

# Inspector's Report ABP-300267-17.

Location	Development consisting of a 10-year permission for the construction of a solar farm development of circa 448,500m <sup>2</sup> of solar panels within a total site are of up to 62.8 hectares, to include one single-storey electrical substation building and associated compound electrical transformer/inverter station modules, and associated electrical cabling, ducting and ancillary infrastructure. Carrigalong, Tramore, Co Waterford.
	Camgalong, Tranoic, Co Watchold.
Planning Authority	Waterford City and County Council.
Planning Authority Reg. Ref.	17/645.
Applicant	Terra Solar
Type of Application	Permission.
Planning Authority Decision	Refusal of permission.
Type of Appeal	First Party
Appellant	Terra Solar.

Observer

Waterford Airport.

Date of Site Inspection

Inspector

21st August 2018.

Derek Daly.

# 1.0 Site Location and Description

- 1.1. The appeal site is located is located in the townland of Carrigalong in a rural area approximately 4 kilometres north of Tramore and 6 kilometres south of Waterford City and approximately 4 kilometres west/northwest of Waterford Airport. The site is in a relatively elevated area but is removed from the R675 Waterford Tramore Regional Route which is located approximately 1.5 kilometres east of the site.
- 1.2. The site is accessed off the regional route by narrow local roads which are located to the south and north of the appeal site. The southern road L96756 is relatively narrow in sections and there is also a bridge Perry's Bridge in close proximity to the R675 and this local road is the proposed mans of access for the development.
- 1.3. The appeal site which has a total site area of up to 51.32 hectares is currently agricultural land and is irregular in configuration. There is a general fall in level in a north westward direction. The site is characterised by large fields used for agriculture with mature hedgerows bounding the fields.
- 1.4. There is little residential development immediate to the northern area of the site but there is an increase in residential properties consisting of individual detached dwellings fronting the local roads to the east in closer proximity to the regional route and along the local road at the southern area of the site.
- 1.5. The overall wider area is characterised by agricultural fields with mature trees and hedgerows forming the field and road side boundaries.
- 1.6. There is a 38kv line crossing the site in a southwest to north east direction in the southern area of the site.

# 2.0 Proposed Development

- 2.1. The development as received by the planning authority on the 31<sup>st</sup> of August 2017 was for the construction of a Solar Farm Energy development within a total site are of 51.32 hectares. The development includes;
  - one single-storey electrical substation building with a pitch roof with a height to the ridge of 5800mm with a stated 70m<sup>2</sup> in area and associated compound approximately 88m<sup>2</sup> in area located in the southern area of the site.

- 11 electrical transformer/inverter station modules;
- 2 battery storage modules located to the east of the substation compound 12 metres in length and 2.6 metres in height;
- solar PV panels ground mounted on steel support structures which are stationary with no moveable parts which are sited in rows off an internal road network;
- internal trackways access roads approximately 3 metres in width,
- security fencing up to 2.8m in height around the perimeter of the site;
- A temporary storage and construction compound located in the southern area of the site;
- The site is accessed from the southern local road the L96756;
- associated electrical cabling and ducting and
- ancillary infrastructure

The associated documentation indicates that the solar array will be made up of individual PV solar modules of varying dimensions arranged on a galvanised metal frame mounted structure having a maximum height of 3.2 metres with precise arrangement of panels to be determined and which will be installed by either earth screws or piling.

- 2.2. In addition to the drawings the application was accompanied by other documentation which included;
  - A Planning and Environmental Statement;
  - An Appropriate Assessment Stage 1 screening report;
  - An ecological impact assessment;
  - A Glint and Glare Assessment report;
  - A landscape and visual impact assessment;
  - An archaeological architectural and cultural heritage assessment;
  - A construction management plan;
  - Traffic management plan;

2.3. The applicant requests a 10-year permission.

# 3.0 Planning Authority Decision

## 3.1. Decision

The planning authority decision was to refuse permission. Two reasons were stated.

The first reason refers to the location in the context of Waterford Airport and areas designated as "Airport Area" and "Airport Reserve Area" and Objective INF4 in the current County Development Plan; that there is no location based requirement to occupy such a substantial extent of lands and that there is an absence of a cumulative assessment of the impact solar projects on the future expansion of the airport and may prejudice such expansion.

The second reason refers to the scale of the development, that would represent an unduly obtrusive feature in the landscape and impact on the rural character of the area and would be premature pending the adoption of national regional and local guidance or strategy for solar power.

#### 3.2. Planning Authority Reports

#### 3.2.1. Planning Report

The planning report dated the 24<sup>th</sup> of October 2017 refers to

- Development plan provisions and national policy.
- The planning history in particular in relation to solar farm developments in the county.
- That an EIAR is not required.
- An assessment of the development referring to the principle of the development in the context of national, regional and local planning policy and that although there is an acknowledgement of national objectives in relation to renewable energy there is an absence of clear policy direction in relation to individual proposals.
- Refusal was recommended referring to loss of the character of the areas; loss of agricultural land and visual amenity.

- 3.2.2. An additional report dated the 24<sup>th</sup> of October 2017 is a recommendation stating two reasons for refusal.
- 3.2.3. The roads and transportation report dated the 5<sup>th</sup> of October 2017 refers to the Traffic Management report submitted. No objection is indicated but the report refers to the need for a bridge structural survey of Perry's Bridge pre and post construction, the need for strengthening the local road following completion of the construction phase and implementation of drainage along the road.
- 3.2.4. The heritage office in a report dated the 23<sup>rd</sup> of October 2017 indicates no objections to the development.

## 3.3. Submissions from Statutory Bodies.

3.3.1. Transport Infrastructure Ireland in a submission dated the 23<sup>rd</sup> of August 2017 refers to national policy in relation to development involving access to national roads and the proposed development if permitted would create an adverse impact on the national road.

## 3.4. Third Party Observations

Submissions were received from local residents outlining issues primarily in relation to the road network and access into the area generally. Other issues raised include surface water drainage, flooding, visual amenity, scale of the development glint and glare, the issue of loss of amenity and impact on residential amenities.

