational and construction phases. Chapter 10 of the EIAR specifically addresses issues in relation to noise and vibration. The baseline modelling information presented relates to five sampling points in the vicinity of the site and close to residential receptors. The surveys identify the M3 Motorway as a source of constant noise at all five locations and local traffic and aircraft noise were also notable noise sources. Table 10.2 of the EIAR details daytime noise levels ranging from 54 dB(A) to 76 dB(A) and night-time levels ranging from 46 dB(A) to 64 dB(A). I would note that the noise levels are above those of a typical rural area. No tonal or impulsive noise was experienced during the survey, according to the EIAR.
- 8.4.3. The construction phase of the substation development would run concurrently with that of the data centre. The potential for noise and vibration would arise form general construction activities and traffic noise associated with the overall

development. Typical noise levels for construction related machinery are detailed in Table 10.4 of the EIAR and range from 61 dB LAeq² to 95 dB LAeq at a 10-metre setback. The closest dwelling is over 300 metres from the substation compound, allowing for significant attenuation. In respect of vibration, I would note that the overall development would not involve significant excavations or subsurface works and that the EIAR states that vibration levels would comply with NRA recommendations for road construction projects, which I consider to be reasonable. The potential noise and vibration impacts would be mitigated by mitigation measures, such as the limiting of construction hours, the use of plant with low inherent potential for noise and / or vibration, the use of noise barriers and locating plant away from noise sensitive receptors. I am satisfied that noise and vibration impacts arising during construction would be temporary and short-term in nature and that adequate mitigation measures are proposed to reduce the level of impact.

- 8.4.4. Once operational, no significant noise or vibrational impacts are predicted from the substation as the proposed transformers would operate within the night-time noise limit of 45dB at the closest noise sensitive locations.
- 8.4.5. In terms of cumulative impacts, I would note that data centres are not significant noise generators. The predicted cumulative noise levels from the substation and data centre are set out Tables 10.7 to 10.10 of the EIAR. The cumulative noise impacts during the operational phase at the closest noise sensitive receptors would be within the day and night-time noise limits of 55 dB (daytime) and 45 dB (nighttime) at all times. In emergency operation, an exceedance of up to 5 dB over the night-time noise limit is expected at a number of noise sensitive receptors in the event that all roof mounted plant and substation transformers, in addition to all 91 emergency backup generators in the existing and proposed data centre sites are employed. The emergency scenario presents a worst-case scenario linked to a temporary power outage or other unforeseen event. I would note that the submission from the HSE requests further examination of this issue. However, I consider the exceedance to be relatively minor and given the unlikely and infrequent nature of this occurrence I considered it acceptable to address this matter by condition.

² Refers to the equivalent continuous sound level where sound levels fluctuate.

Air Quality

- 8.4.6. In relation to air quality, potential impacts could arise from the substation and the data centre developments during both the operational and construction phases.
 Chapter 9 of the EIAR (inc. Appendix A.9.1 (Air Emission Contour Plots) specifically addresses issues in relation to air quality.
- 8.4.7. In terms of the construction phase the analysis contained in the EIAR includes a separate assessment of impacts associated with the substation and data centre developments in addition to an assessment of the cumulative impacts. During the construction phase there is potential for the release of dust and particulate matter arising from earthworks, construction activities and the movement of vehicles / transfer of materials. The potential impacts on sensitive receptors would be mitigated through the implementation of standard best practice dust control measures to reduce dust emissions at source during earthworks, construction activities and the transfer of materials. I consider that the measures detailed are sufficient to control emissions at the source. Ongoing dust monitoring is also proposed. I am satisfied that the construction emissions will be temporary and are unlikely to impact on residential or other receptors in the area.
- 8.4.8. There would be no significant emissions to air during the operational phase of the overall substation development as a result of the processes undertaken on the site. The main source of emissions to the atmosphere is from emergency back-up generators³ within the substation and data centre sites. Larger generators will be used in the event of a power interruption and will be subject to regular testing and maintenance. The assumed maximum operation is 60 hours per generator per year. The impacts to air quality from the operation of the generators are detailed in Tables 9.11-9.13 of the EIAR. I am satisfied that the impact will be within air quality emission limits and that significant impacts will not arise.

<u>Light Pollution</u>

8.4.9. In relation to light pollution, potential impacts are specifically addressed in Section 11.5.3 of the EIAR.

³ Oxides of nitrogen, sulphur dioxide, particulate matter, carbon monoxide, hydro-carbons.

- 8.4.10. The proposed substation will introduce lighting into an area that was previously in agricultural use. While the lighting scheme is designed to internalise lighting, the proposed developments (substation and data centre) will, by their nature, introduce artificial lighting over a large area and as a result will intensify the night-time artificial light environment experienced by residences in the vicinity of the development. The EIAR describes the significance of the impact as 'moderate adverse' for the data centre and 'minor adverse' for the substation. I would agree with the findings in the EIAR.
- 8.4.11. In terms of the substation itself, it is located c.300 metres from the nearest residential properties on the Kilbride Road. The sections through the proposed layout (see drawing 60534866-RISL-CLN-D-016) indicate that the lighting poles are 6 metres in height around the perimeter of the substation. Given the separation distance between the substation and the nearest residential dwellings it is unlikely that the substation would contribute in any way to significant light pollution in the area.
- 8.4.12. While the proposed substation and data centre will introduce a new illuminated light source on lands which were previously unlit, I would note that the development is proximate to the M3 motorway interchange to the south which has artificial lighting and to industrial sites to the east and west, all of which have artificial lighting. I consider that the proposed development would be viewed as an intensification or extension of the existing artificial lighting environment. Furthermore, the lands in question are earmarked for development under the zoning provisions set out in the Development Plan. Any development on the lands in question, will by extension, introduce an additional level of artificial lighting in the area. I do not consider that the level of artificial lighting proposed is in any way significant or that it would affect the residential amenity of the area.

8.5. **Cultural Heritage**

8.5.1. In relation to Cultural Heritage, the potential impacts on archaeology and architectural heritage is considered in Chapter 12 of the EIAR and in the associated Appendices (Appendix A12.1 Archaeological and Architectural Heritage Baseline, Appendix A12.2 Geophysical Survey Report and Appendix A.12.3 Archaeological Assessment).

- 8.5.2. The data centre expansion site is not within a designated area of archaeological potential, nor does it contain recorded monuments. However, a baseline survey carried out within a 2km radius of the site identifies a total of 25 no. recorded monuments in this area and evidence of prehistoric and medieval activity in the surrounding landscape⁴. Geophysical survey was used to in order to identify potential archaeological resources within the site. This was followed by trench testing in areas of potential, including areas within the proposed substation site. Archaeological features were uncovered in ten trenches. A 'boundary wall of archaeological interest' was discovered within the substation site. The development, as proposed, would involve the permanent removal of archaeological features that have been found and their preservation by record. The Archaeological Assessment submitted with the application (EIAR Appendix A12.3) indicates a preference for preservation in situ, but states that where this cannot be achieved and given the localised nature of the archaeological deposits that have been found, it is recommended that all impacted features are preserved by record by means of archaeological excavation. Given the potential for undiscovered sub-surface archaeology in the area the assessment also recommends that ground works are monitored by a suitably qualified archaeologist.
- 8.5.3. I am satisfied that the Archaeological Assessment has been informed by a comprehensive level of survey and investigation and that the applicant proposes to undertake reasonable steps to ensure the protection of archaeology. While I would note that the level of impact to the features found within the site is significant, I am satisfied, on the basis of the submitted information, that the impact of the proposed development and the cumulative impact of the overall development would not be significant in the context of the wider archaeological landscape, given the localised nature of the deposits. I consider that archaeological supervision of all works within the data centre site is warranted, and that this would be sufficient to mitigate any potential impacts on undiscovered archaeology. I would note that the grant of permission for the data centre includes a condition to implement the archaeological mitigation measures detailed in the EIAR. I am therefore satisfied that issues in relation to archaeology can be addressed by way of condition.

⁴ Section 1.4.4 of EIAR Appendix A12.1 describes designated cultural heritage sites in the vicinity of the application site.

