Appendix 6.3. Glint and Glare Assessment

GLINT AND GLARE ASSESSMENT

Proposed Solar Development

Mortarstown, Co. Carlow.

Prepared by Macro Works Ltd

November 2025

LVIA I TVIA I Landscape Design I Visibility Analysis I Glint and Glare I Verified Photomontages I CGI I Shadow Flicker Analysis

Registered Landscape Architect

1. GLINT AND GLARE ASSESSMENT

1.1 INTRODUCTION

This Glint and Glare Assessment was carried out by Macro Works Ltd to determine the potential for solar reflectance effects upon dwelling and transport route receptors in respect of a proposed ground mounted solar development at Mortarstown, Co. Carlow. The proposed panels will have a height of 2.5m above the terrain and will be tilted at an angle of 35 degrees from horizontal towards the south. The proposed panels will remain in a fixed position throughout the day and year (i.e. they will not rotate to track the movement of the sun).

1.1.1 Statement of Authority

Macro Works' relevant experience includes twenty years of analysing the visual effects of a wide range of infrastructural and commercial development types. This experience includes numerous domestic and international wind and solar energy developments. The Glint and Glare analysis model used in this study for non-aviation receptors was developed by Macro Works in conjunction with the National University of Ireland, (NUI) Maynooth. It has successfully replicated results from the Federal Aviation Administration (FAA) approved Solar Glare Hazard Analysis Tool (SGHAT) software and has been utilised to assess the effects of glint and glare for many solar development sites throughout Ireland to date.

1.1.2 Guidance and Best Practice

There is currently no specific guidance or standards for the assessment of photovoltaic glint and glare effects on residential and/or route (road and rail) receptors in Ireland. Guidance has been prepared, however, by the Federal Aviation Administration to address the potential hazards that solar developments may pose to aviation activities, and this has been adopted for use by the Irish Aviation Authority. This guidance, concerned with hazard assessment, has relevance to the other receptor types mentioned, and coupled with numerous assessments already carried out across the UK, combine to establish a suitable best practice for solar development.

By virtue of their efficiency, the intensity of reflected light from modern PV solar panels is deliberately low and currently equates with that of the reflection from still water. Recent studies generally agree, however, that there still exists the potential for hazard or nuisance upon surrounding receptors. Macro Works' glint and glare analysis methods and determination of effects are based on a combination of available studies and established best practice. This methodology has been successfully implemented on numerous previous solar farm projects that met with the approval of both Planning Authorities and An Bord Pleanála.

1.1.3 Definitions

The study is concerned with the potential nuisance and hazard effects of glint and glare in relation to receptors that include the occupants of surrounding dwellings as well as road and rail users. In its "Technical Guidance for Evaluating Selected Solar Technologies on Airports"[1] the FAA have defined the terms 'Glint' and 'Glare' as meaning;

1 Federal Aviation Administration (FAA) 2018. Technical Guidance for Evaluating Selected Solar Technologies on Airports; 3.1.2 Reflectivity. Technical Guidance for Evaluating Selected Solar Technologies on Airports. Available at: https://www.faa.gov/sites/faa.gov/files/airports/environmental/FAA-Airport-Solar-Guide-2018.pdf

Glint – "A momentary flash of bright light"

Glare – "A continuous source of bright light"

Glint and glare are essentially the reflection of sunlight from reflective surfaces. This study uses a multi-step process of elimination to determine which receptors have the potential to experience the effects of glint and glare. It then examines, using a computer-generated geometric model, the times of the year and the times of the day such effects could occur. This is based on the relative angles between the sun, the panels and the receptor throughout the year.

1.1.4 General Nature of Reflectance from Photovoltaic Panels

In terms of reflectance, photovoltaic solar panels are by no means a highly reflective surface. They are designed to absorb sunlight and not to reflect it. Nonetheless, photovoltaic panels have a flat, polished surface, which emits 'specular' reflectance rather than a 'diffuse' reflectance, which would occur from a rough surface (Figure 1.1 refers). Several studies have shown that photovoltaic panels (as opposed to Concentrated Solar Power) have similar reflectance characteristics to water, which is much lower than the likes of glass, steel, snow and white concrete by comparison (Figure 1.2 refers). Similar levels of reflectance can be found in common situations in rural environments from surfaces such as shed roofs, lines of plastic ground covering used in cropping and wet roads to name but a few (Figure 1.3 - Figure 1.5 refer).