The manager of Waterford Airport raises concerns in relation to impacting on the operation and future development of the airport.

# 4.0 **Planning History**

There is no relevant planning history for the site.

A significant number of solar farms have come to the Board on appeal within the past number of years in County Waterford and other counties.

The planning report of the planning authority refers to the large number of applications made in the county in relation to solar farm development.

# 5.0 Policy Context

## 5.1. EU Guidance

### 5.2. European Policy Context

- 5.2.1. The EU has through a series of policy framework and directives outlined an approach to reduce greenhouse gas emissions, the Europe 2020 Climate and Energy Framework and Europe 2030 Climate and Energy Framework to reduce greenhouse gas emissions by 40% from 1990 levels with increasingly the use of renewable energy as a source of energy and also for greater efficiency in the production of energy.
- 5.2.2. In addition, Directive 2009/28/EU the Renewable Energy Directive promoted the increased use of renewable energy and increased targets for the overall level of energy produced and consumed by member states from renewable energy sources; the adoption of greater efficiency in energy production; the preparation of national plans and for the use of energy storage systems for integrated intermittent production of energy from renewable sources.
  - 5.3. The Energy Roadmap 2050 published in 2011 continues the overall policy direction of previous policy frameworks and guidance on how to attain targets and objectives up to 2050 with continued adherence to energy efficiency; the use of renewable energy and advancing technologies and capacity.

#### 5.4. National Guidance.

- 5.4.1. In relation to energy arising from the EU Directive national policy has focussed measures to achieve the targets set out in the European policy framework.
- 5.4.2. The National Renewable Energy Plan published in 2010 is an action plan indicating how the targets would be achieved. Ongoing progress plans have been produced in 2012, 2014 and 2016 on progress in meeting targets in relation to renewable energy and efficiencies in energy.
- 5.4.3. Strategy for Renewable Energy 2012 published by Department of Communications, Climate Action and Environment outlines a policies and strategies for the developing of increased renewable energy production to meet targets in relation to renewable

energy including the development of cost efficient systems of energy production and the development of commercial large-scale electricity storage which arises from the need to store renewable energy which may generate energy at periods when there are not peak demands for energy.

5.4.4. Ireland's Transition to a Low Carbon Energy Future 2015-2030 is a White Paper published by the Department of Communications, Climate Action and Environment in December 2015 as a framework to guide policy and the actions that the Irish Government intends to take in the energy sector from now up to 2030 and takes into account European and International climate change objectives and agreements, as well as Irish social, economic and employment priorities as part of a progression towards a low carbon energy system.

The White Paper considers the increasing transition from fossil based fuels to greater use of Renewable Electricity (RES-E) and the need to develop back up technologies in order to ensure that stability of supply is maintained.

Paragraph 130 of the White Paper recognises that solar energy will become more cost effective as technology recognises that solar energy will become more cost effective as technology matures and that it will be an integral part of the mix of renewables going forward.

## 5.4.5. **Planning Policy**.

- 5.4.6. There is no specific planning guidance in relation to solar energy projects.
- 5.4.7. Planning and Development Guidance Recommendation for Utility Scale Solar Photovoltaic Schemes in Ireland October 2016.
- 5.4.8. This is a research paper prepared by Future Analytics Consulting and which was funded by the SEAI. It does not purport to be a policy document. The report contains a set of planning policy and development guidance recommendations, which it is suggested may contribute to the evidence base that will inform the development of Section 28 planning guidance for Utility Scale Solar Photovoltaic (USSPV) development in Ireland.
- 5.4.9. It notes that over a hundred applications for USSPV developments have been lodged with planning authorities by October 2016.
- 5.4.10. Recommendations in the research paper include

- That development plans set out policy objectives to support USSPV development and put in place development management standards to control development.
- With respect to glint and glare assessments, it is recommended that a national standard for the undertaking of these assessments is developed.
- In relation to siting it is recommended that the development of USSPV should not be prohibited in undulating landscapes.
- That a decommissioning statement should be included as a standard component of a planning application.
- 5.4.11. Future Analytics Consulting prepared a further update in December 2016 which stated that there have been at least 144 utility scale solar photovoltaic schemes submitted for planning permission in Ireland on 1,740 hectares with 387 MW capacity valid applications and 2,625 hectares with 537 MW (which includes valid applications and applications which were invalid, withdrawn and refused).
- 5.4.12. It does not purport to be 100% reflection of the solar planning pipeline but rather for information purpose only.

## 5.5. International Planning Guidance

- 5.5.1. There are a number of guidance documents public in the UK. They do not have a statutory basis in the Irish context, they are useful in informing the planning and environmental issues which arise.
- 5.5.2. Planning Guidance for the development of large scale mounted solar PV systems' prepared by BRE National Solar Centre (UK) 2013

This document is the most applicable in relation to assessment of large scale ground mounted PV systems.

This national guidance provides best practice planning guidance in respect of how large ground mounted arrays are developed and laid out. It provides advisory information on landscape / visual impact; construction and operational works, ecology, historic environment and setting, impacts including glint and glare and duration of the planning permission. Guidance is included on the information which should accompany a Landscape and Visual Impact Assessment and on EIA Screening procedures.

# 5.5.3. The Planning System and Flood Risk Management Guidelines for Planning Authorities November 2009.

These guidelines require the planning system at national, regional and local levels to:

- Avoid development in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk; and
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.
- Carry out a site-specific flood risk assessment, as appropriate, and comply with the terms and conditions of any grant of planning permission with regard to the minimisation of flood risk.
- 5.5.4. The core objective of the Guidelines is to avoid inappropriate development in areas at risk of flooding.
- 5.5.5. The guidelines in requiring assessment of flood risk sets out a methodology in chapter 3 to examine proposals through a series of stages including where identified the need for a justification test where identifiable risks are outlined. Chapter 5 indicates guidance in relation to development management of applications for development.

