

Bat Fauna Impact Assessment for a Development at Hollystown, Dublin 15, Co. Dublin.



03<sup>rd</sup> November 2025

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.

On behalf of: Dublin County Board G.A.A.

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Document Control Sheet						
Client	Dublin County Board G.A.A					
Project	Bat fauna impact assessment for a Development at Hollystown, Dublin 15, Co. Dublin					
Report	Bat Fauna Impact Assessment					
Date	03 <sup>rd</sup> November 2025					
Version	Author	Reviewed	Date			
Planning	Bryan Deegan	Jack Doyle & Luke Dodebier	03 <sup>rd</sup> November 2025			

#### **SUMMARY**

Proposed work:

Impact on bats:

Survey by:

Structure: The site primarily consists of a disused golf course. There is also a

disused golf clubhouse and associated car-parking area located within

the south-eastern portion of the subject site.

**Location:** Townlands of Hollystown and Yellow Walls, On part of the former

Hollystown golf course lands, Ratoath Road, Hollystown, Dublin 15,

D15 C6258.

**Bat species present:** The site is relatively open with few potential foraging corridors for bats

present.

#### 2022

Two Lesser Noctule (*Nyctalus leisleri*) and two Soprano Pipistrelle (*Pipistrellus pygmaeus*) bats were noted foraging briefly on site. A common pipistrelle was noted emerging from the western elevation of the unused clubhouse.

#### 2025

Four Common Pipistrelle (*Pipistrellus pipistrellus*) bats were recorded emerging from the western elevation of the unused clubhouse. A single common pipistrelle bat was recorded foraging along a treeline immediately north of the unused clubhouse.

Redevelopment of clubhouse and placement of pitches with

floodlighting on site.

A small number of bats were recorded on site, including a common pipistrelle (*Pipistrellus pipistrellus*) roost in the western elevation of the disused clubhouse (four bats in 2025), as well as occasional foraging by common pipistrelles and two Leisler's bats in 2022. The proposed works involve extending the clubhouse and developing new sports pitches with associated floodlighting, which may temporarily displace bats from the site.

The site consists mainly of grassland with some semi-mature trees; no additional roosting trees or key foraging corridors were identified. Lighting design has been optimised to reduce impacts on bats, including warm-white (4000°K) fittings, restricted operating hours, deflectors, and no lighting on Pitch 3 from April to September.

Mitigation measures include the provision of bat boxes and additional planting to provide roosting and screening. While foraging activity may be temporarily reduced until landscaping matures, the small number of bats present and the availability of alternative habitats nearby mean that the proposed development is not expected to have a significant effect on the local bat population.

Bryan Deegan MCIEEM & Jack Doyle (MSc)

Survey dates: 29<sup>th</sup> August 2022 & 21<sup>st</sup> August 2025

### Competency of Assessors

This report has been prepared by Bryan Deegan MSc, BSc (MCIEEM). Bryan has over 30 years of experience providing ecological consultancy services in Ireland. He has extensive experience in carrying out a wide range of bat surveys including dusk emergence, dawn re-entry and static detector surveys. He also has extensive experience reducing the potential impact of projects that involve external lighting on Bats. Bryan trained with Conor Kelleher author of the Bat Mitigation Guidelines for Ireland (Kelleher and Marnell (2022)) and Bryan is currently providing bat ecology (impact assessment and enhancement) services to Dun Laoghaire Rathdown County Council primarily on the Shanganagh Park Masterplan. The desk and field surveys were carried out having regard to the guidance: Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition (Collins, J. (Ed.) 2016) and Marnell, Kelleher and Mullen (2022), Bat Mitigation Guidelines for Ireland V2 (which update and replace the Bat Mitigation Guidelines for Ireland published in 2006).

Jack Doyle (MSc Sustainable Environments) also carried out fieldwork elements of this Bat Fauna Impact Assessment. Jack is an experienced environmental project manager, joining Altemar in March 2021. Jack has led and carried out a wide range of flora and fauna surveys across Ireland and produced ecological assessments on residential, commercial, and infrastructure projects. Jack is skilled in breeding & wintering ornithological surveys, roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, and habitat identification.

This report has also prepared by Luke Dodebier. Luke holds a BSc (Hons.) in Wildlife Biology and has 6 years' experience in ecological consultancy. Luke has worked on a large variety of projects from large scale renewable projects to small scale residential projects and seen them to completion. Luke is a skilled terrestrial ecologist, experienced in Bird, mammal and flora surveying as well as associated reporting in AA, NIS and EcIA, designing and implementing mitigation for bats including lighting and habitat enhancement. Luke has attended the following courses: Bat Detector Workshop (BCI, July 2018), Bat mitigation course (CIEEM, November 2019) Bat Handling Course (BCI, 2025).

### Legislative Context

Wildlife Act 1976 (as amended by, inter alia, the Wildlife (Amendment) Act 2000).

Bats in Ireland are protected by the Wildlife (Amendment) Act 2000. Based on this legislation it is an offence to wilfully interfere with or destroy the breeding or resting place of any species of bat. Under this legislation it is an offence to "Intentionally kill, injure or take a bat, possess or control any live or dead specimen or anything derived from a bat, wilfully interfere with any structure or place used for breeding or resting by a bat, wilfully interfere with a bat while it is occupying a structure or place which it uses for that purpose. "

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora has been transposed into Irish Law, including, via, *inter alia*, the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). See Art.73 of the 2011 Regulations which revokes the 1997 Regulations.