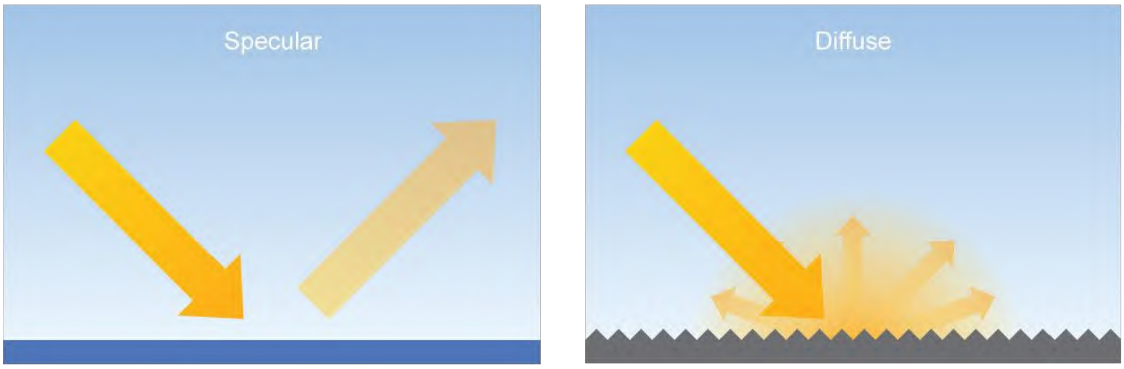
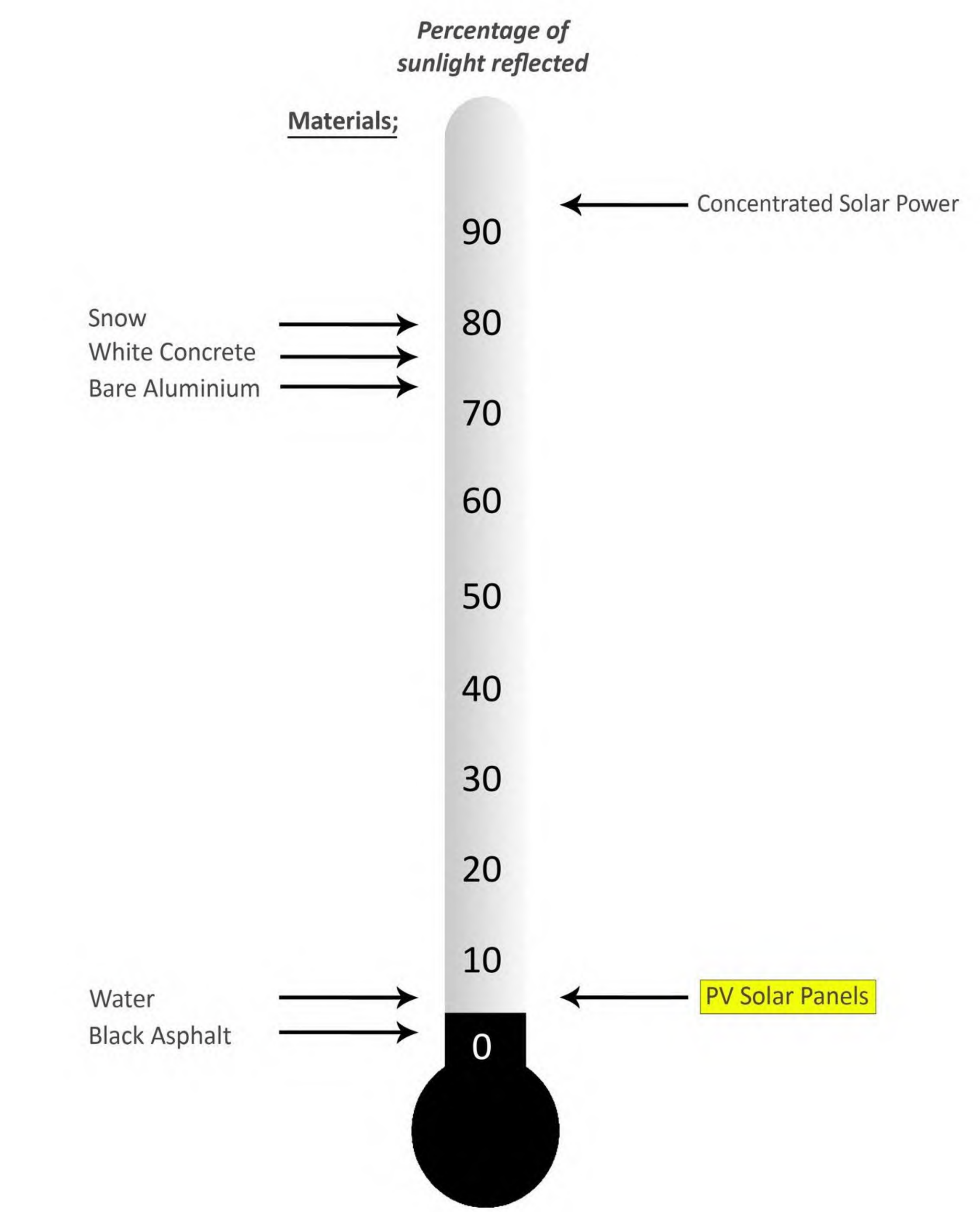


Figure 1.1: Specular vs Diffuse reflection of light from polished and rough surfaces.



Reflectivity produced by different surfaces in comparison to PV solar panels

Figure 1.2: Demonstrates that the amount of sunlight (measured in watts per meter -W/m2) reflected from the surface of a solar panel is very similar to that of still water and is far less than that of many surfaces commonly found in the environment, urban or rural.

Figure 1.3: Similar level of reflectance (to photovoltaic panels) emanating from plastic ground covering in an Irish rural scenario.