# 5.6. **Development Plan**

- 5.6.1. The current plan is the Waterford County Development Plan 2011-2017.
- 5.6.2. This plan has had its lifetime extended, as per Section 11A of the Planning and Development Act 2000, as amended, and will remain in effect until the new Regional

Spatial and Economic Strategy is made by the Southern Regional Assembly. Thereafter a new City and County Development Plan will be prepared.

- 5.6.3. Chapter 6 of the plan refers to Economic Development and section 6.6.4 of the plan refers to the Waterford Regional Airport and Business Park and the critical role of the airport in the development of Waterford and the South East. Reflecting this, lands have been zoned at this location to facilitate the development and expansion of the Airport as 'Airport Area' "to provide for Airport related activities including passenger terminal buildings and services, airside retail, hotel, airport infrastructure, hangerage, storage, maintenance and ancillary facilities, park & ride, transport, depot, training facilities, storage depot, warehouse, offices and light industrial/ enterprise units and Light Industry'.
- 5.6.4. Chapter 7 of the plan refers to infrastructure and does not specifically refer to Solar Power. There are policies in relation to facilitating renewable energy generally including Policy INF26(3) which states: 'to facilitate, where appropriate, future alternative renewable energy developments throughout the County that are located in close proximity to the National Grid Strategy improvements so as to minimise the length and visual impact of grid connections'.

Section 7.11 specifically refers to Waterford Regional Airport and that the airport is a key gateway to Ireland's south east and the availability of its convenient and increasingly frequent air services is making a growing contribution to the facilitation of both tourism and business activities in the region.

Objective INF 4 in relation to Waterford Airport states as an objective "to assist the future expansion of services and routes at the Airport, the Council support the lengthening and widening of the runway, subject to compliance with proper planning and sustainable development and in compliance with Article 6 of the Habitats Directive".

Chapter 8 refers to Environment and Heritage and section 8.1 to landscape and that the management of the County's landscape involves: sustaining and conserving the landscape; protecting the landscape from inappropriate and unsustainable development; and ensuring adequate protection to sensitive and vulnerable landscapes through appropriate policies and objectives. Reference is made to Appendix A9 of the plan Scenic Landscape Evaluation and to various classifications of landscape.

The site is not within any designated landscape in relation to visual sensitivity or amenity designation by reference to the Scenic Landscape Evaluation of the plan or impacting scenic routes as indicated in section 6.6 (b) Scenic Routes of the Scenic Landscape Evaluation. The site in relation to character classification is normal with a potential to absorb a wide range of new development.

Section 8.8 in particular refers to Renewable Energy. Policy ENV10 in this regard as a policy 'to facilitate and encourage sustainable development proposal for alternative energy sources and energy efficient technologies'.

Chapter 10 to Development Management Standards. Table 10.10 in Chapter 10 is the Land Use Zoning Objectives table. The Agriculture land use zoning objective is 'to provide for the development of agriculture and to protect and improve rural amenity'.

A variation to the Development Management Standards Chapter was adopted by the Council in September 2016. No further information is provided in relation to large scale solar energy projects.

## 5.6.5. Waterford City and County Renewable Energy Strategy 2016-2030

The Waterford County Development Plan incorporates the Waterford Renewable Energy Strategy 2016-2030.

Section 5.00 addresses solar energy and notes that Waterford county is in the top 15% in terms of solar resource in Ireland and has good potential for solar energy. It notes that the National Renewable Energy Statement provides a target of 600MW of solar energy for Ireland by 2020. This Renewable Energy Statement has included a projection of 84.1MW of solar energy for Waterford up to 2030. It projects that this would require just over 168 hectares of land. The strategy although identifying potential and projected levels of energy does not provide any guidance on the best locations for projects. It notes the potential disadvantages in relation to solar farms including land take, impact on crop production, glint/glare issues and possible hydrological effects.

# 5.6.6. Waterford Regional Airport& Business Park Masterplan

A masterplan for the Airport and this Business Park is attached as Appendix A6 of the County Development Plan which sets out detailed technical guidance and issue relating to the Airport. In addition to setting out policies in relation to the area which support its current and future role in the region in figure 1 there are areas identified as Airport Area, Airport Reserve Area and Light Industry which are in proximity to the airport. The masterplan in Appendix 1 refers to Airport Control Zones identified on a series of maps A1 to A4 with accompanying technical guidance.

I note that there are no zoning designations or specific references to lands relating to the appeal site and they are confined to the area immediate to the airport.

## 5.7. Regional Planning Guidelines for the South East Region 2010-2022.

5.7.1. The Regional Planning Guidelines for the South-East Region recognises the strategic importance of Waterford Airport, as the most important airport within the region. A key implementation objective (Section 10.2.G) is identified as:

'Development of the full potential of the Waterford Regional Airport, through extension of the existing runway, improved transport linkages between the airport, Waterford City and the region and facilities for additional operators offering services from this location'.

Section 2.3.1 states:

Waterford Regional Airport is located 9 kms. by road from Waterford city centre and is also close to Tramore. Aer Arann operates daily services linking the South-East with London Luton and some European destinations. The Irish Coast Guard operates an air/sea rescue service from the airport. The Regional Airport plays an important role as a Gateway to the South-East Region and passenger numbers at the Airport have grown significantly, from 54,432 in 2004 to 112,000 in 2009. There is potential for further expansion of the Airport and the Regional Authority supports the future expansion and upgrading of airport infrastructure together with improvements to the accessibility of the airport, including access by public transport, and the potential for development of economic and commercial business is also recognised.'

5.7.2. In relation to policies for the airport,

Policy PPO 5.19 in relation to the Airport states:

The Regional Authority will support the further development of the South East Regional Airport and in particular, the development of:

- An extension of the existing runway to accommodate larger aircraft, subject to an Appropriate Assessment of the impact on Tramore Back Strand SPA and to ensure avoidance of adverse impacts on the integrity of this SPA.
- Improved transport linkages and services between the airport, Waterford City and the entire South-East Region, i.e. roads and public transport.
- Measures to encourage additional operators offering services from this location.
- The expansion and development of aviation related industries at the airport.

