



An
Bord
Pleanála

Inspector's Report ABP-300434-17

Development

Construction, operation and decommissioning of photovoltaic solar farm comprising photovoltaic panels on ground mounted frames within a site of up to 48.4ha, to include inverter stations, 1 no. DNO substation, customer substation, switcher substations, field transformers, auxiliary transformers, GRP cabinets, monitoring house, single storey storage shed, battery containers, transformer containers, WC, fencing, temporary construction compound, access tracks, CCTV cameras, landscaping and all associated ancillary development works.

Location

Ballyvatta and Clash, Knockraha, Leamlara, Co. Cork

Planning Authority

Cork County Council

Planning Authority Reg. Ref.

175370

Applicant(s)

Lightsource Renewable Energy
Ireland Ltd.

Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	Third Party
Appellant(s)	Kevin O’Riordan Sheila and Tony Ryan Andrew Nixon Martin and Brigitte Noonan
Observer(s)	Frank O’Driscoll Aileen Leahy
Date of Site Inspection	27 th April 2018
Inspector	Ciara Kellett

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1.0 Site Location and Description

- 1.1. The site is located in two townlands, namely, Ballyvatta and Clash in Co. Cork. The 48Ha site is located c.4.3km south-east of Watergrasshill and the M8 motorway. It is c.15km north-east of Cork city. The nearest villages are Knockraha c.3km to the south-west and Leamlara c. 2.5km to the south-east. Access to the site is off the Watergrasshill to Leamlara Road.
- 1.2. The area is very rural in nature with scattered one-off dwellings in the vicinity. A number of dwellings have direct views towards the fields and are home to a number of the appellants and observers. The roads surrounding the site itself have recently been resurfaced by the Council. A relatively large wooded area lies to the east of the site.
- 1.3. The site comprises three parcels of land each containing a series of fields which are in agricultural use. Section 1 is the most easterly and is noted as being c.7Ha and relatively flat; section 2 is the central parcel c.15Ha, and rises gradually from east to west; and, section 3 is the westerly and most southern c.27Ha, and is relatively flat. There is a narrow public road running between sections 1 and 2. Each field within each section of land is surrounded by hedgerows and trees which provide varying degrees of screening. The site is gently undulating varying in ground levels from 185.81mAOD in the south-eastern end of field 2 decreasing to 174.92mAOD on the south-eastern edge of field 11. The three sections are irregular in shape.
- 1.4. The site is not located in or near a Natura 2000 site and the nearest pNHA is the semi-natural oak woodland of Leamlara Woods that is c.4km to the south-east.
- 1.5. Appendix A contains maps and photos.

2.0 Proposed Development

- 2.1. It is proposed to install an array of solar photovoltaic (PV) panels on the site to provide c.25.7MW of power which will be fed into the local power grid. The panels will be c.1.95m x 0.995m x 0.05m in size, and will have a maximum height of 2.343m above ground level and will be 800mm above ground level at the lowest point with

the intent of allowing sheep to graze beneath the panels. It is proposed to cover c.14Ha with solar modules or c.30% of the site.

- 2.2. The panels will be attached to mounting frames at an angle of 20 degrees and are fixed in place – they will not track the sun. The mounting frames are pile driven c.1.5m into the ground and it is stated that no concrete foundations are required.
- 2.3. A total of 18 inverters which convert the Direct Current (DC) electricity into Alternating Current (AC) are required. These will be housed in a cabin like structure c.2.8m high sitting on a concrete base 8.2m long x 2.3m wide.
- 2.4. A total of 18 transformers are required which will be either housed in a cabinet similar to the inverter or externally surrounded by a fence and accompanied by a switchgear cabinet.
- 2.5. Two substations are required; a DNO and Customer substation c.2.97m high x 10.49m x 3.93m. A security light will be fixed to the exterior of the DNO substation and will only be activated using a motion sensor. No other lighting is proposed.
- 2.6. CCTV Security cameras will be located throughout the site on poles of c.2.5m high. They are directed into the site and will be fixed view. A Communications building is proposed at 3.3 m high x 3.9m x 3.4m. A composting toilet will be provided. A storage building is required for spare parts and maintenance purposes.
- 2.7. Battery storage is proposed. The battery facilities comprise of two containers housing the batteries themselves and a container for a transformer.
- 2.8. A 2m high agricultural timber and wire fence will be installed around the perimeter as well as access tracks.
- 2.9. One access to each parcel of land is provided from the public road. Access to Section 1 and 2 are off the same road and in close proximity to each other. Access to section 3 is to the west of section 3 off another public road.
- 2.10. The application was accompanied by a number of documents as well as drawings:
 - Appropriate Assessment Screening Report
 - Statement of Community Involvement
 - Landscape and Visual Impact Assessment
 - Ecological Appraisal

- Biodiversity Management Plan
- Cultural Heritage and Archaeological Impact Assessment
- Flood Risk Assessment
- Noise Impact Assessment
- Construction Environmental Management Plan
- Glint and Glare Report
- Construction, Decommissioning and Traffic Management Method Statement

3.0 **Planning Authority Decision**

3.1. **Decision**

- 3.1.1. The Planning Authority decided to grant permission subject to 37 conditions. Condition no.2 permitted the development for 30 years from the date of commissioning and required the submission of a detailed restoration plan. Condition no.3 requires the developer to submit a comprehensive landscape plan which details exact numbers and strategic locations of all trees and hedgerows throughout the site including replacement planting for any sections of hedgerows to be removed to provide access to the site. Condition no.32 requires a geophysical survey to be carried out prior to commencement of development. Condition no.34 requires the developer to lodge a cash deposit or bond with the Planning Authority to secure reinstatement of the site on cessation of the project. Condition no.35 requires the applicant to pay a special development contribution of €102,000 towards the upgrade and strengthening of the local roads. Condition no.36 permitted the development to be carried out over 10 years.

