PAGERPOWER
Urban & Renewables

# Aviation Impact Assessment

## TLLF, Tritax London Logistics Fund

## Southampton Road East

April 2026





**PLANNING SOLUTIONS FOR:**

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- Buildings
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# ADMINISTRATION PAGE

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| Issue | Date | Detail of Changes |
|---|---|---|
| 1 | August 2021 | Initial issue |
| 2 | November 2025 | Assessment of new layout |
| 3 | March 2026 | Administrative revisions |
| 4 | April 2026 | Consideration of updated footprint |
| 5 | April 2026 | Remodelling of new building height and footprint |



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# EXECUTIVE SUMMARY

## Report Purpose

Pager Power has been retained to conduct an aviation impact assessment for a proposed building development located off Southampton Road East, Heathrow, to determine potential risks and impacts upon aviation infrastructure in the vicinity of the proposed development. Each relevant piece of infrastructure is assigned a risk classification (High, Medium, or Low), further analysis and recommendations for next steps are made.

## Overall Conclusions

A low impact is predicted with respect to aviation activity at London Heathrow Airport. The proposed development is not predicted to significantly impact the radar and communication navigation and surveillance equipment, the obstacle limitation surfaces, or the instrument flight procedures.

It is recommended that the report is shared with London Heathrow Airport's safeguarding team for their comment.

No significant impacts are predicted with respect to military options, licenced airports, and unlicensed airfields. No further analysis is recommended at this time.

Mitigation is not recommended.

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## ABOUT PAGER POWER

Pager Power is a dedicated consultancy company based in Suffolk, UK. The company has undertaken projects in 64 countries within Europe, Africa, America, Asia and Australasia.

The company comprises a team of experts to provide technical expertise and guidance on a range of planning issues for large and small developments.

Pager Power was established in 1997. Initially the company focus was on modelling the impact of wind turbines on radar systems. Over the years, the company has expanded into numerous fields including:

- Renewable energy projects;
- Building developments;
- Aviation and telecommunication systems.

Pager Power prides itself on providing comprehensive, understandable and accurate assessments of complex issues in line with national and international standards. This is underpinned by its custom software, longstanding relationships with stakeholders and active role in conferences and research efforts around the world.

Pager Power's assessments withstand legal scrutiny and the company can provide support for a project at any stage.

# 1 BACKGROUND

## 1.1 Introduction

Pager Power has been retained to conduct an aviation impact assessment for a proposed building development located off Southampton Road East, Heathrow, to determine potential risks and impacts upon aviation infrastructure in the vicinity of the proposed development. Each relevant piece of infrastructure is assigned a risk classification (High, Medium, or Low), further analysis and recommendations for next steps are made.

The report includes:

- Identification of key constraints associated with Heathrow Airport including:
    - Obstacle Limitation Surfaces – with a technical assessment of the height limitations associated with them;
    - Radar impact – including radar line of sight analysis and an initial screening assessment;
    - Other navigation aids at Heathrow Airport (high-level overview);
    - Instrument Flight Procedures (high-level overview without detailed technical assessment);
    - London Heathrow Airport Public Safety Zones (PSZ).
- Summary of key risks;
- Conclusion and Recommendations.

# 2 PROPOSED DEVELOPMENT INFORMATION

## 2.1 Overview

The following section presents the relevant information for the proposed redevelopment. The site location details considered for this assessment have been extrapolated from the site plans.

## 2.2 Proposed Development Details

The site is located south of the runway 09R/27L. The footprint[1] of the development is shown in Figure 1 below by the black dashed line. The existing building on site has recently been demolished[2].