Policy PPO 5.20 in relation to the Airport states:

Development Plans should incorporate policies to protect longer-term flight path public safety zones and to control uses which could adversely impact on the airport's operations or the potential for new runway development and extensions sufficient to handle larger aircraft to a wider variety of destinations.

All such projects at 5.19 and 5.20 will be required to comply with the principles of sustainable development and to be assessed in accordance with Article 6 of the Habitats Directive.

## 5.8. Natural Heritage Designations

There is no Natura site within or proximate to the appeal site.

# 6.0 The Appeal

# 6.1. Grounds of Appeal

The appellant c/o HWP in a submission dated the 20<sup>th</sup> of November 2017 refers to,

- There is an absence of assessment of key issues in the overall assessment by the planning authority in reaching the decision to refuse permission.
- There were efforts to discuss the proposal with Waterford Airport.

- A detailed glint and glare assessment was prepared in accordance with best practice standards.
- The findings of this assessment were not challenged.
- Reason no.1
- In relation to reason no 1, there is no reference to the policies cited in the planning report, there is reference to the glint and glare assessment but no critique of its findings and the only reference is in an additional report citing the reason for refusal.
- There is no challenge stated as to how the proposed development may impact aircraft safety.
- Reference is made to the RPG and having regard to the policies outlined in PPO 19 and PPO 20 the appellant indicates that the site is not within a defined public safety zone.
- It is also noted that the RPG recognise energy generation as critical to the region.
- The reason for refusal specifically refers to Objective INF 4 of the current CDP and it is contended that this objective which relates to the lengthening and widening of the runway is not directly applicable to the proposed development.
- Reference is also made in the reason for refusal to relative close proximity to designated "Airport Area" and "Airport Reserve Area" and the appellant indicates that the site is at its nearest is 2.23 kilometres from the Airport Reserve Area and 3.2 kilometres from the Airport Area as illustrated in figure 1 of the grounds of appeal.
- There is no inter visibility between the appeal site and these designations.
- Solar farms cannot be reasonably defined as incompatible with an airport and reference is made to other airports and the location of solar farms in proximity to these airports.

- There is a locational requirement established for this development based on access to the electricity grid, resource availability and general planning considerations.
- In relation to hazard to aviation the refusal refers to may rather than a definitive position and the glint and glare assessment considered the matter and indicated that risk to aviation does not arise.
- The appellant as part of the grounds of appeal further considered the matter of aviation safety and also examines runway extension options and the updated modelling indicates that there is no potential for the subject proposal to contribute to any cumulative glint and glare impact on Waterford Airport. I would refer to appendix A of the grounds of appeal in this regard.
- The grounds of appeal also include a report from Mr Graham Liddy in relation to aviation safety which is included as appendix B of the grounds of appeal.
- The report concludes no threat to aviation safety given the appeal site's location away from the centreline axis or approach overshoot/go around or take of paths of aircraft operating at the airport and given the terrain the appeal site is located on a reverse slope beyond and below a high terrain highpoint where the highpoint masks visibility of the appeal site from the airport.
- Based on these findings the appellant considers that the proposal will not prejudice in any way the future of Waterford Airport and that the proposal will not pose a hazard to the operations of the airport and this has been demonstrated.
- In relation to reason no 2
- The scale of the development is not excessive and for clarification of the overall site of 51,32 hectares, 44.8 hectares is within the area for development and the actual panelled area constitutes 15.69 hectares.
- The scale of the proposed is not excessive compared to other proposed solar development developments referred to in the submission.
- Reference is made to absence of national, regional or local level but the appellants contends that there is clear national support for renewable energy.

- Reference is made to the Renewable Energy Strategy for Waterford for Waterford 2016-2030 which supports renewable energy and makes reference to solar power in this regard.
- The Minister has indicated that there is sufficient guidance for the determination of solar projects and there are many major projects granted permission in the absence of guidelines.
- The Board have determined solar power applications based on current information available.
- There is overwhelming support for renewable energy and solar energy at EU, National, Regional and Local level and reference is made to stated policy.
- In relation to landscape and visual impact reference is made to section 8.1 of the CDP and appendix A9 and the site is within an area defined as normal and not a landscape of high sensitivity.
- A visual impact assessment was submitted as part of the application which included assessment of cumulative visual impact and indicated cumulative visual impacts are minimal and impacts on landscape character would be extremely limited arising from the nature of the topography, the presence of established mature vegetation and woodland areas to the west and southeast of the site.
- The site is located in an area designated as a preferred area for wind farm development which would indicate the site's suitability for renewable energy.
- The layout as submitted was evaluated and tested through the Landscape and Visual Impact Assessment and it was determined that the landscape can comfortably accommodate the proposed development.
- The site can and will continue to be grazed by sheep and retain an agricultural function, it will not have an impact on the agricultural setting of the surrounding lands and ultimately it is a reversible use with no discernible impact on the environment.
- There are generous setbacks from adjacent residential properties and planting is proposed to mitigate any visual impact in relation to residential properties.

 In overall terms the proposal will not give rise to adverse visual impacts and cumulative impacts have also been considered in this regard and no adverse cumulative impact is identified.

# 7.0 **Observer submissions**

- 7.1.1. Waterford Airport in a submission dated the 15<sup>th</sup> December 2017 refers to;
  - The Airport fully supports the decision of Waterford County Council.
  - The report of the planning authority did assess the development and refers to the other solar farm proposals in Waterford county.
  - Reference is made to provisions in the current county development plan in relation to the airport including the importance of the Airport and also assisting the future expansion of the airport in the future.
  - The South East RPG also support and recognise the importance of the Airport to the region.
  - Reference is made to PL10.246875 and in that appeal the presence of a solar farm was would compromise the delivery of Belview Port and Waterford Airport should be similarly protected.
  - The proposed development is significant in relation to its scale and reference is made to other solar farms which are smaller and were considered significant in scale.
  - There is concern in relation to the cumulative impact of solar farms in the proximity of the airport and that the cumulative effect of these projects would compromise the future development of the airport and the large number of applications for solar development is piecemeal and speculative.
  - The development as proposed is considered to be contrary to the proper planning and sustainable development of the area.