8.5.4. In terms of built heritage, I would note that Gunnocks House, a Protected Structure (RPS Ref. ME051-008) dating from the 17th century, is located c. 500 metres to the west of the substation compound. The proposed substation development is at a distance from this structure and would not in my view impact on the setting of the structure. There are no other Protected Structures in the immediate vicinity of the site and the site is not subject to any protected views, prospects or other designations.

8.6. Traffic & Transportation

- 8.6.1. In relation to Transport, the relevant sections of the EIAR are Chapter 13 Transport and Appendices A13.1 (Traffic and Transport Assessment), A13.2 (Road Safety Audit) and A13.3 (Outline Construction Traffic Management Plan). The EIAR describes the receiving environment in the context of the local, regional and national road network.
- 8.6.2. The greatest potential for impacts on the local road network arises during the construction phase of the development. It is not altogether clear from the information contained in the EIAR how much construction traffic will be generated by the substation development in its own right, as the data centre and substation developments are assessed together. It is clear however, that there would be a significant increase in traffic on the local road network during the construction phase of the overall development due to employees and HGVs accessing the site. The EIAR (Figure 13.14) suggests that there would be between c. 1000 and c. 1100 employees on the overall site per day, increasing to 1,400 during the peak months of construction. In terms of HGV movements, the EIAR (Figure 13.15) indicates that there would be between c. 450 to c. 550 HGV deliveries to the site per day, increasing to 700 during the peak construction months. I would note that the modelling exercise focuses on the operational stage only and does not quantify the traffic impacts arising from the construction phase of the proposed development.
- 8.6.3. The application before the Board relates to the substation development only. I would note that the submission from TII states that the proposed 220kV substation and associated cabling is located off the local road network and alone will have minimal interaction with the national road operational phase. I would concur with this view. Having regard to the nature and scale of the substation development, I consider that

the level of traffic generation arising during the construction phase, would be minor in the context of the overall data centre development and would occur over a shorter timeframe. On this basis, I consider that the substation development would not, of itself, have an undue impact on the local road network nor would it make a significant contribution to cumulative impacts arising from the overall data centre development. I would, therefore, advise the Board against refusing permission for the proposed substation and associated development on the basis of traffic impacts.

8.6.4. In terms of the operational phase, the number of trips generated by the substation would arise from occasional maintenance and security visits only. Thus, the substation will have a negligible impact on traffic during the operational phase and I am satisfied that no cumulative impacts would arise.

8.7. Energy Demand and Climate Change

- 8.7.1. The submission of a third-party observer raises concerns in relation to the energy demand associated with the proposed data centre development. In summary, the submission states that the development will impact on Ireland's emission targets and commitments for a transition to green energy under the Renewable Energy Directive. It is argued that energy for new high energy demand development should be sourced from a direct renewable power source (on-site or via the grid) and that this requirement should be stipulated in any application. The observation states that the application should be rejected until there is strong evidence that energy will be supplied from a standalone, renewable source and a monitoring programme is in place.
- 8.7.2. The applicant in response highlights that the proposed substation development has a negligible energy consumption. It notes that the EIAR presents a cumulative assessment of both the data centre and substation developments in the context of energy use. The direct and indirect impacts on Ireland's targets for CO2 emissions and renewable energy are addressed. The response also refers to Irelands existing renewable energy capacity including new solar capacity. The response states that the request to withhold approvals until additional monitoring of emissions and renewable energy is in place is not practical nor is it required as emissions and renewable energy are measured on a national level and at a facility level.

8.7.3. I would be inclined to agree with the applicant. A refusal on this basis, would be unreasonable. The mandatory targets for renewable energy set out under the 2009 Renewable Energy Directive (2009/28/EC), require on a European level that 20% of all energy produced would come from renewable sources. A less onerous target is set for Ireland which requires a gross final consumption of 16% of energy from renewable sources by 2020. It is a matter for national government to achieve the above targets, and it would not be appropriate, within the current legislative and policy context, to levy the responsibility on individual developments through the planning consent process. In terms of energy supply, I would note that there are a number of permitted renewable energy developments in close geographical proximity to the site. In addition, recent government policy in the form of the National Planning Framework (2018) and the Governments Statement on Data Centres (2018) highlights that data centres can have added benefits in relation to establishing a threshold of demand for the sustained development of renewable energy. The Government Statement on Data Centres (2018) also acknowledges that data centres pose challenges for the future planning and operation of a sustainable power system, but states that the government recognises this and will take steps to mitigate the challenges. Thus, I consider that a refusal of permission for the substation and associated infrastructure on the basis of energy demand is not warranted. I would note that the environmental impacts relating to energy use are discussed further in Section 9.3 below under the heading of Climate.

8.8. Other Issues.

Flood Risk

8.8.1. The OPWs Preliminary Flood Risk Assessment map for the area (2011) indicates potential for pluvial flooding resulting from rainfall-generated overland flow in isolated sections of the data centre site during a one in 100 year flood event. I would note that the PRFA maps are indicative only. While the more detailed Flood Risk Maps produced in 2016 are unavailable for this area due to an ongoing review, I would note that the draft maps indicated that the site has the potential to be influenced by flooding from the River Tolka during a one in 1000 year flood event.

- 8.8.2. The Planning System and Flood Risk Management Guidelines for Planning Authorities, DEHLG and OPW (2009) recommend that where flood risk may be an issue, a more detailed flood risk assessment should be carried out (Section 5.2).
- 8.8.3. In this regard, the EIAR (Appendix A.7.4) includes a Site Specific Flood Risk Assessment for the overall data centre site. Hydraulic models were built to calculate the 1:100 year (Flood Zone A) and 1:1000 year (Flood Zone B) flood extents modelling watercourses that are local to the site. The FRA also takes account of flood risk associated with the River Tolka. Figure 5.5.1 of the FRA details the modelled flood extents for the site from local watercourses. The model confirms that there would be no significant flooding in the 1:100 and 1:1000 year flood events. The modelled flood extents taking account of impacts from the River Tolka indicate that a small section of the access road to the substation and other areas of the data centre site would be within Flood Zone B, however, the substation compound is outside of Flood Zone B (Map PIP2-ACM-Z0-XX-DR-ZZ-02005 refers).
- 8.8.4. The FRA concludes that the proposed substation development is a highly vulnerable development type. It is recommended that the finished level of the substation should be construction above the modelled 0.1% AEP flood level and that the remainder of the site (data centre development) above the 1% AEP flood level. This recommendation has been incorporated into the proposed development. It is noted that as the identified floodplains are minimal there is no requirement to provide any flood compensation measures, as there would be negligible impact on available flood storage.
- 8.8.5. I consider the level of modelling and sensitivity analysis to be appropriate to the nature and scale of development proposed and accept the findings of this assessment.

SEVESO

8.8.6. There are three existing Seveso sites located in the Damastown Industrial Estate to the east of the site, all within the jurisdiction of Fingal County Council. The application site falls within the consultation zone for these sites and therefore consultation with the HSA is required. The HSA have been notified of the application and comments were invited. No response has been received. I am satisfied

- however, having regard to the nature of development proposed, being an un-maned substation, that no issues would arise.
- 8.8.7. While substations and data centres are not classified as Seveso sites under the provisions of the SEVESO III Directive (2012/18/EU), petroleum products to be stored on the overall data centre campus will exceed the threshold for lower tier Seveso sites, as set out in the Directive (Class iii (i) Petroleum projects (2,500 tonnes)) and the site will, therefore, be required to register as a Lower Tier Seveso site. The HSA guidance does not consider this class as a flammable liquid and consequently the most important major accident consideration is in relation to loss of containment leading to release into the environment. The release of contaminants to ground or surface waters is addressed in detail in Chapter 6 Land and Soils and Chapter 7 Water of the EIAR and considered in Section 9 of this report below.