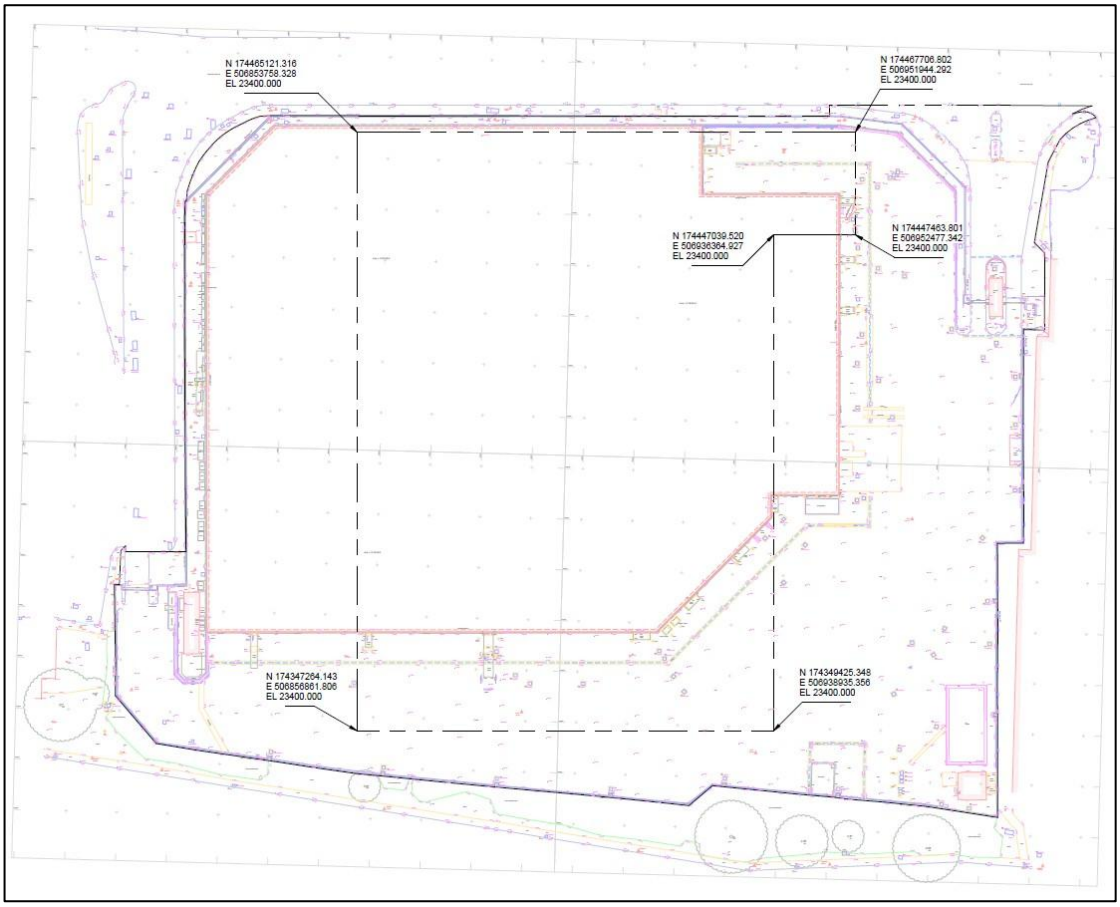


Figure 1 *Proposed development footprint*

[1] Source: 15192-BNY-3DM-ARC-XXX-ZZZ-0001 - Floor Plan - Level 0 Co-ordinates.pdf

[2] As confirmed by the developer.

The site location, relative to London Heathrow Airport, is shown in Figure 2 below.


Figure 2 *Proposed development location, relative to London Heathrow Airport*

Figure 3 below shows an aerial image of the site location and the boundary vertices which have been considered for the analysis. The footprint is shown in blue.


Figure 3 *Assessed vertices – aerial imagery*

## 2.3 Coordinate and Height Data

The vertex coordinates[3] of the proposed development used in this assessment are shown in Table 1 below. Terrain data for the land of the development has been provided by the developer[4].

Heights for assessment consider the maximum roof height above ground level (AGL), in addition to the underlying terrain, to consider the total height above mean sea level AMSL).

| Vertex | Easting | Northing | Terrain Elevation | Roof Height (AGL) | Height (AMSL) |
|---|---|---|---|---|---|
| 1 | 506853.758 | 174465.121 | 23.4m | 16.6m | 40.0m |
| 2 | 506951.944 | 174467.706 | | | |
| 3 | 506952.477 | 174447.463 | | | |
| 4 | 506936.364 | 174447.039 | | | |
| 5 | 506938.935 | 174349.425 | | | |
| 6 | 506856.861 | 174347.264 | | | |

Table 1 *Assessed vertices – coordinates and heights*

[3] Source: 15192-BNY-3DM-ARC-XXX-ZZZ-0001 - Floor Plan - Level 0 Co-ordinates.pdf
[4] Terrain information beyond the site is derived from the OS database.

# 3 AVIATION RISK IDENTIFICATION

## 3.1 Overview

The following sections present an overview of the scope of investigation, which details aviation and radar risks, as well as high-level commentary. Detailed analysis of identified risks are presented in the following sections.

