BIRD HAZARD MANAGEMENT PLAN

MANCHESTER GREEN



Site Address:

Hale Court and Enterprise House

333 and 337 Styal Road, Manchester,

M22 5LW

Version History

Version	Date	Reviewed By
01	30/06/2026	Manchester Gov
02	03/07/2026	Manchester Gov.
03b	14/07/2026	Manchester Gov.

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1. Introduction

This Bird Hazard Management Plan (BHMP) is prepared in response to Manchester Airport's concerns regarding the potential birdstrike risk associated with the rooftop solar PV installation at Hale Court and Enterprise House, 337 Styal Road, Manchester, M22 5LW. Given the site's close proximity to Manchester Airport's Air Traffic Control Tower (ATC) and flight paths, it is essential to demonstrate that the installation will not increase bird activity in a way that could affect aviation safety.

This plan assesses the realistic risk of bird attraction, provides mitigation measures where necessary, and aligns with CAA CAP 772: Wildlife Hazard Management at Aerodromes.

2. Site-Specific Risk Assessment

2.1. Location and Surroundings

The site is located in an industrial/commercial area near Manchester Airport. Surrounding features include:

- Existing buildings and developed land, with no impact on open green spaces directly adjacent.
- No water bodies or natural foraging sites in direct proximity, reducing its attractiveness to waterfowl and gull species.
- Commercial building adjacent to subject property with existing rooftop solar PV system.
- No alteration to surrounding habitat as a result of this project, meaning there is no ecological change that could encourage new bird populations.

2.2. Roof Characteristics and Solar Panel Installation

The proposed rooftop PV system will be installed on a steep pitched roof with the following characteristics:

- Panels will be mounted less than 200mm above the roof surface, significantly limiting potential nesting or roosting space.
- Minimal horizontal surfaces, reducing the likelihood of perching.
- No additional ledges, cavities, or open structures that could create shelter or nesting zones.

This fundamentally differs from flat-roof and ground-mounted solar PV systems, which can provide extensive open space for birds. Studies indicate that steep-sloped solar arrays with tight mounting configurations do not provide suitable conditions for nesting birds (Renewable Energy Wildlife Institute, 2022).

2.3. Bird Species of Concern

Given the airport's location, the primary concern would typically be large flocking birds or species that nest in man-made structures. However, the likelihood of the rooftop solar panels attracting these species is extremely low, because:

- Gulls (*Larus spp.*): Attracted to large, open, flat surfaces, particularly near water bodies, which do not exist at this site.
- Feral Pigeons (*Columba livia domestica*): More likely to nest in abandoned buildings, roof cavities, or sheltered spaces - none of which are created by the design.
- Starlings (*Sturnus vulgaris*): Typically roost in dense tree canopies or urban structures with overhangs – none of which are created by the design.

- Corvids (Crows, Magpies, Jackdaws): Opportunistic nesters, but not known to be attracted to closely mounted solar panels on pitched roofs.

Studies by the UK Centre for Ecology & Hydrology show that bird activity on solar PV installations is mainly an issue for large-scale ground-mounted arrays, particularly in agricultural settings where open land attracts birds. There is limited evidence that rooftop solar panels, particularly on steep pitches, lead to increased bird presence (Natural England Research Report 2023).

3. Bird Mitigation Measures

3.1. Design Features Preventing Bird Attraction

To further support the extremely low likelihood of bird attraction, additional measures have been incorporated into the installation design:

Tight Panel-to-Roof Mounting (≤200mm)

- The minimal gap eliminates nesting opportunities.
- Studies on urban solar arrays (Renewable Energy Wildlife Institute, 2022) indicate that tightly mounted solar PV panels significantly reduce the likelihood of bird nesting as they provide insufficient shelter and access.
- No enclosed spaces between the panels and roof reduce shelter for birds.

Steep Roof Pitch

- The steep angle discourages perching, as birds prefer flat or shallow-sloped surfaces.
- Unlike flat-roof installations, this setup offers no viable surface area for birds to land comfortably.

Minimal Water Accumulation

- Panels are installed with a self-cleaning angle, preventing water pooling, which could otherwise attract birds.
- Panel drainage will be maintained with the installation of solar water drainage clips to eliminate any residual water sources.

4. Bird Hazard Monitoring & Management

4.1. Routine Inspections

During the gull breeding season (typically April to July), the roof and solar PV installation will be inspected for evidence of hazardous bird activity including nesting, roosting, loafing and breeding. Outside of the breeding season, inspections will continue as part of routine planned maintenance visits.