3.2. **Planning Authority Reports**

3.2.1. **Planning Reports**

The project was subject to a request for Further Information. Therefore, there are a number of Planning Reports on the file. In summary, the Reports include:

- There are no specific national guidelines for large-scale solar farms. Renewable energy is supported in the Cork County Development Plan as well as national guidelines.
- Considers potential impact on landscape and visual amenity to be one of the key issues. Notes LVIA has been submitted as well as a Zone of Theoretical Visibility. Site is not designated as a high value landscape in the Plan and the site falls within landscape type 10b “Fissured Fertile Middle ground”. The site is not visible from the nearest scenic route.
- Reviews photomontages and considers that the applicant should be required to carry out full photomontages for all views where there is a possibility of views of the development.
- Does not consider the landscape plan to be adequate. Planting proposed consists of whips and young trees which will take a number of years to grow. Revised planting scheme required as well as a landscape maintenance plan.
- Considers noise will be minimal post construction.
- Has concerns with the lack of certainty with the conclusions regarding glint and glare. Requires applicant to carry out the necessary ground survey work to inform the requirement for any screening.
- Notes third party submissions relating to the access roads. Notes Area Engineer states that the large number of HGV movements are only sustainable due to the short time frame for deliveries. Area Engineer provides costs to upgrade the 3km of road. Area Engineer recommends a special development contribution of 50% of those costs.
- Notes site is not located in an area at risk of flooding and is satisfied with archaeology report.
- With respect to ecology considers a condition to require mammal gates along the fence should be applied. Considers a detailed survey of the wet grassland contained in section 1 should be sought.
- Recommends Further Information is sought with respect to the additional ecology surveying, landscape plan, landscape maintenance plan and other photomontages.

- The applicant responded on 25th October 2017. A National Vegetation Classification survey was carried out on the portion of wet grassland. A floating road is proposed. Evidence of badgers were observed during the survey in September 2017, however no setts were found. Mitigation measures proposed in the Biodiversity Management Plan are considered appropriate. A revised landscape plan was submitted with improved screening and more mature plants and hedging to be planted. A review of the previous Glint and Glare survey was carried out based on the actual ground survey data. Additional cross section drawings were submitted. A landscape maintenance plan was submitted. Additional photomontages were submitted.
- The Planner considers the responses acceptable and recommends permission subject to conditions.
- The report of the A/Senior Planner concurs with Planner's recommendation. Notes that while the scale of the proposal is large, the landscape is capable of assimilating this scale of development.

The decision was in accordance with the Planner's recommendations.

3.2.2. Other Technical Reports

- **Area Engineer:** No objection subject to conditions
- **Environment:** 4 Reports - No objection subject to conditions
- **Water services:** No comments
- **Archaeologist:** No objection subject to conditions

3.3. Prescribed Bodies

- **Inland Fisheries Ireland:** No objection subject to conditions

3.4. Third Party Observations

Ten submissions were made with the majority objecting to the proposal. The concerns are similar to those in the appeals and will be detailed in section 6 below.

4.0 Planning History

There is no planning history associated with the site.

5.0 Policy Context

5.1. National Policy

5.1.1. The Government White Paper entitled '*Ireland's Transition to a Low Carbon Energy Future 2015-2030*' recognises that a radical transformation of Ireland's energy system is required to meet climate change objectives and to meet renewable energy targets. It includes an objective to '*accelerate the development and diversification of renewable energy generation*' and '*increase the country's output of electricity from renewable sources*'. It states that this will be achieved through a number of means including wind, solar PV and ocean energy.

5.1.2. With regard to solar energy, it states (Section 137):

Solar photovoltaic PV technology is rapidly becoming cost effective for electricity generation, not only compares with other renewables but also compares with conventional forms of generation. The deployment of solar energy in Ireland has the potential to increase energy security, contribute to our renewable energy targets and support economic growth and jobs. Solar also brings a number of benefits like relatively quick construction and a range of deployment options including solar thermal for heat and solar PV for electricity.

5.2. Regional Policy

5.2.1. The **Regional Planning Guidelines for the South-West Region 2010-2022** recognises that the region has a key role to play in the attainment of the national renewable energy targets. Section 5.6.32 states:

The guidelines support the sustainable development of renewable energy generation subject to the sustainable development of local areas and the protection of areas of high scenic amenity. Possible effects on Natura 2000

Sites, including effects on water supply and hydrology, wildlife disturbance, habitat loss and species mortality associated with collisions should be an essential consideration when planning for renewables and these should be considered at the local or project-level stage.

5.3. County Policy

- 5.3.1. The operative development plan is the **Cork County Development Plan 2014**. The site is located in a rural area which is unzoned. Chapter 9 of the Plan deals with energy and the environment. Chapter 13 refers to Green Infrastructure.
- 5.3.2. With regard to Energy/Electricity Network the following objectives are relevant.

Objective ED1-1: Energy - *Ensure that through sustainable development County Cork fulfils its optimum role in contributing to the diversity and security of energy supply and to harness the potential of the county to assist in meeting renewable energy targets.*

Objective ED6-1: Electricity Network – *Support and facilitate the sustainable development, upgrade and expansion of the electricity transmission grid, storage and distribution network infrastructure. Support the sustainable development of the grid including strategic energy corridors and distribution networks in the region to international standards. Facilitate where practical and feasible infrastructure connections to wind farms and other renewable energy sources subject to normal planning considerations. Proposals for development which would be likely to have a significant effect on nature conservation sites and/or habitats or species of high conservation value will only be approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected.*

Section 9.4.13 refers to Solar Energy specifically. Section 9.4.15 states:

Photovoltaic (PV) is the generation of electricity from light. In essence photovoltaic systems use daylight (not necessarily direct sunshine) to convert solar radiation into electricity. The technology can be used for domestic as well as larger industrial or commercial applications.

Section 9.4.16 states:

At present the main potential in Cork for this form of electricity generation is by adding a small number of panels to an individual building and at this scale these proposals only have localised impacts.

Section 9.4.17 states:

In other jurisdictions there are some larger scale electricity generating schemes using this method where climatic conditions allow. With technological advances it is possible that these larger scale installations may become practical in Cork and if this occurs careful consideration will need to be given to their scale, location and other impacts.

Section 9.4.18 states:

The Council will support and facilitate the development of solar energy, encourage passive solar design and solar water heating in new buildings and in retrofitting buildings.

Objective GI 6-1 in Chapter 13 refers to Landscape. It states:

- a) *Protect the visual and scenic amenities of County Cork's built and natural environment.*
- b) *Landscape issues will be an important factor in all land-use proposals, ensuring that a proactive view of development is undertaken while maintaining respect for the environment and heritage generally in line with the principle of sustainability.*
- c) *Ensure that new development meets high standards of siting and design.*
- d) *Protect skylines and ridges from development.*
- e) *Discourage proposals necessitating the removal of extensive amounts of trees, hedgerows and historic walls or other distinctive boundary treatments.*

5.4. Natural Heritage Designations

The Blackwater River SAC (Site Code 002170) is c. 5km to the north. The Great Island Channel SAC (Site Code 001058) is c. 7km to the south. Cork Harbour SPA (Site Code 004030) is c.7km to the south.

