

Inspector's Report ADDENDUM PL17.248146

Development Construction of solar farm to include

two electrical substations,

transformer, inverter station and storage modules, solar panels, access roads and associated site

works

Location Garballagh, Thomastown, Gillinstown,

Downestown, Duleek, Co. Meath

Planning Authority Meath County Council

Planning Authority Reg. Ref. LB/160898

Applicant(s) Highfield Solar Limited

Type of Application Permission

Planning Authority Decision Grant

Type of Appeal Third Party

Appellants 1. Bernard & Judith Cullen, Mark &

Stella Hatch, Michael & Leona

Halligan

Observers None

Date of Site Inspection 13th June 2017

Inspector Niall Haverty

NOTE: This Addendum report should be read in conjunction with my original report on file dated 26th June 2017.

1.0 **Section 131, 132 and 137 Notices**

1.1. Section 132 Notice to Applicant

- 1.1.1. Section 132 of the Planning and Development Act 2000, as amended, provides that the Board may serve on any party, or on any person who has made submissions or observations to the Board a notice requiring that person, within a period specified in the notice to submit to the Board such document, particulars or other information as is specified in the notice.
- 1.1.2. The Board issued a notice to the applicant under section 132 on 23rd April 2018 requiring the applicant to submit the following information on or before 5th June 2018:
 - Chapter 6 of the Environmental Report submitted with the application provides
 a generic overview of glint and glare from solar farm developments but has
 not calculated the specific impacts on individual ground based receptors from
 the proposed development. Please provide a comprehensive glint and glare
 assessment of the proposed development on all ground based receptors,
 including residences and transport infrastructure.
 - The Landscape and Visual Impact Assessment submitted with the application provided photomontages illustrating the proposed development within the landscape at 4 of the 17 viewpoints. In some of the other viewpoints it will be possible to view the development but no photomontages were submitted. Please provide better quality photomontages of the proposed development, before and after screening, from all the viewpoints where it may be possible to see the proposed development. The assessment and photomontages should clearly include the proposed substation infrastructure.
 - The Environmental Report and Planning Report submitted with the application refer to Appropriate Assessment Screening and a Stage 1 Natura Screening Statement having been prepared. Neither the assessment or the statement are available on the file. Please provide a Stage 1 Natura Screening Statement (and if necessary Natura Impact Statement) in accordance with Section 177T of the Planning and Development Act 2000, as amended.

• The proposed development initially included two options for electrical substations on site, either 38kV or 110kV. It was subsequently indicated that a 110kV substation, connected to the Transmission Network via an existing 110kV transmission line crossing the site, is the preferred approach. It might be considered that the proposed substation ought to be the subject of preapplication discussions with ABP as to whether it comes within the definition of Strategic Infrastructure.

1.2. Section 137 Notice to All Parties

- 1.2.1. Section 137(1) of the Acts provides that the Board in determining an appeal may take into account matters other than those raised by the parties if the matters are matters to which, by virtue of the Act, the Board may have regard. Section 137(2) provides that the Board shall give notice in writing to each of the parties and to each of the persons who have made submissions or observations in relation to the appeal or referral of the matters that it proposes to take into account under subsection (1).
- 1.2.2. The Board issued a notice to all parties under section 137 on 23rd April 2018 advising that the Board proposed to take into account the abovementioned issue with regard to the proposed substation which was included in the section 132 notice to the applicant. The parties were invited to make submissions or observations in relation to this matter on or before 21st May 2018.

1.3. Section 131 Notice to Applicant and Planning Authority

- 1.3.1. Section 131 of the Acts provides that where the Board is of opinion that it is appropriate in the interests of justice to request any party, observer or any other person or body to make submissions or observations in relation to any matter which has arisen, the Board may serve a notice requesting that person to submit a submission or observation in relation to the matter in question.
- 1.3.2. The Board issued a notice to the applicant and Planning Authority under section 131 on 23rd April 2018 requesting submissions or observations in relation to the submission received from the appellants on 8th June 2017. The submissions or observations in relation to this matter were invited on or before 21st May 2018.