Annex II of the Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) lists animal and plant species of Community interest, the conservation of which requires the designation of Special Areas of Conservation (SACs); Annex IV lists animal and plant species of Community interest in need of strict protection. All bat species in Ireland are listed on Annex IV of the Directive, while the Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is protected under Annex II which related to the designation of Special Areas of Conservation for a species.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), all bat species are listed under the First Schedule and, pursuant to, *inter alia*, Part 6 and Regulation 51, it is an offence to:

- Deliberately capture or kill a bat;
- Deliberately disturb a bat particularly during the period of breeding, hibernating or migrating;
- Damage or destroy a breeding site or resting place of a bat;
- Keep, sell, transport, exchange, offer for sale or offer for exchange any bat taken in the wild.

### Receiving Environment

#### Background

The Dublin County Board G.A.A. has received planning permission (FW22A/0098) for a proposed GAA cluster facility which will include, in summary; 4 No. floodlit pitches, the alteration/refurbishment of the existing clubhouse and the construction of a two storey extension thereto, a warm up area, indoor training pitch, hurling wall, a spectator stand for up to 500 people, with car parking, coach and bicycle parking facilities on the lands of the former Hollystown Golf Club in Co. Dublin.

A description of the proposed GAA Cluster Facility at Hollystown is listed below.

#### **Playing Pitches and External Works**

The external works will consist of the following elements;

- 3 Full size (145m x 90m) sand-based grass, drained playing pitches (Pitches No. 1, 3 and 4) with 5m runoff area, of which Pitch No. 1 will be primary pitch for competitions, being located close to the buildings with spectator seating alongside. These pitches will have an engineered drainage system consisting of slit drains, feeding into pitch drains and from there to collector drains, this approach ensures a better playing surface with greater pitch endurance.
- 1 Full size (145m x 90m) all weather artificial grass (3G with shock pad), drained playing pitch (Pitch No. 2) with 5m run-off area. The all-weather pitch will be fenced off to protect it against unauthorized usage, thus preserving the playing surface.
- 2 no. dugouts and scoreboard to all pitches.
- Floodlighting to all four pitches (350 lux for Pitches No's 2, 3 and 4, with primary pitch; Pitch No.1, lit to 500 lux). Typical 6 columns per pitch, with the exception of Pitch No. 1, which has 7 no, all with 21.3m high.
- Two sets of goals (12m high goalposts, 6.5m wide crossbar and nets) for each pitch.
- Ball-stop netting (12m high x 30m long) to the rear of each goal.
- Railing around each of Pitches No. 1, 3 and 4.
- Warm up/Shuttle Run areas.
- Walking/Jogging trail (c.1km long x 3.7m wide) around the full perimeter of the site with outdoor exercise equipment accessible to the public. Note this trail facilitates emergency access to the playing pitches.
- Car parking (63 spaces of which 9 are universal access and 4 electrical charging) and Coach parking (4 Spaces) on existing hard standing to the front, and new permeable paving to the side and rear of the pavilion.
- 50 Bicycle Stands which can accommodate parking of 100 bicycles and 2 electric bicycle charging points.
- New Entrance for vehicles, cyclists and pedestrians to be constructed onto the Kilbride Road.
- Overflow car parking, as required (up to 100 additional spaces) on grasscrete or similar porous surface.
- New foul sewers to serve the development, connecting into existing foul sewer within the site.
- New surface water drains to catch and attenuate run-off from roofs and hard standing, as well as drain the pitches. All surface water drainage will follow a SuDS strategy inclusive of source and site controls.
- 2 No. Groundwater wells, irrigation tank, pumps and irrigation system to water natural grass pitches.
- Rainwater harvesting tank connected into the above system.
- Fire static storage tank connected into the above tanks system.
- Utility connections including water, power and communications.
- Planting/Landscaping around perimeter.
- 3 No. Pedestrian / Cycle Access Gates along southern boundary to adjacent landscaped corridor, proposed under separate planning application by Glenveagh Homes Ltd.
- Earthworks and minor retaining structures.
- Entrance sign for development.

#### **Buildings & Structures;**

- Upgrade to existing clubhouse (existing area 678m²) with the provision of 4 team changing rooms (2 existing and 2 new, through alteration of existing bar layout, typically 62m² each and with new external access door), officials changing room, showers and toilets on the ground floor, retention of existing kitchen facilities, re-purposing of first floor to offices and team meeting space/multi-purpose room, including removal of external stairs.
- Construction of new two-storey extension (area 1,276m²) 10.06m high to provide 6 team changing rooms (59m² each), showers and toilets, baths and physio rooms, plant room and toilets for spectators, all on ground floor. New 300m² Gymnasium, storerooms, office and physio space and team meeting space/multi-purpose room on first floor. New access stairs and lift as well as terrace and green roof and photovoltaic solar panels.
- Separate Indoor Training Facility (area 820m²) 7.25m high with 30m x 20m pitch, team tactics space, toilets, plant room and store for equipment.
- Spectator Stand (area 296m²) 7m high to accommodate 500 spectators with partial roof/cover, and undercroft equipment store on eastern side of Pitch No.1.
- Hurling walls (9m x 9.5m) 5m high and fenced in, floodlit astro-turf hurling practice area.
- ESB Substation (area 42m²) and switch room.
- A maintenance & equipment building (area 128m²) 4.3m high.
- Demolition of existing driving range and pro-shop shed (existing area 72m<sup>2</sup>).

The proposed site outline, location, and layout plan is demonstrated in Figures 1 -3.