## 8.0 Assessment

8.1. This is a first party appeal against the decision of Waterford City and County Councils decision to refuse permission for two reasons. Having regard to the terms of the planning authority decision I consider the keys issues in determining the appeal are as follows:

EIA

Policy / Principle of the development Visual impact Glint and Glare / Aviation Safety. Impact on residential amenity Traffic and Construction Drainage and flooding Archaeology and Heritage Ecology Appropriate Assessment

- 8.2. EIA
- 8.2.1. Schedule 5 of the Planning and Development Regulations, 2001 (as amended), sets out Annex I and Annex II projects which mandatorily require an EIS. Part 1, Schedule 5 outlines classes of development that require EIS and Part 2, Schedule 5 outlines classes of developments that require EIS but are subject to thresholds. Solar farms are not listed as a class of development under either Part 1 or 2 of Schedule 5 of the Planning and Development Regulations 2001, as amended, and therefore, I conclude that a mandatory EIA and the submission of an EIS is not required.
- 8.2.2. I note that there are some projects under No. 3 of Part 2, 'Energy Projects' which relate to energy production, but suggest that none of these projects would be applicable to a solar farm as proposed. In addition, as the solar farm development is not a development set out in Schedule 5 I do not consider that the subject development is a 'sub-threshold development' for the purpose of EIA. The Board will note that a similar conclusion has been reached in relation to their recently decided solar farm developments.
- 8.3. Policy / Principle of the development.
- 8.3.1. A number of issues arise in this regard energy policy, Waterford Airport, landscape and amenity designations and prematurity.

- 8.3.2. Considering initially the issue of energy policy, in section 5 of this report I have outlined policy at EU, national and county level in relation to energy and the transition from fossil fuels to renewable energy sources. The proposed development I consider is supported by national, regional and local policies in terms of renewable energy in particular the transition from fossil fuels to renewable to renewable sources of energy.
- 8.3.3. The national policy context informs the County Development Plan and I note that in chapter 7 which refers to infrastructure it does not specifically refer to solar power but there are policies in relation to facilitating renewable energy generally including policy INF26(3) and in section 8.8 in particular which refers to Renewable Energy, policy ENV10 in this regard states as a policy 'to facilitate and encourage sustainable development proposal for alternative energy sources and energy efficient technologies'.
- 8.3.4. The Waterford County Development Plan also incorporates the Waterford Renewable Energy Strategy 2016-2030 addresses solar energy and notes that Waterford county is in the top 15% in terms of solar resource in Ireland and has good potential for solar energy.
- 8.3.5. I consider therefore that in relation to energy policy the proposal is acceptable in principle and would contribute to the diversity of sources of energy supply and hence the security of supply. I would note that the acceptability of the proposal is contingent on other issues including impacts on inter alia visual and residential impact as indicated in the Waterford Renewable Energy Strategy 2016-2030.
- 8.3.6. I note that the first reason of the planning authority's reasons for refusal refers to the Waterford Airport and in particular to Objective INF 4 in relation to Waterford Airport states as an objective "to assist the future expansion of services and routes at the Airport, the Council support the lengthening and widening of the runway, subject to compliance with proper planning and sustainable development and in compliance with Article 6 of the Habitats Directive".
- 8.3.7. There are also other references in the plan to the importance of Waterford Airport in section 6.6.4 of the plan which refers to the Waterford Regional Airport and Business Park and the critical role of the airport in the development of Waterford and the South East and reflecting this, lands have been zoned at this location to facilitate the development and expansion of the Airport as 'Airport Area' "to provide for Airport

related activities and also section 7.11 which specifically refers to Waterford Regional Airport and that the airport is a key gateway to Ireland's south east and making a growing contribution to the facilitation of both tourism and business activities in the region.

- 8.3.8. There is also a masterplan for the Airport and this Business Park as attached as Appendix A6 of the plan sets out detailed technical guidance and issue relating to the Airport. This master plan in figure 1 identifies specific zonings referred to as Airport Area, Airport Reserve Area and Light Industry which are in immediate proximity to the airport.
- 8.3.9. The importance of the airport to the area is I consider recognised and any proposal which would impact on its future development would have to be considered in this context.
- 8.3.10. I would however note that there are no zoning designations or specific references to lands relating to the appeal site in the master plan and they are confined to the area immediate to the airport. The site is not within the Public Safety Zone as identified in map A2 of appendix 1 of the masterplan current proposal therefore in relation to the zoning provisions. The runway axis is roughly north to south and the appeal site 3 kilometres to the west not impact on any expansion plans in this regard.
- 8.3.11. I note the Board decision in Belview Port is referred to as a precedent (ABP Ref. PL26.247217) in the observer submission. I do not consider that the circumstances regarding the Belview refusal are particularly relevant to this appeal. The reference by the observer is to a solar farm which was proposed on a site designated with a Port Facilities and Industry zoning objective in the Ferrybank Belview Local Area Plan 2009 2020 and was a development with no location-based requirement to occupy such zoned lands. It was considered by the Board that the proposed development would prejudice the orderly expansion of Belview Port and would compromise the development of port-related industry.
- 8.3.12. Policy at national and regional level often promote different forms of development and this reflected in policies and objectives of development plans. The primary issue in this appeal would be whether the presence of the proposed solar farm would impact on the airport in relation to current operation and impair future expansion and conflict materially with an overall policy to promote renewable energy.

- 8.3.13. In relation to the issue of impacting on the expansion of the airport I would note the following. The circumstances of the current proposal are different to those pertaining with Belview as there is no similar zoning in relation to the appeal site and it is not within or in close proximity to the lands identified as Airport Area and Airport Reserve Area in the masterplan or in lands therefore which would prejudice the orderly expansion of the airport.
- 8.3.14. There is no reason therefore I consider to refuse the proposed development based on the designations/zonings as defined in the airport masterplan.
- 8.3.15. I would also note that the appeal site within unzoned agricultural land with no specific protective designation in relation to landscape sensitivity or amenity.
- 8.3.16. Prematurity of the development pending the adoption of national regional and local guidance or strategy for solar power is stated in reason number 2 of the decision of the planning authority to refuse permission.
- 8.3.17. In relation to the issue of prematurity in the absence of guidance I would note that the Renewable Energy Strategy for Waterford for Waterford 2016-2030 makes specific reference to solar power although not in terms of identifying specific locations. There is as indicated support for a transition to renewable energy including solar energy and the absence of a specific guidance does not necessarily preclude determination of applications made for such projects.