2.0 Responses

2.1. Applicant's Response to Section 132 Notice

- 2.1.1. The applicant's response to the section 132 notice can be summarised as follows:
 - A Glint and Glare Assessment is submitted. Predicted impacts are confirmed as being limited and of low significance.
 - Additional and improved quality photomontages are submitted. The
 Landscape and Visual Assessment consultants have confirmed that a review
 of the revised and additional photomontages has not resulted in any change
 to the predicted effects, either positively or negatively, when compared to the
 original LVIA. Proposed substations do not have any significant visual effects
 on any residential or other visual receptors.
 - Stage 1 Natura Screening Statement is included. The Screening concludes
 that the proposed development, either individually or in combination with other
 plans or projects is not likely to have a significant effect upon the Natura 2000
 sites within the study area.
 - Separate correspondence has been provided to the Board in relation to the proposed 110kV infrastructure.
- 2.1.2. As noted above, the applicant's response included a Glint and Glare Assessment, Appropriate Assessment Screening Report and a number of photomontages.

2.2. Responses to Section 137 Notices

2.2.1. Appellants' Response

- 2.2.2. A response to the section 137 notice was submitted on behalf of the appellants by David Mulcahy Planning Consultants and can be summarised as follows:
 - The issue of the 110kV substation being Strategic Infrastructure was raised in the appellants' s131 response.
 - The infrastructure must be the subject of separate pre-planning discussions with the Board to determine if it is Strategic Infrastructure.

The Board has previously concluded that such development has constituted
 SI (Ref. cases VC0049 and VC0062).

2.2.3. Planning Authority Response

- 2.2.4. The Planning Authority's response to the section 137 notice can be summarised as follows:
 - The Board should have regard to the provisions of section 182A of the Acts.

2.2.5. Applicant's Response

- 2.2.6. The applicant's response to the section 137 notice can be summarised as follows:
 - The applicant acknowledges that more recent Board decisions now likely qualify the proposed 110kV infrastructure elements of the development as being deemed SID.
 - The applicant has submitted a pre-application consultation request for the 110kV infrastructure in order to determine their status.
 - If the application was to be made today, the process by which the application would be determined would be the same. If the 110kV substation is deemed SID, this does not affect the remit of the Board in determining both applications.
 - The applicant requests that the 'proposed SID works' as identified on the drawings submitted with the response be excluded by the Board in determining the current application. All works outside of the 'proposed SID works' are clearly not SID.
 - A separate application will be made for the 110kV infrastructure in due course.
 - For the avoidance of doubt, although a 110kV connection is the preferred grid connection approach, a 38kV substation on the eastern portion of the site remains an option for connecting the solar farm.
- 2.2.7. Revised drawings identifying the 'proposed SID works' were submitted with the applicant's response to the s137 notice.

2.3. Responses to Section 131 Notices

2.3.1. Applicant's Response

- 2.3.2. The applicant's response to the section 131 notice can be summarised as follows:
 - The applicant's previous detailed response provides sufficient detail on the various points raised in the submission.
 - The applicant never made the assertion that David Mulcahy Planning
 Consultants were present at meetings between the applicant and appellants.
 - Comprehensive responses have previously been made in relation to flooding concerns. The applicant is surprised that the engineering report submitted as enclosure 3 of the appellants' submission chose to reference percolation test results a number of townlands removed from the site, rather than percolation tests undertaken on the appellant's own land between the eastern and western sites (Reg. Ref. LB170548) which found a "good steady percolation rate in the topsoil layer".

2.3.3. Planning Authority Response

- 2.3.4. The Planning Authority's response to the section 131 notice can be summarised as follows:
 - All significant matters outlined in the submission were considered in the course of its assessment. The proposed development is consistent with the policies and objectives of the Development Plan.
 - With regard to a policy vacuum, the proposed development was assessed on its own merits having regard to national, regional and local planning policies.
 A number of Board decisions have been made in the absence of specific planning guidelines for solar developments.
 - The issue of land use implications was addressed in the appraisal of the development.
 - The Planning Authority is satisfied with the development from a flood risk perspective subject to the maintenance of the drainage system.

- The issue of potential traffic impact was considered during the course of the assessment. No concerns were raised by the Transportation Department.
- The issues of glint and glare were addressed as part of the assessment of the application.
- The Board is asked to uphold the decision to grant permission.

3.0 Further Section 131 Notices

3.1. The Board decided to issue a further section 131 notice, inviting submissions or observations in relation to the applicant's response to the section 132 notice, received on 5th June 2018.