#### Landscape

The landscape strategy for the proposed development has been prepared by Brady Shipman Martin. The landscape plan is demonstrated in Figure 3. It should be noted that a native treeline is proposed surrounding the proposed pitch development area and in particular on the eastern boundary of the site.



Figure 1. Outline of proposed site.



Figure 2. Site plan

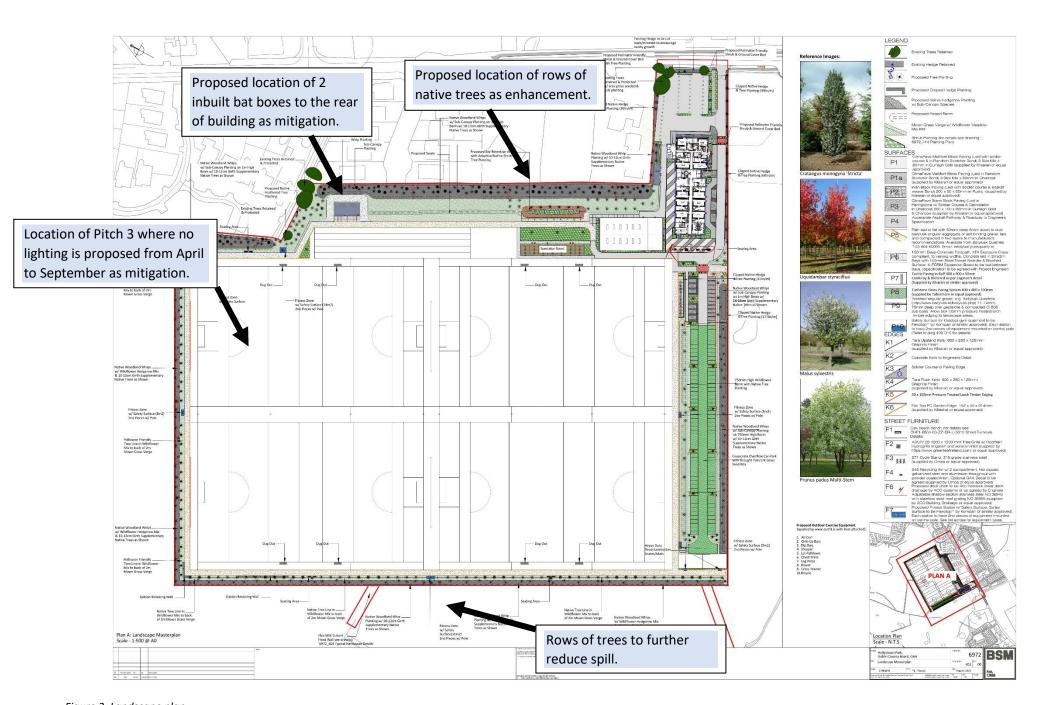


Figure 3. Landscape plan

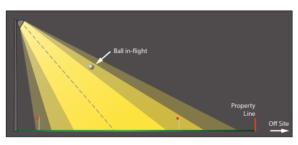
#### Lighting

#### **Floodlights**

A Floodlight Planning Report was prepared by Musco Lighting. This report details the following lighting strategy for the subject site:

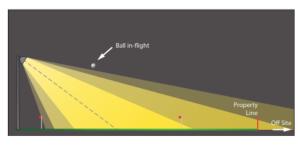
#### '1 Column height, number of columns and aiming angles

Choosing appropriate number of columns and column heights is key to the overall quality of the lighting design. Based on the size of the pitch, the sport being played, the competition level, and the application of the floodlighting system (televised or non-televised); column numbers and height requirements must be accurately assessed to ensure the aiming angle of the floodlight onto the pitch is at an appropriate degree to maintain good playability, control glare, and reduce spill light on adjoining properties and roadway. See the diagram below:



Higher Mounting Height

- Optimal control
- Limited spill
- Optimal quality of play



#### Lower Mounting Height

- Some control
- More spill
- Poor quality of play
- Player safety issue

To achieve the lighting standard required, a 21m column solution is proposed. These column heights achieve optimal aiming angles; minimising glare and spill light while facilitating even light distribution as set out by CIBSE LG4.

#### **2 Class Leading Light Control**

The proposal uses Musco's Light Structure Green TLC for LED $^{\mathrm{m}}$  - Total Light Control system. The Musco LED system luminaire is available in a multitude of beam patterns, wattages and cut off visors or cowls ensuring class leading light control and minimal light spill and glare.

In accordance with **GN01/21 – ILP The Reduction of Obtrusive Light lighting** the system proposed is designed 'so that the front glazing is kept at or near horizontal; parallel to the surface to be lit or ground'.



The Illumination Summary (Maintained Horizontal lux & Maintained Max Vertical lux) and proposed equipment layout are demonstrated in Figures 4-6.