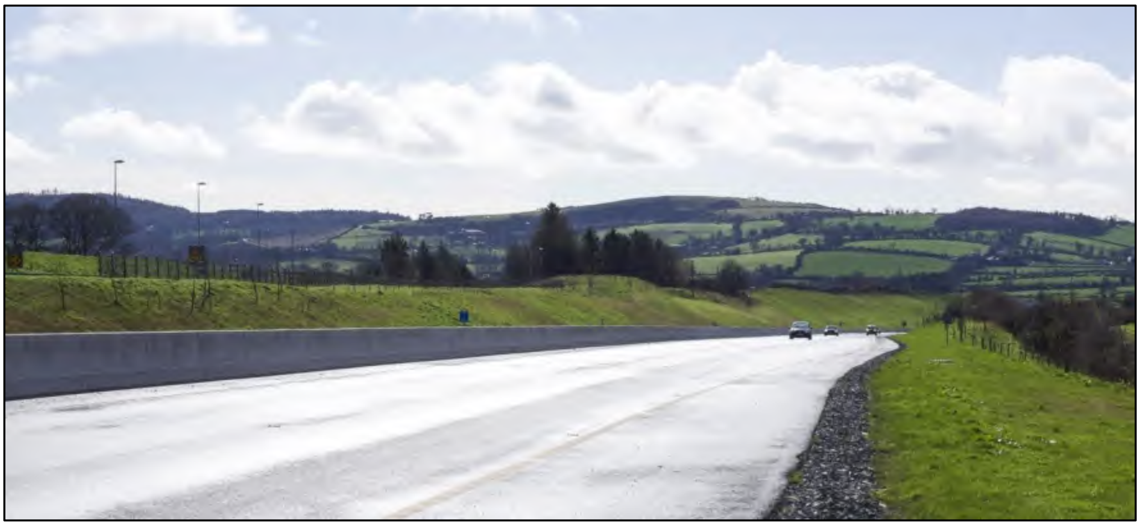


Figure 1.4: Similar levels of reflectance (to photovoltaic panels) emanating from wet road surfaces.

Figure 1.5: Higher levels of reflectance (to photovoltaic panels) emanating from powder coated corrugated metal roof surfaces in an Irish rural scenario.

1.2 ASSESSMENT OF GROUND-BASED RECEPTORS

1.2.1 Assessment Methodology for Ground-Base Receptors

Macro Works' glint and glare assessment methodology follows a rational sequence of steps to identify receptors that might potentially be affected by glint and glare. These are then further filtered to yield those receptors to those that are likely to actually experience such effects. These steps are set out below;

1. Identify study area within which to assess the potential for glint and glare effects. The potential for substantial nuisance or hazardous impacts are greatest in close proximity to the source of reflectance and the potential for adverse impacts reduces with increased distances therefore to balance these factors a buffer extent of 1km from the site boundary is used by default on all solar developments.

2. Pre-analyse the study area for potential glare effects by populating the study area with a regular grid of receptor points (100m spacing). This analysis (1st analysis) allows us to determine those areas theoretically exposed to glint and glare effects that might warrant further investigation. We call this the "Area of Consideration for Further Analysis". This pre-analysis is based on a 3D model of the development superimposed onto a Digital Terrain Model (DTM) of the study area. Note: This DTM accurately replicates the profile of the terrain but does not account for screening by the vegetation or buildings that are present – in this sense the results are somewhat theoretical but they do offer a representation of a bare-earth, worst-case scenario.

3. Identify relevant receptors (dwellings and transport routes) that fall within the theoretically affected zones of the study area (or the "Area of Consideration for Further Analysis"). Dwelling identification utilises a combination of up to date aerial photography and the Eircode Finder tool which locates and identifies buildings classed as residential. Transport route receptors are defined by regularly spaced points along roads and rail lines (50m spacing). The height of the road Receptor Points are set to 1.7m above ground level. This is broadly equivalent to the eye level a person walking or a driver of a 4x4 / SUV type vehicle. The height of rail Receptor Points are set to 2.8m above ground level to represent the eye level of a train driver.

4. Execute the glint and glare analysis on the DTM-based 3-D model (2nd analysis), in respect of each of the theoretically affected receptors. This identifies the times of the day and months of the year that glint and glare could potentially affect receptors in the absence of screening.

   Note: When the sun is situated within 10 degrees of a reflecting PV panel as viewed from a particular receptor, the sun will be a much greater source of glare than what emanates from the surface of the PV panel therefore any potential glare during these periods is excluded when assessing potential impacts.

5. Perform the same calculations (3rd analysis) using a high-resolution digital surface model (DSM) that accounts for the existing screening inherent on and surrounding the site at the time of capture. This offers a truer reflection of the actual glare that is likely to occur and highlights where landscape mitigation may be required.

   Note: A limitation of DSM data in the context of this assessment type is that it is a snapshot of the screening situation at the time of the data capture. This situation is broadly indicative as hedgerows are a semi-permanent feature of the Irish countryside, however, seasonal variation through growth and/or cutting may result in minor changes to their screening potential. A further limitation is due to the aerial overhead nature of data capture. This can result in the under-reporting of potential visibility beneath the tree or woodland canopy and can understate the visibly porous nature of some thin hedgerows. This can result in minor underestimating of glare periods. However, where the data is deemed to be significantly unreliable for the reasons stated, analysis is supplemented, where possible, with a thorough assessment of aerial photography, Google Street View imagery and on-site verification.

6. Where instances of glint and glare remain, determine whether they are likely to cause a hazard / nuisance. For dwellings, this is achieved by comparing the periods of glare potential with our 'Magnitude of Glint and Glare Effects' table, while transport routes are examined in further detail for potential for hazardous impacts.
7. If hazard / substantial nuisance is likely to occur, mitigation measures are proposed where possible. This might relate to the re-siting of particular panels and / or the provision of additional screening.
8. If necessary, re-run the glint and glare calculations (4th analysis) to verify the effectiveness of the proposed mitigation measures and determine if there are any residual glare impacts.

1.2.2 Magnitude of Impacts for Dwelling Receptors

Although there is currently no regulation or guidance as to acceptable levels of glint and glare effects at receptors in Ireland, it is considered necessary to provide a gauge for determining relative levels of impact across a range of development types. Macro Works has established the following indicative textual categories of effect, which are used herein to determine the relative impact levels (Table 1.1 refers). The percentage figures provided are intended as a relative guide only. The final category of assessment is determined on the basis of professional judgement, and accounts for mitigating factors where relevant and the careful consideration of a range of circumstantial variables that may act to intensify or reduce the effect upon a particular receptor.