3.2. Responses

3.2.1. Planning Authority's Response

- It is considered that the issue of glint and glare has been suitably assessed and addressed.
- It is considered that additional screen planting at viewpoints 2, 3 and 8 would serve to further enhance current proposals. A condition to this effect could be attached.
- The Planning Authority agrees with the statements contained in sections 7.3 and 7.4 of the Stage 1 Appropriate Assessment report.
- The applicant's statement in relation to Strategic Infrastructure is noted.

3.2.2. Appellant's Response

- 3.2.3. A response to the section 131 notice was submitted on behalf of the appellants by David Mulcahy Planning Consultants. The issues raised can be summarised as follows:
 - It was not possible to obtain a consultant to rigorously examine the glint and glare study. This puts the appellant at a disadvantage.
 - It is noted that the glint and glare assessment does not rigorously represent the detailed geometry of a system with variable height of the PV array

- impacting on actual glare results. Given the undulating nature of the lands, this is a significant weakness and undermines the findings of the study.
- Glint and glare study does not take impacts during late Autumn, Winter and early Spring, when leaves are not on the vegetation that the applicant is relying on for screening.
- The observer height of 2m does not take account of horse riders. Many houses are two storey in height.
- Appellants have engaged a qualified landscape architect to assess the photomontages submitted. The report concludes that:
 - The Planning Authority elected to disregard their current policies on landscape resource protection.
 - The use of UK methodology rather than EPA Guidelines makes it difficult to draw comparisons.
 - Landscape will undergo profound adverse change with the loss of its distinctive character and value.
 - Views from a distance will be quite significant and have received little mention in the LVIA.
 - LVIA does not emphasis the loss of landscape character.
 - While in most instances, planting will screen the development, a number of instances are indicated where the rated visual impacts and duration is questionable, notably at Downestown Manor and along the Longford Road.
 - Loss of residential amenity.
 - Visual impact from the Bellewstown Hills will be quite significant.
 - LVIA does not make reference to a landscape capacity study having been undertaken.
 - The Board cannot rely on the LVIA findings to provide an accurate and objective view.

- Appellants have engaged a qualified Ecologist to review the AA Screening Report. She concludes that the applicant has not demonstrated any appropriate assessment in terms of the potential impacts on the River Nanny Estuary and Shore SPA, and that the potential impact on pNHAs has not been properly assessed, along with the impact of rainwater run-off, shading and the biodiversity plan.
- 3.2.4. As noted above, the appellants' response included a Landscape Evaluation Report and a report entitled 'Environmental Observations in Response to a Request from An Bord Pleanála Regarding a Solar Farm at Garballagh Lower, Duleek, Co. Meath'.

4.0 **Planning History**

4.1. Strategic Infrastructure Pre-Application Consultation (ABP-301601-18)

- 4.1.1. Following the issuing of notices under sections 132 and 137 of the Acts, the applicant, Highfield Solar Limited, submitted a request to the Board on 11th May 2018 for pre-application consultation in respect of the proposed 110kV infrastructure at the site (Ref. ABP-301601-18).
- 4.1.2. The Board decided, on 21st September 2018, that the proposed development (i.e. the 110kV infrastructure) was Strategic Infrastructure in accordance with the reasoning and recommendations set out in the Inspector's Report (i.e. that the proposed development falls within the scope of section 182A of the Planning and Development Act 2000, as amended).

5.0 Additional Assessment

5.1. Introduction

- 5.1.1. Having reviewed the notices and responses received, I consider that the following principal issues arise for further consideration since my previous report on file:
 - Glint and glare.
 - Landscape and visual impact.
 - Proposed 110kV Infrastructure.

- Appropriate Assessment.
- Other issues.
- 5.1.2. As noted in my earlier report, the appeal site is split into two parts, to the north east and south west of the Downestown Road. The south western site has an area of 131.37 ha, while the north eastern site has an area of 18.92 ha. In the interests of consistency with my earlier report, and the applicant's terminology, I will refer to the larger western site as the Garballagh site (or Site 1), and the smaller eastern site as the Downestown site (or Site 2).