6.0 The Appeal

6.1. Grounds of Appeal

Four third party appeals were lodged against the decision of the Planning Authority to grant permission. In summary, they state:

- *Traffic, swept path analysis, condition of local roads:* All appellants referred to concerns with the condition of the local roads which are considered seriously defective and below standard. One appellant submitted 7 no. drawings of his analysis of the swept path at the junction off the Watergrasshill to Leamlara road and at the junctions near the site which he considers to be totally unsuitable.
- Consider contradictory information has been supplied within the Traffic Management Method Statement. There are a number of very acute and narrow bends.
- Query the suitability of the existing road network to withstand the substantial overbearing loads that the roads will be subjected to during construction. There is no allowance or governance outlined as to the remedial and repair works that would likely be required post construction. The pre-construction strengthening works will no doubt be drastically degraded by the loads inflicted during construction. Photos submitted in one appeal illustrate the condition of the roads which have been taken since the Council completed repair works. Consider development contribution is seriously inadequate for the volume of work to be carried out on the roads.
- Consider proposal is flawed as the 90m sightline required is substantially less with implications for road safety. Safety issues have been completely ignored. Recognise that construction is temporary in duration but that does not mean that unsafe access arrangements are acceptable.
- The traffic and safety aspects were processed under the cover of a cost estimate for road surface repairs. No mention of a condition survey which is required at the very minimum to begin to describe the process as being part of a proper engineering assessment.
- Believe the number of HGV movements has been significantly under estimated. The real impact on the public roads cannot be properly assessed.

- The width of the road is down to 2.2m in places – photos provided of a car on the road. There is no possibility of two cars passing.
- Reference to previous refusal for a dwelling which refers to condition of road (ABP Ref. 120462).
- *Principle, scale and nature of development:* It is considered that the development is too large and its scale has not been adequately assessed by the Planning Authority. Refers to other permissions throughout the county for developments in the 5MW, 25/30 acre size range. Note original application at pre-planning stage was for development on 116Ha. Land is owned by one applicant and could lead to further applications to extend. Request that if the Board are minded to grant, that development is confined to section 3 only.
- The development is not agricultural but is industrial in nature and extent. The Council's statement that the "development pattern of the area" supports the development is unsubstantiated and incorrect. The pattern of dispersed agricultural holdings in the area imply the very opposite, i.e. the proposal conflicts with and is unsupported by the development pattern.
- *Use of agricultural land:* The development is not located on low-grade marginal quality land as is supported by the current usage. In recent years, the land has been let to both dairy and tillage farmers and is currently rented to two dairy farmers.
- *Landscaping and screening:* Consider house 10 in Glint and Glare study (House F in LVIA) will be most affected, but there is no mention in the LVIA about the implications for this house. No photomontages were submitted from any view from House 10. Not clear why the Planning Authority did not seek clarification of Further Information in relation to the lack of images. Consider setback of 80m to be insufficient and 150m more appropriate. Note that condition no.3 requires the applicant to submit landscaping plan and request the Board to include that condition, if the Board are of a mind to grant.
- There are a series of visual impacts from properties and at openings in the hedgerows and gates. A photomontage for one gate only has been submitted and this is for an entrance to a field that contains no solar panels. For access of the vehicles into the fields the entrances have to be widened – thereby providing further unscreened views. The sightlines will require further removal of hedgerows.

- Reference to Objective GI 6-1 which refers to protecting the visual and scenic amenities of Cork – this proposal does not respect the visual environment.
- *Community Involvement*: Consider there has been no community involvement.
- *Duration of permission*: Do not consider the 10 year permission is justified and request the Board to omit this condition as no credible case has been made for this.
- *Topsoil Removal*: No indication of stockpiling of topsoil is made – do not believe that sufficient consideration has been given to this.
- *Fire*: There have been a series of high profile fires in the last few years associated with solar panels. Proposal presents a heightened fire risk to adjacent properties.
- *Ground contamination*: Recycled brick is referred to for use in the track construction. Brick is not common in rural Ireland – where is it coming from? What assurances are there that there are no other contaminants.
- Proposal has the potential to seriously pollute the groundwater and contaminate private wells in the area.
- *Noise*: Noise created by heavy plant during construction and created during operation will destroy appellant's commercial kennel livelihood. Conditions relating to noise for the kennels are far more stringent than those applied to a solar farm. It has taken 10 years of pioneering work to create a bark free Boarding Kennels. Concerned that their business will lose its bark free status because of noise pollution from the proposed development.
- *Procedural issues*: Query validity of application as no distances from structures have been provided on the drawings.

6.2. Applicant Response

The applicant responded to the third party appeals. In summary, it states:

- *Principle of development*: There is support for development at national and county level for renewable energy projects.
- *Traffic, swept path analysis, condition of local roads*: Applicant notes that figures for delivery of gravel hardcore material and fencing were underestimated.

Construction vehicle numbers have been raised from 422 to 597 vehicles during construction. Having regard to the 16 week construction period, consider increase will not mean a significant difference in the 10 vehicles a day revision to 15.

- Road condition was raised by all appellants. It is confirmed that a road condition survey will be completed prior to the development taking place and then upon completion. This will occur on the newly strengthened and upgraded local roadway near the site (leading to the Watergrasshill to Leamlara road). Any damage will be repaired by the applicant. Happy to accept a condition to this effect.
- Consider drawings submitted by the appellant with respect to the three junctions have been drawn using OSI data and not from accurate topographic information. Applicant is aware that currently articulated vehicles negotiate the junctions on a regular basis for the collection of milk, delivery of fertiliser, feedstuffs and removal of slurry from a pig farm locally. Applicant happy to provide accurate swept path analysis drawings for the junctions based on the OSI mapping if the Board request. There are no abnormal loads proposed.
- With respect to sightlines at entrance 3 drawing indicated that 90m can be achieved to the north but only 65m to the south. Condition no. 23 requires all sight distances to be 90m. Contend that traffic coming from the south will be moving at slower speeds due to bend to the south. Highly unlikely those vehicles will be travelling at 50kph around a blind bend. Traffic management procedures will be in place.
- Lack of passing points was raised. Request that a condition to agree a traffic management plan is attached. Options suggested for plan.
- Refer to previous refusal mentioned by an appellant from 17 years ago. The Board's refusal referred to the condition of the road and the unsustainability of one-off housing. Contend there is serious difference in a dwelling and subject proposal. While there will be increased traffic it will only be during construction. Post construction traffic is negligible unlike a dwelling.
- The figure of the Development Contribution has been calculated by the Council's Area Engineer and the applicant accepts this.