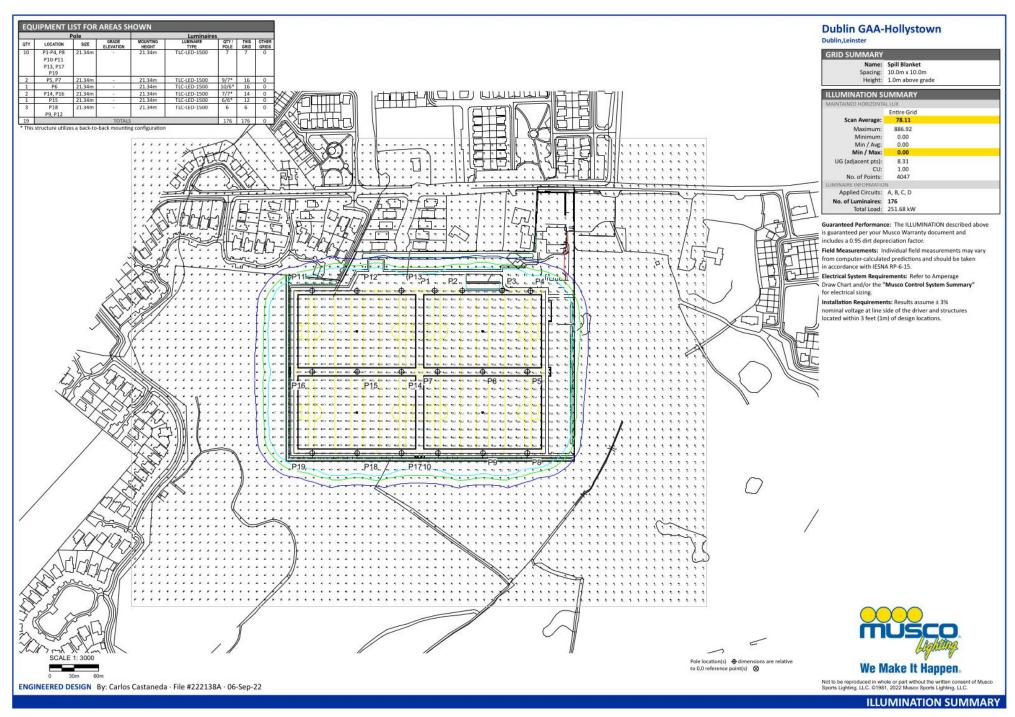


Figure 4. Illumination summary – maintained horizontal lux

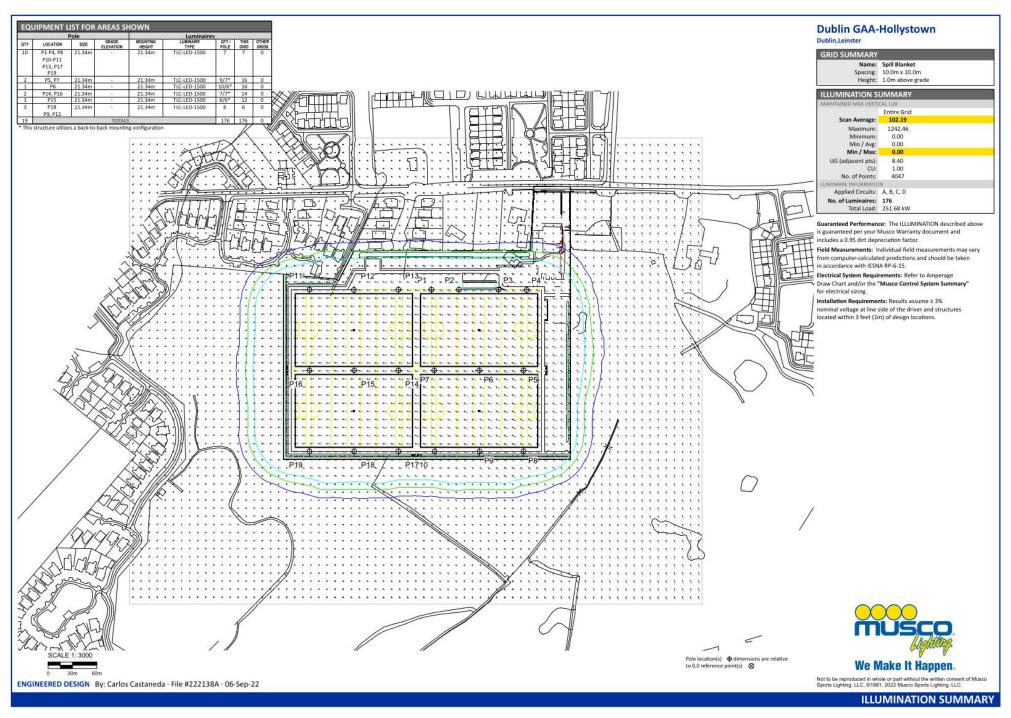


Figure 5. Illumination summary – maintained max vertical lux

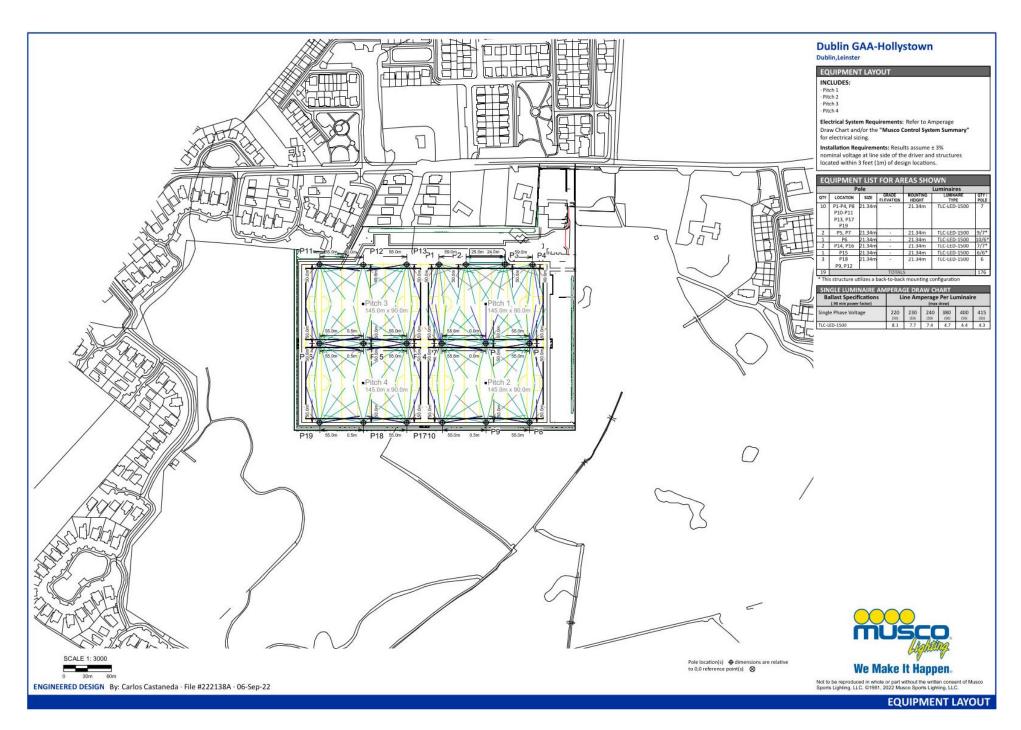


Figure 6. Proposed equipment layout

### **Public Lighting**

Additionally, a Public Lighting Report was prepared by McElligott Consulting Engineers to address the public lighting elements of the lighting design. This report details the following luminaires data:

## Luminaires



## **Luminaire A Data**

Supplier	Urbis Schreder	
Туре	AXIA 3.3 5267 Integrated tenses 48 OSLO N SQUARE GIANT@300mA	
Lamp(s)	48 OSLON SQUARE GIANT@300mA WW 730 230V 6.27 WW 3000K/70 AXIA 3.3 5267 48 OSLON SQUARE GIANT 300mA WW 730 42W 429224 Integrated L	
LampFlux(klm)/Colour		
File Name		
Maintenance Factor	0.82	
Imax70,80,90(cd/klm)	980.0, 156.0, 9.0	