5.2. Glint and Glare

- 5.2.1. A Glint and Glare Assessment, prepared by Neo Environmental, was submitted by the applicant in response to the section 132 notice. The report notes that photovoltaic solar panels are designed to absorb sunlight and not to reflect it, and that studies have shown that panels have similar reflectance characteristics to water, which is much lower than surfaces such as glass, steel, snow and white concrete.
- 5.2.2. I note that a number of assessment limitations are identified in the report. These include the use of a conservative 'bald-earth scenario', which does not consider obstacles (e.g. trees, hedgerows, buildings etc.) between the observation points and the solar installation; variations in atmospheric pressure, temperature and conditions which may result in slight variations from calculated values; and the effects of diffraction are not accounted for, although buffers are stated as being applied as a factor of safety. It also states that the detailed geometry of the system (gaps between modules, variable height of the PV array and the support structures) is not rigorously represented, although the modelling of a large number of points is stated to be representative of the site as a whole.
- 5.2.3. The report notes that there is no specific guidance for identifying the magnitude of impact from solar reflections. It sets out solar reflection impact criteria which in my experience are commonly used in such assessments, ranging from 'none' (effects not geometrically possible or no visibility due to be screening) to 'low' (between 0 and 20 hours per year or between 0 and 20 minutes per day) to 'medium' (between 20 and 30 hours per year or between 20 and 30 minutes per day) to 'high' (over 30 hours per year or over 30 minutes per day).

- 5.2.4. Within the 500m study area, the report identifies 17 No. residential receptors, the majority of which act as proxy receptor points for groups of dwellings. These groupings range from 2 No. to 43 No. dwellings, and include two residential estates (receptors 12 and 13). With regard to the railway line passing the northern boundary of the sites, the report notes the presence of dense vegetation, and that where gaps are present, the only visibility will be to the backs of the south-facing panels, where no reflections are visible. The report also addresses the impacts on the R150 (incorrectly referred to as the L150) and the Downestown Road, which passes between the two sites. It considers that there will be no impact on the Longford Road, to the east of the two sites, due to the angle of driver gaze.
- 5.2.5. Geometric analysis found that 16 of the 17 No. receptors theoretically had the potential to experience some level of impact, with 9 No. experiencing a 'medium' or 'high' magnitude of impact. This was based on the conservative 'bald-earth scenario', with no consideration of obstructing features such as hedgerows, trees, buildings etc. When visibility analysis was undertaken, utilising aerial photography and photographs taken from the vicinity of each receptor to identify obstructing features, the number of receptors experiencing a 'medium' or 'high' impact was considered to drop to zero, with all residential receptors experiencing either a 'low' or no impact. I note that a number of the receptors are identified as having limited visibility to be mitigated by boundary hedgerow treatment.
- 5.2.6. With regard to transport infrastructure, the report assesses impacts at 200m intervals along the R150 and Downestown Road. As with the residential receptors, theoretical impacts were possible, based on the 'bald earth scenario', but when visibility analysis was undertaken, obstructing features serve to obscure the relevant section of the proposed development, resulting in no impact on road receptors.
- 5.2.7. I note that the Planning Authority considered the issue of glint and glare to be suitably addressed while the appellants raise a number of concerns including that the fact that the assessment does not rigorously represent the detailed geometry of the system is a significant weakness that undermines the findings of the study. While the report notes this as an assessment limitation, it states that the modelling of a large number of points is representative of the site as a whole. I consider this position to be reasonable, particularly when the modelling has been followed by photography-based visibility analysis of each receptor.

- 5.2.8. The appellants also contend that the study does not take account of two storey dwellings or address impacts during late Autumn, Winter and early Spring, when leaves are not on the screening vegetation. I note, however, that where the study identifies a 'low', rather than 'no' impact for residential receptors, this is typically on the basis that some glare may filter through vegetation in winter, and in the case of receptor 13 (a residential estate), the 'low' impact classification arises from upper floor window views of the north western section of the Downestown site (Site 2). Referring to the technical appendices included with the report, it is clear that the identified glint and glare impacts at residential receptors generally arise either during the Spring and Autumn, and/or during the Summer months, rather than in the Winter.
- 5.2.9. With regard to potential impacts on horse riders, I do not foresee any reason why these would differ significantly from impacts on road users, given the separation distances and multiple layers of screening typically encountered.
- 5.2.10. In conclusion, having reviewed the detailed Glint and Glare Assessment and the associated technical appendices and photography, and having inspected the site and surrounding area, I consider that the separation distances allied with the presence of intervening dense mature hedgerows separating and surrounding the constituent fields that make up the appeal sites and the additional planting and hedgerow reinforcement proposed are sufficient to ensure that glint and/or glare is not likely to result in a significant adverse impact on either residential receptors or road users.
- 5.2.11. Nevertheless, in order to address any residual impact that may arise, and to ensure the effectiveness of the hedgerow reinforcement, I recommend that if the Board is minded to grant permission, a condition be included requiring the developer to provide detailed glint and glare surveys following commissioning and on an annual basis for a period of two years to the planning authority in order to confirm that no such glint or glare impact has taken place, and to provide such further mitigation measures as the planning authority may specify in writing to ensure that this is achieved.