- *Residential amenity/scale of development:* There are no national guidelines or standards to assess solar farm proposals for compliance. Notwithstanding this, the nearest property is c.50m away to the north, behind a field boundary that is to be infill planted with semi-mature hedging. There will be no vibration, and noise levels will be minimal. The panels will be facing south and will not directly face the frontage of any dwelling.
- With respect to scale, it is not the largest in Ireland. The scale and size of a solar farm is directly related to the proposed subsidy mechanism the Department is anticipated to introduce. Smaller sites are unlikely to be economically viable. Proliferation of smaller schemes could be compared with scatterings of single dwellings in the countryside. Request the Board to consider the economy of scale issue related to ensuring the project is economically viable. The LVIA concluded that the solar farm is not out of keeping with the scale and nature of the receiving landscape context without protective designation.
- With respect to industrialisation of rural land, solar farms are developed on rural land throughout Europe. Suitably sized brownfield sites are not available for this type of development. Applicant gave the selection process due diligence. The current choice has been subject to a robust site selection process.
- *Noise concerns at commercial kennel:* The kennels is c.800m away. The kennels were not one of the noise receptors assessed due to distance from the site. Due to distance, the impact will be less than 35dB during operation. During construction, the haul route proposed will mean that vehicles will not pass the kennels.
- *Landscaping/Glint and Glare:* Loss of hedgerows at entrance is necessary to provide the 90m sightline required by the Council. The initial loss of hedgerows will only be observed as transient views by vehicle users and walkers. There are no residential receptors in the area looking across at entrances. Any adverse effects will be temporary and will reduce as the proposed mitigation becomes established.
- Proposal has been assessed against Objective G1 6-1 and is compatible with this objective.
- Glint and Glare assessment carried out at application and Further Information stage concluded that due to the sites location and existing vegetative screening, the

proposal is unlikely to result in any significant glint effects on neighbouring properties.

- Appellants who live in House D and House F highlight concerns with their respective views. Photomontages from private views would not be in accordance with the advice set out in the Guidelines for Landscape and Visual Impact Assessment. LVIA concludes that the best available locations were used for photomontages in accordance with advice given at pre-planning stage with the Council Planners. It is impractical to take photomontages from every potential view. A revised landscape plan was submitted at Further Information stage to address the Council's concerns regarding planting along the boundary with house F.
- Condition no.3 requires a revised landscape plan to be submitted. The new plan is to include further detail. Request that the Board include a similar condition.
- With respect to setback distances agreed with an appellant, 80m was agreed and this is reflected in the design. Landscaping and a new mound are proposed.
- *Ground contamination*: This issue has been dealt with in the Construction Environment Management Plan submitted with the application. Methodology for Solar Farm installation is well established and there is no basis for considering there are significant issues with regard to contamination or impacts on water supply. There are no toxic materials used in the construction, operation and maintenance of a solar farm.
- It is the applicant's aim to source local and recycled materials whenever possible. The applicant will only obtain materials from a locally approved competent 3rd party waste recycling centre. Previously used hardcore (as opposed to recycled brick) and request a condition that allows either the use of reconstituted brick or quarried hardcore.
- *Fire concerns*: A Health and Safety Manager will be appointed during construction. During operation, applicant will carry out annual Risk Assessments which will include Fire Risk. There is no reason to believe that fire risks associated with solar farms are any greater than those associated with other renewable projects. While low in number, incidents have occurred and have been documented. The base of each inverter is concrete built over a hardcore fire-resistant foundation. The risk of fire spreading beyond a single inverter is extremely low.

- *Topsoil:* Note appellant's calculations in relation to topsoil but do not believe they are accurate or relevant. They fail to appreciate or reflect construction practices where materials are moved around the site and soil is reused and re-graded over the farm as construction progresses. There are no proposals to remove the topsoil.
- *Change in land use:* Note concerns that agricultural land will be replaced with a solar farm. The land is currently used for dairy farming but it is also used for sheep farming and this will continue. Layout has been specifically designed to provide for sheep grazing to continue as approximately 70% will be open grassland. The protection or grading of lands for certain forms of agriculture is not a policy or objective in the County Development Plan. The land is not prime agricultural land, it is upland grazing, best suited to sheep grazing.
- *Community Involvement:* Current proposals from the Department of Communications, Climate Action and Environment for the Renewable Electricity Support Scheme (RESS) are out for consultation. The issue of financial involvement by communities was raised within the consultation document and applicant awaits final published report. Regardless, it is not a directly relevant planning consideration.
- *Procedural Matters:* Consider the Board has already accepted the principle of a 10 year permission for solar farm developments. Consider that solar farms are likely to depend on both financial support from the government, access agreements with ESB/Eirgrid and there could be delays. Request 10 year permission is upheld.
- An EIAR is not required and this has been established and addressed by the Board.
- Consider planning application was validated by the Council and it is applicant's contention that the omission of the measurements has not prejudiced any party.

6.3. Planning Authority Response

The Planning Authority responded noting that they have no further comment to make.

6.4. Observations

- 6.4.1. There were two observations submitted on the appeal. One of the observers is the land owner and he states that the proposal will be a welcome development in support of his overall agricultural activities on the holding. He intends to move sheep back under the solar panels if the development is approved.
- 6.4.2. The second observation is from a person who states that she is the owner of two properties – one in Clash and the other in Ballyvatta. Both properties are unoccupied and both are currently for sale. A map is attached indicating one of the properties is surrounded on 3 sides by section 1 of the proposal and the other is in the very south-west corner but outside of section 3. Observer claims she was not made aware of the proposal. Considers it is glaringly obvious that her lands are encircled by the development. Properties she owns are the closest properties and queries how the developer avoided any reference to them in any of the 12 volumes of reports. There is no mention in the LVIA, the Flood Risk Assessment and not even a mention in the Glare and Glint study. Considers the value of her properties is hugely compromised if this development goes ahead.

6.5. Further Responses

The appellants were provided an opportunity to comment on the applicant's response to their appeals. A number of the earlier points were restated and are not repeated here for brevity. New issues and comments are summarised:

- *10 year permission*: contend that this is still questionable as the developer makes it clear that without the intervention of government grants the project is not viable. It is noted that of the 200 solar farms granted permission, none have been built yet, as solar without subsidy has not been established as a coherent sustainable energy source.
- *Construction traffic*: Note that traffic volumes increased by 40% when queried by an appellant. This volume of traffic will have drastic consequences for the road. Query the level of resurfacing that is proposed to take place pre and post-construction.