Aviation infrastructure considered in the assessment include:

- NATS En-Route Radar :
    - Primary Surveillance Radar (PSR);
    - Secondary Surveillance Radar (SSR);
- Aeronautical Radio Navigation Beacons;
- Civil Airports;
- Heliports;
- Unlicensed Airfields;
- Met Office (Weather) Radar;
- Ministry of Defence (MOD) infrastructure including:
    - Air Traffic Control Primary Surveillance Radar (PSR);
    - Air Traffic Control Secondary Surveillance Radar (SSR);
    - Air Defence Radar (PSR, ASACS);
    - Precision Approach Radar (PAR);
    - Airbases;
    - Low Flying Zones.

Each aviation risk has an initially calculated indicative Risk Level which is classified as High, Medium or Low.

The inclusion of a specific issue in the analysis is contingent upon its type and its proximity to the proposed development. Table 2 on the following page presents further details on risk categorisation.

| Risk Level | Objection | Resolvable | Example |
|---|---|---|---|
| High | Likely | Possible | MOD objects, planning condition required<br>High mitigation costs. |
| Medium | Possible | Likely | NATS objects, mitigation required at a cost |
| Low | Unlikely | Likely | Initial concerns raised by an Airport<br>Objection later withdrawn |

Table 2 *Aviation Risk Levels*

The risk levels stated are purely indicative at this stage; further analysis may be required and is recommended where appropriate.

## 3.2 Identified Risks

Table 3 on the following pages summarises the aviation risk assessment for the proposed development, including recommendations.

| Stakeholder Type | Identified Infrastructure | Risk | Comments and Recommendations |
|---|---|---|---|
| Airports | London Heathrow Airport | Medium | Further assessed in Sections 4 to 7 |
| | London Heathrow Radar | | |
| | Farnborough Airport Radar | Low | Line of sight from the radar to the proposed development is not predicted based upon bare-earth terrain<br>No significant impact is predicted upon the radar |
| | London Gatwick Radar | Low | Line of sight from the radar to the proposed development is not predicted based upon bare-earth terrain<br>No significant impact is predicted upon the radar |

| Stakeholder Type | Identified Infrastructure | Risk | Comments and Recommendations |
|---|---|---|---|
| NATS En Route | Beacons at London Heathrow | Medium | Further assessed in Section 8 |
| | Bovingdon Radar | Low | The proposed development is 28.3km from the radar<br>No significant impact is predicted upon the radar, considering the relative distance and height of the proposed development |
| | Pease Pottage En-route Radar | Low | The proposed development is 45.1km from the radar<br>No significant impact is predicted upon the radar, considering the relative distance and height of the proposed development |
| MOD | Low Flying System | Low | The proposed development is situated within a military low flying area of low priority<br>MOD accredited aviation lighting is not predicted to be required<br>Further detailed assessment is not recommended at this stage |
| | Northolt Radar | Low | Line of sight from the radar to the proposed development is not predicted based upon bare-earth terrain<br>No significant impact is predicted upon the radar |

| Stakeholder Type | Identified Infrastructure | Risk | Comments and Recommendations |
|---|---|---|---|
| MOD | Odiham Radar | Low | The proposed development is 41.8km from the radar<br>Further detailed assessment is not recommended at this time |
| | Benson Radar | Low | The proposed development is 47.6km from the radar<br>Further detailed assessment is not recommended at this time |
| Civil Airfields | Fairoaks Airfield | Low | The proposed development is 13.9km from the airfield<br>Further detailed assessment is not recommended at this time |
| | Denham Airfield | Low | The proposed development is 14.8km from the airfield<br>Further detailed assessment is not recommended at this time |

Table 3 *Aviation Risk Results*

# 4 LONDON HEATHROW RADAR

## 4.1 Radar Information

There are three radar situated at London Heathrow Airport (LHR). Two of these radar are co-located upon a metal lattice tower. The lower radar is a non-cooperative Primary Surveillance Radar (PSR), the taller is a co-operative Secondary Surveillance Radar (SSR).

Both radar will be used by air traffic controllers to provide approach services to aircraft landing at and departing from London Heathrow Airport. Both radar will also be used by air traffic controllers at national air traffic control centres to provide services to en-route aircraft.

