Inspector's Report
ABP-322270-25

Development	A 10 year planning permission for the construction of a solar PV development and all associated ancillary development works. The operational lifespan of the solar PV development will be 40 years. A Natura Impact Statement (NIS) has been submitted.
Location	Boscabell, Garranmore, Newark, Fussough, and Dually, County Tipperary.
Planning Authority	Tipperary County Council
Planning Authority Reg. Ref.	24/60156
Applicant(s)	Power Capital Renewable Energy Limited.
Type of Application	Permission
Planning Authority Decision	Refusal of Permission
Type of Appeal	Third Party v. Grant of Permission
Appellant(s)	1. Dualla Village Preschool c/o Sarah Lawlor 2. Kelly Reay

	3. Donnacha Looby and Denis Looby 4. Enda Howley 5. Dualla Together CLG 6. Conor and Kate Breen 7. Keith Barry
Observer(s)	1. Marie Verschoyle 2. Evan Hickey 3. Barry O'Connor 4. Anne Ward 5. Christopher Ryan 6. Bella Barry Swann 7. David Ryan 8. Brian Kennedy 9. Dariusz Jurkiewicz 10. William Ryan 11. Tracey Callanan 12. Kathleen D'Arcy
Date of Site Inspection	6th August 2025.
Inspector	Enda Duignan

Contents

1. Site Location and Description

1.1. The application site has an area of c. 129ha. and is located across the rural townlands of Boscabell, Garranmore, Newark, Fussough, and Dualla, Co. Tipperary. The site is located c. 4km to north-west of Cashel, Co. Tipperary and currently comprises a series of fields which are in agricultural use. The topography of the lands can be described as generally undulating, marked by field boundary hedgerows and vegetation of varying degrees of maturities along the road frontages. There is a more significant rise in topography within north-eastern corner of the site. The site is comprised of 5 no. land parcels, comprising:

- Parcel 1: 54ha – The parcel is divided in Parcel 1A and 1B is located to the west of the overall site. Parcel 1A adjoins the L5409 to the north and has a southern boundary to the R691. It is noted that there is a cluster of agricultural buildings in the site's south-western corner. Parcel 1B is located on the southern side of the R691 and is accessed from an existing agricultural entrance.
- Parcel 2: 15ha – Located to the east of Parcel 1, the parcel adjoins the L5409 to the north and is bisected by a number of hedgerows. The parcel has a south-western abuttal to a cluster of agricultural buildings and a rural dwelling.
- Parcel 3: 18ha – This parcel is located to the east of the overall site and also adjoins the L5409 to the north. The land parcel bounds the settlement of Dualla to the east.
- Parcel 4: 8ha – This land parcel is located on the northern side of the L5409. In terms of topography, the parcel slopes up from the public road and the roadside boundary is characterised by a dense hedgerow and trees of varying maturities. There are 2 no. dwellings located to the south-east and south-west of this parcel.
- Parcel 5: 34ha – This parcel adjoins the northern boundary of Parcel 4 and is referred to as Mount O'Meara. An area of mixed species woodland adjoins the eastern boundary of this parcel, and a quarry is located to the north-west.

1.2. Whilst the site is located in a rural area, there are a number of one-off dwellings located along the surrounding road network. As noted, the settlement of Dualla adjoins the eastern boundary of Parcel 3. A number of houses, the local national school (Dualla

National School, church (Our Lady of Fatima Church) and cemetery (Dualla Parish Church Cemetery) are located proximate to this boundary. The M8 is located c. 500m to the west of Parcel 5. The existing Kill Hill Wind Farm is located on the upland area to the east and south-east of the settlement of Dualla.

2. Proposed Development

2.1. Description

2.1.1. The Applicant is seeking a 10 year planning permission for a solar PV development with a 40-year operational lifespan. In summary, the development shall comprise:

- The erection of solar panels on ground-mounted galvanised steel frames, string inverters attached to selected ground-mounted galvanised steel frames,
- 16 no. transformer units,
- underground cabling,
- security fencing,
- CCTV system with pole mounted cameras,
- Landscaping,
- 6 no. site entrances with access gates utilizing existing farm field entrances which will be upgraded and internal accesses,
- The installation of underground cables, including cables under public roads,
- 2 no. temporary construction compounds; and,
- All associated ancillary development works.

2.1.2. The proposed Solar Farm is estimated to have a capacity of 130MWp. It is noted within the application documents that a separate application will made to the Commission (ACP) for a pre-application consultation in respect of a proposed 110kv substation and grid connection to serve the proposed development, under the Strategic Infrastructure provisions of the Planning and Development Act, 2000 (as amended).

2.1.3. The proposed development comprises PV Solar panels laid out over an area of c. 979,885m^2 in arrays over a c. 129ha site. The majority of the solar panels will be on ground mounted frames, fixed in place using the pile driven steel framing. However, c. 65,702m^2 of solar panels will be located on non-intrusive ballast footings within the buffer areas associated with the onsite monuments (Ref Nos. TS053-094, TS053-072,

TS061-037 and TS061-029) and an additional area over Mount O'Meara. It is noted that there will be no moving parts associated with the proposed development regardless of the foundation type.

2.1.4. The on-site CCTV will be remotely monitored via a 24/7 operational team, and it is confirmed that the CCTV will only be focused along the fence line. It is also indicated that there is no proposal to include any artificial lighting as part of the proposed development. Deer proof perimeter fence will be installed to provide security and restrict access. All fencing will be fitted with small mammal gates (300mm x 150mm) at appropriate points to enable access for wildlife such as rabbits, badgers and foxes to move freely throughout the landscape.

2.1.5. There will be a total of 6 no. access points into the overall site and 2 no. construction site compound areas which are to be located in Parcel Nos. 1 and 5. It is noted that all deliveries of construction material and construction staff will arrive to the compound areas in Parcel 1 via the R691 regional road and via the L1406 local road to Parcel 5. It is stated that the construction material for Parcel Nos. 1, 2, 3 and 4 will be delivered internally by either jeep and trailer or tractor and trailer.

2.1.6. In terms of drainage, it is indicated that the proposed development will not require any alternations to the existing onsite drainage system onsite as the existing surface water drainage system will provide effective drainage capacity to the site. In addition, it is confirmed that access will be maintained for the maintenance and inspection of all drainage, with appropriate management practices being implemented. Therefore, no new drainage mitigation measures are required.

2.1.7. In terms of landscaping proposals, the proposed development includes the following.

- The development of species-rich grassland with a varied sward structure planted and/or managed in accordance with the BRIDE project EIP techniques.
- Retention, enhancement and strengthening of existing hedgerow / treelines with additional species-rich planting along the site boundaries, where required;
- Planting of additional hedgerow / treelines as screen management; and,
- Retention of field boundaries and utilisation of existing contours, maintaining

the existing character of the area.

2.1.8. It is noted that the following measures have been incorporated into the design of the development to respond to sensitive receptors on site and within the surrounding area:

- The construction and maintenance will use existing farm access points to access the site where possible.
- Buffers will be implemented and maintained throughout the lifecycle of the proposed development, which include:
    - A 5m buffer between all works and solar farm infrastructure and existing drainage ditches.
    - A 5m buffer between all works, solar farm infrastructure and existing hedgerow / treelines.
    - A 30m buffer between all works, solar farm infrastructure and existing badger setts; and,
    - A 20m buffer between all works, solar farm infrastructure and watercourses.
- 65,702m^2 of solar panels will be located on non-intrusive ballast footings within the buffer areas associated with the onsite monuments (Refs: TS053-094, TS053-072, TS061-037 and TS061-029) and an additional area over Mount O'Meara.
- A comprehensive Biodiversity Management Plan has been prepared and will be implemented following the completion of the proposed works in order to conserve and, where possible, enhance the areas of existing habitat. Additional habitats will also be created to enhance ecological diversity within the overall site boundary.
- Implementation of a Landscape Plan to bolster and gap-fill the surrounding hedgerow / treelines (c. 1,836m of new hedgerow / treelines to be planted).
- The type of solar panels to be used in the Proposed Development will have an Anti-Reflective Coating (ARC).
- The type of solar panels to be used will be 'grid-formed' panels which are surrounded by white borders, divided by white grids and contain anti-reflective films that ensure that reflection of polarized light will be fragmented, significantly reducing reflection occurring from the panels.

2.1.9. Underground internal cabling will be installed within the public road to link the land parcels. The proposed internal cabling will comprise of the laying of c. 1,290m of underground electricity cables and communications cable in ducts and associated infrastructure substantially under public roads.

2.2. Amendments to Proposed Development

2.2.1. Following concerns raised by the Planning Authority at further information (FI) stage, the Applicant proposed to omit the originally proposed Parcel 3. This reduced the overall size of the site from 129ha. to 108ha. In addition, increased separation distances between the proposed development and residential properties E25F796, E25XV82 and E25K248 had been provided as part of the revised layout. The FI was deemed to be significant by the Planning Authority and readvertised by the Applicant. It is noted that the application red line boundary was subsequently modified on foot of the omission of Parcel 3.

2.3. Submitted Documentation

2.3.1. The application included the following accompanying documents:

- Environmental Report (ER) Volume 1,
- Environmental Report (ER) Volume 2 Appendices,
    - Appendix A – Site Layout,
    - Appendix B – Information Leaflet,
    - Appendix C – Landscape Plans,
    - Appendix D - Detailed Habitat Maps,
    - Appendix E – Biodiversity Management Plan,
    - Appendix F – Acoustic Appendices,
    - Appendix G – Photomontages,
    - Appendix H – Glint and Glare, and,
    - Appendix I - Cultural Heritage.
- Stage 1: Appropriate Assessment – Screening,
- Stage 2: Appropriate Assessment – Natura Impact Statement (NIS),
- Preliminary Construction Environmental Management Plan (pCEMP),
- Construction Traffic Management Plan, and,

- Planning Statement Report.

2.3.2. Subsequent to a request for Further Information (FI) by the Planning Authority, the following key documents were submitted by the Applicant:

- RFI Response Technical Report,
- RFI Response Technical Report, Appendices Part 1,
    - Appendix 1-1: Sightline Drawings,
    - Appendix 1-2: Road Plan Letter,
    - Appendix 2-1: Revised Site Layout,
    - Appendix 3-1: Revised Site Landscape Management Plan,
    - Appendix 4-1: Bat Report,
    - Appendix 4-2: Badger Technical Note,
    - Appendix 5-1: Diversion Application and/or Building-over or Near Irish Water Asset Application from Uisce Éireann (UÉ).
- RFI Response Technical Report, Appendices Part 1,
    - Appendix 6-1: Geophysical Report,
    - Appendix 6-2: Archaeological Testing Report,
    - Appendix 6-3: Revised Site Layout showing Avoided Archaeological Monuments and Features.

3. Planning Authority Decision

3.1. Decision

3.1.1. The Planning Authority granted planning permission for the proposed development subject to compliance with 18 no. standard conditions. Conditions of note included:

- Condition No. 3 (a) stipulates that the permission shall be for a period of 40 years from the said date of commissioning of the Solar Farm. In addition, 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. Part (b) of the condition requires the submission a detailed restoration plan prior to commencement of development.
- Condition No. 7 relates to archaeology and cultural heritage.
- Condition No. 8 relates to hedgerow management and landscaping.
- Condition No. 10 relates to CCTV.

- Condition No. 13 relates to sightline requirements.
- Condition No. 16 requires the submission of a finalised CEMP.

3.2. Planning Authority Reports

3.2.1. Planning Reports

3.2.1.1. The Tipperary County Council Planning Reports form the basis of the decision. The First Planning Report dated 26th April 2024 provided a description of the site and subject development, an outline of the site's planning history, a summation of the public submissions and referral responses on file and a description of the relevant planning policy context. Whilst the principle of development was deemed to be acceptable by the Planning Authority, a number of key issues were raised during their assessment. A summary of the issues which formed the basis of the Planning Authority's FI request is included as follows:

- A requirement for a revised site layout plan clearly indicating the required sightlines at each of the entrances in accordance with the provisions of Section 6.1 and Tables 6.1 and 6.2 of the Tipperary County Development Plan, 2022-2028,
- The Planning Authority considered that there shall likely be a requirement to extend the settlement boundary of Dualla village to the west within the lifetime of the project i.e. 50 years and it is necessary that the proposal would not inhibit or prejudice the growth of the settlement. Accordingly, the Applicant was requested to submit revised proposals to include for a greater separation distance between the village boundary and the proposed development within Parcel 2. (Note, the Planning Authority's FI request should read Parcel 3)
- The Planning Authority considered that the proposed development had the potential to result in localised negative visual impacts on residential properties located at E25F796, E25XV82 and E25K248. Therefore, the Applicant was requested to submit revised proposals providing for a greater separation distance together with a landscaped buffer zone at these locations.
- The Planning Authority notes a number of deficiencies in the information submitted in relation to the quantities and frequency of species occurrences identified during the field surveys. Therefore, the Applicant was requested to submit:

(i) A comprehensive Bat survey undertaken by a suitably qualified person on Bat species found and populations.

(ii) A comprehensive badger survey which accounts for the location of, and quantum of badger sets found.

(iii) A study/evidence to demonstrate that the use of an EMF will not cause area avoidance for wildlife thus reducing their habitats and foraging areas.

(iv) Confirmation how the growth of vegetation under and between the arrays on the site will be controlled and whether same will be used for agricultural proposes.

- The applicant was advised that there is an Uisce Éireann (UÉ) drinking water abstraction point in the form of a borehole, which serves the local Dualla community. The Planning Authority noted that given the scale of the development and insertion of piles, it is likely that there will be thousands of intrusions below ground including internal cabling. It is necessary to ensure that the development will have zero effect of turbidity within the ZOC. To address these concerns, the Applicant was requested to submit:

(i) Confirmation that a Diversion Application and/or Building-over or Near Irish Water Asset Application has been obtained from UÉ.

(ii) Details of measures to be taken to ensure that there will be no negative impact to UÉ's Drinking Water Source(s) during the construction and operational phases of the development. Hydrological / hydrogeological pathways between the applicant's site and receiving waters should be identified. Mitigations should be proposed for any potential negative impacts on any water source(s) which may be in proximity (to include hydrogeology and any groundwater/ surface water interactions).

(iii) A detailed method statement for the excavation and control measures to effectively address risk of adverse impacts to UÉ drinking water source.

(iv) Any potential impacts on the assimilative capacity of receiving waters in relation to UÉ discharge outfalls including changes in dispersion / circulation characterises.

(v) Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (and resultant

potential impact on the capacity of the source) or the potential of the development to influence / present a risk to the quality of the water abstracted by UÉ for public supply be identified.

(vi) Mitigation measures in relation to any of the above ensuring a zero risk to any UÉ drinking water sources (Surface and Ground water) be identified.

6. Concerns raised in relation to potential impacts on archaeology as follows;
    a. The Planning Authority were of the view that the proposal to locate solar panels on non-intrusive ballast footings within the buffer areas associated with the onsite monuments was inappropriate. The applicant was requested to submit a revised Site Layout Plan providing for exclusion zones at these locations which correspond with the zones of notification.
    b. Owing to the extent of archaeological heritage in the area and the land take associated with the proposal, the Applicant was requested to undertake a widespread geophysical survey of the application site and to submit the findings of same in response to this item.

3.2.1.2. An extension of time under Article 33(3) of the Regulations was submitted on 25/09/2024 and was approved by the Planning Authority on 26/09/2024 for an additional 3 months. A FI response was received on 16/01/2025 and was deemed to contain significant FI. Public Notices were received on 24/01/2025 following a request issued 21/01/2025. The second Planning Report on file signed 13th March 2025 provides an assessment of the Applicant's further information response. A summary of the assessment and the amendments to the proposed development is included as follows:

1. In response to Item No. 1, the report prepared Road Plan Consulting confirms that there will be 2 no. main compounds during the construction phase. All HGV traffic will enter and exit the two main site entrances, Entrance 1A north and Entrance 4 and the visibility splays at the entrances will be in accordance with the standards set out in the TCDP (i.e. 160m at a 4.5m set-back). The response was assessed by the Carrick-On-Suir District Engineers Office who have recommended a grant of permission. The Planning Authority concurred with this recommendation subject to compliance with a condition requiring the

submission of a final Construction Traffic Management Plan prior to the commencement of development.

2. In response to Item No. 2, the Applicant proposed to omit Parcel 3 i.e. the parcel west of Dualla village. This reduced the overall size of the solar farm development from 129ha. to 108ha. The Planning Authority noted that this revision addressed many concerns raised in the third party submissions regarding the proximity of the solar farm to the village and will now allow the village to expend in the future, where necessary.
3. In response to Item No. 3, the Applicant proposed increased separation distances between the proposed development and a number of residential properties. It is noted that the increased separation distances were deemed to be acceptable by the Planning Authority.
4. In relation to item 4 (i) and (ii), the Applicant submitted a revised Bat Survey Report and Badger Sett Report prepared by Malone O'Regan Environmental (MOR). In addition, commentary was included within the Technical Report regarding items (iii) and (iv). In relation to item iv, it is proposed to convert the lands under the arrays to a species-rich grassland habitat with a varied sward structure and vegetation under and between the arrays will be maintained through appropriate grazing or mowing / cutting regimes. Overall, the Planning Authority noted that they were satisfied with the scope of the submitted reports.
5. In relation to item 5(i), the Planning Authority refer to Appendix 5-1 of the submission which included correspondence from UÉ dated stated that the proposed build near can be facilitated subject to conditions. In response to Items 5(ii) – (vi), the submitted Technical Report noted that consultation had been undertaken with UÉ which concluded that UÉ were satisfied that the revised layout would avoid any potential risks to the Dualla Public Water Supply. The exclusion of Parcel 3 and the majority of the site layout being located outside of the Zone of Contribution (ZoC) was noted. In this regard, the Planning Authority was satisfied that the proposal would not have a detrimental impact on drinking water quality or supply.
6. In response to Item No. 6, geophysical surveying was undertaken from the 22nd May – 2nd June 2024 and on the 12th October 2024 under detection licence 24R0244 and c. 41 test trenches were excavated under Licence 57E0854. A

Geophysical Report (Appendix 6-1), Archaeological Test Trenching Report (Appendix 6-2) and a revised Site Layout Plan (Appendix 6-3) showing archaeological features accompanied the FI response. It is noted that the Site Layout was amended in order to exclude all registered archaeological monuments and their associated exclusion zones, and to exclude all of the archaeological features identified with the appropriate buffers. Subject to compliance with appropriate conditions, the Planning Authority was satisfied that the proposals would not give rise to adverse impacts on archaeology.

3.2.2. **Other Technical Reports**

3.2.2.1. Carrick-on-Suir District Engineer: An initial report on file from the district engineer recommended FI regarding the requirement for improved sightlines on all site entrances, updated drainage proposals and updated drawings showing the location of cables which are to be installed on the road and grass verge. A second report is on file following the submission of the FI response stating no objection to the proposed development subject to compliance with a condition.

3.2.2.2. Clonmel Environment Section: An initial report on file from the Council Environment & Climate Action Section which recommended FI with respect to the following:

- A Bat study completed by a suitably qualified ecologist to include Bat species found, populations, what the area is used for and mitigation measures.
- A study to demonstrate that the use of an EMF will not cause area avoidance for wildlife thus reducing their habitats and foraging areas.
- A report which considers the effects of development on groundwater.

No further reports from the Clonmel Environment Section on file.

3.3. Prescribed Bodies

3.3.1.1. Heritage Council: An initial report on file the Heritage Council which noted that they support efforts to increase renewable energy rollout in Ireland. However, due the scale of some of the solar farms being proposed, there will inevitably be a land use impact with archaeology, given the prevalence of ringforts (dun, lios or rath), as well as other archaeological sites, in the Irish countryside. In addition, there is a need to ensure that solar farm development does not undermine biodiversity ambitions. The Heritage Council's commentary is confined primarily to archaeology and the biodiversity

aspects of the scheme, and the following is noted.

- Archaeology - Noting the number on site and within the immediate surrounds, it is recommended that archaeological heritage features as identified in each parcel should be avoided in terms of the installations of panels. This should comprise an archaeological buffer exclusion zone based on the zone of notification for all monuments. Furthermore, additional survey (geophysical) work needs to be submitted to justify the mitigation proposed and the conclusions of the assessment.
- Habitats and Ecology – It is noted that there is a hydrological connection between the site and the River Suir SAC. The Natura Impact Assessment has considered the potential impacts on the SAC and the Heritage Council note that they are satisfied that the mitigation measures as proposed will be adequate. Recommendations are made with respect to the following:
    - Retention of existing hedgerows and treelines, particularly those with bat roost potential along field boundaries.
    - Greater level of assessment for the streams identified including chemical quality.
    - To ensure no siltation or pollution run off during the construction phase, a suitably qualified project ecologist should be present for works in the vicinity of watercourses.
    - Riparian zones along streams should be managed as per Bride EIP project guidelines.
    - Given solar farm operations will desire no overshadowing of the PV panels, some condition for a specific strategy for how the field margins/hedgerows and trees will be managed should be included. Breeding birds will only nest at certain heights, and it is recommended that the National Biodiversity Data Centre's guidance on hedgerow planting be included in such strategy.
    - Badger survey to inform the mitigation suggested and/or preconstruction (immediately before the construction begins) surveys for badger setts/presence of badger.
    - More effort on landscaping could also have aspired to create corridors connecting patches of wet grassland and scrub/woodland.

- Inland Fisheries Ireland is consulted on matters related to watercourses.
- No felling or removal of vegetation during the bird breeding season.
- Preliminary flora/walkover survey should have been done in spring.
- The retention and bolstering of hedgerows in the Biodiversity Management Plan (BMP) is commended.
- It is recommended that the stand of woodland identified in Parcel 1 and Parcel 5 also be retained.

3.3.2. Department of Housing, Local Government and Heritage (National Monuments Service): A report from was received following the submission of the Applicant's FI response. The report recommends various conditions with respect to the implementation of mitigation measures, the retention of a suitably qualified archaeologist to advise on and establish Exclusion Buffer Zones and to monitor all ground disturbance required for the development. In addition, it is recommended that the Construction Environment Management Plan (CEMP) be updated to incorporate all significant findings from the report. Recommendations also provided with respect to decommissioning of the proposed development.

3.3.3. An Taisce: An initial report on file from An Taisce which provided commentary with respect to the following:

- Water Framework Directive (WFD) & Habitats Directive – the submission notes that proximity of the site to two distinct waterbodies, namely the Arglo stream which is designated as moderate water quality status and the Ballintemple stream which is designated as poor water quality status, both of which are at risk of not achieving good status by 2027. It is recommended that adherence to the 20m buffer between all development works and solar farm infrastructure and the 2 no. streams is monitored throughout the construction and operational period.
- Presence of Woodland – it is recommended that the proposal should ensure the preservation of the mixed species woodland to the north of the site given it is likely to possess biodiversity value.
- Species Surveys – it is requested that quantities are provided regarding the frequency of species occurrences during the field surveys in order to provide

a clear and transparent indication of the abundance and distribution of important species within the subject site.

- The inclusion of a Biodiversity Management Plan (BMP) for the retention, supplementary planting and enhancement of key biodiversity features within the is welcomed.
- Archaeological Impact Assessment – it is suggested that an Archaeological Impact Assessment is carried out before the application is granted permission.

A second report from An Taisce was received following the submission of the FI response. Commentary is provided regarding the 'Hedgerow Removal' to facilitate sightlines. It is submitted that if removal is unavoidable, then supplementary planting should utilise native species of Irish provenance.

3.3.4. Uisce Éireann: 2 no. reports on file from UÉ. The report dated 20th March 2024 noted that it is likely that the proposed works may involve building near/under UÉ infrastructure in multiple locations within the public road**.** The Aplicant was requested to:

- Engage with UÉ Diversions Team by submitting a Diversion Application Form and/or Building-over or Near Irish Water Asset Application in order to assess the potential interactions with public water / wastewater infrastructure.
- The outcomes of the Diversion Application and/or Building-over or Near Irish Water Asset Application is to be submitted to the Planning Authority as a response to further information request.

In their addendum report dated 4th April 2024, it is noted that there is an UÉ drinking water abstraction point in the form of a borehole, which serves the local Dualla community, located c. 200 metres east of the most eastern portion of the proposed solar farm development. UÉ further notes that a large portion of the proposed solar farm's eastern development area is located within the ZoC of this drinking water abstraction point. The ZoC reaches over an area of c. 47 no. ha. Therefore, UÉ requested that the applicant to engage with UÉ in order to ascertain the potential impacts to the ZoC so that protection works or mitigation measures can be agreed and carried out as appropriate. The various matters raised by UÉ are detailed above in Section 3.2.1 of this report.

3.3.5. Transport Infrastructure Ireland (TII): 2 no. reports on file from TII indicating that they have no observations to make on the application.

3.3.6. Health Service Executive (HSE): A report on file from the HSE which provided commentary with respect to the following:

- Concerns regarding the potential for possible nuisances from glare/light from the proposed development to local receptors. It is recommended that an independent glint/glare assessment be completed in the vicinity of the proposed development.
- A raw material acceptance procedure should be in place to ensure that the solar panels brought on site for the proposed development are accounted for and fully traceable.
- Recommendation that meaningful public consultation is carried out concerning the proposal and any concerns that the public may have regarding the siting, scale, and operation of the development.
- It is contended that groundwater shall be protected at all stages.
- Concerns raised regarding the absence of a proposal to monitor dust during the construction phase. The applicant is advised to further assess the impact of dust on the receiving environment in particular local roads. It is noted that a dust control strategy should be in place for all proposed land parcels to prevent possible dust nuisances from arising.
- It is recommended that the applicant submit proposals to monitor noise during the construction phase in order to verify the effectiveness of the proposed mitigation measures outlined in the pCEMP
- In the event any temporary drinking water stations are supplied, these sources shall be of potable quality and comply with applicable legislation.
- It is recommended that a formal complaints procedure be implemented to resolve any possible issues or community concerns with traffic, glint or glare, and nuisance complaints.

3.4. Third Party Submissions

3.4.1. A total of 304 no. submissions were initially received by Third Parties in respect of the proposed development. This included a number of submissions from Elected

Representatives. Following the receipt of the Applicant's significant FI response, a further 171 no. submissions were received by the Planning Authority. It is noted that a number of the parties who made submissions to the application are either Third Party appellants in this case or have made observations to the appeal. I note that the issues raised are broadly similar and I will discuss the issues raised in further detail in Section 8 of this assessment. I note that I have considered all submissions in my assessment of the subject proposal.

4. Relevant Planning History

4.1. A review of the Tipperary County Council Planning Portal and the Board's case files was carried out on 9th July 2025 to collate any relevant, recent (within 10 years) planning history for the site and surrounding area.

4.2. Appeal Site

4.2.1. No history of planning applications within the boundaries of the subject site.

4.3. Surrounding Area

4.3.1. There is a history of planning applications within the immediate surrounds of the subject site which typically relate to small scale residential and agricultural developments which are in keeping with the character of the surrounding area. Permissions of note include:

- 22/60679: Planning permission granted for the 'construction of a 400m running track, perimeter walking track, long jump & external exercise area. Reconfiguration of existing soccer field, provision of pitch drainage, and two new dugouts. Construction of a precast hurling wall, training area & basketball court, enclosed by a 2.4-meter-high weld-mesh fence and 2.6-meter netting on top. Flood lighting and associated site lighting, site boundary & site development works.' The site is located c. 60m to the east of Parcel 3.
- 22/60560: Planning permission granted for 'a cattle underpass under the R691, together with ramps, effluent storage tank and ancillary works'. The site is located c. 120m to the east of Parcel 1 along the R691.
- 25/60316: On a site to the west of Parcel 1A, planning permission was granted for a Slatted shed with underground slurry tank and all associated

site works. Permissions also on this site included Ref. 24/60733 and 24/60338.

- 14/600422 (ABP Ref. PL 92.245195): On lands to the north-east of Parcel 5, planning permission refused for quarrying of stone over an extraction area of approximately 2.6 hectares over a 20 year period, and all ancillary site development works.

5. Policy Context

5.1. International/EU Policy.

5.1.1. RED III (European Renewable Energy Directive (EU/2023/2413))

5.1.1.1. The revised Directive EU/2023/2413 came into force on 20th November 2023. RED III sets an overall renewable energy target of at least 42.5% binding at EU level by 2030, but it is aiming for 45%. This target is raised from the previous 32% target. It means almost doubling the existing share of renewable energy in the EU. The Directive introduces several provisions to facilitate the deployment of photovoltaic (PV) projects, including the designation of renewable acceleration areas by Member States, a simplified and expedited permit granting process for solar PV projects and streamlined environmental assessment procedures for solar PV projects in designated renewable acceleration areas. This Directive has been transposed by way of SI 254/2025 on 6th August 2025.

5.1.2. REPowerEU Plan 2022 and Directive EU 2018/2001, as amended 18.05.2022

5.1.2.1. The plan was prepared in response to the Russian invasion of Ukraine. It focuses on the need to end the EU's dependence on Russian fossil fuels and to tackle the climate crisis. It includes the accelerated rollout of renewable energy. It amends the Directive on the Promotion of the Use of Energy from Renewable Sources (Directive EU 2018/2001) to require that 45% of energy is from renewable sources.

5.2. National Policy and Guidance

5.2.1. Climate Action and Low Carbon Development Act, 2015, as amended

5.2.1.1. The Act commits Ireland to the objective of becoming a carbon-neutral economy by 2050, reducing emissions by 51% by the end of the decade. Section 17 of the Climate Action and Low Carbon Development (Amendment) Act, 2021 amends the principle

act such that Section 15(1) requires:

"(*1) A relevant body shall, in so far as practicable, perform its functions in a manner consistent with—*

a) the most recent approved climate action plan,

b) the most recent approved national long term climate action strategy,

c) the most recent approved national adaptation framework and approved sectoral adaptation plans,

d) the furtherance of the national climate objective, and

e) the objective of mitigating greenhouse gas emissions and adapting to the effects of climate change in the State".

"Relevant body" means a prescribed body or a public body.

5.2.2. **Climate Action Plan 2024 ("CAP24") and 2025 ("CAP25")**

5.2.2.1. The Climate Action Plan 2024 (CAP24) is the third annual update to Ireland's Climate Action Plan 2019. The plan is prepared under the Climate Action and Low Carbon Development Act 2015 (as amended, see below), which introduced economy wide carbon budgets and sectoral emission ceilings, to achieve a 51% reduction in emissions by 2030 (relative to 2018 levels) and net zero emissions by 2050. CAP24 sets out the sectoral emission ceilings for the electricity sector (Table 3.2) and, in Table 12.5, KPIs to accelerate renewable energy generation. Key objectives include deploying up to 5 GW of solar power by 2025 and at least 8 GW by 2030. The Plan also details the significant changes required to enhance the electricity grid's capacity and flexibility.

5.2.2.2. To meet its targets and obligations CAP 24 sets a course for Ireland to halve emissions by 2030 and reach net-zero no later than 2050. In terms of the electricity sector a 75% reduction in emissions based on 2018 levels is required by 2030 and CAP 24 provides that central to achieving this is the strategic increase in the share of renewable electricity to 80% by 2030 including ambitious targets of deploying 9GW of onshore wind, 8GW of solar power and at least 5GW from offshore wind projects.

5.2.2.3. CAP 2025 was published on 15th April 2025. It re-affirms the previous commitment to

increase the share of renewable electricity generation to 50% by 2025 and 80% by 2030 including solar targets of up to 5 GW by 2025 and 8 GWs by 2030.

5.2.3. **Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions 2024**

5.2.3.1. The National long-term Climate Action Strategy, entitled Ireland's Long-term Strategy on Greenhouse Gas Emissions Reductions 2024, sets out indicative pathways, beyond 2030, towards achieving carbon neutrality for Ireland by 2050. The Strategy provides a pathway to a whole-of-society transformation and serves as a vital link between shorter-term Climate Action Plans and Carbon Budgets and the longer-term objective of the European Climate Law and Ireland's National Climate Objective.

5.2.4. **The National Adaptation Framework; Planning for a Climate Resilient Ireland (June 2024)**

5.2.4.1. The most recent approved national adaptation framework, the National Adaptation Framework; Planning for a Climate Resilient Ireland June 2024 (NAF) is Ireland's second statutory National Adaptation Framework (NAF) and was published on 5th of June 2024. The NAF and its successors do not identify specific locations or propose adaptation measures or projects in individual sectors, but sets out the context to ensure local authorities, regions and key sectors can assess the key risks and vulnerabilities of climate change, implement climate resilience actions and ensure climate adaptation considerations are mainstreamed into all local, regional and national policy making. The NAF identifies 13 (previously 12) priority sectors under 7 lead Departments that are required to prepare sectoral adaptation plans under the Climate Act in accordance with the Sectoral Planning Guidelines for Climate Change Adaptation which were published in 2018 and updated in 2024. The original 12 sectoral Plans prepared in 2019 and a new sectoral Plan for tourism are to be updated/prepared by end of Q3 2025. The following Electricity and Gas Sectoral Plan is relevant to the subject proposal.

5.2.5. **Electricity and Gas Sectoral Plan 2019**

5.2.5.1. The aim of the Plan is to address the risks posed by climate change to the electricity and gas networks. The plan focuses on identifying vulnerabilities such as extreme weather and changing temperature patterns and how they could affect the electricity

and gas networks. Specific measures to minimise the potential negative effects of climate change are outlined including the strengthening of the grid and ensuring reliable gas supply. The Plan also seeks to exploit opportunities and the potential benefits arising from climate change adaptation such as increased energy efficiency and the development of new renewable energy sources.

5.2.6. **Project Ireland 2040: National Planning Framework ("NPF"), First Revision of the NPF and the National Development Plan ("NDP 2021-2030")**

5.2.6.1. The Project Ireland 2040 is the Government's long-term overarching strategy to make Ireland a better country for all and to build a more resilient and sustainable future. The NPF and the NDP combine to for Project Ireland 2040. The NPF sets out to deliver a spatial strategy through a set of National Strategic Outcomes ("NSO's"), including: 'Transition to a Low Carbon and Climate Resilient Society' which establishes a national objective of achieving transition to a competitive, low carbon, climate resilient and environmentally sustainable economy by 2050. The first revision of the NPF has been approved by both Houses of the Oireachtas, following the decision of the Government to approve the final revised NPF on 8th April, 2025. The 'First Revision' introduces regional renewable electricity capacity allocations for each of the three Regional Assemblies to be achieved by 2030 which for the Eastern and Midland Regional Area is an additional 3,294MW, for solar PV or 45% of the National share in 2030. This is the minimum required for solar generation to meet the 2030 emission reductions in the electricity sector. The NDP 2021-2030 sets out the investment priorities that will underpin the implementation of the National Planning Framework, through a total investment of approx. €116 billion. It recognises that Ireland's energy system requires radical transformation in order to achieve its 2030 and 2050 targets and objectives. It recognises that investment in renewable energy sources affords Ireland an opportunity to decarbonise our energy generation, but that this must be complemented by wider measures to moderate growth in energy demand, increase energy security, diversify supply sources and facilitate more variable electricity generation on the grid.

5.2.7. Relevant National Policy Objectives (NPO) include:

- NPO 69 Reduce our carbon footprint by integrating climate action into the

planning system in support of national targets for climate policy mitigation and adaptation objectives, as well as targets for greenhouse gas emissions reductions as expressed in the most recently adopted carbon budgets.

- NPO 70 Promote renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050.
- NPO 71 Support the development and upgrading of the national electricity grid infrastructure, including supporting the delivery of renewable electricity generating development.

5.2.8. Ireland's 4th National Biodiversity Action Plan 2023–2030

5.2.8.1. Ireland's 4th National Biodiversity Action Plan (NBAP) sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The NBAP will continue to implement actions within the framework of five strategic objectives, while addressing new and emerging issues:

- Objective 1 - Adopt a Whole of Government, Whole of Society Approach to Biodiversity,
- Objective 2 - Meet Urgent Conservation and Restoration Needs,
- Objective 3 - Secure Nature's Contribution to People,
- Objective 4 - Enhance the Evidence Base for Action on Biodiversity
- Objective 5 - Strengthen Ireland's Contribution to International Biodiversity Initiatives.

5.2.9. National Energy Security Framework, April 2022

5.2.9.1. The Framework addresses Ireland's energy security needs in the context of the war in Ukraine. It coordinates energy security work across the electricity, gas and oil sectors. The Framework takes account of the need to decarbonise society and the economy, and of targets set out in the Climate Action Plan to reduce emissions. Theme 3 - Reducing our Dependency on Imported Fossil Fuels, focusses on three areas of work:

7.1 Reducing demand for fossil fuels.

7.3 Replacing fossil fuels with renewables, including solar energy.

7.3 Diversifying fossil fuel supplies.

5.2.9.2. Under 7.2, the statement notes that prioritising renewables is in line with the requirements of the recast Renewable Energy Directive and the EC REPowerEU action statement. The Commission has called on Member States to ensure that renewable energy generation projects are considered to be in the overriding public interest, and the interest of public safety, and the Government supports this request.

5.3. Regional Policy

5.3.1. Regional Spatial & Economic Strategy – Southern Region

5.3.1.1. This document seeks to support the delivery of the programme for change set out in Project Ireland 2040, the National Planning Framework (NPF) and the National Development Plan 2018-27 (NDP), and to ensure coordination between the City & County Development Plans and Local Enterprise & Community Plans. It seeks to facilitate the sustainable development of additional electricity generation capacity throughout the region and to support the sustainable expansion of the transmission network. The Regional Authority seeks to ensure that future strategies and plans for the development of renewable energy, and associated infrastructure, will promote the development of renewable energy resources in a sustainable manner.

5.3.1.2. The following relevant Regional Policy Objectives (RPOs) 87, 95, 98, 219 and 221 deal with renewable energy.

- RPO 87 - Low Carbon Energy Future: The RSES is committed to the implementation of the Government's policy under Ireland's Transition to a Low Carbon Energy Future 2015-30 and Climate Action Plan 2019. It is an objective to promote change across business, public and residential sectors to achieve reduced GHG emissions in accordance with current and future national targets, improve energy efficiency and increase the use of renewable energy sources across the key sectors of electricity supply, heating, transport and agriculture.
- RPO 95 - Sustainable Renewable Energy Generation: It is an objective to support implementation of the National Renewable Energy Action Plan (NREAP), and the Offshore Renewable Energy Plan and the implementation of mitigation measures outlined in their respective SEA and AA and leverage the Region as a leader and innovator in sustainable renewable energy generation.

- RPO 98 - Regional Renewable Energy Strategy: It is an objective to support the development of a Regional Renewable Energy Strategy with relevant stakeholders.
- RPO 219 - New Energy Infrastructure: It is an objective to support the sustainable reinforcement and provision of new energy infrastructure by infrastructure providers (subject to appropriate environmental assessment and the planning process) to ensure the energy needs of future population and economic expansion within designated growth areas and across the Region can be delivered in a sustainable and timely manner and that capacity is available at local and regional scale to meet future needs.
- RPO 221 - Renewable Energy Generation and Transmission Network:
    a. Local Authority City and County Development Plans shall support the sustainable development of renewable energy generation and demand centres such as data centres which can be serviced with a renewable energy source (subject to appropriate environmental assessment and the planning process) to spatially suitable locations to ensure efficient use of the existing transmission network;
    b. The RSES supports strengthened and sustainable local/community renewable energy networks, micro renewable generation, climate smart countryside projects and connections from such initiatives to the grid. The potential for sustainable local/community energy projects and micro generation to both mitigate climate change and to reduce fuel poverty is also supported;
    c. The RSES supports the Southern Region as a Carbon Neutral Energy Region.

5.3.2. **Other Relevant Guidelines**

5.3.2.1. Regard is also given to:

- EU Energy Directives and Roadmaps and associated national targets for renewable energy by sector.
- National Renewable Energy Action Plan 2010.
- Strategy for Renewable Energy 2012-2020.
- Ireland’s Transition to a Low Carbon Energy Future, DCENR, 2015-2030.

- Renewable Energy Policy and Development Framework. DCENR, 2016.
- Architectural Heritage Protection Guidelines for Planning Authorities, Department of Housing, Local Government and Heritage, 2011. (updated in 2022).
- Ireland's 4th National Landscape Strategy for Ireland 2015-2025,
- The Planning System and Flood Risk Management, 2009,
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, (Department of Housing, Local Government and Heritage) (August 2018).
- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (Department of Environment, Heritage and Local Government, 2009).

5.4. Local Policy

5.4.1. Tipperary County Development Plan, 2022 – 2028

5.4.1.1. The operative Development Plan for the purpose of this assessment is the Tipperary County Development Plan, 2022 – 2028 (referred to herein as the Development Plan). The site is located within a rural area of the county, outside the settlement boundary of any designated settlements.