- Applicant should have accurately analysed the junctions of the proposed haul route and appellants should not have to carry out detailed topographical surveys. Note that the developer questions the accuracy of the appellant's swept path analysis based on OSI data but then sees no issue carrying out this work should the Board request.
- Applicant now concurs that the sightlines at entrance 3 are 65m, and now question the condition and they appear to query the designated speed limit of the road.
- *Amenities*: request that the setback is 150m from house F, not 80m. Request the Board to increase the setback in the context of a development area of 125 acres set on an overall landholding of 300 acres. There is no pressure for space. Request the Board to review the setback in the context of the LVIA assessment that property F will experience a Moderate/Major adverse visual effect reducing to Moderate by year 10. Do not agree that boundary embankment is sufficient mitigation. Request that all landscaping conditions are upheld and an appropriate setback of 150m is applied should the Board consider granting permission.
- *Agricultural land*: Applicant provides a broad brush statement that the land is best suited for sheep grazing. This is not accurate as four dairy farms are adjacent to the development plus other tillage farms. Do not accept that sheep will be grazed on the solar farm.
- *Noise*: Of opinion that kennels are 405m away from nearest source of noise which is the temporary construction compound. There is no background noise in the area that could mask the noise pollution. Google measurements indicate that the nearest switchgear is 656m away. A calm environment is essential to the kennels, which cannot be compared to a traditional kennel. They specialise in treating family dogs with behaviour issues.
- *Other issues*: Reference lack of information on windfarms years ago, as is the case currently with solar farms. Research shows that it is too early to tell how solar farms are impacting on humans and animals.
- Theft of solar farms in Germany has been a lucrative business. There is potential to attract crime gangs into the neighbourhood.

- No trust in the planning system.
- Do not accept that sufficient consideration has been given to dealing with the volume of topsoil removed during the construction stage.

7.0 Assessment

The main issues in this appeal are those raised in the grounds of appeal and I am satisfied that no other substantive issues arise. The issue of appropriate assessment also needs to be addressed. The issues can be dealt with under the following headings:

- Principle of development
- Traffic, swept path analysis and condition of local roads
- Visual Impact
- Glint and Glare
- Noise
- Groundwater contamination
- Other Matters
- Appropriate Assessment

7.1. Principle of Development

- 7.1.1. The appellants query the principle of the development in the absence of national planning guidelines. I acknowledge that there are no guidelines specifically for solar farms, but there are guidance documents and policies for renewable energy developments at national, regional, county and local level. I have referred to renewable energy policies in section 5 above.
- 7.1.2. The Government White Paper entitled *'Ireland's Transition to a Low Carbon Energy Future 2015-2030'* notes that *'Solar photovoltaic PV technology is rapidly becoming cost effective for electricity generation, and has the potential to increase energy security, contribute to our renewable energy targets and support economic growth and jobs'*.

- 7.1.3. The Regional Planning Guidelines for the area *support the sustainable development of renewable energy generation* subject to normal planning considerations.
- 7.1.4. The County Development Plan at the time of production considered that solar panels would be mostly used in small-scale developments. However, it did recognise that there are some larger scale electricity generating schemes using this method, and that with technological advances it is possible that these larger scale installations may become practical in Cork.
- 7.1.5. Having regard to the policy support for renewable energy projects at national, regional and county level, I am satisfied that subject to other normal planning considerations, the lack of specific national guidelines for solar farms is not a reason for refusal in this instance.

7.2. Traffic: condition of the local roads, swept path analysis, sightlines

- 7.2.1. Traffic and associated issues are of concern for all four appellants. Significant concerns are raised by all. I will address each below. I note that the applicant revised the number of HGVs to be used during construction following the appeal, and have considered that higher number.
- 7.2.2. *Condition of Local Roads*
- 7.2.3. Access to the site is proposed off the Watergrasshill to Leamlara road. Vehicles will need to turn south beyond Kearney's crossroads onto local roads. The condition of these local roads was a source of much concern to the appellants.
- 7.2.4. The applicant states that they will contribute towards the improvement of the roads. The Council included a Special Development Contribution as a condition. The contribution was deemed to be 50% of the expected costs of the road improvements in the order of €102,000. The applicant states that a road condition survey will be completed prior to the development taking place and then another upon completion. Damage as a result of construction activities will be repaired.
- 7.2.5. Photos accompanied a number of the appeal documents indicating the condition of the surrounding roads. I have carried out a site visit and travelled on the roads around all sections of the proposal. It would appear that road improvement works have been carried out since the lodgement of the appeals, particularly around

Sections 1 and 2. However, I consider it appropriate that the developer should pay a special development contribution towards the road improvement works.

7.2.6. I acknowledge that verges could be damaged but with a condition in place requiring the developer to provide funding towards improvement and repair works, I am satisfied that the short-term disruption will not seriously injure residential amenities.

7.2.7. I travelled around all the local roads during my site visit and do not consider that these roads are particularly narrow. While I accept that there are pinch points, any difficulties can be addressed by way of a condition requiring the applicant to provide a detailed Construction Traffic Management Plan. Options are proposed by the developer including a one-way system for goods in and out, traffic lights or stop-go signage operators at key junctions, etc. Construction duration is noted as being 16 weeks by the applicant. This is a temporary impact. During operation, there will be minimum traffic along the roads. I am satisfied that with an appropriate and detailed Construction Traffic Management Plan, there will not be a seriously long-term injurious residential impact.

7.2.8. *Swept path analysis*

7.2.9. One of the appellants submitted drawings with his analysis of the swept path at the junction with the Watergrasshill to Leamlara road, as well as the two junctions on the local roads that the developer will use during construction. The applicant has responded stating that the drawings are not accurate and that they are aware that articulated vehicles negotiate the junctions currently, such as vehicles for the collection of milk, etc. The applicant provided drawings indicating the visibility splays only at the entrance to each section, but is willing to provide swept path analysis drawings for those junctions should the Board request them.

7.2.10. I am of the view that with the submission of a detailed Construction Traffic Management Plan addressing access at these junctions, and having regard to the fact that large vehicles do already negotiate these junctions, the roads will be able to accommodate these vehicles. The Construction Traffic Management Plan must incorporate the use of signage and if deemed necessary by the Council, other options such as stop-go signage operators. The construction duration is limited, so any potential traffic impact will be temporary.