Note: The magnitude of glint and glare effects in Table 1.1 relates only to static receptors such as residential dwelling. As road receptors are moving objects and will only ever have the potential to experience momentary reflectance periods, the following impact magnitudes are not considered relevant for road receptors. Instead, road receptors will be assessed on whether periods of reflectance have the potential to generate significant nuisance or hazard effects.

Table 1.1 Magnitude of Glint and Glare Effects

Magnitude of Impact	Description
Very High	Hazard / nuisance effects emanating from highly reflective surfaces (>50% sunlight reflection) for most of the year (>70% / 255 days) and for significant periods of each day (>45 mins).
High	Hazard / nuisance effects emanating from moderately reflective surfaces (>30% sunlight reflection) for the majority of days in a year (>50% / 182 days) and for substantial periods of each day (>30 mins).
Medium	Nuisance effects emanating from moderately/low reflective surfaces (>10% sunlight reflection) for a substantial number of days in a year (>30% / 109 days) and for substantial periods of each day (>20 mins).
Low	Nuisance effects emanating from low reflective surfaces (>5% sunlight reflection) for a modest number of days in a year (>10% / 36 days) and for notable periods of each day (>15 mins).
Very Low	Nuisance effects emanating from low reflective surfaces (>5% sunlight reflection) for a small number of days in a year (≤10% / 36 days) and for short periods of each day (<15 mins).
Negligible	Effects either not geometrically possible or barely measurable.

Important Note

It must be emphasised at this point that all results, whether from FAA endorsed SGHAT software or our own bespoke software, are theoretical by default in that they assume that the sun is always shining and at full intensity. The results do not account for climate and inherent weather patterns that occur across the island of Ireland.

Records from Met Éireann (The Irish Meteorological Service) indicate that "over the year as a whole, most areas get an average of between 3 1/4 and 3 3/4 hours of sunshine each day". It states that "the sunniest months are May and June. During these months, sunshine duration averages between 5 and 6.5 hours per day over most of the country"[2].

While we cannot correlate the historic random periods of sunshine with our predicted periods of glare, we can state with a high level of confidence that the weather, more precisely cloud cover, will account for a substantial reduction in all figures quoted in this report i.e. frequency and duration of glare periods.

In addition, atmospheric conditions such as haze, mist, fog and precipitation will all have the effect of both reducing the visibility of the site overall and reducing the intensity of any glare emanating from the proposed solar development.

1.2.3 Relevant Parameters of the Proposed Development

The photovoltaic panels are to be oriented in a south-facing direction to maximise solar gain and will remain in a fixed position throughout the day and year (i.e. they will not rotate to track the movement of the sun). The panels will rise to a height of 2.5m above the level of the terrain and will be pitched at 35 degrees. It is not geometrically possible for glare to occur in the terrain to the north of these south-facing PV panels; hence the 1 km study area does not extend to the north of the proposed PV panels.

The site and study area are located in the southern outskirts of Carlow town, approximately 1.9km from the town centre. The western portion of the study area also encompasses a portion of County Laois. The topography of the study area is generally flat, with the terrain in the western section sloping towards the Barrow corridor. Much of the study area is area used for agrarian practices. These pastoral parcels are bound by networks of intervening hedgerow vegetation and mature trees lines. Additionally, dense riparian vegetation is found along the Barrow corridor. There are also considerable residential and commercial land uses within the study area, particularly towards the north as it is closer to the town centre. In terms of drainage, the River Barrow is the principal watercourse within the study area.

The site is located on the outskirts of Carlow town. There are some notable clusters of dwellings throughout the study area, particularly in the northern sector closer to Carlow. Outside of these clusters, housing is relatively sparse. The nearest dwellings are located c. 125m west of the proposed development. the R448 is the principal transport route within the study area.

Due to the southerly orientation of the PV panels in the proposed solar development, ground-based receptors (houses and transport routes) situated to the west of the solar array can only be affected by morning reflectance, when the sun is rising in the east. Conversely, receptors situated to the east of the site and can only be affected by evening reflectance, when the sun is setting in the west.

2 https://www.met.ie/climate/what-we-measure/sunshine

Further, south facing panels in a landscape such as this result in a typical pattern of glare with potential glare impacts upon surrounding receptors occurring during the months February – October. This broadly represents the season where some or all foliage is present on vegetation. The assessment of the screening capacity of the surrounding vegetation in its winter state is therefore not necessary.

Figure 1.6: Aerial view of proposed solar development site and the study area.

1.2.4 Assessment of Residential Receptors

1.2.4.1 Identification of Relevant Residential Receptors

Figure 1.7 - Figure 1.8 are output maps of the study area showing the results (areas of potential solar irradiance) of 1st phase reflectance analysis carried out on the proposed solar development. These account for the path of the sun throughout the entire year; the panel positions and parameters; the 3D terrain parameters. This is the starting point for determining which residential receptors have the geometric potential to be affected by glint and glare – in the absence of screening.

Note: The yellow buffer line around the reflectance pattern indicating 'Area of consideration for further analysis' on the output maps represents a precautionary approach of including dwellings at the fringe of potentially affected areas. It accounts for the fact that this 'first-filter' map is based on a sampling grid point density of 100m.