5.3. Landscape and Visual Impact

5.3.1. The applicant submitted a number of revised and additional photomontages in response to the Board's section 132 notice. Of the 17 No. viewpoints originally

- identified, 4 No. improved and 5 No. additional photomontages have been submitted and the applicant contends that it would not be possible to see the proposed development from the remaining 8 No. viewpoints. No updated LVIA was submitted, with the applicant instead stating that their Landscape and Visual Impact consultants have confirmed that an assessment of the revised and additional photomontages has not resulted in any change to the predicted effects, either positively or negatively, when compared to the original LVIA submitted to the Planning Authority.
- 5.3.2. In response, the appellants have submitted a report prepared by Michael Cregan, Landscape Architect, which raises a number of concerns, as summarised in Section 3.2.3 above. The Planning Authority, in its response, considered that additional screen planting at viewpoints 2, 3 and 8 would serve to further enhance the proposed development and that a condition to this effect could be attached.
- 5.3.3. Having regard to the points raised by the appellant's consultant regarding terminology in the LVIA, I would concur that the use of standardised terminology would be beneficial, however the proposed development does not require Environmental Impact Assessment, and the EPA guidance is not therefore directly applicable, other than as good practise guidance. I am satisfied that there is sufficient information before the Board in relation to issues of landscape and visual impact to allow an adequate assessment to be undertaken.
- 5.3.4. With regard to landscape impacts, I note that the 'Central Lowlands' LCA, which is identified as having a high value, is considered to have moderate sensitivity and is noted as having limited views, due to the complex topography and mature vegetation, except at the tops of drumlins. As noted in my original report, I consider the existing landscape character of both parts of the appeal site to be broadly consistent with the description of the Central Lowlands LCA.
- 5.3.5. With regard to Site 1 (the Garballagh Site), the visual impact will generally be limited due to the gently undulating site topography, the extensive hedgerows and tree planting which will mostly be retained, and the separation distances from roads and the majority of residential dwellings. In areas where the visual impact will be most pronounced, this will generally be mitigated by additional planting. There are, however, locations where more of the proposed development will be visible, such as along the Downestown Road. This is illustrated in the photomontage from Viewpoint

- 3, which demonstrates that a portion of the development within Site 1 will be visible to the rear of a group of houses on the Downestown Road, with the proposed planting being of limited effect in mitigating the visual impact. In other areas, the existing and proposed planting will generally screen the proposed development, although its generally deciduous nature means that glimpsed views of the proposed development may be available in numerous location from late autumn to early spring. I consider, however, that the multiple layers of hedgerows generally located between the receptors and the appeal site will have a filtering effect which will serve to lessen this seasonal effect. Notwithstanding the partial views towards elements of the proposed development I do not consider, having regard to the spreading of the proposed development within Site 1 across a number of fields, the separation distances involved and the low-lying nature of the lands, and the retention and reinforcement of existing hedgerow and tree planting, that the visual impacts of the proposed development within Site 1 would be so significant as to warrant refusal of planning permission.
- 5.3.6. With regard to Site 2 (the Downestown Site), I consider that it is of considerably greater visibility than Site 1, as demonstrated in the photomontages from Viewpoints 9 and 11, which show views from the Downestown Road and Longford Road, respectively. It will also be readily visible from the upper floors of houses within the northern and western edges of Duleek. Having reviewed the additional and improved photomontages submitted, I remain of the view that as a result of its location on more elevated unzoned lands abutting the development area boundary of Duleek, the proposed development within Site 2 is detrimental to the preservation of rural character and detrimental to the visual amenities of Duleek.
- 5.3.7. This issue is demonstrated in the photomontages for Viewpoint 12, which is a view from an elevated position on a local road at the Moor, c. 2.1km to the south east of the proposed development and Viewpoint 13, which is Protected View No. 66, c. 3.9km to the south east of the proposed development. From both viewpoints it can be seen that the development within Site 1, while significantly larger than that within Site 2, is visually broken up by the fragmented field patterns and the retention of existing intervening hedgerows, which allied with the separation from Duleek village serve to lessen its visual impact. Site 2, in contrast, is more monolithic in appearance, an effect exacerbated by the blue/black colouring of the panels, which