7.2.11. While the construction duration is temporary, I accept the genuine safety concerns of the appellants, particularly at the junction with the Watergrasshill to Leamlara road. However, I am satisfied that the volume of traffic around the roads adjacent to the site is very low and likely to be local. The roads are unlikely to attract tourist traffic and only minimal non-local traffic. Thus, I am satisfied that the construction duration can be managed having regard to local conditions and a fully detailed Construction Traffic Management Plan. Furthermore, I note that the Area Engineer was satisfied with the proposal subject to conditions.

7.2.12. Sightlines

7.2.13. A number of the appellants queried the ability of sightlines of 90m to be achieved at the site entrances. Condition no.23 requires sightlines of 90m in both directions. It is clear that the visibility on the southern side of entrance to section 3 cannot meet 90m due to a bend in the road. A 65m sightline can be achieved. The applicant states that the Design Manual for Roads and Bridges indicates that for a visibility splay of 65m, a 50kph speed limit should apply. It is further stated that it is highly unlikely that vehicles would be travelling at this speed around a blind bend. I can confirm to the Board that it is a blind bend and in normal circumstances, it is likely that vehicles would travel at much reduced speeds.

7.2.14. Regardless, the applicant has stated that they are willing to agree a repositioning of the entrance to achieve 90m sightlines to the south. This could potentially be an option however, having regard to the likelihood of low levels of traffic in the area, I do not consider that this is necessary if construction traffic is managed appropriately. Furthermore, moving the entrance further north would mean moving it closer to existing farm buildings. I am satisfied that with the short duration of construction and with an appropriate construction traffic management plan, the proposed entrance is acceptable.

7.2.15. Conclusion

7.2.16. To conclude on the topic of concern to all the appellants, I am satisfied that construction is of a short duration in the order of 16 weeks. Should the Board be of a mind to grant permission, I recommend that a condition is attached requiring the applicant to submit a detailed Construction Traffic Management Plan, clearly outlining how deliveries will be made to site, what procedures will be put in place to

ensure safety, and what haul routes are to be used. I accept that the traffic management measures will inconvenience local road users and the residents of the adjacent dwellings but consider that these impacts are acceptable, having regard to the temporary duration of the works.

7.2.17. During operation, the applicant states that visits to the site will be kept to a minimum.

7.2.18. With respect to the condition of the road, the applicant is willing to agree a pre and post construction survey of the roads with the Local Authority and make good any repairs necessary. In addition, the applicant is willing to pay a Special Development Contribution. I consider that a condition to this effect will ensure that there will not be a significant impact on the residential amenities of the area.

7.3. **Visual Impact**

7.3.1. The visual impact from individual dwellings was a source of concern to some of the appellants. Prior to addressing individual concerns, I will address the broader views. There are no designated scenic routes in the general area. The main road in the area is the Watergrasshill to Leamlara road. There is significant woodland (Moanbaun Woods), or views of woodland, from either side of this road. As one travels along this road, it is the woodland views that dominate. There will be occasional long distance glimpses towards the development, but I am satisfied that the intervening topography and trees and hedgerows will mitigate those views. Viewpoints 7 and 8 from the southwest indicate that there will be long distant views towards the site. Having travelled along these roads, I am satisfied that while there will be fleeting views towards the development, these views will be in the context of the existence of Knockraha substation and the large pylons and overhead powerlines.

7.3.2. With respect to individual concerns about views from dwellings and at gaps and gates along the fields, the appellants considered that the Landscape and Visual Impact Assessment did not provide sufficient photomontages and that the photomontages provided were selective views. Further concerns were raised with the required removal of hedgerow to enable sightlines at entrances, which would intensify views into the site at the entrance gates, as well as impact the environment.

- 7.3.3. The appellant in dwelling F expresses particular concerns. This is the dwelling to the south of section 2 of the proposal. The appellant states that following discussions with the applicant, the applicant agreed to provide a setback of c.80m from their boundary to the southern boundary of the development (An ESB pole is c.80m from their boundary). The appellant considers that they are the most immediately affected, but consider that their dwelling has not received any special mention in the LVIA. They state that they should have insisted on a larger setback of the order of 150m, and made it clear to the applicant at the time that they reserved the right to review the setback. They request the Board to require a setback of 150m and request that Condition no.3 is incorporated in full if the Board are of a mind to grant.
- 7.3.4. The applicant states with respect to dwelling F that following the request for Further Information, a new mound 1.5m in height with hedgerow planting added along the application site boundary will reduce visibility of the proposed development.
- 7.3.5. I have viewed the proposed location from the gate and from within the field nearest the dwelling. I note the applicant submitted, as part of the Further Information response, an elevation drawing providing a view from the subject appellant's dwelling running east-west¹. However, an elevation drawing running north-south may have provided more information as this is the view of most concern to the appellant. Following the request for Further Information, the applicant revised the photomontage to indicate the views with the improved mound and additional hedging. Reviewing these revised photomontages, I am satisfied that with the planting of a 1.5m high mound as well as semi-mature hedgerows, that the view will be somewhat mitigated. While there will be some views, and particularly during winter, I am satisfied that these views will not cause a seriously adverse visual impact.
- 7.3.6. I am satisfied that with the additional planting and screening there will not be a need to increase the setback to 150m as requested by the appellant. I am satisfied that this increase in distance would not serve much purpose. The land is generally flat and the key mitigation will be the landscape screening. Therefore, I do not recommend increasing the setback distance. I do however, recommend a condition

¹ Provided for Glint and Glare purposes

requiring the production of detailed and strategic landscape drawings and plans detailing the mound and the semi-mature planting to be provided by the applicant.

- 7.3.7. Another appellant is noted as living in dwelling D. Viewpoint 2 is taken from the rear of his dwelling towards section 2 of the proposal. This area is currently quite flat and open with very limited vegetation to provide screening. Similar to House F, following the response to the Further Information request, the applicant now intends to build a mound of 1.5m high, with semi-mature hedgerows and trees to aid screening. As noted above, I consider that a detailed and strategic planting scheme should be prepared along the northern boundary of section 2. The landscaping maintenance plan should be amended accordingly.
- 7.3.8. It is noted by appellants that as well as existing gaps in the hedgerows, removal of hedgerows near each site entrance will be required to enable the HGVs access the different sections of the site. The applicant has proposed to mitigate these losses by replacing them with a similar length of earth bank and semi mature hedgerow planting behind the existing hedgerow at the entrances. I am satisfied that this will mitigate for the loss of hedgerows. As noted above, there will be intermittent views into the development, however the location of the entrances has been carefully considered to avoid being opposite any residences. Views at entrances will be glimpses as walkers or car users travel by. They are not defining views.
- 7.3.9. To conclude, with the changes made at Further Information stage to the landscaping masterplan, I am satisfied that the visual impact will not be seriously injurious to the residential amenities of the area, and will not be contrary to policy GI 6-1 of the County Development Plan. Local views will undoubtedly change and in some instances long distance views, which are currently available to some residents, will be curtailed with the addition of mounds and hedgerows and trees.
- 7.3.10. There will be some long distance views into the development from the surrounding main roads, but these views are in the context of a man-altered environment, containing the Knockraha substation and pylons. There are no designated scenic views in the area. I am satisfied that the topography of the area and the existing screening and vegetation will mitigate long distance views.