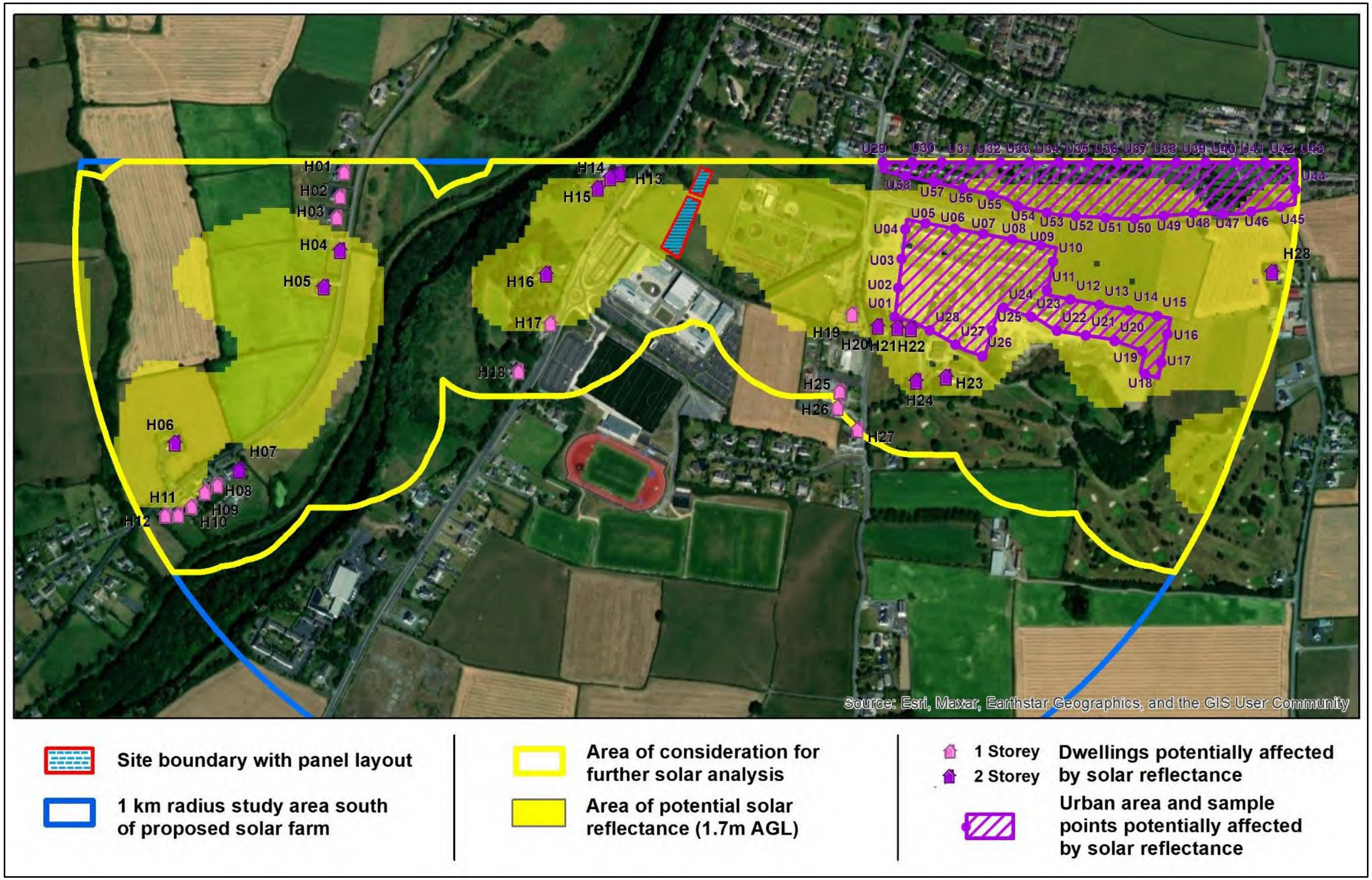


Figure 1.7 Parts of the study area where houses are potentially affected by glint and glare. The results are based on 3D terrain data that does not account for screening by vegetation or man-made structures and are based on a viewers' eye-level when standing on the ground floor = 1.7m above ground level.