5.4.1.2. Chapter 3 (Low-Carbon Society & Climate Action) contains the following policies and objectives of note:

- Policy 3-1 - Promote and facilitate renewable energy development, in accordance with the policies and objectives of the Tipperary Renewable Energy Strategy 2016 (and any review thereof), and the Tipperary Climate Adaptation Strategy 2019.
- Objective 3-A - Support and facilitate the implementation of European and National objectives for climate adaptation and mitigation, and to prepare a Climate Action Plan for Tipperary in compliance with the Climate Action and Low Carbon Development (Amendment) Bill (DECC, 2020) and any review thereof.
- Objective 3-E - Support, in collaboration with stakeholders, research and innovation in smart renewable energy technologies and initiatives to accelerate

diversification away from fossil fuels.

5.4.1.3. Chapter 10 relates to 'Renewable Energy and Bioeconomy' and contains a number of relevant policies and objectives including inter alia:

- Policy 10-1 - Support and facilitate new development that will produce energy from local renewable sources such as hydro, bioenergy, wind, solar, geothermal and landfill gas, including renewable and non-renewable enabling plant, subject to compliance with normal planning and environmental criteria, in co-operation with statutory and other energy providers. The provisions of the Tipperary Renewable Energy Strategy (and any review thereof) as set out in Volume 3, will apply to new development.
- Objective 10 – A - Support the Climate Action Plan (DECC, 2019) as it relates to renewable energy production, having consideration to the strategic importance and potential benefits of renewable energy investment to rural communities.
- Objective 10 - C To continue to support renewable energy development and to maintain a positive framework for development through the review of the Renewable Energy Strategy over the lifetime of the Plan.

5.4.1.4. Policies of relevance to the subject proposal within Chapter 11 (Environment and Natural Assets) include:

- Habitats Directive (Policy 11-1 and 11-2),
- Biodiversity (11-4),
- Water quality (11-7),
- Flood risk (11-9 and 11-10),
- Landscape and visual amenity (11-16 and 11-17), and,
- Noise disturbance (11-18).

5.4.1.5. Policies of relevance to the subject proposal within Chapter 13 (Built Heritage) include 13-4, 13-5 and 13-6.

5.4.1.6. Chapter 15 of the Development Plan relates to Water and Energy Utilities and relevant policies and objectives include 15-7, 15-E and 15-F.

5.4.1.7. The Development Plan's Renewable Energy Strategy is provided in Appendix 2, with Section 6.8 outlining the key considerations for solar farm developments. The policy states that "*There has been recent interest in the development of large-scale ground mounted solar PV installations. The Council will facilitate proposals for solar PV installations; subject the demonstration by the applicant that the proposal will not have a significant adverse impact on the built and natural environment, the visual character of the landscape or on residential amenity. Particular care must be taken in respect to proposals for commercial PV in Primary and Secondary Amenity Areas, where the Council may require a Visual Impact Assessment (VIA) in support of the proposal, particularly where there is potential for cumulative visual impact as a result on existing and permitted solar development in the area*".

5.4.1.8. Policies and objectives of note include:

- RE1 - Protection of the Environment It is the policy of the Council that renewable energy developments and associated supporting infrastructure shall be assessed for compliance with the environmental standards and policies as set out in the County Development Plan (as varied) and the Development Management standards set out in Chapter 10.
- RE2 - Landscape Capacity and Renewable Energy Development It is the policy of the Council to facilitate new development which integrates with and respects the character, sensitivity and value of the landscape in accordance with the guidelines set out in the Tipperary Landscape Character Assessment 2016 and the policies as set out in the County Development Plan (as varied) and the Development Management standards set out in Chapter 10.
- RE10 - It is the policy of the Council to facilitate solar energy installations where it is demonstrated to the satisfaction of the Council that there will be no significant adverse impact on the built and natural environment, the visual character of the landscape or on residential amenity.
- SO1 - It is an objective of the Council to support the implementation of the targets and objectives of the White Paper for Energy 2015.
- SO13 - It is an objective of this Renewable Energy Strategy to support the objectives of the White Paper for Energy 2015 as they relate to energy storage as an important element of renewable energy systems in the county. Volume 2

5.4.1.9. Appendix 3 of the Development Plan contains the Landscape Character Assessment and Schedule of Views and Routes. The application site is located in the open countryside and is not located within a Primary or Secondary Amenity Area landscape designation. The site is contained in the plains of lowland pastures in River Suir Central Plain Landscape Character Area (LCA).

5.4.1.10. Appendix 6 of the Development Plan sets out the various 'Development Management Standards'.

6. Natural Heritage Designations

6.1.1. Natura 2000 European Sites within proposed development's Zone of Influence (ZoI) are as follows:

6.1.1.1. **Special Areas of Conservation (SACs)**

- Lower River Suir SAC (002137) - The proposed development is hydrologically connected to the site via the unnamed stream (c. 7.1km downstream) and the Ballintemple Stream (c. 14.4km downstream).

6.1.1.2. **Natural Heritage Areas (NHA) & proposed National Heritage Areas (pNHA)**

- There are no Natural Heritage Areas (NHA) or proposed National Heritage Areas (pNHA) located within 15km of the site. The nearest pNHA is the Killough Hill, located c. 5.3km to the north of the site. Other pNHAs include Laffansbridge pHNA which is located 6.7km to the north-east and Power's Wood pNHA which is located 7.5km to the south-east.

7. EIA Screening

Solar Energy development

7.1.1. Solar energy development is not listed as a class of development for the purposes of EIA under Part 2 of the Fifth Schedule, within the Planning and Development Regulations, 2001 (as amended). In this regard, a requirement for preliminary examination or EIA does not arise for this type of development.

7.1.2. The proposed solar energy development will require a connection to the national grid. While this appeal relates to a decision under S.34 of the Act, an application for such grid connection would fall under the Strategic Instructure provisions of the act requiring a separate application under S.182. Such underground grid connection would not constitute a class of development under Schedule 5 and would not require preliminary examination or EIA.

Rural Re-structuring

7.1.3. However, it is noted that rural restructuring is listed as development for the purposes of Part 10 under the heading of *Agriculture, Silviculture and Aquaculture*, Class 1 of Part 2 of the Fifth Schedule, with the following stated under subsection (a) '*Projects for the restructuring of rural land holdings, undertaken as part of a wider development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares*.'

7.1.4. The proposed development involves the removal of a limited extent of hedgerow, primarily at the site entrances, in total comprising c. 660m. Such removal is associated with access requirements and does not result in the amalgamation or enlargement of existing fields. This proposed removal of hedgerow is significantly below the EIA threshold of 4km as outlined under Planning and Development Regulations, 2001 (as amended). The development would, however, constitute sub-threshold development for rural restructuring (Class 1(a), Part 2 of Schedule 5). I refer to Appendix 3 Pre-screening and Appendix 4 which contains the final EIA Screening Determination on file.

Private Roads

7.1.5. Given the proposal includes the provision of new access tracks on site, I have also examined the proposed project as it may relate to Class 10: *Infrastructure projects* (dd) "*all private roads which would exceed 2000 metres in length*". This class has been screened out at pre-screening stage from further consideration.

Conclusion

7.1.6. Having regard to the nature and scale of development and the absence of any significant environmental sensitivity in the vicinity of the site, as well as the criteria set out in Schedule 7 of the Planning & Development Regulations 2001 (as amended), and the Schedule 7A information submitted by the Applicant, following a screening determination as detailed under Appendix 4 of this report, it can be concluded that there is no real likelihood of significant effects on the environment arising from the proposed development. The need for environmental impact assessment can, therefore, be excluded following this screening determination and an EIA is not required.

8. The Appeal

8.1. Third Part Appellants

8.1.1. The Commission received a total of 7 (seven) no. appeals from the following Third Parties:

- Dualla Village Preschool c/o Sarah Lawlor,
- Kelly Reay,
- Donnacha Looby and Denis Looby,
- Enda Howley,
- Dualla Together CLG,
- Conor and Kate Breen, and,
- Keith Barry.

8.1.2. The various grounds of appeal encompassed a broad spectrum of issues, many of which presented varying degrees of overlap. A summary of the issues raised in each appeal is presented the below table. It is noted that a number of the appeals enclosed their original submissions to the application with some including technical reports prepared by consultants that were engaged on their behalf. Where relevant, these have also been summarised below. Furthermore, there are reports produced by the same consultant on behalf of different appellants which address distinct subject matters. The content of these reports is outlined in detail below.

Table: Appellant's Grounds of Appeal.

Dualla Village Preschool c/o Sarah Lawlor	
Risk to Drinking Water	It is highlighted within the appeal that the risk to drinking water is the most significant concern regarding the proposed development as Dualla Village Preschool/Afterschool relies on the public water supply to provide safe and clean water for the children and staff in their care. As an educational facility, it is stated that it is their responsibility to ensure that this water remains uncontaminated and suitable for daily use. Reference is made to the Child Care Act 1991 (Early Years Services) Regulations 2016, Regulation 23: Safeguarding Health, Safety, and Welfare of Children which states that a service provider must ensure that children have access to clean drinking water at all times. Additionally, Regulation 20: Premises and Facilities outlines that early years services must maintain facilities that promote children's well-being, which includes ensuring access to a safe water supply. It is highlighted that the Applicant's FI response was prepared by individuals without expertise in groundwater hydrogeology. It also remains unclear whether UE reviewed this expert report or if the Planning Authority sought an independent hydrogeologist's assessment. Given the risks identified in relation to the proposed solar development in Dualla, the threat to the public water supplies due to its location within the ZoC, it is contended that the proposed development directly contravenes the development plan. It is also noted that the Local Authority has a legal obligation to comply with the EU Water Framework Directive, which aims to protect and enhance the quality of water resources, including drinking water supplies. By granting permission despite these concerns, the Council is failing in its duty to uphold EU environmental law.
Impact on Natural Learning Environment	The submission notes that Dualla Village Preschool is proud to be the first outdoor preschool in County Tipperary, offering a unique learning experience where children can immerse themselves in nature for the entire morning. The submission notes that the proposed industrial-scale solar complex poses a severe threat to this environment, replacing their peaceful, nature-rich surroundings with an industrialized landscape that could destroy vital bird habitats. It is stated that Dualla Village Preschool's outdoor-based learning approach is firmly supported by national policy and research, highlighting the benefits of early childhood education in a natural rural environment. The submission goes on to state that the proposed industrial-scale solar complex threatens to dismantle this rich learning environment, replacing a peaceful rural setting with an industrialized landscape, increased traffic, and the destruction of natural habitats.
Business Sustainability	The submission notes that the proposed development poses a serious threat to the long-term sustainability and growth of their service. It is stated that families choose their preschool for the quality of care and education and the safe, rural environment and the proposed development could deter new families from enrolling. This could directly impact their ability to grow and sustain their business which is contrary to the objectives outlined in the National Planning Framework (NPF), which aims to support sustainable rural economies.
Traffic Safety Concerns	It is noted that the afterschool service relies on a small pedestrian path in the village to safely walk children to and from the local school three times a day. Concerns are raised that the proposed development will pose a serious risk to the safety of the children and staff who use this route daily both during the construction and operational phase. It is stated that the road adjacent the premises leads directly to one of the proposed entrance points for the solar development, raising significant safety concerns. The submission notes that this junction has previously

	undergone modifications due to the high number of traffic incidents, underscoring its vulnerability. The proposed development is therefore considered to be inconsistent with Objective TM1 of the Development Plan, which seeks to promote and facilitate safe and sustainable travel modes, particularly for vulnerable road users such as children.
Kelly Reay	
Grounds of Appeal	
Failure to Address Environmental and Drinking Water Concerns	The applicant did not adequately address concerns about the potential impact of the proposed development on the public drinking water supply and the ZoC. The Development Plan policy states that new developments must balance development needs with environmental protection, in line with the Habitats Directive, including the protection of protected species, prevention of contamination of water bodies and ensuring that local ecosystems are not negatively impacted. It is stated that the Applicant's submission fails to provide robust evidence that these requirements have been met.
Failure to Consider Expert Reports Submitted by the Community	It is noted that several professional reports were prepared by Third Parties and submitted to the Planning Authority which raised concerns regarding the ecological, hydrological, and archaeological impact of the proposed development. There is concern that these reports were not reviewed in detail, as they provide critical evidence of environmental risks and potential violations of planning policies. The lack of recognition of these expert submissions raises questions about the fairness and thoroughness of the planning decision.
Non-Compliance with Tipperary County Development Plan, 2022-2028	Concerns that the development's impact on the environment, biodiversity, and local community health has not been fully assessed in accordance with the relevant standards of the Development Plan.
Justification for Scale of Development	The planning application does not provide adequate justification for the scale of the development, which spans 318 acres. Given the policy requirement for proportionality and justification, this omission is a key concern.
Lack of Genuine Community Consultation	It is contended that the applicant has not engaged meaningfully with the local community throughout the planning process. The extent of local opposition (evidenced by numerous submissions) was not adequately considered. No public consultation events were held to address concerns and the voices of affected residents have been largely ignored.
Ecology Concerns	*Snipe* Concerns regarding the impact of the development on the Common Snipe (Gallinago gallinago) at Milburn Farm. It is stated that habitat on this land has provided an essential wintering, breeding, feeding, and resting environment, supporting a stable and growing population of these birds. It is noted that Milburn Farm provides wet grassland (GS4) and reed swamp (FS1), which are prime habitats for the Snipe. Similar habitats have been identified on the appeal site and concerns are raised regarding its destruction. Concerns also highlighted with regard to disturbance due to construction related impacts. In summary, the proposed development would: - Destroy and degrade protected Snipe habitat, violating EU Birds and Habitats Directives and Tipperary's own Development Plan. - Disrupt breeding, feeding, and wintering areas, leading to long-term population decline. - Cause significant disturbance during the 60-week construction

	period, based on peer-reviewed studies showing severe population drops in similar species. *Bat and Badger Surveys* While the Applicant's surveys confirmed the presence of these species both within the proposed development site and in adjacent areas, it is stated the methodologies used were outdated and did not align with the most current assessment methods used in Ireland. It is noted that the report from Dr. Will O'Connor (Third Party's qualified and engaged ecologist) has highlighted these concerns. It is contended that the Planning Authority have failed to adequately consider this report, and new up-to-date surveys should be conducted to ensure proper environmental assessment.
Unmentioned recognised water bodies	Concerns raised that the Applicant failed to identify all water bodies within and surrounding the proposed development site, particularly the lake on Milburn Farm. It is also noted that the Applicant failed to carry out an aquatic survey-nor were they asked by the Planning Authority to conduct one in the FI request. Concerns are therefore raised regarding the potential for water contamination as a result and the absence of adequate drainage proposals for the proposed development.
Risk to drinking water	The risk to drinking water is highlighted as the most significant concern regarding this application. It is noted that the Planning Authority originally stated unequivocally that there must be zero risk to water supply and turbidity and the Applicant was directed to liaise with UE for a solution. However, no official meeting minutes were made available to the public, leaving a critical gap in transparency. Despite the design changes, one part of a parcel remains within the ZoC and concerns are raised regarding the contamination risk due to runoff during construction. The appellant refers to the report of the professional hydrogeologist, Dr. Pamela Bartley, who was engaged by a Third Party and recommended that the application be refused due to the threat to the public water supply. It is noted that Tipperary County Council has a legal obligation to comply with the EU Water Framework Directive, which requires that any proposed development must not compromise water quality or pose a risk to public health.
Sightlines	The Applicant was requested to submit revised site line plans at a scale of 1:500, as the original site lines did not comply with the Development Plan. However, the revised site plans submitted by the applicant did not adhere to this requirement as they were not at the requested scale and the application should therefore have been invalidated.
Substation	The Applicant submitted revised site plans that removed the parcel of land behind the village of Dualla. However, a small image in the top right-hand corner revealed their intended location for the substation-precisely on the parcel of land they had removed. Concerns are raised with respect to water supply risks, environmental risks and the potential to hinder any future expansion of the village.
Permission to grant statement (i.e. compliance with Development Plan)	It is stated that there is insufficient evidence within the planning report to support this conclusion, and the appellant has highlighted multiple points that directly contravene the Development Plan with respect to environmental, visual, amenity impacts and its failure to consider the sensory and environmental needs of autistic individuals.
Appendices	The appellant attached the following reports to their appeal: - Report from Hyrdo G (including review of Applicant's FI Response, submission from UE and a copy of Dualla Together CLG observation on the Applicant's FI Response), - 2 no. reports from Ecofact on the Applicant's FI Response, - Report from Archaeological Management Services.

	It is noted that the content of the individual reports is discussed in further detail below (Dualla Together CLG appeal).
Donnacha Looby and Denis Looby	
Grounds of Appeal	*Invalidation* It is contended that the application should be deemed invalid due to a large number of omissions of crucial information by the applicants, notably in respect of the sub-station. The appellant notes that the concept of functional interdependence is now settled by reference to whether the proposed development serves no function without some other specific development and reference is made to the following case law: - O'Grianna v. An Bord Pleanála [2014] IEHC 632 - O'Grianna [No.2] v. An Bord Pleanála [2017] IEHC 7 - Alen-Buckley v. An Bord Pleanála [2017] IEHC 541 - Rushe & anor v. An Bord Pleanála [2020] IHEC 122 - An Taisce v. An Bord Pleanala [Edenderry Power] (2015) IEHC 633. It is argued that the conclusions in terms of the EIA Directive in the above case law equally applies to the Habitat Directive. Therefore, an assessment of the impact from the cable route and point of connection to the national grid (substation) is required when completing the project's screening for Appropriate Assessment. In the absence of same, the application should be refused. *Planning Policy* It is stated that the proposed development is clearly not aligned to the Development Plan (further commentary in the below submissions). The appellant also notes that similar projects have been rejected by local County Councils for the same reasons as noted (Part III of FI submission (summarised below)) *Ecology* A considered and measured approach should be in this case due to the scale and complexity of the site and the limited research available in respect of long-term biodiversity impact of such a development. The appellant refers to the obligations relating to the EU Habitats Directive as prescribed in the National Energy and Climate Plan 2023 (NECP). *Cultural Heritage* Concerns raised regarding the location of the site relative to the Rock of Cashel. It is highlighted that the site is rich with in archaeological value the proposal will jeopardize the State's chances of securing the Rock of Cashel status as a World Heritage site. Concerns raised regarding the adequacy of the Applicant's archaeological impact assessment. *Long Term & Largely Irreversible* It is highlighted that there is no guidance in respect of bonds/financial contributions and concerns are highlighted with respect to the decommissioning phase of the proposal and the potential long term impact. *Visual Impact* It is contended that the topography, elevation and fragmented nature of the site will result in severe negative visual impact to surrounding residents and tourists to the Cashel Area.
Original Observation (Donnacha Looby)	*Prematurity and Incomplete Assessments* - Lack of Public consultation,

	- Absence of details on substation, grid connection and the trenching methodology for cabling between sites and fire assessment. - Failure to submit and EIAR. Unsuitability of Lands - The undulating topography of the site is not aligned to the advised landscape for solar farms to mitigate against negative visual impact, - Absence of an evaluation of the need for excessive excavation e.g. potential requirement for blasting of the bedrock - Concerns regarding the fragmented nature of the proposed development which increases requirement to maintain the fencing, etc. - Concerns associated with potential glint and glare impacts. *Extreme Visual Impact* - Impact exacerbated due to the hilly nature of the site and proximity to residences. - Glint and Glare impacts due to the landscape, topography of the area and the proximity to residences and farms. The development therefore fails to comply with Policy 11-17 of the Development Plan. *Environmental impact* - In terms of Noise pollution, the appellant does not agree with the Applicant's assertion within the 'Quiet Area Assessment' that the area is deemed not to be a quiet rural area. It is stated that the data used in the assessments needs to be reviewed, as there are a number of discrepancies in the quiet area assessment. It is highlighted that the concentration of MV stations and their location to nearby residents in all Parcels appears to be in direct contradiction of policy 11-18 of Development Plan. - Concerns raised with respect to soil contamination as a result of cleaning during the life of the development. - Underground cabling to connect the power stations and transformers to the National Grid will further disturb the waterways and marine life. The characteristics of the soil types in the area are noted. - In terms of water pollution, it is noted that the elevated nature of the area gives rise to surface water, springs and streams and water contamination is a significant concern during the construction and operational phase of development. - The potential for flooding as a result of the proposed development is noted. The various watercourses within the site are highlighted. - Inadequate assessment of wildlife is noted. - In terms of cultural heritage, it is noted that a full geophysical assessment of the site should be performed. In addition, an underwater archaeological assessment is recommended. - Concerns regarding the site entrances and the potential for a traffic hazard. - Restrictive implications of the proposed development in terms of amenity impacts, negative visual impact, impact on cultural heritage and the ability for the settlement to expand.
Original Observation (Denis Looby)	As above, issues raised within the observation are broadly similar.
Original Observation	Part 1: Applicants response to the FI.

(Denis Looby) Observation on Significant FI (Donnacha Looby)	*Sightlines & revised site layout*: - Incorrect scaling on plans. - Incorrect time to undertake speed survey (December 2023). - The local of a substation proximity to the village. - Concerns regarding the absence of a Construction Traffic Management Plan. *Greater separation distance between development and the village boundary* - It is stated that the revised layout is misleading as there appears to be a significant substation to be constructed adjacent to the village hindering any growth for residential development or for the nearby primary school. The omission in the application is an unfair benefit of the applicant and a disadvantage to the community members & TCC in their assessment. *Localised negative impact on three residential properties* - The proposed solar farm will have an extreme and unacceptable negative visual impact to a significant number of residents in the area. It is stated that the solar farm will be visible from all sides of the appellant's property and there is a cumulative impact to their home. It is stated that this will destroy the environs of their home, significantly devalue their home and pose a flood risk to their land (which may result in additional financial loss). It is stated that the development will reduce loan to value ("LTV") on mortgaged properties adjacent to the site and could result in increased interest rates for a longer period as the lower interest rates are generally offered on a reduced LTV property. *Ecology and associated Surveys* - It is stated that the bat survey does not appear to be comprehensive or adequate given the scale of the development. - The timing of the survey suggests the results cannot be relied upon. To test sporadically over a 12-month period would give a truer reflection. The appellant refers to the University of Bristol's research which identified lower bat activity on solar farms. - Concerns regard the adequacy of the badger survey given it was only conducted in 1 day. - In terms of the query with respect to the growth of vegetation under and between the arrays, it is stated that the FI response is incomplete and there is an absence of evidence of their track record of maintaining and a lack of commitment to same. In addition, the response does not clarify the impact of the change in growth as the land will be predominantly in shade or how this will impact flora. *Assurances that the development will have zero effect of turbidity within the ZoC for the identified drinking water abstraction point.* - It is noted that a considerable portion of the parcel 4 is within the ZoC identified by UE. Concern are raised due to its elevated location and the potential for impacts. - It is unclear whether the Applicant has prepared method statements or whether the impact on private well has been considered.

	Potential impacts on archaeology - It is contended that the Applicant's archaeology report is of poor quality to read and is of a low resolution. The appellant also questions why Bord Failte Eireann, Department of Culture, Heritage and the Gaeltacht and the Department of the Environment, Local Government and Heritage were not notified based on the proximity to the Rock of Cashel and the number of monuments of archaeological interest identified on the site. Part 2: Misalignment with Development. - The submission highlighted the continued non-compliance with the various policies and objectives of the County Development Plan. Part 3 - Recent Decisions - The submission refers to a number of solar farms that have been rejected by the Commission and County Councils for developments of a commensurate scale and complexity and where similar concerns were raised by Third Parties.
Enda Howley	
Grounds of Appeal	
Overlooking and Overbearance	Concerns regarding overlooking of the appellants property due to the steep gradient on the site from both persons and CCTV. It is noted that the steep gradient will also create a significant and material level of overbearance when viewed from their home.
Mitigatory Hedging	The appellant contends that the proposed hedging mitigation needs to be moved away from their boundary wall. It is noted that their home is on an elevated site on L5409 at the lower hills of Mount O'Meara and is directly bordering Parcel 4 and the proximity of the hedging will impact on their property and residential amenity as follows: - Future damage property - the boundary wall is a reconstructed natural stone wall using existing stones and the hedge planting will result in encroachment and damage to the wall over time due to difficulties associated with maintenance. - Sunlight & Daylight impact – the planting will significantly reduce the amount of sunlight reaching their property due to the proposed hedging height and its lack of distance away from their home. - Privacy Impact - there will be significant unwanted observation into their home due to the land use change and their property will be directly impact by the fencing, hedging and CCTV.
Visual Amenity Impact	The overall appearance of the solar farm on the steep hill of Mount O'Meara will negatively impact the landscape setting of the village of Dualla and its surrounding access routes. The mitigatory hedging as proposed will be ineffective and should be set beside the solar panels over the top of the hill to reduce impact on visual amenity.
Impact on Water turbidity, quality & downstream impacts for the appellant's home (E25YP29) & water treatment system from Parcel 4	As outlined in their submission to Planning Authority, at a minimum, a condition should be included which removes all panels within the ZoC to Dualla's water source. This is necessary to avoid doubt in the future on water access or quality of water due to the Council permitting the panels to remain in the ZoC and to reduce the possibility of flood risk from surface water run-off and how this may impact the appellant's wastewater treatment system.
Dualla Together CLG	
An appeal was prepared and submitted on behalf of Dualla Together CLG. The submission provides a description of the site and subject proposal, a review of the proposal against what they deem to be relevant planning policy, the provision of commentary on the validity of the application and an outline of the grounds of appeal. The submission included the following documents: - Cheque for appeal fee,	

- Copy of Planning Authority Decision, - Copy of Acknowledgements, - Copy of CRO for Dualla Together, - Planning guidance for the development of large scale ground mounted solar PV systems, - Report from Hyrdo G (including review of Applicant's FI Response, EPA Site Visit Report 2019 Dualla PWS and the submission from UE), - Report from Michael Moran Traffic Consultant, - Report from Ecofact, - Copy of Dualla Together CLG observation on the Applicant's Further Information Response, - East Stour Solar Farm (UK application EIA screening report), - Judge Humphries decision 2023 IEHC 335, and, - Report from Archaeological Management Services.	
Planning Compliance Failure	*National Planning Framework 2018-2040* – the appellant notes that the same proper planning and development principles and the environmental requirements for housing applications are not being applied in the determination of solar farm applications such as this. It is submitted that the Commission cannot be satisfied that the proposed development would not have a significant effect on the environment and would be contrary to the proper planning and development of the area. *UK: Planning guidance for the development of large-scale ground mounted solar PV systems* – in the absence of national policy in Ireland, consideration should be given to the National Planning Guidance for Solar in the UK. It is noted that the proposal is contrary to this policy as the appeal site is located on high quality agricultural land which could be regarded as the best and most versatile land in the county. In terms of visual impact, the appeal site is not flat, not screened by hedges, are on visually exposed sites and would have a detrimental impact on nearby domestic properties and local roads. A copy of these Guidelines is included with the appeal, and it is contended that the methodology for assessing Solar Farms employed in these Guidelines should be used in this instance. In terms of the Uk Guidance and landscape/visual – it is noted that the proposed development involves the loss of c. 650m of hedgerow in order to achieve the required sightlines which represents a significant loss of hedgerow. It is highlighted that no arborists assessment has been carried out and the proposed loss of hedgerow would irrevocably alter the landscape character of the area and would have a detrimental visual impact on the area. In terms of the Uk Guidance and ecology – it is contended that the potential impact on ecology has not been thoroughly considered, and the Commission cannot be satisfied that the proposed development would if not have a significant effect on the habitats or protected species arising from the proposed development. - No EcIA was prepared in respect of the proposed development. - No winter birds survey was prepared. - No arborists report was prepared. - The bat surveys were done out of season and are insufficient - Conflicting findings in the submitted bat report regarding the potential bat roost is shown. - The loss of such a significant amount of hedgerow has not been properly considered and assessed. In terms of the Uk Guidance and drainage and flooding – it is stated that the development does not include any proper drainage proposals and should include a proper attenuation tanks, swales and infiltration trenches in order to slow on the run-off from the appeal site onto

	neighbouring property. The capacity of the existing drainage system has not been considered, nor has the potential impact on existing watercourses been examined. In terms of the Uk Guidance and community engagement – concerns regarding the complete absence of engagement with the community of Dualla. EIA Screening Procedures - Notwithstanding the fact that there are no thresholds for EIA for solar farms in Ireland, the considerations on whether a development is likely to have significant effects on the area by virtue of its characteristics, location and the nature of the potential impact would in this instance require that the development be the subject of an EIA. It is suggested that a case by case approach be taken and it is contented that an EIA should be required in this instance due to the archaeological sensitivities of the site. *Tipperary County Development Plan* Renewable Energy Targets - The proposed development is estimated to have the capacity of 130MW which highlights its scale when there is a target in the County of only 150MW operational by 2028. It is stated that the Planning Authority gave no consideration to the permissions already in place for 117MW of solar farms. It is noted that there is no justification for a development of this scale. Solar Policy – The policy requires flat terrain or sloping gently. However, it is noted that the site inspection will show that it does not constitute lowing lying lands or a level site. The lands are elevated above the public roads, are visually exposed and the solar farm would have a detrimental visual impact on both the local and wider landscape. Grid Connection – As the proposed 110kV substation has not formed part of the Environmental Report or NIS, no consideration for the cumulative impact of these two developments has been given which are inextricably linked. Distinctive Features - Given a significant number of solar farms have already been permitted in the county, it is inconceivable that some of the finest agricultural land is being carpeted with large scale solar farms. In the absence of Irish Guidelines, the UK Guidance should be used which recommends the avoidance of using prime agricultural lands for solar development and defers to brownfield lands or less productive lands for this type of development. Given its proximity to the Rock of Cashel and the historic rich nature of the landscape, the proposed development would be totally inappropriate and visually incompatible with the visual amenity of the area. Land use compatibility - Where a landscape is deemed to only have a medium compatibility, this would suggest that the potential acceptability of such a development would be on a case by case basis rather than a presumption in favour of the proposed development. It is contended that there are two major contributors to indicate the unacceptability of this proposal in terms of visual impact: - The piecemeal and haphazard nature of the proposed development covering a number of sites dominates the landscape. - The elevated and exposed nature of the landholdings

	Policy RE10: Ground Mounted for Solar PV Installations – It is submitted that the proposed development would be contrary to this policy on the basis that it would have a significant adverse impact on the built and natural environment and on the visual character of the landscape and on the residential amenity of those in the surrounding area.
Validity of Application	Whilst it is accepted that the Commission has no remit in respect of the validation of a planning application, the appellant notes that they have identified a considerable number of non-compliances with the Planning Regulations. It is noted that the Drawings submitted with the planning application are substandard and do not comply with the Requirements for plans, drawings, maps referred to in Article 23 of the Planning Regulations. Examples are provided with respect to deficiencies in the application drawings including the absence of contours, levels, dimensions, details of road makeup, identification of tree lines etc.
Grounds of Appeal	
Piecemeal, haphazard and uncoordinated development which constitutes disorderly development.	It is stated that a development of this scale and nature should be plan led and not speculative. The layout of a development should not be piecemeal and ad-hoc and the only reason for the proposed development to be laid out in this piecemeal and haphazard form is due to land ownership. The random and ad-hoc nature of the site layout plans would result in a development which has the maximum impact on the wider rural area and on the wider rural population. The disjointed nature results in same having the maximum visual impact on the wider rural area. Aerial views of the site have been provided to illustrate its fragmented nature.
Significant negative visual impact on the rural area.	Due to the elevated and exposed nature of the appeal site, it is contended that the proposed development would not be capable of being absorbed into the local landscape. It is stated that solar farm of this scale should not be located on elevated lands where they are visually obtrusive and would result in the industrialisation of the visual rural landscape. The LVIA confirmed that a large proportion of the proposed development would be visible from the motorway for a considerable distance. The appellant has carried out a site assessment of the views of the appeal site from the surrounding road network and photographs are included to highlight the elevated nature of the appeal site and hedgerow screening would be inadequate given their height.
Destruction of 650m of hedgerow to achieve the required sightlines represents an unacceptable destruction of biodiversity.	The loss of hedgerows represents an unacceptable destruction of biodiversity without any proper analysis of same. It is stated that no arborists assessment, no EcIA and a limited bat survey is not a sufficient assessment of the impact of the scale of loss of biodiversity arising from the proposed development. Therefore, the Applicant has failed to assess the potential impact of the loss of such a major amount of hedgerow and the unacceptable destruction to the established habitats and biodiversity. The appellant refers to the High Court Judgement [2023] IHEC 335 which discusses the issue of hedgerow removal. It is submitted that the statements of Judge Humphreys are relevant in this instance due to the historic landscape in this area. It is also the appellant's view that the bat report submitted with the application and at FI is lacking in sufficient detail to properly determine the impact on these protected species. It is stated that the proposed hedgerow removal would result in the destruction of bat habitats and the direct destruction of bats which are protected species. In addition, the surveys were undertaken out of season and are therefore unreliable. There are conflicting statements in the bat report submitted with the FI response insofar as they state the habitats are of value for foraging and commuting but not for roosting. Yet, Figure 3.2 shows trees with features suitable for roosting bats.
Risk to Public Water	The Appellant has appointed expert Hydrogeologist Dr. Pamela Bartley

Supply.	of Hydro-G to examine the planning application and to set out the serious concerns in respect of the risks to Public Water Supply and the Groundwater Abstraction Borehole serving Dualla Village. A copy of Dr. Bartley's report is enclosed with the appeal and is discussed in further detail below.
Increased risk of surface water runoff and flooding due to lack of drainage or surface water proposals.	It is noted that there is a significant volume of surface water runoff from these fields onto neighbouring properties and onto the public road which results in local flooding, some of which are shown on the CFRAMs maps. Due to the nature of the soil, during periods of heavy rainfall these lands are incapable of accommodating the rainfall and the water cannot be absorbed into the land. The proposed development if permitted would increase the intensity and speed at which this water runs off the appeal site due the loss of 65,702m^2 of greenfield land which will be covered in solar panels. Concerns are raised regarding the absence of a surface water management plan and no SUDS proposals. It is also noted that the impact of piling and the deposition of crushed concrete over such an extensive area has not been assessed and may have an impact on the surface water runoff from the site.
Risk of unacceptable flooding of lands elsewhere.	The majority of the appeal site is karst with bedrock at the surface which highlights the impermeable nature of the lands and confirms the rapid runoff rate of rainwater from the land onto neighbouring properties and onto the road below. Therefore, the proposed development cannot be permitted as it would exacerbate the rate of runoff. The Flood Risk Assessment relies on existing drainage ditches to deal with surface water run off without actually assessing the capacity of these drainage ditches. Clearly, they do not have sufficient capacity if there are floods in the vicinity of the appeal site caused by "runoff". The flood risk assessment suggests "appropriate management practices" will be implemented without actually providing any drainage proposals, without assessing the capacity of the existing drainage network, without modelling the increased risk of flooding due to the rapid increase in surface water run off rate arising from the proposed development. The proposed development would exacerbate the poor drainage conditions of this landholding and compound the flooding issues elsewhere due to the increased rainfall run off rate arising from the proposed development. The proposed development would therefore pose an unacceptable risk of flooding of lands in the vicinity of the appeal site.
Potential archaeological impacts.	In terms of the monuments that have been identified in the Applicant's Archaeological Impact Assessment within 750m of the site, it is stated that it is unacceptable that they are not clearly identified in the application drawings. The appellant notes that the lack of dimensions on the drawings and the lack of a drawing identifying the monuments and a buffer zone for same could result in accidental or deliberate destruction of these important national monuments. A buffer of 25m in diameter centred on the find spots have been omitted from any element of the proposed development. Buffers zones have been identified in the Applicant's report for some monuments. However, it is stated that these dimensions do not form part of the revised site layout plan and therefore pose an unacceptable risk to these archaeological features during construction. Given that the buffer zones vary from 25m to 30m to 50m, there are significant risks that the appropriate buffer zones will not be properly applied or adhered to, and the archaeological features would be clearly at risk. At a very minimum the site layout should have the archaeological sites clearly numbered and labelled and the buffer zone to these archaeological features should be clearly labelled.