7.4. Glint and Glare

- 7.4.1. Potential issues with glint and glare were raised by one appellant. I note that solar panels are designed to absorb as much light as possible and reflect as little as possible to maximise their electricity generation. I also note that many documents state that the reflectivity of solar panels is similar to that of still water and significantly less than glass and steel. The panels are the 'fixed' type and will not 'track' or follow the sunlight.
- 7.4.2. The Glint and Glare study submitted with the application concludes that the expected impact upon residential amenity is defined as, at worst 'low'. The study notes that a view of solar reflections is deemed possible from 4 of the 21 dwellings in the vicinity having regard to the existing screening. The applicant's response to the appeal notes that the line of sight from dwelling 6 (D in LVIA) will be completely blocked and therefore solar reflections would be blocked. An elevation drawing has been prepared indicating the viewpoint from one section through the proposal. While this particular section indicates that the topography and vegetation would prevent a direct line of sight, this is only one location. However, having visited the site and having regard to the existing vegetation between section 1 and dwelling 6, I am satisfied that there will be limited direct line of sight into the development and therefore limited impact of glint and glare.

7.5. Noise

- 7.5.1. One of the appellants expressed serious concerns with potential noise. The appellant operates a commercial dog kennel with a no-barking policy where it is stated difficult family dogs are trained. The appellant notes that it has taken 10 years of pioneering work to create a bark free Boarding Kennels and there is serious concern for the future of the business.
- 7.5.2. The kennels are located to the south-west of the overall site. The actual distance from the site was contested. I am satisfied that the business is located c.450m to the south-west of the proposed entrance to section 3 as the crow flies.
- 7.5.3. Based on the information supplied by the applicant with respect to the haul routes, no HGVs will pass by the kennels to access the site. While this does not preclude vehicles from using the road to the front of the kennels - and to preclude vehicles

would be difficult to enforce - I am of the opinion that there are easier routes to access the site, even coming from a southerly direction. Notwithstanding this, construction is temporary and can be subject to a condition to restrict noise.

- 7.5.4. With respect to noise during operations, solar farms by their nature are not noisy. The only noise emitting equipment are the transformers and other electrical equipment. These are all housed within acoustically insulated pre-fabricated structures to ensure that there is no unacceptable noise at the boundary. Furthermore, solar farms only operate at daytime when background noise is higher. Having regard to the low level of noise that will be generated, the separation distance to the kennel and other sensitive receptors and the daytime operation of the solar farm, when other noise sources such as traffic and farm machinery will contribute to the noise environment, I consider that that impacts arising will be negligible and insignificant.

7.6. Groundwater Contamination

- 7.6.1. This issue was raised by a number of the appellants. A Construction Environmental Management Plan was submitted by the applicant. I am satisfied that with normal practice construction mitigation measures there will not be a seriously adverse impact on ground water. Furthermore having regard to the nature of the construction activities whereby the mounting frames are pile driven c.1.5m into the ground and no concrete foundations are required, I am satisfied that there will not be an adverse impact on water supplies in the area.
- 7.6.2. I do agree with the appellants whereby concern was expressed with the use of recycled bricks in the access track materials and the potential for contamination. The applicant responded stating that only local recycled materials will be used or gravel hardcore similar to what has been used in their Northern Ireland solar farms. A condition requiring the applicant to agree with the Planning Authority the materials used throughout the development is a standard condition and I recommend that this is included should the Board consider granting permission.
- 7.6.3. I accept that any topsoil removed within the construction period will be reused throughout the site and not transported off site. Should any waste materials be

produced, the Construction Management Plan must address where this waste will go. This can be dealt with by way of condition.

7.7. Other Matters

7.7.1. 10 year permission

7.7.2. A number of the appellants query the condition providing the applicant a permission timeframe of 10 years and request that this condition is omitted, thereby resulting in a standard 5-year permission timeframe. I note that almost all planning permissions for solar farms that have been granted permission by the Board have included a condition to allow a 10-year timeframe. I consider that it would be unreasonable to limit this particular permission to 5 years. There are no specific objectives for this particular part of the county highlighted in the Development Plan which would indicate that the site may in the future become 'developable' or zoned land for an alternative use. Therefore, I am satisfied that a 10-year permission is acceptable.

7.7.3. Observer's property

7.7.4. I note that one of the observers indicates that she owns two properties in the area that are closest to the site. The observer queries why her properties were not included in the Glint and Glare assessment. I visited the two properties and can confirm to the Board that both properties are currently derelict and appear uninhabitable. I have addressed glint and glare etc. above. I am satisfied that the applicant considered the general area in the various assessments and am of the opinion that the observer's lands have not been excluded from those assessments.

7.7.5. Land ownership/Redline

7.7.6. I draw the Board's attention to the map which accompanied the observers submission. The map appears to indicate that the observer's property bisects section 1 of the overall development. This would indicate that the applicant cannot access the southern part of section 1 via the proposed entrance. I am satisfied that the observer's submission is at a small scale and may not accurately reflect the land ownership. Furthermore, I draw the Board's attention to section 34(13) of the Planning and Development Act where it states that a person shall not be entitled solely by reason of a permission to carry out development.

7.7.7. Scale of Proposal

7.7.8. A number of the appellants referred to the scale proposed and the industrial nature of the development. One appellant suggested that only section 3 of the proposal should be granted permission by the Board. The scale of the overall development is large having regard to a number of solar farms that have been appealed to the Board. However, I have considered the entirety of this proposal with respect to the policies and objectives of the County Development Plan as well as other guidance documents. I have visited the site and travelled around the area to understand the visual impact of the proposal. I have assessed the project with respect to the various topics raised by the appellants. I am satisfied that the site is conducive for the development of a solar farm and that the scale of the project is not a reason for refusal.