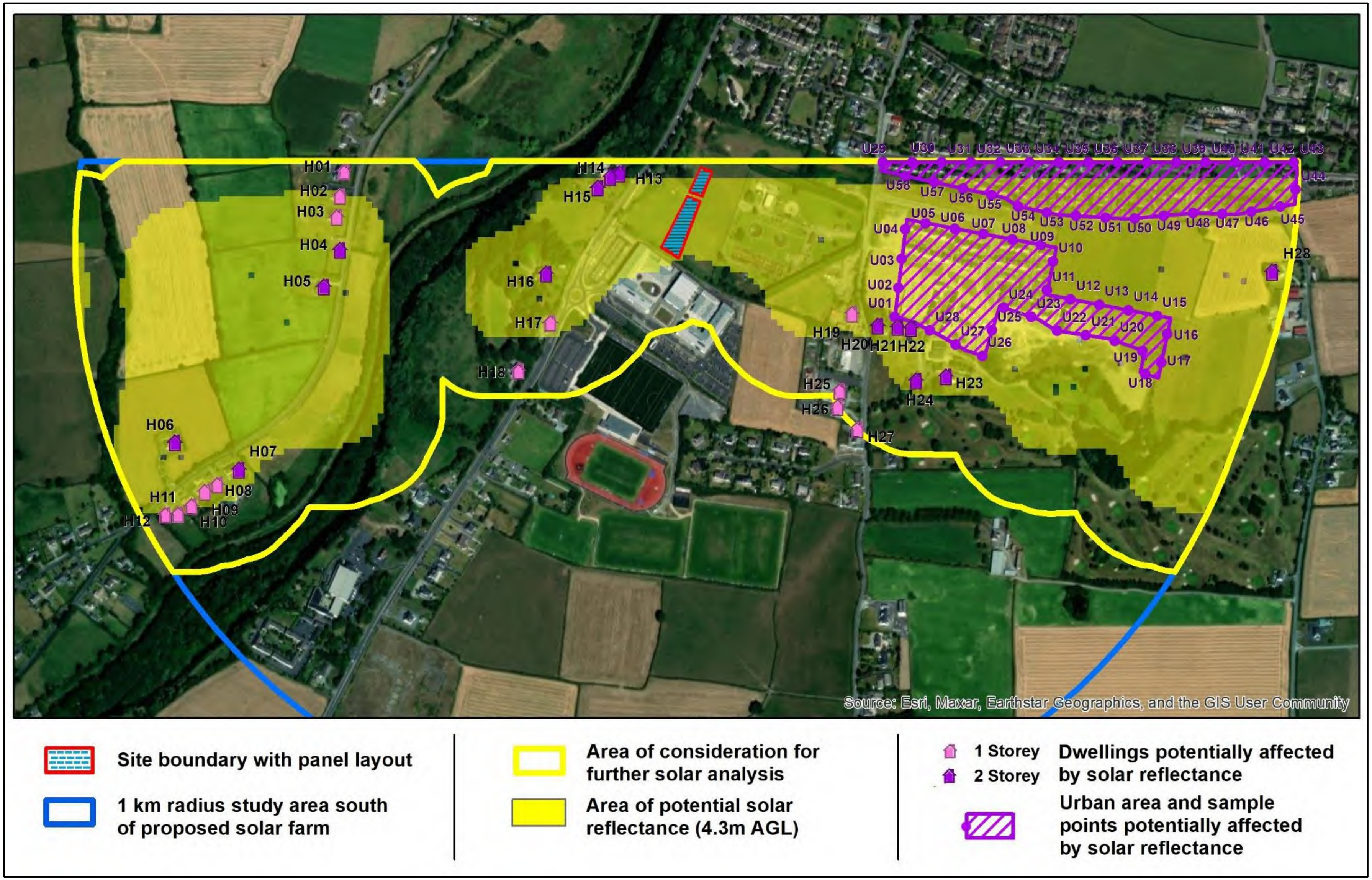


Figure 1.8 Parts of the study area where houses are potentially affected by glint and glare. The results are based on 3D terrain data that does not account for screening by vegetation or man-made structures and are based on a viewers' eye-level when standing on the first floor = 4.3m above ground level.

1.2.5 Results of Analysis of Residential Receptors

The results of the analysis for the dwellings which occur within the 'Area of Consideration for Further Analysis' are contained in Appendix A. These set out the times of day and days of the year that glint and glare effects could theoretically be experienced at residential receptors within the study area. Appendix A excludes periods where the sun is within 10 degrees of the angle of reflectance and it is these figures that form the basis of this assessment.

A summary of the results in Appendix A is included in Table 1.2 below. An assessment of the results will be undertaken in Section 1.2.5.1. This assessment also outlines the potential magnitude of impact that may occur at residential receptors.

Note: The results in the left hand columns of Appendix A are theoretical in that they are derived from a "bare-ground" data model that does not account for screening that might exist in the intervening landscape in the form of buildings and/or vegetation. This helps to establish a worst-case scenario baseline, from which we identify a subset of receptors for more thorough investigation. It is important to note that these figures do not necessarily represent an accurate portrayal of real impacts.

Table 1.2 Summary of Results in Appendix A - Dwellings

Receptor ID	Reflectance theoretically possible based on DTM topographic mapping (for control purposes)	Potential for impact after existing screening is taken into account (DSM)
H01	None	None
H02	None	None
H03	Yes Potentially	None
H04	Yes Potentially	None
H05	Yes Potentially	None
H06	Yes Potentially	None
H07	None	None
H08	None	None
H09	None	None
H10	None	None
H11	None	None
H12	None	None
H13	None	None
H14	None	None
H15	Yes Potentially	None
H16	Yes Potentially	None
H17	None	None
H18	None	None
H19	Yes Potentially	None

H20	Yes Potentially	None
H21	Yes Potentially	None
H22	Yes Potentially	None
H23	None	None
H24	None	None
H25	None	None
H26	None	None
H27	None	None
H28	Yes Potentially	None
U01	Yes Potentially	None
U02	Yes Potentially	None
U03	Yes Potentially	None
U04	Yes Potentially	None
U05	None	None
U06	Yes Potentially	None
U07	Yes Potentially	None
U08	Yes Potentially	None
U09	Yes Potentially	None
U10	Yes Potentially	None
U11	Yes Potentially	None
U12	Yes Potentially	None
U13	Yes Potentially	None
U14	Yes Potentially	None
U15	Yes Potentially	None
U16	Yes Potentially	None
U17	Yes Potentially	None
U18	Yes Potentially	None
U19	Yes Potentially	None
U20	Yes Potentially	None
U21	Yes Potentially	None
U22	Yes Potentially	None
U23	Yes Potentially	None
U24	Yes Potentially	None
U25	Yes Potentially	None
U26	Yes Potentially	None
U27	Yes Potentially	None
U28	Yes Potentially	None

U29	None	None
U30	None	None
U31	None	None
U32	None	None
U33	None	None
U34	None	None
U35	None	None
U36	None	None
U37	None	None
U38	None	None
U39	None	None
U40	None	None
U41	None	None
U42	None	None
U43	None	None
U44	None	None
U45	None	None
U46	None	None
U47	None	None
U48	None	None
U49	None	None
U50	None	None
U51	None	None
U52	None	None
U53	None	None
U54	None	None
U55	None	None
U56	None	None
U57	None	None
U58	None	None

1.2.5.1 *Effects on Residential Receptors*

A total of 28 dwelling receptors and 58 urban area receptors were examined. Computer analysis using terrain-only data (DTM) identified that glint and glare is geometrically possible at 11 of the dwelling receptors and 27 urban area receptors. Further analysis, taking account of the existing screening inherent across the study area (using a digital surface model - DSM) and on-site verification of the analysis results, indicates that none of these dwellings or urban areas are actually likely to have the potential to be materially affected by glint and glare. This is on the basis of the considerable screening afforded by buildings and hedgerows that occur between the receptors and potentially reflecting panels. As such, no further assessment was deemed necessary.