No. in Project	5	

# Luminaire B Data



Supplier	Urbis Schreder		
Туре	AXIA 3.3 5267 Integrated lenses 48 OSLO N SQUARE GIANT/\$550mA		
Lamp(s)	48 OSLON SQUARE GIANT@550mA WW 730 230V		
LampFlux(klm)/Colour	10.65 WW 3000K/70		
File Name	AXIA 3.3 5267 48 OSLON SQUARE GIANT 550mA WW 730 78W 429224 Integrated I.		
Maintenance Factor	0.82		
Imax70,80,90(cd/klm)	980.0, 156.0, 9.0		
No. in Project	21		

## Luminaire C Data



Supplier	Urbis Schreder	
Туре	AXIA 2.1 5165 Integrated lenses 4 NVSL2 19CT@650mA NW 740 23	
Lamp(s)	4 NVSL219CT@680mA NW 740 230V	
LampFlux(klm)/Colour	1.09 NW 4000K/70	
File Name	AXIA 2.1 5165 4 NVSL219CT 680mA NW 7 40 10W 383122 Integrated lenses 230V TF.	
Maintenance Factor	0.82	
lmax70,80,90(cd/klm)	1320.4, 224.1, 0.0	
No. in Project	38	

The Horizontal Illuminance (lux) levels emitted by these luminaires is demonstrated in Figures 7-9.