is a somewhat alien colour within the landscape, and its location on elevated lands immediately adjacent to Duleek village. I consider that the proposed development within Site 2 serves to undermine the urban/rural separation and is detrimental to both the rural character of the Duleek hinterland and the urban form and character of Duleek itself as well as being contrary to Objective LC OBJ 5 of the Development Plan which seeks to preserve protected views from development that would interfere with the character and visual amenity of the area. I therefore recommend that planning permission be refused for the proposed development within Site 2.

5.4. Proposed 110kV Infrastructure

- 5.4.1. As noted in Section 4.0 above, following the issuing of notices under sections 132 and 137 of the Acts, the applicant submitted a request to the Board for preapplication consultation in respect of the proposed 110kV infrastructure at the site (ABP-301601-18 refers). The Board subsequently decided that the proposed development was Strategic Infrastructure.
- 5.4.2. The applicant has noted, however, that although a 110kV connection is the preferred approach, a 38kV substation remains an option for connecting the proposed solar farm to the grid. The applicant has also requested that the development identified as 'proposed SID works' on the drawings submitted with their response to the section 137 notice on 21st May 2018 be excluded by the Board in determining the current application.
- 5.4.3. Having regard to the Board's decision under case ABP-301601-18, and the lack of certainty with regard to the grid connection, should the Board be minded to grant permission, I recommend that conditions be included to omit the proposed 110kV substation and associated infrastructure as identified on the revised Site Layout drawing submitted to the Board on 21st May 2018, and to clarify that the permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.
- 5.4.4. I consider that such conditions would be consistent with recent decisions of the Board in SID pre-application consultation cases, such as case ABP-301206-18 where the Board determined that a solar farm was not strategic infrastructure and that a planning application should be made to the Local Planning Authority, whereas the associated 110kV substation and infrastructure would fall within the scope of

Section 182A of the Acts, and that a planning application should be made directly to the Board.

5.5. Appropriate Assessment

- 5.5.1. An Appropriate Assessment Screening, prepared by Neo Environmental and dating from July 2016, was submitted by the applicant in response to the section 132 notice.
- 5.5.2. The appellants submitted a report prepared by Dúlra is Dúchas with their response to the second section 131 notice. This report contends, in respect of Appropriate Assessment, that the screening has not addressed the impacts that may arise during construction, operational and decommissioning phases on the conservation aspects of the River Nanny Estuary and Shore SPA. It also contends that impacts identified in the planning documentation have not been evaluated in the screening report.
- 5.5.1. The appeal site is not located in or adjacent to any designated Natura 2000 sites, however the following 5 No. Natura 2000 sites are within 15km of the appeal site:
 - River Boyne and River Blackwater SPA (Site Code 004232), c. 3km to the north.
 - River Boyne and River Blackwater SAC (Site Code 002299), c. 3km to the north.
 - Boyne Estuary SPA (Site Code 004080), c. 9.5km to the north east.
 - Boyne Coast and Estuary SAC (Site Code 001957), c. 10.7km to the north east
 - River Nanny Estuary and Shore SPA (Site Code 004158), 11.3km to the east.
- 5.5.2. The qualifying interests of the River Nanny Estuary and Shore SPA are as follows:
 - Oystercatcher (Haematopus ostralegus)
 - Ringed Plover (Charadrius hiaticula)
 - Golden Plover (Pluvialis apricaria)
 - Knot (Calidris canutus)
 - Sanderling (Calidris alba)