1.2.6 Conclusion - Residential Receptors

It has been determined that there will be no glint and glare effects at any of the dwelling or urban area receptors analysed in this assessment.

1.2.7 Assessment of Transport Route Receptors

1.2.7.1 *Identification of Relevant Transport Route Receptors*

Figure 1.9 is an output map of the study area showing the results (areas of potential solar irradiance) of 1st phase reflectance analysis carried out on the proposed solar development. These account for the path of the sun throughout the entire year; the panel positions and parameters; the 3D terrain parameters. This is the starting point for determining which transport route receptors have the geometric potential to be affected by glint and glare – in the absence of screening.

Note: The yellow buffer line around the reflectance pattern indicating 'Area of consideration for further analysis' on the output map represents a precautionary approach of including transport route sections at the fringe of potentially affected areas. It accounts for the fact that this 'first-filter' map is based on a sampling grid point density of 100m.

Receptor Points have been positioned along all the potentially affected roads (R) and railways (T) within the 'Area of Consideration for Further Analysis'. Transport route Receptor Points are placed automatically in an un-biased fashion at 50m intervals along route lines using Geographic Information Systems (GIS) software. There will be instances where points may be screened by single trees in otherwise open sections of route, or, conversely they may be exposed through a gateway in an otherwise long section of screening hedgerow. Their frequency is designed, however, to reflect the overall screening characteristics of the route sections.

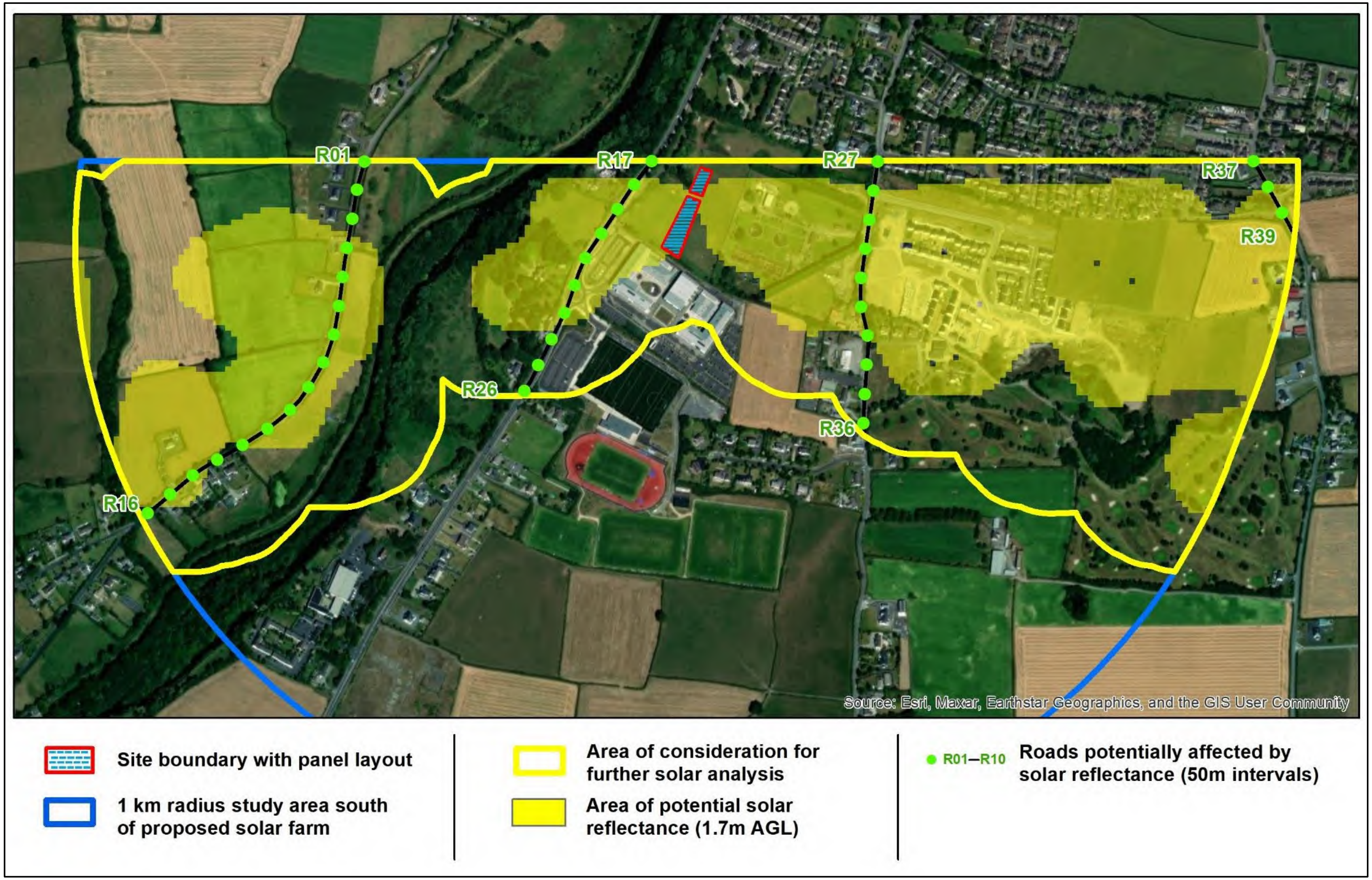


Figure 1.9 Parts of the study area where roads are potentially affected by glint and glare. The results are based on 3D terrain data that does not account for screening by vegetation or man-made structures and are based on viewer's eye level at 1.7m above ground level for roads

1.2.8 Results of Analysis of Transport Route Receptors

The results of the analysis for the transport routes which occur within the 'Area of Consideration for Further Analysis' is contained in Appendix B. These set out the times of day and days of the year that glint and glare effects could theoretically be experienced at transport route receptors within the study area. Appendix B excludes periods where the sun is within 10 degrees of the angle of reflectance, and it is these figures that form the basis of this assessment.