Figure 7. Horizontal Illuminance (lux) levels - Entrance

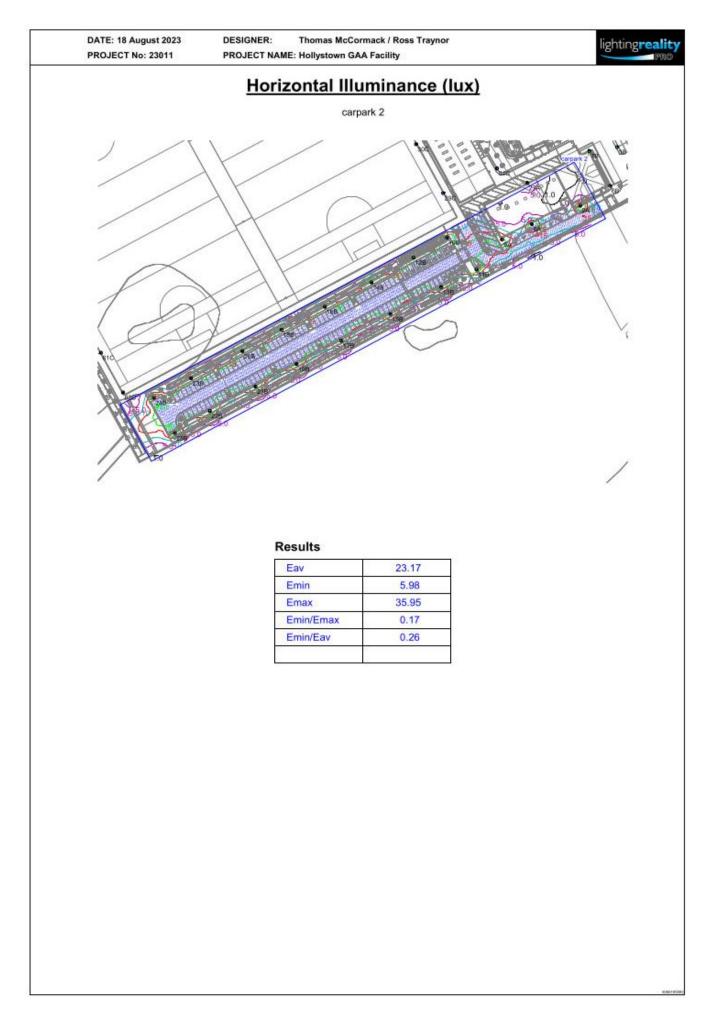


Figure 8. Horizontal Illuminance (lux) levels – Car park 2



Figure 9. Horizontal Illuminance (lux) levels – Pedestrian Path

## Bat survey

This report presents the results of site visit by Bryan Deegan (MCIEEM) on the 29<sup>th</sup> August 2022 and by both Bryan Deegan and Jack Doyle on the 21<sup>st</sup> August 2025. A bat emergent and detector survey was carried out on each survey date. Trees and structures on site were examined for bat roosting potential.

### Survey methodology

As outlined in Marnell et al. 2022 'The presence of a large maternity roost can normally be determined on a single visit at any time of year, provided that the entire structure is accessible and that any signs of bats have not been removed by others. However, most roosts are less obvious. A visit during the summer or autumn has the advantage that bats may be seen or heard. Buildings (which for this definition exclude cellars and other underground structures) are rarely used for hibernation alone, so droppings deposited by active bats provide the best clues. Roosts of species which habitually enter roof voids are probably the easiest to detect as the droppings will normally be readily visible. Roosts of crevice-dwelling species may require careful searching and, in some situations, the opening up of otherwise inaccessible areas. If this is not possible, best judgement might have to be used and a precautionary approach adopted. Roosts used by a small number of bats, as opposed to large maternity sites, can be particularly difficult to detect and may require extensive searching backed up by bat detector surveys (including static detectors) or emergence counts.' In relation to the factors influencing survey results the guidelines outlines the following 'During the winter, bats will move around to find sites that present the optimum environmental conditions for their age, sex and bodyweight and some species will only be found in underground sites when the weather is particularly cold. During the summer, bats may be reluctant to leave their roost during heavy rain or when the temperature is unseasonably low, so exit counts should record the conditions under which they were made. Similarly, there may be times when females with young do not emerge at all or emerge only briefly and return while other bats are still emerging thus confusing the count. Within roosts, bats will move around according to the temperature and may or may not be visible on any particular visit. Bats also react to disturbance, so a survey the day after a disturbance event, may give a misleading picture of roost usage.'

The survey involved the methodologies outlined in Collins (2016) which included the roost inspection methodologies i.e. external methodology outlined in section 5.2.4.1 and the internal survey outlines in section 5.2.4.2 of the guidelines. In addition, the methodologies for Presence absence surveys (Section 7) was carried out for dust emergent surveys.'

As outlined in Collins (2016) 'The bat active period is generally considered to be between April and October inclusive (although the season is likely to be shorter in northern latitudes). However, because bats wake up during mild conditions, bat activity can also be recorded during winter months.'

#### Trees – Potential Bat Roost Inspection

A ground level roost assessment was carried and used to examine any trees on/proximate to the site for features that could form bat roosts. Potential roosting features include heavy ivy growth, broken limbs, areas of decay, vertical or horizontal cracks, cracks in bark etc.

#### Buildings - Potential Bat Roost Inspection

The exterior and interior of all accessible onsite buildings were inspected for evidence of bat activity (e.g. bat droppings, grease markings at potential access points). Accessible areas of these structures were inspected for bat roosts using a Petzl Tikkina 300 Lumens headtorch and a Magnusson IM18 Inspection Camera (Endoscope).

#### **Emergent Surveys**

Emergent surveys were carried out by Bryan Deegan on the 29<sup>th</sup> August 2022 and by both Bryan Deegan and Jack Doyle on the 21<sup>st</sup> August 2025. Bat activity was determined through visual observation and the use of an *Echo meter touch 2 Pro* handheld detector. Surveyors were positioned at areas containing potential features of bat roosting potential at dusk to determine evidence of bat roosting onsite.

#### **Detector Surveys**

Following an emergent survey, a bat detector survey was carried out on both the 29<sup>th</sup> August 2022 & 21<sup>st</sup> August 2025. Detector surveys were carried out onsite using an *Echo meter touch 2 Pro* handheld detector to determine bat activity. Bats are identified by their ultrasonic calls coupled with behavioural and flight observations. All areas of the site were surveyed for bat activity during the detector surveys.

#### Desk Study

A pre-survey bat data search was carried out in August 2022 and revised in August 2025. This included examining records and data from the National Parks and Wildlife Service (NPWS), National Biological Data Centre (NBDC), Bat Conservation Ireland (BCI), in addition to aerial, 6-inch maps and satellite imagery.

#### **Survey Constraints**

All surveys were conducted within the active bat season and the transects covered the entire site multiple times during the night. Weather conditions were good with mild temperatures of 10°C after sunset. Winds were light and there was no rainfall. Insects were observed in flight during all surveys.

As outlined in Collins (2016) in relation to weather conditions 'The aim should be to carry out surveys in conditions that are close to optimal (sunset temperature 10°C or above, no rain or strong wind.), particularly when only one survey is planned.... Where surveys are carried out when the temperature at sunset is below 10°C should be justified by the ecologist and the effect on bat behaviour considered.' There were no constraints in relation to the surveys carried out. All areas of the site were accessible, and weather conditions were optimal for bat assessments.