The third radar is understood to be an advanced Surface Movement Radar (SMR) utilising Mode-S. SMR is specifically designed to detect all principal features on the surface of an airport, including aircraft and vehicular traffic. This is not considered in this assessment because it's mainly focused on operations within the airport boundary only.

The radar of significance with respect to the predicted impact is the SSR. This is the typical approach to assessments of radar interference from buildings in the UK, in particular where PSR and SSR are co-located. Shadowing concerns for either radar type are relatively rare in the UK, and the main concern is reflections for SSR in the UK (see section 4.2).

Table 4 below provides the details for the assessed LHR Airport SSR.

| | |
|---|---|
| **Radar Type** | Secondary Surveillance Radar |
| **Overall radar height above mean sea level** | 67m |
| **Average distance between the proposed development and radar** | 1.55km |
| **Average grid bearing from radar to proposed development** | 84° |

Table 4 *LHR SSR radar location details*

A photograph of the LHR SSR is shown in Figure 4 on the following page.


Figure 4 *Photograph of the Heathrow SSR*

The location of radar relative to the site red line boundary is shown in Figure 5 below.


Figure 5 *LHR Radar, relative to the proposed development*

## 4.2 Radar Interference

Buildings, structures and terrain can interfere with SSR. The level of interference normally depends on the size of the interfering structure and its distance from the radar. A larger structure closer to the radar is more likely to interfere than a smaller structure which is further away. The two predominant forms of interference are considered. These are:

### 4.2.1 Reflections

Reflections from a structure can potentially result in genuine aircraft returns being plotted in the wrong place as a result of the structure reflecting signals in a specular (mirror-like) way. This means that an air traffic controller could mis-manage aircraft, leading to safety implications.

Both in-bound and out-bound signals are weakened due to reflections because they are reflected by a structure in both directions.

### 4.2.2 Shadowing

Radar signals are weakened by physical obstacles. The most significant signal blocking is often caused by terrain. Large obstructions within a radar's area of coverage can have a 'shadowing' effect, reducing the signal strength immediately behind them.

This effect is most pronounced immediately behind the structure and becomes less pronounced with distance. This is important because it means a structure's 'shadow' does not block radar coverage indefinitely, and the areas with the highest losses should be considered in an operational context.

Both in-bound and out-bound signals are weakened by shadowing because signals are attenuated by a structure in both directions.

## 4.3 SSR Capabilities

The radar is a Secondary Surveillance Radar (SSR) fitted with a Large Vertical Aperture (LVA) antenna. The radar is located to the south of London Heathrow Airport. It is a Mode S monopulse SSR supplied by Raytheon Systems Limited.

The radar is understood to be a Condor 300 dual channel system with Mode S capabilities. This radar has a range of advanced built-in capabilities for increasing its reliability and performance. Specific features that reduce the radar's susceptibility to interference from buildings are listed in Table 5 below and on the following page.

| Feature | Form of interference | How feature reduces interference | Additional Information |
|---|---|---|---|
| Integral Tracking Function | Reflections | More likely to determine return is genuine if it moves as an aircraft return is expected to | Ensures good false target suppression |
| Refined Algorithms | Reflections and Shadowing | Experience on many sites used to enhance performance | Ensures good performance in complex environments |
| Identification and rejection of false replies | Reflections | False returns are rejected | If two or more replies are identified from the same source all but the first is rejected. |
| Side Lobe Suppression | Reflections | False returns arising from antenna sidelobes are rejected | P1 and P2 pulses are used. This is an encoding system which enables sidelobe signals to be detected by comparing pulse sizes |
| Sensitivity Time Control (STC) | Reflections | Removes reflections | Removes relatively low amplitude replies |
| Minimum Detection Signal Level (MDS) | Shadowing | Maximises radar coverage whilst minimising noise detections | - |
| Dynamic Threshold | Shadowing | Weak signals stronger than any interference signals are detected | - |
| Reply to Reply Correlation | Reflections | Multiple replies required for target processing | Single reply reports are rejected |

| Feature | Form of interference | How feature reduces interference | Additional Information |
|---|---|---|---|
| FRUIT[5] Rejection | Reflections | Track initiation only allowed if report contains two or more correlating replies in the same SSR mode | e.g. two or more Mode A replies |
| Track Processing | Reflections and Shadowing | Improvements are made in target location using history of target position | Improvements made when confidence in location information is low |
| False Target Processing | Reflections | Advanced processing that applies a series of tests to identify and reject false returns | Techniques include:<br>1: Check whether Mode A code is unique<br>2: Check "known" reflection zones<br>3: Use geometric analysis for checking reflection zones<br>4: Self adaptive processing |

Table 5 *Radar features for reducing interference*

## 4.4 Radar Line of Sight Analysis

### 4.4.1 Methodology

The approach taken within this report is presented below:

- Radar line of sight assessment based on the building co-ordinates assessed at their relative height above ground level;
- Screening assessment to determine whether existing buildings and/or landscape features would hide/shield the proposed development from the SSR;
- Consideration of the distance from the SSR;
- Assessment of the predicted impact in the context of the existing environment has been undertaken.