Water Services

- 8.8.8. Chapter 7 of the submitted EIAR assesses the potential for significant impacts on water.
- 8.8.9. Surface water from the substation site will drain to a surface water network associated with the overall data centre site, which will discharge, via an onsite attenuation system, to the Pace Stream and M3 culverts, which in turn drain to the Tolka River. It is envisaged that the discharge will be of similar composition and have similar flow rates to the existing 'greenfield' drainage discharges.
- 8.8.10. During the operational phase I would note that the proposed substation development will be connected to the to the internal site water supply and wastewater networks, which in turn will be connected to the public networks. The substation is unmanned and will have a negligible water demand. I would note that the submission from Irish Water states that additional information is needed in relation to water demand. However, I am satisfied that no significant water demand arises in respect of the substation and that further information is not therefore necessary.
- 8.8.11. In conclusion, I am satisfied that the engineering details and drawings submitted with the application and in the EIAR satisfactorily address surface water drainage, foul drainage and water supply. I would note that the potential for significant environmental effects on the water environment is considered in more detail in Section 9.3 of this report.

9.0 ENVIRONMENTAL IMPACT ASSESSMENT

9.1. **Introduction**

- 9.1.1. This section sets out an environmental impact assessment (EIA) of the proposed project. I have examined the information submitted by the applicant including the submitted EIAR as well as the written submissions made to the Board.
- 9.1.2. A single EIAR has been prepared in respect of the approved data centre development and the substation development. I am satisfied that the environmental impact of the proposed substation development is addressed under each environmental factor in addition to the cumulative impacts of both developments. A number of the environmental issues relevant to this EIA have already been addressed in the Planning Assessment at Section 8 of this report above. This EIA section of the report should therefore, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment.
- 9.1.3. The application is accompanied by an Environmental Impact Assessment Report (EIAR) on the basis that it was considered by the applicant to come within Class 10 (b) (iv) of the Fifth Schedule of the Planning and Development Regulations, that being 'urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere". No formal scoping procedure with the Board was entered into. The application was received by the Board on 22nd June 2018, and therefore, having regard to the provisions of Circular Letter PL1/2017, the subject application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU) on the basis that the application was lodged after the last date for transposition in May 2017. It does not however, fall within the scope of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, as the application was lodged prior to these regulations coming into effect on 1st September 2018.
- 9.1.4. The impact of the proposed development is addressed under all relevant headings with respect to the environmental factors listed in Article 3(1) of the 2014 EIA Directive. The EIAR clearly sets out a case regarding the background to and need for the project (Chapter 1). The EIAR also provides a significant level of detail with

- regard to the consideration of alternatives. This information is presented at Chapter 4 of the EIAR and includes discussion on site selection, alternative layouts, alternative designs and alternative processes. An overview of the main interactions is provided at Chapter 16 of the EIAR. Table 1.1 presents a list of main contributors / authors for each environmental factor and their qualifications. The competencies of the experts detailed in the EIAR are considered to be consistent with and appropriate to the requirements of the EIA and amending directive.
- 9.1.5. Details of the consultation entered into by the applicant as part of the preparation of the project are set out at Chapter 3 of the EIAR and at Section 5 of this report above. I would note that the subject application was subject to public notification and that the timeline for the receipt of submissions from the public exceed the minimum 30-day period specified in the EIA Directive. Specifically, the period for the receipt of submissions from the public extended from 28th June 2018 to 16th August 2018, a period of 7 weeks. Prescribed bodies were also given a period of 7 weeks to make submissions.
- 9.1.6. Article 3 (2) of the Directive requires the consideration of the effects deriving from the vulnerability of the project to risks of major accidents and / or disasters that are relevant to the project concerned. The potential for major accidents is considered in Chapter 5 Population and Human Health (Section 5.4.1.4 refers) and the potential for flooding is considered in Chapter 7 Water (Section 7.4.4.3). Having regard to the nature and extent of the proposed development and to the local environmental and climatic conditions, I am satisfied that the vulnerability of the project to the risks of major accidents and / or disasters has been adequately addressed within the submitted EIAR and it is considered that the vulnerability level of the project to major accidents and / or disasters is acceptable.
- 9.1.7. The content and scope of the EIAR is considered to be acceptable and in compliance with the requirement of Articles 94 (content of EIS) and 111 (adequacy of EIS content) of the Planning and Development Regulations, 2001 (as amended) and the provisions of the new amending directive.

9.2. Consideration of Alternatives

9.2.1. Chapter 4 of the submitted EIAR addresses the alternatives considered. The assessment covers the need for the facility, alternative sites, designs, layouts and processes. The EIAR states that the overall development will provide the potential for the applicant to expand its server / computing capacity at the existing data centre to meet anticipated user requirements. In terms of the substation development the EIAR notes that the data centre requires a power supply that is highly secure, reliable and enduring and that the proposed dedicated high voltage substation would satisfy all of the technical requirements. The site was chosen to reduce the distance between the proposed substation and the existing substation and the amount of cable required. Within the site the location took account of flood risk, planting and visual impacts. Alternative technologies and layouts were explored, and the chosen technology and layout were chosen on the basis of efficiency, sustainability and security. In my opinion reasonable alternatives have been explored and the information contained in the EIAR with regard to alternatives is comprehensive, provides a justification in environmental terms for the alternatives chosen and is in accordance with the requirements of the 2014 EIA Directive.

9.3. Environmental Factors

- 9.3.1. The sections below address each of the environmental factors. The headings used in the EIAR are as follows:
 - Population and Human Health
 - Land and Soil
 - Water
 - Biodiversity
 - Air Quality
 - Noise and Vibration
 - Landscape and Visual
 - Cultural Heritage
 - Transport

- Waste Management
- Material Assets Including Energy and Climate
- 9.3.2. The direct, indirect and cumulative effects of the proposed project on the specified factors is identified, described and assessed in the following sections. In this regard I have examined the EIAR and any supplementary information and the contents of submissions received.

Population and Human Health

- 9.3.3. Chapter 5 and Appendix.A.5.1 (Health Impact Assessment) addresses population and human health. Effects are considered in the context of socio-economic considerations, land use and health and safety. Other impacts that have the potential to impact on humans such as effects on soil, geology and hydrogeology, water, air, noise and vibration, traffic and landscape are discussed in the respective chapters of the EIAR.
- 9.3.4. The existing environment includes rural populations, employees in the industrial areas to the east and west of the site and the residents of the proximate settlements including Clonee to the south, Mulhuddart / Dublin 15 to the east and Dunboyne to the west.
- 9.3.5. During the construction phase there will be positive economic impacts as a result of employment and economic activity generated by the substation development. Slight negative impacts are likely to arise due to potential air quality, water, noise and vibration, transport and landscape impacts during construction. However, having regard to the separation distances between the site and the closest residential properties and to the temporary nature of the construction activities, I consider that adverse impacts to population and human health will be minimal and will be further reduced by the mitigation measures to be employed during the construction phase, as detailed in the relevant sections of the EIAR and in the Outline Construction Environmental Management Plan submitted with the application.
- 9.3.6. During the operational phase there will be no direct employment and indirect employment will be confined to occasional inspections and maintenance visits.
 Potential air, noise and visual impacts are considered in Section 8 above and under

- the respective headings below and are not likely to result in significant effects in my view and no other significant impacts are envisaged.
- 9.3.7. In terms of cumulative impacts, there is potential for disruption to residents and to economic activity in the area due to noise, landscape changes / visual impacts and traffic disruption associated with the construction and operational phase of the overall data centre development. These potential impacts are addressed in detail under the headings of noise and vibration, landscape and visual and transport in Section 8 above and in the relevant sections of the EIAR. While the proposed substation will not in itself have any major positive impacts on population and human heath during the operational phase, it will facilitate a new data centre on adjoining lands which will increase employment opportunities and economic activity in the area and improve the road network in the vicinity of the site, which will have a positive impact on human beings. I am satisfied that potential negative impacts would be avoided, managed and / or mitigated by measures that form part of the overall scheme.
- 9.3.8. I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I am satisfied that the potential for impacts on population and human health can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the potential for direct or indirect impacts on population and human health can be ruled out. I am also satisfied that cumulative effects are not likely to arise.