- Herring Gull (Larus argentatus)
- Wetlands
- 5.5.3. The sole qualifying interest of the River Boyne and River Blackwater SPA is the Kingfisher (*Alcedo atthis*), while the qualifying interests of the SAC are as follows:
 - River lamprey (Lampetra fluviatilis)
 - Atlantic salmon (Salmo salar)
 - Otter (*Lutra lutra*)
 - Alkaline fens
 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior.
- 5.5.4. The conservation objectives for the SAC and SPAs listed above are to restore/maintain the favourable conservation condition of the relevant habitats/species as appropriate.
- 5.5.5. Having regard to the source-pathway-receptor model, the only Natura 2000 site which has connectivity to the appeal site is the River Nanny Estuary and Shore SPA, as the small stream that traverses both parts of the appeal site is a tributary of the River Nanny. However, as noted in the Environmental Report, but not in the AA Screening Report, while there is no connective aquatic habitat linking the appeal site to the River Boyne and River Blackwater SPA and SAC (and therefore there is not likely to be a significant impact on the Kingfisher population of the SPA or on lamprey, salmon or alkaline fens and forests within the SAC), otters can travel significant distances when foraging. It is of note, however, that no signs of otters were found during the baseline survey although the applicant is proposing to undertake an otter survey prior to commencement.
- 5.5.6. With regard to the River Nanny Estuary and Shore SPA, the AA Screening Report considers that given the separation distance between the appeal site and the SPA is greater than the core foraging areas of the qualifying bird species associated with the SPA, that potential ornithological impact pathways are unlikely. With regard to potential contamination of aquatic systems, the report considers that the habitats of the SPA do not occur within the Zone of Influence of the site, due to their distance downstream and will not be influenced by lotic processes.

- 5.5.7. Having regard to the nature of the appeal site which generally comprises arable land that is subject to regular ploughing and changes in ground cover (as well as areas of improved grassland), and the nature of the proposed development, which does not entail significant excavations and which will see a significant area of arable land returned to species rich grassland between the solar panel arrays, and having regard to the qualifying interests of the River Nanny Estuary and Shore SPA and its distance from the appeal site, I am satisfied that the undertaking of development in accordance with good practice construction methods including a buffer zone around the stream as shown on the drawings submitted, would ensure that the proposed development is not likely to have a significant impact on the qualifying interests of the SPA. For the same reasons, I do not consider that the proposed development is likely to result in a significant impact to the otter population of the River Boyne and River Blackwater SAC.
- 5.5.8. In conclusion, it is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on the River Boyne and River Blackwater SPA (Site Code 004232) and SAC (Site Code 002299), the River Nanny Estuary and Shore SPA (Site Code 004158), or any other European site, in view of the sites' Conservation Objectives, and a Stage 2 Appropriate Assessment and submission of a NIS is not therefore required.

5.6. Other Issues

5.6.1. Ecology

5.6.2. The Dúlra is Dúchas report submitted by the appellants raises issues regarding the potential impacts on the Thomastown Bog pNHA and issues relating to drainage and run-off from the panels. I consider that these issues have been sufficiently addressed in Sections 7.8 and 7.9 of my original report, and I do not consider that any additional issues arise.

5.6.3. Traffic

5.6.4. In my earlier report, I recommended an additional reason for refusal for the portion of the proposed development within the Downestown Site (Site 2), which related to the endangering of public safety by reason of traffic hazard because of the additional

traffic turning movements the development would generate at a point where sightlines are restricted in both directions. Having regard to my recommendation in this addendum report that permission be refused for the development within Site 2 on substantive grounds relating to visual impact, I have not included the traffic hazard issue as a recommended reason for refusal.

6.0 **Recommendation**

6.1. I recommend that planning permission should be REFUSED for the eastern solar array in the townland of Downestown (Site 2) for the reason marked (1) below and GRANTED for the western solar array in the townlands of Garballagh, Thomastown and Gillinstown (Site 1), subject to conditions, for the reasons and considerations marked (2), as set out below.

7.0 **Reason (1)**

1. 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, which would be highly visible from protected view 66 and other elevated areas to the south east, as well as from Downestown Road and Longford Road and residential areas towards the northern and western edges of Duleek. It is therefore considered 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 Development Plan objective LC OBJ 5 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.

