

# Inspector's Report ABP-317209-23

#### Development

A 10-year permission for the construction of a solar PV energy development within a total site area of approximately 18.92hA, to include solar PV panels ground mounted on steel support structures, IPP electrical control building and associated compound, electrical transformer / inverter station modules, battery storage modules, storage containers, CCTV cameras, access tracks, fencing and associated electrical cabling, ducting and ancillary infrastructure.

Downestown, situated near the town of Duleek, Co. Meath.

Planning Authority	Meath County Council
Planning Authority Reg. Ref.	22972
Applicant(s)	Highfield Solar Limited
Type of Application	Permission

Location

Grant subject to conditions

Type of Appeal	Third Party v. Decision
Appellant(s)	Bernard Cullen
Observer(s)	None.
Date of Site Inspection	15 <sup>th</sup> March, 2024
Inspector	Robert Speer

# 1.0 Site Location and Description

- 1.1. The proposed development site is located in the townland of Downestown to the immediate northwest of Duleek, Co. Meath, and comprises a large agricultural field generally enclosed by hedgerows (which is used for arable cropping as evidenced by the presence of cutover stubble) along with a new access track from Downestown Road that extends through an adjoining field to the south. It has a stated site area of approximately 18.92 hectares, is irregularly shaped, and occupies a recessed position set back from the public road (excluding the access route over intervening lands). The broader site topography is characterised by sloping agricultural land which falls in a south-easterly direction towards Duleek town from an approximate elevation of c. 50m AOD in the north-western corner to c. 35m AOD in the southeastern corner. The site itself is bounded to the north / northwest by the Navan -Drogheda railway line while a gas main passes through the northern periphery of the site immediately adjacent to the rail line. A stream runs along the southern boundary of the site proper (excluding the proposed access route) with the Platin-Gorman 110kV overhead power line traversing the southernmost extent of this field.
- 1.2. Although the town of Duleek is located a short distance away to the east / southeast, the surrounding area is primarily agricultural and characterised by an undulating rural landscape interspersed with intermittent instances / groupings of one-off rural housing, farmyards and associated outbuildings. Other land uses include a quarry on the opposite side of the railway line to the north and the recently developed Duleek Care Centre / Nursing Home c. 250m to the southeast. The wider area also includes the Garballagh Solar Farm to the southwest, the Indaver waste-to-energy plant c. 3.5km to the northeast, and the Irish Cement Ltd. (Platin) manufacturing plant c. 4.0km to the northeast.

# 2.0 Proposed Development

2.1. The proposed development, as initially submitted to the Planning Authority, consists of the construction of a solar PV development within a total site area of circa 18.92 hectares as an extension / expansion of the solar farm already permitted on nearby lands pursuant to PA Ref. No. LB160898 / ABP Ref. No. PL17.248146. It includes for the following:

- Ground-mounted solar photovoltaic panels set within galvanised metal framework racks elevated above the ground surface and assembled in south-facing rows (arrays) east to west over the development area. The panels will be fixed at an angle of up to 30 degrees to the horizontal while the lower edge of the array will be c. 0.7m over ground level with the highest edge c. 3.2m from ground level. The cells will be in an elevated position to allow airflow around the modules to avoid overheating; to provide safe clearance for sheep to graze beneath the panels; and to encourage vegetative growth below the panels.

The rack variants proposed include arrangements of up to 4 No. panels in portrait orientation or up to 6 No. panels in landscape orientation. The precise solar panel arrangement and rack variant will be established prior to construction. While the dimensions of solar panels and metal racks produced by different manufacturers vary, the total structure height will not exceed 3.2m.

- The metal support structures will utilise piles directly driven into the ground thereby removing the need for deeper foundations. A small gap surrounding all sides of each module will allow water to drain between the modules.
- A 38kV substation building (c. 18.6m x 5.83m with a pitched tiled roof extending to an apex height of 4.62m over the adjacent footpath) and an associated electrical compound (c. 25m x 25m) incorporating an ESB room, control room, switchgear room, store / workshop area, and a washroom (with a holding tank for wastewater which will be emptied by a licensed contractor).
- Up to 10 No. inverter and transformer stations (typically housed within glass reinforced plastic housing or modified steel shipping containers).
- A spare parts container (the location of which is not shown on the submitted site layout plans).
- 14 No. battery storage modules to facilitate on site energy storage and to provide ancillary services to the electricity grid. These typically comprise containerised modules.
- Underground cabling.

- Perimeter security fencing between 1.8m and 2.1m in height supported by steel / wooden posts (between 2.0m and 2.2m in height) and incorporating mammal gates.
- A CCTV system with pole mounted cameras.
- New access / maintenance tracks.
- A new site entrance off Downestown Road (Local Road No. L5609).
- All associated ancillary site development works, including temporary construction compounds.
- 2.1.1. The Maximum Export Capacity of the proposed development is expected to be in the range of 15-25MW (the annual renewable energy generation is expected to be between 15-25GWh).
- 2.1.2. The proposal has sought a 10-year permission.
- 2.1.3. Amended proposals were submitted in response to a request for further information with a small section of the proposed PV panels being omitted given their location within an identified flood zone (please refer to 'Annex B Flood Risk Assessment' received by the Planning Authority on 13<sup>th</sup> March, 2023 and, in particular, Figure 1.1: 'Downestown Flood Zones' of the revised 'Technical Appendix 4: Flood Risk and Drainage Impact Assessment').
- 2.1.4. An updated '*Technical Appendix 4: Flood Risk and Drainage Impact Assessment*' was also submitted. This details the drainage strategy for the development which provides for the construction of one soakaway and one swale within the application site as follows.
  - The proposed soakaway will have an overall length of c. 220m with a base width of 0.5m, a design depth of 0.5m, and a freeboard of 0.15m (providing a total storage volume of c. 5.5m<sup>3</sup>).
  - The proposed swale will have an approximate length of 50m with a base width of 500mm, a design depth of 500mm, a freeboard of 150mm, and a maximum side slope of 1 in 3 (providing a total storage volume of c. 50m<sup>3</sup>).
- 2.1.5. Other drainage measures include the following:

- The retention / reinstatement of grass cover adjacent to and below the solar panels to maximise bio-retention.
- The access tracks to be unpaved and constructed from local stone.
  Temporary swales or similar to be used to collect runoff from the access tracks with discharge to ground through percolation areas.
- Runoff from the transformer stations, substation and associated hardstanding will be directed to a percolation area for discharge to ground. Should surface water accumulate around any of these locations, a soakaway can be constructed to allow the runoff to soak into the underlying subsoils.
- 2.1.6. An indicative grid connection route from the proposed development site to the existing Gillinstown 110kV substation was provided in response to the request for further information (please refer to Annex 'C': Drg. No. Figure 2.7 Rev. A (TB): '*Indicative Grid Connection Route'*). It has been emphasised that this is purely indicative as the applicant is awaiting confirmation of the proposed connection methodology from EirGrid and ESBN. It has also been submitted that the proposed development is unlikely to require a 110kV cable along the length of the route indicated (in the applicant's opinion these works would not constitute Strategic Infrastructure Development). This grid connection will be the subject of a separate planning application.

# 3.0 **Planning Authority Decision**

# 3.1. Decision

- 3.1.1. Following the receipt of a response to a request for further information, on 2<sup>nd</sup> May,
  2023 the Planning Authority issued a notification of a decision to grant permission for
  the proposed development subject to 19 No. conditions which can be summarised as
  follows:
  - Condition No. 1 Refers to the submitted plans and particulars.
  - Condition No. 2 Requires all structures to be removed no later than 35 years from the date of the commencement of development and the site reinstated unless planning permission has been granted for their retention for a further period prior to that date. It also

requires a detailed restoration plan to be agreed with the Planning Authority, and the decommissioning of the development.

- Condition No. 3 Requires the Mega-Watt output capacity of the solar farm to be agreed with the Planning Authority.
- Condition No. 4 Refers to the design & construction of the proposed entrance and the required sightlines. Before and after surveys of the road network affected by the development are also to be carried out, the details of which are to be agreed with the Planning Authority prior to the commencement of works. A limitation of 20 No. HGV loads to the site per day has also been specified.
- Condition No. 5 Refers to the submission of a Construction Environmental Management Plan, adherence to identified environmental emission limit values, and the implementation of various mitigation measures, including those set out in the Biodiversity Management Plan and Technical Appendix 7: *'Glint and Glare Assessment'*.
- Condition No. 6 Refers to the preparation of a Waste Management Plan.
- Condition No. 7 Requires the implementation of the mitigation measures set out in the '*Glint & Glare Assessment*'.
- Condition No. 8 Specifies various flood protection measures, including:
  - The siting of all essential infrastructure outside Flood Zones 'A' & 'B'.
  - The battery storage and the inverter / transformer to be a minimum of 500mm above the 1 in 1,000-year critical flood level.
  - No development within 10m of any watercourse unless otherwise agreed.
  - Access tracks within Flood Zones 'A' & 'B' are not to be raised above ground level and are to be delineated by

markers showing the 1 in 100 and 1 in 1,000-year flood return levels.

- Details of any fencing or gates to be agreed with the Planning Authority.
- The submission of Section 50 consents for any proposed culverts, crossings, watercourse diversions etc. to be submitted to the Planning Authority.
- Condition No. 9 Requires the completion of a BRE 365 report to include detailed infiltration calculations and confirmation that the proposed soakaway and swale will be half empty within 24 hours. Provision to be made for a 20% increase in rainfall attributable to climate change with the attenuation system designed for the ground conditions.
- Condition No. 10 Requires the applicant to demonstrate that the finished floor level of the proposed substation is at least 500mm above the maximum adjacent river level and top water level in the on-site drainage system.
- Condition No. 11 Requires all work to comply with the Greater Dublin Region Code of Practice for Drainage Works (Vol. 6).
- Condition No. 12 Requires the implementation of appropriate mitigation measures to ensure the safety of aircraft operations should the need arise.
- Condition No. 13 Refers to pre-development archaeological testing.
- Condition No. 14 Refers to the hours of construction.
- Condition No. 15 Refers to landscaping.
- Condition No. 16 Requires the submission of an external lighting design for the prior written agreement of the Planning Authority.
- Condition No. 17 Requires exact details (including locations) of all transformers, inverters and other ancillary structures to be agreed in writing with the Planning Authority prior to the commencement of development.

Condition No. 18 – Refers to the payment of a development contribution.

Condition No. 19 – Requires the lodgement of security to ensure the satisfactory reinstatement of the site on cessation of the project coupled with an agreement empowering the Planning Authority to apply such security or part thereof.

#### 3.2. Planning Authority Reports

#### 3.2.1. Planning Reports

An initial report details the site context, planning history and the relevant policy considerations before summarising the contents of the various submissions and reports received with respect to the proposed development. It proceeds to state that the proposed development is acceptable in principle, subject to the consideration of other factors, including any impact on landscape character. The report then refers to the Landscape Visual Impact Appraisal submitted with the application and the previous decision to refuse permission for a solar energy development on the subject site under PA Ref. No. LB160898 / ABP Ref. No. PL17.248146 for reasons of adverse impact on the rural character and visual amenity of the surrounding area. In this regard, the planning report notes that the lands to the immediate south of the development site are no longer within the settlement boundary of Duleek and that part of those adjacent lands have since been developed as a nursing home. Given this change in context (since the determination of ABP Ref. No. PL17.248146), the report concludes that the applicant has suitably addressed the concerns raised and that the proposed development is acceptable from a landscape / visual perspective.

The remainder of the analysis considers issues including the Glint & Glare Assessment, Ecological Impact Assessment, and Biodiversity Management Plan. It also refers to the recommendations contained in the internal reports of the Local Authority along with the contents of the submissions received from the Department of Housing, Local Government & Heritage and Inland Fisheries Ireland.

The report concludes by stating that the proposed development is consistent with the applicable policy context before recommending that further information be sought in relation to a number of issues, including flooding concerns, grid connection, noise impact, and the contents of the submissions received.

Following the receipt of a response to a request for additional information, a further report was prepared which recommended a grant of permission, subject to conditions.

#### 3.2.2. Other Technical Reports

- 3.2.3. *Water Services:* States that the proposed development broadly meets the requirements of the Local Authority as regards the orderly collection, treatment and disposal of surface water. However, in the event of a grant of permission, the following issues should be addressed prior to the commencement of development:
  - The completion of a BRE 365 report (to include detailed calculations of soil infiltration) and confirmation that the proposed soakaway and swale will be half empty within 24 hours. Details of the winter ground water level should also be provided. Furthermore, the applicant is required to include a 20% increase in rainfall due to climate change and to design the attenuation system suitable for the ground conditions.
  - It should be clearly demonstrated that the finished floor level of the proposed substation is at least 500mm above the maximum adjacent river level and the top of the water level in the on-site drainage system.
  - All work to comply with the Greater Dublin Region Code of Practice for Drainage Works (Volume 6).
- 3.2.4. *Transportation:* No objection, subject to conditions.
- 3.2.5. *Architectural Conservation Officer:* No comments from an architectural conservation perspective.
- 3.2.6. Environment: An initial report states that the application site is located within Flood Zones 'A' & 'B' as defined by '*The Planning System and Flood Risk Management, Guidelines for Planning Authorities*' and, therefore, there is a need for a 'Justification Test' to be submitted in order to assess the appropriateness of the proposed development. With regard to the Site Specific Flood Risk Assessment (wherein the Drumman Stream is identified as flowing east to west through the site and across the southern boundary), although it has been submitted that the hydraulic modelling undertaken as part of the CFRAM study to the east of Longford Road (c. 500m east of the site) shows the 0.1% AEP flood extent to be similar to that indicated by the

Preliminary Flood Risk Assessment and thus any hydraulic modelling of the application site is also likely to be similar to the PFRA mapping, the Council does not consider this approach acceptable as it is not appropriate to utilise CFRAM mapping for the purposes of site specific flood risk assessment. It is further noted that the analysis has discounted the culvert at Longford Road despite there being evidence of historic flooding at this location (and any site-specific study should include an assessment of a minimum 50% blockage scenario associated with the culvert).

On the basis that the applicant has relied on PFRA flood mapping, the Environment Section was not satisfied that essential infrastructure has been excluded from Flood Zones A & B. Site specific hydraulic modelling is also required to accurately establish the flood zones and the associated siting of essential infrastructure while a Justification Test should be submitted as per the Guidelines. Further requirements include the need to ensure that all access tracks within Flood Zones A & B are constructed at grade with no loss of floodplain storage; all fencing within Flood Zones A & B to be limited to deer fencing with no such fencing crossing the watercourse extending into the watercourse; and that any gates / crossings of the watercourse keep cattle out while not impacting the flow of water in the 1% AEP and 0.1% AEP flood events. The report concludes by recommending that further information be sought in relation to the aforementioned items.

Following the receipt of a response to a request for additional information, which included the submission of a revised Site Specific Flood Risk Assessment, a further report was prepared which noted that the applicant had revised the critical flood maps and amended the site layout plan by removing any essential infrastructure from within Flood Zones A & B. This report concludes by stating that there is no objection to the proposed development from a flooding perspective, subject to conditions.

#### 3.3. Prescribed Bodies

- 3.3.1. Irish Water: No objection.
- 3.3.2. Department of Housing, Local Government & Heritage: Based on the information contained in the archaeological component of '*Technical Appendix 3: Archaeology* and Architectural Impact Assessment', the archaeological potential of the proposed

development site and the proposed archaeological mitigation, it is recommended that the following condition be attached to any grant of permission:

Archaeological Testing shall be carried out as follows:

- The applicant is required to engage the services of a suitably qualified archaeologist (licensed under the National Monuments Acts 1930-2004) to carry out pre-development testing at the site. The testing programme will include the results of an archaeological geophysical survey. No subsurface works shall be undertaken in the absence of the archaeologist without his / her consent.
- 2. The archaeologist is required to notify the National Monuments Service of the Department of Housing, Local Government and Heritage in writing at least four weeks prior to the commencement of site preparations. This will allow the archaeologist sufficient time to obtain a licence to carry out the work.
- The archaeologist shall carry out any relevant documentary research and inspect the site. Test trenches will be excavated at locations chosen by the archaeologist (licensed under the National Monuments Acts 1930-2004), having consulted the site drawings.
- 4. Having completed the work, the archaeologist should submit a written report to the Planning Authority and to the National Monuments Service of the Department of Housing, Local Government and Heritage in advance of the commencement of construction works. Where archaeological material / features are shown to be present, preservation in situ, preservation by record (excavation) or monitoring may be required.
- 5. No site preparation or construction work shall be carried out until after the archaeologist's report has been submitted and permission to proceed has been received in writing from the Planning Authority in consultation with the National Monuments Service of the Department of Housing, Local Government and Heritage.

Reason: To ensure the continued preservation (either in situ or by record) of places, caves, sites, features or other objects of archaeological interest.

- 3.3.3. Inland Fisheries Ireland: States the following:
  - The proposed development site (the solar panels) is located within the catchment of the River Nanny.
  - The Water Framework Directive (WFD) aims to maintain the high and good status of waters where they exist and to prevent any deterioration of the status in all waters.
  - The primary concern is the construction phase of the project. The IFI's preference would be for overhead cabling as this would have the least effect on fisheries' interests.
  - There should be at least a 10m buffer zone from the top of the bank of the watercourse free from development, including solar panels.
  - Any riparian vegetation within the buffer zone should be left in place where possible (with reference to the IFI's 'Planning for Watercourses in the Urban Environment: A Guide to the Protection of Watercourses through the use of Buffer Zones, Sustainable Drainage Systems, Instream Rehabilitation, Climate / Flood Risk and Recreational Planning').
  - Access to the river along the bank should not be interfered with as a result of the development.
  - The construction of a grassed berm or similar c. 400mm high or greater in a suitable location between the panels and the river site would assist in containing washings from cleaning to an appropriate drainage system.
  - Method statements for high pollution risk areas of construction (which are likely to give rise to suspended solids) should be agreed with Inland Fisheries Ireland.
  - The IFI requires agreement on site drainage during construction with appropriate settlement measures.
  - A Construction Environmental Management Plan should be produced with appropriate mitigation and environmental protection measures. This should be agreed with Inland Fisheries Ireland prior to commencement of development.