I have reviewed all the available policies and I find that there is no basis for a refusal for permission for policy reasons.

- 8.3.18. I would therefore conclude therefore that as there are no policy objectives to preclude developing a solar farm on the appeal site, and that there is a general policy presumption nationally, regionally, and locally, in favour of developing renewable energy, there would be a favourable policy presumption in favour of the proposed development, subject to site specific issues and normal planning considerations.
- 8.4. Visual impact.
- 8.4.1. Visual impact on the character of the landscape is referred to in reason no 2 of the decision to refuse planning permission.

- 8.4.2. In relation to visual impact the site is located in an area which is typically rural in character with mature vegetation, trees and hedgerows. The site is removed from the main traffic routes of the area and has a fall in level in a north westerly direction. It is largely screened from view from the R675 by a ridgeline to the west of the R675. Panoramic montages of the proposed solar farm are also submitted in relation to assessment of the impact of the development.
- 8.4.3. The significance of the impact is the altering of a traditional landscape by the inclusion of a Solar PV Energy development within a total site are of up to of up to 51.32 hectares on land which is currently agricultural land with an array of infrastructure including solar panels, electrical transformer/inverter station modules' and an internal trackway/ road network. In this regard there is no doubt that the proposed development would change the local landscape from a visual perspective. The issue however is the capacity of the receiving landscape to absorb the development in a manner that does not impact on the overall visual amenity of the area.
- 8.4.4. In terms of the receiving landscape and designations the site is not within any designated landscape in relation to visual sensitivity or amenity designation by reference to the Scenic Landscape Evaluation of the plan or impacting scenic routes as indicated in section 6.6 (b) Scenic Routes of the Scenic Landscape Evaluation. The area is however a typical but attractive mature working agricultural landscape.
- 8.4.5. The relation to the actual location of the development there is significant hedgerow and other vegetation cover on the site and within the area which facilitates screening of the site. By reason of the existing planting along the roadside boundaries and within the site the proposed development will be largely screened. I consider having examined the site from different locations that the landscape is generally robust has the capacity to absorb any impact arising and to ensure that the panels would not be particularly intrusive.
- 8.4.6. In conclusion whilst there is no doubt that the proposed development would change the local landscape from a visual perspective, in my view however the established landscape is capable of absorbing this change. Having regard to the measures proposed to retain hedgerows and supplement existing planting and the absence of any designations in the area, I am satisfied that the proposed development in its

entirety would not adversely impact on the landscape and visual amenities of the area.

- 8.5. Glint and Glare / Aviation Safety.
- 8.5.1. The applicant submitted a glint and glare assessment as part of the initial submission and also additional supplementary information in the grounds of appeal to address matters relating to air navigation and safety which is included as Appendix A of the appeal submission and there is also an aviation safety report submitted as appendix B of the grounds of appeal. The initial assessment considered sensitive receptors within a kilometre radius of the appeal site and also considered the airport located 3 kilometres to the east.
- 8.5.2. In relation to impacts on dwellings the study concludes that 1 dwelling out of a total of 24 dwellings assessed would have the potential to receive a solar reflection and the magnitude of effect was identified as very low/none.
- 8.5.3. In relation to the road network isolated points on the local road network could experience glint and glare effects in a fleeting effect and measures are indicated raising the height of hedgerows and filling in of any gaps in hedgerows would address the effects which the study indicates are of a short duration and low impact/effect.
- 8.5.4. In relation to aviation safety and the impact on the control tower reference is made to standards and best practice adopted and also to studies which have assessed potential impacts from an existing solar farm in proximity to Belfast International Airport. Arising from the assessment it is considered that will not be any significant hazard from glint and glare at the runway and that no effects are geometrically possible at the air traffic control tower. Where it is theoretically possible for an impact mitigation measures are indicated through additional planting of vegetation.
- 8.5.5. In the grounds of appeal there is an addendum to the glint and glare report which applies an updated modelling tool to assess in particular any impact in relation to the airport (SGHAT version 3) and also an extended runway. The finding of the addendum indicates no possibility for glint and glare to occur whatsoever at any of the approaches to the runway either present or future or in relation to any cumulative effects from other identified sites.

- 8.5.6. In relation to glint and glare the UK Planning Guidance for the development of large scale mounted solar PV systems' prepared by BRE National Solar Centre (UK) 2013 addresses the issue of glint and glare and in relation to glint and glare it states: 'Glint may be produced as a direct reflection of the sun in the surface of the solar PV panel. It may be the source of the visual issues regarding viewer distraction. Glare is a continuous source of brightness, relative to diffused lighting. This is not a direct reflection of the sun, but rather a reflection of the bright sky around the sun. Glare is significantly less intense than glint. Solar PV panels are designed to absorb, not reflect, irradiation. However, the sensitivities associated with glint and glare, and the landscape/visual impact and the potential impact on aircraft safety, should be a consideration. In some instances, it may be necessary to seek a glint and glare assessment as part of a planning application. This may be particularly important if 'tracking' panels are proposed as these may cause differential diurnal and/or seasonal impacts. The potential for Solar PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all the materials used in the construction of the solar PV farm.'
- 8.5.7. The appellant has submitted a study which outlines a glint and glare assessment which I consider addresses impacts and effects arising.
- 8.5.8. The proposed solar panels are typically set 0.7m above ground level at the lowest point increasing to a maximum height above ground level of 3.2m. The panels which are mounted onto racks which are south facing and it is proposed will be mounted between 22 and 30 degrees to the horizontal but this may be adjusted to suit local conditions. The solar panels will be fixed in position using galvanised steel framing piles driven into the ground, so there will be no moving parts.
- 8.5.9. Solar panels are normally dark in colour and designed to absorb rather than reflect daylight and therefore have a low level of reflectivity (or glare) when compared to other surfaces. Any glint which would occur, would do so for short periods when the sun is shining above the plane of the PV panels and there is reference in the study to a period of 20 minutes in this regard.
- 8.5.10. There are also measures outlined largely in relation to additional planting to minimise any effect on the road network and dwellings.