	Concerns are raised regarding the demolition of historic stone walls in order to achieve sightlines. Such removal is deemed to be unacceptable in terms of heritage loss and contrary to the proper planning and development of the area both in terms of heritage destruction and loss of habitat for bats. Furthermore, the application fails to consider the proximity of the Rock of Cashel (with which there is intervisibility from elevated areas of the proposed solar farm development), and considerations which should be afforded to a location which feasibly lies within a proposed UNESCO World Heritage Property Buffer Zone. Having regard to the historically sensitive location, the appellant notes that it is imperative that the Department of Housing, Local Government and Heritage be consulted in respect of this application and National Monuments Service be consulted on the potential impact of the proposed development on these archaeological features and on the potential impact of proposed development which may form part of the UNESCO attendant grounds.
Requirement for an EIAR.	As appeal site contains such an extensive amount of archaeology, the appellant notes that it is not possible to be certain that the proposed development would not give rise to significant effects on onsite heritage assets in the absence of an EIAR. The appellant refers to the UK Planning Guidance on solar farms and provides an example of where an EIAR was required for a solar farm development (part of copy of EIAR enclosed with the appeal). Due to the lack of detail and the lack of proper measurements and accurate definition of boundaries of these protected monuments, it is stated that the Board cannot be satisfied that the proposed development would not have a significant effect on the heritage of the area. It is also submitted that the lack of detail in the assessment regarding the proposed substation is unacceptable and no consideration has been given to the cumulative impact of the proposed development when taken together with the substation. It is the appellants view that the O'Grianna Judgement applies in this instance as the EIAR screening and the NIS submitted does not examine the cumulative impact of the proposed development of the solar farm and substation. Whilst it is acknowledged that the substation is dealt with by a separate application, the NIS and EIA screening should form part of the assessment submitted with this application. The absence of such assessment constitutes project splitting in direct contravention of the EIA and AA directive.
Traffic Hazard.	The proposed access drawings fail to provide a topographical survey of the vertical and horizontal alignment of the road in order to show that the required sightlines can be achieved. The appellant notes that drawing B-02-1 shows the removal of a section of historical stone wall without any heritage report to examine the impact of the loss of this wall. The extent of wall removal has not been quantified. The sightline is shown to the far edge of the road to the west when it should be shown to the near edge of the L1406. For the purposes of the appeal, the appellants have engaged the services of independent traffic consultant Michael Moran of TPS Moran to review the application (see further details below).
Cumulative Impacts	There are two substantial quarries in the immediate vicinity of the appeal site and there is a significant windfarm development in the area. These developments are significant in terms of their environmental impact and it is contended that the determination of this application

	should have included consideration for these existing uses in this area. It is submitted that the cumulative impact of these developments taken in conjunction with the proposed development would have a significant environmental impact and should therefore the subject of EIA.
Incompatibility with the adjoining quarrying activities.	Having regard to the fact that the quarry is the long-established use, it would be unacceptable that any newly permitted use would undermine the future development of this quarry. The following points are noted: - No consideration has been given to the impact of dust from the quarry on the viability of the solar farm. - No consideration has been given to potential impact of blasting on the operation of this solar farm. - No consideration has been given to cumulative impact on human beings arising from the proposed development when taken in conjunction with the existing quarry and existing windfarm. - No cumulative noise assessment has been undertaken having regard to the existing quarry activities and the existing windfarm. - No cumulative heritage impact assessment has been undertaken. - No cumulative visual impact assessment has been undertaken. - An EIAR would have examined the cumulative impact of these existing established uses and the proposed solar farm.
Residential Amenity Impacts	The determination of the planning application has failed to consider the potential impact on the residents living in the immediate vicinity of the appeal site. It is highlighted that there are a number of dwellings in very close proximity to the site and their visual amenity is undoubtedly impacted by the proposed development. The elevated nature of the appeal site means that the proposed development would be visually exposed and seriously alter their rural residential amenity. The setting of their homes would be dramatically altered by virtue of the proposed development and no proper mitigation is proposed to reduce the visual amenity of the proposed development. In addition, the noise impact of the proposed development on these dwellings has not been considered or mitigated in the determination of this application.
Impacts on equine activities.	It is noted that number of the farmers in the vicinity of the appeal site have horse breeding activities. Concerns are raised that no consideration has been given to the impact of the proposed development on these horse breeding activities, particularly the impact of the construction traffic associated with the proposed development.
Impacts on Birds.	It is contended that a development of this scale with such a significant loss of hedgerow biodiversity should have been the subject of a 12 month bird survey in order to establish the potential impact on bird habitats. In the absence of this assessment, the appellant notes that the Commission cannot be satisfied that the proposed development would not have a significant effect on birds nesting in this area.
Appendices (Reports)	
Hydro G Report (Dr. Pamela Bartley)	The report indicates that Dr. Pamela Bartly is the only water supply hydrogeologist to have been involved in the consideration of proposed development and it is stated that the residents of Dualla have invested greatly in attempting to protect the integrity of the lands contributing to their PWS groundwater abstraction borehole. Concerns are highlighted that no professional hydrogeologist has been involved from either Tipperary County Council's departments or UE. It is contended that the potential impact on Dualla's water supply has not been properly considered by the Applicant's agents or the Planning Authority. The Commission is invited to interrogate the Planning Authority's reports and requested to put on formal record in their own planner's

	case file report, any justification to ignore or set aside the following opinion that was placed on public record (25th February 2025). These points are summarised as follows: - The proposed development would result in permanent change of landscape and groundwater catchment of a PWS Borehole serving Dualla village. No assessment has been presented by the Applicant with respect to the onerous obligations, when catchment changes are proposed, of the European Union Drinking Water Regulations 2023 (SI 99 of 2023). - The Planning Authority FI request comprised 6 main Items, with many component parts, and one of the Items specifically related to the Public Water Supply that serves the village. - UE issued two correspondences to the Planning Authority, with significant concerns raised on the 20th March 2024 and 24th April 2024. - The Technical Advice Note has been prepared by Dr. Pamela Bartley who is considered an expert groundwater service provider to many state agencies. Details of her experience/qualifications are provided. - The purpose of her report is to present expert hydrogeological information to the Planning Authority and to confirm that the environmental scientists who prepared the FI response do not have competency or experience in the matter of groundwater hydrogeology or public water supply. - The definition of the ZoC in the RFI is oversimplistic and it is asserted that the ZoCs mapped for PWS relate only to the land area contributing to the abstraction rate from the well at the time of the drawing of the zone and for the climatic conditions. Therefore, if the abstraction rate were to increase in the future, so too would the area of the ZoC. Similarly, during a year of lower rainfall, the ZoC would increase in magnitude. - The Applicant's environmental scientists have not evaluated the effect of the increase in abstraction on the zone of contribution. Instead, they have relied on a mapped ZoC that is historic and relates to historic usage - future impacts have not been considered. - The true nature of groundwater has not been considered by the Applicant. Groundwater is not static and flows in all directions. A mapped ZoC in Ireland, when created by those involved in assessing Public Water Sources, relates to how much rain falls in a year and how much water is abstracted for the Public from a Borehole. The water taken this year may come from within the line drawn on the map, but it can also come from outside the line drawn on the map - The ZoC was conceived as a tool to assist with other tools that would allow a protection zone to be delineated based on 100 day time of travel i.e., to stop microbial contamination. Groundwater will not stop flowing after 100 days, it will continue to flow. Therefore, groundwater flows from outside ZoCs. - It is their view that the Planning Authority would have ample grounds for refusing the proposed solar farm on the grounds of threat to the PWS source Borehole at Dualla. - The appellant's consultants assert that groundwater will move from the west and south west of the mapped ZoC each year, to assist in the replenishment of water rainfall. Therefore, the proposal presents a significant risk to Public Water Supply. - The potential effects of construction vehicles, leaching of microplastics, large tracts of drainage channels to take the runoff from the hard standing inclined angled PV Panels have not been addressed. The absence Risk Based Assessments

	regarding the change in the way that the rainfall will recharge the Aquifer is also noted. - The Dualla Borehole is part of a large aquifer and over the course of the next 20 years, water will flow from the entire upgradient Aquifer in the direction of the Borehole. The revised Solar PV development area will still result in impact to the groundwater feeding the borehole in 4 to 5 or 10 years. - The development is entirely unjustified, indefensible and contrary to proper planning and solar development should be direct to alternative locations. - A Turbidity of 7 NTU was reported in the Audit Report for the Dualla WTP which does not suggest a competent construction. In addition, the EPA advised that the borehole (BH) was not completed to EPA Advice Note 14. In order to maintain security of supply, if there was ever to be more drilling, the question is asked whether the existing BH would be retained until a new BH was drilled at a sufficient distance so as to not interfere with the operational supply. The submission notes that there is no Plan B when a groundwater supply borehole is affected. Importation and tankering is the only back up plan for Dualla at this stage. The no risk scenario does not exist in this case. It is stated that there is an EPA Site Visit Report which confirms that turbidity issues shut down the Water Treatment Plant because its compromised security of supply (as noted in the above point). The Commission is invited to request the Planning Authority to provide evidence that they communicated with the caretaker for the WTP or even the EPA to ascertain if the Turbidity issue was resolved? It is their view that a new borehole will eventually be required and that this has not been properly factored into the assessment of potential land take and sterilisation of future options presented by the proposed development. The submission notes that they have sourced a copy of the Drilling Report for Dualla PWS (included in a Report entitled "Galtee & Emly Water Supply Scheme. Source Protection Zone Definition Report" August 2007) (not enclosed with appeal). The Commission is advised to consider that the report is dated 2007 and therefore the borehole is pre-EPA Advice Note 14 for Public Water Supply (EPA, 2013). Therefore, in order to bring the abstraction infrastructure to the standard required, a new borehole will eventually be required, which will result in a new ZoC and the Applicant's proposal to merely move some panels is not appropriate. It is noted that PV Panels present the same, or worse effect, as paving or roofing a landscape, whereby the rainfall runoff pattern is altered and instead of diffuse recharge there is concentrated linear recharge delivered more rapidly by virtue of the hard surface and inclined angle of the PV Panels. Added to this, the rainfall will pass over a plastic and metal runoff surface and concerns are raised with respect to associated pollution. Within their report, the Commission is requested to include consideration of, and report a formal determination of the following issues: - Applicant's omission of a three-acre waterbody, which is habitat to Snipe (red listed Annex II species). Reference is made to the Bradan Beo - Case C-301/22 and it is noted that even if a small water body is not directly covered by the WFD, an assessment

	is required if it is connected to other water bodies. Member States must ensure that projects do not cause deterioration or compromise the attainment of good water status in connected water bodies, adhering to the objectives of the WFD. The Commission is advised to consider the detail in two separate document Observations presented by Karen Swann dated the 3rd April 2024 and relating to an unassessed lake and an incorrectly considered impact on the Snipe. - The out of date, wholly lacking, WFD Report in the context of Ireland's Water Action Plan and the associated Programme of measures for the WFD's implementation. The Commission is invited to assess whether the WFD Assessment accompanying the application can be defended. A determination on Impact must consider the current Water Action Plan 2024 and the published proposed catchment restoration measures, which the government of Ireland has invested heavily in. It is contended that the proposal to alter and change the rainfall recharge characteristic of highly permeable agricultural grazing lands to a predominantly hard standing corridor industrial energy development has not been presented for any evaluation by the Competent Authority. - The submission questions why has only current OPW Flood Mapping been presented in the applicant's project details. In addition, where are the Stormwater Attenuation calculations and infrastructure proposals to ensure that the current mapped flood extents will not increase and where are the data to demonstrate that increased intensities of storm rainfall events associated with Climate Change will have adequate capacity in the stormwater attenuation devices specified to serve the extent of hard standing PV Panels themselves?The Commission is advised to consider the information relating to water and flooding in the observation by Mr. Keith Barry (Receipt No. 180206, dated 05/04/24) and Dualla Together's Planning Consultant, Ger Fahy Planning, in this 2025 third-party appeal.
Michael Moran Traffic Consultant Report	It is submitted within the report that, save for some indicative plans indicating visibility sightlines within the various site access points, neither the Local Authority or the applicant considered the traffic impact or road safety impact of the proposed development. It is contended that a Traffic Impact Assessment must have been undertaken for a development that generates c. 1,000 construction related heavy vehicle trips and 140 daily employee traffic movements. The traffic impact of these trips should also have been assigned within a series of topographical surveys to identify this impact on the geometry of these critical road links and junctions, and to specifically identify locations where passing bays could be safety provided. Furthermore, the structural integrity of the adjacent Local Roads would have been determined within a Traffic Impact Assessment to identify if these roads can accommodate 40 tonne heavy vehicles. Concerns are also raised with respect to the adequacy of the sightline diagrams, and it is their view that it is unacceptable to indicate sightlines (as submitted within the FI response) overlaid on photographic base derived from angled satellite images where tolerance and scale is known to be fractured. Furthermore, the matter of road safety and this development giving rise to a traffic hazard has been completely overlooked by the applicant and Tipperary County Council. A series of Road Safety Audits could have been undertaken to identify where this development could give rise to

	safety implications within the Regional or Local Road links or junctions. Therefore, without such road safety audits the development at this stage could be considered as giving rise to a traffic hazard.
Archaeological Management Services Report	The report raises concerns regarding aspects of the proposed development and the adequacy of the Applicant's assessments. It is noted within the report that the Planning Authority would benefit from the following: - A complete baseline cultural heritage dataset showing all features within the redline boundaries for each proposed development area as well as a suitable study area around each 'parcel' as per current industry standard guidelines (TII 2024). - A comprehensive table cross-referencing geophysical anomaly and interpretation with archaeological testing and interpretation, ranking of significance of identified features, and recommended mitigations. - Include previous archaeological excavation sites and known archaeological finds to the general layout figure in Appendix 6–13 to give a comprehensive overview of the cultural context of the area. - Inclusion and analysis of folklore resources and historical map regressions to assist in characterising the cultural landscape. - Address the impact of the proposed development on geophysical survey anomalies not subject to archaeological testing and include a statement of significance for same. - Inclusion of requirements for access and egress management (new roads, tracks etc.) to address the likely impact of same on the identified archaeological sites, and/or additional geophysical survey anomalies which were not tested as part of this exercise. - Provide individual archaeological site management plans for known monuments within the redline boundary to better understand proposals for their management over the lifetime of the development (including for operational and decommissioning phases). - Assess the proposed development (construction, operation/maintenance and decommissioning phases) in relation to the UNESCO Royal Sites of Ireland Tentative List Property to prevent adverse effects to the Royal site's advancement to UNESCO World Heritage status. - Consider mitigations for subsurface impacts of both standing and subsurface structures and development works, including but not limited to, transformer stations, auxiliary transformer stations, inverters, storage buildings, communications buildings, underground cabling, security fencing, and CCTV system with pole-mounted cameras. - Consider archaeological mitigations to depth of impact of the solar panel legs in areas outside of the currently identified archaeological zones. - Consider built heritage appropriately and address the likely impacts of the proposed development on the newly identified limekiln (Hurley 2024a, 45), roadside boundaries (stone walls), field boundaries, townland boundaries (both of which, in Cashel, frequently present as herring-bone patterned stone-faced earthen banks), etc. arising from the proposed development.
Ecofact Report	***EIA Screening*** It is contented that an EIA Screening report following the current OPR (2021a) guidelines has not been prepared to support the current application. The Applicant's screening report is inadequate and has not been updated to consider the design changes made in response to the

	FI request. It is stated that this alone invalidates the report given it has substantially changed. Concerns are raised regarding the low level of survey effort that was undertaken “to identify any sensitive environmental receptors.” The additional surveys completed in response to the FI request and their findings have not been taken into account in this report as it has not been updated. It is stated that the information presented in the Applicant’s EIA Screening has been done so in an excessively brief and dismissive way with no serious examination of the likely issues. The screening does not follow the current guidelines for preparing these documents. The EIA Directive aims to ensure a high level of protection for the environment and human health. It requires that an assessment of the likely significant effects a project will have on the environment is carried out, where relevant, before development consent is given. For EIA, likely significant effects are based on a ‘likelihood’ or ‘possibility’ of significant effects on the environment occurring. Where there is doubt as to the absence of a significant effect(s), then the precautionary principle must be applied. The report then claims that the rest of the report provides a “robust environmental assessment” of the proposed development – while again suggesting that this was not even necessary. However, the assessments completed are far from “robust”, as outlined below. ***Appropriate Assessment*** The following issues are highlighted within the report: - The 'Screening for Appropriate Assessment' of the NIS was not updated in response to the design changes and additional information available. The reports therefore fail to comply with the requirements of the OPW (2021b) and DoEHLG (2010) guidelines. - The Applicant’s AA Screening Report concludes that "significant likely effects" may occur in relation to Otter, Atlantic salmon, Sea Lamprey, Brook Lamprey, River Lamprey and White-clawed crayfish in the absence of appropriate mitigation. However, in the NIS, apart from Otters, these species are not discussed again and no species-specific mitigation for these sensitive species are provided. - In relation to the Annex I habitat 'Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho - Batrachion vegetation' it is stated that "although, the distribution of this habitat or its sub-types throughout this SAC is currently unknown, the boundary of the SAC is considered to be the nearest potential point of occurrence". The possibility of this habitat occurring in the Ballintemple Stream downstream of the site is not even considered and then it is "screened out" with the explanation "as per Atlantic salt meadows". The latter is a marine intertidal habitat with no relationship to the freshwater and fully aquatic floating river vegetation habitat. - It has not been considered that any designated habitats, such as floating river vegetation, or species, such as salmon, lampreys, and crayfish, could actually occur in the Ballintemple stream from the site downstream to the River Suir. It is almost certain that some, or indeed all, of these species occur in these watercourses and they have not been surveyed or subject to assessment. This is despite that fact that the NIS assumes that any releases of "sediment and other pollutants" would dilute and settle in this area. - The report notes that there are multiple contradictions of the impact assessment on otters in the same section. Therefore, it is impossible to know what the real effects are likely to be -

	especially since no otter survey was conducted. - Since no aquatic ecology surveys were completed, it is unclear what fish species could have their gills clogged and spawning areas degraded, or what other species could be affected by a possible "trophic cascade". From a review of the Applicant's reports, it is unclear what aquatic ecological communities are at risk from the potential impacts as no aquatic ecology surveys were completed. ***Biodiversity Assessment*** *Habitats and Flora* – It is indicated that the surveys were undertaken at the wrong time of the year. *Bats* – It is noted that no formal bat survey following an approved methodology has been completed to date and concerns are raised that no bat activity survey was completed to inform the environmental report. Bats are "screened out" in the environmental report. The bat survey undertaken as part of the FIR response was also not completed correctly. The recently updated 'Bat mitigation guidelines for Ireland v2' manual by Marnell et al. (2022) should have been followed as this is the latest guidance document from the National Parks and Wildlife Service. The surveys completed were limited to a walkover daytime survey and an emergence/ activity survey which is considered to be an insufficient effort and is not compliant with the current guidelines for these surveys. Concerns are also raised regarding the timing of these surveys. The bat survey completed in response to the FIR also included the use of static detectors left on the site over 12 nights. No information on bats roosting on the site has been obtained from the static detector survey as no data analysis was completed. To rule out the presence of roosts on the site, the report has to rely on the actual emergence survey completed when ecologists were on the site. However, this is deemed to be an inadequate survey for a site of this size. All current guidelines advocate for multiple activity surveys throughout the bat activity season from May to September, a protocol not followed in this instance. In summary, it is stated that a comprehensive bat survey following approved guidelines has not been provided despite being specifically requested by the Planning Authority. *Otters* – It is noted that no otter survey has been completed as part of the environmental report or the additional surveys completed in response to the FIR. Otters are "screened out" in the "environmental report" – despite the fact that no surveys were done. However, this screening conclusion is contradicted elsewhere in the application. *Badgers* - Mitigation for badgers includes the commitment that "a pre-construction survey for badger will be undertaken to confirm the absence of badger setts onsite". The report notes that this is a concerning statement as three badger setts were recorded on the site despite the limited field work. Concerns are raised with respect to the adequacy of the Applicant's surveys, timing and the methodology used and is contrary to DoEHLG guidance (2010). It is also noted that no derogations are in place for the confirmed badger setts and the report refers to the recent Court of Justice of the European Union (CJEU) judgement (Hellfire Massey C166/22) which held that derogation should be applied for and granted if needed, before planning consent. *Other protected mammals* – It is stated that there is potential for other protected mammals to occur on the proposed development site,

	including Stoats, Pine Martens, Hedgehogs, and Irish Hares. However, no surveys or assessments for these species have been provided by the Applicant. *Birds* - Even though no formal bird survey following an approved methodology was undertaken, it is reported that a total of 18 species of birds (including red-listed species) were recorded on the site during the limited site visits. The development has the potential to have a number of serious impacts on birds, including habitat loss, displacement. The report notes that it is inexcusable that no formal ornithological assessment has been completed. *Aquatic ecology* – Concerns raised that no aquatic ecology surveys were conducted despite that two watercourses flow through the site and provide connectivity with the Lower River Suir SAC which is designated for a number of aquatic conservation interests. It is stated that the absence of aquatic surveys is incompatible with the Habitats Directive. *Amphibians* – It is stated that no credible amphibian surveys were conducted to inform the environmental report. No assessment or mitigation for amphibians is provided in the application. Both common frog spawn (Rana temporaria) or smooth newt (Triturus vulgaris) are protected under the Wildlife Act and are likely to occur on the site. *Lake Effect* - This is where the reflection of light from artificial surfaces of solar energy infrastructure leads birds to collide with the surfaces as they perceive it to be a body of water. There is also evidence to suggest that aquatic invertebrates may also mistake panels for waterbodies. Invertebrates that lay eggs on water may lay eggs on solar panels which leads to reduced reproductive success, thereby reducing the food availability for birds, and bats. Bats and birds can be impacted by habitat loss through physical displacement along with reduced insect production and activity over the solar array, lessening the foraging opportunities for bats in the area. It is stated that operational solar farms also have the potential to cause wildlife disturbance (e.g., noise, human presence, barriers to movement), and habitat degradation. Habitat loss does not occur only during the construction phase but can also occur throughout the lifetime of the solar farm, with site maintenance typically involving regular landscaping and cutting of hedgerows and grasslands. This can impact local bird and bat populations through loss of foraging and/or commuting habitat and reduced insect production, which is in addition to the habitat loss and displacement caused by the presence of the solar arrays.
Conor and Kate Breen	
An appeal has been prepared and submitted on behalf of Conor and Kate Breen. The submission has included the decision of the Planning Authority and a copy of the original observation to the application.	
Grounds of Appeal	
Potential for Flooding of Farmyard and Public Road	The appellant is the owner of a farm and house which are located to the northwest of Parcel 1A. It is contended that there is the potential for these lands to be severely impacted by the proposed solar farm by virtue of surface water flooding. It is stated that no consideration has been given in to the potential impact of the proposed development on existing farming and equestrian activities in the area. The submission highlights that there is a significant fall in levels between the appeal site and the appellant's farmyard and there is an

	existing surface water drain which runs from the appeal site through their farm which results in flooding of their farmland and the public road during periods of heavy rainfall. It is highlighted that no analysis of the capacity of this drain has been undertaken to accommodate increased surface water run off arising from the proposed development. There is also a risk that the development may result in their slatted tanks overflowing. Therefore, it is contended that the proposed development would if permitted give rise to serious public health concerns due to the potential for flooding of these slatted tanks with runoff from the solar farm. The submission notes that the appellant also owns farmland off the L1406 Newpark to the north of Parcel 4 & 5 and it is advised that surface water from Mount O'Meara runs down the hill and into a surface water drain under the public road and onto the drain in his land and is regularly subject to flooding. At a very minimum, it is stated that proper attenuation tanks and hydrobrake should be installed on the appeal site in order to address the potential for increased surface water run off arising from the proposed development in order to avoid environmental pollution. In the absence of a comprehensive assessment of the capacity of these drains and a proper flood risk assessment which accounts for climate change, it is the appellant's view that the proposed development should be refused.
Impact on Ecology and Private and Public Water Supplies	The submission notes that there is a hydrological connection between the streams which rise in the appeal site, the Ballintemple Stream, the Arglo River and Anner River which is connected to the Lower Suir SAC. It is stated that no consideration has been given to the construction impacts of the hydrological connection the Lower Suir SAC. Concerns are raised regarding the potential risk to the local public water supply in Dualla arising from the proposed development and fears that current issues with the public water supply would be compounded by the proposed development. Furthermore, there are concerns that no assessment has been carried out on the ZoC for appellant's private well and the absence of any consideration of the piling and construction impact associated with the development.
Rural Residential Amenity	Concerns highlighted regarding the overall scale of the development and its visual impact given its location and siting relative to the appellant's property. It is contended that the proposed development would result in their current rural residential amenity being replaced by an industrial style development. The visual impact and noise associated with the proposed development would have a serious negative impact on the appellant's quality of life and would therefore be contrary to the proper planning and development of the area.
Traffic Safety Risk	The submission notes that a site visit will demonstrate that the road network in the vicinity of the appeal site is substandard in terms of width and horizontal and vertical alignment. It is stated that the road network is not capable of taking the type of construction traffic which would be generated by the proposed development. There would be a direct conflict between the traffic movements of the farm during peak season and during construction of the proposed development.
EIAR Requirement	It is submitted that the O'Grianna case (O'Grianna (No.2) v An Bord Pleanala (2017) IEHC 7) applies in this instance as the EIA screening and the NIS submitted does not examine the cumulative impact of the proposed development of the solar farm and substation. Whilst it is acknowledged that the substation is dealt with by a separate application, the NIS and EIA screening should form part of the assessment submitted with this application. It is the appellant's view that the absence of such assessment constitutes project splitting in

	direct contravention of the EIA and AA directive. Whilst it is acknowledged that the substation will be the subject of a separate application under SID to ACP, it is stated that this does not prevent it from being assessed as part of the cumulative impact assessment of the proposed development through the NIS and potential EIAR. To separate the two elements simply on the basis of being to separate applications does not justify a failure to properly assess cumulative impact.
Original Submission	A summary of the issues raised included: - The impact of noise on the residential amenity of neighbouring residences, local village and livestock. - The impact of noise on wildlife in the vicinity. - The safety concern to neighbours from the proposed development. - Concerns regarding the absence of public consultation on the proposed development. - Possible contamination of natural resources over the duration of this project. - The devaluation of property in the area surrounding the proposed solar farm. - The overall scale of this project in a rural community and the use of the best of agricultural land. - Traffic safety related concerns. - The mental health implications to local residents living beside a project of this scale. - The effect on local farming enterprises who rely on their land to live off.
Keith Barry	
An appeal has been prepared and submitted on behalf of Keith Barry. The submission included the following documents: - Water Framework Directive and Expert Opinion from Hyrdo G, - Report from Ecofact (responding to the Applicant's FI Response), - Series of aerial photographs to illustrate the scale of the proposed development, and, - Visual Impact Assessment prepared on behalf of the appellant.	
Grounds of Appeal	
Visual Impact Assessment	It is stated that the Planning Authority completely failed to adequately assess the visual impact assessment of the application from a neutral, unbiased perspective which is contrary to Policy RE10 of the Development Plan. The policy is clear and unambiguous, in that there must be no significant adverse impact on the built or natural environment or residential amenity and most importantly on the visual character of the landscape. There is no provision for mitigating circumstances allowed to promote development or to reduce the protection of the built, natural, residential or visual amenity of an area. Any solar farm development must be capable of being subsumed into the current receiving environment with no significant adverse impact. Concerns are raised regarding the overall size of the site. The undulating topography of the site is also noted and deemed to be unsuitable for a development of this nature and scale. The appeal submission criticises the adequacy of the Planning Authority's assessment and it is contended that the visual impacts on the receiving landscape will be significant. The submission notes that the Planning Authority recognise that the Applicant's LVIA is deficient and it is an obvious admission that screening is required to assimilate this huge development into the landscape. In support of the appeal, the appellant notes that they have

	enclosed a more appropriate and factually correct visual impact assessment showing the range of views of the lands from normal everyday locations which show the significant negative visual impact of the development on this landscape. In addition, a contextual example of the overall size and scale of the development is provided in the submitted imagery. To illustrate the impact, they have used an example of a portion of the Red Car Park in Dublin Airport (1000 vehicles) which they have superimposed over the various land parcels. It is stated that these vehicles would be lower in height that the stated 3.5m high panels. It is stated that 16,000 car parking spaces could be accommodated on the lands.
Water Framework Directive	Concerns raised regarding adequacy of the Planning Authority's assessment and its potential detrimental impact on water quality in the area. The appellant refers to the evidence-based report from Dr. Pamela Bartley (Hydro-G) which accompanies the appeal (see discussion below). It is stated that the submitted application failed to recognise the impact on the appellants lands and lakes, which was clearly highlighted in Mr. Barrys submission to Tipperary County Council. It is stated that the Planning Authority ignored the content of this submission and constructive knowledge is now available to the planning authority as to the legal implications of ignoring the Water Framework Directive. It is stated that the appellant now gives full constructive notice to Tipperary County Council in relation to a potential judicial review.
Impact on Red List Protected Species - Snipe	The submission notes that the third reason for appealing the development rests with the protection of the Snipe. It is stated that the Natura Impact Statement (NIS) submitted with the application identified a perfect snipe habitat which is located within the vicinity of a Reed and Sedge swamp. The submission notes that it is reasonable to state that any construction of the substation or solar panels is going to destroy the Snipe habitat and it is stated that there are studies that evidence this phenomenon. With the snipe being in severe decline, it is classed as a protected, threatened, Annex II/III in EU Directives, red list bird that is at risk of extinction. The appellant notes that the giant size and scale of the proposed development will, without any doubt, destroy the snipe habitat in the area.
Impact on Ecology	It is noted that the appellant commissioned the preparation of an ecological assessment of the development which found that the EIA Screening, Biodiversity and screening for Appropriate Assessment (AA) were not undertaken correctly in accordance with Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended). Attached to the appeal is the report prepared by Dr. William O Connor to support this issue. Again, it is noted that the appellant wishes to put the local authority on constructive notice in relation to judicial review.
Supporting Reports	
Water Framework Directive and Expert Opinion from Hyrdo G	The proposed development is located within the catchment of the BALLINTEMPLE STREAM_010 and this is listed as an Area for Action by LAWPRO, with a RESTORATION, objective in the EPA (2024) Report for the 3rd Cycle Hydrometric Area 16 Suir Catchment Report. The submission notes that they have found no evidence that the Planning Authority considered the significance of the lake at appellant's site. It is stated that the omission of an Impact Assessment and thorough WFD Assessment is lacunae that warrants a refusal of permission. Given that the surface water draining the proposed development lands, the BALLINTEMPLE STREAM_010 [IE_SE_16B070800] is mapped by

	the EPA as Poor Status (2016-2021) and 3rd Cycle At Risk, the Commission is invited to assess whether the WFD Assessment accompanying the application exists and if so, can it be defended? It is stated that there is no information that would enable evaluation in the context of the proposed development aiding or impeding Ireland's Statutory Obligations associated with the WFD. There is no information in the application that enables water impact with respect to the development's excavations and water management proposals, in both the enabling and operational phase (Storm Water), and the ability of the site to operate within the catchment in the context of the Irish Government's Water Action Plan 2024 and the published Programme of Measures (POM). It is stated that the significance of the omission of an evaluation of the connectivity of the waterbody on the appellant's lands, which is connected to a river system that has Poor Status segments The Commission is advised that they must assess and consider how the proposed development will aid the statutory obligation to restore all waters to at least Good Status by 2027. It is stated that a proposal to alter and change the rainfall recharge characteristic of highly permeable agricultural grazing lands to a predominantly hard standing corridor industrial energy development has not been presented for any evaluation by the Competent Authority. Replacing energy with non-carbon based systems is a facet for continued consumerism, not climate action. The report notes that the Bradan Beo - Case C-301/22 is relevant in this instance. In terms of implications for development projects, even if a small water body is not directly covered by the WFD, an assessment is required if it is connected to other water bodies. Member States must ensure that projects do not cause deterioration or compromise the attainment of good water status in connected water bodies, adhering to the objectives of the WFD.
Report from Ecofact	The report by Ecofact was prepared in response to the Applicant's FI Response. I have summarised the content of this report above (Dualla Together CLG appeal).

8.2. Observations

8.2.1. The commission received a total of 12 no. observations from the following Third Parties:

- Marie Verschoyle,
- Evan Hickey,
- Barry O'Connor,
- Anne Ward,
- Christopher Ryan,
- Bella Barry Swann,
- David Ryan,
- Brian Kennedy,
- Dariusz Jurkiewicz,

- William Ryan,
- Tracey Callanan, and,
- Kathleen D'Arcy

8.2.2. The issues raised within the various observations have been summarised and categorised under the following themes in the below Table.

Table: Third Party Observations.

Issues Raised	
Water	The observation refers to Mr. Barry's appeal which highlights the substantial and credible evidence he has provided to both Tipperary County Council and the Marine Institute regarding the existence, use, and environmental importance of the private lake situated at Milburn Farm. Correspondence from both confirms that the lake is not an isolated feature but part of a connected natural water system, subject to environmental and regulatory protection. The lake contributes directly to the local ecosystem and supports aquatic life, including farmed trout. The question is asked whether the Applicant provided any scientifically credible assessment proving that the Ballintemple Stream, the private lake, and their associated aquatic species will not be adversely affected by this development. It is noted that the Applicant was required to ensure that the development would have zero effect on the turbidity within the ZoC. It is stated that there is no evidence provided that this requirement has been adequately addressed nor any scientific assessment demonstrating zero impact on turbidity was included in the documentation. It is noted that Dr. Pamela Bartley concluded in her report that without any scientific doubt, the ZoC would be impacted if this development proceeds.
Grid Connection	It is stated that a fundamental omission is the absence of detailed information regarding the associated substation and possible battery storage. These components are critical to the functionality of the solar farm and may have significant environmental, infrastructural, and planning implications.
Visual Impact	The majority of the proposed site is situated on elevated ground, meaning the panels will be visible over existing hedgerows, exacerbating the visual intrusion. Dualla is a traditional agricultural community. The scale and industrial nature of this solar complex would fundamentally change the appearance and atmosphere of the area.
Cumulative Impact	It is noted that there is community engagement underway for another proposed solar development directly opposite some of these sites. Approval of both would result in unacceptable cumulative industrialisation of a rural environment. An observation notes that there is a wind farm located in close proximity to the village. They will not accept the construction of a solar farm.
Justification	There is no clear justification for the size and scale of the proposed development. The Inspector is requested to examine the submitted documentation to determine whether this justification exists and whether it was addressed as requested by the Council. The scale of the development has significant implications for the community and local environment, and a lack of justification should be taken seriously in the appeal process.
Ecology	Concerns are raised regarding the manner in which Planning Authority appears to have handled important ecological information during the planning process. The Applicant's updated bat and badger surveys were reviewed by Dr. Will O'Connor, Ecologist, who identified several significant flaws in the

	surveys. This is a serious concern, as it brings into question the reliability of the ecological assessments presented by the applicant. There is no indication that his findings were acknowledged, discussed, or addressed in any way by the Planning Authority. This lack of transparency undermines confidence in the planning process and calls into question whether ecological matters are being taken seriously in the decision-making process. The observer refers to the original submission by Keith Barry which clearly identified the presence of the Snipe (a red-listed protected bird species) on his property at Milburn Farm, which lies in immediate proximity to one of the proposed Parcels. This was not acknowledged by the Planning Authority and they failed to request a bird survey or any other ecological assessment that would specifically protect the Snipe population. It is stated that it is highly likely that Snipe populations exist across the wider development area as well and the failure to properly consider the presence of a protected species is a serious flaw in the assessment process.
Solar Planning Guidance	There is a pressing need for a review and reform of national policy in relation to solar farm developments. Substations, being a vital part of such infrastructure, should be treated as integral components of any solar farm application, not as secondary or disconnected elements. At FI stage, the Applicant indicated the proposed location of a large substation behind the village. Yet, they failed to provide any meaningful detail beyond this. Concerns are raised with respect to its location relative to the village of Dualla. Whilst the importance of transitioning to renewable energy sources is acknowledged, this transition must be managed in a responsible and equitable manner. Concerns are raised regarding the absence of national policy and clear guidelines around large-scale solar developments. It is stated that this lack of regulation places an unfair burden on rural communities, who are left to campaign against projects without the support of a defined legislative framework.
Traffic	The Commission is requested to closely review the traffic report included in the appeal documentation, which claims that the Council failed to fully consider the implications for traffic and road safety arising from the proposed development. The question is asked whether it is truly safe to introduce a significant increase in HGV traffic into a small rural village that is home to two schools.

8.3. First Party Response

8.3.1. A response to the various issues raised in each Third Party appeal has been prepared by the Applicant's agent and is summarised in the below table. Included as an attachment to the appeal is a publication titled the 'Hydrologic Response of Solar Farms'.

Table: Applicant's Response to Grounds of Appeal.

Dualla Village Preschool c/o Sarah Lawlor	
Issue Raised	***Response***
Risk to Drinking Water	Consultation with UÉ (21st June 2024) concluded that they were satisfied that the revised layout would avoid any potential risks to the Dualla Public Water Supply, particularly the exclusion of Parcel 3 and the majority of the site layout would be outside of the ZoC. The observations of UÉ relate to the construction and operational stages and

	UÉ has no objection to the revised proposals. It is note that the response to FI request was prepared by Malone O'Regan Environmental senior consultant Ms. Nuria Manzanas in collaboration with Mr. Simon Firth. Information is provided on their relevant qualifications and experience.
Impact on Natural Learning Environment	Other than visual, it is stated that the proposed solar arrays have a minimal impact on the natural environment as the panels are mounted on frames, the legs of which are either pile-driven or pile-drilled. The land can remain in agricultural use and the co-existence of renewable energy development with ongoing agricultural can be a positive learning experience for children. The proposed solar arrays are over 600m from the pre-school along a stretch of public road with no public footpaths. The Proposed Development will not detract from the nature learning conducted in the pre-school grounds.
Traffic safety concerns	There are no footpaths from the school along the public road frontage to the nearest part of the solar farm. There is an internal footpath to the rear of the school, which terminates inside Dualla village and the 50kmh speed limit to the south. The issue of construction and operational traffic is addressed earlier. The delivery of solar panels is to be coordinated in compliance with an agreed Construction Traffic Management Plan, a Traffic Management Plan and traffic details, which were developed to minimise any traffic through the village of Dualla as outlined in the FI response. It is stated that the developer has no objection to engaging with the pre-school to advise when panel deliveries to the site are planned. During the operational stage of the solar farm, traffic movements will be negligible for repair and maintenance only and generally only require small vehicles.
Business Sustainability	The proposed development will have no adverse impact on the rural setting of the school.
Kelly Reay	
Environment & Water Concerns	As above, for discussion on impacts to drinking water. In terms of potential impacts on protected species, contamination of water bodies and local ecosystems, it is stated that no evidence has been submitted to support these concerns and the response refers to the various reports in support of the application.
Non-Compliance with Development Plan	All issues were fully addressed in the application documents and in the assessment and decision of the Planning Authority. The Environmental Report included a detailed Landscape and Visual section which is considered to be accurate and robust. It has been demonstrated in the application documents that there would be no adverse impacts on the natural environment. In terms of residential amenity, solar arrays have been set back from residential properties, where appropriate with intervening landscape buffers to protect visual amenity. In addition, the arrays do not give rise to issues of noise, and inverters, which can be a source of low noise, are kept sufficiently back from residential properties.
Justification for the scale of the development	It is stated that the development's justification was detailed in the Planning Statement and Environmental Report that accompanied the application, in particular, compliance with planning policy at all levels.
Lack of genuine community consultation	The applicant engaged with the local community through the distribution of the "Boscabell PV Farm" information brochure, including Q&As. In

	addition, the application itself was subject to statutory public consultation, which allowed the local community to make submissions to the Planning Authority.
Ecological Concerns - Snipe	Snipe was not identified as a species on the application site. An area of reed and sedge swamp was within Parcel 3 of the original submission, which may be suitable habitat for snipe; however, no snipe were observed during field surveys. Furthermore, Parcel 3 was omitted from the Proposed Development as an area for solar arrays and the application does not propose a substation, which will be the subject of a separate SID application and, if required, an NIS. Additionally, the application was supported by a Biodiversity Management Plan ('BMP').
Unmentioned recognised water bodies.	The water body referenced in the submission, which is located at Milburn Farm and feeds into the Ballytemple stream, is not on or adjoining the application site. The Ballytemple stream was surveyed as detailed in Section 7 of the Environmental Report. Section 7 of the Environmental Report included water mitigation measures that would ensure no adverse effects occur to ground or surface water quality.
Risk to Drinking Water	As above, for discussion on impacts to drinking water.
Invalidation - Sightlines	The application file includes the application checklist, demonstrating the Planning Authority undertook a robust validation process before the application was validated. It is stated that the submitted FI drawings with revised sightline details, were based on similar detail containing levels, contours, dimensions etc and were deemed acceptable to the Planning Authority.
Substation	No details of a substation were shown on the application drawings. A 110kv or greater grid connection will be required to serve the Proposed Development, which immediately puts it into the category of a SID application made to ACP.
Dualla Together CLG	
Application Validity	It is stated that the appellant's agent has used selective extracts from plans to support the invalidity contention, which is not representative of the validity of the complete drawings the extracts were taken from. The Applicant notes that the Planning Authority undertook a robust validation process before the application was validated.
Proximity to the Rock of Cashel	It appears the photograph included in the appeal may be drone images taken from a height, possibly from land in the vicinity of the site, but not from the site. The response notes that the most important view is from the Rock of Cashel back towards the site and at its closest point, the site is located c. 3.25km away and is unlikely to be visible due to intervening obstructions. In any event, the panels are coated in anti-glare which would make it indistinguishable. It is noted that an Archaeology Assessment Report and further information in respect of archaeology, including geophysical surveying and trench archaeological test findings, accompanied the application. In addition, the Department of Housing, Local Government and Heritage offered no objection to the Proposed Development.
Piecemeal, haphazard and Uncoordinated Development	Landownership had a role in dictating the overall site layout. This is the case with most solar farm developments, where the site is not in single ownership. It is noted that the Planning Authority formed the view that the fragmented nature of the parcels within the overall sites assists in mitigating visual impacts. Intervening fields, trees, and hedgerows, setting arrays back from more sensitive receptors and site features such as the various recorded monuments, and avoiding the most elevated parts of land parcels, all assist in reducing the overall visual impact.