The assessment has included earth curvature and radar refraction. The resulting visibility margin could, in practice, vary by a few metres relative to the results calculated here due to data accuracy. This is not considered a significant limitation when the results are considered holistically.

[5] FRUIT – False Replies Unsynchronized in Time

### 4.4.2 Radar Line of Sight Analysis

A radar line of sight assessment was completed for the proposed development. Figure 6 on the following page shows the line of sight chart to the most visible vertex of the development. The box labelled 'certainty' in the figure advises how much of the obstruction vertically is within line of sight to the assessed radar (rounded to one decimal place). A certainty of 16.6 metres means that the entire height of the proposed development is illuminated by the radar beam, accounting for earth curvature and radar refraction. In this case, the proposed development would be fully visible considering bare earth terrain.

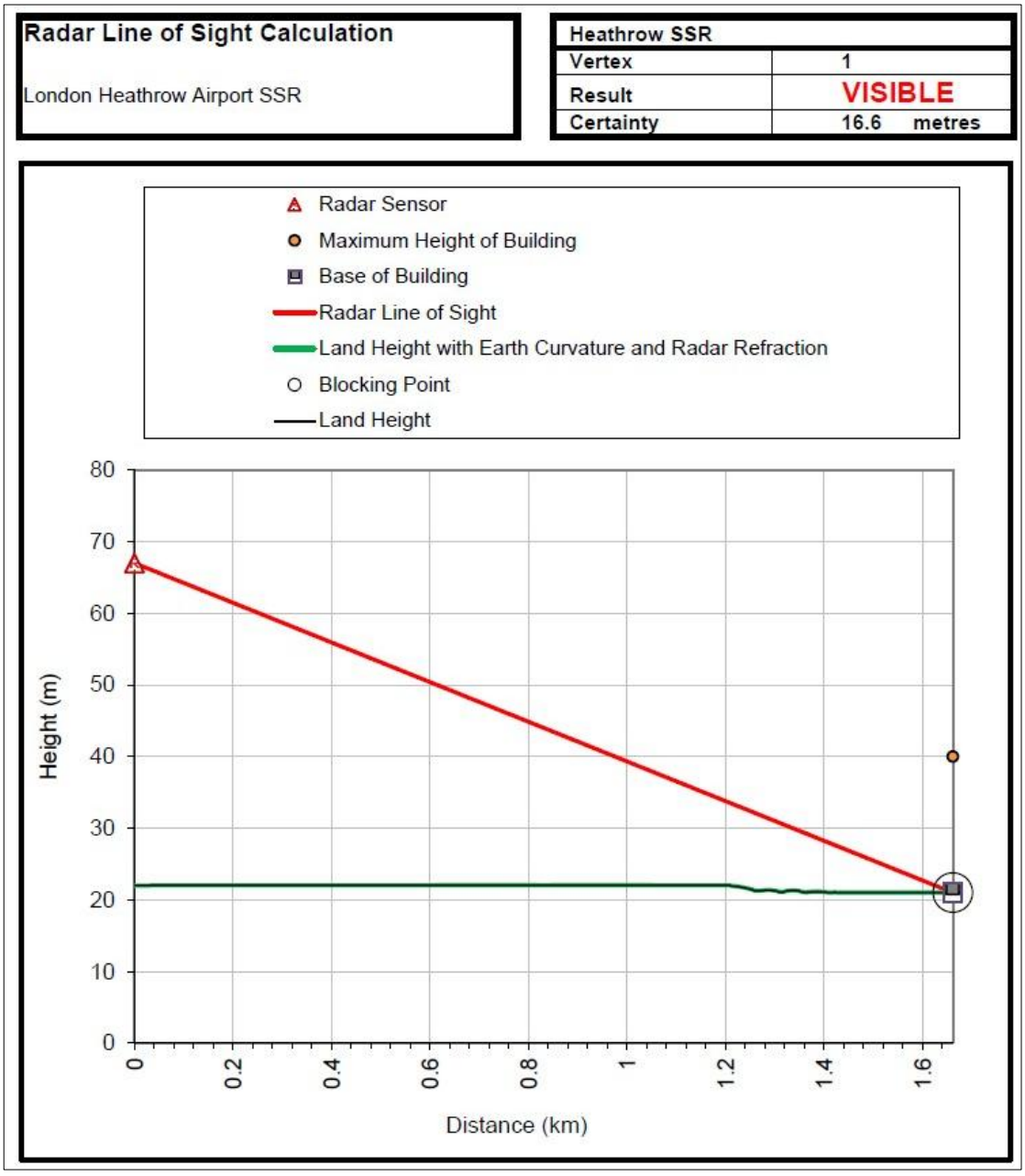


Figure 6 *Radar line of sight chart*

### 4.4.3 Additional Screening

The modelling described in the sections above accounts for the intervening terrain. It does not account for additional obstructions on the ground along the radar line of sight e.g. buildings or vegetation.

Inspection of the aerial imagery suggests that existing obstructions are likely to provide some screening of the development. This can be seen in Figure 7 on the following page.

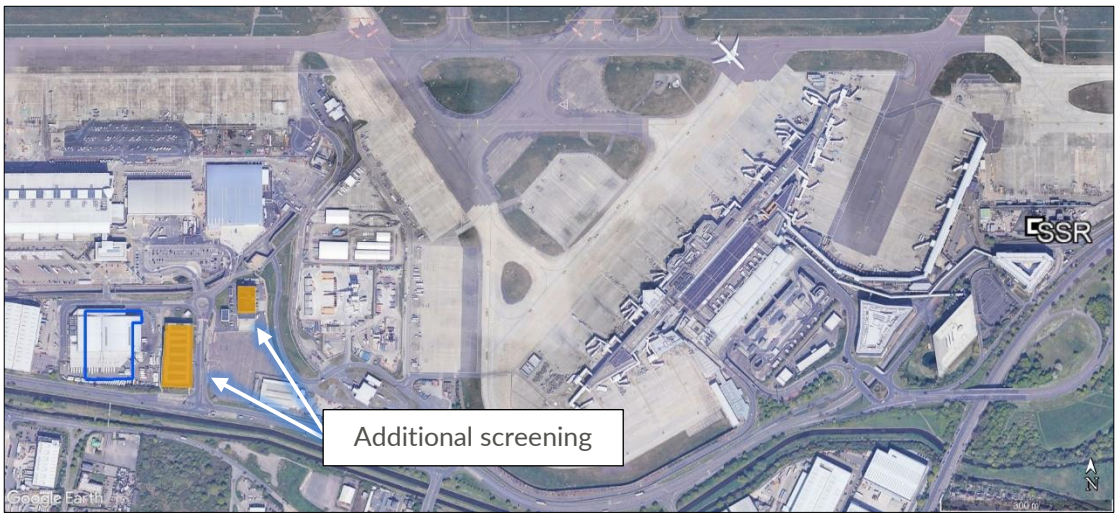


Figure 7 *Identified additional screening – Radar*

The screening that is present is in the form of multi-storey buildings. These obstructions are predicted to partially remove the visibility of the building to the SSR at Heathrow Airport (see Figure 8 below).