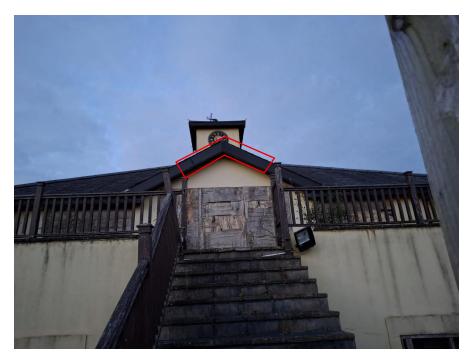
#### Survey Results

#### Trees as potential bat roosts.

No trees of bat roosting potential are located on site. No bats, evidence of bats or bat roost were identified in any of the onsite trees. A derogation license is therefore not required for the removal of trees on site.

#### Buildings as potential bat roosts.

A disused clubhouse is located on site. A single common pipistrelle bat (*Pipistrellus* pipistrellus) was noted emerging from the western elevation of the building on site during the 2022 survey. During the 2025 survey, four common pipistrelles were recorded emerging from the same elevation of this disused structure. Four common pipistrelles emerged from the soffit/facia marked in red (Plate 1). A derogation license is therefore required for alterations to the buildings on site.



**Plate 1.** Western elevation of disused clubhouse. Four common pipistrelles emerged from the soffit/facia marked in red.

Emergent/detector surveys.

#### 29th August 2022

A single common pipistrelle bat (*Pipistrellus* pipistrellus) was noted emerging from the western elevation of the building on site. In addition, two common pipistrelle bats were noted foraging on site and in the lands to the southeast which contains a pond. Two Leisler's (Lesser noctule) bats were noted briefly foraging on site in the northwest and northeast corners of the site (see Figure 10).

### 21st August 2025

Four common pipistrelle (*Pipistrellus pipistrellus*) bats were recorded emerging from the western elevation of the disused clubhouse onsite. These bats were observed emerging from the soffit/ fascia of the gable end of the west facing entrance (see Plate 1).

No evidence of a maternity or large aggregation was observed during the survey and no other bat species were observed exiting the structure. While the roost was not identified as a maternity roost. no evidence of active roosting (e.g. live or dead bats, staining, or accumulations of droppings) was recorded within the interior of the structure. The building does exhibit features with potential to support occasional or opportunistic use by bats for day or night roosting,

A single common pipistrelle bat was also observed briefly foraging along *Cypress leylandii* trees located along the northern boundary of the site (see Figure 11).



Figure 10. Bat Activity onsite (2022)

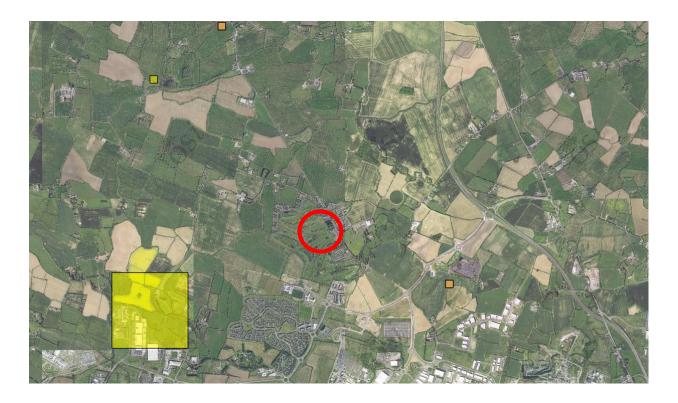


Figure 11. Bat Activity onsite (2025 Survey)

### **Bat Assessment Findings**

### Review of local bat records

The review of existing bat records (sourced from Bat Conservation Ireland's National Bat Records Database) within a 2km² grid (Reference grid O04R) encompassing the study area reveals that one of the nine known Irish species (a single record of a common pipistrelle bat in 1998) have been observed locally. The National Biodiversity Data Centre's online viewer was consulted in order to determine whether there have been recorded bat sightings in the wider area. The following species were noted in the wider area: Lesser Noctule (*Nyctalus leisleri*), Common Pipistrelle (*Pipistrellus pipistrellus*), and Soprano Pipistrelle (*Pipistrellus pygmaeus*) (Figures 12 & 13).



**Figure 12.** Common Pipistrelle (*Pipistrellus pipistrellus*) (yellow), and both Lesser Noctule (*Nyctalus leisleri*) and Common Pipistrelle (orange) (Source: NBDC) (Site – red circle)



Figure 13. Soprano Pipistrelle (*Pipistrellus pygmaeus*) (purple) (Source: NBDC) (Site – red circle)

## Potential Impact of the Development on Bats

The development site consists of a disused golf course predominantly comprised of grassland with some semi-mature trees. No trees of bat roosting potential are noted on site. No potential foraging corridors are noted on site. As the extension to the clubhouse will cover any potential bat roost entry, this will require a derogation license to exclude any bats from the building. In accordance with current guidance, and considering the low level of bat activity recorded, the common nature of the species present, and the absence of any breeding behaviour, the roost is not regarded as being of ecological significance (NRA, 2006). The common pipistrelle (the only species confirmed roosting within the structure) is currently assessed as having a favourable conservation status in Ireland (NPWS, 2019;). However, as the roost is legally protected, it must still be fully considered and appropriately managed during the planning and implementation of any proposed works.

The proposed redevelopment will result in the loss of a roost for four common pipistrelle bats. A derogation licence from NPWS is required to carry out the works to the building on site.