- The proposed development must not cause or exacerbate flooding in the area.
- Only biodegradable phosphate-free cleaning products should be used to clean the panels to ensure there is no impact on receiving waters from potential pollutants.
- All construction works should adhere to IFI guidance on the protection of fisheries.

# 3.4. Third Party Observations

- 3.4.1. A total of 3 No. submissions were received from interested third parties and the principal grounds of objection contained therein can be summarised as follows:
  - Permission was already refused under PA Ref. No. LB160898 / ABP Ref. No. PL17.248146 for a substantially similar development on site with those reasons for refusal remaining valid.
  - The culvert for the Drumman Stream at Longford Road is inadequate to cope with the existing flow of water during periods of heavy rainfall which results in fluvial flooding as referenced in the Flood Impact Assessment. Flooding is also known to occur at Downestown, Longford and in the village of Duleek. It is considered that the proposed development is likely to increase the risk and extent of fluvial flooding thereby endangering property in the area.
  - The increased traffic generated along a roadway which serves a heavily populated residential area will endanger public safety by reason of traffic hazard.
  - The application site is elevated and visible from surrounding areas with the result that the proposed development will adversely impact the rural character of the area, seriously injure the visual amenities of the area, appear as a prominent and obtrusive feature in the landscape, and conflict with the objectives of the Development Plan which seek to preserve protected views from development.
  - The proposed development will adjoin a recently opened nursing home.

# 4.0 Planning History

## 4.1. **On Site:**

- 4.1.1. PA Ref. No. LB160898 / ABP Ref. No. PL17.248146. Was determined on appeal on 8<sup>th</sup> March, 2019 with a split decision being issued to Highfield Solar Limited as follows with respect to the proposed development of a Solar PV Energy development with a total site area of 150.29 hectares, to include 2 No. electrical substation buildings and associated compounds, electrical transformer and inverter station modules, storage modules, Solar PV panels ground mounted on support structures, access roads and internal access tracks, spare parts storage container, fencing, electrical cabling and ducting, including undergrounding of existing electrical cabling, CCTV and other ancillary infrastructure, additional landscaping and habitat enhancement as required and associated site development works at Garballagh, Thomastown, Gillinstown and Downestown, Duleek, Co. Meath, in accordance with the plans and particulars lodged and as revised by further public notices received by the planning authority on the 20<sup>th</sup> day of January, 2017.
  - To GRANT permission for the western solar array and associated development in the townlands of Garballagh, Thomastown and Gillinstown (Site 1), subject to 14 No. conditions.
  - To REFUSE permission for the eastern solar array and associated development in the townland of Downestown (Site 2) for the following 2 No. reasons:
    - Having regard to the elevated and open nature of the site of the proposed eastern solar array in the townland of Downestown and its position on agricultural lands immediately abutting zoned lands within the development boundary of Duleek, it is considered that this section of the proposed solar farm development would form a prominent and obtrusive feature in the landscape, and that the portion of the proposed development within the Downestown site would adversely impact the rural character of the area, seriously injure the visual amenities of the area and conflict with objective LC OBJ 5 of the Meath County Development Plan 2013–2019, which seeks to preserve protected views from development that would interfere with the character and visual amenity of the landscape. The

proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

- It is considered that the proposed development would endanger public safety by reason of traffic hazard because of the additional traffic turning movements the development would generate on a substandard road at a point where sightlines are restricted in both directions.
- 4.1.2. PA Ref. No. 23458 / ABP Ref. No. ABP-317568-23. On 20<sup>th</sup> June, 2023 the Planning Authority issued a notification of a decision to grant EirGrid PLC permission for the uprating of the existing Gorman to Platin 110kV overhead line (OHL) (19.76km long and comprising 109 No. supporting structures between the existing Gorman substation in the townland of Causetown, Co. Meath and the existing Platin 110kV substation in the townland of Platin, Co. Meath). The proposed project is located within the townlands of Graigs, Ardmulchan, Dollardstown, Dunmoe, Carranstown, Platin, Haystown and Carnuff, Stackallan, Harmanstown, Causetown, Garballagh, Commons, Downestown, Gillinstown, Longford, Rathdrinagh, Painestown, Thurstianstown, Knockcommon, Drumman, Laugher, Newtown and Platin, Co. Meath. This decision has since been appealed with no determination to date.

#### 4.2. On Adjacent Sites (to the immediate southeast):

- 4.2.1. PA Ref. No. SA901916. Was granted on 15<sup>th</sup> July, 2010 permitting the SEPB Partnership permission for the construction of a medical / retirement complex comprising a nursing home, primary care & day care centre & 48 No. assisted living housing units, 1 no. plant / substation building, vehicular access off Downestown Road, and all associated site development, road, landscaping & boundary treatment works. All at Downstown, Duleek, Co. Meath.
  - PA Ref. No. LB150550. Was granted on 10<sup>th</sup> June, 2015 permitting the SEPB Partnership an 'Extension of Duration' of PA Ref. No. SA901916 until 14<sup>th</sup> July, 2020.
  - PA Ref. No. LB150133. Application by the SEPB Partnership for an 'Extension of Duration' of PA Ref. No. SA901916. This application was subsequently withdrawn.

- PA Ref. No. LB181036. Was granted on 13<sup>th</sup> March, 2019 permitting Edge Fusion 4.2.2. Ltd. permission for amendments to a portion of the previously approved medical / retirement complex, comprising a nursing home, primary care and day care centre and assisted-living housing units under Reg. Ref. SA901916 (extended under Reg. Ref. LB/150550). (A) Amendments to the internal layout of the approved nursing home including new entrance layout, revisions to kitchen, dining areas/ancillary services, bedroom layout and staff facilities. (B) External elevational changes including the introduction of a new pitched roof. (C) Two storey addition to the north of the previously approved 47-bedroom nursing home resulting in an overall nursing home development of 120 single bedrooms (all with associated ensuite bathrooms) plus lounges, family rooms, assisted bathrooms and an enclosed landscaped courtyard, (D) Associated changes to car parking layouts serving the nursing home to provide 90 car parking spaces in total. (E) Associated revisions to the approved overall site development works and landscaping layout to suit the reconfigured approved nursing home and its proposed extension to the north. (F) The resultant relocation of the approved primary care centre and day centre, ESB sub-station, revisions to layout of assisted living units in "Cluster 11" and omission of "Cluster 1 & part of Cluster 2" (to be the subject of a separate planning application). All at Downstown, Duleek, Co. Meath.
- 4.2.3. PA Ref. No. LB191719. Was granted on 3<sup>rd</sup> April, 2020 permitting Edge Fusion Limited permission for a new 2-storey Nursing Home with an overall floor area of c. 5,497m<sup>2</sup> and an ESB kiosk and an access road to an attenuation pond with related pumping station. The nursing home to comprise 120. No bedrooms all with associated en-suite bathrooms, at ground and first floor levels. It will also include the following ancillary elements;-treatment room; multipurpose activity room; sitting/day and dining/recreation rooms; reception; storage; seating/rest areas; toilets; sluice rooms; coffee shop; staff/management facilities; including kitchen and catering areas; staff room; and lobby; staff changing rooms; boiler/plant and comms room all at ground floor level and lounge; oratory/library; meeting rooms; sluice/toilets; nurse station/office/storage; seating/ rest areas; and laundry areas all at first floor level; along with car parking for 90. No cars and 26 No. cycle spaces, including landscaping and all other associated development works. All at Downstown, Duleek, Co. Meath.

- 4.2.4. PA Ref. No. LB201753. Was refused on 21<sup>st</sup> January, 2021 refusing Edge Fusion Limited permission for 64 No. housing units to include 12 No. sheltered housing / assisted living units associated with the nursing home permitted under LB191719, and 4 No. live work units, a community building, 99 No. car parking spaces, landscaping, public open spaces, and all other associated development works, with access from Downstown Road. All at Downstown, Duleek, Co Meath.
  - The proposed development is located on lands zoned G1 Community Infrastructure in the Duleek Written Statement which forms part of the Meath County Development Plan, 2013 – 2019, as varied. The relevant zoning objective is '*To provide for necessary community, social and dedicational facilities*'.

The proposed development, as presented, predominantly involves private residential development, does not comply with the above zoning objective and is therefore not considered to be in accordance with the proper planning and sustainable development of the area.

- Based on the lack of information submitted with the application and having regard to the location of the application site within an area identified as being within a flood risk in the OPW PFRA Mapping / Strategic Flood Risk Assessment for County Meath carried out for the Meath County Development Plan, 2013 2019, it is considered that the applicant has not sufficiently demonstrated that the proposed development would not be at risk of flooding. The proposed development would, therefore, be contrary to POL 29 of the Meath County Development Plan, 2013 2019, Section 28 Guidance 'The Planning System and Flood Risk Management, Guidelines for Planning Authorities' and the proper planning and sustainable development of the area.
- Based on the lack of information submitted with the application, the Planning Authority is not satisfied that the proposed development, as presented, satisfactorily complies with recommendations contained in the Design Manual for Urban Roads and Streets issued by the Department of Transport, Tourism and Sport in 2013 (Section 28 Ministerial Guidelines). The proposed development, therefore, in the absence of sufficient information to the

contrary, is considered to represent a traffic hazard and, if permitted, would be contrary to the proper planning and sustainable development of the area.

## 4.3. Other Relevant Files:

4.3.1. (Approx. 1.1km to the west)

ABP Ref. No. ABP-303568-19. Was approved on 22<sup>nd</sup> July, 2019 permitting Highfield Energy Services Limited permission for the construction of an electrical substation and associated 110kV and MV infrastructure required to connect ground mounted solar PV generation to the electricity transmission system; lightening protection masts; perimeter security fencing; CCTV cameras; access tracks; 110kV end masts; underground cabling; temporary construction compound; drainage infrastructure and all associated ancillary site development work all in the townland of Gillinstown, Duleek, Co. Meath.

4.3.2. (Approx. 1.7km to the west):

PA Ref. No. 22663. Was granted on 26<sup>th</sup> August, 2022 permitting Bartle Lenehan permission for (1) the restoration of lands for the purposes of agricultural gain through importing and depositing of inert material comprising natural minerals of clay, silt, sand, gravel or stone and (2) ancillary site development works. All at Gillinstown, Duleek, Co. Meath.

4.3.3. (Approx. 1.2km to the south):

PA Ref. No. LB200487 / ABP Ref. No. ABP-308667-20. Was granted on 24<sup>th</sup> February, 2021 permitting Highfield Solar Ltd. a 10-year permission for the construction of a solar PV energy development within a total site area of up to 81.3hA, to include solar PV panels ground mounted on steel support structures, electrical transformer/inverter station modules, battery storage modules, storage containers, CCTV cameras, access tracks, fencing and associated electrical cabling, ducting and ancillary infrastructure. All at Garballagh and Gaskinstown, Duleek, Co Meath (*N.B.* A first party appeal was subsequently withdrawn).

4.3.4. (Approx. 1.2km to the south):

ABP Ref. No. ABP-311427-21. Was approved on 14<sup>th</sup> April, 2022 permitting Highfield Energy Services Ltd. a 10-year permission for the construction of an electrical substation and associated 110kV and MV ancillary infrastructure required to connect ground mounted solar PV generation to the electricity transmission system; lightning protection masts; perimeter security fencing; access tracks; 110kV masts; underground cabling; temporary construction compound; tree planting; drainage infrastructure and all associated ancillary site development works. In the townlands of Garballagh and Commons, Duleek, Co. Meath.

# 5.0 Policy and Context

# 5.1. National Policy

# 5.1.1. **The Programme for Government - Our Shared Future:**

The current programme commits to an average 7% reduction in greenhouse gas (GHG) emissions per annum over the 2021-2030 period (a 51% reduction over the decade) and the achievement of net zero emissions by 2050. It states that the reliable supply of safe, secure and clean energy will be essential in order to deliver a phase-out of fossil fuels and commits to taking the necessary action to deliver at least 70% of renewable electricity by 2030.

# 5.1.2. Project Ireland 2040: National Planning Framework, 2018:

The National Planning Framework (NPF) sets out a vision for the future development of the country and includes strategic goals in respect of transitioning to a low carbon and climate resilient society. It contains a number of relevant National Strategic Outcomes (NSOs) and National Policy Objectives (NPOs) which can be summarised as follows:

- NSO 8: Transition to a Low Carbon and Climate Resilient Society:

Recognises that the diversification of energy production systems away from fossil fuels and towards a more renewables focused energy generation system (utilising sources such as wind, wave, solar and biomass) will be necessary. It includes an aim to deliver 40% of electricity needs from renewable sources by 2020, with further increases through to 2030 and beyond in accordance with EU and national policy.

- *NPO 23:* Facilitate the development of the rural economy through supporting a sustainable and economically efficient agricultural and food sector, together

with forestry, fishing and aquaculture, energy and extractive industries, the bio-economy and diversification into alternative on-farm and off-farm activities, while at the same time noting the importance of maintaining and protecting the natural landscape and built heritage which are vital to rural tourism.

- NPO 54: Reduce our carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions.
- NPO 55: Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050.

## 5.1.3. National Development Plan, 2021-2030:

The National Development Plan, 2021-2030 (NDP) sets out the Government's investment strategy and budget up to 2030. The NDP commits to increasing the share of renewable energy up to 80% by 2030 and acknowledges that this will require world-leading levels of wind and solar electricity penetration onto the national grid.

# 5.1.4. Policy Statement on Security of Electricity Supply, November 2021 (Government of Ireland):

The Policy Statement notes that electricity is vital for the proper functioning of society and the economy and states that in order to contribute to the achievement of the targeted reductions in greenhouse gas emissions, the Government has committed that up to 80% of electricity consumption will come from renewable sources by 2030 on a pathway to net zero emissions. It emphasises that the continued security of electricity supply is a priority at national level and within the overarching EU policy framework in which the electricity market operates. The challenges to ensuring security of electricity supply are stated to include:

 ensuring adequate electricity generation capacity, storage, grid infrastructure, interconnection and system services are put in place to meet demand – including at periods of peak demand. Within the Policy Statement the Government recognises inter alia that ensuring security of electricity supply continues to be a national priority as the electricity system decarbonises towards net zero emissions and that there is a need for very significant investment in additional flexible conventional electricity generation, electricity grid infrastructure, interconnection, and storage in order to ensure security of electricity supply.

## 5.1.5. Energy Security in Ireland to 2030: Energy Security Package, November, 2023:

This document outlines a new strategy to ensure energy security in Ireland for the decade, while ensuring a sustainable transition to a carbon neutral energy system by 2030. It has been published as part of an Energy Security Package, containing a range of supplementary analyses, consultations, and reviews, which have informed recommendations and actions related to energy security. The report sets out that Ireland's future energy will be secure by moving from an oil- and gas-based energy system to an electricity-led system, maximising our renewable energy potential, flexibility and being integrated into Europe's energy systems. It further states that energy security must be prioritised, monitored, and reviewed regularly, and includes a range of measures to implement such an approach in the short and medium term by prioritising:

- Reduced and Responsive Demand
- A Renewables-Led System
- More Resilient Systems
- Robust Risk Governance

Under each of these four areas of actions, the report sets out a range of mitigation measures, including the need for additional capacity of indigenous renewable energy, but also energy imports, energy storage, fuel diversification, demand side response, and renewable gases.

# 5.1.6. Climate Action Plan, 2023 – Changing Ireland for the Better:

This plan is the second annual update to Ireland's Climate Action Plan, 2019 and is the first such plan to be prepared under the Climate Action and Low Carbon Development (Amendment) Act, 2021 as well as since the introduction of economywide carbon budgets and sectoral emissions ceilings in 2022. It implements the carbon budgets and sectoral emissions ceilings and sets out a roadmap for taking decisive action to halve Ireland's emissions by 2030 and reach net zero no later than 2050, as committed to in the Programme for Government. Moreover, it supports the accelerated delivery of renewable electricity generation to the national grid with a target of achieving 80% of electricity demand being met from renewable energy by 2030. This includes a target of providing up to 5GW of solar energy by 2025 with a longer-term target of 8GW by 2030. The Plan proceeds to list the actions needed to deliver on climate targets and sets emission ceilings reductions for each sector of the economy. These include an increased reliance on renewable energy sources with the following actions of particular relevance to the proposed development:

- EL/23/1: Establish a taskforce to accelerate renewables.
- EL/23/2: Publish the Renewable Electricity Spatial Policy Framework.
- EL/23/3: Publish a roadmap for the development and implementation of Regional Renewable Electricity Strategies.
- EL/23/5: Complete analysis to update Shaping Our Electricity Future to accommodate 80% renewables and align with carbon budgets and sectoral emissions ceilings for electricity.
- EL/23/6: Ensure electricity generation grid connection policies and regular rounds of connection offers which facilitate timely connecting of renewables, provides a locational signal and supports flexible technologies.

# 5.1.7. Climate Action Plan, 2024:

An updated Climate Action Plan, 2024 was approved by Government on 21<sup>st</sup> May, 2024. It aims to build upon the last plan by refining and updating the measures and actions required to deliver the carbon budgets and sectoral emissions ceilings.

Chapter 12: '*Electricity*' of the Plan states that the electricity sector continues to face an immense challenge in meeting its requirements under the sectoral emissions ceiling, as the decarbonisation of other sectors, including transport, heating, and industry, relies to a significant degree on electrification. The deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity are unprecedented and require urgent action across all actors to align with the national targets. The EPA has projected that the electricity sector emissions are currently not aligned to Climate Action Plan 2023 (CAP23) pathways and targets (the projections forecast an overshoot of ~5.2 MtCO <sub>2</sub>eq. in the period 2021 to 2025, and ~8.2 MtCO<sub>2</sub>eq. in the period 2026 to 2030). Therefore, the scale of the challenge to meet the sectoral emissions ceiling has been described as immense and requires policies to be moved from an 'end of decade' target trajectory towards a 'remaining carbon budget' target.