Land and Soil

- 9.3.9. Chapter 6 of the submitted EIAR assesses and evaluates the potentially significant impacts on land, soil, geology and hydrology. Due to the interrelationship between land, soil and water the EIAR notes that some impacts are also addressed in chapters relating to water and waste management. The site conditions were assessed using available data and through geotechnical and environmental site investigations (Appendix A6.1).
- 9.3.10. In terms of the existing environment, the site comprises unpolluted agricultural grassland interspersed with hedgerows and drainage ditches. Potential impacts

during the construction phase may arise from excavation and infilling works, accidental spills and leaks of hazardous or water polluting substances and the use of concrete and lime. Environmental management measures detailed in the EIAR include care during soil excavation and filling, fuel and chemical handling, the transport and storage of materials, during the use of lime, concrete and cement and in the management of surface water runoff and the sourcing of fill and aggregates. I am satisfied that the degree of impact can be avoided, managed and mitigated through the proposed environmental management measures detailed in the EIAR and in the Outline Construction Environmental Management Plan submitted with the application.

- 9.3.11. During the operational phase, there will be no direct discharges to soil or groundwater and no storage or use of hazardous or water polluting materials, save for petroleum products used for backup generators. There is potential for accidental leaks and spills from the storage of materials or during fuelling and maintenance of the generators that could result in the contamination of soil and groundwater. Potentially polluting materials will be handled and stored in a manner to prevent or minimise potential impacts to soil and groundwater. This will include the use of bunded storage areas and running run off from storage areas through oil interceptors and emergency procedures in the event of accidental spillages.
- 9.3.12. In terms of cumulative impacts on land and soil, I would note that the existing and proposed data centre on contagious lands carry similar risks to the substation and I am satisfied that these risks can be similarly avoided, managed and mitigated. There are no other largescale developments proposed in the immediate vicinity of the site.
- 9.3.13. I have considered all of the written submissions made in relation to land and soil and the relevant contents of the file including the EIAR. I am satisfied that impacts identified on land and soil would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of land and soil and that cumulative effects are not likely to arise.

Water

- 9.3.14. Chapter 7 of the submitted EIAR specifically assesses and evaluates the potential for significant impacts on water. It provides details of the baseline environment and assesses the likely impacts associated with both the construction and operational stages of the proposed development. In particular, the chapter examines how the development will interact with natural water bodies and stormwater, wastewater and water supply infrastructure in the area.
- 9.3.15. The site drains via drainage channels to the Partan Stream and Pace Stream within the site or to one of three surface water culverts which pass under the M3 motorway to the south and discharge into the Tolka River. The Partan Stream and Pace Stream are tributaries of the Tolka River. The Tolka River has been classified as having 'poor status' at monitoring stations in the area. At a regional level the site lies in the River Liffey Water Catchment and in the River Tolka sub-catchment.
- 9.3.16. During the construction phase, there is potential for direct and indirect impacts on surface water arising from the discharge of construction materials, uncontrolled sediment erosion and contaminated and silty run off, accidental spillages, changes to drainage channels (natural and artificial) and increased run off. An Outline Construction Environmental Management Plan (OCEMP) has been prepared for the proposed development which incorporates relevant environmental avoidance or mitigation measures to reduce potential environmental impacts and will cover all potentially polluting activities and accidents. The construction mitigation measures adhere to industry best practice and are sufficient in my view to avoid, mitigate and minimise impacts. The residual impacts to surface water would be negligible in my view.
- 9.3.17. During the operational phase surface water from the substation site will drain to the site wide surface water network, which will in turn discharge to the Pace Stream and M3 culverts. The discharge will have been passed through attenuation ponds and / or hydrocarbon interceptors prior to discharge and it is envisaged that the discharge will be of similar composition and have similar flow rates to the existing 'greenfield' drainage discharges. The proposed substation development will be connected to the site wide water supply and wastewater network, which will in turn connect to public networks. In terms of mitigation measures the EIAR states that all hazardous or

- water polluting materials will be handled or stored in a manner to prevent/minimise potential impact to surface water. I would note that fuels will be stored in bunded areas and that all surface water runoff from the fuel storage area will be directed to hydrocarbon interceptors prior to discharge to the drainage system.
- 9.3.18. The water demand associated with the substation will be negligible in the context of the overall site.
- 9.3.19. In terms of cumulative impacts, I would note that the proposed data centre on contiguous lands and the existing data centre which is nearing completion on the lands to the east all carry similar risks. There are no other large-scale developments proposed in the immediate vicinity of the site. Having regard to the mitigation measures proposed during the construction and operational phase of all developments within the data centre campus (inc. substation development), I consider that the likelihood for cumulative impacts is slight. In terms of wastewater the loading associated with the substation is of a scale, such that it would not contribute to cumulative effects.
- 9.3.20. I have considered all of the written submissions made in relation to water and the relevant contents of the file including the EIAR. I am satisfied that the impacts identified would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of water and that cumulative effects are not likely to arise.

Biodiversity

- 9.3.21. Chapter 8 of the submitted EIAR assesses and evaluates the potential for significant impacts on biodiversity.
- 9.3.22. The impact of the proposed development on European sites is addressed in detail in Section 10.0 of this report. In summary the site does not overlap or adjoin any European or nationally designated sites. On the basis of separation distance and the lack of direct ecological or hydrological connectivity it is concluded that the proposed development is not likely to have significant effects on any European site. The Rye Water / Carton Valley SAC is the closest site at a distance of c. 6.5 km to the south of the site. The proposed development is not hydrologically connected to

- this site and the development will not result in direct or indirect loss or disturbance to habitats or species associated with this European site. In terms of national designations, I would note that the Royal Canal pNHA, is located c. 4 km south of the site. This proposed development is not hydrologically connected to the Royal Canal.
- 9.3.23. Potential impacts to biodiversity associated with the proposed development include habitat loss, disturbance and impacts arising from pollution. The assessment of impacts is supported by a comprehensive range of ecological surveys undertaken between September 2017 and June 2018. The following surveys have been undertaken:
 - A Habitat and Flora Survey,
 - Hedgerow Survey,
 - Bat Surveys (inc. Bat Activity Surveys at Dusk and Dawn, Bat Roost Surveys),
 - Badger Survey
 - Otter Survey
 - Amphibian Surveys
 - Breeding Bird Surveys,
 - Barn Own Surveys,
 - Survey for Other Protected and Notable Species
- 9.3.24. A detailed description of the surveys is given in section 8.2.4 of the EIAR. The scope of these surveys is noted and is considered to be appropriate. Information is also drawn from other available information sources.
- 9.3.25. The surveys identified the presence of commuting and foraging bats within the site and two bat roosts were located in the wider site. Evidence of badger was found throughout the site, but no setts were recorded. There was no evidence of otter. Potentially suitable habitat for stoat, pygmy shrew and hedgehog (protected but common species) was identified, although no evidence of these species was found. In terms of birds, a single barn owl was incidentally recorded foraging and perching outside of the substation site. No evidence was found in subsequent surveys. One territory of yellowhammer (High Conservation Concern) and six species of low

conservation concern were recorded breeding in the proposed substation site and in the wider zone of influence. In terms of fish, desk top surveys found that no fish species of conservation value have been recorded in the Pinkeen River downstream of the site and that there are no designated salmonid waters in the water sub catchment that the substation development is located in. The IFI submission refers to the River Tolka as an important salmonid system with brown trout throughout and salmon in its lower reaches. The EIAR (Section 8.3.12.4) refers to an electro-fishing survey undertaken by the IFI in the Pinkeen River in 2011 downstream of the site and indicates that three common fish species recorded were of least conservation concern in Ireland and did not include salmonids. The EIAR does note that Atlantic Salmon, European Eel and Lamprey have been recorded downstream of the site in the River Tolka.