7.7.9. Use of agricultural land

7.7.10. The loss of good agricultural land for the solar farm is noted by a number of the appellants. I do not accept that this land is lost to agricultural uses. It is stated that grazing of sheep will be considered by the applicant. Dual use appears to be the norm for most solar farms being proposed. This will maintain the fields in agricultural use, albeit restricted in the type of agricultural use. As noted, it is used for pasture currently. I do not accept that this is a reason for refusal of permission.

7.7.11. Fire Risks

7.7.12. I am satisfied that Solar Farms do not pose risks greater than any other renewable energy project and that it is not a planning issue per se.

7.7.13. Procedural Matters

7.7.14. An appellant considers that the application documentation was deficient with respect to the drawings. It is stated that the distance from structures to the boundary have not been clearly identified. Having regard to the detailed submissions from the appellants, I am satisfied that third party rights have not been compromised in any way and I accept the applicant's contention that the omission of the measurements has not prejudiced any party.

7.7.15. Need for an Environmental Impact Assessment

7.7.16. One appellant was of the opinion that the requirement for EIA was not given the consideration it deserved from the Planning Authority. I am satisfied that solar farms are not a development class for which an Environmental Impact Assessment Report (EIAR) is required from the applicant. It does not fall within Part 1 or Part 2 of Schedule 5 of the Planning and Development Regulations. I am satisfied that an EIAR is not required and I note that a similar conclusion has been reached by the Board on other solar farm developments.

7.8. Appropriate Assessment

7.8.1. The development site and the SACs (Blackwater River SAC and Great Island Channel SAC) are not hydrologically connected. The Cork Harbour SPA is c.7km to the south. Core foraging areas of the qualifying species is less than 3km.

7.8.2. Therefore, having regard to the nature and scale of development proposed and to the nature of the receiving environment, no appropriate assessment issues arise and it is not considered that the proposed development would be likely to have a significant effect individually or in combination with other plans or projects on a European site.

8.0 Recommendation

I recommend that planning permission should be granted subject to conditions, for the reasons and considerations as set out below.

9.0 Reasons and Considerations

Having regard to the provisions of the Cork County Development Plan 2014 - 2020, and national and regional policy in relation to renewable energy, the nature and scale of the development proposed, the suitability of the screening and topography of the site, it is considered that, subject to compliance with the conditions set out below, the proposed development would not be seriously injurious to the visual and residential amenities to the area, would not endanger human health or the environment, and would be acceptable in terms of traffic safety and convenience. Therefore, the proposed development would be in accordance with the proper planning and sustainable development of the area.

10.0 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 on the 25th day of October, 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 shall be carried out shall be 10 years from the date of this Order.

Reason: Having regard to the nature of the proposed development, the Board considered it reasonable and appropriate to specify a period of permission in excess of five years.

3. The permission shall be for a period of 25 years from the date of commissioning of the solar array. The solar array and related ancillary structures shall then be removed unless, prior to the end of the period, planning permission shall have been granted for their retention for a further period.

Reason: To enable the planning authority to review the operation of the solar array in the light of the circumstances then prevailing.

4. (i) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation shall be submitted to and agreed in writing with the planning authority.

(ii) On full or partial decommissioning of the solar array, or if the solar array ceases operation for a period of more than one year, the site shall be restored and structures removed in accordance with the said plan within

three months of decommissioning/cessation, to the written satisfaction of the planning authority.

Reason: To ensure the satisfactory reinstatement of the site on full or partial cessation of the proposed development.

5. Prior to commencement of any works on site by the developer a comprehensive landscape plan which details the exact numbers and strategic locations of all trees, hedgerows and mounds throughout the site, shall be submitted to, and agreed in writing with, the planning authority. This shall include all replacement planting for any sections of hedgerow which are to be removed to provide access to the site. The landscape maintenance plan and planting schedule shall be amended accordingly and submitted in conjunction with the landscape plan.

Reason: In the interests of visual amenity and biodiversity.

6. 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 interests of public health.

7. The construction of the development shall be managed in accordance with a Construction Management Plan, to include a Construction Traffic 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:

(a) Location of the site and materials compound(s) including area(s) identified for the storage of construction refuse;

(b) Location of areas for construction site offices and staff facilities;

(c) Details of site security fencing and hoardings;

(d) Details of on-site car parking facilities for site workers during the course of construction;

(e) Details of the timing and routing of construction traffic to and from the

construction site and associated directional signage and use of stop-go signage operators at relevant junctions, to include proposals to facilitate the delivery of abnormal loads to the site;

(f) Measures to obviate queuing of construction traffic on the adjoining road network;

(g) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network;

(h) Alternative arrangements to be put in place for pedestrians and vehicles in the case of the closure of any public road during the course of site development works;

(i) Details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;

(j) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater;

(k) Off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;

(l) Means to ensure that surface water run-off is controlled such that no silt or other pollutants enter local surface water sewers or drains.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

. **Reason:** In the interest of amenities, public health and safety.

8. Noise levels emanating from the proposed development when measured at Noise Sensitive Locations shall not exceed 55dBA between 0700 and 1900 hours, and 45dBA between 1900 and 0700 hours.

All sound measurements shall be carried out in accordance with ISO Recommendations 1996 – “Acoustics – Description, Measurement and Assessment of Environmental Noise”.

Reason: In the interest of residential amenities.

9. (i) No artificial lighting shall be installed or operated on site unless authorised by a prior grant of permission.
- (ii) CCTV cameras shall be fixed and angled to face into the site and shall not be directed towards adjoining property or roads.
- (iii) Cables within the site shall be located underground.
- (iv) The inverter/transformer stations shall be dark green in colour. The external walls of the proposed substation shall be finished in a neutral colour such as light grey or off-white and the roof shall be of black slate or tiles.

Reason: In the interests of visual and residential amenity.

10. Before construction commences on site, details of the structures of the security fence showing provision for the movement of mammals shall be submitted for prior approval to the planning authority. This shall be facilitated through the provision of mammal access gates every 100 metres along the perimeter fence and in accordance with standard guidelines for provision of mammal access (National Roads Authority 2008).

Reason: To allow wildlife to continue to have access across the site.

11. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the 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.

12. Details of the materials, colours and textures of all structures as well as materials to be used in the construction of the access tracks shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of visual amenity and the environment.

13. 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.

14. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000 in respect of improvement works on the local roads surrounding the development site. The amount of the contribution 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 for determination. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

15. 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.

16. 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.

Ciara Kellett
Senior Planning Inspector

30th April 2018