The Plan emphasises that transformational policies, measures, and actions, along with societal change, are required to meet the electricity sector's sectoral emissions ceiling. In order to facilitate the major acceleration and increase in onshore wind turbines and solar PV required nationwide to achieve national and regional targets, a previously unseen level of electricity network upgrades and construction will be required. For onshore renewables, greater alignment between national, regional and local plans and renewable energy targets to support investment in and delivery of onshore wind and solar renewable energy will be critical.

Theme	2025 KPI	2030 KPI
	50% renewable electricity	80% renewable electricity
Accelerate Renewable	share of demand	share of demand.
Energy Generation	Up to 5 GW solar PV	8 GW solar PV capacity,
	capacity, including at	including 2.5 GW of new
	least 1 GW of new non-	non-utility solar.
	utility solar.	

Extract from Table 12.5: 'Key Metrics to Deliver Abatement in Electricity':

It has been stated that the achievement of further emissions reductions between now and 2030 will require a major step up across three key measures:

- Accelerate and increase the deployment of renewable energy to replace fossil fuels;
- Deliver a flexible system to support renewables and demand;
- Manage demand.

With respect to the acceleration of renewable electricity generation to reach 80% of electricity demand from renewable sources by 2030, necessary measures include:

- Accelerate the delivery of utility-scale onshore wind, offshore wind, and solar projects through a competitive framework;
- Target of up to 5GW of solar by 2025;
- Target of 8GW of solar by 2030;
- Commence drafting of Solar Energy Development Guidelines.

Extract from Table 12.6: 'Key Actions to Deliver Abatement in Electricity sector for the period 2024-2025':

Measure	2024 Actions	2025 Actions
	Accelerate Renewable	Accelerate Renewable
Accelerate Renewable	Electricity Taskforce to oversee	Electricity Taskforce to oversee
Energy Generation	delivery	delivery
	Revision to the National	Ensure that electricity
	Planning Framework to include	generation grid connection
	regional capacities for the	policies, and regular rounds of
	allocation of national targets at	connection offers (which
	a regional level in order to	facilitate timely connection of
	inform local development plan	renewables and supporting
	policy	flexible technologies), provide
		a locational signal and support
		flexible technologies
	Publish Regional Renewable	Deliver onshore and offshore
	Electricity Strategies	RESS auctions as per the
	Publish revised methodology	annual RESS auction calendar
	for Local Authority Renewable	
	Energy Strategies	

The following 2024 actions are of relevance to the proposed development:

- EL/24/1: Accelerating Renewable Electricity Taskforce to publish programme of work.

- EL/24/3: Revision to the National Planning Framework to include regional capacities for the allocation of national targets at a regional level in order to inform local development plan policy.
- EL/24/4: Publish Regional Renewable Electricity Strategies.
- EL/24/6: Publish revised methodology for Local Authority Renewable Energy Strategies.
- EL/24/7: Publish new Electricity Generation Grid Connection Policy.

## 5.2. Regional Policy

## 5.2.1. Eastern & Midland Regional Economic and Spatial Strategy, 2019-2031:

The RSES provides a long-term strategic planning and economic framework for the development of the Eastern & Midland Region and represents a significant evolution of regional policy making which replaces the previous Regional Planning Guidelines. A key underlying principle of the Strategy is the need to enhance climate resilience and to accelerate a transition to a low carbon society. Relevant Policy Objectives include:

- *RPO 10.20:* Support and facilitate the development of enhanced electricity and gas supplies, and associated networks, to serve the existing and future needs of the Region and facilitate new transmission infrastructure projects that might be brought forward in the lifetime of this Strategy. This includes the delivery of the necessary integration of transmission network requirements to facilitate linkages of renewable energy proposals to the electricity and gas transmission grid in a sustainable and timely manner subject to appropriate environmental assessment and the planning process.

#### 5.3. **Development Plan**

#### 5.3.1. Meath County Development Plan, 2021-2027:

Chapter 6: Infrastructure Strategy:

Section 6.14: *Climate Change* 

Section 6.15: Energy:

## Section 6.15.3: Renewable Energy:

Section 9.2 of the NPF states the following in relation to energy "Ireland's national energy policy is focused on three pillars: (1) sustainability, (2) security of supply and (3) competitiveness. The Government recognises that Ireland must reduce greenhouse gas emissions at 1990 levels from the energy sector by at least 80% by 2050, while at the same time ensuring security of supply of competitive energy sources to our citizens and businesses".

The potential feasible renewable energy options for the County include, but are not limited to, a balanced mix of:

- Bioenergy crops, forestry;
- Biomass anaerobic digestion, combined heat and power (CHP);
- Geothermal hot dry rock reservoirs, groundwater aquifers;
- Hydro energy small and micro hydro systems;
- Solar electricity generation, passive solar heating, active solar heating;
- Waste landfill methane gas collection;
- Wave wave action, and;
- Wind onshore wind, offshore wind (single turbines and groups).

#### Section 6.15.3.1: Solar Energy:

There are a range of technologies available to exploit the benefits of harnessing energy of the sun, including solar panels, solar farms, solar energy storage facilities all of which contribute to a reduction in energy demand. Solar technologies can be designed into buildings or retrofitted. Large scale solar farms have been positively considered on suitable sites within the County in the recent past. As of May 2019, twenty solar photovoltaic farms were granted planning permission across the County. A number of other solar farm proposals are at the pre-planning stage.

Proposals for the development of solar farms will be subject to a Site-Specific Flood Risk Assessment as set out in the Planning System and Flood Risk Management Guidelines 2009 for Planning Authorities (or any updated guidelines).

- *INF POL 34:* To promote sustainable energy sources, locally based renewable energy alternatives, where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity, natural and built heritage, residential or local amenities.
- *INF POL 35:* To seek a reduction in greenhouse gases through energy efficiency and the development of renewable energy sources utilising the natural resources of the County in an environmentally acceptable manner consistent with best practice and planning principles.
- *INF POL 36:* To support the implementation of the National Climate Change Strategy and to facilitate measures which seek to reduce emissions of greenhouse gases.
- INF POL 42: To support the identification, in conjunction with EMRA, of Strategic Energy Zones, areas suitable to accommodate large energy generating projects within the Eastern and Midlands Regional area.
- *INF POL 43:* To require that development proposals in respect of solar panel photovoltaic (PV) arrays in the vicinity of Dublin Airport shall be accompanied by a full glint and glare study to assess the potential impact upon aviation safety (Refer to Chapter 5 Movement, Section 7.11, Aviation Sector).
- INF OBJ 39: To support Ireland's renewable energy commitments outlined in national policy by facilitating the development and exploitation of renewable energy sources such as solar, wind, geothermal, hydro and bio-energy at suitable locations within the County where such development does not have a negative impact on the surrounding environment (including water quality), landscape, biodiversity or local amenities so as to provide for further residential and enterprise development within the county.
- *INF OBJ 41:* To promote the generation and supply of low carbon and renewable energy alternatives, having regard to the

opportunities offered by the settlement hierarchy of the County and the built environment.

- *INF OBJ 42:* To support the recording and monitoring of renewable energy potential in the County in partnership with other stakeholders including the Sustainable Energy Authority of Ireland (SEAI).
- *INF OBJ 45:* To ensure that all plans and projects associated with the generation or supply of energy or telecommunication networks are subject to an Appropriate Assessment Screening and those plans and projects which could, either individually or incombination with other plans and projects, have a significant effect on a Natura 2000 site (or sites) undergo a full Appropriate Assessment.
- INF OBJ 46: To support the implementation of the actions of the Meath Climate Action Strategy 2019-2024 and review and update the Energy Management Action Plan 2011-2012, "Think Globally Act Locally".
- *INF OBJ 47:* To investigate the preparation of a Renewable Energy Strategy promoting technologies which are most viable in the County.

Chapter 8: Cultural and Natural Heritage Strategy:

Section 8.17: Landscape:

Section 8.17.3: Landscape Character Assessment

- HER POL 52: To protect and enhance the quality, character, and distinctiveness of the landscapes of the County in accordance with national policy and guidelines and the recommendations of the Meath Landscape Character Assessment (2007) in Appendix 5, to ensure that new development meets high standards of siting and design.
- HER POL 53: To discourage proposals necessitating the removal of extensive amount of trees, hedgerows and historic walls or other distinctive boundary treatments.

- HER OBJ 49: To ensure that the management of development will have regard to the value of the landscape, its character, importance, sensitivity and capacity to absorb change as outlined in Appendix 5 Meath Landscape Character Assessment and its recommendations.
- HER OBJ 50: To require landscape and visual impact assessments prepared by suitably qualified professionals be submitted with planning applications for development which may have significant impact on landscape character areas of medium or high sensitivity.

Section 8.18: Views and Prospects:

- HER OBJ 56: To preserve the views and prospects listed in Appendix 10, in
  Volume 2 and on Map 8.6 and to protect these views from
  inappropriate development which would interfere unduly with the
  character and visual amenity of the landscape.
- HER OBJ 57: To undertake a review of existing protected views and prospects contained in the County Development Plan and to assess and consider additional views and prospects deemed worthy of inclusion/protection.

Chapter 10: Climate Change Strategy:

Section 10.5: Integrating Mitigation and Adaptation into the County Development Plan

Section 10.5.8: Energy:

Mitigation Strategy: Encourage the uptake of more renewable energy sources.

Section 10.6.2: Energy and Waste Infrastructure

Chapter 11: Development Management Standards and Land Use Zoning Objectives:

Section 4: General Development Standards:

Section 11.4: General Standards applicable to all Development Types

Section 8: Energy Development Standards:

Section 11.8.1: Energy Development:

- *DM POL 27:* To encourage renewable development proposals which contribute positively to reducing energy consumption and carbon footprint.
- *DM OBJ 76:* In the assessment of individual energy development proposals, the Council will take the following criteria into account:
  - The proper planning and sustainable development of the area;
  - The environmental and social impacts of the proposed development;
  - Traffic impacts including details of haul routes;
  - Impact of the development on the landscape, (please refer to Appendix 5 Landscape Character Assessment);
  - Impact on protected Views and Prospects, (please refer to Appendix 10 Protected Views and Prospects);
  - Impact on public rights of way and walking routes, (please refer to Appendix 12 Public Rights of Way);
  - Connection to the National Grid (where applicable);
  - Mitigation features, where impacts are inevitable;
  - Protection of designated areas NHAs, SPAs and SACs, areas of archaeological potential and scenic importance;
  - proximity to structures that are listed for protection, national monuments, etc. (Please refer to Chapter 8 Cultural Heritage, Natural Heritage, Landscape and Green Infrastructure and Appendices 6-9 inclusive for further details);
  - Cumulative Impact of proposal

#### Section 11.8.2: Solar Energy:

There are a variety of solar technologies available in the form of roof-top domestic, roof-top commercial, large-scale land based solar developments (where solar cells

are mounted to supply energy to the grid) and solar energy storage facilities. There are a significant number of solar farm planning applications in the system nationally. Section 28 Guidance is awaited from the Department of Housing and Planning to assist in the assessment of this development type.

*DM OBJ 77:* In the assessment of individual proposals, the Council will require the following to be submitted as part of any planning application:

- Glint & Glare Assessment
- Outline Construction Environmental Management Plan (CEMP)
- Biodiversity Management Plan
- Public Consultation details
- Noise Assessment
- Socio-Economic Assessment
- EIA Screening
- Ecology Assessment
- Archaeology Assessment
- Traffic & Transport Assessment
- Landscape and Visual Assessment
- Hydrology Appraisal/Flood Risk Assessment
- Decommissioning/Restoration Plan

# Appendix 5: A05: Landscape Character Assessment:

The proposed development site is located within the '*Lowlands*' Landscape Character Type and the '*Central Lowlands*' (6) Landscape Character Area which is considered to be of '*High Value*', '*Moderate Sensitivity*' and '*Regional Importance*'.

# 5.4. Natural Heritage Designations

The following natural heritage designations are located in the general vicinity of the proposed development site:

#### 5.4.1. Special Protection Areas:

- The River Boyne and River Blackwater Special Protection Area (Site Code: 004232), approximately 3.2km northwest of the site.
- The Boyne Estuary Special Protection Area (Site Code: 004080), approximately 9.8km northeast of the site.
- The River Nanny Estuary Special Protection Area (Site Code: 004158), approximately 11.4km east of the site.
- The North-West Irish Sea Special Protection Area (Site Code: 004236), approximately 14km east of the site.
- 5.4.2. Special Areas of Conservation:
  - The River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), approximately 3.2km northwest of the site.
  - The Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957), approximately 11.0km northeast of the site.

#### 5.4.3. Natural Heritage Areas:

None.

- 5.4.4. Proposed Natural Heritage Areas:
  - The Duleek Commons Proposed Natural Heritage Area (Site Code: 001578), approximately 400m east of the site.
  - The Thomastown Bog Proposed Natural Heritage Area (Site Code: 001593), approximately 1.5km west-southwest of the site.
  - The Rossnaree Riverbank Proposed Natural Heritage Area (Site Code: 001589), approximately 4.1km northwest of the site.
  - The Balrath Woods Proposed Natural Heritage Area (Site Code: 001579), approximately 4.4km southwest of the site.

- The Dowth Wetland Proposed Natural Heritage Area (Site Code: 001861), approximately 4.6km north of the site.
- The Crewbane Marsh Proposed Natural Heritage Area (Site Code: 000553), approximately 5.0km northwest of the site.
- The Boyne River Islands Proposed Natural Heritage Area (Site Code: 001862), approximately 6.6km north-northeast of the site.
- The King William's Glen Proposed Natural Heritage Area (Site Code: 001804), approximately 6.7km north of the site.
- The Boyne Woods Proposed Natural Heritage Area (Site Code: 001592), approximately 7.6km northwest of the site.
- The Cromwell's Bush Fen Proposed Natural Heritage Area (Site Code: 001576), approximately 7.7km southeast of the site.
- The Slane Riverbank Proposed Natural Heritage Area (Site Code: 001591), approximately 8.1km northwest of the site.
- The Laytown Dunes / Nanny Estuary Proposed Natural Heritage Area (Site Code: 000554), approximately 10.5km east of the site.
- The Boyne Coast and Estuary Proposed Natural Heritage Area (Site Code: 001957), approximately 11.0km northeast of the site.
- The Mellifont Abbey Woods Proposed Natural Heritage Area (Site Code: 001464), approximately 13.2km north of the site.

# 5.5. EIA Screening

- 5.5.1. Solar energy development is not listed as a class of development for the purposes of EIA under Parts 1 or 2 of Schedule 5 of the Planning and Development Regulations, 2001 (as amended). In this regard, a requirement for preliminary examination or EIA does not arise.
- 5.5.2. Although Class 10(dd) of Part 2 of Schedule 5 of the Regulations requires EIA for "All private roads which would exceed 2000 metres in length", the proposed development does not include such private roads and therefore does not fall under Class 10. In this regard, the Board is advised that the definition of 'road' utilised in

the Planning and Development Act, 2000, as amended, is that set out in the Roads Act, 1993:

- a) any street, lane, footpath, square, court, alley or passage,
- b) any bridge, viaduct, underpass, subway, tunnel, overpass, overbridge, flyover, carriageway (whether single or multiple), pavement or footway,
- c) any weighbridge or other facility for the weighing or inspection of vehicles, toll plaza or other facility for the collection of tolls, service area, emergency telephone, first aid post, culvert, arch, gulley, railing, fence, wall, barrier, guardrail, margin, kerb, lay-by, hardshoulder, island, pedestrian refuge, median, central reserve, channelliser, roundabout, gantry, pole, ramp, bollard, pipe, wire, cable, sign, signal or lighting forming part of the road, and
- d) any other structure or thing forming part of the road and -
  - necessary for the safety, convenience or amenity of road users or for the construction, maintenance, operation or management of the road or for the protection of the environment, or
  - ii) prescribed by the Minister.
- 5.5.3. The proposed development includes for the construction of approximately 900m of access tracks. Notably, these are referred to 'access tracks' in the statutory notices whereas the submitted drawings and the Planning & Environmental Report use the terms 'maintenance roads' and 'site tracks' interchangeably. The Board may wish to consider whether the structures described as access tracks would fall within the aforementioned definition of a road. The proposed tracks will generally be approximately 4m in width (although they will be wider at bends, turning points and adjacent to the inverter / transformer module locations), with a compacted stone surface, and are intended to be used for the purpose of construction, maintenance and ultimate decommissioning of the development. At this point, I would draw the Board's attention to its determination of ABP Ref. No. PL17.248146 wherein it accepted the assessment by the reporting inspector that as the purpose of the access tracks was not for the conveyance of people and vehicles, per se, except as necessary in connection with the construction, maintenance and decommissioning of the development, then the access tracks were materially different from a 'road' as defined under the Roads Act, 1993. That position has since been adopted in other

Board decisions (e.g. ABP Ref. Nos. ABP-301028-18, ABP-302681-18 & ABP-314320-22) to the effect that access tracks serving solar developments do not fall to be considered under Class 10(dd) of the Regulations and thus do not require EIA. Accordingly, I am satisfied that the access tracks proposed to be constructed as part of the subject proposal similarly do not require EIA.

- 5.5.4. Under the Environmental Impact Assessment (Agriculture) Regulations, 2011 issued by the Department of Agriculture, Food and the Marine, the rural restructuring of farmland requires screening for EIA. In this regard, I note the more recent amending Regulation S.I. 383 of 2023, Planning and Development (Amendment) (No. 2) Regulations 2023, which amends Class 1 of Part 2 of Schedule 5, by inserting the following:
  - (a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment)(Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.
- 5.5.5. I note that these thresholds reflect those set out in Schedule 1, Part B of the 2011
  EIA (Agriculture) Regulations. Furthermore, Part A of Schedule 1 of the 2011
  Regulations sets out the following thresholds for screening for EIA:

Restructuring of rural land holdings	Screening Required
Length of field boundary to be removed	Above 500m
Re-contouring (within farm-holding)	Above 2 hectares
Area of lands to be restructured by removal	Above 5 hectares
of field boundaries	

5.5.6. The proposed development involves the removal of a limited extent of hedgerow, primarily along the roadside boundary to accommodate the proposed site entrance, comprising approximately 41.2m of hedging as shown on Drg. No. NEO00892\_0241\_A Figure 5.2: 'Swept Path Analysis' and appended to Technical
Appendix 5: 'Construction Traffic Management Plan' (with a further 60.2m of roadside hedging to be trimmed back to achieve sightlines (as per Drg. No. NEO00892\_0231\_A Figure 5.3: 'Visibility Splay' of the Construction Traffic Management Plan). This is significantly below the threshold of 4km for EIA reinserted by the 2023 amending regulations and is also below the screening threshold set out in the 2011 (Agricultural) Regulations. Such removal is associated with access requirements and does not result in the amalgamation or enlargement of existing fields. Significant effects on biodiversity are not likely as a result of such works.