- 8.5.11. In relation to aviation the glint and glare assessment the applicant has submitted a detailed report in line with current international guidelines and modelling, and has correctly noted that all available research indicates that the impact of existing PV installations in and around airports is minor and not significant.
- 8.5.12. I would also note that in the grounds of appeal a report was submitted as Appendix B which considers specifically aviation safety and identifies the primary hazards to aircraft safety. The report considers the appeal site in the context of the airport and its approaches in relation to landing and take-off, overshoots and go round paths. Glint and glare is specifically addressed in section 6 of the report. The report concludes that any level of glint is very low and within FAA limits and that there is greater glint and glare hazard arising from the sea at Tramore Bay and that the airport has operated with this higher level of potential hazard successfully. Fixed wing and helicopter aircraft was assessed in the report which concludes no threat to aircraft safety or hindering any future runway expansion.
- 8.5.13. On the basis of the available evidence, I do not consider that there is any basis for a refusal for the reason of a 'glint and glare' impact on aircraft safety. The applicant has submitted reports which has assessed the proposed development in accordance with best practice and international guidelines, and has correctly noted that all available research indicates that the impact of existing PV installations in and around airports is minor and not significant and the assessment has considered impacts in relation to the control tower and approaches to the airport. I am therefore satisfied notwithstanding consideration of a precautionary approach in relation to aircraft safety that the applicant has demonstrated that there is no significant hazard.
- 8.6. Residential Amenity
- 8.6.1. Submissions were received from local residents outlining issues primarily in relation to the road network and access into the area generally. Other issues raised include surface water drainage, flooding, visual amenity, scale of the development glint and glare, the issue of loss of amenity and impact on residential amenities.
- 8.6.2. Specifically, in relation to impacts on residential amenities the main issue which would arise in the operational phase of the development would be impacts arising from glint and glare.

- 8.6.3. As indicated previously this was considered in the glint and glare assessment which concluded that that 1 dwelling out of a total of 24 dwellings assessed would have the potential to receive a solar reflection and the magnitude of effect was identified as very low/none. The presence of hedgerows and the proposal to supplement gaps identified it was indicated would ameliorate any impact.
- 8.6.4. I am satisfied from my site visit and assessment of the documentation submitted that provided that the existing hedgerows are maintained, strengthened and supplemented in accordance with the proposals submitted, the panels will not be visible to any significant extent and there will be no glint/glare impacts.
- 8.7. Traffic and construction impacts.
- 8.7.1. Submissions were received from local residents raised the issue of the impact on the local road network and in the inability of the road network to cater with the level of traffic the development would generate.
- 8.7.2. Many of the issues relating to traffic I consider will only arise during the additional traffic arising during the construction phase and that during the operational phase there will not I consider be any significant impact on the road network or in relation to road safety.
- 8.7.3. The road network serving the appeal site is from the regional road to the site is narrow and there is also a bridge Perry's Bridge, in close proximity to the regional road which has a narrow pavement width. The applicant submitted a traffic management report which assessed route options from the regional road and considered the southern route via Perry's Bridge as the preferred route. The level of traffic generated over a construction period of 20 to 22 weeks is indicated as 497 trips over the period. The preferred route was surveyed in relation to pinch points and it was established that the preferred route can accommodate the vehicle which will travel to and from the site. It is also indicated that during the post construction phase will be very low 1 to 2 LGVs per month.
- 8.7.4. The local authority roads report it is noted did not object to the development but the report refers to the need for a bridge structural survey of Perry's Bridge pre and post construction, the need for strengthening the local road following completion of the construction phase and implementation of drainage along the road.

- 8.7.5. I would have no objections to the requirements for a survey of the bridge and the development would if permitted be the subject of a development contribution which could be used to address damage to the roads and any strengthening works needed.
- 8.7.6. I would acknowledge that the road serving the site is narrow in places but it currently serves all types of vehicles which serve an agricultural area many of which can be large wide bodied vehicles. The impact on the road network will be short term in duration during the construction phase and negligible in the operational phase and is therefore within the normal bounds of acceptability.
- 8.7.7. The documentation submitted also includes a construction management plan in relation to practices to be adhered to during the construction phase of the development.
  - 8.8. Drainage and flooding
- 8.8.1. There are no indications from available sources including CFRAM that the site is subject to flooding. In relation to drainage, the layout and construction details including those for the access road and internal trackways provide for a drainage system using the existing drainage and infiltration system pertaining on the site which will be maintained to current run off rates. The application documents in pages 19 and 20 of the Planning and Environment Statement indicates that there will be no increase in run-off or of contamination arising from the proposed development and I would agree with this position. There are no indications that the solar farm could increase run-off from the site onto the road network, but as a precaution I would recommend a condition be included that the applicant comply with any drainage requirement required by the local authority.
  - 8.9. Archaeology and Heritage.

An archaeological, Architectural and Cultural Heritage Impact Assessment was submitted with the application which in relation to archaeology identified two archaeological sites within the appeal site. Buffer zones are proposed in relation to these sites. The assessment also notes that unknown material may be present and ongoing surveys would be required. I would therefore in considering the overall area of the site recommend an archaeological monitoring condition as a precaution.

8.10. Ecology.

- 8.10.1. An Ecological Impact Assessment was submitted with the documentation.
- 8.10.2. There are no Natura 2000 sites or NHA's on or immediate to the site and the nearest Natura site is in excess of 1.6 kilometres from the site.
- 8.10.3. The habitats within the sites are identified which are largely habitats associated with arable and grassland farming. The hedgerows within the site retain areas of shelter for mammals and birds which the assessment indicates should be retained. I would consider that overall impacts would be neutral compared to maintaining agricultural use on the lands.