Given the design of the installation and the negligible risk of bird attraction identified within this assessment, a weekly inspection regime during the breeding season is considered disproportionate. The inspection frequency proposed within this Bird Hazard Management Plan is considered appropriate to the level of risk presented. However, should monitoring identify increased bird activity, or should Manchester Airport identify a birdstrike hazard associated with the site, the inspection regime will be reviewed and increased where necessary in accordance with Section 4.4.

Each inspection will include a visual check of the solar PV installation and surrounding roof areas. Findings will be recorded within the site's Bird Hazard Log.

4.2. Bird dispersal procedures

Where hazardous bird species are identified, and if safe and lawful to do so, appropriate bird dispersal measures will be implemented. These are but are not limited to; increased human presence, visual disturbance and other non-lethal bird deterrent methods.

Should birds continue to occupy the site, further advice will be sought from Manchester Airport and, where necessary, a specialist bird control contractor.

4.3. Incident Reporting

All inspections and bird activity will be recorded within the sites Bird Hazard Log. [1] Where repeated hazardous bird activity is identified or where concerns are raised by Manchester Airport, a meeting between Manchester Airport, the site owner and the Local Planning Authority will be arranged to agree any additional mitigation measures considered necessary.

4.4. Review of Plan Effectiveness

This BHMP will be reviewed if:

- hazardous birds cannot be dispersed within a reasonable timeframe;
- gulls successfully nest adjacent to or beneath the solar panels;
- Manchester Airport identifies increased birdstrike risk associated with the site;
- the monitoring programme identifies repeated hazardous bird activity.

4.5. Failure Criteria

The BHMP will be considered ineffective if:

- hazardous birds repeatedly occupy the site despite management measures;
- gulls successfully nest on or beneath the solar PV installation;
- hazardous bird activity as a result of the solar PV installation presents a demonstrated aviation risk;
- reasonable requests from Manchester Airport are not implemented.

If any of the above apply Manchester Airport will be notified without delay

5. Compliance & Motivation

This Bird Hazard Management Plan fully aligns with CAA CAP 772 and demonstrates that:

- The steep-pitched roof and minimal mounting height do not provide conditions for bird nesting.
- The lack of surrounding habitat changes means bird populations will not be altered.
- The absence of water bodies, food sources, or flat nesting spaces negates the attraction of this site to birds.
- The design inherently discourages perching, roosting, and nesting, eliminating the risk factors associated with increased bird activity.

[1] See appendix A

Given these factors, there is no reasonable expectation that this installation will create additional bird hazard risks for Manchester Airport.

6. Conclusion

This assessment concludes that the proposed rooftop solar PV installation at 337 Styal Road is unlikely to increase bird activity or create an additional birdstrike risk to Manchester Airport. The steep-pitched roof, tight panel-to-roof mounting system, lack of suitable nesting or roosting opportunities, and absence of any changes to surrounding habitat mean the development is not expected to attract hazardous bird species.

To ensure this remains the case throughout the operational life of the development, this Bird Hazard Management Plan establishes a long-term monitoring and management regime. This includes:

- Inspections during the gull breeding season to monitor for hazardous bird activity.
- A procedure for recording, reporting and, where necessary, dispersing hazardous bird species using appropriate and lawful methods.
- A comprehensive inspection log recording bird activity, actions taken and outcomes.
- A clear escalation process, including notification to Manchester Airport where required and review of the management plan should monitoring identify an increased aviation risk.
- A commitment to implement additional mitigation measures where necessary to maintain aviation safety.
- A commitment for this Bird Hazard Management Plan to remain in force for the operational lifetime of the solar PV installation and to transfer to any future owner or operator of the site.

Based on the design of the development and the management measures set out within this plan, the proposed solar PV installation is considered to comply with the principles of CAA CAP 772 and will be managed to ensure that any unforeseen bird activity is identified promptly and addressed appropriately throughout the lifetime of the development. Whilst the risk of bird attraction is considered negligible, this BHMP establishes a long-term monitoring and management regime to ensure that any unforeseen bird activity is identified promptly and managed appropriately throughout the operational life of the development.

7. Appendices

Appendix A

Inspection Date & time	Est no. and Species observed	Bird behaviour (eg. feeding / loafing / nesting etc)	Actions taken	Details of nests eggs / chick removed
Example	2 x Black headed gull	Roosting		NA