- 9.3.26. During the construction phase there will be permanent loss of grassland, hedgerow and treeline habitats with potential impacts for foraging and roasting bats. There is potential loss of yellowhammer nesting territory (high conservation concern), loss of territories of up to five bird species (low conservation concern) and potential impacts to breeding or resting sites of stoat, pygmy shrew and hedgerow (assumed present). Impacts on water quality would have the potential to affect fish species.
- 9.3.27. During the operational phase there is potential that factors such as increased activity and human presence and noise and artificial light may disturb or displace bats, badger, hedgehog, pygmy shrew, stoat and occasionally present barn owl. Impacts to other species and all habitats are not likely to be significant, as the footprint of the proposed substation is relatively small in relation to the surrounding agricultural system.
- 9.3.28. Protential impacts on water are considered under the relevant heading and it is concluded that significant impacts are not likely to arise.
- 9.3.29. A range of cumulative effects are identified relating to the loss of habitats and disturbance to species, including in-combination effects with the existing and proposed data centre sites. Mitigation is proposed to reduce the scale and significance of impacts. The landscaping and lighting schemes include design mitigation to reduce impact. Measures include the retention of existing hedgerows, use of native and species rich planting and cowled lighting. Other targeted mitigation

measures include the preparation of a Construction Environmental Management Plan, commissioning of an Ecological Clerk of Works, pre-construction mammal surveys and the erection of artificial nesting and roosting boxes for bats. Whilst a range of cumulative impacts have been predicted, none would elevate the significance of impacts beyond a local or county level. I am of the view that the impacts are relatively localised and that the cumulative impacts, subject to the implementation of the proposed mitigation measures detailed in the EIAR would not be significant.

9.3.30. I have considered all of the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am satisfied that impacts that are predicted to arise in relation to biodiversity are of a local scale and that these impacts can be avoided, managed and / or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of biodiversity. I am also satisfied that significant cumulative impacts are not likely to arise, and that approval should not be withheld on the grounds of such cumulative effects.

Air Quality

- 9.3.31. Chapter 9 of the submitted EIAR assesses the potential for significant impacts on air quality. The likely significant effects on air quality have been described and assessed in the planning assessment in Section 8.4 of this report and are summarised in this section.
- 9.3.32. During the construction phase there is potential for the release of dust and particulate matter arising from earthworks, construction activities and the movement of vehicles / materials. The potential impacts on sensitive receptors would be mitigated through the implementation of best practice dust control measures and dust monitoring. In terms of cumulative impacts, construction at the site will take place as one integrated programme and impacts associated with earthworks, general construction activity and the movement of vehicles will be cumulative for both the data centre and substation developments. I am satisfied, subject to implementation of the mitigation measures, that impacts can be avoided, managed and / or mitigated through good construction practice and that that proposed

- development will not have significant effects on the environment during the construction phase. There is no significant source of operational phase emissions to air from the proposed substation development and I am satisfied that no cumulative impacts would arise.
- 9.3.33. I have considered all of the written submissions made in relation to air quality and the relevant contents of the file including the EIAR. Having regard to the above, I am satisfied that impacts in relation to air quality would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of air quality and that significant cumulative impacts are not likely to arise.

Noise and Vibration

- 9.3.34. Chapter 10 of the submitted EIAR describes the potential noise and vibration impacts on sensitive receptors in accordance with EPA Guidance. The likely significant effects of noise and vibration impacts have been described and assessed under the planning assessment in Section 8.4 of this report and are summarised below.
- 9.3.35. During the construction phase there is potential for noise and vibration impacts arising from construction activities and associated traffic noise. The potential impacts would be mitigated by noise and vibration mitigation measures detailed in the EIAR, such as the limiting of construction hours, the use of plant with low inherent potential for noise and / or vibration, the use of noise barriers and locating plant away from noise sensitive receptors. I am satisfied that noise and vibration impacts arising during construction would be temporary and short-term in nature and that adequate mitigation measures are proposed to reduce the level of impact. Once operational, the substation will operate within the night-time noise limit of 45dB at the closest noise sensitive locations and no significant impacts are envisaged. In terms of cumulative impacts, the data centre would be within the day and night-time noise limits of 55dB and 45 dB during normal operation. In emergency operation, an exceedance of up to 5 dB over the night-time noise limit is forecast at a number of noise sensitive receptors. The emergency scenario presents a worst-case scenario linked to a temporary power outage or other unforeseen events. I consider the

- exceedance to be relatively minor and given the unlikely and infrequent nature of this occurrence I considered it acceptable to address this matter by way of condition.
- 9.3.36. I have considered all of the written submissions made in relation to noise and vibration and the relevant contents of the file including the EIAR. I am satisfied that impacts in relation to noise would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of noise and vibration. I am also satisfied that significant cumulative impacts are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Landscape and Visual

- 9.3.37. Chapter 11 and Appendix A.11.3 (Data Centre and Substation Photomontages) and Appendix A.11.4 (Substation Photomontages) of the submitted EIAR describe the landscape and visual effects of the proposed development. The likely significant landscape and visual impacts have been described and assessed under the planning assessment in Section 8.3 (Landscape and Visual) and 8.4 (Light) of this report and are summarised below.
- 9.3.38. The proposed data centre development would change the landscape character of the site from agricultural to industrial. Given the position of the substation within the landholding and at a distance from the surrounding road network I am satisfied that all but the highest structures (lightening masts) of the substation would be screened by existing and proposed landscape features. During the construction phase visual impacts would be temporary in nature and can be mitigated through good construction practices. Cumulatively, the overall development (substation and the data centre) will result in a significant landscape change at a local level. However, I am of the view that the change will not be negative due to the fact that the data centre and substation will sit within a large landscaped site (108ha) which will retain much of the existing natural amenities and will be augmented by further landscaping including surface water attenuation features. The proposed development will be viewed in the context of existing contiguous developments types which include the existing data centre to the immediate east and the adjacent industrial estates at

- Damastown and Macetown to the east and west and will, in my view, read as an extension to the existing industrial land uses. It is therefore considered that significant environmental effects will not arise.
- 9.3.39. The development will introduce lighting into an area that was previously unlit. This will intensify the night-time light environment experienced by residences in the area. The EIAR describes the significance of the impact as 'moderate adverse' for the data centre and 'minor adverse' for the substation. In the context of the wider environment which includes artificial lighting associated with the M3 motorway interchange to the immediate south and industrial sites to the immediate east, I consider that the cumulative impact of the substation and data centre developments would be to extend or slightly intensify the existing lighting environment. I do not consider that significant environmental impacts would arise.
- 9.3.40. I have considered all of the written submissions made in relation to landscape and visual impacts including the EIAR. I am satisfied that landscape and visual impacts would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect landscape and visual impacts and that significant cumulative impacts are not likely to arise.

Cultural Heritage

- 9.3.41. Chapter 12 of the submitted EIAR describes the effects of the proposed development on cultural heritage. The key consideration in relation to cultural heritage in my view relates to archaeology and built heritage. The likely significant effects on cultural heritage (archaeology and architectural heritage) have been described and assessed under the planning assessment in Section 8.5 of this report and are summarised below.
- 9.3.42. The main potential for impact arises in respect of archaeology. There are no recorded monuments within the site. However, geophysical and trench testing of the site identified a number of features within the overall data centre site, including a 'boundary wall of archaeological significance' within the substation site. The development, as proposed, would involve the permanent removal of archaeological features that have been found and their preservation by record. Archaeological

- supervision of future works is also proposed. While I would note that the level of impact to the individual archaeological features found within the overall site is significant, I am satisfied, on the basis of the submitted information, that the impact of the proposed development (data centre and substation) would not be significant in the context of the wider archaeological landscape, given the localised nature of the deposits. I consider that archaeological supervision of all works within the data centre site is warranted, and that this would be sufficient to mitigate any potential impacts on undiscovered archaeology.
- 9.3.43. I have considered all of the submissions made in relation to cultural heritage including the EIAR. Having regard to the above, I am satisfied that impacts in relation to cultural heritage would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of cultural heritage. I am also satisfied that significant cumulative impacts are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Material Assets and Climate

Transport

- 9.3.44. The relevant sections of the EIAR are Chapter 13 Transport and Appendices A13.1 (Traffic and Transport Assessment), A13.2 (Road Safety Audit) and A13.3 (Outline Construction Traffic Management Plan). The likely significant effects on traffic have been described and assessed under the planning assessment in Section 8.6 of this report and are summarised below.
- 9.3.45. The greatest potential for impacts on the local road network arise during the construction phase of the development. It is not altogether clear from the information contained in the EIAR how much construction traffic will be generated by the construction of the substation in its own right, as the data centre and substation developments are assessed together. Notwithstanding this, I consider that the level of traffic generation arising from the substation development during construction, would be minor in the context of the overall data centre development and would occur over a shorter timeframe. On this basis, I consider that the substation