- 5.5.7. The development does not involve any significant excavation or the recontouring of the lands by, for example, the levelling off of hills or by the infilling of hollows (by removing or shifting earth or rocks), or other use or drainage works. Although the proposed substation building and the inverter & transformer cabinets etc. will be sited on areas of hardstanding which will require some localised levelling and foundation works, such works are not significant in nature and would not constitute recontouring of the lands.
- 5.5.8. Having regard to the above, I am satisfied that the proposed solar farm is not of a class that requires EIA or screening for EIA, while the associated grid connection is also not of a class of development listed under Parts 1 or 2 of Schedule 5. The development would, however, constitute sub-threshold development for rural restructuring (Class 1(a), Part 2 Schedule 5).
- 5.5.9. I refer to Form No. 2 Preliminary Examination appended to this report and conclude that there is no real likelihood of significant effects on the environment and that EIA is not required.

# 6.0 The Appeal

## 6.1. Grounds of Appeal

- Permission was previously refused in 2019 for the construction of a solar farm on this site under PA Ref. No. LB160898 / ABP Ref. No. PL17.248146.
- Since the determination of PA Ref. No. LB160898 / ABP Ref. No.
   PL17.248146, a 120-bedroom nursing home has opened with an entrance c.

50m east of the proposed access which has increased the traffic volumes along Downestown Road. In addition, the grant of permission issued under PA Ref. No. 22/663 for the importation of soil to a farm c. 1 mile west of the proposed site access will result in considerably heavier commercial traffic on Downestown Road. It is submitted that the additional traffic associated with the existing, permitted and proposed developments will endanger public safety along this country road (Downestown Road) by reason of traffic hazard.

## 6.2. Applicant's Response

6.2.1. None received.

## 6.3. Planning Authority's Response

- The Planning Authority is satisfied that all matters raised in the grounds of appeal were considered during its assessment of the planning application.
- The proposed development, as presented, is consistent with the proper planning and sustainable development of the area and the decision to grant permission should be upheld accordingly.

## 6.4. **Observations**

None.

## 6.5. Further Responses

None.

# 7.0 Assessment

- 7.1. From my reading of the file, inspection of the site, and assessment of the relevant policy provisions, I conclude that the key issues raised by the appeal are:
  - The principle of the proposed development
  - The determination of ABP Ref. No. PL17.248146
  - Landscape & visual impact

- Traffic considerations
- Other issues
- Appropriate assessment

These are assessed as follows:

### 7.2. The Principle of the Proposed Development:

- 7.2.1. Given the nature and stated purpose of the proposed development, it is apparent that it has a role to play in realising Ireland's international, European and national commitments as regards the provision of energy from renewable sources and achieving a reduction in greenhouse gas emissions. In this regard, there are a multitude of policy provisions at national, regional and local level which all support the development of renewable energy projects, including solar farms, with a view to transitioning to a low carbon and climate resilient society. For example, the National Planning Framework: 'Project Ireland 2040' aims to reduce the national carbon footprint by integrating climate action into the planning system in support of national targets for climate policy mitigation and adaptation as well as targets for greenhouse gas emissions reductions. More specifically, National Strategic Outcome 8 sets the goal of transitioning to a low carbon and climate resilient society and recognises that the diversification of energy production systems away from fossil fuels and towards a more renewables focused energy generation system (utilising sources including solar) will be necessary as supported by National Policy Objective 55 which seeks to Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a low carbon economy by 2050'.
- 7.2.2. The current 'Programme for Government Our Shared Future' builds on the policy provisions of the NPF and commits to an average 7% reduction in greenhouse gas (GHG) emissions per annum over the 2021-2030 period (a 51% reduction over the decade) and the achievement of net zero emissions by 2050. It also emphasises that the reliable supply of safe, secure and clean energy will be essential in order to deliver a phase-out of fossil fuels and aims to take the necessary action to deliver at least 70% of renewable electricity by 2030.

- 7.2.3. More recent policy developments in support of the submitted proposal include the Climate Action Plan, 2023 'Changing Ireland for the Better', which aims to accelerate the delivery of renewable electricity generation to the national grid with a target of achieving 80% of electricity demand being met from renewable energy by 2030 (including a target of providing up to 5GW of solar energy by 2025 with a longer-term target of 8GW by 2030).
- 7.2.4. The updated Climate Action Plan, 2024 continues to highlight the challenges posed to the electricity sector in meeting its requirements under the relevant sectoral emissions ceiling and emphasises that the deployment rates of renewable energy and grid infrastructure required to meet the carbon budget programme for electricity are unprecedented and require urgent action across all actors to align with the national target. It reiterates the need to accelerate renewable electricity generation (in order to achieve 80% of electricity demand from renewable sources by 2030) and sets targets of up to 5GW of solar energy by 2025 and 8GW by 2030.
- 7.2.5. Further policy support includes the '*Energy Security in Ireland to 2030: Energy Security Package*' published in November, 2023 which outlines a new strategy to ensure energy security in Ireland while achieving a sustainable transition to a carbon neutral energy system by 2050, a key component of which will be maximising the country's renewable energy potential by prioritising a 'Renewables-Led System'.
- 7.2.6. In a local context, the Meath County Development Plan, 2021-2027 contains a number of policy provisions in support of the transition to a climate resilient society and the development of renewable energy, including solar energy, subject to normal planning criteria. Policies INF POL 34, INF POL 35 & DM POL 27 are of particular relevance in this regard. Objective INF OBJ 39 further aims to support Ireland's renewable energy commitments by facilitating the development and exploitation of renewable energy sources such as solar at suitable locations within the County.
- 7.2.7. For the purposes of completeness, and in reference to Policy Objective INF OBJ 47 of the Plan which seeks '*To investigate the preparation of a Renewable Energy Strategy promoting technologies which are most viable in the County*', I would advise the Board that the issue of prematurity pending the preparation of any such strategy was considered in the Board's previous assessment of ABP Ref. No. PL17.248146 on site. In that instance, the reporting inspector considered an identical policy

objective contained in the Meath County Development Plan, 2013-2019 and determined that as the objective only sought '*to investigate the preparation of a renewable energy strategy*' (rather than to prepare the strategy itself), and as no timeframe had been specified, the issue of prematurity did not arise. In my opinion, such a conclusion remains valid in this instance.

7.2.8. Therefore, on the basis of the available information, I am satisfied that the proposed development is consistent with Ireland's international, European and national commitments as regards the reduction of greenhouse gas emissions and the provision of energy from renewable sources, however, while I am amenable to the principle of the proposed development, any such proposals should be assessed on their individual merits and subject to normal planning considerations.

### 7.3. The Determination of ABP Ref. No. PL17.248146:

- 7.3.1. For the purposes of clarity, I would advise the Board that the subject proposal amounts to a moderately scaled back version of the solar energy development previously refused permission on site under ABP Ref. No. PL17.248146. The only notable differences are the revised access arrangement and the omission of a section of the solar panels from within the easternmost corner of the site which lies within an identified floodplain. Given that the grounds of appeal refer to this earlier refusal of permission, I would suggest that it is entirely reasonable to take due cognisance of the rationale which informed that decision with a view to establishing whether the subject proposal would warrant approval.
- 7.3.2. In its decision to refuse permission for a solar energy development on site under ABP Ref. No. PL17.248146, the Board concluded that having regard to the elevated and open nature of the site and its position on agricultural lands immediately abutting zoned lands within the development boundary of Duleek, the proposed development would form a prominent and obtrusive feature in the landscape, would adversely impact the rural character of the area, would seriously injure the visual amenities of the area, and would conflict with Objective LC OBJ 5 of the Meath County Development Plan, 2013–2019, which sought to preserve protected views from development that would interfere with the character and visual amenity of the landscape. It was further considered that the proposed development would endanger public safety by reason of traffic hazard because of the additional traffic turning

movements it would generate on a substandard road at a point where sightlines are restricted in both directions.

7.3.3. Accordingly, the pertinent issue requiring consideration is the continuing validity of the aforementioned reasons for refusal and whether there has been any change in circumstances since the determination of ABP Ref. No. PL17.248146 which would obviate same. In this regard, I propose to assess the issues arising elsewhere in this report.

## 7.4. Landscape & Visual Impact:

7.4.1. In terms of assessing the landscape / visual impact of the proposed development, it is of relevance in the first instance to note that the subject site is located within the 'Central Lowlands' Landscape Character Area (LCA) as detailed on Map 02: 'Landscape Character Areas' of the Landscape Character Assessment included at Appendix 5 of the Meath County Development Plan, 2021-2027. This LCA is considered to be of 'High Value', 'Moderate Sensitivity' & 'Regional Importance' and is described as follows:

'Large lowland area composed of rolling drumlins interspersed with large estates and associated parkland. Thick wooded hedgerows, with some conifer plantations, and shelterbelts of ash and larch, separate medium to large fields. Deep roadside drainage ditches and banked hedgerows are a common feature of the landscape in the enclosed rural road corridors . . .

The landscape character around settlements tends to be a wellmanaged patchwork of small pastoral fields, dense hedgerows and small areas of broadleaved woodland . . . The landscape is predominantly rolling pastureland . . .

Views within this area are generally limited by the topography and mature vegetation except at the tops of drumlins where panoramic views are available particularly of the Hill of Tara uplands and Skryne Church'.

7.4.2. A broad analysis of the potential capacity of the 'Central Lowlands' LCA to absorb certain development types is included in the Landscape Character Assessment. This states (by way of example) that the LCA has medium potential capacity to accommodate overhead cables, substations and communication masts due to the complexity of the area (which has a variety of land uses and a robust landscape structure); medium potential capacity to accommodate road infrastructure and upgrades to existing roads as the small-scale wooded nature of the landscape has the potential to screen such developments and there are few archaeological features present; and low potential capacity to accommodate wind farms due to the high number of receptors but medium potential capacity to accommodate single turbines because extensive views could be more easily limited by vegetation and through careful location. Regrettably, the analysis does not specifically mention the potential capacity for the LCA to accommodate solar energy development, although it provides a useful guide for comparison purposes as to the limitations of the landscape in question.

- 7.4.3. At this point it is of particular relevance to note that the Landscape Character Assessment appended to the current Meath County Development Plan, 2021-2027 was prepared as part of the previous Meath County Development Plan, 2013-2019 which informed the Board's earlier determination of ABP Ref. No. PL17.248146. Furthermore, there has been no change in the applicable landscape designation since the determination of ABP Ref. No. PL17.248146.
- 7.4.4. In a local context, the surrounding area is primarily agricultural and dominated by an undulating rural landscape characteristic of the 'Central Lowlands' Landscape Character Area. Notable exceptions include Duleek to the east / southeast, the nearby Garballagh Solar Farm, the Indaver waste-to-energy plant (c. 3.5km to the northeast), and the Irish Cement Ltd. (Platin) manufacturing plant (c. 4.0km to the northeast).
- 7.4.5. The site itself comprises a single, large agricultural field (excluding the access route from the public road that extends through an adjoining field) which occupies a recessed position set back between approximately 165m and 460m from Downestown Road to the south. It is bounded by the railway line to the north (with a quarry beyond same) and agricultural lands to the immediate east, west and south while the adjoining lands to the southeast would appear to have been cleared as part of the site development works that accommodated the construction of the recently completed Duleek Care Centre / nursing home (c. 250m to the southeast). Notably, the site is located a short distance west / northwest of Duleek on the periphery of the

#### ABP-317209-23

transition between the built-up area of that settlement and the wider rural surrounds. This is of relevance when considering the provisions of 'Recommendation 3' for the Central Lowlands LCA (as set out in the Landscape Character Assessment) which states the following:

'Future expansion of settlements should take place in accordance with design guidelines to inform layout, scale, detailing, use of materials and location. Also to ensure that the existing strong interfaces between urban and rural areas are maintained'.

- 7.4.6. The site perimeter is bounded by mature hedgerow while a stream runs along its southern boundary. The Platin-Gorman 110kV overhead power line also traverses the southernmost extent of the site proper. The sloping nature of the topography is such that the lands rise on travelling north / north-westwards with the result that clear views of the more elevated parts of the site are available from locations along Downestown Road to the south while partial views are also available from Longford Road to the east as well as from within the town of Duleek to the southeast.
- 7.4.7. The subject application has been accompanied by a 'Landscape and Visual Impact Assessment' (LVIA) (Technical Appendix 1) which examines the potential impact of the proposed development on landscape and visual considerations within a study area extending 5km from the proposed development site. This document sets out the baseline landscape data for the study area, including the site context and its location within the Central Lowlands LCA, before assessing the landscape effects of the proposed development on both the wider LCA and the site itself.
- 7.4.8. In terms of landscape effects on the application site, the LVIA has submitted that its agricultural grassland cover is a relatively common feature of the surrounding landscape capable of simple replacement and thus of a 'low' landscape value whereas the hedgerows and treelines defining the perimeter boundaries are of a higher 'medium' landscape value. Accordingly, when taken in combination with the surrounding pattern of land use, the subject site is considered to have a *'low-medium'* susceptibility to the type and scale of change proposed. The LVIA has thus determined that the application site has a *'low / medium'* sensitivity to the proposed development type.

- During the construction phase, it has been acknowledged that there will be a notable 7.4.9. change in land use from farmland to a construction site attributable to the broader activities associated with the construction of the proposed development including the operation of machinery, the erection of temporary site offices, car parking, and the installation of the solar arrays etc. In this regard, it has been indicated that only minor regrading of the site will be required to provide a level base for the proposed buildings and / or trackways while any ground disturbance consequent on the installation of cabling etc. will be reinstated and reseeded to minimise any adverse effects. Reference has also been made to the siting of the inverter / transformer stations and the substation proximate to the solar arrays and boundary hedgerows to limit their visibility, the use of external finishes to these structures that will help integrate them into the site and the surrounding area, and the additional landscaping / planting proposed to further screen any potential views of the proposed development. It has therefore been submitted that landscape effects on the application site during the construction phase will be temporary and 'moderate to moderate / minor adverse'.
- The visual impact of the proposed development once operational will be more readily 7.4.10. apparent and represents a noticeable change from the previous agricultural grassland cover of the site. The most expansive element of the project comprises the erection of ground-mounted solar photovoltaic panels set within galvanised metal framework racks elevated above ground and assembled in south-facing rows (arrays) over the development area (the total structure height of which will not exceed 3.2m). Other visible elements of the proposal include the substation building, the inverter and transformer stations, and the battery storage compound. Some visual impact will also be attributable to the occasional movement of traffic to / from the development for maintenance purposes. However, the spacing and height of the solar arrays is such that the lands may be utilised for grazing on a rotational basis thus retaining an agricultural use in tandem with the operation of the proposed development. It is further envisaged that the reinforcement of existing hedgerows and the provision of new screen planting (please refer to the Landscape Strategy Plan detailed on Drg. No. NEO00892\_022 Figure 117 Rev. A: 'Landscape Strategy *Plan'*) will have a slight beneficial effect in terms of mitigating the visual impact of the development throughout its operational phase. On the basis of the foregoing, the

LVIA has determined that the landscape effects on the application site during the operational phase will initially be '*moderate to moderate / minor adverse*' before falling to '*moderate / minor to minor adverse*' when the proposed planting starts to become established and fill out within 5-10 years.

- 7.4.11. Any future decommissioning of the development will involve the removal of all the existing ground structures and the subsequent reinstatement of the lands to their previous agricultural use. The hedgerows and screen planting will remain in place with beneficial residual effects attributable to the strengthened field boundaries. The landscape effects arising are thus described as reverting to *'no change'* or *'minor beneficial'*. Post-decommissioning, when the site has reverted to its previous use along with the retention of the matured screen planting, the LVIA anticipates a *'minor beneficial'* impact on the landscape character of the application site.
- 7.4.12. With regard to the broader landscape effects of the proposal on the Central Lowlands LCA, although the LVIA has acknowledged the overall 'high value' of the LCA it has reiterated that the grassland cover on site is of a 'low' landscape value while the degree of enclosure offered by the network of hedgerows merits a 'medium' landscape value. Notwithstanding that the Landscape Character Assessment appended to the Development Plan does not expressly consider the sensitivity of the LCA to solar energy development, the applicant's LVIA has determined that the high degree of enclosure afforded by the established hedgerow and the lowland setting of most of the site and the surrounding area would afford the LCA a 'medium' sensitivity to the proposed development type.
- 7.4.13. The construction phase of the project will inevitably impact the farmland within the confines of the site with the works requiring some minor loss of hedgerow, ground disturbance, and the undergrounding of overhead electricity lines, however, it has been submitted that any associated disturbance to the landscape of the LCA will be both localised and temporary. By extension, the LVIA has stated that the effect on the LCA during construction will be 'moderate to moderate / minor adverse' during the build period.
- 7.4.14. Upon operation, the proposal will introduce a new large scale, manmade feature into the predominantly agricultural landscape of the Central Lowlands LCA although this will be contained in part through the retention, strengthening and supplementation of

the existing field hedgerows and tree lines that are an important characteristic of the LCA. This planting will be maintained throughout the operation of the solar farm and will help to integrate the development into the landscape with a view to maintaining the broader high value character of the LCA. It has also been suggested that the low scale of the development, when taken in combination with the degree of enclosure offered by the strengthened field boundaries and the proposed screen planting, will further mitigate its visibility from neighbouring LCAs and that the localised 'industrialisation' of the Central Lowlands LCA consequent on the development will not detract from the key characteristics of other LCAs found within the study zone. The LVIA has thus concluded that any effects arising during the operation of the proposed development on the LCA will be 'moderate to moderate / minor adverse' while the additional landscaping measures will have a localised 'minor beneficial' effect on a small element of the LCA.