Significant Visual Impact	The response notes that the original LVIA undertaken and the landscape impact details submitted with the FI response were accurate reflections of the proposed works when implemented. It is acknowledged that the mitigating planning will take varying time to be realised. It is stated that there will inevitably be snapshots of the solar panels when motorists, cyclists and pedestrians pass parts of the site, particularly when hedges are cut back and when passing field gates. Other sections of panels will be seen from further field, but no more so than when the use of fields change from one agricultural production to another. All of this is part and parcel of the ever-changing agricultural landscape. It is submitted that the proposed development will not be visible from the motorway. LVIA image 15 is taken from a motorway overbridge and demonstrates the visual impact before mitigation will be negligible and there will be no impact with mitigation in place. Notwithstanding the concerns raised, the response notes that the entire site is not elevated with some parts being more elevated than others. It is considered that the LVIA accurately demonstrates how visual impacts on the undulating ground can be mitigated.
Hedgerow loss in the absence of arborist assessment, EclA, and limited bat survey.	It is noted that hedgerows and trees will be replaced behind the lines of visibility. Traffic associated with the proposed development will be low and confined to construction phase and occasional upkeep and maintenance involving 2 or 3 visits per annum. It is considered short-term road closures and the deployment of stop/go traffic systems, including flagmen traffic management, may be sufficient for reduced sightlines at some or all of the entrances. If the Commission were to concur with this view in principle, the developer would have no objection to a planning condition to allow a system to be devised and revised sightlines proposals to be agreed, with minimal hedgerow removal. The application was accompanied by a detailed Biodiversity Management Plan, which addressed hedgerow loss. Had trees of note been identified during the surveys, an arborist would have been engaged. It is stated that An Taisce, in its referral response, accepted the hedgerow removal and replacement proposals as necessary in this case. In terms of impacts on Bats, it is stated that a detailed daytime bat suitability walkover, ground tree inspection, two dusk emergence and nighttime walkover bat surveys (using thermal monocular cameras and Echo Meter bat recorders) were undertaken by suitably qualified and experienced Malone O'Regan Environmental Ecologists. The results of which were presented in the Bat Report issued as part of the FI response, which included detailed methodology, findings, assessments and mitigation measures.
Risk to Public Water Supply and Public Health	It is submitted that the Applicant's consultants have the necessary expertise to address the issue that was raised. In terms of Dr. Bartley's claims that a new borehole will likely eventually be required for the Dualla PWS, it is stated that consultation was undertaken with UÉ who did not indicate that a new borehole for the Dualla PWS was planned. UÉ were satisfied that the revised layout would avoid any potential risks to the Dualla PWS well. Furthermore, it

	is stated that UÉ did not appeal the decision of the Planning Authority. It is noted that there will be no increase in surface water run-off arising from the proposed development. Surface water from the solar panels will seep into the ground below and beside the panels. As no significant new hard surfaces are proposed, it is not considered that any alteration to the existing drainage at the site will be required. As a result, stormwater attenuation calculations were not considered to be required. Furthermore, it is not anticipated that the proposed development will result in an increased flood risk onsite or at any offsite receptors.
Lack of proper drainage and treatment of surface water runoff, with risk of flooding on public roads	It is stated that solar arrays do not increase surface water runoff on solar sites. Rainwater run off from panels infiltrates into the ground beside and below the rows of panels. There will be no increase in surface water runoff as a result of installing the arrays and targeted surface water management is not required. A preliminary Flood Risk Assessment (FRA) was undertaken by the Applicant and concluded that the proposed solar farm is a 'water compatible development,' there is no potential risk for fluvial or pluvial flooding on the site, and there will be no net increase in the surface water discharge rate or runoff volume from the site. The existing drainage network within the site will not be altered and appropriate drainage management practices will be implemented.
Risk of flooding elsewhere	The preliminary FRA report concluded there is no identified potential risk of fluvial /pluvial flooding on, or in the vicinity, of the site arising from the proposed development. The photographs showing surface water on road surfaces and in roadside ditches seeping on to roads, is not untypical along rural roads during periods of very wet weather. It is an existing situation and will not be exacerbated by the proposed development. At site entrances, roadside drainage will be installed, which should improve and assist in reducing seepage onto the roads.
Risk to Archaeology	An Archaeology Assessment Report and FI in respect of archaeology, including geophysical surveying and trench archaeological test findings, accompanied the application. It is also noted that the Department of Housing, Local Government and Heritage offered no objection to the proposed development, including the mitigation measures proposed to mitigate the impact on archaeology, subject to conditions.
Traffic Hazard	The following points are noted: - Sightline details are provided for each proposed access. - Sightlines were calculated accurately, in particular to the nearside edge of carriageways. - There is no specific protection status for the stone walls that may require removal to facilitate sightlines. No concerns were raised by the Planning Authority. The Applicant reiterates that they would be happy to accept a condition for reduced sightline requirements subject to traffic control measures. - It is noted that TII and the Council's local engineer were consulted and offered no objection. It is stated that the roads are public roads suitable for larger vehicles and accommodate the movements of large agricultural vehicles each day.
Cumulative Impacts (quarry and Wind Farm)	It is stated that the Proposed Development will not be seen in conjunction with the nearest quarries, which are located in a hollow, 750m to the northwest of the nearest solar arrays and accessed off a different public road. The nearest wind turbine in the windfarm to the southeast of the site is 1.5km away and, again, the two developments will not be seen in context, there will be no similar impacts, and access to each development is off a different public road. It is noted that all reports submitted as part of the planning application have taken into

	consideration all existing developments in the vicinity of the proposed solar farm.
Incompatible with adjoining quarry	It is stated that there should be no adverse impacts on the proposed solar farm from dust and blasting if the quarries are operating within the terms of their consents.
Residential Amenity	Consideration was given to the proximity of individual dwellings close to the site and solar arrays were set back to minimise visual impacts. Significant setbacks and proposed biodiversity areas are proposed in closer proximity to group housing. Mitigation planting is also proposed in close proximity to existing houses, as required. It is stated that the omission of the arrays of solar panels to the west of Dulla village removed the visual impact from that location entirely A comprehensive noise impact assessment was undertaken by a qualified and experienced Malone O'Regan Environmental acoustician. The findings of the assessment were that noise nuisance will not occur during the construction or operation phases of the proposed development; therefore, no specific mitigation measures were deemed necessary.
Impact on Equine Activity	It is considered that the impact of installing and operating a solar farm on horses is similar to that on most other farm animals and does not give rise to particular issues. Most solar farms that are installed and operating, are located in rural areas surrounded by agricultural activity, and both uses function side by side without incident. The installation of the solar farm will be carried out during set hours. It is stated that no expert evidence has been submitted to the contrary by the appellant.
Unacceptable risk to birds due to tree and hedgerow loss	Section 6 of the Applicant's Environment Report refers to the bird suitability assessment survey carried out, including for protected species. Common species were identified, one Amber-listed species (starling) and one Red-listed species (kestrel) were noted during the survey, which are both found throughout Ireland and regularly utilised countryside / rural habitats. No Annex I bird species were recorded during the surveys. The Environmental Report included an assessment of potential impacts to nesting bird species and included appropriate mitigation measures which will protect habitats and species, particularly during any vegetation clearance works. Additional hedgerow clearance works to facilitate appropriate sightlines will be undertaken in accordance with the mitigation measures outlined in the Environmental Report. In addition, the application was supported by a Biodiversity Management Plan, which will provide suitable nesting habitat for a range of breeding bird species and was received positively by the Heritage Council and the Planning Authority.
Keith Barry	
Local & National Policy	The response notes that the Planning Authority had due regard to the various submissions on file and Policy RE10 of the Development Plan. It is acknowledged that there is no current national planning policy document in respect of solar farms. However, planning authorities and the Commission have a statutory duty to determine applications in accordance with the proper planning and sustainable development of the area. This includes having regard to the NPF objective to promote renewable energy developments, and Climate Action Plan targets for electricity to be generated by renewables, including solar. The Applicant notes that they are not aware of a solar farm application being refused on the grounds of prematurity pending national planning policy guidance, which is not currently proposed. It is stated that the proposed development is designed in accordance with Sustainable Energy Association of Ireland's 'Solar PV for Business -Best practice Guide' and

	Irish Solar Energy Association's 'Best Practice Planning Guidance for Large Scale Solar Farms in Ireland'.
Visual Impact Assessment	It is stated that the application documents do not claim that the entire side is flat. Some of the land is undulating, but it is considered, with mitigation planting, adverse visual impacts can be avoided. The Planning Authority identified the site as being contained in the plains of lowland pastures in the River Suir Central Plain Landscape Character Area, and that the Development Plan Landscape Character Assessment identified that the site is located within an area of robust/normal sensitivity with medium compatibility and low likely landscape effects from solar energy developments. This is the most suitable designation for solar development. The level changes referenced by the appellant occur over a distance of 2.5km in a partially undulating landscape, with solar arrays being planned in a series of 4 no. land pockets, each separated by fields and roadside and field hedgerow boundaries. The level difference between the highest and lowest points is, in fact, only 57m following the removal of the parcel of land to the west of Dualla from the proposal. Mitigation planting is standard and acceptable practice in all solar farm proposals. It is not a reflection of unacceptable or significant visual impacts or an inappropriate site. It is considered the appellant's agent's use of car park footprints overlayed on a Google Earth image to demonstrate visual impact is ineffective and only serves to confirm the site area, which is 108ha. It has no regard for level variations across the site or the fragmentation of the 4 parcels to be developed, including roadside and field hedgerow boundaries.
Hydrology Assessment - Water Framework Directive	The Applicant's Technical Report submitted in response to the FI request, referred specifically to the issues of water quality. It is stated that UE and An Taisce were notified bodies that made submissions to the Planning Authority concerning impact on water supplies and water quality. In particular, the applicant met UE which advised it had no objection to the revised proposals. An Taisce noted in its referral response that the subject site was in close proximity to two distinct waterbodies, namely the Arglo stream which is designated as moderate water quality status and the Ballintemple stream which is designated as poor water quality status. An Taisce submitted that the proposal should be assessed against Article 4 of the WFD to determine whether the project may cause a deterioration of the status of a surface or ground water body or if it may jeopardise the attainment of good surface or ground water status or of good ecological potential and good surface or ground water chemical status. Section 7 of the Environmental Report included water mitigation measures that would ensure no adverse effects to ground or surface water quality. An Taisce welcomed the proposal to implement a 20m buffer between all development works and solar farm infrastructure and the two streams.
Protected Species	An area of reed and sedge swamp was within Parcel 3 of the original submission. No Snipe were observed during field surveys. Furthermore, Parcel 3 was omitted from the Proposed Development and the application does not propose a substation, which will be the subject of a separate SID application and, if required, an NIS.
Ecology – EIAR screening, Biodiversity and AA	The issue of screening out EIA is addressed earlier. A mandatory EIA is not required.

screening	Similarly, the OPR Guidelines with respect to Appropriate Assessment are provided for general information purposes only. The response notes that they are satisfied that the screening undertaken by the applicant's agent and the Planning Authority for Appropriate Assessment and the need for an NIS were properly established, in accordance with legislation. Regarding the criticism that the biodiversity report was not updated in response to the Further Information response, it is submitted that this was not required. The report and the FI read as one. Particular emphasis is placed on surveys and findings relating to otters, bats, badgers and birds. No evidence of otters was found on the site or on or along watercourses within 2km of the site. Therefore, mitigation measures to protect the species were not necessary. In terms of bats, surveys were carried out and conclusions reached that bats likely forage and commute along hedgerows and tree lines and may also roost in these locations. It was noted that supplementary planting would enhance foraging and commuting along hedgerows and tree lines and provide additional roosting in these locations. Evidence was found in surveys of badgers on the site and within the wider area. Mitigation measures were proposed to protect the setts identified and foraging areas. Also, measures are proposed to avoid badgers becoming entrapped in trenches/excavations on the site. The surveys recorded 18 bird species onsite and within the wider area. Mitigation measures were proposed to protect all breeding birds, including the restriction of vegetation cutting / clearance during the breeding bird season. Criticism is levelled at the applicant's proposed pre-construction survey for badgers. This will update and add to the survey information to date and is appropriate. Following a grant of permission, SID consent will be required for the grid connection and thereafter a grid offer. This can take years in some cases, and updating survey work is a logical precaution to protect badgers. Streams in and around the site were surveyed, and this is noted in the Environmental Report. It is considered the screening of species was accurate, comprehensive and that the grouping species was appropriate. EIA screening was complete and the need for EIA screened out, as detailed earlier in this appeals response.
Lake Effect	Solar panels are set at 10 – 30 degree angles, therefore, water will not collect on the surface. Also, the surface of the solar panels will be coated with anti-glare, thereby removing the perception of a water surface. As outlined in the Environmental Report, the type of solar panels to be used will be 'grid-formed' panels which contain anti-reflective films that ensure that reflection of polarized light will be fragmented, significantly reducing reflection occurring from the panels.
Enda Howley	
Overlooking, Overbearing	The nearest solar panels will be 125m from the appellant's house and will not be visible. There is a security camera proposed at the southeast

and Hedge Mitigation	corner of Parcel 4, close to the appellant's home, which will face northwest away from his home and garden. It is noted that it would be possible to set the solar farm security fence and security camera further from the appellant's boundary and a planning condition to achieve same would be acceptable to the Applicant.
Property damage	It is considered the proposed hedging would have no adverse impact on the existing field boundary wall with the appellant's property. If the fence and hedge are set back, as suggested above, the issue does not arise.
Sunlight and Daylight Impact	It is considered that there will be no material loss of sun or daylight at the appellant's property as a result of the proposed hedging.
Privacy Impact	No loss of privacy issues arises from the use of the site to include for the development of solar arrays. The site is visited at most 2 or 3 times per annum.
Visual Amenity Impact	There is a significant set back from the appellant's property (c. 125m) and there is significant existing hedge and tree lining along much of the roadside boundary of Parcel 4. New hedges/ reinforcement planting is proposed along the public roadside side which will bolster screening of the more elevated ground.
Impact on Water and Water Treatment	It is stated that this issue has been addressed above.
Conor and Kate Breen	
Flooding	As above, for discussion on flood related impacts. As the proposed development will not add further surface water to existing watercourses, it is stated that it will not exacerbate any surface water on the public road or in the appellants' farmyard, which, the photographs submitted with the application show, can occur during particularly wet periods.
Ecology and Water	As above, for discussion on impacts to ecology and water.
Scale and amenity	In terms of residential amenity, it is noted that the solar arrays have been set back from residential properties, where appropriate, with intervening landscape buffers to protect visual amenity. The closest solar arrays to the appellants' house are c. 145m away. Hedgerows are to be planted and reinforced between the appellants' property and the site, which, when established will assist in minimising visual impacts. It is noted that the solar arrays do not give rise to issues of noise and inverters, which can be a source of low noise, are kept sufficiently back from residential properties. The application was accompanied by a noise impact assessment which concluded that noise nuisance would not occur during construction and that during the operational stage, there would be no likely noise issues to arise, therefore, mitigation was not required.
Roads and Road Safety	The roads are public roads and are suitable for larger vehicles and accommodate the movements of large agricultural vehicles each day. The use of large vehicles associated with the Proposed Development will be restricted to the construction and decommissioning stages. During these times, traffic management measures will be put in place.
EIAR	As EIA is not required, the question of project splitting does not arise. Contrary to the appellants' agent's opinion that AA for the proposed solar array development should have included for a substation, this is incorrect. Details of the grid connection are not known at this time and any substation and grid connection will be the subject of a separate SID application process to ACP.
Donnacha Looby and Denis Looby	
Validity of the Application	As above, for discussion on the validity of the application.
Proximity to the Rock of Cashel.	As above, for discussion regarding concerns associated with visual impacts on the Rock of Cashel.
Development Plan	As above, for discussion on compliance with the Development Plan.

Compliance	
Impact on Habitats	As above, for discussion on ecology.
Archaeology	The quality of the documents as uploaded by the Council is outside the control of the applicant. Should the quality of reports forwarded to the Commission from the Council be low resolution or poor, the applicant can submit quality hard copies if required. An Archaeology Assessment Report and further information in respect of archaeology, including geophysical surveying and trench archaeological test findings, accompanied the application and was deemed acceptable by both the Planning Authority and the Department.
Decommissioning/ Restoration	The application was accompanied by a Decommissioning Statement (Section 5.5 of the Environmental Report). Condition 3(b) requires a detailed decommissioning plan to be submitted and agreed, prior to works. It is stated that this would be a standard approach to dealing with such matters.

8.4. Planning Authority Response

8.4.1. None.

8.5. Further Responses

8.5.1. A further submission has been received on behalf of Dualla Together CLG. The submission notes that they concur with all of the third party appeals in respect of the above which reaffirm their conclusion that the proposed development would be contrary to the proper planning and development of the area and should be refused.

9. Planning Assessment

Having examined the application details and all other documentation on file, including the reports of the Local Authority, the submissions on file and having inspected the site, and having regard to the relevant local/regional/national policies and guidance, I consider that the substantive issues in this appeal to be considered are as follows:

- Principle of Development
- Landscape & Visual Impact
- Water
- Biodiversity
- Residential Amenity
- Transport
- Archaeology
- Other Matters

9.1. Principle of Development.

9.1.1. Under the current proposal, the Applicant is seeking a 10 year permission for the construction of a solar PV development on a site within the townlands of Boscabell, Garranmore, Newark Fussough, and Dualla, Co. Tipperary. The site originally comprised 5 no. parcels of land measuring a total of c. 129ha. Within the application documents it was noted that the proposed solar farm had an estimated capacity of 130MWp. As discussed previously, the site layout was amended by the Applicant by way of significant FI and Parcel 3 was omitted from the scheme, reducing the overall site area to c. 108ha. I note that the appellants in this case have raised concerns with respect to the principle of development at this location, the prematurity of development pending the preparation of national planning guidance for solar developments, the loss of prime agricultural farmland to facilitate the proposed development and the lack of a justification for the overall scale of development being proposed which is not supported by the policy of the Tipperary County Development Plan, 2022-2028 (Development Plan).

9.1.2. As I have outlined in Section 5 of this report, the transition to a green economy and the acceleration in the delivery of renewable energy projects is a principle that is supported in international, national, regional and local policy. The NPF seeks to reduce the country's carbon footprint (NPO 69) and promotes renewable energy use and generation at appropriate locations within the built and natural environment to meet national objectives towards achieving a climate neutral economy by 2050 (NPO 70). This policy is now aligned with the ambitious targets set out within CAP24 and CAP25 of achieving net zero emissions by 2050. There are also objectives included within CAP24 and CAP25 to deploy up to 5 GW of solar power by 2025 and at least 8 GW by 2030. Similar support is provided at regional level where the enormous potential for renewable energy in the region in the region is recognised. In addition, RPO 59 of the RSES acknowledges the urgency to transition to a low carbon future and it is therefore an objective to accelerate the transition towards a low carbon economy.

9.1.3. In terms of local planning policy, the Development Plan has identified that climate change is one of the most significant challenges facing society as a whole and it acknowledges that a transition to a 'Green' economy and society will bring benefits in

the form of new jobs, economic innovation, enhanced environment and better quality of life. Within Chapter 3 (Low-Carbon Society & Climate Action), policies are prescribed which promote and facilitate renewable energy development (Policy 3-1) and objectives are included that seek to support research and innovation in smart renewable energy technologies and initiatives to accelerate diversification away from fossil fuels (Objective 3-E). Chapter 10 (Renewable Energy and Bioeconomy) supports investment and development in renewable energy and the bioeconomy, as part of a national transition to a low-carbon, climate resilient and circular economy. Policy is enshrined within the Development Plan that supports and facilitates new development that will produce energy from local renewable sources such as solar, subject to compliance with normal planning and environmental criteria (Policy 10-1). It is also an objective to support the Climate Action Plan (DECC, 2019) as it relates to renewable energy production (Objective 10-A), renewable energy development (Objective 10-C) and the diversification of the agriculture sector as part of decarbonisation (Objective 10-E).

9.1.3.1. As per the Development Plan's Renewable Energy Strategy, it is the policy of the Council to facilitate solar energy installations where it is demonstrated to the satisfaction of the Council that there will be no significant adverse impact on the built and natural environment, the visual character of the landscape or on residential amenity (Policy RE10). The strategy notes that key considerations for developments of this nature are:

- Site aspect, area and topography,
- Availability and method of grid connection,
- Impact on sensitive receptors including roads, residential development, areas of tourism and landscape amenity value, airfields and ecology,
- The visual impact of the proposal and other permitted large-scale solar PV developments on the visual character of the area having regard to the provisions of the LCA 2016,
- Management, fencing and upkeep of the site,
- Construction phase activities and impacts,
- Proposed lifespan of the development, and,
- Decommissioning and reinstatement of site subject to the satisfaction of the

council.

I note that various considerations listed above are addressed in further detail in my assessment of the subject proposal. As noted above, the appellants have raised concerns regarding the prematurity of proposed development pending the preparation of national planning guidance for solar developments. It is also highlighted within the appeal from Dualla Together CLG that consideration should be given to the National Planning Guidance for Solar Development in the UK. I note that it is stated within the Development Plan's Renewable Energy Strategy that in the absence of Irish guidelines, the provisions of 'Planning guidance for the development of large scale ground mounted solar PV systems' BRE 2013, may be consulted. Therefore, I have had regard to this planning guidance in my assessment where applicable, and I am fully satisfied that the proposed development can be considered on its merits in the absence of specific national planning guidance for solar energy development.

9.1.3.2. I note that concerns have been raised regarding the lack of a justification for the overall scale of development being proposed. Other concerns have been raised that the Planning Authority have failed to consider the extent of solar farm developments that have been permitted within the County and the proposal would exceed the targets set out in the Development Plan. As detailed in Table 10.1 (Renewable Energy Targets for County Development Plan period), the 2028 target for solar energy represents a 25% increase over permitted capacity (117MW). This equates to a solar energy target of 150MW operational. Whilst I note that the proposal has an estimated capacity of 130MWp, the figures provided by the Applicant relate to a maximum potential power output of the solar farm in ideal conditions and I note that the potential output of the proposed solar farm has further been reduced through the omission of Parcel 3. Furthermore, it is my view that the targets contained within the Development Plan are not maximum targets which are aimed to cap renewable energy projects. It is considered that the rapid acceleration and delivery of renewable energy projects of this nature is both fully supported in local through to national policy, and necessary to achieve the national targets of achieving net zero emissions by 2050. Therefore, I am satisfied that the principle of development is acceptable at this location. However, I accept that a balance must be achieved, whereby significant adverse impacts on the built and natural environment, the visual character of the landscape or on residential

amenity can be avoided as required by Policy RE10 of the Development Plan. The remaining sections of this report will engage with these considerations in further detail.

9.2. Landscape & Visual Impact

9.2.1.1. The appellants have raised concerns regarding the overall scale and visual impact of the development on the character of this rural area and its overreliance on vegetation screening to mitigate potential impacts. This concern has been echoed by the observers to the appeal and in the many objections to the proposed development during the application stage. It is the appellant's view that the impacts will be exacerbated as a result of the undulating site topography, where the lands are visually exposed and elevated above the public roads. It is therefore contended that the solar farm would have a detrimental visual impact on both the local and wider landscape and the supplementary hedging proposed around the site will be ineffective in mitigating this impact. The appeal by Mr. Keith Barry has also raised concerns regarding the adequacy of the Applicant's LVIA which in their view does not illustrate the true impact of the proposed development.

9.2.1.2. In terms of a landscape's capacity to absorb renewable energy development, it is the policy of the Council to facilitate new development which integrates with and respects the character, sensitivity and value of the landscape in accordance with the guidelines set out in the Tipperary Landscape Character Assessment (LCA) 2016 and the policies as set out in the Development Plan (Policy RE2). I note that the site is located in the Plains (a) of Lowland Pastures & Arable (A1) in the River Suir Central Plain (4) LCA. This area is also known as part of the 'Golden Vale' and forms the large central area of the county where it is associated with the River Suir and also extends west along the tributaries of the Multeen, Thonouge and Tar and eastwards along the Anner. It is characterised by its rich and productive agricultural lands and rolling landscape. The M8 Motorway transverses the central plain in an east – west divide. The LCA identifies the site as being located with an area of robust/normal sensitivity with medium compatibility and low likely landscape effects from solar energy developments.

9.2.2. The application has been supported by a Landscape and Visual Impact Assessment (LVIA) which was prepared by Macro Works Ltd. and included within Chapter 9 of the Applicant's Environmental Report. In terms of the extent of the study area, Section 9.4

of the LVIA notes that based on similar studies, the proposed development is likely to be difficult to discern beyond c. 5km and is not likely to give rise to significant landscape or visual impacts beyond c. 2km. In this instance however, a 2km study area has been adopted as it is argued that the site is located in a well-contained undulating setting with existing mature vegetation. The LVIA includes a total of 18 no. viewpoint photomontages taken from various locations within the study area and each viewpoint provides the existing scenario, the proposed scenario and the proposed scenario which incorporates the mitigation i.e. supplemented hedgerow planting. In support of the LVIA, a computer-generated Zone of Theoretical Visibility (ZTV) map has been prepared to illustrate where the proposed development is potentially visible from. The ZTV map is based solely on terrain data (bare ground visibility), and ignores features such as trees, hedges or buildings, which may screen views. It is noted that the following key points are illustrated by the 'bare-ground' ZTV map (as per Figure 9-4 of the LVIA):

- Comprehensive visibility (blue colour) is limited to a small area c. 2km east of the site, this being the landform of Kill Hill, which hosts a wind energy development. In the remaining areas where visibility is present, no more than 80% of the panels will be visible at any given time which is reflective of the undulating landform and the dispersed layout of the solar farm.
- The immediate surrounds will have theoretical visibility of up to 60% of the site depending on the elevation. Areas with a higher elevation such as Mount O'Meara will have theoretical visibility of up to 60%. The remainder of the immediate surrounds will experience potential visibility of no more than 20% due to the undulating terrain partially screening the proposed development.
- Areas of theoretical visibility (up to 40% of panels) are located in the north-eastern and south-western extents of the settlement of Cashel. There are two large areas of no visibility within Cashel. It is noted that there will be no potential visibility of the proposed development from the Rock of Cashel, located in the north-western extents of the town centre.
- The settlement of Dualla located along the eastern boundary of the Site will have potential visibility throughout its entirety. However, in this case no more than 60% of the panels being visible.
- No visibility will occur from the eastern periphery of the study area due to

screening from Kill Hill.

- The M8 motorway will have theoretical visibility of up to 20% of panels along the majority of its course within the study area and up to 40% visibility for approximately c. 3.6km along the northern section of the motorway.

The second form of ZTV mapping provided within the LVIA relies on a Digital Surface Model (DSM), which also accounts for terrestrial land cover elements, such as hedgerows and buildings (see Figure 9-5). It is stated that this is of far more value in determining the likely visibility of the solar panels.

9.2.3. In terms of their assessment of landscape and visual amenity, the Planning Authority accepted that the proposed development would vary the landscape character of the site and noted that they were satisfied with the scope and conclusions of the landscape assessment. Owing to the low-profile scale of the proposed structures and the mitigation measures to be employed, it was their view that the proposal would not have a significant visual impact on the rural area. In coming to this conclusion, the Planning Authority had regard to:

- The low profile height of the solar panels at 3.2m at their highest point,
- The relationship between the application site and the surrounding/receiving landscape which assists in screening the development,
- The existing hedgerows and treelines along the roadside boundaries and within the site are to be retained and supplemented with additional landscaping measures (a condition to be included to any grant of permission which requires that same be double planted).
- The residual impact once the proposed landscape mitigation boundary planting has become established is considered to be low.
- The potential visibility of the development will be largely confined to only a local number of residential, recreational and road users.

9.2.4. I note that the results of the Applicant's LVIA in terms of the magnitude of visual effects is provided in Table 9-7 of LVIA. My assessment of each viewpoint is also provided in the below table.

Table: Magnitude of Visual Effects

VP No. &	VP	Pre-mitigation	Post-mitigation	Assessment

Location	Sensitivity	Significance / Quality / Duration of Impact	Significance / Quality / Duration of Impact	
VP1: R639– View from road adjacent to M8 motorway	Medium-low	Slight-Imperceptible / Negative / Medium-term	Imperceptible / Neutral / Long-term	✓ - Agree with LVIA conclusions. Imperceptible / neutral impact once mitigatory planting has matured.
VP2: View from overbridge of M8 motorway	Low	Slight-Imperceptible / Negative / Medium-term	Imperceptible / Neutral / Long-term	✓ - Agree with LVIA conclusions. Imperceptible/ neutral impact once mitigatory planting has matured.
VP3: View from Clonmore road (adjacent to western array)	Medium-low	Substantial-moderate / Negative / Medium-term	Moderate-slight / Negative / Long-term	X - It is noted that VP3b is provided in a south/south-easterly orientation to illustrate the impact of the solar array within Parcel 1A from this local road and the properties along its northern side. Given the visibility of this parcel from the local road and the number of sensitive residential receptors, it is considered that there would be a moderate/negative long term residual impact once the mitigatory planting has been established. Currently there are views of rolling pasturelands from this VP which will be lost.
VP4: View from Clonmore road (between western and central arrays)	Medium-low	Slight-Imperceptible / Negative / Medium-term	Slight-Imperceptible / Negative / Long-term	X – In terms of VP4a, views of the solar array within Parcel 5 will be visible from this location given the topography of the site which rises up to Mount O'Meara. Whilst the height and profile of the arrays is acknowledged. It is considered that there will be a Moderate-slight / Negative / Long-term residual impact. Hedgerow screening will be ineffective from this VP location.
VP5: Clonmore road (adjacent to central array)	Medium-low	Substantial-moderate / Negative / Medium-term	Moderate-slight / Negative / Long-term	X - It is noted that VP5b is provided in a south/south-easterly orientation to illustrate the impact of the solar array within Parcel 2 from this local road and

				the existing dwelling along its northern side. The public road is elevated relative to the site and there are expansive views of the site from this VP location. I would concur with the Applicant that there is a substantial impact from this location particularly when taken in combination with the existing wind farm which is located further to the south-east. It is considered that there would be a moderate/negative long term residual impact once the mitigatory planting has been established. Currently there are views of rolling pasturelands and upland areas further to the south from this VP which will be lost.
VP6: Clonmore road (between eastern and central array)	Medium-low	Moderate / Negative / Medium-term	Moderate-slight / Negative / Long-term	X – VP6a is taken from the local road in the direction of Parcels 4 & 5. Whilst I accept that there is a residual moderate-slight impact from this location, there are more exposed views of the parcels further to the east. Once mitigation has been implemented, it is considered that there will be a residual moderate / negative / long-term impact given the topography of the parcel. VP6b is provided in a south-westerly direction and is orientated towards Parcel 2. Expansive views of this parcel are achieved from this VP. As the local road is elevated relative to the parcel, the eastern boundary hedgerow planting will be less effective. Therefore, a moderate / negative / long-term impact will arise.
VP7: Clonmore Road	Medium-low	Substantial-moderate / Negative /	Moderate-slight / Negative / Long-term	X – VP7a is orientated to the south towards Parcel

(adjacent to eastern array)		Medium-term		3. Whilst this view is localised, in my view it is a substantial impact, particularly when viewed in combination with the existing wind farm. However, I note that Parcel 3 has been omitted from the development. In this regard, there is no residual impact at this VP location. In terms of VP7b, there are views towards Parcels 4 & 5 which cannot be fully mitigated through landscaping due to the topography of the site. Therefore, a moderate / negative / long-term impact residual will arise.
VP8: Local road at Boscabell	High	Imperceptible / Neutral / Medium-term	Imperceptible / Neutral / Long-term	✓ - Agree with LVIA conclusions. Imperceptible / neutral residual impact will arise.
VP9: Local road at Boscabell	Medium-low	Slight / Negative / Medium-term	Imperceptible / Neutral / Long-term	✓ - Agree with LVIA conclusions. Imperceptible / neutral residual impact will arise. Views further to the north of this VP of Parcel 1 will be screened by the undulating topography.
VP10: R691 between sections of the western array	Medium-low	Substantial-moderate / Negative / Medium-term	Moderate-slight / Negative / Long-term	X – 3 no. VPs are provided from this location, looking north (Parcel 1A), east and south (Parcel 1B). Parcel 1A rises up from the regional road with a part of Parcel 1B sitting at a lower elevation. As a result, the arrays on either side of the road would form a visually prominent feature within landscape from this localised VP. It is considered that a substantial negative impact will arise as a result. This impact will eventually be mitigated by hedgerow planting on either side of the road. However, open views to the south will be irrevocably lost and, in my view, will result in a moderate / negative

				residual impact.
VP11: R691 south of the central array	Medium-low	Slight / Negative / Medium-term	Slight-imperceptible / Neutral-Negative / Long-term	✓ - Agree with LVIA conclusions. Slight-imperceptible / neutral residual impact will arise from both VP11A and B.
VP12: R691 south of the eastern array	Medium-low	Slight / Negative / Medium-term	Slight / Negative / Long-term	✓ - Agree with LVIA conclusions. Slight / neutral residual impact will arise. The visual impact will be reduced given Parcel 3 has been omitted from the development.
VP13: Residential Housing Estate at Dualla	Medium-low	Moderate-slight / Negative / Medium-term	Slight / Negative / Long-term	✓/X - Agree with LVIA conclusions from this particular viewpoint. Slight / neutral negative impact will arise. In terms of residential amenity, visual impacts are pronounced for the residences that are located proximate to Parcel 3 (see further discussion below). Nonetheless, the visual impact will be significantly reduced given Parcel 3 has been omitted from the development. However, at location further north (i.e. church, graveyard and adjacent playing pitches), there are expansive views of Mount O Meara (Parcel 4 &5). Notwithstanding the proposed mitigatory planting, the proposed development will result in a moderate / negative residual impact when viewed from within the settlement of Dualla.
VP14: Cashel (View from R691)	Medium-low	Imperceptible / Neutral / Medium-term	Imperceptible / Neutral / Long-term	✓ - Agree with LVIA conclusions. An imperceptible / neutral residual impact will arise.
VP15: View from R691 overpass of M8 motorway	Low	Slight / Negative / Medium-term	Slight-imperceptible / Neutral-Negative / Long-term	✓ - Agree with LVIA conclusions. A slight-imperceptible / neutral residual impact will arise.
VP16: R691 between M8 motorway and Boscabell	Medium-low	Slight / Negative / Medium-term	Slight-imperceptible / Neutral-Negative / Long-	✓ - Agree with LVIA conclusions. A slight-imperceptible / neutral-

			term	negative residual impact will arise.
VP17: Local road at Rathclogh South	Medium-low	Slight-imperceptible / Neutral-Negative / Medium-term	Slight-imperceptible / Neutral-Negative / Long-term	✓ - Agree with LVIA conclusions. Whilst Parcel 4 & 5 will be perceptible from this VP, a slight-imperceptible / neutral residual impact will arise given the intervening distances and the low profile of the solar arrays.
VP18: R692 Crossroads at Rathordan	Medium-low	Imperceptible / Neutral / Medium-term	Imperceptible / Neutral / Long-term	✓ - Agree with LVIA conclusions. An imperceptible / neutral residual impact will arise.

9.2.5. Section 6.8 (Solar Energy Strategy) of the Development Plan's Renewable Energy Strategy notes that the provisions of 'Planning guidance for the development of large scale ground mounted solar PV systems' BRE 2013 (referred to herein as the UK Guidance), may be consulted in the absence of Irish guidelines. I note that a number Third Party appellants have highlighted the need to have regard to this guidance in determining applications of this nature in Ireland. The UK Guidance notes that landscape / visual impact is likely to be one of the most significant impacts of such development and it is acknowledged that southerly sloping sites are likely to be more visible within the wider landscape. Given the temporary nature of solar farms, the policy notes that the removal of existing vegetated field boundaries, including hedges will not be permitted as this will irrevocably alter the landscape character of the site. It is stated that developments will need to have regard in both its design layout, and future maintenance plans for the retention of growth of vegetation on these important boundaries, including the opportunity for individual trees within the boundaries to grow on to maturity. Existing hedges and established vegetation, including mature trees, should be retained wherever possible and protected during construction.

9.2.6. It is outlined within the LVIA that the main mitigation that has been employed is avoidance, whereby the proposed development has been sited and dispersed within an undulating landscape within an existing network of hedgerows. It is stated that the vast majority of the site has to some degree existing perimeter visual screening, either in the form of mature areas of vegetation or a low 'gappy' hedgerow. As noted, all existing vegetated boundaries are to be retained, with the exception of the hedgerow

loss at the site entrances. It is also proposed to bolster the existing hedgerows along the boundaries of the various land parcels. It is noted that the proposed landscaping will comprise additional native hedgerows, with whips and a high proportion of advanced nursery stock trees (c. 3m planted height). Whilst I acknowledge that a degree of subjectivity is naturally applied to LVIAs, I have outlined a number of instances in the above table where it is considered that the magnitude of effect has been underreported in the Applicant's LVIA which informs my assessment. From my observations during my inspection of the site and surrounding area, this was evident at VP3, VP4, VP5, VP6, VP7, VP10 and VP13, where it is considered that long term, moderate, negative residual impacts would arise and there is a reliance on the mitigatory hedgerow planting, where the solar arrays will be particularly prominent. I also accept that alternative locations could have been provided by the Applicant which would be more reflective of the true visual of the development. Notwithstanding this, I note that the impacts are predominantly localised and can be successfully mitigated to avoid any significant impacts on the receiving landscape. Whilst I acknowledge that the change in land use will alter the area's landscape character, I note that the site is not located in a Primary or Secondary Amenity area. With the exception of Parcel 5, the undulating topography and vegetation will generally screen longer views of the proposed development. Overall, I am satisfied that it will not have a significant adverse impact on the existing landscape character and the development can be successfully absorbed at this location. However, it is considered that the proposed planting should be implemented at the earliest opportunity given the length of time it will take for it to reach maturity. I therefore concur with the Planning Authority that a condition should be included which requires the landscaping to be implemented within the first planting season following commencement of development. Whilst I note that there is no obligation to comply with the UK Guidance for ground mounted solar farms, I am satisfied that the proposed development is generally in compliance with same. Overall, the proposed development is considered to be acceptable in my view, subject to compliance with appropriate conditions.

9.2.7. In terms of decommissioning and restoration, the operational life of the solar farm is c. 40 years. Following this, it is confirmed within the application documents that a decision would be made whether the solar farm would be decommissioned, and the

site returned to agricultural usage, or to re-power the solar farm. It is noted that the installation method for these types of solar panels and mounting frames is undertaken using local piling to reduce the impact deriving from construction to facilitate the long-term use of the field as farmland. Panels are constructed using small-scale machinery causing very limited effect to the existing grass surface and the process is akin to timber post fence construction, whereby the post is driven a short length into the ground. It is stated that this ensures that the fields' general green characteristics can be retained or quickly redressed following construction. All new cabling within the site will be buried underground. Wherever possible, the onsite access tracks utilise the existing tracks and follow existing topography and the reinstatement of temporary construction areas, construction compounds and cable trenches to the preconstruction conditions will be carried out at the end of the construction phase. It is also noted that the restoration of any areas disturbed during the construction process will be undertaken on completion by appropriate grass seeding to return a green characteristic. The Applicant notes that the decommissioning of the site will involve the removal of all solar panels and associated fencing, storage and operation facilities and the site will be fully restored to its pre-existing use once fully decommissioned. I note that the Planning Authority have included a condition (3(a)) which requires the submission of a restoration plan for agreement prior the commencement of development. It is also my recommendation that a condition be included that requires all ancillary structures such as inverters, transformer cabins and other plant to be coloured in green or muted shades to help them assimilate with the surrounding countryside, a point which is noted in the Applicant's LVIA. As part of the Applicant's response to the FI request, it is stated that the areas under the panels will be converted to a species-rich grassland habitat with a varied sward structure following the installation of the solar panels. The Applicant notes that the grassland will either be grazed or mowed between autumn (September) and winter (March). The grassland will then be allowed to grow between mid-March and early September, and if sheep grazing is possible, it will be maintained by grazing alone. It is my view that the maintenance regime for the solar should be detailed and agreed with the Planning Authority and it is considered that this could form part of the maintenance and restoration plan which will be submitted to the Planning Authority for written agreement prior to the commencement of development.

9.2.8. Section 9.5.1.1 of the LVIA notes that there are several Development Plan scenic designations located within the study area of the proposed development. Those scenic designations that fall within the study area are illustrated on Figure 1 (Location of Scenic Routes and Views) of the Development's LCA and include:

- V01: View towards the Rock of Cashel from Dundrum Road;
- V02: View towards the Rock of Cashel from Ardmayle Road;
- V03: View towards the Rock of Cashel from Boherlahan Road;
- V04: View towards the Rock of Cashel from Dublin Road;
- V05: View towards the Rock of Cashel from Dualla Road;
- V06: View towards the Rock of Cashel from Clonmel Road; and,
- V35: Views of the Comeragh Mountains looking south on the R639 from Cashe

In terms of V01, V02, V03, V04, V05, and V06, all are all oriented towards the Rock of Cashel which is situated in the south-western portion of the study area. The proposed development is located 2.8km at its nearest point from the Rock of Cashel. Due to their orientation away from the site, the considerable distance and the successive layers of vegetation and buildings, it is the consultant's view that the proposed development will not have a material effect on any of these scenic views. In the case of V035, this scenic view looks southeast towards the Comeragh Mountains, whereas the proposed development is located in the opposite direction and will therefore not impact on this scenic view. Therefore, it is contended that none of the protected views are relevant to a consideration of visual effects and representative viewpoint were not provided from these locations. I would concur with the conclusions of the LVIA, and I am satisfied that the proposed development will have no impact on any scenic designations in the area.

9.3. Water

Impacts to Water Supply/Quality

9.3.1. A key issue raised in each of the Third Party appeals and the observations on file are concerns regarding the proposed development's potential risk to the public water supply (PWS) and the groundwater abstraction borehole serving the settlement of Dualla. Concerns have also been noted in terms of the impact of the development on domestic water supplies in the vicinity of the site (i.e. private wells). The local service centre of Dualla is located to the east of the appeal site and the existing PWS serves

the village and its surrounding area, whereby groundwater is abstracted from a borehole located on the existing treatment plant site. In support of their objections to the application and appeal, Dualla Together CLG engaged the services of consultant hydrogeologist Dr. Pamela Bartley who has provided input at each stage in the form of written submissions. I note that Dr. Bartley was also engaged by Conor and Kate Breen and her commentary on the proposed development has been referenced in a number of the other Third Party appeals. It is highlighted by the appellants that the Planning Authority did not sufficiently engage with the issues highlighted within the expert reports and Dr. Bartley contends that she is the only water supply hydrogeologist to have been involved in the proposed development's assessment. She raises further concerns that had no professional hydrogeologist appears to have been involved from either the Applicant, the Planning Authority or UÉ. It is opined that the Planning Authority did not have the technical competency to assess the facts presented and that an independent hydrogeologist should have been consulted in the interest of protecting the existing water supply. I have set out in detail the core issues that have been raised by the appellants in Section 8 of this report.

9.3.2. UÉ in their supplementary report on file noted that the drinking water abstraction point (i.e. borehole) serving Dualla is located c. 200m to the east of Parcel 3 and a large portion of the proposed development is located within its ZoC (i.e. Parcel 3). UÉ confirm that the ZoC reaches over an area of c. 47ha. and concerns are raised regarding the potential effects of the proposed works on the water abstraction borehole given their location within the ZoC. It is stated that there is potential for an increase in the turbidity of the ground water sources through the increased weight pressure at ground level through movements associated with heavy vehicle use and the placement of large machinery prior to and during the construction phases. It is stated that any disturbance in the overlying soils can create a pathway for turbidity and drive soil particulates into the rockhead. UÉ note that they require a zero effect of turbidity within any ZoC. They also noted that there is the added potential for the contamination of groundwater sources through spillages of wet concrete during the construction phase as well as the potential for leakages of anti-fungal cleaning agents being used during the lifetime of the development to enter ground sources. On the basis of the recommendations within this report, the Planning Authority requested the Applicant to

engage with UÉ and to submit additional information to demonstrate that there will be no negative impact to UÉ's Drinking Water Source(s) during the construction and operational phases of the development.

9.3.3. In response to the Planning Authority's FI request, the Applicant's consultant confirmed that they had engaged with UÉ regarding the revisions to the layout of the proposed solar farm (i.e. omission of Parcel 3) and they confirmed that UÉ were satisfied that the revised layout would avoid any potential risks to the Dualla PWS. It is noted that the ZoC and details of the Dualla PWS was shared with the Applicant. The revised site layout has been overlayed by the ZoC in Figure 1-1 of the Applicant's FI response which demonstrates that only a portion of Parcel 4 now extends into this ZoC. Whilst the ZoC encroaches Parcel 4, the actual development footprint within this parcel is limited and is generally located outside the ZoC. Whilst I note that there is no record of a formal response from UÉ on file, the Planning Authority were satisfied that the proposal would not have a detrimental impact on drinking water on the basis of the revised layout.