## 8.11. Appropriate Assessment.

- 8.11.1. In appendix A of the Ecological Impact Assessment a stage 1 screening report was submitted which concluded that there would be no adverse impacts on a Natura 2000 site.
- 8.11.2. The site is not within a Natura site and there is no reduction or loss of a designated site
- 8.11.3. The report identifies 6 sites within 15 kilometres of the site with the nearest Natura sites the Tramore Dunes and Backstrand SAC (site code 000671) and Tramore Backstrand SPA (site code 004027) are approximately 1.606 kilometres and 1.773 kilometres to the south east. There is no hydrological link between the appeal site and these two Natura sites.
- 8.11.4. Other sites are in excess of 5 kilometres distant but there is a potential hydrological link identified to the Lower River Suir SAC (site code 002137) in Waterford city 6.3 kilometres from the appeal site. The River Suir SAC covers an area consisting of the freshwater stretches of the River catchment and it also includes the tidal reaches of the river following the course of the channel of the river and main tributaries and links with another SAC the River Barrow and River Nore SAC (site code 002162). The qualifying interests include terrestrial and aquatic habitats and species.
- 8.11.5. In relation to Annex 1 habitats and species none of the listed species are proximate to the site and the potential for direct impact would not appear to arise.
- 8.11.6. In relation to potential link in the context of Source-Pathway-Receptor between the appeal site and the SAC site it would arise from an indirect impact. The appeal site would be within the overall drainage catchment of the River Suir as the North Kilbride

Stream at the northwestern boundary of the appeal drains to the Williamstown River which is a tributary of the River Suir.

- 8.11.7. The screening report assesses potential impacts arising from the development in the construction and operational phases of the development with particular consideration of runoff from the site into the watercourse and consequent impact downstream from the site.
- 8.11.8. The potential impacts from the construction phase arise from material entering the watercourse from sediment and silt, earthworks used in the construction of the internal road and infrastructure and accidental spillages.
- 8.11.9. Water discharge on the working area of the site during the operational phase is to an existing surface water drainage system with attenuation measures integrated into the discharge from the site.
- 8.11.10. The only possible pathway for an impact from the proposed development would be surface run-off, and I am satisfied that with the measures as set out in the application documents there is no reasonable likelihood of contaminated run-off from the site having any impact on the coastal habitats.
- 8.11.11. Water discharge impacts (direct or indirect) of the project alone and in combination with other projects I consider can be reasonably ruled out on the basis of objective scientific information.
- 8.11.12. Impacts (direct or indirect) of the project alone and in combination with other projects I consider be reasonably ruled out on the basis of objective scientific information.
- 8.11.13. In conclusion, therefore, having regard to the scale, nature and operation of the development, the absence of defined connectivity to the nearest European site, 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.

# 9.0 **Recommendation**

9.1. It is recommended that permission for the development be granted for the following reasons and considerations.

# 10.0 Reasons and Considerations

10.1. Having regard to:

- national and county level policies in favour of the deployment of renewable energy,
- the scale, extent and layout of the proposed development,
- the pattern of development in the area, and the generally good screening available to the site by means of existing hedgerows, and
- to the current designation of the site in the current Waterford County Development Plan,

it is considered that, subject to compliance with the conditions set out below, the proposed solar farm would not seriously injure the visual or residential amenities of the area, would be acceptable in terms of landscape impacts and traffic safety and convenience and would not endanger human health or the environment. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

10.2. Having regard to the Appropriate Assessment Screening Report submitted with the planning application, the report of the Inspector and the nature, scale and location of the proposed development, the Board is satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on any European Site, in view of the sites' conservation objectives. In this regard, the Board concurred with and adopted the Planning Inspector's conclusions in respect of Appropriate Assessment Screening.

# 11.0 **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 31<sup>st</sup> August, 2017 and by the further plans and particulars received by An Bord Pleanála on the 20<sup>th</sup> of November, 2017, 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 interests of clarity.

2 The period during which the development hereby permitted may 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 the permission in excess of five years.

3 (a) The permission shall be for a period of 25 years from the date of the 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.

(b) Prior to commencement of development, a detailed restoration plan, including a timescale for its implementation, 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.

(c) 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.

4 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

5 (a) Existing field boundaries shall be retained, notwithstanding any exemptions available and new planting undertaken in accordance with the plans submitted to the planning authority on the 31<sup>st</sup> of August, 2017 and by the further plans and particulars received by An Bord Pleanála on the 20<sup>th</sup> of November 2017.

(b) All landscaping shall be planted to the written satisfaction of the planning authority prior to commencement of development. Any trees or hedgerows that are removed, die or become seriously damaged or diseased during the operative period of the solar farm as set out by this permission, shall be replaced within the next planting season by trees or hedging of similar size and species, unless otherwise agreed in writing with the planning authority.

(c) all supplementary planting as indicated in the submitted documentation shall be implemented.

**Reason:** In the interest of biodiversity, the visual amenities of the area, and the residential amenities of property in the vicinity

6 (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) Cables within the site shall be located underground.

(d) 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 clarity, of visual and residential amenity and to minimise impacts on drainage patterns and surface water quality.

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

Reason: To protect the environment

8 Prior to the commencement of development works the applicant shall submit to and agree with the planning authority the following:

(a) Details relating to the carrying out of a structural survey of Perry'sBridge before and after the construction phase of the development.

(b) Details relating to drainage measures in relation to attenuation of runoff from the site.

**Reason**: To protect the existing road infrastructure and to ensure that measures are implemented to address any potential flooding arising from this development on the existing road network.

9 The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which 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, and

(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site (including archaeological testing) and monitor all site development works.

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

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 area and to secure the preservation (in-situ or by record) and protection of any archaeological 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 but not limited to, hours of working, noise and dust management measures, surface water management proposals, the management of construction traffic and off-site disposal of construction waste.

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

. 11 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.

12 The developer shall pay to the planning authority a financial contribution in

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

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

. Derek Daly Planning Inspector

4<sup>th</sup> September 2018