8.0 Reasons and Considerations (2)

8.1. Having regard to the provisions of national and regional policy objectives in relation to renewable energy, the provisions of the Meath County Development Plan 2013 – 2019, the nature and scale of the proposed development, the continued agricultural use and improved biodiversity which would result, it is considered that, subject to compliance with the conditions set out below, the reduced scale of development of the western array in the townlands of Garballagh, Thomastown and Gillinstown (Site 1) would support national and regional renewable energy policy objectives, would not conflict with the provisions of the Development Plan, would not seriously injure the residential amenities of property in the vicinity, would not have unacceptable impacts on the visual amenities of the area, would not result in a serious risk of pollution, would be acceptable in terms of traffic safety and convenience, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

9.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted to the Planning Authority on the 20th day of December 2016 and by the further plans and particulars received by An Bord Pleanála on the 21st day of May 2018 and the 5th day of June 2018, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity

2. The period during which the development hereby permitted may be carried out shall be five years from the date of this Order.

Reason: In the interest of clarity.

3. (a) The 110kV substation and associated infrastructure identified as 'proposed SID works' on the drawing titled 'Figure 1.3', which was submitted to the

Board on the 21st day of May 2018 shall be omitted. Any proposal for a substation and associated infrastructure to serve the proposed development shall form part of a separate planning application to the Planning Authority or the Board, as appropriate.

(b) This permission shall not be construed as any form of consent or agreement to a connection to the national grid or to the routing or nature of any such connection.

Reason: In the interest of clarity.

- 4. (a) All structures including foundations hereby authorised shall be removed not later than 25 years from the date of commissioning of the development, and the site reinstated unless planning permission has been granted for their retention for a further period prior to that date.
 - (b) Prior to commencement of development, a detailed restoration plan, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, substation, CCTV cameras, fencing and site access to a specific timescale, shall be submitted to, and agreed in writing with, the planning authority. On full or partial decommissioning of the solar farm, or if the solar farm ceases operation for a period of more than one year, the solar arrays, including foundations/anchors, and all associated equipment, shall be dismantled and removed permanently from the site. The site shall be restored in accordance with this plan and all decommissioned structures shall be removed within three months of decommissioning.

Reason: To enable the planning authority to review the operation of the solar farm over the stated time period, having regard to the circumstances then prevailing, and in the interest of orderly development.

 The proposed development shall be undertaken in compliance with all environmental commitments made in the documentation supporting the application.

Reason: To protect the environment.

6. (a) The landscaping proposals shall be carried out within the first planting season following commencement of construction of the solar PV array. All

existing hedgerows (except at access track openings) shall be retained. The landscaping and screening shall be maintained at regular intervals. Any trees or shrubs planted in accordance with this condition which are removed, die, become seriously damaged or diseased within two years of planting shall be replaced by trees or shrubs of similar size and species to those originally required to be planted.

(b) Additional screening and/or planting shall be provided so as to ensure that there is no glint impact on adjoining houses as a result of the development. Upon commissioning of the development and for a period of two years following first operation, the developer shall provide detailed glint surveys on an annual basis to the planning authority in order to confirm that no such glint impact has taken place, and shall provide such further mitigation measures, as the planning authority may specify in writing, to ensure that this is achieved.

Reason: To assist in screening the proposed development from view and to blend it into its surroundings in the interest of visual amenity, and to mitigate any glint and glare impact from the proposed development upon adjoining residential amenities.

7. The inverter/transformer stations, storage module and all fencing shall be dark green in colour.

Reason: In the interest of the visual amenity of the area.

- 8. (a) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of planning permission.
 - (b) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or the road.
 - (c) Each fencing panel shall be erected such that for a minimum of 300 millimetres of its length, its bottom edge is no less than 150 millimetres from ground level.
 - (d) The solar panels shall have driven or screw pile foundations only, unless otherwise authorised by a separate grant of planning permission.
 - (e) Cables within the site shall be located underground.

Reason: In the interest of clarity, of visual and residential amenity, to allow wildlife to continue to have access to and through the site, and to minimise impacts on drainage patterns and surface water quality.

- The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. site. In this regard, the developer shall -
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development,
 - (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - (c) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

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

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

10. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including hours of working, noise management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste. The plan shall also include a construction method statement to ensure the avoidance of impacts on badgers and otters.

Reason: In the interests of public safety, protection of ecology and residential amenity.

11. Water supply and drainage arrangements including the attenuation and disposal of surface water shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of environmental protection and public health.

12. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the reinstatement of public roads that may be damaged by construction transport coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the reinstatement of public roads that may be damaged by construction transport.

13. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure 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 to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site.

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

provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

Niall Haverty Planning Inspector 31st January 2019