9.3.4. Within the appeal, Dr. Bartley has outlined that Dualla's PWS was currently not EPA Standard, suffers turbidity events that compromise the ability of the Water Treatment System to cope, and that a new borehole was likely to be needed in the near future. In addition, it is highlighted that the ZoC is not static and even if the current borehole did not get replaced, it is incorrect and too simplistic to attempt to perceive that a ZoC does not move each year. I note that it is a specific policy of the Development Plan (11-5) to ensure that new developments proposed in or near 'Ground Water Protection Schemes' and 'Zones of Contribution' which contribute to public water supplies, do not result in a significant negative impact on the integrity, function and management of these important assets. From a review of the planning file, notably the planner's report, it is not evident that the Planning Authority adequately engaged with the issues raised in the Third Party expert report, a point on which I agree with the appellant. I also accept that the ZoC will fluctuate over time depending on demand, rainfall etc. and the simple omission of a portion of the development from a historically mapped ZoC will not remove all risks associated with the proposed works. Furthermore, I am conscious of the site's mapped groundwater vulnerability, with the majority of the site being

underlain by a mosaic of Karst, Extreme and High vulnerability where there are inevitably higher risks of groundwater contamination by human activities.

9.3.5. Notwithstanding the foregoing, the existence of the ZoC in of itself does not preclude the development of a site. I am conscious of the scale of earthworks that are required for developments of this nature as stated in the Applicant's Environmental Report. It is outlined that the installation of the panels will use a simple ground-mounted system consisting of driven steel or aluminium uprights that avoid ground disturbance. This method does not require the excavation of soils as the support poles are piled directly into the ground, c. 1.5m deep. The Planning Authority has also included a condition (Condition No. 15) which requires the solar panels to be fixed in place by way of driven pile or screw pile foundations only. Furthermore, it is noted that the laying of cables from the panels to the transformer stations will require the excavation of narrow trenches to a maximum depth of 1m. In addition, detailed mitigation measures have been set out in the Environmental Report, preliminary Construction and Environmental Management Plan (pCEMP) and the NIS which have been designed to protect surface and groundwater quality (see further discussion below). Having regard to the omission of Parcel 3 within the revised site layout, the actual footprint of the development within Parcel 4 which partially overlaps the ZoC, the requirement for minimal earthworks across the entire site and the various mitigation measures that will be employed to protect surface and groundwater quality, I am satisfied that it has been adequately demonstrated that the proposed development shall not pose an unacceptable risk to Dualla's PWS or private water supplies (i.e. domestic wells) in the surrounding area. It is therefore considered that the Applicant's proposals are in accordance with Policy 11-5 of the Development Plan which seeks to ensure that developments do not have a significant negative impact on the integrity, function and management of ZoCs which contribute to public water supplies. The proposals are therefore acceptable in my view, subject to compliance with appropriate conditions.

Drainage & Flooding

9.3.6. Key concerns raised at the application and appeal stage is the absence of adequate drainage proposals for the proposed solar farm and the associated potential for flooding due to an increase in the intensity of surface water runoff. An appellant highlights that currently, there is a significant volume of surface water runoff from these

fields onto neighbouring properties and onto the public road which results in localised flooding, some of which is shown on the CFRAM flood maps. Photographs have been included to demonstrate flooding of public roads and farmland in the vicinity of the site. An appellant also notes that the majority of the appeal site is karst with bedrock at the surface, highlighting the impermeable nature of the lands, confirming the rapid runoff rate of rainwater from the land onto neighbouring properties and onto the road below. It is stated that the intensity and speed of runoff would be exacerbated by the proposed development due the loss of 65,702m^2 of greenfield land which will be covered in solar panels. An appellant has contended that it is necessary to assess the capacity of the existing drainage network to cater to the increased volumes of runoff. In summary, it is the appellant's view that the proposed development would exacerbate the poor drainage conditions of the lands and compound the flooding issues elsewhere due to the increased rainfall runoff rate arising from the proposed development. Concerns are also raised regarding runoff from the access tracks, construction compounds etc. associated with the proposed development. In the absence of a comprehensive assessment of the capacity of the existing drains and a proper flood risk assessment which accounts for climate change, it is an appellant's view that the proposed development should be refused permission. It is noted that the issues raised regarding impacts on drainage and flooding are detailed in Section 8 of this report.

9.3.7. As detailed in Chapter 5 of the Applicant's Environmental Report, the proposed development will not require any alternations to the existing onsite drainage system as it is noted that the existing surface water drainage system will provide effective drainage capacity to the site. It is stated that the majority of the surfaces on site will be permeable surfaces, allowing rainwater to percolate directly to the ground. The total area of permanent impermeable hardstanding within the site measures c. 240m^2 and comprises the 16 no. transformer units. I note that the area of hardstanding was reduced further following the omission of Parcel 3 from the proposed development. All rainwater will run directly off these surfaces to the adjacent permeable surfaces of either grass or crushed stone. Therefore, it is confirmed that no specific drainage infrastructure or new drainage mitigation measures will be required for the proposed development. As part of their FI request (Item No. 1(vii)), the Planning Authority on foot of the recommendations of their area engineer required the Applicant to submit a

revised site layout plan which indicated the surface water management arrangement at the site entrances to prevent surface water from discharging from the site onto the public road. I note that this information does not appear to have been supplied to the Planning Authority as part of the Applicant's FI response. Notwithstanding this, the Planning Authority included a condition (9(a)) which states that the access points from the public road shall be provided with a drainage kerb/cattle grid or approved equivalent surface water cut-off drain which shall discharge to a stone filled sump located within the site. In addition, the condition states that surface water from the site shall not be allowed to discharge onto the public road or adjoining properties.

9.3.8. It is confirmed within the application documents that the solar arrays will be constructed with a "spacer section" between each row of panels which will allow rainwater to pass through the arrays and disperse and infiltrate to the agricultural grassland below at a natural rate in a similar manner to the current greenfield infiltration rates. Furthermore, it is noted that all access tracks are comprised of permeable hardcore and will not impede drainage. The Applicant's Environmental Report (Section 7.3.6) has referred to studies (Cook and McCuen[1]) that have shown that solar PV developments do not impact on infiltration rates once grass is maintained under and between the panels - 'With well-maintained grass underneath the panels, the solar panels themselves do not have much effect on total volumes of the runoff or peak discharge rates.' Once this measure is taken, the study goes on to note that 'solar farms will not have an adverse hydrologic impact from excess runoff or contribute eroded soil particles to receiving streams and waterways.' I note that a copy of this 2013 study has been enclosed with the Applicant's response to the Third Party appeals. As part of the Planning Authority's FI request, the Applicant was requested to confirm how the growth of vegetation under and between the arrays on the site will be controlled and whether same will be used for agricultural proposes. As outlined in Section 9.2 of this report, the Applicant confirmed in their response that it is proposed to convert the lands under the panels to a species-rich grassland habitat with a varied sward structure. It is stated that if sheep grazing is not possible (landowner dependent), the species-rich grassland could be managed through appropriately timed cuttings / mowing with appropriate low-profile machinery that will cut under and

[1] L. Cook and R. McCuen, "Hydrologic Response of Solar Farms," Journal of Hydraulic Engineering, 2013

between panels. As I have stated, it is my view that the maintenance regime for the solar farm should be agreed before the commencement of development and should form part of the maintenance and restoration plan for the solar farm.

9.3.9. In terms of the UK Guidance, Section 2(n) (Drainage, Surface Water Run-off and Flooding) recommends that applications are to be accompanied by a Flood Risk Assessment. The policy acknowledges that as solar PV panels will drain to the existing ground, the impact will not in general be significant and therefore this should not be an onerous requirement. Furthermore, it states that where access tracks need to be provided, permeable tracks should be used, and localised SUDS, such as swales and infiltration trenches, should be incorporated to control any run-off where recommended. Given the temporary nature of solar PV farms, the policy states that sites should be configured or selected to avoid the need to impact on existing drainage systems and watercourses and culverting of existing watercourses/drainage ditches should be avoided. As noted, the solar farm has been designed to ensure that the existing hydrological regime of the site is not impacted. In terms of the construction phase, any HGVs delivering components will be restricted to site access tracks and the temporary construction compound, with only light machinery required to install the solar arrays, limiting soil compaction. Soil disturbance will also be minimised to essential excavations (i.e. laying of cables). Buffers are to be provided to all drainage ditches and watercourses and appropriate spacing shall be provided between the arrays to ensure that runoff will infiltrate naturally to ground. This spacing shall also support the growth of vegetation beneath the panels and will allow rainwater to pass through the arrays and disperse and infiltrate evenly, thereby reducing the potential for runoff. In addition, the access tracks within the site are to be constructed of permeable materials, the details of which are to be agreed with the Planning Authority (as per Condition 9(c)). Overall, the extent of impervious services across the site is limited and relate only to the proposed transformer units. On balance, I am satisfied that the Applicant's drainage proposals are acceptable and whilst there is no obligation to comply, they are also generally in accordance with the UK Guidance for ground mounted solar farms. However, I am conscious of the Planning Authority's condition which has been attached to preclude surface water run-off from discharging onto the public road or any adjoining properties. It is my view that a condition should be included

which requires the details of the drainage proposals to be submitted to the Planning Authority for written agreement prior to the commencement of development. It is also considered that a condition should be included which requires the Applicant to monitor the existing drainage network for blockages and other issues that could affect its functionality throughout the lifetime of the solar farm.

9.3.10. In terms of flood risk, Chapter 7 (Water) of the Applicant's Environmental Report sought to assess whether there are any likely hydrological impacts to water, including flood risks during all phases of the proposed development. I note the Planning Authority raised no objections to the proposed development on the grounds of flood risk. Section 7.4 (Stage 2 – Initial Flood Risk Assessment) noted that the following type of flooding sources have been identified which could affect the proposed development:

- Groundwater systems and infiltration capacity in soils;
- Fluvial flood risk posed by Ballintemple stream, the unnamed stream and onsite drainage ditches; and,
- Pluvial flood risk posed by heavy rainfall and associated surface water ponding.

Taking account of the characteristics of the bedrock aquifer beneath the site, the potential flood risk posed by groundwater sources was considered to be negligible and was not considered further. In terms of pluvial flooding, it is noted that the entire site can be categorised as Flood Zone C (as per OPW flood maps). It is stated that there is no historic evidence of any fluvial flooding in the immediate vicinity of the site, and it is noted that the risks of flooding associated with fluvial flooding do not warrant further consideration given the size of the Ballintemple Stream and the unnamed stream that traverse the site. For pluvial flooding, the Chapter notes that there is no known potential risk of pluvial flooding based on the OPW flood maps. Furthermore, it is stated that there is no historic evidence of any pluvial flooding within or in the immediate vicinity of the site (nearest historic flood recorded c. 1km from site). Therefore, the Applicant's Flood Risk Assessment concludes that no potential risk of fluvial or pluvial flooding within the site has been identified. Nonetheless, it is stated that the proposed design would be considered a water compatible development for the following reasons:

- The proposed development will not impede on infiltration or runoff;

- The proposed development will not displace any potential flood waters;
- There would be no risk to people or other infrastructure if the proposed development were to flood; and,
- The panels will continue to work as normal up to a flood depth of 800mm. Even in an extremely unlikely scenario where flooding occurred greater than this depth all structures will remain intact

It is also indicated that the proposed development will not have an impact on flooding elsewhere as there will be no net increase in discharge rate or runoff volume from the site. Given the location of the site within Flood Zone C, where the probability of flooding is low (less than 0.1%), the nature of the proposed development, a water compatible development which will not impede infiltration, the proposed installation method which will minimise impacts on drainage patterns (pile driven) and the sustainable drainage systems incorporated into the development's design, including permeable access tracks, the planting of a species-rich grassland habitat and infiltration, which would reduce surface water runoff, it is considered that the proposed development would not increase the risk of flooding either on site or elsewhere downstream. Having regard to the relevant Planning System and Flood Risk Guidelines (2009), I am satisfied that a Justification Test does not need to be applied in this instance and the proposed development is acceptable.

Water Framework Directive, Water Quality and Identification of Water Bodies

9.3.11. I have assessed the proposed development and have considered the objectives as set out in Article 4 of the WFD as detailed in Appendix 5 (WFD Screening Matrix) of this report. A number of appellants have raised concerns raised regarding the potential detrimental impact of the proposed development on water quality in the area and the adequacy of the Planning Authority's assessment. It is stated that the competent authority has a legal obligation to comply with the EU Water Framework Directive (WFD), which aims to protect and enhance the quality of water resources. By granting permission, it is contended that the Planning Authority has failed in its duty to uphold EU environmental law. Consultant hydrogeologist Dr. Bartley was also engaged by Mr. Keith Barry (Third Party appellant) to provide a technical note on the proposed development. Mr. Barry is the owner of Millburn Farm, a residential and equestrian farm located to the south-east of Parcel 2. Within his original observations to the application, the appellant indicated that their private lake was fed by two sources with

one being identified as being the Ballintemple Stream. It is contended that the Applicant has failed to identify this private lake as the closest body of water which will face a significant impact given its location downstream of the solar farm. The appellant notes that this body of water has been both recognised by the Marine institute of Ireland Private Lake is FHA-000751IE and Tipperary County Council and correspondence confirming same was enclosed with the original observations to the application. It is noted that a number of the Third Pary appellant's have referred to the Applicant's failure to identify the existing waterbody on Mr. Barry's lands. Within the technical note provided by Dr. Bartley, it is advised that the Commission must assess and consider how the proposed development will aid the statutory obligation to restore all waters to at least Good Status by 2027. It is stated that a proposal to alter and change the rainfall recharge characteristic of highly permeable agricultural grazing lands to a predominantly hard standing corridor industrial energy development has not been presented for any evaluation by the Competent Authority. In her technical note, Dr. Bartely refers to the Bradan Beo - Case C-301/22 which confirms that even if a small water body is not directly covered by the WFD, an assessment is required if it is connected to other water bodies. It is stated that Member States must ensure that projects do not cause deterioration or compromise the attainment of good water status in connected water bodies, adhering to the objectives of the WFD.

9.3.12. The appeal site is located within the Suir WFD Catchment (Catchment_ID: 16) and the Suir_SC_050 subcatchment (Subcatchment_ID: 16_10). There are 2 no. EPA mapped watercourses that are located within the site which includes an unnamed stream which bisects the northern end of Parcel 1A. This unnamed stream flows in a north-westerly direction for c. 670m from the site and discharges into an unnamed river. The unnamed river then flows in a north-westerly direction for c. 2.5km before discharging into the Arglo River. The Arglo River flows for a distance of c. 3.9km and drains into the River Suir. As per the WFD 2016-2021 monitoring events, the water quality status within the unnamed stream, the unnamed river and the Arglo River are identified as being 'moderate,' and the status of these watercourses are identified as being 'at risk' of not meeting the WFD's 'good' status objective. The other EPA mapped watercourse on the site is the Ballintemple Stream. A is spring located at the start of this stream within Parcel 5. The stream flows in a south-easterly direction, bisecting

through Parcel 2, and draining into the Clashawley River. The Clashawley River forms part of the Lower River Suir SAC, c. 5km downstream. According to the WFD 2016-2021 monitoring events, the water quality within the Ballintemple Stream is considered to be 'poor,' and the status of this river is identified as being 'at risk' of not meeting the WFD's 'good' status objective. The Clashawley River is considered to be of 'moderate' water quality status and is also identified as being 'at risk' of not meeting the WFD's 'good' status objective. In terms of groundwater, the appeal site is underlain by a single Groundwater Body (GWB), being the Clonmel GWB. As per the most recent monitoring period (GW 2016 to 2021), the current status of the Clonmel GWB is 'good' and it is identified as being 'at risk' of not meeting the WFD's 'good' status objective.

9.3.13. As detailed in Chapter 7 (Water) of the Applicant's Environmental Report, a preliminary CEMP accompanied the application, and it is confirmed that it will be implemented to ensure that construction works have no significant impact on water quality and will not result in excess runoff or soil erosion / compaction. It is acknowledged that construction works can potentially impact on groundwater and surface water quality due to accidental spillages of deleterious materials and siltation due to release of sediments due to earthworks etc. However, it is stated that the impact of the proposed development on surface water quality during the construction phase will be neutral based on:

- The nature of the proposed works (i.e., no changes to onsite drainage, minimal earthworks, sensitive design);
- No in-river works or works within onsite watercourses or drainage ditches will be required;
- All construction works will be set back a minimum of c. 5m from onsite drains; and,
- All construction works associated will be setback a minimum of c. 20m from the EPA Watercourses

9.3.14. As detailed above, HGVs delivering components to the site will be restricted to site access tracks, thereby limiting soil compaction. Soil disturbance will also be minimised as the solar arrays will be installed using pile driven aluminium uprights and excavation will be limited to the 1m deep trenches for the laying of cables. The various measures that will be employed to protect surface and groundwater quality during the

construction phase are detailed in the below table. In terms of the operational phase, it is noted that the proposed development will result in a change of land-use at the site from arable crop production and agricultural grasslands to a solar PV Farm, thereby reducing the potential for fertilisers and pesticides entering into the nearby watercourses. I note that this is of relevance in this instance given that pollution from agriculture has been identified by the EPA as a significant pressure for the 2 no. watercourses and the GWB that underlays the site. As I have discussed previously, the solar arrays have been designed to minimise the effect on the infiltration pattern of the site, whereby the spacing will support the growth of vegetation beneath the panels and will allow rainwater to pass through the arrays and disperse and infiltrate evenly, thereby reducing the potential for concentrated flows that could cause soil erosion. The Applicant confirms that monitoring and maintenance will be undertaken to ensure excess runoff or soil erosion / compaction does not occur and if required, the ground will be cultivated and re-seeded. As noted, it is my view that monitoring of this nature should be prescribed in the maintenance and restoration plan for the solar farm which can be agreed with the Planning Authority prior to the commencement of development. In terms of decommissioning, it is stated that the same measures will be applied as during the construction phase. After removal of the infrastructure, the site will be inspected, cultivated, and seeded to suit future land use requirements.

Table: Mitigation measures to protect surface and groundwater quality.

General Mitigation	- All materials shall be stored at the main contractor compound and transported to the works zone immediately prior to construction; - Excavations will be left open for minimal periods to avoid acting as a conduit for surface water flows; - Where drainage ditches are crossed, the release of sediment over baseline conditions will be prevented using silt traps, check dams and / or bunds. These will be put in place in advance of construction works and monitored on a regular basis; - No surface water runoff will be discharged into drainage ditches, public roads, foul sewers or adjacent properties; - Weather conditions will be considered when planning construction activities to minimise risk of run off from the Site; - Provision of exclusion zones and barriers between any stockpiled materials and any surface water features to prevent sediment washing into the receiving water environment; - Entry by plant, equipment, machinery, vehicles and construction personnel into watercourses, wet drainage ditches or the river riparian zones shall not be permitted; - An ECoW shall be engaged to undertaken inspections of all elements of the works for their entire duration on a monthly basis minimum; - Emergency response procedures will be put in place - Chemicals used will be biodegradable where possible;

	- Measures will be implemented to minimise waste and ensure correct handling, storage and disposal of waste; - The production, transport and placement of all cementitious materials will be strictly planned and supervised; - All concrete pours will be carried out in dry weather; - Shutters will be designed to prevent failure; - Chemicals used will be biodegradable, where possible; - Any spillages will be cleaned up immediately and disposed of correctly; - Where possible, concrete skips, pumps and machine buckets will be prevented from slewing over water when placing concrete; - No washing of plant or equipment will be permitted adjacent to the river; - Concrete washout of trucks and larger plant will not occur onsite; - Concrete washing from smaller equipment will be collected and disposed of offsite; and, - Surplus concrete will be returned to batch plant after completion of a pour
Accidental Release or Spill of Potentially Contaminating Substances	- All plant and machinery will be serviced before being mobilised to the site; - Prior to any works commencing, all construction equipment will be checked to ensure that they are mechanically sound, to avoid leaks of oil, fuel, hydraulic fluids and grease; - Preventative maintenance and relevant maintenance logs will be kept for all onsite plant and equipment; - Any chemical / oils to be stored onsite will be placed within a bund on an area of hardstanding to ensure there is no seepage of pollutants into groundwater or surface water; - All bunds will have the capacity of the largest tank volume plus 10 percent, at a minimum, with additional capacity to hold 30mm of rainfall; - All drainage from bund areas will be directed to secure containment prior to suitable disposal; - The Appointed Contactor will put in place a specific, step-by-step refuelling procedure which will be communicated to all relevant employees onsite; - Only designated trained operators will be authorised to refuel plant onsite; - Refuelling of plant and machinery will be completed in a controlled manner using drip trays (bunded container trays) in a dedicated refuelling area; - All oil stored onsite for construction vehicles will be kept in a lock and bund protected area. This bund protected area will be located over 20m away from onsite watercourses and drainage ditch network; - Fuels, lubricants and hydraulic fluids for equipment used in the construction site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to current best practice; - Vehicle or equipment maintenance work will be carried out in a designated area on the Site. In the event that refuelling is required outside this area a spill tray will be employed during the refuelling operation; - Adequate drip trays and spill kits including absorbent booms and other absorbent material will be maintained onsite; - All contractor workers will be appropriately trained in the use of spill kits; - Any sediments impacted by contamination will be excavated and stored in appropriate sealed containers for disposal offsite in accordance with all relevant waste management legislation;

	- Appropriate containment facilities will be provided to ensure that any spills from vehicles are contained and removed offsite. Adequate stocks of absorbent materials, such as sand or commercially available spill kits shall be available; - The Contractor shall ensure that all personnel working onsite are trained in pollution incident control response; - A regular review of weather forecasts of heavy rainfall is required; - No storage of hydrocarbons or any polluting chemicals will occur within 10m of watercourses or surface water features; - Cabins, containers, workshops, plant, materials storage and storage tanks shall not be located within 10m of any watercourse; - Fuel and oil stores including tanks and drums will be regularly inspected for leaks and signs of damage; Drip trays will be used for fixed or mobile plant such as pumps and generators in order to retain oil leaks and spills; - Only designated trained operators will be authorised to refuel plant onsite; - Periodic visual monitoring will be undertaken by the Contractor during the construction works to ensure that the above measures are effective; and, - Additionally, the contractor will maintain a drainage inspection regime to ensure there is no negative impact to the drainage patterns at the site.

9.3.15. As noted, a key concern raised by appellants was the potential impact of the proposed development on surface and groundwater quality. Furthermore, it is contended that the Applicant has failed to identify and consider the potential impact of the proposed development on an existing private lake. This private lake is located on a Third Party appellant's landholding and appears to be fed by and hydrologically connected to the appeal site via the Ballintemple Stream. Having examined historic aerial imagery that is available to the Commission and having reviewed the Planning Authority's online planning application register, it would appear this private lake was created c. 2016. Whilst this waterbody may not have been identified within the Applicant's assessment, I am generally satisfied that the various mitigation measures that will be implemented on site during the construction and operational phases of the development will ensure that any downstream receptors will not be adversely impacted by the proposed development. Whilst I note that buffers are proposed to be provided to all watercourses and drainage ditches within the site, the access tracks serving the solar farm will both cross and be located adjacent to the watercourses within Parcel 1a and 2. In this regard, it is my view that a condition be included which requires the installation of silt fences along each bank of the watercourses as a further measure to prevent siltation. These silt fences shall be installed for the duration of the construction works and shall be monitored throughout for their effectiveness. A detailed drainage drawing identifying the location of the silt fences shall be submitted to the Planning Authority

prior to the commencement of development.

9.3.16. I have assessed the proposed development and have considered the objectives as set out in Article 4 of the WFD, which seek to protect and, where necessary, restore surface and ground water waterbodies in order to reach good status (meaning both good chemical and good ecological status), and to prevent deterioration. Having considered the nature, scale and location of the proposed development, I am satisfied that it can be eliminated from further assessment because there is no conceivable risk to any surface and/or groundwater water bodies either qualitatively or quantitatively. The reason for this conclusion is as follows:

- The nature and extent of the proposed development which entails minimal excavations.
- Mitigation measures to be employed during the construction phase,
- The provision of SuDS measures, i.e. natural infiltration between the solar arrays, the planting of a species-rich grassland habitat and permeable surface for the access tracks which will result in road surfaces filtering any sediment-laden surface waters prior to soakage to groundwater,
- The inclusion of a condition requiring the installation of silt fences along the 2 no. watercourses within the site,
- The findings of the Chapter 7 (Water) of the Applicant's Environmental report including the Flood Risk Assessment.

I conclude that on the basis of objective information, that the proposed development will not result in a risk of deterioration on any water body (rivers, lakes, groundwaters, transitional and coastal) either qualitatively or quantitatively or on a temporary or permanent basis or otherwise jeopardise any water body in reaching its WFD objectives and consequently can be excluded from further assessment. (See Appendix 5 for WFD Screening Matrix).

9.4. Biodiversity

9.4.1. This section concerns general biodiversity and in particular the potential for impacts on habitats and species which are not qualifying interests of European Sites. It is noted that the site itself does not have any specific natural heritage designations. The nearest is the Killough Hill proposed Natural Heritage Area (pNHA) located c. 5km to

the north. The site is not connected to same and there are no other pNHAs or NHAs of relevance due to a lack of any source-pathway receptor. I note that concerns regarding the potential impacts on biodiversity have been raised by a number of Third Party appellants. Similar issues were raised by observers at application stage. In addition, commentary was provided from An Taisce, the Heritage Council and the Planning Authority's Environment Section during the course of the application which I will discuss in further detail below.

Habitats

9.4.2. In terms of habitats on site, detailed habitat mapping is provided within Appendix D of the Applicant's Environmental Report. The appeal site is characterised by improved agricultural grassland (GA1), tilled land (BC3) and arable land (BC1). Treelines (WL2), hedgerows (WL1) and watercourses and drainage ditches (FW2 and FW4) have been identified as locally important receptors. A small area of mixed woodland (WD1) (Parcel 5), wet grassland (GS4) (Parcel 2, 4 & 5) and sedge swamp (FS1) (Parcel 3) are also present on site and were screened in for further consideration within the Environmental Report. The Improved agricultural grassland (GA1) was the dominant habitat within the site. At the time of the Applicant's study, 3 no. arable fields (BC3) had recently been tilled and prepared for planting resulting in the area being species poor. There were also 4 no. arable crop fields (BC1) present within the site, which were left fallow at the time of the Applicant's site inspection. As these areas had been cultivated and managed, there was limited botanical diversity present. All 3 no. habitats were screened out for further assessment due to the limited biodiversity value. It is noted that no plant species protected under the Flora Protection Order were observed on site. Furthermore, no invasive species were identified on the site during the field surveys.

9.4.3. As noted, the Applicant has sought to retain all hedgerows and tree lines, where possible. Section 6.7.1.2 (Protection of Retained Hedgerows / Treelines) of the Environmental Report sets out the various mitigation measures that will be employed to protect the hedgerows and tree lines that border and bisect the various land parcels. In addition, mitigation measures will be implemented to safeguard the drainage ditches and watercourses on site which I have discussed in Section 9.3 of this report.

Following the Planning Authority's FI request, the Applicant proposed revisions to the site access points so that adequate sightlines could be achieved in accordance with the requirements of the Development Plan. This resulted in the requirement to remove c. 660m of hedgerows across the site. I note that the appellants in this case have raised significant concerns with respect to the loss of this hedgerow habitat given its importance for nesting and foraging for various species (notably bat, badger and bird species). Concerns are also raised regarding the tree loss in the absence of an arboricultural assessment. Within their report on file, An Taisce have noted that if the loss of the hedgerow in question is unavoidable, supplementary planting should utilise native species to ensure the retention of genetic resilience, eliminate the importation of species which may harbour disease (Ash Dieback, Hawthorn Firebligh) and the utilisation of species which have evolved symbiotically with native pollinators and other wildlife.

9.4.4. In support of the application, the Applicant has submitted a Biodiversity Management Plan *(*BMP*)* which identifies a number of opportunities for providing biodiversity enhancement within the development's design. As part of the BMP, 3 no. areas within the site have been designated for biodiversity enhancement which include:

- Biodiversity Area 1: (Parcel 1 – Western Area) This area is ca. 3.6ha in size and comprised of tilled crop lands, being bordered to the north, east and west by hedgerows;
- Biodiversity Area 2: (Parcel 1 – Southern Area) This area is ca. 0.7ha in size and located in an agricultural grassland field, bordered to the north and west by hedgerow / treelines;
- Biodiversity Area 3 (Parcel 3): This area is ca. 0.3ha in size and located within an arable field, bordered to the north and east by hedgerows. See Figure 5-1 for the location of the Biodiversity Areas

Within these designated biodiversity areas, it is proposed to create an area with a mix of cereal and wildflower plants to provide cover and food for seed eating birds and other bird species. A wild bird cover will be created around the perimeter of the Biodiversity Area 1 and 2 and it is confirmed that there will be no solar panels placed in these areas. In addition, it is proposed to include wildflower strips / areas using the 'Green Hay Transfer' method within Biodiversity Areas 1 and 3. This method involves

transferring cut green hay from a species-rich meadow (donor field) to spread on a cut species-poor field (receptor field). As discussed previously, it is proposed to convert the lands under the panels to a species-rich grassland habitat with a varied sward structure. It is noted that the proposed species composition of the seed mixture is specified in Table 5-2 of the BMP and the grassland fields will be allowed to naturally recolonise with local botanical species from the existing seed bank. It is indicated that there will be no fertilisers, pesticides or herbicides used within the site in order to maintain suitable soil conditions for natural recolonisation. Furthermore, the BMP confirms that it is proposed to allow areas currently established with wet grassland habitat and the areas around the onsite drainage ditches / watercourses to be naturally recolonised by local wet grassland botanical species from the existing seed bank. The objective is to enhance the quality of existing habitats on site and create a diversity of habitats. In order to protect the wet grassland, it is proposed to:

- Exclude sections of wet grassland from planting and any future development;
- Ensure that the fencing will allow for mammal movement; and,
- Ensure that no machinery enters into this area. In addition, there should be no spraying of pesticides or fertilizers within these habitats and any noxious weeds should be controlled by pulling or spot treatment

9.4.5. In terms of tree and hedgerow enhancement, a total of c. 1,836m of additional planting will be undertaken as part of the proposed works along c. 9,786m of the existing hedgerows. It is indicated that the additional hedgerow planting will provide shelter and a source of food for a variety of species throughout the year including birds, small mammals, amphibians and butterflies. It will also allow movement of species such as badger and other small mammals across the site and provide connectivity to the wider landscape. It is confirmed that the new areas of hedgerow will comprise inter-planting and under-planting of native species in existing hedgerows, where required, to provide a well-structured hedgerow and dense screening. It is noted that a height of 3-4m will be established along all hedge / treelines after 2-3 years (3-4 growing seasons). As noted, the Applicant omitted Parcel No. 3 at FI stage. As part of the revised proposals, a new area of native woodland planting (c. 9,500sq.m.) is proposed in the northern corner of Parcel 4. Furthermore, an additional biodiversity area is proposed in the south-eastern corner of Parcel 1b. In order to mitigate the loss of the hedgerow habitat (i.e. 660m), a new native hedgerow will be planted within the site along the roadside

boundaries at each entrance. Notwithstanding the concerns raised by the appellants, I am satisfied that the incorporation of the mitigation measures proposed within the Environmental Report and implementation of the various biodiversity enhancement measures as set out within the BMP will ensure that the proposed will not have a significant impact on habitats within the site. However, it is considered that there is scope to further reduce the extent of hedgerow removal along the northern roadside boundaries of Parcels 1b and 2. This is discussed in further detail below.

Badgers

9.4.6. The appellants have raised concerns regarding the adequacy of the Applicant's surveys in terms of their timing and methodology, which they deem to be contrary to DoEHLG guidance (2010). Noting the Applicant's proposals for pre-commencement surveys, an appellant's Ecologist has also confirmed that no derogations are in place for the confirmed badger setts and they refer to the recent Court of Justice of the European Union (CJEU) judgement (Hellfire Massey C166/22) which held that derogation should be applied for and granted if needed, before planning consent. Within the Applicant's Environmental Report, it is noted that the surveys undertaken (28th June 2023 and 14th December 2023) identified signs of badger activity including badger scat and mammal paths along with an active badger sett and outlier setts (i.e. 2 no. outlier badger setts identified within Parcel 3 and 1 no. outlier badger sett identified in Parcel 4). Furthermore, the report notes that the well-established hedgerows / treelines provide suitable foraging habitat and connectivity to the wider landscape. It is therefore considered highly likely that badgers utilise this area for sett construction, commuting and foraging purposes.

9.4.7. As part of the Planning Authority's FI request, the Applicant was requested to undertake a comprehensive badger survey which accounts for the location and quantum of badger sets found within the site. In response, the Applicant submitted a Badger Survey - Technical Note which confirmed that Parcel 3 was excluded from further surveying given the revisions to the site layout. An updated badger survey was conducted (19th July 2024) and it is confirmed that the outlier badger sett in Parcel 4 was identified again with fresh digging. The Technical Note also indicates that no other large mammal holes or setts were found in the area following a detailed search. In addition, no badger setts were identified within any of the other land parcels within the

site. It is concluded that the implementation of the mitigation measures for terrestrial mammals (i.e., badgers) as outlined in Section 6.7.1.3 of the Environmental Report will ensure that no harm comes to this species. These measures include further pre-construction surveys to confirm the absence of any new setts, the provision of a 30m buffer with no infrastructure to be implemented around historic sett entrances, no works to be undertaken within 50m of any active sett and no blasting or pile driving within 150m of any active setts during the badger breeding season. I note that the mitigation measures proposed are generally consistent with the NRA 'Guidelines for the Treatment of Badgers prior to the Construction of National Road Schemes' and are appropriate in this instance in my view. Whilst I note that the mitigation refers to restrictions regarding blasting/piling, I am conscious of the nature of the piling required for the proposed development which is different to that as prescribed within the NRA Guidelines (i.e. typical to road projects).

9.4.8. In terms of the adequacy of the Applicant's survey work, I acknowledge that badger surveys are significantly constrained by vegetational cover and season and are best conducted from November to April. It is noted that badger territorial activity is high from mid-January to March and surveys at this time are most efficient in identification of badger paths, latrines and feeding signs. Notwithstanding the appellant's concerns, it is confirmed that site was surveyed in December within the optimal period. Furthermore, pre-commencement surveys are to be undertaken prior to the commencement of development to identify if there are any new setts on site in the intervening period. Whilst the appellant refers to the requirement for a derogation to be approved prior to consent, I note that the Applicant is not proposing to remove the identified outlier sett and there are no solar arrays proposed within this portion of Parcel 4. Irrespective of this, derogations relate to certain animal/plant species under the EU Habitats Directive. Updated guidance has been published from DHLGH on Regulation 54 derogation process for protected species listed on Annex IV (Applications for Regulation 54 Derogations for Annex IV species, Guidance for Applicants, Version 1.0, 1 July 2025). In summary, this guidance requires any derogation to be granted before the approval of the consent to the proposed activity. However, badgers are a protected species under the Wildlife Act 1976, as amended (the "Wildlife Acts"). It is understood Section 23(7)(iv) of the Wildlife Acts

provides that the breeding place or resting place of any protected animal (in this case badger) may be interfered with pursuant to and in accordance with a grant of planning permission. Overall, I am satisfied that the proposed development will not result in a significant adverse effect on badgers. In coming to this conclusion, I have also had regard to proposals to create new foraging and commuting habitats as outlined within the BMP. As part of the Applicant's proposals, mammal gates will also be installed along the perimeter fence to ensure fencing does not inhibit the movement of wildlife, and to allow movement of badgers, otters, and small mammals across the development. The proposed development is therefore acceptable in my view.

Bats

9.4.9. Within the Applicant's Environmental Report, it was considered likely that bats will utilise the site and the wider area given the presence of habitats which are suitable for commuting, roosting and foraging purposes. It was noted that no buildings suitable for roosting bats were identified within the site. In addition, all hedgerows and treelines were proposed to be retained, and no lighting was proposed. For this reason, bats were screened out for further assessment within the Environmental Report and no species-specific mitigation was deemed necessary. However, it is evident that dedicated surveys for this species were not undertaken by the Applicant. As part of the Planning Authority's FI request, the Applicant was therefore requested to undertake an updated bat survey on foot of the recommendations of their Environment Section. It is noted that the appellant's have raised concerns with respect to the adequacy of the Applicant's survey due to their timing and their limited nature. It was also contended that the Applicant's consultant did not follow the latest relevant guidance documents from the NPWS (i.e. 'Bat mitigation guidelines for Ireland v2' manual by Marnell et al. (2022)). The loss of the existing roadside hedgerows (and trees) to satisfy the sightline requirements was also raised as a significant concern, given the roosting and foraging potential within these areas of the site. It was also noted that there are conflicting statements in the Bat Report, insofar as it is stated that there are habitats of value for foraging and commuting but not for roosting. However, Figure 3.2 of this report identifies features suitable for roosting bats.

9.4.10. As part of the planning application, site walkovers were undertaken by suitably

qualified and experienced Environmental Ecologists on 28th June 2023 and 14th December 2023. As part of these walkovers, an assessment was carried out on the suitability of habitats within the site to support roosting, foraging and commuting bats. Within the updated Bat Report, the site was assessed again by Environmental Ecologists during a daytime walkover survey on 22nd July 2024 in relation to potential bat roosting potential, foraging habitat and potential commuting routes. It is noted that all trees within the site were assessed for the presence of features that could be utilised by roosting bats using close-focusing binoculars. Furthermore, the following surveys were undertaken:

- 1 no. dusk emergence and nighttime bat walkover ('NBW') survey on 13th August 2024, whereby Environmental Ecologists surveyed separate areas of the site. Three predetermined vantage points ('VP') (VP1, VP2 and VP3) took place for one hour and 15 minutes and were designed to survey all trees identified as having Potential Roost Features ('PRFs') during the daytime bat walkover survey for bat emergence and had the aim of determining whether or not bats were utilising the trees with PRFs for roosting purposes.
- After the emergence survey, three predetermined transects (T) (T2, T3 and T4) took place for one hour. Two other predetermined transects (T1 and T5) took place for the full two hours and 15-minute duration of the survey as it was not deemed necessary to survey any trees for emergence in these areas of the site.
- Four (4) no. passive bat detectors (SM4s) were placed on various hedgerow / treelines around the site that were deemed potentially important flight path and foraging habitats for bats and were left in specific locations for a specified period of time (12 nights).

9.4.11. It is noted within the Bat Report that the daytime bat walkover survey identified 11 no. trees with PRFs, and the onsite habitats were identified to provide suitable flight path and foraging habitat for bats. Eleven (11) no. trees were identified as having low bat roost potential based on the presence of dense ivy and loose bark, cracks and crevices. Figure 3-1 and 3-2 of the Bat Report identifies the location of the trees with PRFs which are concentrated along the northern roadside boundary of Parcels 1a and 2. Therefore, it was deemed necessary to survey the site for bat emergence and

activity. It is confirmed in Section 3.2.3 of the Bat Report that the dusk emergence survey did not record any bats roosting in the surveyed trees. However, bats were observed using the boundary hedgerow / treelines for foraging and commuting purposes which was evident from the results of the VP and static monitoring surveys (see Table 3-3, 3-4, 3-5 and 3-6). In summary, the Bat Report indicates that the site is of high local value to foraging and commuting bats. In addition, the following can be concluded from the results of the dusk emergence, NBW survey and static monitoring surveys:

- Common pipistrelle, soprano pipistrelle, Leisler's bat, brown long-eared bat, and Myotis species were recorded commuting / foraging within or above the site;
- The most frequently encountered species of these were common pipistrelle, followed by soprano pipistrelle and Leisler's bat;
- Overall, low levels of brown long-eared bat and Myotis species were recorded;
- All of the species recorded are relatively wide-spread and the most commonly encountered species within Ireland; and,
- No bats were identified to be roosting within the trees onsite. Based on the levels of activity and movement of the bats recorded during the surveys, it is considered that the Site is of high local value to foraging and commuting bats.

9.4.12. In terms of potential impacts, it is acknowledged within the Bat Report that the proposed development will result in the loss of c. 660m of hedgerow / treeline to facilitate the sightlines for the site. Additionally, there may be some loss of potential foraging habitat during the installation of solar panels within the grassland onsite. However, there will be no loss of roosting habitat associated with the proposed development as surveys did not identify any bat roosts within the site or within the trees to be removed (i.e. 11 no. trees along the northern boundary of Parcel 1b and 2). It is noted that bats were observed primarily foraging and commuting over the hedgerow / treelines that border the site, which will be retained and protected for the lifetime of the proposed development with a minimum 5m to be maintained between hedgerows and installed solar panels, ensuring no disturbance. In addition, it is proposed to undertake enhancement planting (c. 1,836m) to both supplement and strengthen the existing hedgerows and provide suitable foraging and commuting habitat. Furthermore, the Applicant's BMP outlines opportunities to enhance the site

for bat species which includes the creation of designated 'Biodiversity Areas' that include wildflower strips, wild bird cover, species-rich grassland, wet grassland and woodland planting and the provision of wildlife shelters including bat boxes. In terms of impacts associated with lighting, it is acknowledged that artificial and excessive lighting has the potential to impact on commuting and foraging bat species. However, it is noted that no lighting will be installed as part of the proposed development, and any temporary lighting used during the construction phase will not be turned on at night and will be directed away from hedgerow / treelines to reduce light spillage onto the mature treelines. Therefore, it is contended that there will be no impacts on bats from light spillage. It is noted that mitigation measures for the protection of trees, hedgerows and treelines have been included within Section 4.2.2 of the Bat Report.