Foraging activity was relatively low on site. The proposed development will change the local environment as new sports pitches are to be constructed, new flood light columns are to be erected, and some of the existing vegetation and trees will be removed. The development is likely to disturb the bat roost in the west side of the club house. Therefore, in order to safeguard bats during the construction and operation of the proposed development, robust mitigation measures and a derogation license from the NPWS will be required.

## Mitigation Measures

As outlined in Marnell et al. (2022) "Mitigation should be proportionate. The level of mitigation required depends on the size and type of impact, and the importance of the population affected." In addition as outlined in Marnell et. al (2022) 'Mitigation for bats normally comprises the following elements:

- Avoidance of deliberate, killing, injury or disturbance taking all reasonable steps to ensure works do not harm individuals by altering working methods or timing to avoid bats. The seasonal occupation of most roosts provides good opportunities for this
- Roost creation, restoration or enhancement to provide appropriate replacements for roosts to be lost or damaged
- Long-term habitat management and maintenance to ensure the population will persist
- Post-development population monitoring to assess the success of the scheme and to inform management or remedial operations.'

The following mitigation will be carried out:

- 1. A derogation license will be sought for the removal of the bat roost. Conditions in relation to the derogation licence will be carried out. However, as a minimum, mitigation in relation to the removal of the roost will include the following:
- 2. As bats were observed emerging from the structure, a bat derogation licence will be obtained from NPWS prior to the commencement of works.
- 3. Works will be undertaken outside the main bat activity period (May August).
- 4. Prior to the commencement of works, a toolbox talk will be undertaken to ensure that all staff members are fully aware of the sensitivities of the site i.e. existing common pipistrelle roost.
- 5. As four common pipistrelle bats were identified emerging from the structure during the dusk emergence survey (from the facia/soffit at the west side), a pre-commencement endoscope and visual inspection survey is recommended to ensure there are no roosting bats present in the building prior to works at the identified roost entrances.
- 6. The requirement for a pre commencement survey does not represent a lacuna in the survey assessment, but is fully in line with industry best practice and will serve to assess any changes in baseline conditions since the survey undertaken in August 2025.

- 7. An ecologist will be present during works at the identified roost locations. This will allow for:
  - Confirmation of bat presence/absence at the time of works,
  - Verification of the nature of the roost, and
  - Will provide guidance on appropriate reinstatement or replacement of roosting features.
- 8. Two in-built bat boxes will be placed at the rear of the building. The installation of which will be supervised by an ecologist to confirm correct installation.
- 9. Should any bats be found to be roosting during the site works, the removal of the roost will be carried out by a bat specialist under NPWS license and placed in suitable bat boxes in suitable location.
- 10. A band of trees will be planted on the eastern boundary of the site and around the perimeter of the site to control the light spill beyond the site outline.
- 11. No lighting will be directed to the roof area on the southern side or at bat boxes.
- 12. Lighting within Pitch 3 will not be turned on during the months April to September inclusive and will be limited to 10pm at all other times.
- 13. Lighting of Pitches 1,2, & 4 will be limited to 10pm during the year.
- 14. Detailed discussions took place in relation to the proposed lighting of the pitches on site. The mitigation measures/ design has been optimised to take bats into account. This includes restricting the spill from the lights through design and deflectors, providing warm sports lighting (4000oK),
- 15. The lighting report notes that the design is in accordance with the Institute of Lighting Professionals (ILP) Guidance Notes for the Reduction of Obtrusive Light GN 01/21 and that the proposed Lux levels, maximum 3.14 Lux vertical, which is very much less than the recommended limit of 10 Lux vertical, at a reference height of 1.5m above ground level at neighboring properties and therefore will not impact adjoining properties to east of Pitches 1 and 3 and to north of Pitches 3 and 4. The design has been optimized to minimize obtrusive light by selecting an appropriate number of columns, of appropriate height and aimed correctly for each pitch.
- 16. The report also details proposed LED lights (TLC-LED-1500) with cut off visors and cowls to prevent light emissions above a horizontal plane above the fitting. No glare or dazzle will arise on a horizontal plane above the fittings as a result of the proposed floodlighting system.
- 17. It is further proposed to reduce the colour temperature of Pitch 3 lights to 4000k and restrict the operation of floodlights to this pitch (Pitch 3 only), so that they will not be used between the months of April to September inclusive.

	Civil Twilight 1 <sup>st</sup> of each month	Time OFF Pitch 3	Time OFF Pitch 1,2 & 4
Jan	16:15	22:00	22:00
Feb	17:07	22:00	22:00
Mar	18:02	22:00	22:00
Apr	19:59	Not used	22:00
May	20:53	Not used	22:00
Jun	21:42	Not used	22:00
Jul	21:56	Not used	22.00
Aug	21:20	Not used	22.00
Sep	20:15	Not used	22.00
Oct	19:02	22:00	22:00
Nov	16:53	22:00	22:00
Dec	16:10	22:00	22:00

## Predicted Residual Impact of Planned Development on Bats

Based on the small number of common species found using the site, the short term displacement of bats from this site will not have any significant effect on local bat populations. Mitigation in relation to bat roosting and bat foraging will be carried out. Lighting on site will not take place beyond 10pm and will be limited in relation to Pitch 3 during peak bat foraging season. Foraging activity on site may be reduced in the short-medium term until the landscaping matures. However, sufficient screening will be in place and bat foraging would be expected to continue on site. No significant long term effects on bats would be foreseen in site.

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