- development would not, of itself, have an undue impact on the local road network nor would it make a significant contribution to cumulative impacts arising from the overall data centre development. In terms of the operational phase, the number of trips generated by the substation would arise from occasional security and maintenance visits and would have a negligible impact on the local road network.
- 9.3.46. I have considered all of the submissions made in relation to transportation and the relevant contents of the file including the EIAR. I am satisfied that impacts in relation to transportation would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of transportation. I am also satisfied that significant cumulative impacts are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Waste

- 9.3.47. Chapter 14 of the submitted EIAR describes the effects of the proposed development from a waste management perspective.
- 9.3.48. Waste generated during the construction phase is expected to include excavated materials, rubble, steel, timber, plastic, carboard and small quantities of hazardous waste. Waste will be reused and recycled where possible or disposed to landfill. I would note that the submission from the HSE refers to areas of made ground within the wider site and suggests that this area is the subject of further investigation. I would note that this area of made ground fall outside of the substation site. During the operational phase it is anticipated that the substation development will generate minimal amounts of waste. Hazardous waste would relate to waste fuel oils, fluorescent tubes, WEEE and waste batteries. In terms of cumulative impacts the quantities of hazardous and non-hazardous waste arising from the overall development are small when compared to the total waste arising in the region and therefore I am satisfied that no significant effects would arise.
- 9.3.49. I have considered all of the submissions made in relation to waste including the EIAR. Having regard to the above, I am satisfied that impacts in relation to waste management would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable

conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of transportation. I am also satisfied that significant cumulative impacts are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

Other Material Assets (inc. Energy) and Climate

- 9.3.50. Chapter 15 of the submitted EIAR describes the effects on ownership and access, local settlement, electricity supply & energy use, climate, water supply and sewerage, telecommunications, agriculture and tourism. The key considerations in my view relate to electricity usage, contribution to carbon emissions and utilities. Other impacts relating to population, water, sewerage and land are considered in this EIA under other environmental factors.
- 9.3.51. In terms of energy and climate, the proposed substation would not have a significant energy demand and the main potential for direct impacts on climate arising from carbon emissions relates to the use of diesel generators during emergency operation, with negligible impact. In terms of cumulative impacts, I would note that the substation is required to provide an energy supply to the approved data centre on contiguous lands. This data centre has an estimated maximum energy demand of 72 MW, whilst the overall data centre campus would have a maximum energy demand of 180 MW. Electricity will be supplied from the national transmission network, which comprises a mix of renewable and non-renewable sources. The projected energy demand for the overall data centre development is within the projected demand scenarios for the period 2017-2026 detailed in Eirgrid's Generation Capacity Statement⁵. The Capacity Statement states that in 2016, 22% of all electricity in Ireland came from wind (installed capacity of over 2800 MW) and 3% came from Hydro. There is, therefore, potential for indirect cumulative impacts associated with electrical power consumption from non-renewable sources. However, I am satisfied that, in a European and National context the scale of electricity consumption for the overall Clonee Data Centre campus (180 MW) and the indirect impact on carbon emissions would not result in significant environmental impacts. In the longer term, I would also note Government policy in relation to the transition to a low carbon economy, as detailed in Section 7 above. I would also

⁵ Source: EirGrid's All Ireland Generation Capacity Statement 2017-2026.

- note that the National Planning Framework and the Governments Statement on Data Centres, specifically note that high energy demand installations such as the data centres can provide a stable base load that can help the operation of renewable systems, thus indicating a potential positive impact in terms of carbon emissions and climate.
- 9.3.52. In terms of utilities I would note that the site was chosen due to its proximity to grid infrastructure and would further development the grid.
- 9.3.53. I have considered all of the written submissions made in relation to other material assets (inc. energy) and climate and the relevant contents of the file including the EIAR. Having regard to the above, I am satisfied that impacts in relation to other material assets and climate would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of material assets. I am also satisfied that significant cumulative impacts are not likely to arise and that approval should not be withheld on the grounds of such cumulative effects.

9.4. Interactions between the Factors and Cumulative Impacts

- 9.4.1. I have considered the interrelationships between factors and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. Table 16.1 of the EIAR provides a matrix of the impact interactions.
 - 9.4.2. The potential arises for population and human health to interact with all of the other factors (biodiversity, land, soil, water, air and climate, material assets, cultural heritage and the landscape). Biodiversity could impact on land, soil, water, air and climate. The details of all other interrelationships are set out under Table 16.1, which I have considered.
- 9.4.3. In addition, I have considered the approved data centre development which lies on contiguous lands under each environmental factor.
- 9.4.4. I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated by the measures which form part of the

proposed development, the proposed mitigations measures detailed in the EIAR, and with suitable conditions. There is, therefore, nothing to prevent the approval for the development on the grounds of significant effects as a result of interactions between the environmental factors and as a result of cumulative impacts.

9.5. Reasoned Conclusion on the Significant Effects

- 9.5.1. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submissions from the observer and prescribed bodies, the contents of which I have noted, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
 - Impacts on population and human health as a result of Noise and Vibration during the construction and operational phases. The potential impacts would be mitigated by noise and vibration mitigation measures, such as the limiting of construction hours, the use of plant with low inherent potential of noise and / or vibration, the use of noise barriers and locating plant away from noise sensitive receptors. Noise and vibration levels would be within acceptable emissions limits during normal operation.
 - Impacts on Biodiversity are likely to arise during construction due to the
 removal of habitat and disturbance associated with noise and human activity
 on site. The impacts arising from the removal of habitat and disturbance
 would be mitigated by minimising the removal of existing vegetation and
 reinstatement of vegetation, seeking the advice from a qualified ecologist and
 following best practice and procedures during the construction phase.
 - Cultural Heritage impacts would arise due to the removal of archaeological features from the site and preservation by record. During the construction stage further impacts would be mitigated by requiring all works to be subject to full time archaeological monitoring with provision made for the resolution of any archaeological features or deposits that may be identified in consultation with the DCHG.
 - Landscape and Visual impacts would arise on the landscape from the transition of the site from agricultural use to industrial use resulting from the

- cumulative impact of the data centre and substation development.

 Implementation of the landscape management plan to include the retention of existing landscaping features, and ongoing landscape maintenance would greatly assist in assimilating the works into the landscape and reduce the impact at operational phase.
- While no direct significant impacts would arise in respect of Material Assets (inc. Energy and Climate) there is potential for cumulative impacts arising from the consumption of energy associated with the adjacent data centre and the indirect generation of CO2 emissions. However, I am satisfied that, in a National and European context the scale of electricity consumption for the overall data centre campus and the indirect impact on carbon emissions would not result in significant environmental impacts.
- Positive significant impacts would arise during the operation phase as a
 result of the overall data centre scheme, which is directly dependent on the
 proposed substation. Benefits would include data security, employment and
 economic benefits.
- 9.5.2. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. Following mitigation, no residual significant negative impacts on the environment would remain as a result of the proposed scheme. The positive benefits of the scheme would outweigh any remaining minor negative impacts. I am, therefore, satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

10.0 APPROPRIATE ASSESSMENT

10.1.1. The proposed development is not directly connected with or necessary to the management of any of the Natura 2000 sites and therefore potential impacts on European sites must be considered. The application is accompanied by an Appropriate Assessment Screening Report that relates to both the data centre and substation developments. The site and its environs have also been subject to a comprehensive range of ecological surveys that are detailed in Chapter 8 of the

EIAR and in the EIA section of this report. I am satisfied that the information provided is sufficient to allow me to undertake Appropriate Assessment Screening in respect of the proposed development.