9.4.13. As detailed, the appellants have raised concerns regarding the adequacy of the Applicant's surveys which they contend are not in accordance with the most recent NPWS guidance. In addition, concerns are raised regarding the loss of the existing hedgerow habitat as a result of the site access requirements. As per the NPWS Guidance**,** a bat detector survey at dusk or dawn during the summer may help to produce evidence of bats if an inspection suggests that the tree has suitable cavities or roost sites. Whilst I acknowledge that several dawn or dusk surveys spread over a period of several weeks during the summer period will greatly increase the probability of detecting significant maternity roosts, I note that the trees identified for removal offered low roost potential. Most trees were included due to the presence of ivy while 3 no. trees had loose bark or cracks and crevices as PRFs (i.e. Tree No. 1, 4 & 5). In addition, the Applicant's Bat Report is supported by static monitoring, the results of which were discussed above. The NPWS Guidance recommends static monitors to be left in place for a minimum of one week, but for larger projects it can be useful to leave them in situ for longer. In this instance, they were installed for a period of 12 days. Overall, I am satisfied that the Applicant's surveys have been undertaken in the appropriate season and the assessment is acceptable and proportionate given the nature of the proposed development and the extent of habitat loss required. It has been adequately demonstrated that the proposal will not result in the loss of any bat roosts, and it is considered that the biodiversity enhancement measures will ensure that the proposed development will not have a significant negative impact on the

commuting and foraging habitat for bats. Subject to compliance with the various mitigation measures set out within the Bat Report, I deem the proposal to be acceptable. However, it is my recommendation that an updated BMP be submitted prior to the commencement of development which has regard to the revised site layout on foot of the FI revisions.

Birds

9.4.14. It is noted within the Applicant's Environmental Report that the site was assessed for its potential to support important assemblages of birds of rare or notable species and the survey aimed to identify and examine areas where wintering and breeding birds might occur. Any disused nests or potential nesting habitats onsite were noted. During the survey, a total of 18 no. bird species were recorded within the site which included 16 no. Green BoCCI listed non-Annex I species, 1 no. Amber BoCCI listed non-Annex I species (i.e. Starling) and 1 no. Red BoCCI listed non-Annex I species (i.e. Kestrel). It was noted that no designated species of note were identified in the survey. The report indicates that the areas of hedgerow / treelines, wet grassland and scrub habitats provide both suitable nesting sites and foraging areas for a range of common bird species. However, the arable crop fields are not considered to be suitable for nesting bird species given the fact that it is intensively managed. Although the hedgerow / treelines will be protected, it is acknowledged that birds may be subject to some temporary disturbance during construction. However, it is considered that the impacts are not likely to be significant as birds are highly mobile and therefore will move away from disturbances to suitable habitat within the vicinity of the site. It is therefore concluded that should any birds be disrupted during any of the works, they will move to a suitable area elsewhere. In order to mitigate any potential disturbances to bird species during the construction phase, mitigation measures (Section 6.7 of the Environmental Report) will be put in place to ensure that no impacts occur to breeding birds.

9.4.15. A key concern raised by a number of appellants is the potential impact of the proposed development in terms of habitat loss for Snipe, a red listed species. It is indicated that Snipe have been observed on Millburn farm and that similar areas of the appeal site offer a prime habitat for this species (wet grassland (GS4) and reed swamp (FS1)). Concerns are also noted regarding the potential for disturbance due to construction

related activity. Furthermore, the adequacy of the Applicant's survey work has been called into question and one appellant has indicated that a wintering bird survey should have been undertaken for the proposed development. In terms of potential Snipe habitat, it is noted that a reed and large sedge swamp (FS1)) was located within Parcel 3. However, this parcel was omitted from the proposed development at FI stage. Therefore, there will be no impacts to this potential habitat. Whilst some areas of wet grassland (GS4) have been identified in Parcels 2, 4, and 5, these are limited in size, and I note that the Applicant's BMP has included proposals to allow these areas to be naturally recolonised by local wet grassland botanical species from the existing seed bank. I note there are no Special Protection Areas (SPA) within the proposed development's Zone of Influence, with the nearest being the Slievefelim to Silvermines Mountains SPA (004165) (c. 25km) and the River Nore SPA (004233) c. 30km. Having regard to the results of the Applicant's survey, the inland nature of the site, the distance of the site from any SPAs and outside the core foraging range their qualifying interests (Hen Harrier and Kingfisher), the nature of habitats on site comprising primarily of improved agricultural grasslands, the Applicant's proposals to retain the majority of boundary hedgerows (exception of the c. 660m roadside hedgerows) and the various biodiversity enhancement measures proposed within the BMP, it is considered that the Applicant's assessment is adequate and proposed development will not have a significant impact on bird species subject to compliance with the various mitigation measures prescribed in the Applicant's Environmental Report. I am therefore satisfied that the proposed development is acceptable.

9.4.16. It is noted that the appellant has raised concerns associated with the 'lake effect', whereby the solar arrays may lead birds to collide with the surfaces as they perceive it to be a body of water. It is also noted within an appeal that evidence suggests that aquatic invertebrates may mistake panels for waterbodies and may inadvertently lay eggs on solar panels which leads to reduced reproductive success, thereby reducing the food availability for birds, and bats. As detailed in the Applicant's response to the appeals, it is noted that the proposed solar panels are set at 10 – 30 degree angles which will ensure that water will not collect on the surface. In addition, the surface of the solar panels will be coated with anti-glare, thereby removing the perception of a water surface. Furthermore, it is noted that the type of solar panels proposed will be 'grid-formed' panels which contain anti-reflective films that ensure that reflection of

polarized light will be fragmented, significantly reducing reflection occurring from the panels. I am also conscious of the guidance from Nature Scott (NatureScot pre-application guidance for solar farms, June 2025) which indicates that published evidence suggests the overall risk of collision is low for solar PV proposals and it is advised there is no need for a collision risk assessment. In this regard, I am satisfied that undue impacts will not arise.

Other Species

9.4.17. The appellant contends that no credible amphibian surveys were conducted to inform the Applicant's environmental assessment and no assessment or mitigation for amphibians is provided. As detailed within the Environmental Report, the site was assessed for its potential to provide sheltering, foraging and breeding habitat for amphibians in line with the NRA, now TII, 'Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes,'. It is noted that the NBDC does not hold any records of amphibian species within 2km of the site, and no evidence of amphibians were noted onsite as part of the surveys undertaken. However, the slow-moving sections of the drainage ditches within the site are considered to provide suitable habitats for native species of amphibians. Although no observations of the common frog spawn (Rana temporaria) or smooth newt (Triturus vulgaris) were made within the site, the report notes that it is possible that they may utilise the network of ditches. In addition, the agricultural grassland may be suitable for amphibians during the terrestrial phase of their lifecycle. Whilst Amphibians were screened out for further assessment within the Environmental Report, it is confirmed that all drainage ditches and onsite watercourses will be protected and retained as part of the development works. Therefore, it is not considered that any impacts will occur to amphibians and no mitigation measures are required. Furthermore, it is indicated that proposed development includes measures to enhance the site for amphibians as set out in the BMP. These measures include hedgerow enhancement and the provision of habitat piles to create refuges for breeding amphibians. Nonetheless, it is confirmed that if any amphibians are discovered onsite during the construction works, all works within the affected area will cease and the project ECoW will be consulted. Whilst I am satisfied that due regard has been given to amphibians within the Applicant's assessment, it is noted that common frog spawn (Rana temporaria) and smooth newt (Triturus vulgaris) are protected under the Schedule V

of the Wildlife Act, 2000 (as amended). Given that a potential habitat for these species exist on site, it is considered that the finalised CEMP should prescribe this species-specific mitigation (i.e. ceasing of construction activity and consultation with the ECoW), the details of which shall be agreed with the Planning Authority prior to the commencement of development.

9.4.18. It has been noted by an appellant that there is potential for other protected mammals to occur on the proposed development site, including Stoats, Pine Martens, Hedgehogs, and Irish Hares. However, no surveys or assessments for these species have been provided by the Applicant. Within the Environmental Report, it is noted that mammal runs were observed during the surveys and evidence of other species utilising the site including rabbits and foxes were noted in the form of visual sightings, small mammal holes and droppings. Additionally, it is confirmed that the onsite habitats provide suitable foraging habitats and connectivity to the wider landscape for a range of commonly occurring species such as those listed above as well as field mice, hedgehogs, etc. Notwithstanding the appellant's concerns, I would agree with the Applicant that the proposed development will not give rise to any significant impacts to other fauna, given that the key habitat features will be retained and safe guarded as part of the development and standard mitigation for the protection of terrestrial mammals will be put in place.

Conclusion

9.4.19. Overall, I consider that adequate detail has been provided on the biodiversity of the site and that it has been prepared by competent persons in accordance with relevant guidelines. Having regard to the location of the site in an area characterised by predominantly improved agricultural grassland, tilled and arable lands and the integral design measures, standard best practice measures and mitigation measures set out within the Environmental Report, Bat Report and Badger Technical Note and the various biodiversity enhancement measures included within the BMP, I am satisfied that significant impacts will not arise on biodiversity and that the impacts on the ecology of the site and wider area would be acceptable.

9.5. Residential Amenity

Glint and Glare

9.5.1. I note that a number of appellants have raised concerns with respect to the potential for glint and glare impacts. It is contended that the impacts would be exacerbated due the topography of the landscape. A Glint and Glare assessment was carried out by Macro Works Ltd. and is included within Chapter 10 of the Applicant's Environmental Report. The objective of the assessment is to determine the potential for solar reflectance effects upon dwellings and transport route receptors within 1km of the proposed development. It is noted that the potential for hazardous effects upon aviation activities in the wider area was also considered. In terms of reflectance, Section 10.3.2 of the assessment notes that photovoltaic solar panels are by no means a highly reflective surface. They are designed to absorb sunlight and not to reflect it. Furthermore, as technology has improved, the addition of an Anti-Reflective Coating (ARC) on panels has become an option. The assessment notes that models were initially run based on utilising a standard solar panel type that does not contain ARC. This assessment included a total of 95 no. dwellings, the location of which are identified in Figures 10.8 and 10.9 of the Environmental Report. The computer analysis using terrain-only data (DTM) identified that glint and glare would be geometrically possible at a total of 70 no. dwellings. Further analysis, taking account of the existing screening inherent across the study area (using a digital surface model - DSM) and onsite verification of the analysis results, indicated that 22 no. dwellings would actually likely have the potential for glint and glare prior to mitigation when using standard panels. Following post mitigation planting establishment, a total of 17 no. dwellings could have the potential to incur glint and glare effects using standard panels that would occur either early morning or evening from low angle sun light. However, it is confirmed within the assessment that the Applicant has committed to using ARC on all the solar panels. As detailed in Table 10-3 (Summary of Results – Dwellings) of the Environmental Report, the use of ARC on all panels will negate the potential for nuisance glare on all dwelling receptors.

9.5.2. In terms of the transport receptors, the results of the analysis for these receptors which occur within the 'Area of Consideration for Further Analysis' is provided in Table 10-4 of the Environmental Report. As was the case with the residential receptors, models were initially run based on utilising a standard panel type that did not contain an ARC. In total, the assessment included 311 no. road receptor points. The computer analysis

using terrain-only data (DTM) identified that glint and glare would have been theoretically possible at 171 no. receptor points. Further analysis, taking account of the existing screening inherent across the study area (using a digital surface model - DSM) and onsite verification of the analysis results, determined that 29 no. receptor points could actually have the potential for glint and glare prior to mitigation when using standard panels. These road receptor points are situated on local roads in the vicinity of the proposed development. Following post mitigation planting establishment, a total of 25 no. receptors could have the potential to incur glint and glare effects using standard panels that would occur either early morning or evening from low angle sun light. However, it is noted that the use of ARC on all of the panels will negate the potential for nuisance glare on transport receptors.

9.5.3. Subject to the utilisation of ARC panels and the implementation of the proposed mitigation planting, it is concluded within the Applicant's assessment that there will not be any significant nuisance effects from glint and glare at dwellings or road receptors within the study area. Furthermore, there were no aviation receptors identified for assessment. In addition, the Planning Authority have included a condition (Condition No. 8(c)) which shall require the Aplicant to provide detailed glint surveys on an annual basis (2 years post commissioning) in order to confirm that no such glint impact has taken place and shall provide such further mitigation measures if required. Having considered the Applicant's assessment, the various mitigation measures proposed and the condition requiring additional post-commencement surveys, I am satisfied that the proposed development is acceptable and that significant impacts from glint and glare are unlikely.

Noise

9.5.4. In support of the application, a detailed noise survey was completed by the Applicant's acoustic consultants in accordance with the Government of Ireland, Statutory Instrument 549 of 2018 European Communities (Environmental Noise) Regulations, Dublin: Government of Ireland, 2018 (SI 549/2018). This assessment is included within Chapter 8 of the Environmental Report. As part of the assessment, the locality was assessed for 'Quiet Area' status as per SI 549/2018. It is stated that currently, the only recognised methodology for this assessment is within the Environmental Protection Agencies (EPA) noise guidance document NG4. Based on the desk-based

assessment provided within Table 8-1, the locality was not deemed a rural 'Quiet Area'. I note that this finding was brought into question by an appellant. Notwithstanding these concerns, I am satisfied that the appeal site does not constitute a 'Quiet Area' based on its location relative to the population centre of Cashel, existing quarrying facilities within the surrounds and the site's location relative to the M8 motorway. I note that the appellants have also raised concerns regarding the potential noise impacts associated with the construction and operational phases of the proposed development and the failure to undertake a cumulative noise assessment which had regard to the existing quarry activities and the existing wind farm in the wider surrounds. Another appellant noted that the concentration of MV stations and their location to nearby residents which in their view would be in direct contradiction of policy 11-18 of Development Plan.

9.5.5. To evaluate potential noise impacts, local Noise Sensitive Receptors (NSR's) were identified and assessed, the locations of which are outlined in Table 8-2 and shown in Figure 8-2 of the Environmental Report. It is noted that ambient noise monitoring was conducted on 4th and 5th January 2023 in the vicinity of the site and each monitoring location is described and identified in Table 8-3 and Figure 8- 2.

9.5.6. In terms of noise emissions during the construction phase, it is noted that a typical construction programme for a solar PV development of this size will take c. 60 weeks and most of the noise will likely be generated during a 10–40 week period at the beginning of construction when activities such as site fencing, installation of panel rigs, delivery of components, construction and installation of ancillary buildings and transmission cable trenching will be completed. The construction works will consist of four main phases:

- Site Setup;
- Installation of Solar Panel Frame and Arrays;
- Cabling and Ducting; and,
- Connections and Commissioning. Delivery movements and on-site machinery noise will likely occur during Phases 1-3, with peak HGV movements during Phase 2. Construction noise will primarily arise during Phase 1 (refer to Table 8-9).

Noise arising from the construction is predicted to account for the peak construction

noise source, though the installation of the solar array frames, arising from their positioning across the site and the duration of the works on their installation, is predicted to be the primary characteristic noise source arising from the solar farm construction phase.

9.5.7. For the operational phase, the solar arrays will be fixed structures with no moving parts. The generation of electricity occurs during solar loading to the panels in the arrays and that will be transmitted from the arrays to transformer and inverter units by cabling. No operational noise will therefore be associated with the solar arrays. There were 359 no. Inverters and 16 no. MV Stations proposed which have been identified as a potential noise sources and are shown in Figure 8-7 of the Environmental Report. An assessment of the noise arising from each of the noise emission sources, and their reported sound pressure levels is provided in Table 8-11. I note that the overall number of inverters and MV stations have been reduced following the omission of Parcel 3 from the proposed development.

9.5.8. In terms of the noise impact assessment, Section 8.7 of the Environmental Report notes each phase was assessed independently, as the construction and operational phase will not overlap. For the construction phase, all receivers inside the 200m buffer, have been analysed and 58 no. will experience less than a LAeq,1hr of 65dB, due to the distances between receivers and the site boundary. Thirty seven (37) no. receivers will experience exceedances of the LAeq,1hr 65dB limit up to LAeq,T 82dB at NSR08, prior to mitigation. It is stated that these values represent the c. 3-5 days that the plant will be operational on the closest boundary to these properties. I noted that the full results are provided within Appendix F-3 of the Environmental Report. The operational stage noise was assessed from fixed plant with the 359 no. Inverters and 16 no. MV Stations located across the site. Table 8-12 demonstrates that all NSRs will remain below the typical noise limits for daytime (LAeq,T 55dB), with a peak site-specific contribution of 40dB at NSR07. Three (3) no. NSRs are predicted to experience a change from the ambient background of +1 to +2dB. All other NSRs were predicted not to experience a change from the measured ambient. The overall effect, based on the modelled site-specific noise values, the cumulative noise change on ambient was predicted to be negligible as per the IOA-IEMA guidelines.

9.5.9. In terms of mitigation, Section 8.8.1 of the assessment confirms that the Applicant is committed to implementing noise mitigation measures throughout the construction phase which will include the development of a Construction Environmental Management Plan (CEMP), where noise mitigation measures, complaints procedures and monitoring programmes will be clearly defined. Measures include:

- Activities and deliveries to the site to occur only during permitted hours;
- All plant where possible will be low noise rated;
- Where necessary the use of enclosures and noise screens will be used to control noise from plant;
- Evaluation of construction methods to ensure the quietest option will be utilised within 50m of any receptor;
- Positioning of the site compound a minimum of 100m from the closest receptor;
- On-site policy for all plant and equipment, including Site delivery vehicles, to power off rather than to be left with idling engines;
- All plant and vehicles on the Site will be in a fit condition for use, to prevent the addition of noise from maintenance issues;
- Working Method Statements will be developed for the Site Construction Personnel to ensure optimal working procedures are employed, thereby minimising time spent in proximity to receptor; and,
- A Site Representative will be appointed to receive and respond to noise complaints and enquiries during construction by local residents, the Local Authority and any other regulatory body. Relevant details will be provided to the Local Authority prior to construction, and will be made available to third parties, including local residences.

For the operational phase, it is stated that no specific noise mitigation measures will be required as it has been determined that no noise nuisance impacts will occur at the surrounding NSRs. Whilst I acknowledge that there are 4 no. NSRs that have the potential to result in an exceedance of the 65dB LAeq,T construction limit during the construction phase, I note that the impact will be temporary and short-term and would generally be controlled as part of the standard and best practice construction measures, as well as specific mitigation measures set out in the CEMP. Noting the separation distances provided between the Inverters, MV Stations and the residential receptors, the operational phase impacts are considered to be negligible. I consider

the conclusions of the Applicant's assessment to be reasonable, and I note that the Planning Authority had no objection to this aspect of the proposed development. Overall, I am satisfied that the proposed development is in accordance with Policy 11 – 18 of the Development Plan which seeks to ensure that new development does not result in significant noise disturbance.

Privacy, Overbearance & Overshadowing

9.5.10. An appellant (Mr. Enda Howley) has raised concerns regarding the potential for overlooking of their property from the proposed CCTV and from persons visiting the site. It is contended that the impact is exacerbated due to the site topography which in their view will unreasonably impact the residential amenity of their property. Similar concerns regarding the locations of CCTV were also raised by Third Parties at application stage. I note that Mr. Howley has also raised concerns regarding the proposed hedgerow planting in terms of its potential impact on the structural integrity of his boundary wall and loss of sunlight noting its location relative to his property. Within the Applicant's Environmental Report, it is noted that the proposed development will be an unmanned facility, which will be remotely monitored by way of CCTV. The CCTV will be monitored via a 24/7 operational team who will alert all relevant personnel in the event of a break-in or vandalism at the site. It is confirmed that the cameras will be focused along the fence line only and will not be focused on any neighbouring dwellings. In addition, it is noted that the proposed development does not include any artificial lighting. The cameras are to be mounted on c. 4m high poles and are provided around the perimeter of each land parcel, the locations of which have been identified on the submitted layout drawings. In response to the appellant's concerns, the Applicant has confirmed that they would be agreeable to a condition to set back the proposed security fencing and CCTV from the appellant's property. It is stated that the provision of this setback would also ensure that the appellants boundary wall would not be damaged by the proposed hedgerow planting. In terms of overlooking from staff, the Applicant has noted that the site will only be visited by personnel at most, 2-3 times per annum (additional trips required for maintenance regime). Therefore, it is contended that the change in land use will not impact the residential amenity of their home by way of overlooking or loss of privacy. I note that the Planning Authority have included a condition (Condition No. 10) which requires all CCTV cameras to be fixed and angled to face into the site and shall not be directed

towards adjoining property or the public road.

9.5.11. Noting the proximity of the appellant's dwelling to Parel 4, the variation in levels between the appeal site and the neighbouring property and the planned height of the proposed hedgerow planting (i.e. c. 3-4m), it is my view that a condition should be included which requires the fencing, CCTV and proposed hedgerow planting to be set back within the site at this location. I note that the setting back of this boundary would reduce the potential for overshadowing of the appellant's property in the evening period. Details of the realigned boundary treatment at this location shall be submitted to the Planning Authority for written agreement prior to the commencement of development. I note that there is an existing mature tree located within Parcel 4 and the Applicant shall ensure that the revisions to the boundary at this location shall ensure that the ongoing viability of this tree is maintained.

9.5.12. Another appellant, Mr Donnacha Looby, who resides in a property to the south of Parcel 4 has raised concerns with respect to the overall visual impact of the proposed development. Overall, I am satisfied that there is sufficient potential to mitigate the potential visual impacts of the proposed development through appropriate siting, design and screening with hedgerow planting, in spite of the proximity of this parcel to his dwelling. I note that consideration of potential visual impacts has been addressed in detail in Section 9.2 of this report.

9.6. Transport

9.6.1. In support of the application, the Applicant submitted a Construction Traffic Management Plan (CTMP) which seeks to ensure that the construction works are organised and delivered in a manner that minimises roadway impact and protects roadway safety and the overall amenity of the surrounding area. In terms of site access, temporary construction compounds are proposed within Parcels 1A and 5 and it is noted within the CTMP that construction staff and all deliveries of construction material (HGVs) will arrive to the construction compounds in these parcels only. It is confirmed that the construction material for Parcel 1B and 2 will then be delivered by either jeep and trailer or tractor and trailer. Access to Parcel 1A and 1B will be via the R691 regional road, the northern access to Parcel 1A and 2 will be via the L5409 local road and access to Parcel 4 and 5 will be via the L1406 local road to the north-east. It

is noted that it was originally proposed to utilise the existing agricultural entrances serving each land parcel. A number of appellant's have raised concerns with respect to proposed development from a traffic management perspective. Similar issues were raised by Third Parties during the course of the application. It has been outlined by appellants that the that the road network in the vicinity of the appeal site is substandard in terms of its horizontal and vertical alignment and is incapable of accommodating the construction traffic that will be generated by a development of this nature. I note that Dulla Together CLG engaged the services of a consultant engineer to review the proposed development. Within their report, they have highlighted concerns regarding the adequacy of the sightlines that were provided at FI stage. In addition, it is contended that a Traffic Impact Assessment and series of road safety audits should have been undertaken for a development of this scale. Other concerns have been raised by the Dualla Village Preschool regarding the safety risk posed by the proposed development to children and staff who rely on the small pedestrian path in the village. The submission further highlights that the junction located proximate to the preschool has previously undergone modifications due to the high number of traffic incidents, thereby underscoring its vulnerability.

9.6.2. During their initial assessment of the application, the Planning Authority was generally satisfied that the proposed development was acceptable from a traffic management perspective. However, concerns were raised regarding the adequacy of the sightlines for each of the site entrances. The Applicant was therefore requested to submit a revised site layout plan clearly indicating the required sightlines at each entrance in accordance with the provisions of Section 6.1 and Tables 6.1 and 6.2 of the Development Plan (Volume 3, Appendix 6, Development Management Standards). As part of the FI response, the Applicant submitted revised sightline diagrams for each entrance and a technical report prepared by their consultant engineer (Road Plan Consulting). The report again noted all HGV traffic will enter and exit the two main site entrances (i.e. Parcel 1A (south) (R691) and Parcel 4 (L1406)) and it was confirmed that visibility splays of 160m at a 4.5m set-back will be now provided at these locations. From my observations on site, I note that visibility from the existing entrances on the R691 are restricted and in my view, the removal of the existing hedgerows at this location to facilitate safe site access and egress is warranted. As noted, new hedgerow planting is proposed at this location to mitigate this loss. An ATC speed survey was

carried out by the Applicant's consultant in December 2023 to determine the speed of the existing local road L5409 which provides access to Parcel 1A (north) and Parcel 2 L5409. The speed survey was taken on a straight section of the L5409 to the north of Parcel 1B. Based on the 85th percentile speed of the local road (72km/h), a sight distance of 128m with a 2.4m setback was considered appropriate at these locations. I note that this was deemed to be acceptable by the Planning Authority and a condition has been included (Condition No. 13) which requires the boundaries to be set back and the sight triangles to be achieved prior to further construction on the site. A condition has also been included which requires the submission of a Traffic Management Plan (TMP) regarding the management of construction traffic and off-site disposal of construction/demolition waste.

9.6.3. Although it is not clearly stated in the Applicant's FI response or specifically addressed by the Planning Authority in their assessment of same, the Applicant relocated the proposed entrances to Parcel 1A (north) and Parcel 2 as part of their amended proposals. It would appear that this was done so that adequate sightlines could be achieved within the boundaries of the appeal site. The entrance serving Parcel 1A was relocated further to the west, with the entrance to Parcel 2 now being centrally located within the roadside boundary (relocated from its western end). As of February 2025, the default speed limit on many local roads throughout the country changed from 80km/h to 60km/h. This is the case with the L5409 local road, where I observed the posted speed limit to now be 60km/h. As per Table 5.5 ('y' Visibility distances from the minor road) of TII Publication DN-GEO-03060 (Geometric Design of Junctions), a sightline requirement of 120m applies to roads which have a design speed of 70km. This aligns with Table 6.2 (Design Speeds and associated Y-Distances) of the Development Plan (Volume 3), where a sightline requirement of 120m would typically apply where a 60km/h speed limit (Design Speed 70km/h) is in place. I therefore acknowledge that reduced sightlines can now be provided from the entrances on the L5409, whereby the sightlines can be reduced from 128m to 120m in each direction and a condition recommending same could be attached to a grant of permission should the Commission deem appropriate. However, I note that the requirement to relocate the entrance to Parcel 2 will result in a significant intervention to the existing roadside boundary. The relocated entrance is located proximate to the existing onsite

watercourse and a number of mature trees along this boundary will need to be felled in order to facilitate the sightlines in each direction. It is noted that the removal of these trees, hedgerow and the existing stone roadside boundary walls was highlighted as a concern by a number of the Third Party appellants. Whilst I am satisfied that the removal of the trees and hedgerow in question is acceptable from a biodiversity perspective, it was evident from my observations on site that the existing hedgerow and treeline offers an effective screening of the site along this local road, particularly towards its eastern extent. At present, there is good visibility in an eastern direction from the existing agricultural entrance given the height of the roadside hedgerow. It is also noted that the eastbound approach to the entrance along this stretch of the L5409 naturally encourages lower speeds because of its alignment. Therefore, it is my view that there is significant merit in retaining the existing entrance as originally proposed. As noted, the CTMP confirmed that the entrance will be used for internal deliveries of construction material only, and it was stated that a flagman will be provided at the entrance to ensure the safe access and egress of construction vehicles. Provided that robust traffic control measures are in place, I am satisfied that the existing entrance can be safely maintained during the construction phase, subject to the agreement of a finalised Traffic Management Plan which can be addressed by way of condition. In terms of the operational phase, it is again noted that it is an unmanned solar farm facility, and it is considered that the proposed development will not result in an intensification of the existing agricultural entrance. Prior to the commencement of development, a revised layout plan of Parcel 2, reverting to the use of the existing entrance shall be submitted to the Planning Authority for written agreement. Subject to compliance with these conditions, I am satisfied that the proposed development is acceptable from a traffic management perspective and will not result in a traffic hazard.

9.6.4. In terms of construction traffic, it is confirmed within the CTMP that all construction vehicles travelling to Parcel 1 will take the R692 westbound exit at the M8 junction 8 and continue towards Parcel 1 via the R692 / L5410 for c. 4km. All construction vehicles travelling to Parcel 4/5 will take the R639 northbound exit at the M8 junction 7 and continue towards Parcel 4/5 via the R639 / L1406 for c. 1km. During the construction phase, it is stated that all HGV traffic travelling to and from Parcel 1 and Parcel 4/5 will have a convoy warning vehicle escorting it to and from the proposed development. It is confirmed that are a number of locations along the L5410 and L1406

where opposing vehicles can pull in to accommodate the passing of an HGV, if required. The convoy vehicle will travel in front of the HGV and direct oncoming vehicles into areas to allow opposing vehicles to pass safely. The construction period is estimated to last for up to 15 months (60 weeks), with deliveries fluctuating within this period as per Table 2.2 (Indicative Construction Phase Details) of the CTMP. The expected number of HGV deliveries is c. 1,600, and the weekly and daily distribution of those deliveries over the 60 week construction period is indicated in Table 2.3 of the CTMP. In terms of construction staff, it is expected that the construction schedule is likely to require no more than 100 staff to be on-site at any one time. On the basis of a predicted vehicle occupancy rate of 0.7, it is indicated that a total of 140 staff movements per day is likely to be generated by the proposed development.

9.6.5. The CTMP has confirmed that deliveries of material to the site will avoid the village of Dualla, with all HGVs to Parcel 1A coming from the M8 Junction 8 to the south and all HGVs to Parcel 4/5 coming from the M8 Junction 7 to the north. In addition, it is noted within the Applicant's FI response (Road Plan Consulting) that materials will be transferred from the two main compounds via smaller vehicles (i.e., vans and trailers) to Parcel 1B (Entrance 1B south), Parcel 1A north (Entrance 2) and Parcel 2 (Entrance 3). Flagmen will be provided at the entrance to Parcel 1A and Parcel 1B to control the crossing of construction materials to Parcel 1B. It is proposed that a convoy system be utilised to move the construction material from the compound at Parcel 1A to Parcel 1A north (Entrance 2) and Parcel 2 (Entrance 3). For the short duration of these convoys, a stop/go system would be put in place along the local road which provides access to Parcel 1A north (Entrance 2) and Parcel 2 (Entrance 3). In addition, flagmen will be provided at the access to Parcel 1A north and Parcel 2 to control the movement of construction traffic. Whilst I note that it is appellant's submission that the proposed development should have been the subject of a traffic impact assessment and has referred to the relevant TII Guidance, I note that this guidance relates to potential impacts to the national road network. In this case, I am satisfied that the Applicant has given appropriate consideration to traffic management. It is acknowledged that there will be some minor disruption during the construction phase (i.e. stop/go system). However, I am satisfied that the proposed development is acceptable given the temporary nature of these impacts and the traffic management measures that are to be implemented. In addition, conditions have included which require the submission

of a finalised traffic management plan. In terms of the operational phase, no significant impacts are identified on the surrounding road network given the nature of the proposed development. The proposed development is therefore acceptable in my view.

9.7. Archaeology

9.7.1. Chapter 11 (Cultural Heritage) of the Applicant's Environmental Report provides a description and evaluation of the potential likely and significant impacts of the proposed development on the site's archaeological, architectural and cultural heritage resources. I note that the site and the surrounding area has a rich archaeological heritage and a total of 5 no. Recorded Monuments are recorded either within or adjoining the application red line boundary. These include:

- TS061-029 located within Parcel 1B,
- TS061-037 adjoining the eastern boundary of Parcel 3,
- TS061-018 located within Parcel 4, and,
- TS053-094 and TS053-072 located within Parcel 5.

There are also a number of Recorded Monuments located within the immediate vicinity of the appeal site. A full description of each land parcel is provided within Section 11.3 (Receiving Environment) of the Applicant's assessment. As noted, the proposed solar farm originally comprised panels laid out over an area of c. 979,885m^2 in arrays within a site area of ca. 129ha. The majority of the solar panels were to be on ground mounted frames, fixed in place using the pile driven steel framing. However, within the buffer areas associated with the onsite monuments (Ref Nos. TS053-094, TS053-072, TS061-037 and TS061-029) and an additional area over Mount O'Meara, c. 65,702m^2 of solar panels were proposed be located on non-intrusive ballast footings. In addition, an appropriate setback was proposed to be implemented around the monument TS061-018 (ringfort) (Parcel 4) and the associated SMR zone with no works proposed within this portion of the site.

9.7.2. Notwithstanding the use of non-intrusive ballast footings, the Planning Authority had concerns regarding the erection of the solar panels within the buffer zones of Ref. Nos. TS053-094, TS053-072, TS061-037 and TS061- 029. It was their view these areas of the site should remain free from development and the Applicant was requested to

amend the proposal accordingly. The Planning Authority also had regard to commentary of An Taisce and the Heritage Council and the Applicant was requested to undertake a widespread geophysical survey of the application site. In response to the FI request, geophysical surveying was undertaken by Target Archaeological Geophysics Ltd. from the 22nd May – 2nd June and on the 12th October 2024 under detection licence 24R0244 (Appendix 6-1 of FI Response). Following the geophysical surveying, the mapping and interpretation were assessed by archaeologist Dr. Maurice F. Hurley and c. 41 test trenches were excavated under Licence 57E0854 (Appendix 6-2 of FI Response). Following the completion of the geophysical survey and the archaeological test trenching, the site layout was amended in order to exclude all registered archaeological monuments and their associated exclusion zones and to exclude all of the archaeological features identified with the appropriate buffers. It is noted that Parcel 3 was excluded from further consideration given its omission as part of the revised layout. A summary of the conclusions and recommendations within the archaeologist's assessment is included as follows:

- The already known Recorded Monuments (TS061-018, TS061-072, TS056-029) are excluded from all elements of the proposed development. Recorded Monument (TS061-094) has also been excluded, notwithstanding uncertainty regarding the identification of the monument's location.
- The summit of Mount O'Meara (see Plate 80), centred on geophysical Anomaly 10 in M6 (i.e. Parcel 5) is excluded within a 50m diameter area surrounding the summit.
- A built structure, a lime kiln in M10/M11 (i.e. Parcel 5) is excluded from the proposed development.
- The archaeological findings from the geophysical survey and test trenches have revealed seven likely or definite fulacht fiadh in trenches 1, 2, 4, 10, 14 (Parcel 2), 16 (Parcel 1B) and 37 (Parcel 5). All seven find spots have been excluded from impact by the proposed development, and buffer areas of 25m in diameter, centred on the find spots have been omitted from any element of the proposed development.
- Other archaeological findings from the testing include three areas of brick kiln waste (Trench 7, 15 (Parcel 2) and 41 (Parcel 4)). It is stated that such waste may have some historical curiosity but is not the type of material that is

generally afforded archaeological priority.

- Two stone outcrops, each in the vicinity of Recorded Monuments, one in Trench 31 (Parcel 5) close to RMP TS-061-072 and one in Trench 40 (Parcel 4), close to RMP TS061-081, are deemed to be adequately protected by the already recommended exclusion areas surrounding the Recorded Monuments.
- A possible ring ditch in M24 (Parcel 5) was identified in the geophysical survey and was identified at the junction of two trenches (Trench 20) as a silt-filled shallow ditch. No charcoal or other evidence clearly relating to human activity was apparent. Notwithstanding, an exclusion zone of 30m in diameter has been designed to safeguard the feature from any potential risk.

9.7.3. Outside of the areas preserved, it is acknowledged that subsurface impacts (physical impacts) may arise due to the construction of small-scale building units namely, the transformer stations, auxiliary transformer stations, inverters, etc. However, it is stated that the buildings associated with the development are all small in scale. It is noted that the solar panels will have a relatively low sub-surface impact as they will be fixed in position using a ground-mounted system consisting of driven steel uprights, consequently avoiding significant ground disturbance. In addition, the machinery utilised in the development of solar farms is generally a 13-tonne digger, 6- tonne piling rig with tracks of 600mm to minimise ground disturbance. Alternatively, a tractor-mounted piling rig will be used. It is stated that these machines are no heavier than those used in modern agricultural practices. As such, the subsurface impacts are relatively unobtrusive and cumulatively low compared to most standard agricultural regimes currently operable in the Irish landscape.

9.7.4. The appellant's have raised concerns regarding the potential impact of the proposed development on the site's archaeological heritage. An appellant has noted that the lack of dimensions on the drawings and the lack of a drawing identifying the monuments and a buffer zone for same could result in the accidental or deliberate destruction of these important national monuments. Although the appellant acknowledges that buffers zones have been identified in the Applicant's report for some monuments, it is stated that these dimensions do not form part of the revised site layout plan and therefore pose an unacceptable risk to these archaeological

features during construction. Given that the buffer zones vary from 25m to 50m, it is contended that there are significant risks that the appropriate buffer zones will not be properly applied or adhered to, and the archaeological features would be clearly at risk. In addition, I note that an appellant (Dualla Together CLG) has engaged the services of Archaeological Management Solutions Cultural Heritage Consultancy Ltd. (AMS) who provided a critique of the Applicant's FI response. Concerns are raised within this report regarding the adequacy of the information supplied in the Applicant's assessment, the failure to consider the proximity of the Rock Cashel to the development site, the failure to provide adequate mitigation strategies for Recorded Monuments, the failure to adequately assess construction and operational impacts in an area where there is a high potential for sub-surface archaeology to occur, failure to consider cultural heritage connections and built heritage (lime-kiln, roadside, field and townland boundaries) and the failure to consider mitigation measures for potential sub-surface impacts for the structures associated with the proposed development.

9.7.5. Following the submission of the Applicant's FI response, a report was received from the Department of Housing, Local Government and Heritage. The report highlights that the Department was generally satisfied with the various recommendations provided within the Applicant's archaeological assessment. However, there is a recommendation for preservation by record of the three areas of brick kiln waste. In addition, there is a recommendation that ground disturbances associated with the construction phase of the project may be subject to licensed archaeological monitoring. Suitable conditions have therefore been recommended by the Department which includes a requirement for the Applicant to submit a report to the Department and the Planning Authority containing the results of the archaeological monitoring and any subsequent required archaeological work. In response to the appellant's concerns, I note that Table 1 of the Applicant's archaeological assessment identifies the various archaeological features identified during the test trenching and the Recorded Monuments within the site boundary. It is confirmed that all monuments and archaeological features and their buffer zones will be excluded from the development and no panels or infrastructure will be placed within these buffer zones. Furthermore, a revised site layout plan which identifies all pre-existing and newly recorded archaeological features, and their appropriate buffer zones have been provided in

Appendix 6-3 of FI Response. In addition, a condition (Condition 7(a)(ii)) has been included by the Planning Authority which requires the Exclusion Buffer Zones to be fenced off for the duration of construction works and no machinery, storage of materials or any other activity related to construction will be permitted within these zones. Furthermore, a condition (Condition 7(c)) requires the submission of a finalised CEMP to incorporate all significant findings from the report submitted as part of the FI response. Having regard to the mitigation measures and exclusion zones proposed, the nature of the proposed works which will have a relatively low sub-surface impact, and the scale of the structures associated with the solar farm, I consider the proposed development to be acceptable from an archaeological perspective. Overall, I am satisfied that the Applicant has provided a thorough assessment and subject to compliance with the conditions as recommended by the Department, I consider the proposal to be fully in accordance with policy of the Development Plan (13 – 4) that seeks to safeguard sites, features and objects of archaeological interest, including Recorded Monuments, National Monuments and Monuments on the Register of Historic Monuments, and archaeological remains found within Zones of Archaeological Potential. The proposed development is therefore acceptable in my view.