A summary of the results in Appendix B is included in Table 1.3 below. An assessment of the results will be undertaken in Section 1.2.8.1

Note: The results in the left hand columns of Appendix B are theoretical in that they are derived from a "bare-ground" data model that does not account for screening that might exist in the intervening landscape in the form of buildings and/or vegetation. This helps to establish a worst-case scenario baseline, from which we identify a subset of receptors for more thorough investigation. It is important to note that these figures do not necessarily represent an accurate portrayal of real impacts.

It is important to note that the figures for the maximum minutes per day in Appendix B relate to the time window that a section of route can potentially experience reflectance and are therefore of less consequence than they would be for a static dwelling receptor. Such effects can only be experienced for the period of time it takes to travel along the affected road section, and therefore will be fleeting and in any event significantly less than the maximum periods outlined.

Table 1.3 Summary of Results contained in Appendix B - Transport Receptors: Roads

Receptor ID	Reflectance theoretically possible based on DTM topographic mapping (for control purposes)	Potential for impact after existing screening is taken into account (DSM)
R01	None	None
R02	None	None
R03	Yes Potentially	None
R04	Yes Potentially	None
R05	Yes Potentially	None
R06	Yes Potentially	None
R07	Yes Potentially	None
R08	Yes Potentially	None
R09	Yes Potentially	None
R10	Yes Potentially	None
R11	Yes Potentially	None
R12	None	None
R13	None	None
R14	None	None
R15	None	None
R16	None	None

R17	None	None
R18	Yes Potentially	None
R19	Yes Potentially	None
R20	Yes Potentially	None
R21	Yes Potentially	None
R22	Yes Potentially	None
R23	None	None
R24	None	None
R25	None	None
R26	None	None
R27	None	None
R28	None	None
R29	Yes Potentially	None
R30	Yes Potentially	None
R31	Yes Potentially	None
R32	Yes Potentially	None
R33	Yes Potentially	None
R34	None	None
R35	None	None
R36	None	None
R37	None	None
R38	None	None
R39	None	None

1.2.8.1 *Effects on Road Receptors*

Appendix B examined a total of 39 road Receptor Points. Analysis of terrain-level screening (using a digital terrain model - DTM) identified that glint and glare is theoretically possible at 19 of these road Receptor Points. Further analysis, taking account of the existing screening inherent across the study area (using a digital surface model - DSM) and on-site verification of the analysis results, determined that none of the road receptor points will actually have the potential to be materially affected by glint and glare. The results indicate that the existing screening afforded by buildings and vegetation that occurs between receptors and potentially reflecting panels has a considerable bearing on reducing the overall glint and glare likely to be experienced within the study area. As such, no further assessment was deemed necessary.

1.2.9 Conclusion - Road Receptors

It has been determined that there will be no glint and glare effects at any of the road receptors analysed in this assessment.

1.3 ASSESSMENT OF AVIATION RECEPTORS

1.3.1 Identification of Relevant Aviation Receptors

In accordance with current IAA and DAA protocol 10 km and 15 km radius study areas were established for the identification of IAA registered aerodromes and main airports respectively, that might require testing for glint and glare impacts. However, there are no IAA registered aerodromes within the 10 km aviation study area and neither of DAA's Dublin or Cork airports occur within 15 km of the proposed solar development. For these reasons, no further aviation analysis was undertaken.

Furthermore, the Planning and Development (Solar Safeguarding Zone) Regulations 2022 set out 43 Solar Safeguarding Zones (SSZs). A SSZ is an area around an airport, aerodrome or helipad in which there is a potential for glint or glare from solar panels to impact aviation safety. The proposed development is not located within any of the defined SSZs, and therefore, an aviation-based glint and glare analysis was scoped out for further assessment.

1.4 OVERALL CONCLUSION

From the analysis and discussions contained herein, it is considered that there will be no reflectance effects experienced at any of the dwelling receptors in this assessment as a result of the proposed solar development at Mortarstown, Co. Carlow. It is also considered that there will not be any reflectance effects experienced at any road receptors assessed in this study as a result of the proposed development.

APPENDIX A: RESULTS OF GLINT AND GLARE ASSESSMENT - DWELLING RECEPTORS

The results tables set out the days of the year and the times of the day that glint and glare effects could theoretically be experienced for each residential receptor within the study area. It is important to note that the analysis assumes that the sun will be shining at all times without cloud cover, thus the output periods in the context of the Irish climate could be considered to be significantly exaggerated.

APPENDIX B: RESULTS OF GLINT AND GLARE ASSESSMENT - TRANSPORT RECEPTORS

The results tables set out the days of the year and the times of the day that glint and glare effects could theoretically be experienced for each transport receptor within the study area. It is important to note that the analysis assumes that the sun will be shining at all times without cloud cover, thus the output periods in the context of the Irish climate could be considered to be significantly exaggerated.