- 7.4.15. Although decommissioning of the proposed development will result in some minor localised disturbance, it has been submitted the subsequent reversion of the lands to their former agricultural use along with the retention of the mitigatory planting (which will have since matured) will likely have a '*minor beneficial*' effect on this part of the wider LCA.
- 7.4.16. Section 1.105 of the LVIA proceeds to detail that while there are 5 No. 'Historic Gardens and Designed Landscapes' (HGDLs) within the limits of the identified Zone of Theoretical Visibility (as detailed on Drg. No. NEO00892/0021/A: 'Figure 1.2: Landscape Designations with Zone of Theoretical Visibility'), the presence of intervening features such as buildings, trees and hedgerows will screen outward views from these features towards the proposed development (for the purposes of clarity, Section 1.68 of the LVIA refers to the presence of 12 No. 'Historic Gardens and Designed Landscapes' within the 5km study zone extending from the proposed development site, however, Figure 1.2: 'Landscape Designations with Zone of Theoretical Visibility' would suggest that some of these features fall either wholly or in part outside of the study area. In any event, Figure 1.2 confirms that only 5 No. HGDLs fall within the ZTV).
- 7.4.17. Having considered the wider landscape effects of the proposed development, the LVIA subsequently aims to establish the potential visibility of the proposal within the study area and the receptors likely to be affected. This has been determined by

reference to a 'bare earth' Zone of Theoretical Visibility (ZTV), the identification of visual receptors that may experience views of the proposed development by way of desktop and field surveys, and the selection of representative viewpoints from which to assess the effect of the proposed development on existing views and visual amenity. Figures 1.2 & 1.3 of Appendix 1A show the theoretical visibility of the proposed development over approximately half of the study zone (which extends to a radius of 5km from the development site), which encompasses the majority of the area to the south of the railway line (with the tree lines alongside the railway generally screening views of the site from vantage points to the north), however, I would concur with the LVIA that actual visibility within the ZTV is likely to be considerably less when account is taken of intervening features such as hedgerows and buildings etc.

- 7.4.18. It has been submitted that views of the proposed development will be largely confined to those residential and transient receptors within c. 800m of the development site's outer boundaries with actual visibility varying as a result of orientation, height, distance, and intervening screening. Views of the proposal will be greatest from receptors located along / off roadways in the immediate area, with particular reference to Downestown Road to the south and Longford Road to the east given the prevailing topography and the intermittent screening in places.
- 7.4.19. More distant views will be possible from the southeast where the land is elevated allowing for views across to the proposed site and, in this respect, particular consideration should be given to the views available from Viewpoint Nos. 66 & 67 identified on Map 8.6: '*Views & Prospects*' of the Development Plan which are listed for protection.

View	Location	Direction	Description	Significance
66	County road	Southwest, West,	Panoramic views from	Regional
	between Duleek and	Northwest and	southwest to north. Southwest -	
	Carnes East	North	Very distant horizons visible.	
			Views to north and west - very	
			compromised by industry and	
			urbanisation.	
67	County road	Southwest	Very long-distance views to	Regional
	between Carnes		south west and west across	

West and Carnes	open tillage landscape with	
East	occasional settlement and very	
	large fields. View provided is	
	typical. There are similar views	
	from many equivalent vantage	
	points in this general area.	

- 7.4.20. Views from settlements will generally be limited to those residences on the outer western / northwestern edges of the village of Duleek and are likely to be most readily apparent from within the Downestown Manor housing development and the recently opened Duleek Care Centre / nursing home to the southeast.
- 7.4.21. The LVIA proceeds to assess the visual impact of the proposal on 13 No. viewpoints, primarily from receptors located along Downestown Road to the south and Longford Road to the east but also including Protected View Nos. 66 & 67. Although several of these viewpoints are described in Table 5.2 of the LVIA as being representative of road and / or residential receptors, I would have some reservations in this regard given that several of the selected viewpoints would appear to have been chosen due to the obstruction caused by intervening features such as buildings or vegetation. Most notably, I would suggest that Viewpoints 3 & 4 are not entirely representative of the views available to road users travelling between those two points along Downestown Road. Indeed, it is this section of roadway from which the proposed development will be most readily apparent given the low cut roadside boundary ditch and the rising topography of the site. Similarly, I am inclined to suggest that positions further north along Longford Road (i.e. beyond Viewpoint Nos. 6, 7 & 8) would afford clearer views over open fields towards the site for road users, although I would concede that these views may not be representative of those available from the wider Longford Road area.
- 7.4.22. While photographs were provided from each of the viewpoints, photomontages illustrating the proposed development were only prepared for three of the viewpoints (Nos. 4, 12 & 13). These photomontages show how the proposed development will appear at Year 0 (with initial planting) and at Year 5 (with more established planting).
- 7.4.23. On balance, I am satisfied that the visual impact of the proposed development will be most pronounced from receptors located along roadways in the immediate vicinity of

the site (Downestown Road & Longford Road) although these will be limited in part due to the site topography, the level of screening offered by intervening features such as trees and hedgerows, and the separation distances from roads and residential dwellings. However, it should be noted that while many of the viewpoints selected in the LVIA are from roadside positions, more overt views of the development will be visible from within the confines of certain properties (such as the upper floors of houses within the northern and western edges of Duleek). While I would acknowledge that any such views are not of public interest and essentially amount to views enjoyed by a private individual from private property, the visibility of the proposal within any such views serves to highlight the site location proximate to the village of Duleek.

- 7.4.24. With respect to those views of the proposed development from Viewpoints 12 & 13 (identified as corresponding to Viewpoint Nos. 66 & 67 as listed for protection in the Development Plan) and the accompanying photomontages, I would advise the Board that this matter was previously given consideration in the assessment of ABP Ref. No. PL17.248146 with concerns being raised that the development was monolithic in appearance, an effect exacerbated by the blue/black colouring of the panels and the site location on elevated lands immediately adjacent to Duleek village. The reporting inspector in that instance concluded that the proposed development would serve to undermine the urban/rural separation; would be detrimental to both the rural character of the Duleek hinterland and the urban form and character of Duleek itself: and would be contrary to an objective of the Development Plan which sought to preserve protected views from development that would interfere with the character and visual amenity of the area. Given that the proposed development is directly comparable to that previously refused and as the views in question remain listed for protection (pursuant to HER OBJ 56 of the Plan), I am not convinced that the proposal as submitted overcomes the aforementioned concerns which informed the decision to refuse permission for ABP Ref. No. PL17.248146.
- 7.4.25. At this point, it is of relevance to note that the broader landscape considerations applicable to the subject site remain unchanged from those which informed the earlier determination of ABP Ref. No. PL17.248146, and that the overall design and layout of the proposed development (including the level of mitigation to be provided by way of additional landscaping / planting) remains comparable to that previously

refused on site. The only contextual changes of note since the refusal of ABP Ref. No. PL17.248146 are the adoption of the Meath County Development Plan, 2021-2027 (which provides for the dezoning of those lands previously zoned as '*G1: To provide for necessary community, social and educational facilities*' that presently accommodate the Duleek Care Centre / nursing home and the consequent exclusion of same from within the Duleek settlement boundary) and the construction of the Duleek Care Centre / nursing home on lands to the southeast.

- 7.4.26. In light of the foregoing, I would draw the Board's attention to the assessment of ABP Ref. No. PL17.248146 wherein it was noted that the development site was located immediately west of the development boundary of Duleek and would be adjacent to, and visible from, undeveloped zoned lands as well as being proximate to a number of residential developments. It was further considered that the development site occupied a position at the urban / rural interface and that the proposed development of a solar array on said lands would serve to undermine the urban / rural contrast by adding a large-scale industrial type use immediately adjacent to Duleek. The reporting inspector therefore concluded that said development would serve as a *de facto* expansion of the town boundary which would be detrimental to the preservation of rural character and inconsistent with a stated objective of the then Development Plan that sought to ensure small towns such as Duleek would grow in a manner which is balanced, self-sustaining and supportive of a compact urban form and the integration of land use and transport.
- 7.4.27. In its assessment of the subject proposal, the Planning Authority has determined that the exclusion of those lands to the south / southeast of the application site from the Duleek development boundary, along with the development of a nursing home on part of said lands, serves to overcome the rationale for the previous refusal of a solar array on the development site. While I would concede the change in context as previously outlined, I am not in agreement with the assessment by the Council. Notwithstanding the relocation of the development boundary for Duleek, in my opinion, it remains clear that the application site continues to occupy a position at the urban / rural interface regardless of the location of the settlement boundary. Indeed, the construction of the Duleek Care Home (which has occurred since the assessment of ABP Ref. No. PL17.248146) could be construed as a *de facto* expansion of the town boundary thereby lending further credence to the need to

preserve the rural character of the subject lands. Cognisance should also be given to 'Recommendation 3' for the Central Lowlands LCA (as set out in the Landscape Character Assessment) which aims to '*ensure that the existing strong interfaces between urban and rural areas are maintained*'.

7.4.28. Accordingly, having regard to the foregoing, and given the site location on more elevated unzoned lands proximate to both the built-up area and the development boundary of Duleek, I am of the opinion that the proposed development would be detrimental to the preservation of rural character and the visual amenities of Duleek and does not overcome the rationale for the refusal of ABP Ref. No. PL17.248146.

### 7.5. Traffic Considerations:

### 7.5.1. The Proposed Access Arrangements:

In response to the previous decision of the Board to refuse permission under PA Ref. No. LB160898 / ABP Ref. No. PL17.248146 for the development of a solar array on the subject site, the present proposal includes for an amended access arrangement off Downestown Road (Local Road No. L5609) via a new site entrance at a location on the approach to Duleek and to the south of the site proper. In this regard, I would advise the Board that the solar array previously refused permission on site was to have been accessed from a point further west along a poorly aligned section of the same roadway (where the sightlines were restricted in both directions) whereas the subject access arrangement will open onto a comparatively straight section of carriageway situated approximately 85m outside of the 60kph speed limit serving the town of Duleek.

7.5.2. Having conducted a site inspection, and following a review of the available information, I am satisfied that the positioning of the site access as currently proposed represents a considerable improvement in terms of traffic safety over that previously refused permission under ABP Ref. No. PL17.248146. The overall horizontal and vertical alignment of the roadway at this location affords much improved forward visibility and stopping sight distances when compared to ABP Ref. No. PL17.248146 while the carriageway itself is in a generally good condition with sufficient width (c. 5m) to accommodate two-way passing traffic and grassed margins on both sides (although there are no defined carriageway markings, pedestrian facilities or public lighting).

- At this point, I would refer the Board to the Construction Traffic Management Plan 7.5.3. (CTMP) (Technical Appendix 5) submitted with the application which details that the new access point has been designed in accordance with 'Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions) DN-GEO-03060, May 2023' as published by Transport Infrastructure Ireland. It proceeds to state that while the Meath County Development Plan does not include any specific visibility splay requirements, it has been assumed that vehicles along this stretch of road will be travelling at 80kph (as per the speed limit) and thus the applicable Standard Stopping Distance is 160m as measured from a point set back 3m from the near edge of the carriageway. The CTMP then refers to Drg. No. NEO00892 0231 A: Figure 5.3: 'Visibility Splay' which details that 41.2m of hedgerow and 2 No. trees will be removed to facilitate the new entrance point while the roadside boundary ditch (which is in the same ownership as the application site) will be trimmed back for distances of 38.3m and 21.9m respectively to the east and west of the proposed entrance to achieve unobstructed sightlines of 160m in both directions without the need for further remedial works.
- In support of the foregoing, the application has been accompanied by a 'Speed 7.5.4. Survey Report' (Appendix 11) which details the prevailing traffic conditions at the site entrance (including the maximum number of vehicles recorded during peak hours); the speed at which vehicles are travelling along Downestown Road in the vicinity of the site entrance; and the 85<sup>th</sup> percentile speed along Downestown Road. It has been established from the results of the 7-day traffic survey that the average speed of traffic at this location is 55.96kph westbound and 59.68kph eastbound. In addition, it is of note that both the maximum and the minimum speeds recorded occurred eastbound along Downestown Road at 110.78kph and 2.8kph respectively. On the basis of the data collected, the 85<sup>th</sup> percentile speed (i.e. the speed at or below which 85% of the motorists drive on a given road unaffected by slow traffic or weather) has been calculated and accounts for 64.34kph westbound and 75.39kph eastbound. It has therefore been submitted that the speed data survey presented supports the contention that the 85<sup>th</sup> percentile of traffic travelling along Downestown Road in the vicinity of the proposed site entrance is below the posted speed limit of 80kph. By extension, as the majority of passing traffic is travelling below the speed limit and as the recorded traffic volumes are low, it has been suggested that a

reduced visibility splay (from normal TII requirements) at the site entrance could be accommodated in this instance.

- 7.5.5. The proposed access arrangement will be onto a local roadway at a point where a posted speed limit of 80kph applies and, therefore, I have had regard to the relevant provisions of '*DN-GEO-03031: Rural Road Link Design, May 2023*' and '*DN-GEO-03060 Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions), May 2023*' as issued by Transport Infrastructure Ireland. For a local road with a speed limit of 80kph the maximum design speed is 85kph and thus the desirable minimum stopping sight distance is 160m (without the need for any relaxation). In turn, the visibility splay from the proposed access onto the public road should be 160m in both directions from a point set back 3m from the near edge of the carriageway.
- 7.5.6. In addition to the foregoing, it is of relevance to note that the application has been accompanied by a Stage 1/2 Road Safety Audit (Appendix 11), the recommendations of which have been incorporated into the final design of the proposed development as submitted.
- 7.5.7. Accordingly, the access arrangement as proposed complies with the relevant standards and does not rely on any reduction in the applicable visibility splay derived from the results of the Speed Survey Report. In this regard, it is of further note that the Transportation Dept. of the Local Authority has also concluded that the sightlines as shown are acceptable at this location.

### 7.5.8. <u>Traffic Volumes and Road Capacity:</u>

Concerns have been raised that the additional traffic volumes consequent on the proposed development, when taken in combination with those attributable to other existing, permitted and planned developments in the locality, will serve to endanger public safety along Downestown Road by reason of traffic hazard. In this regard, specific reference has been made to the traffic volumes associated with the recently opened Duleek Care Centre / Nursing Home (on neighbouring lands to the southeast) and the development approved under PA Ref. No. 22/663 which provides for the restoration of lands for agricultural gain (through the importation of up to 55,000 No. tonnes of fill material via Downestown Road) at a location approximately 1.6km west of the subject site (*N.B.* For the purposes of completeness, the Board is

advised that the infilling approved under PA Ref. No. 22/663 is to be phased over a five-year period and that Condition No. 3 of the grant of permission limits vehicle activity to 10 No. truck movements (5 No. loads) per day).

- 7.5.9. The Construction Traffic Management Plan (CTMP) submitted with the application estimates the traffic volumes expected to be generated during the construction and operational phases of the development. Within this document it is anticipated that the construction works will occur over a three (Para. 5.59) or four (Para. 5.61) month period during which a combination of HGVs (for component and material deliveries) and cars / vans (for construction workers / staff) will visit the site, however, I note that both these timeframes differ from Para. 45 of the applicant's Outline Construction phase of the proposed development is expected to extend up to 12 No. months. While these inconsistencies are regrettable, I would suggest that they are not fundamentally problematic as regards the assessment of the proposal given the breakdown of traffic volumes provided elsewhere in the documentation, past experience in the determination of similar development, and the comparatively short construction timescale involved.
- 7.5.10. An estimation of HGV movements is set out in Table 5-2 of the CTMP wherein it is detailed that approximately 290 No. vehicles will visit the site over the construction period giving rise to 580 No. movements. These figures are considered to represent a best estimation of the likely HGV volumes by reference to the construction of comparably sized solar farms, however, it has been emphasised that they are for guidance purposes only and that the overall number of site visits may differ due to factors such as local conditions, weather restrictions and contractor working practices etc. HGV movements are expected to be more intensive in the first few weeks of construction with a daily maximum of c. 15 No. HGV deliveries (i.e. 30 No. HGV movements) while other car / van movements are likely to be constant throughout.
- 7.5.11. It is regrettable that the submitted documentation does not include an overall figure for the total volume of construction traffic inclusive of all vehicle types e.g. LGVs, vans & cars etc. However, I would draw the Board's attention to Para. 5.74 of the CTMP which forecasts that there will be approximately 25 No. staff on site at any one time during the construction phase (although this will vary subject to the overall

programme of works). It is further anticipated that there will be a degree of vehicle sharing by staff and, therefore, less than 25 No. staff vehicles (with an estimated maximum of 10 - 15 No. vehicles per day during peak construction periods) are expected to arrive on site each day. This would broadly correspond with Para 8.48 of the Outline Construction Environmental Management Plan which refers to a maximum of 25 No. staff on site at any one time during the construction (and decommissioning) periods, subject to the programme of works. Accordingly, it would seem reasonable to surmise that up to 25 No. staff vehicles (LGVs, private cars etc.) could potentially visit the site daily giving rise to an additional of 50 No. traffic movements. It can therefore be estimated that the maximum combined total of HGVs and other traffic visiting the site daily will be approximately 40 No. vehicles generating up to 80 No. movements to / from the site per day with no account having been taken of any car-pooling / vehicle sharing.

- 7.5.12. Having regard to the submitted information, the nature and scale of the proposed development, the comparatively short timescale for construction and the works involved, my past experience of similar projects, and noting that construction of the nearby Garballagh Solar Farm (as permitted under ABP Ref. No. PL17.248146) would not appear to have given rise to any significant traffic impact (noting the absence of any commentary on same by either the Planning Authority or third parties), I am satisfied that the anticipated volumes of construction traffic appear to be reasonable and that the surrounding road network, including Downestown Road, has sufficient capacity to accommodate the relatively modest and temporary increase in traffic levels during the construction phase.
- 7.5.13. With respect to the potential for cumulative traffic impacts should the proposed development be constructed in tandem with the infilling works approved under PA Ref. No. 22/663 (given that both projects will utilise a haul route along the eastern part of Local Road No. L5609 / Downestown Road), I would reiterate that a limitation of 10 No. truck movements (5 No. loads) per day has been placed on that grant of permission by way of condition. In this regard, I am inclined to suggest that the comparatively low traffic volumes associated with the aforementioned infilling works, when taken in combination with those attributable to the construction of the proposed development, will not give rise to any significant cumulative traffic impact. Similarly, I am satisfied that the temporary increase in traffic consequent on the proposed

construction works would not warrant a refusal of permission when taken in conjunction with the low levels of traffic likely associated with the normal operation of the neighbouring Duleek Care Centre / nursing home.