9.7.6. As noted above, concerns have been raised regarding the Applicant's failure to consider the potential impact of the development on the Rock of Cashel. It was highlighted by the appellant that the proposed development may jeopardize the State's chances of securing the Rock of Cashel status as a UNESCO World Heritage site. In terms of the more elevated areas of the subject site, the topography of Parcel 5 is dominated by Mount O'Meara rising to a height of 200mAOD. From my on-site observations, intervisibility between the site and the Rock of Cashel was indiscernible. This would align with the ZTV mapping that has been prepared in the Applicant's Environmental Report. Taking into account the intervening distances (i.e. c. 4.8km) between this parcel and the Rock of Cashel and the scale and form of the structures which follow the site's natural topography, I am satisfied that adverse impacts on the Rock of Cashel will not arise. I also note that the proposed panels are to be coated in anti-glare which would further limit their visibility. Appellants have also raised concerns regarding the loss field and townland boundaries and the demolition of historic stone

walls in order to achieve sightlines. I note that the proposal has sought to retain all field and townland boundaries. There is a historic stone wall which currently divides Parcels 4 and 5 and I note that an access track is provided at its south-western end. It is my view that a condition should be included which requires details of the works to this wall to facilitate the access to be submitted prior to the commencement of development. The Applicant shall be required to submit a plan and section diagram to illustrate the relationship between this historic boundary wall and the access tracks. Any intervention to this wall should be limited to the requirement for the width of the access tracks only. In terms of the works to the existing stone wall at the entrance to Parcel 4 & 5 on the L1406, I note that the initial iteration of the submitted documents identified the removal of a portion of the existing boundary wall to facilitate access. However, the sightline diagrams submitted as part of the FI response (i.e. Drawing No. GRE-BOS-C-00) did not identify the requirement to remove the boundary wall at this location. I am therefore satisfied that this matter has been adequately addressed.

9.8. Other Matters

Property Devaluation

9.8.1. I note that a number of appellants have raised concerns with respect to property devaluation. Having regard to my assessment of the application, particularly with respect to residential amenity and landscape and visual impact impacts, and subject to appropriate conditions and adherence to the various mitigation measures, including the implementation of the comprehensive landscaping proposals, I am satisfied that the proposed development would not lead to property devaluation at a level as to warrant a refusal of permission.

Duration of Permission

9.8.2. In this instance, the Applicant has sought a 10-year duration of the permission from the date of grant of planning permission and that the development be granted planning permission for an operational period of 40 years. Having regard to the nature and extent of the proposed development and the material considerations required for its development, including a grid connection and the need for financial certainty before progressing with construction, I am satisfied that 10-year permission is acceptable in this instance. Regarding the requested operational period of 40 years, this appears reasonable in the context of increased knowledge relating to the durability of the

proposed infrastructure. I also note that there is significant precedent for similar operational periods being permitted by the Commission.

Public Consultation

9.8.3. A number of appellants have raised concerns that the Applicant had failed to meaningfully engage with the local community throughout the planning process and it is indicated that no public consultation events were held to address concerns of affected residents. I note that there are no legal obligations under planning legislation for the Applicant to engage in formal consultation with the public for a development of this nature. Notwithstanding this, the Applicant's planning report indicates that they engaged with the local community through the distribution of the 'Boscabell PV Farm' information brochure, including Q&As. In terms of a local Community Benefit Fund, the Applicant also indicates that they will meet the obligations and are supportive of the principles of Government of Ireland "Terms and Conditions for the First Competition Under the Renewable Electricity Support Scheme (RESS1:2020)". Overall, I am satisfied that the legal requirements were adhered to through the application process.

Validity of Application

9.8.4. It is the contention of a number of appellants that the application is invalid. One appellant has identified a number of non-compliances with the Regulations and examples are provided with respect to deficiencies in the sightline diagrams and the application drawings in general, including the absence of contours, levels, dimensions, details of road makeup, identification of tree lines etc. I note that the matter of validation is the role of the respective Planning Authority. Notwithstanding this, I am satisfied that there is adequate information before the Commission in order to comply with the relevant legislative provisions and discharge its statutory function as the competent authority.

Substation & the Requirement for EIA/AA

9.8.5. It is submitted by an appellant that the lack of detail in the assessment regarding the proposed substation is unacceptable and concerns are raised that no consideration has been given to the cumulative impact of the proposed development when taken together with the substation. An appellant submits that the O'Grianna Judgement

(O'Grianna & others v An Bord Pleanála (2015)) applies in this instance as the EIA screening and the NIS submitted does not examine the cumulative impact of the proposed development of the solar farm and substation. It is stated that in the absence of such assessment, the proposed development constitutes project splitting in direct contravention of the EIA and AA directive.

9.8.6. I do not consider that there is a requirement, including in the context of the O'Grianna Judgement, for consideration of the future substation development under this appeal. The grid connection does not form a part of this application and is presently not yet determined or designed. It is not therefore assessed in this report. It will be the subject of a future consent process whereby an application may be made to the Local Authority or the Commission under Section 182A of the Act whereupon screening for AA will be captured, or subject to screening the grid connection may be exempt under Class 26 of the Regulations. As detailed in Section 7 of this report above and Appendix 3 & 4 below, I am satisfied that the proposed development does not require the submission of an EIAR.

Impact on Equine Activities

9.8.7. An appellant has noted that a number of the farmers in the vicinity of the appeal site have horse breeding activities. Concerns are raised that no consideration has been given to the potential impact of the proposed development on these horse breeding activities, particularly the impact of the construction traffic associated with the proposed development. I note that similar concerns were raised by a number of Third Parties during the application stage. In response to the appellant's concerns, the Applicant's planning consultant has noted that the impact of installing and operating a solar farm on horses is similar to that on most other farm animals and does not give rise to particular issues. It is stated that most solar farms installed and operating, are located in rural areas surrounded by agricultural activity, and both uses function side by side without incident.

9.8.8. Whilst I acknowledge that proposed development has the potential to cause disturbance as a result of noise during the construction phase, it is considered that any impact would be temporary and short term. In addition, I am satisfied that the impacts could be mitigated by the measures contained in the final CEMP in relation to

the timing and phasing of construction works. In terms of the operational phase, the proposed development has limited potential to cause disturbance, and I am satisfied that there is no likelihood of significant adverse operational noise effects on equine receptors.

Impact on Existing School

9.8.9. A submission from Dualla Village Preschool has raised concerns that the proposed development poses a severe threat to the natural learning environment provided within the school. In addition, it is contended that the development poses a serious threat to the long-term sustainability and growth of their service. Having regard to the revisions to the layout of the proposed development, namely the omission of Parcel 3, the setback of the proposed development from the school and the traffic management proposals, whereby construction traffic will avoid the settlement of Dualla, I am satisfied that the proposed development will not have an undue impact on the operation of the existing school.

Incompatibility with the Adjoining Quarrying Activities

9.8.10. An appellant's submission has noted that it would be unacceptable that any newly permitted use would undermine the future development of the nearby quarry and concerns are raised that consideration has been given to the impact of dust from the quarry, potential impact of blasting and the lack of cumulative assessments. In response, the Applicant has noted that there should be no adverse impacts on the proposed solar farm from dust and blasting if the quarries are operating within the terms of their consents. In terms of cumulative impacts, it is stated that the nearby quarry is located in a hollow and accessed off a different public road and the two developments will not been seen in the same context. Noting the location, topography and separation distances between the proposed development and the existing quarrying activities, I am satisfied that both uses can co-exist.

10. Appropriate Assessment

10.1. Screening Determination

10.1.1. In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of the information provided by the Applicant in the AA

Screening Report and supporting information, the nature, size and location of the proposed development and its likely direct, indirect and cumulative effects and the source pathway receptor principle between the proposed works and the European site and its conservation objectives, I conclude that the proposed development could result in significant effects on the Lower River Suir SAC (site code: 002137). It is therefore determined that Appropriate Assessment (Stage 2) [under Section 177V of the Planning and Development Act, 2000 (as amended) of the proposed development is required. (see Appendix 1)

10.2. Appropriate Assessment Conclusion: Integrity Test

10.2.1. In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the Lower River Suir SAC (site code: 002137) in view of the conservation objectives of this site and that Appropriate Assessment under the provisions of S177U was required.

10.2.2. Following an examination, analysis and evaluation of the NIS, all associated material submitted, and taking into account observations on nature conservation, I consider that adverse effects on site integrity of the Lower River Suir SAC (site code: 002137) can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects (see Appendix 2). My conclusion is based on the following:

- Detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the Lower River Suir SAC (site code: 002137).
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- The development of a solar PV energy development will, through the design and application of mitigation measures, ensure the preservation of the favourable conservation status of habitats characterised as being in favourable status and ensure that habitat characterised as being in unfavourable status will not be further harmed or rendered difficult to restore to favourable status.
- The development of a solar PV energy development will, through the design and application of mitigation measures as detailed and conditioned ensure the

lasting preservation of the essential components and characteristics of the European Sites.

- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Lower River Suir SAC.

11. Recommendation

11.1. It is recommended that the Commission grant planning permission for the proposed development for the following reasons and considerations and subject to the conditions set out below.

12. Reasons and Considerations

12.1. The Commission reached its decision in accordance with its duties under Section 15(1) of the Climate Action and Low Carbon Development Act 2015, as amended, and the requirement to, in so far as practicable, perform its functions in a manner consistent with inter alia the Climate Action Plan 2025 and the furtherance of the national climate objective, and otherwise had regard to:

a. European, national, regional and local planning, energy, climate and other policy of relevance, including in particular the following:

European Policy/Legislation including**:**

- Directive 2014/52/EU amending Directive 2011/92/EU (Environmental Impact Assessment Directive);
- Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directive);
- Directive 2000/60/EC (Water Framework Directive)

National Policy and Guidance including**:**

- Project Ireland 2040: National Planning Framework (“NPF”), First Revision of the NPF;
- National Development Plan 2021-2030
- The objectives and targets of the National Biodiversity Action Plan 2023-2030;
- Policy Statement on Security of Electricity Supply (November 2021);
- National Energy Security Framework (April 2022);

- National Energy and Climate Action Plan (2021-2030);

Regional and Local Planning Policy, including in particular:

- Regional Spatial and Economic Strategy for the Southern Region (2019-2031);
- Tipperary County Development Plan, 2022-2028;

b. The nature, scale and extent of the proposed development,
c. The pattern of development within the area and context of the receiving environment,
d. Measures proposed for the construction, operation and decommissioning of the development,
e. The range of mitigation measures set out in the Environmental Report and the Preliminary Construction and Environmental Management Plan,
f. The range of mitigation measures set out in the Natura Impact Statement,
g. The measures set out in the Biodiversity Management Plan,
h. The submissions received in relation to the appeal,
i. The documentation submitted with the application and the appeal, and,
j. The Inspector's report and recommendation.

12.2. Proper Planning and Sustainable Development

12.2.1. It is considered that subject to compliance with the conditions set out below, the proposed development would be in accordance with European, national, and regional renewable energy policies and with the provisions of the Tipperary County Development Plan, 2022-2028, would not seriously injure the visual or residential amenities of the area or otherwise of property in the vicinity or have an of unacceptable impact on the character of the landscape or cultural or archaeological heritage, would not have a significant adverse impact on ecology, would not have a significant adverse impact on water quality, would be acceptable in terms of traffic impacts and safety and would make a positive contribution to Ireland's renewable energy and security of energy supply requirements. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

12.3. Appropriate Assessment Stage 1 Screening Determination

12.3.1. The Commission noted that the proposed development is not directly connected with, or necessary for the management of a European Site.

12.3.2. The Commission considered the Screening Report for Appropriate Assessment and all other relevant submissions and carried out an appropriate assessment screening exercise in relation to the potential effects of the proposed development on designated European sites. The Commission noted that the proposed development is not directly connected with or necessary for the management of the Lower River Suir SAC (site code: 002137) and considered the nature, scale, and location of the proposed development, as well as the report of the Inspector.

12.3.3. The Commission agreed with the screening report submitted with the application and with the screening exercise carried out by the Inspector. The Commission concluded that, having regard to the qualifying interests for which the site was designated and in the connections to and distance between the application site, Lower River Suir SAC (site code: 002137) required further investigation.

12.4. Appropriate Assessment – Stage 2

12.4.1. The Commission considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions on file, and the Inspector's assessment. The Commission completed an Appropriate Assessment of the implications of the proposed development for the Lower River Suir SAC (Site Code 002137) in view of the sites' conservation objectives. The Commission considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment. In completing the Appropriate Assessment, the Commission considered, in particular, the following:

i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
ii. the mitigation measures which are included as part of the current proposal, and
iii. the conservation objectives for the European Site.

In completing the Appropriate Assessment, the Commission accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the

potential effects of the proposed development on the aforementioned European Site, having regard to the sites' Conservation Objectives. In overall conclusion, the Commission was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' Conservation Objectives.

13. Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application and as amended by the further plans and particulars received by the Planning Authority on the 16th day of January 2025 and the 24th day of January 2025, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.
   Reason: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be 10 years from the date of this order.
   Reason: Having regard to the nature of the development, the Board considers it appropriate to specify a period of validity of this permission in excess of five years.

3. All of the environmental, construction and ecological mitigation measures, as set out in the Environmental Report (Noise Impact Assessment Report, Archaeology Assessment Report, Glint and Glare Assessment), Biodiversity Management Plan, Natura Impact Statement, preliminary Construction and Environmental Management Plan and other particulars submitted with the application and by way of further information, shall be implemented by the developer in conjunction with the timelines set out therein, except as may otherwise be required in order to comply with the conditions of this Order. In addition, the Applicant shall:

a. Install silt fences on either side of the 2 no. EPA mapped watercourses on the subject site for the duration of the construction period. Details of the proposed silt fences shall be submitted to the Planning Authority for written agreement prior to the commencement of development.

Reason: In the interests of clarity and of the protection of the environment during the construction and operational phases of the 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. The electricity control unit, inverters, and fencing shall be dark green in colour or other dark colour that shall be agreed with the Planning Authority prior to the commencement of development.
   Reason: In the interest of the visual amenity of the area.

6.
   a. The permission shall be for a period of 40 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 maintenance regime for the solar farm and a separate restoration plan, including a timescale for its implementation, providing for the removal of the solar arrays, including all foundations, anchors, inverter/transformer stations, control building, 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.

7. Prior to the commencement of development, the Applicant shall submit a revised Biodiversity Management Plan which has regard to the revisions of the layout of the development as amended by the further plans and particulars received by the Planning Authority on the 16th day of January 2025 and the 24th day of January 2025

   Reason: In the interest of environmental protection

8. All mitigation measures in relation to archaeology and cultural heritage set out in the report by Maurice Hurley, submitted as part of the further information response on 16/01/2025 shall be implemented, except as may otherwise be required in order to comply with the following condition.
   a. The developer shall retain the services of a suitably qualified archaeologist to advise on and establish Exclusion Buffer Zone around the external-most elements of the archaeological sites as listed in Table 1 of the submitted report:
      i. No groundworks of any kind (including but not limited to advance geotechnical site investigations) will be permitted in Exclusion Buffer Zones.
      ii. Exclusion Buffer Zones shall be fenced off for the duration of construction works in the vicinity of the monuments. No machinery, storage of materials or any other activity related to construction will be permitted within Exclusion Buffer Zones.
   b. The developer is required to engage a suitably qualified, archaeologist to monitor all ground disturbance required for this development. No groundworks of any type (including any preparatory/enabling works or advance site investigations) are to take place in the absence of the archaeologist without his/her express consent.

i. The archaeological monitoring programme must be carried out under licence from the National Monuments Service and in accordance with an agreed method statement; note a period of 5-6 weeks should be allowed to facilitate processing and approval of the licence application and method statement.
ii. The method statement will include methodology for the preservation by record of the three areas of brick kilns waste identified in Trenches 7, 15 and 41 during archaeological testing under Licence 24E0854.
iii. Should archaeological material be found during the course of the archaeological monitoring, the archaeologist shall suspend work in the area of archaeological interest pending a decision as to how best to deal with the archaeology. The developer shall be prepared to be advised by the Planning Authority, in consultation with the Department of Housing, Local Government and Heritage (DoHLGH) with regard to any necessary mitigating action e.g. preservation in situ, and/or excavation. The developer shall facilitate the archaeologist in recording any material found.
iv. The DoHLGH and the Local Authority shall be furnished with a report describing the results of the monitoring. All resulting and associated archaeological costs shall be borne by the developer.

c. The final Construction Environment Management Plan (CEMP) shall incorporate all significant findings from the report submitted as part of the further information response on 16/01/2025 including (but not limited to) the location of any archaeological or cultural heritage constraints relevant to the proposed development. The final CEMP shall clearly describe all identified likely impacts— both direct and indirect—and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during all phases of construction activity. It shall have particular regard to the requirements as set out above in relation to the establishment and characteristics of the protective buffer zones that will be implemented to ensure preservation in situ of archaeological sites and monuments.
d. The developer shall retain the services of a suitably qualified archaeologist to advise on an archaeological mitigation plan for decommissioning of the

development, to include mitigation measures for the removal of the solar panels and the protection of the archaeological sites and monuments that are in situ at the site. The Decommissioning Statement for the Proposed Solar PV Array shall be updated to include the location of any archaeological or cultural heritage constraints. It shall clearly describe all identified likely impacts from decommissioning—both direct and indirect—and all mitigation measures to be employed to protect the archaeological or cultural heritage environment during decommissioning works.

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

9. Prior to the commencement of development, the developer shall submit details to the Planning Authority confirming the anticipated megawatt capacity and annual electricity generation of the solar farm.
   Reason: In the interest of clarity.

10.
    a. Existing field boundaries, including trees and hedgerow, shall be maintained and supplemented in accordance with the details submitted save where removal is proposed to facilitate access roadways and sight lines.
    b. All proposed landscaping and planting shall take place in the first planting season following commencement of development and in accordance with the details proposed. The landscaping and screening shall be maintained at regular intervals. Any trees or hedgerow that are removed, die or become seriously damaged or diseased within five years from planting 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. Additional screening and/or planting shall be provided so as to ensure that there is no glint impact on adjoining dwellings as a result of the development. Upon commissioning of the development and for a period of two years following first operation, the developer/operator shall

provide detailed glint surveys on an annual basis to the planning authority in order to confirm that no such glint impact has taken place, and shall provide such further mitigation measures, as the planning authority may specify in writing, to ensure that this is achieved

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

11. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services. In addition:
    a. The access points from the public road shall be provided with a drainage kerb/cattle grid or approved equivalent surface water cut-off drain which shall discharge to a stone filled sump located within the site, the details of which shall be submitted to planning authority for written agreement prior to commencement of development. Surface water from the site shall not be allowed to discharge onto the public road or adjoining properties.
    b. Prior to the commencement of development, details of the proposed service roads/tracks and drains shall be agreed in writing with the Planning Authority. The new tracks shall be surfaced in gravel or hardcore and shall not be hard topped with tarmacadam or concrete.
    c. The Applicant shall monitor the existing drainage network for blockages and other issues that could affect its functionality throughout the lifetime of the solar farm.

    Reason: In the interest of environmental protection

12. The solar panels shall be fixed in place by way of driven pile or screw pile foundations only, unless otherwise authorised by a separate grant of planning permission.

    Reason: In the interest of the long term viability of this agricultural land, and in order to minimise impacts on drainage patterns

13.
    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. Each fencing panel shall be erected such that for a minimum of 300millimetres of its length, its bottom edge is no less than 150millimetres from ground level.

Reason: In the interests of clarity, of visual and residential amenity and biodiversity.

14. The construction of the development shall be managed in accordance with a finalised Construction and Environmental Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. The finalised CEMP shall also include an updated Traffic Management Plan (TMP) which provides details for the management of construction traffic for the duration of the construction phase. The TMP should follow the recommendations of the Traffic Signs Manual 2010 as published by the Department of Transport. The finalised CEMP shall provide details of intended construction practice for the development, including:
    a. location of the site and materials compound(s);
    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, 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. details of appropriate mitigation measures for noise, dust and vibration, and monitoring of such levels;

i. 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;
j. off-site disposal of construction/demolition waste and details of how it is proposed to manage excavated soil;
k. details of on-site re-fuelling arrangements, including use of drip trays;
l. details of how it is proposed to manage excavated soil;
m. means to ensure that surface water run-off is controlled such that no deleterious levels of silt or other pollutants enter local surface water drains or watercourses.
n. Hours of construction.

The finalised CEMP shall also take account of the mitigation measures outlined within the NIS. In addition, the finalised CEMP shall prescribe the species-specific mitigation (i.e. ceasing of construction activity and consultation with the ECoW) for Amphibians.

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

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

15. The Applicant shall revert to the existing agricultural entrance serving Parcel 2, the details of which (revised Site Layout Plan for Parcel 2) shall be submitted to the Planning Authority for written agreement prior the commencement of development. Details of construction traffic management for this entrance shall be provided within the finalised Traffic Management Plan as per Condition No. 12. The proposed roadside hedgerow planting for Parcel 2 shall be implemented upon the cessation of the construction activity.

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

16. With the exception of the entrance to Parcel 2 (as per Condition No. 13), the roadside boundary shall be set back behind the required sight triangles at the proposed site entrances onto the public road. The required sight triangles are

as shown in the site layout plans submitted 16/1/2025. The sight triangles shall be achieved prior to further construction on site. The replacement roadside boundary hedgerow shall be cut back and maintained such that clear, unobstructed sight lines are provided at all times.

a. During the first planting season following construction of the access points native hedgerows shall be planted behind the necessary sightlines at the entrance.
b. The hedgerows shall be managed and maintained such that a minimum height above ground level of 2.5metres is achieved. Where sections of hedgerow and or existing trees within the hedgerows become damaged or die these shall be replaced with shrubs/trees of a similar species.
c. ESB, Telecom poles or services connections on roadside shall be removed and setback to the new fence line in agreement with the service provider.
d. The area between new road fence and road carriageway shall be trimmed and rolled level with the carriageway, top soiled, seeded with grass and thereafter maintained without obstruction, trim and tidy.

Reason: In the interest of traffic safety and in the interest of visual amenity.

17. The Applicant shall submit details (plan and section diagram) to illustrate the relationship between the historic boundary wall dividing Parcel 4 & 5 and the proposed access tracks. Any intervention to this wall should be limited to the requirement for the width of the access tracks only.
Reason: In the interests of built heritage.

18. The fencing, CCTV and proposed hedgerow planting along the eastern boundary of Parcel 4 shall be set back within the site, where it abuts the boundary of the neighbouring residential property. Prior to the commencement of development , the details of the realigned boundary treatment at this location shall be submitted to the Planning Authority for written agreement. The revisions to the boundary at this location shall ensure that the ongoing viability of mature tree in the south-eastern corner of Parcel 4 is maintained.
Reason: In the interests of residential amenity.

19.

a. During the operational phase of the proposed development, the noise level arising from the development, as measured at the nearest noise sensitive location shall not exceed:
    i. An LAeqT value of 55 dB(A) during the period 0800 to 2200 hours from Monday to Saturday inclusive. [The T value shall be one hour.]
    ii. An LAeqT value of 45 dB(A) at any other time. [The T value shall be 15 minutes]. The noise at such time shall not contain a tonal component. At no time shall the noise generated on site result in an increase in noise level of more than 10 dB(A) above background levels at the boundary of the site.
b. All sound measurement shall be carried out in accordance with ISO Recommendation R 1996 "Assessment of Noise with respect of Community Response" as amended by ISO Recommendations R 1996 1, 2 or 3 "Description and Measurement of Environmental Noise" as applicable.

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

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

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

21. All road surfaces, culverts, watercourses, verges, and public lands shall be protected during construction and, in the case of any damage occurring, shall be reinstated to the satisfaction of the planning authority at the developer's expense. Prior to commencement of development, a road condition survey shall be carried out to provide a basis for reinstatement works. Details in this regard

shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In order to ensure a satisfactory standard of development.

22. Prior to works commencing on the site the developer shall satisfy the requirements of Uisce Eireann in relation to their requirements for working in the vicinity of Uisce Eireann assets.

    Reason: In the interest of protecting the public water infrastructure at this location.

23. 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, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

    Reason: To ensure the satisfactory restoration of the site in the interest of visual and residential amenity.

24. 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.

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

Enda Duignan
Senior Planning Inspector

20th August 2025

Appendix 1: AA Screening Determination
Test for likely significant effects (ABP-322270-25)

Screening for Appropriate Assessment Test for likely significant effects	
Step 1: Description of the project and local site characteristics **Case File: ABP-322270-25**	
Brief description of project	Normal Planning Appeal Permission is sought for the solar PV development with a 40-year operational lifespan. The development shall comprise the erection of solar panels on ground-mounted galvanised steel frames, string inverters attached to selected ground-mounted galvanised steel frames, 16 no. transformer units, underground cabling, security fencing, CCTV system with pole mounted cameras, landscaping, 6 no. site entrances with access gates, 2 no. temporary construction compounds and all associated ancillary development works. See Section 2.0 of Inspectors Report.
Brief description of development site characteristics and potential impact mechanisms	It is proposed to construct a solar farm development on land that is currently primarily agricultural pastural lands. A detailed description of the site and subject proposal is provided in Sections 1 and 2 of the Inspector's report and detailed specifications of the proposal are provided in the AA screening report, NIS, Environmental Report and other planning documents provided by the Applicant. In summary, the development originally comprised PV Solar panels laid out over an area of ca. 979,885m^2 in arrays over c. 129ha site. The proposed Solar Farm is estimated to have a capacity of 130MWp. It is noted within the application documents that a separate application will made to the Commission (ACP) for a pre-application consultation in respect of a proposed 110kv substation and grid connection. Following concerns raised by the Planning Authority at further information stage, the Applicant proposed to omit the previously proposed Parcel 3. This reduced the overall size of the site from 129ha to 108ha. A hydrological connection was identified between the site and the Lower River Suir SAC (002137) via the unnamed stream (c. 7.1km downstream) and the Ballintemple Stream (c. 14.4km downstream). The unnamed stream bisects Parcel 1 and flows in a north-westerly direction for c. 670m from the site and discharges into an unnamed river. This unnamed river flows in a north-westerly direction for c. 2.5km and then discharges into the Arglo River, which flows for c. 3.9km and drains into the River Suir. The Ballintemple Stream starts flowing in Parcel 5. According to Ordnance Survey Ireland (OSI) historic 25-inch maps (Sheet: TY053-14), there is a spring located at the start of this stream. This stream flows in a south-easterly direction for c. 9.4km, bisecting through Parcel 2, and drains into the Clashawley River. The Clashawley River forms part of the Lower River Suir SAC c. 5km downstream. The Lower River Suir SAC supports a number of designated species which have the potential to commute and forage within the wider river network outside the SAC boundary. Therefore, consideration is given to this European site and

	its designated features of interest to assess potential impacts arising from water quality impairment as a result of the proposed development.
Screening report	Yes. Prepared by Malone O'Regan Environmental
Natura Impact Statement	Yes. Prepared by Malone O'Regan Environmental
Relevant submissions	A summary of the issues raised in Third Party Observations included: - The Applicant's 'Screening for Appropriate Assessment' fails to comply with the requirements of the OPW (2021b) and DoEHLG (2010) guidelines. - Whilst the AA Screening Report concluded that "significant likely effects" may occur in relation to Otter, Atlantic salmon, Sea Lamprey, Brook Lamprey, River Lamprey and White-clawed crayfish, no species-specific mitigation for these sensitive species are provided within the NIS apart from Otters. - In relation to the Annex I habitat 'Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho - Batrachion vegetation', the possibility of this habitat occurring in the Ballintemple Stream downstream of the site is even considered and then it is "screened out" with the explanation "as per Atlantic salt meadows". The latter is a marine intertidal habitat with no relationship to the freshwater and fully aquatic floating river vegetation habitat. - It is noted that habitats, such as floating river vegetation, or species, such as salmon, lampreys, and crayfish, could actually occur in the Ballintemple stream from the site downstream to the River Suir. However, they have not been surveyed or subject to assessment despite the fact that the NIS assumes that any releases of "sediment and other pollutants" would dilute and settle in this area. - It is impossible to know what the real effects to Otter are likely to be since no survey was conducted. - It is unclear what aquatic ecological communities are at risk from the potential impacts as no aquatic ecology surveys were completed. A submission was received from the Heritage Council which noted the location of the site relative to the Lower River Suir SAC and have indicated that they are satisfied that the proposed mitigation measures within the NIS will be adequate. An Taisce have advised that adherence to 20m buffer length is monitored throughout the construction and operational phases of the development to mitigate the potential for sediment runoff.

Additional Information:
N/A

Step 2. Identification of relevant European sites using the Source-pathway-receptor model
One (1) no. European site was identified as being located within a potential zone of influence (ZoI) of the proposed development as detailed in Table 1 below.

European Site (code)	**Qualifying interests[1] Link to conservation objectives (NPWS, date)**	**Distance from proposed development (km)**	**Ecological connections[2]**	**Consider further in screening[3] Y/N**
Lower River Suir SAC	Atlantic salt meadows, Water courses of plain to	Hydrological distance of c.	The solar farm site is hydrologically linked	**Yes**

[002137]	montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, Old sessile oak woods with Ilex and Blechnum in the British Isles, Alluvial forests with Alnus glutinosa and Fraxinus excelsior, Taxus baccata woods of the British Isles, Freshwater Pearl Mussel, White-clawed Crayfish, Sea Lamprey, Brook Lamprey, River Lamprey, Twaite Shad, Salmon, Otter. Lower River Suir SAC | National Parks & Wildlife Service	7.1km via the unnamed stream and c. 14.4km via the Ballintemple Stream.	to the SAC via the two watercourses on site and the additional drainage ditches within the site.	

Step 3. Describe the likely effects of the project (if any, alone or in combination) on European Sites

The appeal site is not located within or directly adjacent to a European site, and there are no designated habitats located onsite. Therefore, it is not considered that the proposed development will result in any direct loss or degradation to the habitats designated for the Lower River Suir SAC. However, due to the size and scale of the development and its proximity and hydrological connectivity to the River Suir, impacts generated by the construction and operation of the solar farm development require consideration.

Sources of impact and likely significant effects are detailed in the Table below.

AA Screening matrix

Site name Qualifying interests	**Possibility of significant effects (alone) in view of the conservation objectives of the site***	
	Impacts	**Effects**
Lower River Suir SAC [002137]	Direct: None. There will be no direct impacts or effects as the site is not located within or directly adjacent to a European site, and there are no designated habitats located onsite. Indirect: There are multiple hydrological connections between this SAC and the subject site. A pathway for indirect effects on the aquatic qualifying interest (QIs) species and habitats of the SAC exist in the form of water quality deterioration and habitat degradation via	Potential for indirect effects on SCI species and habitats via a deterioration in water quality and habitat degradation. There is potential for indirect effects on Otter associated with this SAC via disturbance.

	surface water pathways during construction and operation of the proposed development. The terrestrial ranges for Otter can also extend outside of SAC boundaries, so there is potential for indirect effects on this SCI species during construction and increased human activity.	
	Likelihood of significant effects from proposed development (alone): **Yes.**	
	If No, is there likelihood of significant effects occurring in combination with other plans or projects? **N/a.**	

Step 4 Conclude if the proposed development could result in likely significant effects on a European site

Based on the information provided in the screening report, my visit to the proposed solar farm site and a review of the conservation objectives and supporting documents, I consider that in the absence of mitigation measures beyond best practice construction methods, the proposed development has the potential to result significant effects on the Lower River Suir SAC.

I concur with the applicants' findings that such impacts could be significant in terms of the stated conservation objectives of the SAC when considered on their own and in combination with other projects and plans in relation to pollution related pressures and disturbance on qualifying interest habitats and species.

An appropriate assessment is required on the basis of the possible effects of the project alone.

Screening Determination

Finding of likely significant effects

In accordance with Section 177U of the Planning and Development Act 2000 (as amended) and on the basis of objective information provided by the Applicant, I conclude that the proposed development could result in significant effects on the Lower River Suir SAC in view of the conservation objectives of a number of qualifying interest features of those sites.

It is therefore determined that Appropriate Assessment (stage 2) [under Section 177V of the Planning and Development Act 2000] of the proposed development is required.

Appendix 2: Appropriate Assessment (ABP-322154-25)

The requirements of Article 6(3) as related to appropriate assessment of a project under part XAB, sections 177V of the Planning and Development Act, 2000 (as amended) are considered fully in this section.

Taking account of the preceding screening determination, the following is an appropriate assessment of the implications of the proposed solar farm development in view of the relevant conservation objectives of the Lower River Suir SAC [002137] based on scientific information provided by the Applicant.

The information relied upon includes the following:

- Natura Impact Statement and associated appendices prepared by Malone O'Regan Environmental, and,
- Preliminary Construction Environmental Management Plan, Environmental Report and the associated appendices prepared by Malone O'Regan Environmental.

I am satisfied that the information provided is adequate to allow for Appropriate Assessment. I am satisfied that all aspects of the project which could result in significant effects are considered and assessed in the NIS and mitigation measures designed to avoid or reduce any adverse effects on site integrity are included and assessed for effectiveness.

Submissions/observations

Heritage Council

- Satisfied that the mitigation measures proposed are acceptable.

An Taisce

- An Taisce welcome the proposal to implement a 20m buffer between all development works and solar farm infrastructure and the two streams. It is advised that adherence to this buffer length is monitored throughout the construction and operational phases of the development to mitigate for potential sediment runoff given the hydrological connection to the Lower River Suir SAC (site code: 002137), which is legally designated and protected under the Habitats Directive.

Public Observations

- As noted in Appendix 1, issues raised in the course of the appeal by Third Parties include; Failure of the Applicant's AA Screening to comply with the requirements of the OPW (2021b) and DoEHLG (2010) guidelines, lack of species-specific mitigation for designated sensitive species within the NIS, lack of clarity regarding the 'screening out' of habitats and concerns regarding the adequacy of surveys.

Lower River Suir SAC (002137):

Summary of Key issues that could give rise to adverse effects (from screening stage):

(i) Water quality deterioration and habitat degradation (construction and operation), and,

(ii) Disturbance of mobile species

See Table 5-1 of the NIS

Qualifying Interest features likely to be affected	**Conservation Objectives** Targets and attributes (summary)	**Potential adverse effects**	**Mitigation measures** (summary) See Section 7.1.1 and 7.1.2 of NIS and Table 5-4 (Site Specific Environmental Risk Assessment) of the

			Preliminary CEMP.
[1092] White-clawed crayfish (Austropotamobius pallipes)	To maintain the favourable conservation condition of White-clawed crayfish in the Lower River Suir SAC. No reduction in distribution, Juveniles and/or females with eggs in all occupied tributaries, no alien crayfish species, no instances of disease, At least Q3-4 at all sites sampled by EPA and no reduction in habitat heterogeneity or habitat quality.	There are multiple hydrological connections between this SAC and the proposed solar farm site. Therefore, there is a potential pathway for indirect effects on this QI species via the deterioration of water quality resulting from pollution entering these watercourses. The NBDC holds records for white-clawed crayfish within 2km of the site. As per Map 7 of the SSCO, White-clawed crayfish have been recorded along almost the entire length of non-tidal water within the River Suir from the most upstream point at Cabragh, near Thurles, to downstream of Kilsheelan. Pollution of surface water may result in adverse impacts on this species in the absence of mitigation.	Measures included to address potential hydrological impacts include mitigation for the construction phase as follows: During the construction phase all works will comply with all relevant legislation and best practice to reduce the potential environmental impacts of the works. These procedures will be communicated to all relevant site staff. Best practice guidelines will be followed, which are based on Inland Fisheries Ireland and National Roads Authority (NRA), now known as the Transport Infrastructure Ireland (TII), guidance documents (See Section 7.1.2 of the NIS for further detail). Oil pollution is known to cause significant damage to aquatic communities and loss of bulk stored oil or oil from construction vehicles is likely to have an adverse impact, the severity of which would depend on the volumes of oil involved. The proposed measures to remove the risk from potential contamination and emergency procedures to be implemented in the event of an accidental release or spill of potentially contaminating substances are outlined in Section 7.1.2 of the NIS. Poured concrete will be utilised for ancillary infrastructure associated with the proposed development. However, concrete will be pre-cast, where possible, to reduce

			the need for concrete pouring. The measures to proposed to protect water quality are outlined in Section 7.1.2 of the NIS. In addition, an ECoW will be appointed to the project to ensure that the mitigation and best practice measures will be fully implemented. Operational Phase – Throughout the operational phase, monitoring and maintenance of the grassland beneath the panels will be undertaken to ensure excess runoff or soil erosion / compaction does not occur. If required, the ground will be cultivated and re-seeded. Should there be any need to carry out works requiring machinery to traffic across the proposed solar farm site, an appropriate temporary construction access surface will be used depending on ground conditions. Once operational, the solar farm will receive 2–4 maintenance visits per month. Should any unforeseen changes in the soil management at the site occur, they will be detected at an early stage and remedial measures will be implemented accordingly.
[1095] Sea lamprey (Petromyzon marinus)	To restore the favourable conservation condition of Sea lamprey in the in the Lower River Suir SAC. Greater than 75% of main stem length of rivers accessible from estuary, at least three age/size groups	The NBDC holds records for sea lamprey within the River Suir catchment. However, there are no records held by NBDC for the species within a 2km of the site. Lamprey species were identified at 3 of the 10 survey sites within the River Suir catchment according to the IFI Southeastern River Basin District River Survey Report 2018. The IFI report does not distinguish which lamprey species were	As above for mitigation to protect water quality.

	present, juvenile density at least 1/m², no decline in extent and distribution of spawning beds and more than 50% of sample sites positive for juvenile habitat.	identified during the survey There are multiple hydrological connections between this SAC and the proposed solar farm site. Therefore, there is a potential pathway for indirect effects on these QI species via the deterioration of water quality resulting from pollution entering these watercourses. Pollution of surface water may result in adverse impacts on these downstream QI aquatic species in the absence of mitigation.	
[1096] Brook lamprey (Lampetra planeri)	To restore the favourable conservation condition of River lamprey in the Lower River Suir SAC. Access to all watercourses for distribution, at least three age/size groups of brook/river lamprey present, mean catchment juvenile density of brook/river lamprey at least 2/m², no decline in extent and distribution of spawning beds and more than 50% of sample sites positive for juvenile habitat.		
[1099] River lamprey (Lampetra fluviatilis)	To restore the favourable conservation condition of River lamprey in the Lower River Suir SAC. Access to all water courses down to first order streams, at least three age/size groups of river/brook lamprey present, mean catchment juvenile density of brook/river lamprey at least 2/m², no decline in extent and distribution of spawning beds and more than 50% of sample sites positive for juvenile habitat.		
[1106] Salmon (Salmo salar) (only in fresh water)	To restore the favourable conservation condition of Salmon in the Lower River Suir SAC. 100% of river channels for distribution, conservation limit (CL)	There are multiple hydrological connections between this SAC and proposed solar farm site. Therefore, there is a potential pathway for indirect effects on this QI species via the deterioration of water quality resulting from pollution entering watercourses. The NBDC holds no records	As above for mitigation to protect water quality.

	for each system consistently exceeded, maintain or exceed 0+ fry mean catchment-wide abundance threshold value, no significant decline in out-migrating smolt abundance, no decline in number and distribution of spawning redds due to anthropogenic causes and for water quality, at least Q4 at all sites.	Atlantic salmon within 2km of the Site. However, the section of the River Suir, located c. 13km downstream of the site is classified as salmonoid waters under S.I. 293: European Communities (Quality of Salmonid Waters) Regulations, 1988 [14]. It is noted within the NIS that the onsite watercourses were not considered suitable for spawning salmon due to the fact that the substrate of these watercourses was primarily muddy, fine sediment. It is stated that Atlantic salmon have a preference for spawning in rivers with loose gravel. Therefore, it is considered highly unlikely that the works will have any significant direct or indirect negative effects on this species during either the construction or operational phase of the proposed development based on the distance separating the site with suitable spawning habitat (c. 13km). However, given the hydrological connectivity and the potential for this species to migrate upstream and to disperse outside the SAC boundary, a precautionary approach has been adopted and further consideration is be given to potential indirect effects on Atlantic salmon through water quality impairment. Therefore, pollution of surface water may result in adverse impacts on this downstream QI aquatic species in the absence of mitigation.	
[1103] Twaite shad (Alosa fallax)	To restore the favourable conservation condition of Twaite shad in the Lower River Suir SAC.	Suitable habitats are not present for this species within the site. However, twaite shad are known to utilise the lower reaches of the SAC and this species was recorded in low numbers the Lower River Suir and River Barrow and Nore estuary in 2019 by Inland Fisheries Ireland. According to the Site Synopsis document for the Lower River Suir, this SAC is one of only three known spawning grounds in the country for Twaite Shad. There are multiple hydrological connections between this SAC and the proposed solar	As above for mitigation to protect water quality.