Description of the Site

- 10.1.2. The proposed development relates to a substation development on a greenfield site that is dominated by grassland and hedgerows. There are two small streams and several ditches present within the overall site, all of which drain to the Tolka River. Ecological surveys found no Annex I habitats within, or adjacent to, the site. Species identified included commuting and foraging bats, badger and barn owl. One territory of yellowhammer and potentially suitable habitats for stoat, pygmy shrew and hedgehog were recorded.
- 10.1.3. I would suggest that in terms of potential impacts the direct loss of land/habitat and surface water impacts during the construction and operational phases of the development are the most relevant. I would note that significant attenuation is proposed within the site by way of SUDS measures and that the site is connected to the public water supply and wastewater networks, thereby limiting the potential for impact on the water quality.

Description of European Sites

- 10.1.4. In considering the likely zone of impact of the project, I have had regard to the potential for likely significant effects on European sites in the context of their qualifying interests and conservation objectives. In this regard I have had regard to the Site Synopsis and Conservation objectives for the relevant European sites and to the entirety of the application documentation including submissions received.
- 10.1.5. There are no European sites located within or in close proximity to the application site. The closest European site to the proposed development site is the Rye Water Valley/Carton SAC which is located c. 6.5 km to the south of the site. There are no other sites within a 15 km radius of the site. In terms of hydrological links there are no European sites within the River Tolka water management unit downstream of the site and no European sites overlapping the same groundwater body⁶. The only sites where there is any potential for hydrological connectivity are European sites in

⁶ Waterbody Code IE_EA_G_005

estuarine and coastal waters in Dublin Bay that are downstream of the River Tolka, including the South Dublin Bay and Tolka River Estuary SPA (site code 4042) and the North Dublin Bay SAC and SPA (site code 206 and 4025), located c. 15.8 km and 18.6 km to the east of the site, respectively. Having regard to the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects, and applying the source-pathway-receptor model in the context of likely significant effects, I am satisfied that likely significant impacts can be excluded in respect of European Sites in Dublin Bay at the preliminary stage due to the large separation distance and the volume of water that separates the proposed works from these sites.

10.1.6. I consider that a more detailed screening assessment is necessary in respect of the Rye Water Valley / Carton SAC given its proximity to the application site and the potential for ecological pathways.

Appropriate Assessment Screening Rye Water Valley / Carton SAC

10.1.7. The qualifying interests (QI) for this site are as follows:

Annex I Habitats

- Petrifying springs with tufa formation (*Cratoneurion*)* [7220]
- Annex II Species
 - Narrow-mouthed Whorl Snail (Vertigo angustior) [1014]
 - Desmoulin's Whorl Snail (Vertigo moulinsiana) [1016].

The Rye Water is also a spawning ground for Trout and Salmon, and the rare, White-clawed Crayfish (*Austropotamobius pallipes*) has been recorded at Leixlip. The latter two species are listed on Annex II of the E.U. Habitats Directive. The scarce dragonfly, *Orthetrum coerulescens*, has also been recorded at Louisa Bridge. The conservation objective for the site is Generic Version 6.0 dating from February 2018.

10.1.8. There are no hydrological connections between the application site and the Rye Water Valley / Carton Valley SAC as the Rye River is in a separate water management unit. The ecological surveys of the site, which were undertaken between September 2017 and June 2018, do not identify any of the qualifying interests associated with the Rye Water Valley / Carton Valley SAC within the site or

its immediate environs. The development will not, therefore, result in direct or indirect loss or disturbance to habitats or species associated with this European site. It is reasonable to conclude in light of the conservation objectives for the site and having regard to the separation distance from the SAC, the absence of qualifying interests associated with the SAC within the application site and the lack of hydrological pathways, that the proposed development would not be likely to have a significant effect on the Rye Water Valley / Carton Valley SAC.

<u>Cumulative and In-Combination Effects</u>

- 10.1.9. The screening statement considers potential in-combination effects associated with other developments (Section 5.3). The screening statement relates to the substation and data centre developments. The report refers to the existing data centre development which is ongoing on adjacent lands to the east and to an extant permission for a water pumping station on the Tolka River. It is also noted that the LAP for the area identifies lands to the north and west of the site as a potential location for further employment related activities.
- 10.1.10. I consider that the potential impacts to European sites as a result of ongoing or future development projects is limited by the existing legal requirement for all plans and projects to undergo screening for AA, and if necessary AA and to adhere to best practice construction methodologies to avoid damage and removal of protected habitats and species and to avoid surface water run-off and contamination. I accept, therefore, that cumulative impacts are not likely to arise.

10.2. Appropriate Assessment Screening Conclusion

10.2.1. I consider that it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 001398 (Rye Water Valley / Carton SAC), or any other European site, in view of the site's Conservation Objectives, and that a Stage 2 Appropriate Assessment (and the submission of a NIS) is therefore not required.

11.0 Recommendation

11.1.1. Approve the proposed development under Section 182A of the Planning and Development Act 2000 (as amended) in accordance with the said plans and particulars lodged based on the reasons and considerations set out below.

12.0 Reasons and Considerations

- 12.1. In coming to its decision, the Board had regard to the following:
 - a) EU legislation including in particular:
 - The relevant provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive) on the assessment of the effects of certain public and private projects on the environment,
 - Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC
 as amended by 2009/147/EC (Birds Directives) which set the
 requirements for Conservation of Natural Habitats and of Wild Fauna
 and Flora throughout the European Union,
 - EU Renewable Energy Directive 2009/28/EC which aims to promote the use of renewable energy.
 - b) National Legislation including in particular:
 - Section 182A of the Planning and Development Act 2000 (as amended) which sets out the provisions in relation to electricity transmission lines.
 - c) National Policy including in particular:
 - The National Planning Framework (NPF), 2018.
 - Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy, 2018.
 - Government Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure, July 2012
 - d) Regional Policy including in particular:

- Regional Planning Guidelines for the Greater Dublin Area 2010-2022.
- e) Local Planning Policy including in particular:
 - The provisions of **Meath County Development Plan 2013-2019**.
 - The provisions of Dunboyne, Clonee and Pace Local Area Plan 2009-2015.
- f) The following matters:
 - the nature, scale and design of the proposed development as set out in the application and the pattern of development in the vicinity,
 - the documentation and submissions of the applicant, including the environmental impact assessment report and associated documentation submitted with the application, and the range of mitigation and monitoring measures proposed,
 - other relevant guidance documents,
 - the submissions and observations made to An Bord Pleanála in connection with the application,
 - the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European sites and
 - the report and recommendation of the inspector including the examination, analysis and evaluation undertaken in relation to appropriate assessment screening and environmental impact assessment.

12.2. Proper Planning and Sustainable Development

12.2.1. It is considered that the proposed substation would accord with European, national, regional and local planning and that it is acceptable in respect of its likely effects on the environment and its likely consequences for the proper planning and sustainable development of the area.

12.3. Environment Impact Assessment

- 12.3.1. The Board completed an environmental impact assessment of the proposed development, taking into account:
 - a) the nature, scale, location and extent of the proposed development,
 - b) the environmental impact assessment report and associated documentation submitted in support of the application,
 - the submissions from the local authority, the observer and the prescribed bodies in the course of the application, and
 - d) the Inspector's report.
- 12.3.2. The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, provided information which is reasonable and sufficient to allow the Board to reach a reasoned conclusion on the significant effects of the project on the environment, taking into account current knowledge and methods of assessment. The Board is satisfied that the information contained in the EIAR complies with the provisions of EU Directive 2014/52/EU amending Directive 2011/92/EU. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated as follows:

12.4. Reasoned Conclusion on the Significant Effects

- 12.4.1. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submissions from the observer and prescribed bodies, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows:
 - Impacts on population and human health as a result of Noise and Vibration during the construction and operational phases. The potential impacts which would be mitigated by noise and vibration mitigation measures, such as the limiting of construction hours, the use of plant with low inherent potential of noise and / or vibration, the use of noise barriers and locating plant away from noise sensitive receptors. Noise and vibration levels would be within acceptable emissions limits during normal operation.