- 7.5.14. By way of further consideration, in the event the proposed development was to be constructed in tandem with the solar farms approved under PA Ref. No. LB160898 / ABP Ref. No. PL17.248146 (Garballagh) and PA Ref. No. LB/200487 (Gaskinstown), the CTMP has submitted that the subject proposal will not significantly increase the overall volume of construction traffic involved (presumably in reference to its smaller scale). In addition, it has been suggested that should such circumstances arise the construction period would likely be extended with the result that daily traffic figures would remain similar to the projected 15 No. HGVs (although this could be uplifted to c. 20 No. vehicles). In this regard, while I would acknowledge the contents of the CTMP (dated November, 2021) as received by the Planning Authority on 22<sup>nd</sup> July, 2022, the Garballagh Solar Farm permitted under PA Ref. No. LB160898 / ABP Ref. No. PL17.248146 has since been completed and commissioned thereby negating any concerns as regards possible cumulative construction impacts with that development. Furthermore, the solar energy development approved under PA Ref. No. LB/200487 at Gaskinstown (and Garballagh) will be accessed directly from the R150 Regional Road and thus any impact on traffic volumes along Downestown Road is likely to be negligible.
- 7.5.15. The CTMP also sets out various mitigation / management measures that are to be put in place for the duration of the works in order to minimise the impact of construction traffic, including the implementation of a delivery booking system to ensure that site deliveries are spread out across the week or any given day to minimise potential disruption; the scheduling of deliveries to avoid peak times; limitations on working hours and HGV scheduling; adherence to an identified haul route; temporary traffic management, signage and road safety measures; and the use of banksmen to assist with the manoeuvring of delivery vehicles to / from the site.
- 7.5.16. In relation to the future operation and maintenance of the proposed development, I would anticipate that the operational traffic levels arising will be quite low and unlikely to give rise to any significant impact on traffic safety. In this regard, Para.
  5.80 of the CMTP confirms that the operational phase of the development is

expected to have a negligible trip generation potential with approximately c. 5 - 10 LGVs visiting the site every year for scheduled maintenance checks and additional visits as required to attend to remedial issues when necessary. Although no mention has been made of the traffic generation attributable to any ongoing agricultural use of the lands (e.g. sheep grazing), cognisance should be taken of the existing and historical use of the site area as farmland.

7.5.17. On the basis of the foregoing, it is inevitable that the construction and operation of the proposed development will give rise to an increase in traffic volumes on the surrounding road network, including Downestown Road, however, it is my opinion that the surrounding road network has sufficient capacity to accommodate the traffic volumes consequent on the proposed development and that the subject proposal will not pose a risk to traffic / public safety.

#### 7.6. Other Issues:

#### 7.6.1. Glint and Glare Assessment:

In assessing the potential for glint and glare attributable to the proposed development and any associated impact on residential amenity or road safety etc., it should be noted in the first instance that the subject proposal does not incorporate tracking panels and that the arrays are to be mounted in a fixed position along an east-west alignment and orientated to face due south. Furthermore, solar photovoltaic panels, given the very nature of their design, need to absorb (as opposed to reflect) solar radiation and are therefore finished in an anti-reflective coating so as to absorb as much light as possible. In this regard, Paragraph 7.20 of the 'Glint and Glare Assessment' (GGA) submitted with the application details that several studies have shown the levels of reflectance from photovoltaic panels to be similar to that of water and much lower than standard glass, steel, snow and white concrete by comparison. It states that similar levels of reflectance can be found in rural environments from shed roofs and the lines of plastic mulch used in crop production. In support of the foregoing, Appendix '7F' of the GAA includes a 'Solar Module Glare and Reflectance Technical Memo' prepared in respect of 'SunPower' PV modules wherein it is detailed that the reflected energy percentage of 'Solar Glass' is far below that of standard glass and more on a par with smooth water. In addition, the material reflectivity of solar glass is stated to be noticeably less than

standard glass, plexiglass, plastic, steel and snow. It is further stated that the solar glass in question (SunPower solar modules) uses "*high-transmission, low iron glass*" which absorbs more light, producing smaller amounts of glare and reflectance than normal glass, while its incorporation of a '*stippling*' effect (whereby the surface of the glass is textured with small types of indentations) allows for more light energy to be channelled / transmitted through the glass while diffusing the reflected light energy.

- 7.6.2. The 'Glint and Glare Assessment' prepared by Neo Environmental (please refer to Technical Appendix 7 of the submitted particulars) aims to assess the 'worst-case' scenario potential impacts of the proposed development on ground-based receptors such as roads, rail, and residential properties as well as aviation assets utilising 'bare earth' simulations which do not take intervening vegetation or other obstacles into account. For the assessment of ground-based receptors a 500m radius study area was deemed appropriate as this was thought to contain a good spread of residential and road receptors in most directions from the proposed development. In this regard, it should be noted that the greater the distance between a receptor and a solar farm, the less chance it has of being affected by glint or glare due to the scattering of the reflected beam and atmospheric attenuation, in addition to the likely obstruction from ground sources such as any intervening vegetation or buildings. In instances where there are a number of residential units in close proximity, a representative dwelling or dwellings has / have been chosen for assessment as the impacts will not vary to any significant degree between the individual properties. With respect to aviation assets, it has been submitted that glint is only considered to be an issue for aviation safety where the solar farm lies in close proximity to runways, particularly when an aircraft is descending to land, and that en-route activities are not of concern as flights will most likely be at a higher altitude than the solar reflection. The assessment subsequently details the methodology employed in determining the degree of reflection theoretically possible at identified receptors (on the assumption of 'bare ground') and the results of geometric reflection calculations undertaken as part of the prediction modelling (*N.B.* Reflection is considered to include both 'glint' and 'glare').
- 7.6.3. A total of 25 No. residential receptors, 14 No. road receptors, and 8 No. rail receptors have been identified within a 500m radius of the proposal development. However, not all of these have the potential to be impacted by solar reflection given the need to account for 'non-reflection zones' as set out in Paras. 7.72 to 7.74 of the

GAA and detailed in Figure Nos. 7.1, 7.2 & 7.3 of the assessment. In addition, there are 4 No. aerodromes within 30km of the proposed development (including Dublin Airport), although these are not large enough or close enough (for their size) to warrant detailed assessments by reference to the separation distances involved and the safeguarding buffer zones as outlined in Para. 7.61 of the GGA (generally stated to be within 20km for large international aerodromes, 10km for military aerodromes, and 5km for small aerodromes).

- 7.6.4. There are 5 No. residential receptors (Nos. 21-25) within the predicted no-reflection zones as identified in Table 7-5 and Figure 7.1 of the GAA. Similarly, there are 5 No. road receptors (Nos. 10-14) within the no-reflection zones as per Table 7-6 and Figure 7.2. In addition, 3 No. rail receptors (Nos. 6-8) fall within the no-reflection zones (please refer to Table 7-7 and Figure 7.3). Accordingly, these receptors do not warrant further investigation as part of the glint and glare assessment.
- 7.6.5. Having identified those residential, road and rail receptors with the potential to be impacted by the proposed development, geometric analysis comparing the azimuth and horizontal angle of the receptors from the proposed development and the solar reflection was conducted. Although this modelling has assumed a 'bare ground' scenario with no account having been taken of any obstruction offered by intervening vegetation or buildings, cognisance has been taken of such in the analysis set out later in the GAA.
- 7.6.6. With respect to those (20 No.) residential receptors which have the potential to experience solar reflection (for the purposes of completeness), the results of the detailed analysis of the glint and glare impacts set out in Appendix 7B are summarised in Table 7-5 with the magnitude of the impacts at each receptor being categorised as 'None', 'Low', 'Medium' or 'High'. Although no impacts have been predicted to occur at 2 No. of the receptors, the modelling has recorded a theoretical 'High' impact at 11 No. receptors, a 'Medium' impact at 2 No. receptors and a 'Low' impact at 5 No. receptors. Paras. 7.92 7.114 of the GAA proceed to assess the specific circumstances of each individual receptor 'on the ground' by taking account of factors such as topography and the presence of intervening vegetation & buildings, and whether these would be sufficient to screen all views of the proposed development where glint and glare could be possible. The conclusion drawn from this analysis is that the 'actual visibility' of the proposal when developed (and in the

absence of any additional mitigation) will be significantly less than the magnitude of the modelled impact. In effect, it has been submitted that the glint and glare impacts at 13 No. of the residential receptors will reduce to 'None' once account is taken of the 'on the ground' scenario, with the exception of Receptor Nos. 5 & 8 - 13 which are all predicted to experience a 'Low' impact.

- 7.6.7. In relation to the 9 No. road receptors with the potential to experience solar reflection, the results of the modelling set out in Appendix 7C are summarised in Table 7-6 with a theoretical 'High' impact predicted at 7 No. receptors and no impact at the remaining 2 No. receptors. Paras. 7.92 7.114 of the GAA subsequently detail that the 'actual visibility' of the proposal (in the absence of mitigation) when taking account of 'on the ground' factors will be such that all of the receptors, with the exception of Receptor No. 6 which will experience a 'Low' impact, will have views of the proposed development blocked by intervening vegetation or buildings.
- 7.6.8. With regard to the 5 No. rail receptors, while the modelling set out in Appendix 7D as summarised in Table 7-7 has predicted that all these receptors will experience a 'High' theoretical impact in the 'bare-earth' scenario, the analysis subsequently provided in Paras. 7.125 7.134 has concluded that when account is taken of the level of screening afforded by existing vegetation along the southern edge of the railway and the western boundary of the proposed development (i.e. the 'actual visibility' scenario) the glint and glare impacts at each of the rail receptors will reduce to 'None'.
- 7.6.9. Having established that only a 'Low' magnitude of impact (i.e. a solar reflection impact of between 0 and 20 hours per year or between 0 minutes and 20 minutes per day) could potentially be experienced at Residential Receptors Nos. 5 & 8 13 and Road Receptor No. 6 (with no impacts predicted to occur at the remaining residential, road, rail or aviation receptors), Para 7.135 of the GAA has concluded there is no need for mitigation, although some existing hedgerows will be supplemented and additional planting undertaken as part of the landscaping and ecological management plans for the development.
- 7.6.10. At this point, I would advise the Board of the following limitations of glare prediction modelling:

- The model does not consider obstacles between the receptors and the proposed solar farm that may obstruct observed glare (e.g. buildings, trees, hills etc.)
- The model does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact on actual glare results.
- Due to variations in atmospheric conditions, temperature, pressure and conditions, observed values may vary slightly from calculated positions.
- The model assumes clear skies at all times and does not account for meteorological effects such as cloud cover, fog, or any other weather event which may screen the sun.
- 7.6.11. Further caveats as regards the results of the modelling are set out in the 'Assumptions' included at the end of Appendices 7B, 7C & 7D.
- 7.6.12. It should also be emphasised that solar reflection effects will only be experienced in specific circumstances e.g. an observer within a dwelling would have to be positioned at a window directly facing the solar panels on a sunny day at a time when a reflection is geometrically possible in order to experience any effect. With regard to road users, an observer would have to look away from the direction of travel in most instances to view a solar reflection whilst any such effects would be of a fleeting nature from a moving vehicle. In terms of the intensity of the reflections, I would reiterate that these will be comparable to those emanating from water whilst reflections from surfaces in an outdoor environment are regularly encountered by road users.
- 7.6.13. On balance, and in the absence of any evidence to the contrary, I am amenable to accepting the findings of the Glint and Glare Assessment and that the proposed development will not have a significant impact on the residential amenity of nearby properties or the safety of road users. Furthermore, I would accept that the effects glint and glare will only occur during suitable weather conditions whilst any such impacts with be of limited duration and will be reliant on specific circumstances such as motorists looking towards the development and away from their direction of travel. In the event the Board is not satisfied in this regard, it may wish to consider seeking further information or the imposition of conditions omitting elements of the proposed

solar arrays or perhaps requiring the development to be revised pursuant to a further investigation of any glint and glare impacts.

7.6.14. By way of further comment, a similar conclusion was reached in the assessment of the development previously refused on site under ABP Ref. No. PL17.248146 with the reporting inspector being satisfied that the separation distances involved, allied with the existing intervening mature hedgerows and the additional planting and hedgerow reinforcement proposed, would be sufficient to ensure that glint and / or glare would not likely to result in a significant adverse impact on either residential receptors or road users.

#### 7.6.15. Flooding Implications:

From a review of the available information, consideration needs to be given to the potential flooding implications of the proposed development due to the site location relative to the Drumman Stream to the immediate south / southeast as well as the proximity of lands that are known to be at risk of flooding further east beyond Longford Road. In this respect, I would advise the Board that while an examination of the most up-to-date flood mapping prepared by the Office of Public Works as part of its CFRAM programme (which is available on www.floodinfo.ie and has informed the development of Flood Risk Management Plans for specific areas) does not show any flood events within or bounding the development site, the applicant's site specific 'Flood Risk and Drainage Impact Assessment' (Technical Appendix 4) details that an area of indicative fluvial flooding was previously recorded on site as part of the OPW's Preliminary Flood Risk Assessment, 2011 (PFRA) which in turn informed the flood mapping included in the Strategic Flood Risk Assessment (SFRA) appended to the Meath County Development Plan, 2021-2027. Indeed, both the PFRA and the SFRA present a small area within the south-eastern corner of the application site as being at risk of fluvial flooding from the Drumman Stream and thus the affected lands fall within Flood Zones 'A' and 'B' (i.e. within the 1.0% & 0.1% AEP flood extents respectively as defined by the 'Planning System and Flood Risk Management, Guidelines for Planning Authorities'.

7.6.16. The site-specific FRA & DIA (SSFRA) notes that the Drumman Stream has only a small catchment area of c. 4.9km<sup>2</sup> at the point where the PFRA and SFRA mapping show potential fluvial flooding. It proceeds to state that detailed hydraulic modelling

undertaken as part of the CFRAM study for those lands to the east of Longford Road (c. 500m east of the application site) established that the 1 in 1,000 year flood return level appears to closely follow that of the PFRA and, therefore, it is likely that any modelling of flood levels alongside the application site would also be similar to the PFRA flood mapping with the only major concern being a possible blockage of the culvert under Longford Road. In this regard, it has been emphasised that as there is a height difference of 2m between ground level at the culvert and at the application site, the likelihood is that flood waters would overtop the road and flow eastwards rather than backing up towards the development site with the result that the PFRA and SFRA mapping show the 'worst-case' scenario for possible flooding from the Drumman Stream.

- 7.6.17. Having established the extent of the fluvial floodplains for the various return periods, all essential infrastructure, including the substations, inverters & transformer stations, and the battery storage modules, which is classified as '*highly vulnerable development*' by reference to Table 3.1 of the '*Planning System and Flood Risk Management, Guidelines for Planning Authorities*', is to be located in Flood Zone 'C' (i.e. on lands where the probability of flooding is low at less than 0.1% AEP or 1 in 1,000 for river flooding) with only '*water-compatible development*' such as the access tracks, fencing and CCTV within Flood Zones 'A' and 'B'. Accordingly, given that the siting of the various development components can be held to be '*appropriate*' as per the matrix of vulnerability versus flood zone set out in Table 3.2 of the Guidelines, it has been submitted that the proposal is acceptable from a flood risk management perspective without recourse to the '*Justification Test*'.
- 7.6.18. (The SSFRA also notes that the PFRA has indicated that there is no risk of pluvial flooding at the site and that the risk of flooding from groundwater for that part of the application site outside the predicted floodplain is likely to be low. Furthermore, given the inland location and distance from tidal influences, there is no risk of coastal flooding at the site).
- 7.6.19. Following consideration of the contents of the SSFRA as regards the probable extent of fluvial flooding on site and the proposal to locate all essential infrastructure accordingly on lands where the probability of flooding was found to be lowest (i.e. Flood Zone 'C'), the Planning Authority was not satisfied that the methodology employed was sufficiently robust to support the conclusions drawn. Firstly, while the

hydraulic modelling undertaken as part of the CFRAM study to the east of Longford Road (c. 500m east of the site) was found to show the 0.1% AEP flood extent to be comparable to that indicated by the Preliminary Flood Risk Assessment, it was not considered appropriate to rely on such an approach with a view to extrapolating similar findings with respect to the subject lands. Secondly, it was not considered appropriate in any event to utilise CFRAM mapping for the purposes of site-specific flood risk assessment. Furthermore, the analysis had discounted the culvert at Longford Road despite the evidence of historic flooding at this location and thus any site-specific study should include an assessment of a minimum 50% blockage scenario associated with the culvert. In effect, the Planning Authority was not satisfied that the SSFRA had undertaken sufficient investigative work to accurately establish the likely extent of fluvial flooding on site. By extension, it could not be determined with any reasonable degree of accuracy that all essential infrastructure would be excluded from within Flood Zones A & B.