		farm site. Despite this species being screened out of further assessment in the NIS, there is a potential pathway for indirect effects on this QI species via the deterioration of water quality resulting from pollution entering these watercourse. Pollution of surface water may result in adverse impacts on this downstream QI aquatic species in the absence of mitigation.	
[1355] Otter (Lutra lutra)	To maintain the favourable conservation condition of Otter in the Lower River Suir SAC. No significant decline in distribution, extent of terrestrial habitat, extent of marine habitat, extent of freshwater (river) habitat, extent of freshwater (lake) habitat, couching sites and holts and fish biomass available.	Large river catchments, including the River Suir catchment, are considered to be among the more important SACs for otter. Otters are known to occur within the Lower River Suir SAC. It is stated that there are no recent records of otters occurring within 2km of the site and the NIS notes that onsite habitats were not considered suitable for otters due to the fact these habitats are frequently managed for agricultural purposes. In addition, the surveys did not identify any evidence of otters onsite nor did the survey identify any suitable habitat for holt construction. Therefore, there is no potential for habitat destruction, loss of breeding or resting places and no direct mortality related impacts on otter are anticipated. However, in Ireland, female otter territories can be up to c. 7.5km in length and male otter territories can be up to c. 13.2km in size. Otter are therefore considered to be within the ZoI of the proposed development. There is potential for construction works to result in the run-off of silt and other pollutants such as hydrocarbons and cementitious material into watercourses downstream of the proposed solar farm site. This has the potential to impact on the conservation objectives for this species in particular in relation to fish biomass availability, for example a degradation in water quality could impact on prey resource for otter. In addition to the above, construction works associated with	As above for mitigation to protect water quality. See Section 7.1.1 of NIS for Otter specific mitigation. The following mitigation is proposed for the construction phase: - The ECoW will inspect the Site in advance of works commencing; - Buffers will be implemented and maintained throughout the lifecycle of the proposed development including a 5m buffer between all works and solar farm infrastructure and existing drainage ditches; - No construction works will take place outside of daylight hours during the vegetation clearance works, the appointed project ECoW will be consulted as required; and, - If unidentified burrows are identified within the works area during construction, the project ECoW will be contacted for advice.

		the proposed development have the potential to result in disturbance related impacts to otters associated with the SAC.	
[3260] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	To maintain the favourable conservation condition of Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation in the Lower River Suir SAC. Habitat area stable or increasing, no decline in habitat distribution, maintain appropriate hydrological regime for river flow, groundwater discharge and tidal influence, maintain substratum composition, maintain water quality, maintain typical species, maintain floodplain connectivity, and maintain fringing habitats.	The full distribution of this habitat and its sub-types within the SAC is currently unknown. There are multiple hydrological connections between this SAC and solar farm. The Applicant's NIS has stated that the boundary of the SAC is considered to be the nearest potential point of occurrence. This distance is over 7km downstream which is considered to be outside of the ZoI of the site. Despite this habitat being screened out of further assessment in the NIS, it is considered that the potential for significant effect on this QI habitat cannot be excluded. A deterioration in water quality, in particular from silt laden runoff, could have the potential to undermine the conservation objectives for this QI habitat which requires the substratum to be free from fine sediment.	As above for potential hydrological impacts.
Other QI's	**Not at Risk**	**Rationale for Exclusion:**	
[1330] Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	To restore the favourable conservation condition of Atlantic salt meadows in the Lower River Suir SAC.	The NPWS Conservation Objectives document shows that this habitat is not present in the immediate vicinity of the site. Salt meadows are known to occur below Waterford City in old meadows where the embankment is absent, or has been breached, and along the tidal stretches of some of the in-flowing rivers below Little Island. As per Map 3 of the NPWS Conservation Objectives document, the nearest known location of this QI habitat is located c. 70km from the site. Although a weak hydrological connection to the SAC exists, any changes in water quality as a result of the proposed development would not have the potential to undermine any of the conservation objectives for this QI habitat given nature, scale and location of the proposed development (separation distance of >70km) along with the attenuating and diluting property of the intervening waterbody.	
[1410] Mediterranean salt meadows (Juncetalia maritime)	To restore the favourable conservation condition of Mediterranean salt meadows in the River Barrow and River Nore SAC.	As per the NPWS Conservation Objectives document, this habitat has not been mapped in detail for the Lower River Suir SAC and the total area of this habitat is not currently known within the SAC. However, it is be noted that this habitat is typically found high up in saltmarshes and requires occasional tidal inundation and therefore, this habitat will not be found in freshwater sections of the Lower River Suir SAC. Although a weak hydrological connection to the SAC exists, any changes in water quality as a result of the proposed	

		development would not have the potential to undermine any of the conservation objectives for this QI habitat given nature, scale and location of the proposed development along with the attenuating and diluting property of the intervening waterbody.
[6430] Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels	To maintain the favourable conservation condition of Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels in the Lower River Suir SAC.	This habitat has not been mapped in detail for the Lower River Suir SAC and the total area of this habitat is not currently known within the SAC. However, it is noted that this habitat type occurs in association with alluvial forests within the SAC, other woodland types in the fringe areas along the River Suir and areas of open marsh or wet grassland. The Conservation Objectives Report, note the potential presence of this habitat at Fiddown, below Carrick-on-Suir and at Tibberaghny Marshes. Fiddown. Both of these areas are located c. 52km downstream of the site. Although a weak hydrological connection to the SAC exists, any changes in water quality as a result of the proposed development would not have the potential to undermine any of the conservation objectives for this QI habitat given nature, scale and location of the proposed development (separation distance of >50km) along with the attenuating and diluting property of the intervening waterbody
[91A0] Old sessile oak woods with Ilex and Blechnum in the British Isles	To restore the favourable conservation condition of Old oak woodland with Ilex and Blechnum in the Lower River Suir SAC.	The Conservation Objectives show that this habitat is not present in the immediate vicinity of the site. As per Map 4 of the NPWS Conservation Objectives document, the nearest recorded location of this habitat is located over 30km upstream from the site at its nearest point. This terrestrial habitat is not located onsite or within the immediate vicinity of the site. There are no impact pathways connecting the site to this habitat given its terrestrial nature. Therefore, there are no potential adverse effects anticipated that could affect this habitat.
[91E0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	To restore the favourable conservation condition of Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) in the in the Lower River Suir SAC.	The NPWS Conservation Objectives document show that this habitat is not present in the immediate vicinity of the site. As per Map 5 of the NPWS Conservation Objectives document, the nearest recorded location of this habitat is located over 40km from the site at its nearest point. There are no impact pathways connecting the site to this habitat given its terrestrial nature. Therefore, there are no potential adverse effects anticipated that could affect this habitat.
[91J0] Taxus baccata woods of the British Isles	To restore the favourable conservation condition of Taxus baccata woods of the British Isles* in Lower River Suir SAC.	This habitat has not been mapped in detail for the Lower River Suir SAC. According to the NPWS Conservation Objectives document, there are two stands of Yew woods within the SAC, which are known to occur on limestone ridges at Shanbally and Cahir Park, the nearest of which is over 20km south-east of the site. There are no impact pathways connecting the site to this habitat given its terrestrial nature. Therefore, there are no potential adverse effects anticipated that could affect this habitat.
[1029] Freshwater pearl mussel (Margaritifera margaritifera	To restore the Favourable conservation condition of the Freshwater pearl mussel (Margaritifera margaritifera) in the	Freshwater pearl mussels are not considered to be abundant in any area of the SAC. The NBDC holds records for Freshwater pearl mussel within the River Suir catchment. As per Map 6 of the NPWS Conservation Objectives document, this species is confined to the Clodiagh River where it has been recorded in low numbers from Clonea to Portlaw, Co. Waterford. It is noted that there are no recent records held by NBDC for the species within

	Lower River Suir SAC.	a 2km boundary of the site. The nearest record of this species is located ca. 42.km south-east of the site. Whilst it is accepted that this species is very sensitive to water quality impairment, no impact pathways are identified between the site and the Clodiagh River i.e. the catchment area for freshwater pearl mussel within the Lower River Suir SAC. Notwithstanding this, it is noted within the NIS that water quality protection measures implemented to protect other aquatic species will similarly protect any potentially unrecorded freshwater pearl mussel within the ZoI of the site.

No other QIs were excluded.

Assessment of issues that could give rise to adverse effects in view of conservation objectives:

(i) Deterioration in water quality and habitat degradation

A deterioration in water quality within the SAC during construction phase as a result of silt laden run-off and other pollutants could affect the SCI habitats and species of this SAC as listed above and undermine the respective SSCO attribute targets.

Mitigation Measures and Conditions

Construction Phase
Mitigation measures are proposed to be implemented onsite in order to ensure the proposed works do not have an impact on the unnamed stream or Ballintemple Stream and any species utilising the wider river network outside the SAC boundary. However, it is outlined within the NIS that it is unlikely that potential pollutants arising from the proposed development will impact the water quality within these watercourses due to:

- The localised nature of the proposed works;
- A 20m buffer will be implemented between all works and solar farm infrastructure and the unnamed watercourse and the Ballintemple Stream;
- A 5m buffer will be implemented between all works and solar farm infrastructure and existing drainage ditches; and,
- There will be no direct or indirect discharges to the drainage ditches onsite.

I note that the focus of the proposed mitigation measures is to prevent silt/sediment and pollutants entering surface waters and receiving watercourses. This is to be achieved via a detailed and comprehensive suite of mitigation measures which are based on conformity with best practice regulations and guidance. Mitigation includes:

- All materials shall be stored at the main contractor compound and transported to the works zone immediately prior to construction;
- Excavations will be left open for minimal periods to avoid acting as a conduit for surface water flows;
- Where drainage ditches are crossed, the release of sediment over baseline conditions will be prevented using silt traps, check dams and / or bunds. These will be put in place in advance of construction works and monitored on a regular basis;
- No surface water runoff will be discharged into drainage ditches, public roads, foul sewers or adjacent properties;
- Weather conditions will be considered when planning construction activities to minimise risk of run off from the Site;
- Provision of exclusion zones and barriers between any stockpiled materials and any surface water features to prevent sediment washing into the receiving water environment;
- Entry by plant, equipment, machinery, vehicles and construction personnel into watercourses, wet drainage ditches or the river riparian zones shall not be permitted;
- An ECoW shall be engaged to undertaken inspections of all elements of the works for their entire duration on a monthly basis minimum;
- Emergency response procedures will be put in place;
- Chemicals used will be biodegradable where possible; and,

- Measures will be implemented to minimise waste and ensure correct handling, storage and disposal of waste.

Specific mitigation measures proposed to remove the risk from potential contamination from oil pollution are included. The NIS also sets out emergency procedures to be implemented in the event of an accidental release or spill of potentially contaminating substances. These include:

- All plant and machinery will be serviced before being mobilised to the site;
- Prior to any works commencing, all construction equipment will be checked to ensure that they are mechanically sound, to avoid leaks of oil, fuel, hydraulic fluids and grease;
- Preventative maintenance and relevant maintenance logs will be kept for all onsite plant and equipment;
- Any chemical / oils to be stored onsite will be placed within a bund on an area of hardstanding to ensure there is no seepage of pollutants into groundwater or surface water;
- All bunds will have the capacity of the largest tank volume plus 10 percent, at a minimum, with additional capacity to hold 30mm of rainfall;
- All drainage from bund areas will be directed to secure containment prior to suitable disposal;
- The Appointed Contactor will put in place a specific, step-by-step refuelling procedure which will be communicated to all relevant employees onsite;
- Only designated trained operators will be authorised to refuel plant onsite;
- Refuelling of plant and machinery will be completed in a controlled manner using drip trays (bunded container trays) in a dedicated refuelling area;
- All oil stored onsite for construction vehicles will be kept in a lock and bund protected area. This bund protected area will be located over 20m away from onsite watercourses and drainage ditch network;
- Fuels, lubricants and hydraulic fluids for equipment used in the construction site will be carefully handled to avoid spillage, properly secured against unauthorised access or vandalism, and provided with spill containment according to current best practice;
- Vehicle or equipment maintenance work will be carried out in a designated area on the Site. In the event that refuelling is required outside this area a spill tray will be employed during the refuelling operation;
- Adequate drip trays and spill kits including absorbent booms and other absorbent material will be maintained onsite;
- All contractor workers will be appropriately trained in the use of spill kits;
- Any sediments impacted by contamination will be excavated and stored in appropriate sealed containers for disposal offsite in accordance with all relevant waste management legislation;
- Appropriate containment facilities will be provided to ensure that any spills from vehicles are contained and removed offsite. Adequate stocks of absorbent materials, such as sand or commercially available spill kits shall be available;
- The Contractor shall ensure that all personnel working onsite are trained in pollution incident control response;
- A regular review of weather forecasts of heavy rainfall is required;
- No storage of hydrocarbons or any polluting chemicals will occur within 10m of watercourses or surface water features;
- Cabins, containers, workshops, plant, materials storage and storage tanks shall not be located within 10m of any watercourse;
- Fuel and oil stores including tanks and drums will be regularly inspected for leaks and signs of damage;
- Drip trays will be used for fixed or mobile plant such as pumps and generators in order to retain oil leaks and spills; and,
- Only designated trained operators will be authorised to refuel plant onsite.

Furthermore, measures will be implemented to protect water quality during concrete pours. However, as noted above, concrete will be pre-cast, where possible, to reduce the need for concrete pouring. Measures include:

- The production, transport and placement of all cementitious materials will be strictly planned and supervised;
- All concrete pours will be carried out in dry weather;
- Shutters will be designed to prevent failure;

- Chemicals used will be biodegradable, where possible;
- Any spillages will be cleaned up immediately and disposed of correctly;
- Where possible, concrete skips, pumps and machine buckets will be prevented from slewing over water when placing concrete;
- No washing of plant or equipment will be permitted adjacent to the river;
- Concrete washout of trucks and larger plant will not occur onsite;
- Concrete washing from smaller equipment will be collected and disposed of offsite; and,
- Surplus concrete will be returned to batch plant after completion of a pour

All mitigation measures are included in the preliminary Construction and Environmental Management Plan (CEMP) which shall be finalised prior to the construction of development. In addition, an Environmental Clerk of Works (ECoW) will oversee construction works and audit the implementation of the CEMP and all mitigation measures. Overall, I am satisfied that the preventative measures which are aimed at interrupting the source-pathway-receptor are targeted at the key threats to SCI habitats and species and that by arresting these pathways or reducing possible effects to a non-significant level, adverse effects can be prevented.

Operational Phase
In terms of the operational phase, monitoring and maintenance of the grassland beneath the panels will be undertaken to ensure excess runoff or soil erosion / compaction does not occur. If required, the ground will be cultivated and re-seeded. Should there be any need to carry out works requiring machinery to traffic across the proposed solar farm site, it is stated that an appropriate temporary construction access surface will be used depending on ground conditions. Once operational, the solar farm will receive 2–4 maintenance visits per month. Should any unforeseen changes in the soil management at the site occur, they will be detected at an early stage and remedial measures will be implemented accordingly. Overall, I would concur with the conclusions of the NIS that there will be no risks to water quality during the operational phase of the proposed development. I am therefore satisfied that the operational activity at the site will not have any adverse effects on either the surface or groundwater quality of the watercourses in the vicinity of the proposed development, or on the protected European sites and their designated conservation interests located downstream.

(ii) Disturbance of Mobile Species

An initial site walkover was undertaken on the 28th June 2023 by an ecologist to assess the extent and the quality of habitats present on the site and to identify any potential ecological receptors. A further site walkover was undertaken by 3 no. ecologists on the 14th December 2023. The Applicant's Environmental Report indicates that the assessments were extended to also identify the potential for these habitats to support other features of nature conservation importance, such as species afforded legal protection under either Irish or European legislation. On the basis of the ecological survey, it is noted that the site is not of value to otter. It is stated that the habitats within the site boundary are unsuitable for otter given the cultivation of arable crops and management of agricultural grasslands. Therefore, it is considered that the proposed project will not result in any reduction in otter habitat, loss of couching or resting sites and direct mortality related impacts are not anticipated.

Transport Infrastructure Ireland (formally the National Roads Authority) best practice planning and construction guidelines for the treatment of certain protected mammal species (i.e. otter) indicate that disturbance to terrestrial mammals would not extend beyond 150m. The NIS notes that studies have noted that different types of disturbance stimuli are characterized by different avifaunal reactions. However, in general a distance of 300m can be used to represent the maximum likely disturbance distance for waterfowl. The ZoI for noise / disturbance is therefore established as the site with a 300m buffer. There are no European sites within 300m of the site. However, the unnamed stream and the Ballintemple Stream are hydrologically connected to the Lower River Suir SAC, which supports otter. Otter are predominantly found in aquatic habitats along rivers and estuaries and have the ability to disperse from water. As indicated previously, female otter territories can be up to c. 7.5km in length and male otter territories can be up to c. 13.2km. In relation to disturbance, otter are predominantly crepuscular in nature and it is anticipated that the daytime construction activities will minimise potential disturbance related impacts to this species. Nonetheless, a precautionary approach has been taken and the following mitigation measures will be put in place in order to minimise any potential disturbances to otter in the unlikely event that this species utilises the site or adjoining habitats:

- The ECoW will inspect the Site in advance of works commencing;
- Buffers will be implemented and maintained throughout the lifecycle of the proposed development

including a 5m buffer between all works and solar farm infrastructure and existing drainage ditches;
- No construction works will take place outside of daylight hours during the vegetation clearance works, the appointed project ECoW will be consulted as required; and,
- If unidentified burrows are identified within the works area during construction, the project ECoW will be contacted for advice.

Overall, I am satisfied that the measures proposed are adequate and will be effective in ensuring that the attributes required to maintain the favourable condition for Otter will not be adversely affected and that the proposed development will not prevent or delay the attainment of the conservation objective.

In-combination effects

It is noted within the NIS that a review has been undertaken of the Tipperary County Council Planning Files, and the Department of Housing, Local Government and Heritage's planning portal – the National Planning Application Database. It is stated that no current or previously granted plans or projects were identified in the immediate vicinity that are considered to have the potential to have any significant in-combination contribution to adverse effects on the Lower River Suir SAC or any other European site. It is therefore considered that the proposed development is unlikely to have any significant in-combination contribution to possible significant effects on Lower River Suir SAC or any other European sites, a statement which is supported by:

- The localised nature of the proposed works;
- The distances separating the site from European sites;
- The dilution factor between the site and European sites;
- The mitigation measures that will be put in place; and,
- The best practice guidelines which will be implemented during the construction and operational phase of the proposed development.

I note that concerns have been raised by Third Parties regarding the grid connection that will be required for a development of this nature. However, The Applicant has confirmed that a separate application will made to the Commission (ACP) for a pre-application consultation in respect of a proposed 110kv substation and grid connection to serve the proposed development, under the provisions of the Planning and Development (Strategic Infrastructure) Act 2006. Whilst the Applicant has not clearly identified the permissions within the vicinity of the site, I have reviewed both the Commission's and Planning Authority's online planning application database and I do not consider that there are any projects which could have the potential to have significant in-combination effects on a European Site when considered alongside the proposed development. Similarly, I am unaware of any plans that could potentially have in-combination effects on a European Site when considered alongside the proposed development. Overall, I am satisfied that there are no current or previously granted plans or projects in the immediate vicinity that are considered to have the potential to have any significant cumulative effects during the construction or operational phase of the proposed development.

Findings and conclusions

The applicant determined that following the implementation of mitigation measures, the construction and operation of the proposed development alone, or in combination with other plans and projects, will not adversely affect the integrity of this European site.

Based on the information provided, I am satisfied that adverse effects arising from the proposed development can be excluded for the Lower River Suir SAC. No direct impacts are predicted. Indirect impacts would be temporary in nature and mitigation measures are described to prevent ingress of silt laden surface water, other construction related pollutants and disturbance. I am satisfied that the mitigation measures proposed to prevent such effects have been assessed as effective and can be implemented and conditioned if permission is granted.

Reasonable Scientific Doubt

I am satisfied that no reasonable scientific doubt remains as to the absence of adverse effects.

Site Integrity

The proposed development will not affect the attainment of the Conservation Objectives of the Lower River Suir SAC. Adverse effects on site integrity can be excluded, and no reasonable scientific doubt remains as to the absence of such effects.

Appropriate Assessment Conclusion: Integrity Test

In screening the need for Appropriate Assessment, it was determined that the proposed development could result in significant effects on the Lower River Suir SAC in view of the conservation objectives of this site and that Appropriate Assessment under the provisions of S177U was required.

Following an examination, analysis and evaluation of the NIS, all associated material submitted, and taking into account the observations on nature conservation, I consider that adverse effects on site integrity of the Lower River Suir SAC can be excluded in view of the conservation objectives of these sites and that no reasonable scientific doubt remains as to the absence of such effects. My conclusion is based on the following:

- Detailed assessment of all aspects of the proposed project including proposed mitigation measures and ecological monitoring in relation to the Conservation Objectives of the Lower River Suir SAC (site code: 002137).
- Detailed assessment of in combination effects with other plans and projects including historical projects, current proposals and future plans.
- The development of a solar PV energy development will, through the design and application of mitigation measures, ensure the preservation of the favourable conservation status of habitats characterised as being in favourable status and ensure that habitat characterised as being in unfavourable status will not be further harmed or rendered difficult to restore to favourable status.
- The development of a solar PV energy development will, through the design and application of mitigation measures as detailed and conditioned ensure the lasting preservation of the essential components and characteristics of the European Sites.
- No reasonable scientific doubt as to the absence of adverse effects on the integrity of the Lower River Suir SAC.

Appendix 3 - Form 1

EIA Pre-Screening

[EIAR not submitted]

ACP Case Reference	**ABP-322270-25**
Proposed Development Summary	A 10 year planning permission for the construction and operation of a solar PV farm and all ancillary works.
Development Address	Boscabell, Garranmore, Newark, Fussough, and Dually, County Tipperary.

1. Does the proposed development come within the definition of a 'project' for the purposes of EIA? (that is involving construction works, demolition, or interventions in the natural surroundings)	**Yes**	✓
	No	

2. Is the proposed development of a class specified in Part 1 or Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) and does it equal or exceed any relevant quantity, area or limit where specified for that class?

Yes		Class……	EIA Mandatory EIAR required
No	✓		Proceed to Q.3

3. Is the proposed development of a class specified in Part 2, Schedule 5, Planning and Development Regulations 2001 (as amended) but does not equal or exceed a relevant quantity, area or other limit specified [sub-threshold development]?

		Threshold	**Comment (if relevant)**	**Conclusion**
No				
Yes	✓	Class 1 of Part 2 of Schedule 5, (a) *Projects for the restructuring of rural land holdings, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field*	Sub-threshold – c. 660m of hedgerow are proposed to be removed	Proceed to Q.4

		boundaries is above 50 hectares.		

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

Appendix 4 – Form 3 – Screening Determination

A. CASE DETAILS

ACP Case Reference	**ABP-322270-25**	
Development Summary	A 10 year planning permission for the construction and operation of a solar PV farm and all ancillary works. A Natura Impact Statement accompanies the planning application.	
	Yes / No / N/A	Comment (if relevant)
1. Was a Screening Determination carried out by the PA?	Yes	EIA not required.
2. Has Schedule 7A information been submitted?	Yes	Document entitled Environmental Report - Section 2.4.3 notes that the proposed development has been screened for significance of its environmental effects, under criteria set out in Schedule 7 and 7a of the Planning and Development Regulations. No specific class is referenced within this document. However, revisions to the design of the development at FI stage resulted in the removal of c. 660m of hedgerows across the site. Therefore the proposed development is considered in the context of Schedule 5, Part 2, Class 1 Agriculture, Silviculture and Aquaculture: (a) *Projects for the restructuring of rural land holdings, undertaken as part of a wider proposed development, and not as an agricultural activity that must comply with the European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011, where the length of field boundary to be removed is above 4 kilometres, or where re-contouring is above 5 hectares, or where the area of lands to be restructured by removal of field boundaries is above 50 hectares*.
3. Has an AA screening report or NIS been submitted?	Yes	An Appropriate Assessment Screening Report and Natura Impact Statement were submitted with the application.
5. Have any other relevant assessments of the effects on the environment which have a significant bearing on the project been carried out pursuant to other relevant Directives – for example SEA	Yes	SEA and AA were undertaken in respect of the Tipperary County Development Plan, 2022-2028. The site is located within lands governed by this plan.

B. EXAMINATION		**Where relevant, briefly describe the characteristics of impacts (ie the nature and extent) and any Mitigation Measures proposed to avoid or prevent a significant effect** (having regard to the probability, magnitude (including population size affected), complexity, duration, frequency, intensity, and reversibility of impact)	**Is this likely to result in significant effects on the environment? Yes/ No/ Uncertain**
1. Characteristics of proposed development (including demolition, construction, operation, or decommissioning)			
1.1 Is the project significantly different in character or scale to the existing surrounding or environment?		The site comprises agricultural fields which are typically bound by mixed hedgerows and trees of varying maturities. The existing network of trees and hedgerows provide varying degrees of screening from the adjoining public roads and vary in height across the site. Following revisions to the design of the development at FI stage, the proposal will result in the removal of c. 660m of hedgerow where access is required to fields and the various entrances to the various land parcels. It is considered that the volume of hedgerow to be removed is insignificant given the remaining linear features present in the surrounding environment.	**No**
1.2 Will construction, operation, decommissioning or demolition works causing physical changes to the locality (topography, land use, waterbodies)?		The removal of hedgerows has largely been confined to the site access points where removal is required to achieve adequate sightlines. New replacement hedgerow planting is proposed at these locations and landscaping proposals have been prepared for the entire site. It is proposed to bolster and gap-fill the surrounding hedgerow / treelines where required across the site and along	**No**

	the boundaries of the site, and to plant c. 1,836m of new hedgerow / treelines. No physical changes to the topography of the lands are proposed and earthworks are minimal given the nature of the proposed development.	
1.3 Will construction or operation of the project use natural resources such as land, soil, water, materials/minerals or energy, especially resources which are non-renewable or in short supply?	Standard construction methods and materials. No significant use of natural resources in operational phase. The loss of natural resources (hedgerow) is not regarded as significant in nature. Replacement hedgerow planting is proposed at each site entrance to mitigate this loss. Significant hedgerow planting is also proposed along the boundaries of each land parcel.	**No**
1.4 Will the project involve the use, storage, transport, handling or production of substance which would be harmful to human health or the environment?	Hedgerow removal activities will require the use of potentially harmful materials, such as fuels and other such substances to power necessary machinery. Use of such materials would be typical for construction sites. Any impacts would be local and temporary in nature and the implementation of the standard construction practice measures outlined in the submitted preliminary Construction and Environmental Management Plan would satisfactorily mitigate potential impacts. No operational impacts in this regard are anticipated.	**No**
1.5 Will the project produce solid waste, release pollutants or any hazardous / toxic / noxious substances?	The works associated with the hedgerow removal will require the use of potentially harmful materials, such as fuels and other similar substances for necessary machinery and may give rise to waste for disposal. However, it is noted that the use of these materials would be typical for construction sites. With the implementation of the standard measures outlined in the preliminary Construction and Environmental Management Plan, the project would satisfactorily mitigate any potential	**No**

	impacts. It is noted that some areas where hedgerow removal is proposed is located within close proximity to an existing watercourse (Parcel 2), which ultimately drain to watercourses connected to the Lower River Suir SAC. However having regard to the nature of the proposed works, the distance of the subject site from this designated site and the proposed mitigation measures, particularly those relating to water quality as outlined in the submitted associated NIS, significant effects on the environment are not likely.	
1.6 Will the project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater, coastal waters or the sea?	It is noted that works are proposed within close proximity to field drains and watercourses which ultimately connected to the Lower River Suir SAC. However having regard to the nature of the proposed works, the distance of the subject site from this designated site and the proposed mitigation measures, particularly those relating to water quality as outlined in the submitted NIS, significant effects on the environment are not likely. No discharge of pollutants to ground water is likely.	**No**
1.7 Will the project cause noise and vibration or release of light, heat, energy or electromagnetic radiation?	Some noise and vibration impacts are anticipated during the hedgerow removal works. However, there are temporary in nature and there will be a localised impact only. Mitigation measures are proposed in submitted preliminary CEMP. No operational impacts in this regard are anticipated.	**No**
1.8 Will there be any risks to human health, for example due to water contamination or air pollution?	The construction related impacts associated with the hedgerow removal would be temporary and localised in nature and the application of standard measures within the preliminary CEMP. No significant operational impacts are anticipated with a development of this nature.	**No**
1.9 Will there be any risk of major accidents that could affect human health or the environment?	No significant risk is predicted having regard to the	**No**

	nature and scale of the development.	
1.10 Will the project affect the social environment (population, employment)	It is likely that there will be a minor positive effect on local employment during the construction phase of the proposed development.	**No**
1.11 Is the project part of a wider large scale change that could result in cumulative effects on the environment?	No.	**No**
2. Location of proposed development		
2.1 Is the proposed development located on, in, adjoining or have the potential to impact on any of the following: - European site (SAC/ SPA/ pSAC/ pSPA) - NHA/ pNHA - Designated Nature Reserve - Designated refuge for flora or fauna - Place, site or feature of ecological interest, the preservation/conservation/ protection of which is an objective of a development plan/ LAP/ draft plan or variation of a plan	There is only one Natura 2000 site within the proposed development's ZoI. There is a potential pathway from the proposed development to the Lower River Suir SAC (Site code: 002137) via two watercourses that traverse the subject site Following an Appropriate Assessment, it has been concluded that the proposed development, individually or in combination with other plans or projects, would not adversely affect the integrity of any of this European site, in view of its Conservation Objectives. There is no NHAs within 15km of the subject site. In terms of pNHAs, Killough Hill pNHA is located 5km to the north, Laffansbridge is located 6.7km to the north-east and Power's Wood is located 7.5km to the south-east. Given the lack of pathway connections to these sites and the separation distances involved no potential impacts have been identified. It is noted that 1 no. outlier badger sett is located onsite. There were no other setts found within the other parcels of the site. Section 3 of the Badger sets outs the required mitigation to applied during the construction phase of the development.	**No**

	Therefore, no potential impacts are likely. The development will result in some loss of commuting / foraging habitats for bats by the removal of hedgerow / treelines, however, 1,836m of enhancement planting and enhancement measures that will be implemented as part of the proposed development, will strengthen the existing hedgerow / treelines onsite, where required, and provide new foraging and commuting habitat for bats. The Applicant's Bat Report concluded that no bats were roosting within the trees surveyed, and no derogation is required from the NPWS.	
2.2 Could any protected, important or sensitive species of flora or fauna which use areas on or around the site, for example: for breeding, nesting, foraging, resting, over-wintering, or migration, be significantly affected by the project?	The surveys undertaken as part of the Applicant's Environmental Report found no evidence of sensitive species on the site or in the vicinity likely to be affected by the proposed development. As noted, hedgerow removal is required at the site entrances to provide adequate sightlines (c. 660m). It is acknowledged the hedgerow provides habitat for bird species and linear foraging features for bats. While it is noted that there will be some temporary impacts on these species, it is not expected that the removal of hedgerow would result in significant impacts to protected, important or sensitive species subject to compliance with the various mitigation measures outlined in the Environmental Report, Bat Report and the pCEMP.	**No**
2.3 Are there any other features of landscape, historic, archaeological, or cultural importance that could be affected?	Chapter 11 (Cultural Heritage) of the Environmental Report provides a description and evaluation of the potential, likely and significant impacts of the proposed development on archaeological, architectural and cultural heritage resource of the site. Buffer areas associated with the onsite monuments (Refs: TS053-094, TS053-	**No**

	072, TS061-037 and TS061-029) and an additional area over Mount O'Meara are provided. As part of the Applicant's FI response, Geophysical surveying of the site was undertaken, the mapping and interpretation were assessed by the Applicant's consultant archaeologist. A Geophysical Report (Appendix 6-1), Archaeological Test Trenching Report (Appendix 6-2) and a revised Site Layout Plan (Appendix 6-3) showing archaeological features have been submitted with the FI response. As noted, the Site Layout was subsequently amended in order to exclude all registered archaeological monuments and their associated exclusion zones, and to exclude all of the archaeological features identified with the appropriate buffers. Subject to compliance with suitable conditions, no significant impacts are expected. It is an appellant's view that in the absence of an EIAR, it is not possible to be certain that the proposed development would not give rise to significant effects on onsite heritage assets. In terms of potential archaeological impacts, I have addressed this in detail in Section 9.7 of this report, and I am satisfied that it has been adequately demonstrated that significant effects on archaeology can be avoided through the implementation of the proposed mitigation measures and through adherence to the conditions of the permission.	
2.4 Are there any areas on/around the location which contain important, high quality or scarce resources which could be affected by the project, for example: forestry, agriculture,	Given the nature of the works proposed, there will be no foreseeable impact on any areas of high quality or scarce resources which could be affected	**No**

water/coastal, fisheries, minerals?	by the project.	
2.5 Are there any water resources including surface waters, for example: rivers, lakes/ponds, coastal or groundwaters which could be affected by the project, particularly in terms of their volume and flood risk?	As per the Applicant's Stage 2 – Initial Flood Risk Assessment, the potential flood risk posed by groundwater sources was considered to be negligible and will not be considered further. In terms of pluvial flooding, it is stated that based on available predictive flood mapping, the entire Site can be categorised as Flood Zone C. Furthermore, there is no historic evidence of any fluvial flooding in the immediate vicinity of the site (recorded event c. 1km from site). In this regard, the risk of flooding associated with pluvial flooding did not warrant further consideration. It is concluded that there will be no net increase in discharge rate or runoff volume from the site arising from the proposed development. Therefore, the hedgerow removal works will not have an impact on flooding elsewhere.	**No**
2.6 Is the location susceptible to subsidence, landslides or erosion?	No	**No**
2.7 Are there any key transport routes (e.g. National primary Roads) on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?	While some traffic disruption is likely during the construction phase, this is expected to be temporary in nature and no significant contribution to traffic congestion is anticipated to arise from the proposed development.	**No**
2.8 Are there existing sensitive land uses or community facilities (such as hospitals, schools etc) which could be significantly affected by the project?	The surrounding area is comprised of agricultural land uses, farm buildings and dwellings. There are also a number of commercial and community related uses, such as schools, within the village of Dualla to the east of the site. Having considered the minor nature of the hedgerow removal works, no significant impacts on these uses are anticipated as a result of the proposal.	**No**

3. Any other factors that should be considered which could lead to environmental impacts		
3.1 Cumulative Effects: Could this project together with existing and/or approved development result in cumulative effects during the construction/ operation phase?	I note that the hedgerow removal is proposed as part of a solar farm development which of itself is not a class for the purposes of the EIA Directive. However, it is considered in the context of any resulting potential cumulative effects, including visual/landscape, water, archaeology, transport and biodiversity which are addressed separately in the Planning Assessment within this report. Significant environmental effects from a cumulation of the proposed hedgerow removal with other existing development is unlikely based on a review of the relevant technical reports, the project design decisions and the proposed mitigation measures which effectively reduces the potential for cumulative effects. The Applicant has confirmed that a separate application will made to the Commission (ACP) for a pre-application consultation in respect of a proposed 110kv substation and grid connection to serve the proposed development, under the provisions of the Planning and Development (Strategic Infrastructure) Act 2006. I have undertaken a review of the Local Authority's online planning application register and the Department of Housing, Local Government and Heritage's planning portal – the National Planning Application Database. I note that no existing or permitted developments have been identified in the immediate vicinity that would give rise to significant cumulative environmental effects with the subject project. Overall, I am satisfied that there are no	**No**

	current or previously granted plans or projects in the immediate vicinity of the site that are considered to have the potential to have any significant cumulative effects during the construction or operational phase of the proposed development.	
3.2 Transboundary Effects: Is the project likely to lead to transboundary effects?	No	**No**
3.3 Are there any other relevant considerations?	No	**No**

C. CONCLUSION

No real likelihood of significant effects on the environment.	**Agreed**	**EIAR Not Required**
Real likelihood of significant effects on the environment.		~~EIAR Required~~

D. MAIN REASONS AND CONSIDERATIONS

Having regard to

(a) the nature and scale of the proposed development, which is below the thresholds in respect of Class 1(a) of Part 2 to Schedule 5 of the Planning and Development Regulations 2001, as revised;

(b) The nature and scale of the proposed development, which is significantly below the threshold of 4km for hedgerow removal reinserted by the 2023 amending regulations and is also below the screening threshold set out in the 2011 (Agricultural) Regulations;

(c) The nature of the existing site and the pattern of development in the surrounding area;

(d) The location of the development outside of any sensitive location specified in Article 109(4)(a)(v) of the Planning and Development Regulations 2001, as revised;

(e) The guidance set out in the 'Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development', issued by the Department of the Environment, Heritage and Local Government (2003);

(f) The criteria set out in Schedule 7 of the Planning and Development Regulations 2001, as revised, and;

(g) The features and measures proposed by the applicant that are envisaged to avoid or prevent what might otherwise be significant effects on the environment, including measures identified to be provided as part of the submitted preliminary Construction and Environmental Management Plan, the Environmental Report and its associated appendices, the Natura Impact Statement and the information submitted to the Planning Authority by way of further information.

It is considered that the proposed development would not be likely to have significant direct, indirect or cumulative effects on the environment and that the preparation and submission of an environmental impact assessment report would not, therefore, be required.

Inspector _____ **Date** _____

Approved (DP/ADP) _____ **Date** _____

Appendix 5 - WFD Impact Assessment Stage 1: Screening			
Step 1: Nature of the Project, the Site and Locality			
ACP ref. no.	**ABP-322270-25**	**Townland, address**	Boscabell, Garranmore, Newark, Fussough, and Dually, County Tipperary
Description of project		A 10 year planning permission for the construction of a solar PV development and all associated ancillary development works.	
Brief site description, relevant to WFD Screening,		The site is located c. 4km to north-west of Cashel, Co. Tipperary within the rural townlands of Boscabell, Garranmore, Newark, Fussough, and Dualla. The site originally comprised 5 no. land parcels which are currently in agricultural use. Each parcel is either bound or bisected by drainage ditches which are hydrologically linked to the 2 no. mapped EPA watercourses on the appeal site. The underlying aquifer beneath Parcel 1, Parcel 5 and the western portion of Parcel 2 is classified as Pl (poor aquifer – bedrock which is generally unproductive except for local zones). However, the eastern portion of Parcel 2, Parcel 3 and Parcel 4 is underlain by aquifer Rkd (regionally important aquifer – karstified (diffuse)). The majority of the site is identified as being underlain by mosaic of Karst, Extreme and High vulnerability. Parcel 3 was omitted from the development at FI stage.	
Proposed surface water details		SUDs which include natural infiltration and permeable access tracks.	
Proposed water supply source & available capacity		N/A	
Proposed wastewater treatment system & available capacity, other issues		N/A	

Others?						
Step 2: Identification of relevant water bodies and Step 3: S-P-R connection						
Identified water body	**Distance to (m)**	**Water body name(s) (code)**	**WFD Status**	**Risk of not achieving WFD Objective e.g.at risk, review, not at risk**	**Identified pressures on that water body**	**Pathway linkage to water feature (e.g. surface run-off, drainage, groundwater)**
River Waterbody	0m	Ballintemple Stream_010	Poor	At risk	Agriculture	Yes – The watercourse emerges from a spring within Parcel 5 and slows through Parcel 2. There is also multiple drainage ditches hydrologically connected to this watercourse.
River Waterbody	0m	Arglo_020	Moderate	At Risk	Agriculture	Yes – The watercourse flows through Parcel 1a. There is also multiple drainage ditches hydrologically connected to this watercourse.

Groundwater Waterbody	Underlying site	Clonmel IE_SE_G_040	Good	At risk	Agriculture Anthropgenic		Yes – The majority of the site is identified as being underlain by mixture of Karst, Extreme and High vulnerability
Step 4: Detailed description of any component of the development or activity that may cause a risk of not achieving the WFD Objectives having regard to the S-P-R linkage.							
CONSTRUCTION PHASE							
No.	Component	Waterbody receptor (EPA Code)	Pathway (existing and new)	Potential for impact/ what is the possible impact	Screening Stage Mitigation Measure*	Residual Risk (yes/no) Detail	**Determination** to proceed to Stage 2. Is there a risk to the water environment? (if 'screened' in or 'uncertain' proceed to Stage 2.**
1.	Surface	Ballintemple Stream_010	Watercourse is located on site and existing drainage ditches.	Siltation, pH (Concrete), hydrocarbon spillages	Standard construction practice mitigation. Adherence to the finalised CEMP and conditions of permission which includes a requirement for the installation of silt	No	Screened out

					fences.		
2.	Surface	Arglo_020	Watercourse is located on site and existing drainage ditches.	Siltation, pH (Concrete), hydrocarbon spillages	Standard construction practice mitigation. Adherence to the finalised CEMP and conditions of permission which includes a requirement for the installation of silt fences.	No	Screened out
3.	Ground	Clonmel IE_SE_G_040	Pathway exists. The site is partially located within a Regionally Important Aquifer and is underlain by Karst, Extreme and High vulnerability.	Spillages	Standard construction practice mitigation. Adherence to the finalised CEMP.	No	Screened out
OPERATIONAL PHASE							
4.	Surface	Ballintemple Stream_010	Watercourse is located on site and existing drainage ditches.	Siltation, Hydrocarbon spillage.	SUDs features including natural infiltration between arrays, seeding to ensure vegetation	No	Screened out

					growth and permeable access tracks.		
5.	Surface	Arglo_020	Watercourse is located on site and existing drainage ditches.	Siltation, Hydrocarbon spillage.	SUDs features including natural infiltration between arrays, seeding to ensure vegetation growth and permeable access tracks.	No	Screened out
6.	Ground	0020	Pathway exists, The site is partially located within a Regionally Important Aquifer and is underlain by Karst, Extreme and High vulnerability.	Spillages	SUDs features including natural infiltration between arrays, seeding to ensure vegetation growth and permeable access tracks.	No	Screened out
DECOMMISSIONING PHASE							
7.	As above for the construction phase.						