- Impacts on Biodiversity are likely to arise during construction due to the removal of habitat and disturbance associated with noise and human activity on site. Potential impacts on water quality are considered under the relevant heading and it is concluded that significant impacts are not likely to arise. The impacts arising from the removal of habitat and disturbance would be mitigated by minimising the removal of existing vegetation and reinstatement of vegetation, seeking the advice from a qualified ecologist and following best practice and procedures during the construction phase.
- Cultural Heritage impacts would arise due to the removal of archaeological features from the site and preservation by record. During the construction stage further impacts would be mitigated by requiring all works to be subject to full time archaeological monitoring with provision made for the resolution of any archaeological features or deposits that may be identified in consultation with the DCHG.
- Landscape and Visual impacts would arise on the landscape from the
 transition of the site from agricultural use to industrial use resulting from the
 cumulative impact of the data centre and substation development.
 Implementation of the landscape management plan to include the retention of
 existing landscaping features, and ongoing landscape maintenance would
 greatly assist in assimilating the works into the landscape and reduce the
 impact at operational phase.
- While no direct significant impacts would arise in respect of Material Assets
 (inc. Energy and Climate) there is potential for cumulative impacts arising
 from the consumption of energy associated with the adjacent data centre and
 the indirect generation of CO2 emissions. However, I am satisfied that, in a
 National and European context the scale of electricity consumption for the
 overall data centre campus and the indirect impact on carbon emissions
 would not result in significant environmental impacts.
- Positive significant impacts would arise during the operation phase as a
 result of the overall data centre scheme, which is directly dependent on the
 proposed substation. Benefits would include data security, employment and
 economic benefits.

12.4.2. The Board completed an environmental impact assessment in relation to the proposed development and concluded that subject to the implementation of the mitigation measures proposed, as set out in Volume 1 of the EIAR – Appendix 'Summary of Proposed Mitigation Measures' which provides a summary of Impacts and Mitigation measures including proposed monitoring as appropriate and subject to compliance with the conditions set out herein, the effects on the environment of the proposed development by itself and in combination with other development in the vicinity would be acceptable. In doing so, the Board adopted the report and conclusions of the reporting inspector.

12.5. Appropriate Assessment

12.5.1. The Board completed an Appropriate Assessment Screening exercise in relation to the potential effects of the proposed development on designated European sites. The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site. The Board considered the nature, scale and location of the proposed development, the appropriate assessment screening report submitted with the application, the submissions on file and the report of the Inspector. In completing the screening exercise, the Board adopted the report of the Inspector and concluded that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European sites, in view of the sites' conservation objectives, and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

13.0 Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars, including the mitigation measures specified in the EIAR, lodged with the application to An Bord Pleanála on 22nd day of June 2018, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority the undertaker shall agree such details in writing with the planning authority prior to the commencement of development and the proposed development shall be carried out in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. All mitigation measures identified in the EIAR and other particulars submitted with the application shall be implemented in full by the applicant except as may otherwise be required in order to comply with the following conditions. The developer shall appoint a person with appropriate ecological and construction expertise as an environmental manager to ensure that the mitigation measures identified in the EIAR are implemented in full.

Reason: In the interest of clarity and to protect the environment during the construction and operational phases of the development.

3. (a) The applicant shall appoint a suitably qualified ecologist to monitor all works relating to the proposed development and ensure that all avoidance / mitigation measures relating to the protection of flora and fauna identified in the EIAR and other particulars submitted with the application are implemented in full in accordance with best ecological practice and to liaise with consultants, the site contractor, the NPWS and Inland Fisheries Ireland. A report on the implementation of these measures shall be submitted to the planning authority and retained on file as a matter of public record.

Reason: To protect the environmental and natural heritage of the area.

4. Water supply and drainage arrangements including the disposal of surface water shall comply with the requirements of Irish Water for such works in respect of both the construction and operation phases of the proposed development.

Reason: To ensure adequate servicing of the proposed development and prevent pollution.

5. The site shall be landscaped in accordance with a comprehensive scheme of landscaping and in accordance with the landscaping proposals set out in the EIAR. Landscaping details shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This scheme shall include the following:

- (a) A plan to scale of not less than 1:500 showing -
 - (i) Existing trees and hedgerows to be preserved and details for the protection of same during the construction and operational phases of the development.
 - (ii) The species, variety, number, size and locations of all proposed trees and shrubs which shall comprise predominantly native species.
 - (iii) Details of all hard and soft landscaping works, specifying surfacing materials and finished levels.
- (b) Specifications for mounding, levelling, cultivation and other operations associated with plant and grass establishment.
- (c) A timescale for implementation.

All planting shall be adequately protected from damage until established. Any plants which die, are removed or become seriously damaged or diseased, within a period of five years from the completion of the development, shall be replaced within the next planting season with others of similar size and species, unless otherwise agreed in writing with the planning authority.

Reason: In the interest of visual amenity.

- 6. Construction of the proposed development shall be completed in accordance with a construction environmental management plan details of which are to be agreed with the planning authority prior to the commencement of development. The plan shall incorporate following mitigation measures:
 - The location of the site and material compound including areas identified for the storage of construction refuse.
 - The location of areas for construction site offices and staff facilities.
 - Details of site security fencing and hoardings.
 - Details of on-site car parking facilities for site workers during the course of construction.
 - Details of the timings and routing of construction traffic to and from the construction site and associated directional signage to include proposals to facilitate the delivery of abnormal loads to the site.

- Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network.
- Measures for the protection of all road surfaces, culverts, watercourses and ditches during construction.
- Details of appropriate mitigation measures for noise, dust, vibration including the monitoring of such levels.
- The containment and bunding of all construction related fuel and oil within special constructed bunds to ensure that fuel spillages are fully contained.
- Disposal of construction/demolition waste and details of how it is proposed to manage excavated soil.
- All in-stream works relating to the Portan Stream shall be carried out and completed during the period July – September.
- A water and sediment management plan providing for the means to ensure that surface water run-off is controlled such that no silt or other pollutions enter the local water courses or drains.
- Details of a water quality monitoring and sampling plan for the Portan and Pinkeen River.

The construction environmental management plan shall be forwarded to Meath County Council prior to the commencement of development. The developer shall agree in writing with the planning authority a protocol for reporting and managing accidental spillages during the construction and operational stage that may cause soil contamination or surface water pollution.

Reason: In the interest of public health.

7. All waste generated during construction including any surplus excavation material shall be taken off site and shall only be recovered or disposed of at an authorised site which has a current waste licence or waste permit in accordance with the Waste Management Acts 1996 – 2008. This shall not apply to the reuse of excavated material within the applicant's site boundary. The developer shall ensure that all waste removed from site is collected and transported by an authorised collector. The applicant shall ensure that all

activities pertaining to collection and transportation are as detailed in any waste collection permit.

Reason: In the interest of sustainable waste management.

8. All of the flood mitigation measures set out in the flood risk assessment submitted with the application shall be implemented in full in accordance with the requirements of the planning authority.

Reason: To prevent flooding on site.

- 9. The undertaker shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard the undertaker shall:
 - (a) Engage the services of a suitably qualified archaeologist who shall monitor all site development and excavation works on a full-time basis. The archaeologist shall liaise with consultants, the site contractor and the Department of Culture, Heritage and the Gaeltacht.
 - (b) The undertaker shall notify the relevant planning authority and the Department of Culture, Heritage and the Gaeltacht in writing at least 4 weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development.
 - (c) All of the avoidance and mitigation measures relating to the preservation, recording and protection of archaeological materials identified in the EIAR and other particulars submitted with the application shall be implemented in full in accordance with best practice.
 - (d) Arrangements for the recording and for the removal of any archaeological material which the authority considers appropriate to remove, shall be agreed in writing with the relevant planning authority.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

10. Site development and building works shall be carried out only between the hours of 0800 to 1900 Mondays to Fridays inclusive, between 0800 to 1400 hours on Saturdays and not at all on Sundays and public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In order to safeguard the amenities of property in the vicinity.

11. Noise levels from the substation shall not exceed 55 dB(A) rated sound level (corrected sound level for any tonal or impulsive component) at dwellings between 0800 hours and 2200 hours on any day and shall not exceed 45dB(A) at any other time. Procedures for the purpose of determining compliance with this limit shall be submitted to and agreed with the planning authority prior to the commencement of development.

Reason: To protect the residential amenities of property in the vicinity.

12. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to

An Bord Pleanála to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Karen Kenny

Senior Planning Inspector 15th November 2018