- 7.6.20. A revised site-specific 'Flood Risk & Drainage Impact Assessment' (SSFRA) was subsequently submitted in response to a request for further information in an effort to address the concerns of the Planning Authority. This includes a detailed hydrological analysis of the Drumman Stream in the vicinity of the site which was carried out in order to estimate peak design flows with a view to informing a hydraulic model of the watercourse and to more accurately establish the relevant flood zones on site.
- 7.6.21. By way of explanation, the updated SSFRA states that although the standard flood estimation method employed in Ireland is the Office of Public Works' Flood Studies Update 3 Variable (OPW FSU 3V), this is unsuited for use when assessing catchments of less than 25km<sup>2</sup> in area. Therefore, given that the total catchment area for the Drumman Stream is c. 4.93km<sup>2</sup>, the Institute of Hydrology Small Catchment Method (IH124) has been adopted for flow estimations of the watercourse. For the purposes of comparison, the alternative FSH 4.2a regression method (FSU WP4.2, 2012), which is an equation based on catchment descriptors that have been developed specifically for use in smaller catchments, has also been used in the assessment. The final peak flows for the Drumman watercourse catchment for the 1 in 100-year and 1 in 1,000-year events utilising the IH124 and FSU 4.2a methodologies are set out in Table 4-5 of the SSFRA, however, the more conservative flow estimate derived from the FSU 4.2a method has been used to

inform the site-specific hydraulic modelling. The results of this modelling have established the maximum predicted water levels at identified reference points during the 1 in 100-year and 1 in 1,000-year events with flooding from the Drumman Stream predicted to occur in the southeastern and southwestern corners of the development site (please refer to Figures 4.3 – 4.6 of Appendix 4D which show the 100-year and 1,000-year flood extents within the site). A modelling sensitivity analysis was subsequently undertaken to illustrate the effect of changing certain model parameters (as per Table 4-7 of the SSFRA) on its outputs i.e. flood levels, and the results of this analysis are set out in Table 4-9 with the minor changes predicted in flood levels not considered to give rise to any significant change in the flooding mechanism or the resulting flood extent.

- Having considered the results of the hydraulic modelling, which serves to establish 7.6.22. the 1.0% & 0.1% AEP flood extents to a greater degree of accuracy thereby allowing for identification of Flood Zones A & B, I would refer the Board to Figure 1.1 of the updated SSFRA which shows that part of the solar array as initially proposed would have encroached into those lands at risk of flooding. In response, an amended site layout has been submitted which provides for the omission of the relevant solar panels (shown in red on Figure 1.1) from the development. It is of further note that the updated SSFRA confirms that all essential infrastructure associated with the proposed development will be located outside of Flood Zones A & B thereby negating any requirement for a 'Justification Test'. Moreover, those elements of the proposed development which could be classified as 'highly vulnerable' (i.e. the solar arrays, substations, inverters & transformer stations, and the battery storage modules) are to be located in Flood Zone 'C' with only 'water-compatible development' such as the access tracks, fencing and CCTV proposed in Flood Zones 'A' and 'B'.
- 7.6.23. In addition to the foregoing, the response to the request for further information has also confirmed the following:
  - Access tracks within Flood Zones A & B will be constructed at grade with no loss of floodplain storage;
  - All fencing within Flood Zones A & B will be limited to deer fencing with no such fencing that crosses the watercourse extending into it; and

- Any gates / crossings of the watercourse will keep cattle out while not impacting the flow of water in the 1% AEP and 0.1% AEP flood events.
- 7.6.24. The Drainage Impact Assessment (DIA) which serves to supplement SSFRA recognises that surface water arising from a developed area should, as far as practicable, be managed to mimic the surface water flows from the site prior to its development, while also reducing the flood risk both to the site itself and elsewhere. In this regard, the DIA details how rainwater falling onto the solar panels will be drained via infiltration to ground at the same rate as the existing greenfield site to the effect that the array is not considered to comprise an impermeable area. Similarly, the proposed access tracks will be constructed from a permeable material to allow for the percolation of rainwater to ground at the same rate as present.
- 7.6.25. The only impermeable surfaces associated with the proposed development will arise from the construction of the substation and the inverter / transformer stations along with their underlying foundation pads, however, due to the small size of these areas (totalling 684.9m<sup>2</sup>), it is anticipated that the low levels of runoff expected to be generated can be accommodated by way of infiltration to ground with any associated impacts likely to be negligible (in the event surface water runoff were to accumulate at any of these locations, it has been suggested that a soakaway could be constructed to allow for percolation to ground).
- 7.6.26. The DIA proceeds to calculate the pre- and post- development runoff rates from the site to the effect that the runoff rate for the 1 in 100-year, 360-minute storm event, inclusive of a 20% climate change allowance, with the development in place, would be 18m<sup>3</sup> if left unchanged. In response, the surface water drainage strategy for the proposed development aims to ensure that there will be no increase in downstream flood risk by managing the rate at which runoff is discharged to the local water environment (i.e. the Drumman Stream) through the implementation of a Sustainable Drainage System (SuDS). In this regard, it has been calculated that the indicative storm water volumes arising from the proposed development (in reference to the introduction of the impermeable surfaces) will require a maximum storage requirement of 51m<sup>3</sup> to attenuate a 1 in 100-year storm event (with a 20% allowance for climate change). This attenuation is to be provided through the construction of a swale (50m<sup>3</sup>) and a soakaway (5.5m<sup>3</sup>) with a combined storage volume of 55.5m<sup>3</sup> (which is greater than the volume of additional runoff generated as a result of

impermeable surfaces), the design of which will limit the rate of surface water discharge from the proposed development to that of the pre-development site. Such an arrangement not only adequately mitigates the increase in flow rates consequent on the proposed development but would also seem to represent an improvement over the current conditions. The SuDS features are to be implemented during the construction phase of the development and subsequently maintained throughout its lifespan.

7.6.27. Therefore, having considered the available information, I am generally satisfied that the proposed development complies with the relevant provisions of the Development Plan and the 'Planning System and Flood Risk Management, Guidelines for Planning Authorities' and will not negatively impact on the flood regime of the surrounding area through the displacement of floodwaters. However, I would advise the Board that the 'Landscape Strategy Plan' includes a proposal to construct a landscaped berm within the south-eastern corner of the site (with a view to mitigating the overall visual impact of the proposed development) on lands that have been shown to be at risk of flooding. This element of the development has not been considered in the Flood Risk Assessment and could potentially result in the loss of floodplain storage and the associated displacement of floodwaters. Accordingly, in the absence of any further information as regards the potential impact, if any, of this aspect of the proposal on the flood regime of the area, I would recommend that, should the Board be minded to grant permission, the berm in guestion should be omitted by way of condition

## 7.7. Appropriate Assessment:

### 7.7.1. Compliance with Article 6(3) of the Habitats Directive:

The requirements of Article 6(3) as related to screening the need for appropriate assessment of a project under Part XAB, Section 177U of the Planning and Development Act, 2000 (as amended) are considered fully in this section.

### 7.7.2. Background on the Application:

The subject application has been accompanied by a screening exercise for Appropriate Assessment which is contained in '*Volume 1: Appropriate Assessment Screening, Downestown Solar Farm*' as prepared by Neo Environmental and dated 29<sup>th</sup> October, 2021. The applicant's Stage 1 AA Screening Report was prepared in line with current best practice guidance, provides a description of the proposed development, and has been undertaken to assess whether there is any connectivity with any Natura 2000 site within a 15km zone of influence of the development and whether the proposed development, either alone or in combination with other plans or projects, is likely to have any significant effects upon any Natura 2000 sites found to have connectivity with the proposed development. It has been informed in part by an accompanying Ecological Impact Assessment (Technical Appendix 2) and Outline Construction Environmental Management Plan.

- 7.7.3. The screening report has identified 5 No. Natura 2000 sites within 15km of the site, however, the only connectivity pathway for potential impacts was found to be a possible hydrological connection between the application site and the River Nanny Estuary and Shore Special Protection Area via the Drumman Stream and the River Nanny. Having scoped out the remaining Natura 2000 sites within the study area, the report proceeds to focus on the potential for the release of contaminants / pollutants to the aquatic environment and the SPA during the construction and operational phases of the development. It subsequently references certain integral measures (including the drainage strategy) that form an inherent part of the design of the proposed development and the implementation of best practice construction and pollution prevention measures.
- 7.7.4. The AA Screening Report concludes as follows:

'It has been assessed that due to the nature and design of the proposed development, the distance from the Natura 2000 sites and the dilution factor involved for any residual waterborne pollution, no significant effects will occur upon the qualifying species within the River Nanny Estuary and Shore SPA. In accordance with the precautionary principle this conclusion has been reached in the absence of any mitigation measures to avoid or reduce any significant effect, which may be applied during the construction or operational phases of development.

It can therefore be concluded that the proposed development will not lead to a significant adverse effect upon any of the Natura 2000 sites within the study area and that the next stage of the Appropriate Assessments is not required'.

7.7.5. Having reviewed the documentation submitted with the application, and the submissions received, I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

### 7.7.6. Screening for Appropriate Assessment - Test of likely significant effects:

The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on a European site(s).

The proposed development is examined in relation to any possible interaction with European sites, i.e. designated Special Conservation Areas (SAC) and Special Protection Areas (SPA), to assess whether it may give rise to significant effects on any European Site.

#### 7.7.7. Brief description of the development:

The applicant provides a description of the project in Section 1.8 of the AA screening report and elsewhere, with particular reference to Section 4 of the Planning & Environmental Report. In summary, the proposed development consists of the construction of a solar PV development within a total site area of circa 18.92 hectares which is intended to operate as an extension / expansion of the solar farm already constructed on nearby lands pursuant to PA Ref. No. LB160898 / ABP Ref. No. PL17.248146. It includes for the erection of ground-mounted solar photovoltaic panels set in metal framework racks and assembled in south-facing rows east to west in addition to a 38kV substation building, up to 10 No. inverter and transformer stations, 14 No. battery storage modules, associated cabling and ducting, access / maintenance tracks, security fencing, and CCTV cameras. An integral part of the design of the proposed development from a flood risk management perspective is the surface water drainage strategy which provides for the implementation of a Sustainable Drainage System, the design of which will limit the rate of surface water discharge from the proposed development to the Drumman Stream to that of the predevelopment site.

- 7.7.8. The application has been accompanied by a Planning & Environmental Statement, Appropriate Assessment Screening Report, Ecological Impact Assessment (including a Biodiversity Management Plan), Landscape & Visual Impact Appraisal, Flood Risk & Drainage Impact Assessment, Construction Traffic Management Plan, Outline Construction Environmental Management Plan, Noise Impact Assessment, Glint and Glare Assessment, Landscape and Visual Appraisal, and an Archaeology & Architectural Heritage Impact Assessment. An updated Flood Risk & Drainage Impact Assessment and Noise Impact Assessment, along with a Decommissioning & Reinstatement Plan, were received by the Planning Authority in response to a request for further information.
- 7.7.9. The development site is described in Paras. 1.9 1.11 of the AA Screening Report as comprising a single medium scale field currently under crop (*N.B.* The Board is advised that during a site inspection it was observed that the lands appeared to be used for arable cropping as evidenced by the presence of cutover stubble). The site is enclosed by mature hedgerow along much of its perimeter boundary while a thicket of trees and scrub along the northern boundary edges against the embankment of the Drogheda to Navan railway line. The Drumman Stream runs along the southern boundary of the site proper (excluding the proposed access route) with the Platin-Gorman 110kV overhead power line traversing the southernmost extent of this field. The site topography is characterised by sloping agricultural land which falls in a south-easterly direction from an approximate elevation of c. 52m AOD in the north-western corner to c. 35m AOD in the south-eastern corner. Access to the site will be obtained via a new entrance arrangement off Downestown Road (Local Road No. L5609).
- 7.7.10. Within the supporting Ecological Impact Assessment (EcIA), the habitats survey (Fossitt) conducted on 16<sup>th</sup> August, 2021 identified the following 6 No. habitat types within the survey boundary:
  - Improved Agricultural Grassland (GA1)
  - Treelines (WL2)
  - Arable Crops (BC1)
  - Buildings and Artificial Surfaces (BL3)
  - Drainage Ditches (FW4)

ABP-317209-23

**Inspector's Report** 

- Stream (FW2)

- 7.7.11. The application site is predominantly composed of '*Improved Agricultural Grassland*' and '*Arable Crops*' which are of low ecological value, although they could provide some potential for foraging and grounding nesting birds, badger and Irish hare. The '*Treelines*' provide bat roosting and bird nesting opportunities as well as foraging habitat for many species. They will also act as wildlife corridors to the wider environs. Therefore, the treelines are of a moderate / high ecological value at site level. Both the '*Drainage Ditches*' and the '*Stream*' habitat types are considered to be an important water source for local ecology at site level while dry drainage ditches also serve as a wildlife corridor for many species. The '*Buildings and Artificial Surfaces*' (i.e. the public road) are of no ecological value.
- 7.7.12. Although the Ecological Impact Assessment has acknowledged the potential suitability of the site for certain protected or notable species (please refer to Table 2-8: 'Summary of Biological Records'), no badger, otter, pine marten, hedgehog or other mammals were recorded during the course of the field surveys. In specific reference to the possible presence of bats on site, while support is lent to the broader suitability of the area for certain species by reference to the results of a search using the National Biodiversity Data Centre's 'Bat Suitability Index' (Table 2-9) as well as known records of bat species in the area, and although the existing trees on site offer commuting pathways to the wider landscape, it has been submitted that there is still limited foraging potential for bats within the study area. Furthermore, no evidence of bats was identified on site during the habitats survey.
- 7.7.13. No formal bird surveys were carried out as part of the EcIA, however, incidental observations of bird species during a walkover survey of the site noted the presence of Swallow (Birds of Conservation Concern of Ireland (BoCCI) status: 'Amber' breeding), Crow and Wood Pigeon (BoCCI status: 'Green'). The treelines and stream habitats on site would also be expected to provide foraging and nesting opportunities for many other bird species, including common Irish farmland species.
- 7.7.14. No reptiles or amphibians were identified during the survey work, although it is acknowledged that the site offers potential habitat for Smooth Newt and Common Frog. Similarly, no notable invertebrate species were identified on site.
- 7.7.15. No rare or protected flora species are present on site, however, one record each of Parrot's Fetaher, Cherry Laurel and Himalayan Honeysuckle, which are all considered to be invasive species, were identified within the data search area.
- 7.7.16. Taking account of the characteristics of the proposed development in terms of its location and the scale of works, the following issues are considered for examination in terms of implications for likely significant effects on European sites:
  - Surface water related pollution during the construction phase as a result of sediment-laden run-off and pollutants (hydrocarbons and other contaminants) entering the Drumman Stream (a tributary of the River Nanny which in turn flows into the River Nanny Estuary and Shore Special Protection Area).

## 7.7.17. Submissions and Observations:

All submissions and observations received from interested parties are set out in Section 3.0 of this report.

#### 7.7.18. European Sites:

The development site is not located in or immediately adjacent to a European site. The closest European sites are the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), approximately 3.2km northwest of the site, and the River Boyne and River Blackwater Special Protection Area (Site Code: 004232), approximately 3.2km northwest of the site. The River Nanny and Estuary Special Protection Area (Site Code: 004158) is located approximately 11.4km east of the site. Table 1-1 of the applicant's AA Screening Report considers the potential interactions of the proposed development with Natura 2000 sites. A summary of European Sites that occur within a possible zone of influence of the proposed development is presented in the table below. Where a possible connection between the development and a European site has been identified, these sites are examined in more detail.

European Site	Qualifying Interest /	Distance from	Connections	Considered
	Special Conservation	the proposed	(source-pathway-	Further in
	Interest	development	receptor)	Screening
River Boyne	Kingfisher (Alcedo	c. 3.2km	None - There is no	No.
and River	atthis) [A229]	northwest of	hydrological,	
Blackwater		the site	ornithological or	

Special			ecological	
Protection Area			connectivity	
(Site Code:			between the sites.	
004232)				
River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299)	Alkaline fens [7230] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106]	c. 3.2km northwest of the site	None - There is no hydrological, ornithological or ecological connectivity between the sites.	No.
	Lutra lutra (Otter)			
	[1355]			
Boyne Estuary	Shelduck (Tadorna	c. 9.8km	None - There is no	No.
Special	tadorna) [A048]	northeast of the	hydrological,	
Protection Area	Oystercatcher	site	ornithological or	
(Site Code:	(Haematopus		ecological	
004080)	ostralegus) [A130]		connectivity	
	Golden Plover (Pluvialis apricaria) [A140]		between the sites.	
	Grey Plover (Pluvialis squatarola) [A141]			
	Lapwing (Vanellus vanellus) [A142]			
	Knot (Calidris canutus) [A143]			
	Sanderling (Calidris alba) [A144]			

	Black-tailed Godwit (Limosa limosa) [A156] Redshank (Tringa totanus) [A162] Turnstone (Arenaria interpres) [A169] Little Tern (Sterna albifrons) [A195] Wetland and Waterbirds [A999]			
Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957)	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Annual vegetation of drift lines [1210] Salicornia and other annuals colonising mud and sand [1310] Atlantic salt meadows	c. 11.0km northeast of the site	None - There is no hydrological, ornithological or ecological connectivity between the sites.	No.
	(Glauco- Puccinellietalia maritimae) [1330] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous			

	vegetation (grey			
	dunes)* [2130]			
River Nanny	Oystercatcher	c. 11.4km east	Hydrologically	Yes.
Estuary Special	(Haematopus	of the site	connected via the	
Protection Area	ostralegus) [A130]		Drumman Stream	
(Site Code:	Ringed Plover		which flows into the	
004158)	(Charadrius hiaticula)		Nanny River c. 2km	
	[A137]		downstream and	
	Colden Ployer		onwards to the SPA.	
	(Pluvialis apricaria)			
	[A140]			
	Knot (Calidris canutus)			
	[A143]			
	Sanderling (Calidris			
	alba) [A144]			
	Herring Gull (Larus			
	argentatus) [A184]			
	Wetland and			
	Waterbirds [A999]			
North-West	Red-throated Diver	c. 14km east of	None - There is no	No.
Irish Sea	(Gavia stellata) [A001]	the site	hydrological,	
Special	Great Northern Diver		ornithological or	
Protection Area	(Gavia immer) [A003]		ecological	
(Site Code:			connectivity	
004236)	ruimar (ruimarus		between the sites.	
	giacialis) [A009]			
	Manx Shearwater			
	(Puffinus puffinus)			
	[A013]			
	Cormorant			
	(Phalacrocorax carbo)			
	[A017]			
	Shag (Phalacrocorax			
	aristotelis) [A018]			
			1	

Common Scoter		
(Melanitta nigra)		
[A065]		
Black-headed Gull		
(Chroicocephalus		
ridibundus) [A179]		
Common Gull (Larus		
canus) [A182]		
Lesser Black-backed		
Gull (Larus fuscus)		
[A183]		
Herring Gull (Larus		
argentatus) [A184]		
Great Black-backed		
Gull (Larus marinus)		
[A187]		
Kittiwake (Rissa		
tridactyla) [A188]		
Roseate Tern (Sterna		
dougallii) [A192]		
Common Tern (Sterna		
hirundo) [A193]		
Arctic Tern (Sterna		
paradisaea) [A194]		
Little Tern (Sterna		
Entre Ferri (Oterria		
albifrons) [A195]		
albifrons) [A195]		
albifrons) [A195] Guillemot (Uria aalge) [A199]		
albifrons) [A195] Guillemot (Uria aalge) [A199]		
albifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda)		
albifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200]		
albifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula		
albifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204]		
albifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204] Little Gull		
albifrons) [A195] Guillemot (Uria aalge) [A199] Razorbill (Alca torda) [A200] Puffin (Fratercula arctica) [A204] Little Gull (Hydrocoloeus		

- 7.56.1. By way further explanation, the likelihood for the proposed development to have any significant effects upon either the River Boyne and River Blackwater Special Protection Area (Site Code: 004232) or the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299) can be discounted on the basis that it is located within a different river catchment (the Nanny-Delvin WFD catchment) than the European Sites (the Boyne WFD catchment) and as there are no pathways between the project and those sites. Furthermore, there is no hydrological, ornithological or ecological connectivity between the sites.
- 7.56.2. Similarly, given the location of the Boyne Coast and Estuary Special Area of Conservation (Site Code: 001957) and the Boyne Estuary Special Protection Area (Site Code: 004080) within a different river catchment than the development site, the physical separation distances between the sites concerned, and the dilution offered by the downstream distances involved and the Irish Sea, there are no hydrological pathways between the project and the qualifying interests and / or special conservation interests of those European sites. The separation distances involved, the lack of suitable habitats within the development site (improved agricultural grassland and arable crop being dominant), and the availability of suitable habitat between the two areas makes travel to the application site by species of special conservation interest from the European Sites extremely unlikely. Accordingly, there are no hydrological, ornithological or ecological pathways between the sites.
- 7.56.3. With respect to the North-West Irish Sea Special Protection Area (Site Code: 004236), the physical separation distances between the sites concerned, the dilution offered by the downstream distances involved and the Irish Sea, the lack of suitable habitats within the development site, and the availability of suitable habitat elsewhere between the project and the protected sites, negates any hydrological, ornithological or ecological connectivity between the sites.
- 7.56.4. However, given that the application site drains to the Drumman Stream, which in turn flows into the Nanny River c. 2km downstream and onwards to the River Nanny Estuary Special Protection Area (Site Code: 004158), there is potential hydrological connection between the project and that European Site.

- 7.56.5. The Conservation Objectives for the River Nanny Estuary SPA seek to maintain the favourable conservation conditions for the bird species for which the SPA has been selected, and to maintain the favourable conservation condition of the wetland habitat as a resource for the regularly occurring migratory waterbirds that utilise it.
- 7.56.6. For the purposes of completeness, I would advise the Board that I have also given consideration to Natura 2000 sites located outside of the 15km radius, however, in light of the separation distances involved and as no potential pathways for any significant impacts can be established, it can be reasonably concluded that there is no potential for those Natura 2000 sites to be impacted by the subject development.
- 7.56.7. Identification of likely significant effects:

**Deterioration of water quality – construction related pollution**: The construction phase of the proposed development will involve earthworks and the disturbance of soil etc. which gives rise to the possibility of indirect negative impacts on downstream water quality through the accidental release of suspended solids / sediment etc. or the discharge of hydrocarbons and / or other pollutants by way of contaminated surface water runoff. In this regard, and following consideration of the 'source-pathway-receptor' model, the Drumman Stream and the River Nanny could potentially act as a hydrological conduit for contaminated surface waters between the development site and the River Nanny Estuary Special Protection Area with any associated deterioration in water quality having a potentially negative impact on downstream qualifying interests / special conservation interests (please refer to Table 1-2 of the applicant's AA screening report which details the adverse effects of possible contaminants on the aquatic environment, including a reduction in prey species for bird species of special conservation interest). However, given the separation distances involved, the likelihood is that water quality in the European site will not be negatively affected by any contaminants, such as sediment from site clearance and other construction activities, due to dilution and settling out over such a distance.

7.56.8. With respect to the foregoing, it should also be noted that an integral part of the design of the proposed development from a flood risk management perspective is the surface water drainage strategy which provides for the implementation of a Sustainable Drainage System, the design of which will limit the rate of surface water

discharge from the proposed development to the Drumman Stream to that of the predevelopment site. It has been stated that adherence to best practice guidelines on the use of SUDS as part of the drainage strategy will also reduce the potential for contaminated surface waters to enter the aquatic environment. Notably, both the AA screening report and the 'Flood Risk and Drainage Impact Assessment' confirm that the SUDS features are to be implemented during the construction phase of the proposed development with the swales to be planted with vegetation to protect against soil erosion and maintained throughout the lifetime of the development.

- 7.56.9. Furthermore, it is proposed to adhere to various best practice construction and pollution prevention measures during the site works as per the Outline Construction Environmental Management Plan in order to prevent contaminants entering the aquatic environment.
- 7.56.10. Given that best practice pollution prevention and integral design measures are to be adopted to reduce the potential for the contamination of surface water during the construction stage, no significant effects are predicted to arise from the proposed development on the qualifying interests / special conservation interests of the SPA.

## 7.56.11. Cumulative / In-combination Effects:

It is not envisaged that the proposed development will give rise to any in-combination / cumulative effects.

#### 7.56.12. Mitigation Measures:

Having considered the available information, I refer to the ruling of the Court of Justice of the European Union ('CJEU') in the case of *Eco Advocacy v An Bord Pleanála* on 15<sup>th</sup> June, 2023 wherein it was found that where measures are incorporated into the design of a project not with the aim of reducing the negative effects of that project on the site concerned, but as standard features required for all projects of the same type, those elements cannot be regarded as indicative of probable significant harm to that site. Accordingly, I am satisfied that the measures proposed as part of the subject proposal are features that are incorporated as standard features inherent in the construction of such schemes, irrespective of any effect on such sites, and are not therefore relied upon to reach a conclusion of no likely significant effects on any European site.

## 7.56.13. Screening Determination

The proposed development was considered in light of the requirements of Section 177U of the Planning and Development Act 2000 as amended. Having carried out Screening for Appropriate Assessment of the project, it has been concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on the River Nanny Estuary Special Protection Area (Site Code: 004158), or any other European site, in view of the site's Conservation Objectives, and Appropriate Assessment (and submission of a NIS) is not therefore required.

- 7.56.14. This determination is based on the following:
  - The information on file, which is considered adequate to undertake a screening determination;
  - The nature, scale and design of the proposed development;
  - The nature of the receiving environment;
  - The considerable downstream dilution and dispersion effect attributable to the Drumman Strean, the River Nanny and the Irish Sea; and
  - The separation distance between the proposed development and the European Sites and the demonstrated lack of any direct connections with regard to the source-pathway-receptor model.

## 8.0 **Recommendation**

8.1.1. Having regard to the foregoing, I recommend that the decision of the Planning Authority be overturned in this instance and that permission for the proposed development be refused for the reasons and considerations set out below:

## 9.0 **Reasons and Considerations**

 Having regard to the elevated and open nature of the site and its position on agricultural lands proximate to zoned lands and the built-up area and development boundary of Duleek, it is considered that the proposed solar farm development would form a prominent and obtrusive feature in the landscape, and would adversely impact the rural character of the area, seriously injure the visual amenities of the area, and conflict with objective HER OBJ 56 of the Meath County Development Plan, 2021-2027 which seeks to preserve views and prospects from inappropriate development which would interfere unduly with the character and visual amenity of the landscape. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Robert Speer Senior Planning Inspector

30<sup>th</sup> May, 2024

# Appendix 1 - Form 1 EIA Pre-Screening [EIAR not submitted]

An Bord Pleanála Case Reference			ABP-317209-23			
Proposed Development Summary			A 10-year permission for the within a total site area of app ground mounted on steel sup and associated compound, el battery storage modules, stor fencing and associated electr	construction of a solar P roximately 18.92hA, to i port structures, IPP elec ectrical transformer / in rage containers, CCTV ca ical cabling, ducting and	V energ nclude ctrical co verter s imeras, ancillar	y development solar PV panels ontrol building tation modules, access tracks, y infrastructure.
Developn	nent Ad	dress	Downestown, situated near t	he town of Duleek, Co. N	vleath.	
1. Does	the p	roposed de	velopment come within t	the definition of a	Yes	$\checkmark$
(that is in surroundi	volving ( ings)	construction w	orks, demolition, or interventio	ons in the natural	No	No further action required
2. Is the Plan exce	e prope ning ai ed any	osed develo nd Developi v relevant qu	opment of a class specifi ment Regulations 2001 ( uantity, area or limit whe	ied in Part 1 or Part as amended) and d re specified for tha	2, Sc oes it t clas	hedule 5, equal or s?
Yes		Class		•	EIA Ma EIAR r	andatory equired
No	~				Procee	ed to Q.3
3. Is the Deve relev	e prope elopme ant qu	osed develo ent Regulatio antity, area	opment of a class specif ons 2001 (as amended) I or other limit specified	ied in Part 2, Schec out does not equal [sub-threshold dev	lule 5, or exc elopm	Planning and ceed a ent]?
			Threshold	Comment		Conclusion
				(if relevant)		
No			N/A		No El <i>A</i> Exami	AR or Preliminary nation required
Yes	<ul> <li>✓</li> </ul>	Class 1 of Par (a) Proje rural lengt remo	t 2 of Schedule 5: ects for the restructuring of land holdings, where the h of field boundary to be oved is above 4km, or where		Proce	ed to Q.4

	re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.	
	Class 10 of Part 2 of Schedule 5: Infrastructure Projects: (dd) All private roads which would exceed 2000m in length.	

4. Has Schedule 7A information been submitted?				
No	✓	Preliminary Examination required		
Yes		Screening Determination required		

Inspector: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix 2 - Form 2

## **EIA Preliminary Examination**

An Bord Pleanála Case Reference	ABP-317209-23
Proposed Development Summary	A 10-year permission for the construction of a solar PV energy development within a total site area of approximately 18.92hA, to include solar PV panels ground mounted on steel support structures, IPP electrical control building and associated compound, electrical transformer / inverter station modules, battery storage modules, storage containers, CCTV cameras, access tracks, fencing and associated electrical cabling, ducting and ancillary infrastructure.
Development Address	Downestown, situated near the town of Duleek, Co. Meath.

The Board carries out a preliminary examination [Ref. Art. 109(2)(a), Planning and Development Regulations 2001 (as amended)] of, at least, the nature, size or location of the proposed development having regard to the criteria set out in Schedule 7 of the Regulations.

In addition, the Planning and Development Regulations (Amendment) (No. 2) Regulations, 2023 (S.I. 383 of 2023) require from 1<sup>st</sup> August, 2023 that projects for the restructuring of rural land holdings are screened for the purposes of Environmental Impact Assessment as follows:

Amendment of Schedule 5, Part 2, Class 1 of the Principal Regulations is amended:

- (a) By the insertion of the following before paragraph (c):
- (a) Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations, 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares.

Also relevant to this application is Schedule 5, Part 2, Class 10. Infrastructure Projects

(dd) All private roads which would exceed 2000 metres in length.

Examination	Yes/No/
	Uncertain

Nature of the Development Is the nature of the proposed development exceptional in the context of the existing environment?	The proposed solar farm has a stated site area of 18.92Ha. While the area involved is comparatively large, the provision of solar farm developments in rural landscapes is well established and increasingly commonplace in terms of rural diversification as evidenced by nearby examples. There are several examples of existing and permitted solar farms along with associated electrical infrastructure (such as substations) in the broader site surrounds, including the Garballagh Solar Farm (ABP Ref. No. PL17.248146) and the Garballagh & Gaskinstown Solar Farm (ABP Ref. No. ABP- 308667-20). The site comprises a large agricultural field enclosed by hedgerows and has been used for arable cropping as evidenced by the presence of cutover stubble. The surrounding area is primarily agricultural and dominated by an undulating rural landscape with the site being characteristic of the broader 'Central Lowlands' Landscape Character Area which is deemed to be of 'High Value', 'Moderate Sensitivity' & 'Regional Importance' in the Development Plan. Many of the fields in the area are enclosed by mature hedgerow and tree lines. Although the proposed solar development will extend across	No
	mature hedgerow and tree lines. Although the proposed solar development will extend across much of the site area, the extent of hedgerow boundary removal is minimal and not exceptional in the context of this rural area. The development will also be screened in part through the retention and reinforcement of existing boundary hedgerows with further mitigation provided by additional landscaping.	
Will the development result in the production of any significant waste, emissions or pollutants?	The solar photovoltaic panels will be set within galvanised metal framework racks anchored to ground by shallow piles avoiding the need for concrete works. The cells will be in an elevated position to allow for airflow around the modules to avoid overheating; to provide safe clearance for sheep to graze beneath the panels; and to	No

	<ul> <li>encourage vegetation growth below the panels.</li> <li>While some comparatively minor excavations will be required for the construction of associated electrical infrastructure, including the substation and inverter / transformer stations, this will be limited in extent with the majority of the site remaining available for vegetative growth and agricultural or biodiversity applications.</li> <li>The Outline Construction Environmental Management Plan states that ground disturbance will be limited to c. 13,138.1m<sup>2</sup> or c. 6.77% of the site area. Excavated material will be used to backfill trenches and to reinstate the construction compound with the remainder used in the regrading of the site, particularly along access tracks and to level off uneven area and in the creation of the landscaped berms. Any excess soil is expected to be minimal and will be recycled off-site at a licensed facility.</li> </ul>	
	There will be limited waste generated during the construction and decommissioning phases and this will be segregated, stored and disposed of appropriately. Best practice measures will be put in place during the construction and decommissioning phases.	
	The drainage strategy set out in the Drainage Impact Assessment details the SuDS measures to be implemented on site, the design of which will limit surface water discharge from the proposed development to that of the pre- development greenfield site.	
	the development will not result in any significant emissions to the environment.	
Size of the Development Is the size of the proposed development exceptional in the context	The scale of the proposed development is exceptional in the broader context of surrounding development but is not exceptional when compared to other solar energy developments,	No

of the existing environment?	including those constructed and / or permitted in the vicinity of the site.	
Are there significant cumulative considerations having regard to other existing and/or permitted projects?	It is not considered that there is any likelihood of significant cumulative effects with other existing or permitted developments in the area.	No
Location of the Development Is the proposed development located on, in, adjoining or does it have the potential to significantly impact on an ecologically sensitive site or location?	The proposed development is not located on, in or adjoining any ecologically sensitive site or location. Although the site lies approximately 350m upstream of the Duleek Commons Proposed Natural Heritage Area (Site Code: 001578), with adherence to best practice construction and pollution prevention measures, no significant impacts are likely.	No
	There are indirect hydrological connections to the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158). The Appropriate Assessment Screening Report has concluded that due to the nature and design of the proposed development, the separation distances involved, and the dilution factor involved for any residual waterborne pollution, no significant effects will occur on the qualifying species of the River Nanny Estuary and Shore SPA.	
	Having regard to the nature of the connections identified and the nature of works proposed, significant effects on the environment are not likely.	
Does the proposed development have the potential to significantly affect other significant environmental sensitivities in the area?	The Ecological Impact Assessment has determined that the short-term disturbance attributable to the proposed development will not be significant on ecological features if best practice and recommended mitigation are implemented.	No
	There are no adjoining protected structures. An Archaeology and Architectural Heritage Impact	

		Assessment adequately addresses issues in this regard. Boundary removal will not significantly impact on cultural heritage. The proposed development does not have the potential to significantly affect other significant environmental sensitivities in the area.	
Part 2, C Agricultu and Aqua (a) Restr rural land	lass 1. ure, Silviculture aculture: ucturing of d holdings:		No.
i)	is the amount of field boundary to be removed greater than 4km,	The extent of hedgerow removal is not significant and generally amounts to c. 41.2m of roadside boundary hedging to accommodate the proposed site entrance (with a further 60.2m of roadside hedging to be trimmed back to achieve sightlines). This is significantly below the threshold of 4km for EIA reinserted by the 2023 amending regulations and is also below the screening threshold set out in the 2011 (Agricultural) Regulations. Such removal is associated with access requirements and does not result in the amalgamation or enlargement of existing fields. Significant effects on biodiversity are not likely as a result of such works.	
ii)	the amount of re-contouring to take place above 5 hectares,	The development does not involve any significant excavation or the recontouring of the lands by, for example, the levelling off of hills or by the infilling of hollows (by removing or shifting earth or rocks), or other use or drainage works. Although the proposed substation building and the inverter & transformer cabinets etc. will be sited on areas of hardstanding which will require some localised levelling and foundation works, such works are not significant in nature and would not constitute recontouring of the lands.	
iii)	is the area of lands to be restructured by removal of	The development does not involve any restructuring through the removal of field boundaries above 50 hectares. The site area	

field boundaries above 50 hectares.	extends to only 18.92Ha while the development itself only involves the removal of c. 41.2m of roadside boundary hedging.	
Part 2, Class 10. Infrastructure Projects (dd) All private roads which would exceed 2000 metres in length.	The proposed development includes for the construction of approximately 900m of access tracks. Notably, these are referred to 'access tracks' in the statutory notices whereas the submitted drawings and the Planning & Environmental Report use the terms 'maintenance roads' and 'site tracks' interchangeably. Given that the purpose of these tracks is not for the conveyance of people and vehicles, per se, except as necessary in connection with the construction, maintenance and decommissioning of the development, and in keeping with previous Board decisions I am satisfied that the proposed access tracks are materially different from a 'road' as defined under the Roads Act, 1993. Therefore, the proposed access tracks do not fall to be considered under Class 10(dd) of the Regulations and thus do not require EIA.	No.
	Conclusion	
There is no real likelihood EIA not required.	of significant effects on the environment.	

Inspector:
------------

Date:	
Date.	

DP/ADP: \_\_\_\_\_

Date: \_\_\_\_\_

(only where Schedule 7A information or EIAR required)