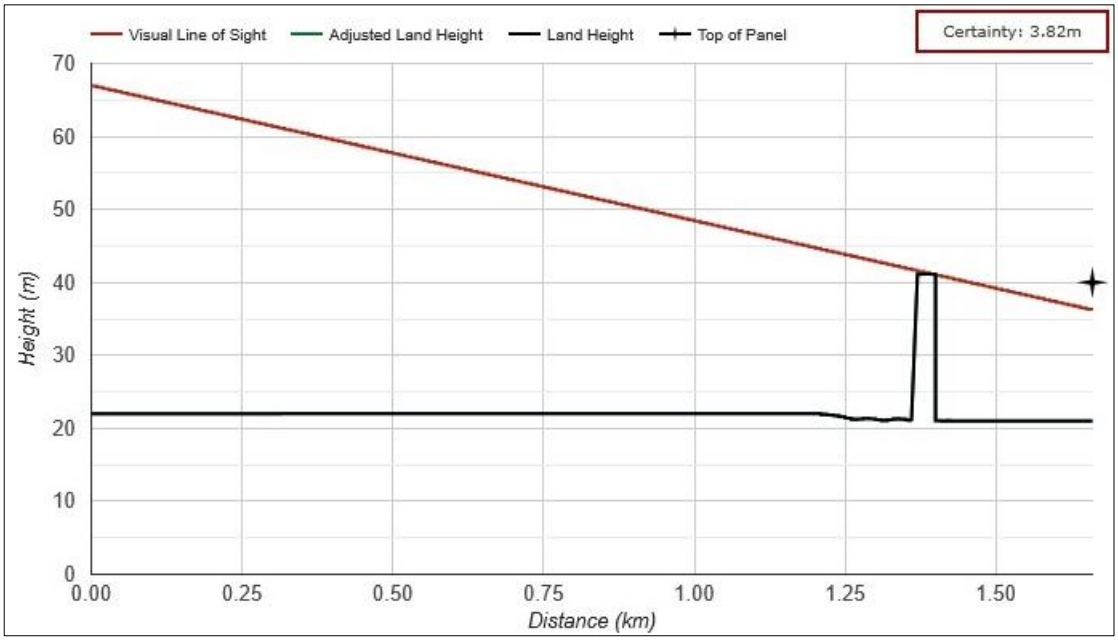


Figure 8 *Visibility of vertex 1 considering the screening of the identified existing buildings*

The proposed development will remain partially visible to the SSR at Heathrow Airport.

The identified screening is predicted to reduce the magnitude of the impact upon the radar. However, due to partial visibility of the development, a technical impact cannot be conclusively ruled out.

Significant shadowing and/or reflection effects are not predicted due to the height of the proposed development, relative to the radar, and the height of the existing structure which was previously located within the site boundary.

## 4.5 Conclusions

The modelling predicts that the proposed development will be partially visible to the SSR at London Heathrow Airport based on bare-earth terrain and consideration of existing obstructions, i.e. neighbouring buildings.

While the potential for a technical impact on the radar cannot be conclusively ruled out, considering the intervening buildings, and the distance to the proposed development, it is predicted that the proposed development could be operationally accommodated.

It is recommended that the safeguarding team at London Heathrow Airport and NATS are consulted to confirm if the proposed development could be operationally accommodated with respect to their radar facilities.

# 5 OBSTACLE LIMITATION SURFACES ASSESSMENT

## 5.1 Overview

Obstacle Limitation Surfaces (OLS) are imaginary planes defined in three dimensions for physical safeguarding purposes (i.e. ensuring that physical structures do not present a safety hazard at an airfield) and are defined around licensed airfields. The OLS for London Heathrow Airport have been modelled with respect to the obstruction heights presented in Section 2.2. The aim is to identify whether the development could be built without infringing the OLS at London Heathrow Airport.

## 5.2 London Heathrow Airport Obstacle Limitation Surfaces

The OLS consists of a set of imaginary planes defined in three dimensions for physical safeguarding purposes (i.e., ensuring that physical structures do not present a safety hazard at an airfield) and are defined around licensed and military aerodromes. The dimensions and geometry of the surfaces are constructed based on detailed rules defined in:

- For licensed aerodromes: UK Civil Aviation Authority's Civil Aviation Publication 168 for licensed aerodromes;
- For certificated aerodromes: Assimilated Regulation (EU) No. 139/2014; and,
- For military aerodromes: UK Military Aviation Authority (MAA): Regulatory Article (RA) 3512: Permanent Fixed Wing Aerodrome - Obstacle Environment for military aerodromes.

The size of the surfaces is dependent on the number of runways, their dimensions and the procedures carried out at the aerodrome. London Heathrow is a certificated aerodrome and therefore has been assessed in accordance with the Assimilated Regulation (EU) No. 139/2014.

The proposed runway has been assessed in addition to the existing runways due to this being formally safeguarded by the airport.

The analysis has shown that the proposed development is laterally underneath and vertically clear of the Inner Horizontal Surface by a minimum clearance of 27.95m. Therefore, the OLS at London Heathrow Airport are not predicted to be infringed.

The OLS for London Heathrow Airport are presented in Figure 9 on the following page along with the assessed points (shown as red crosses[6]).

[6] Multiple crosses may appear as one, due to the scale of the chart.

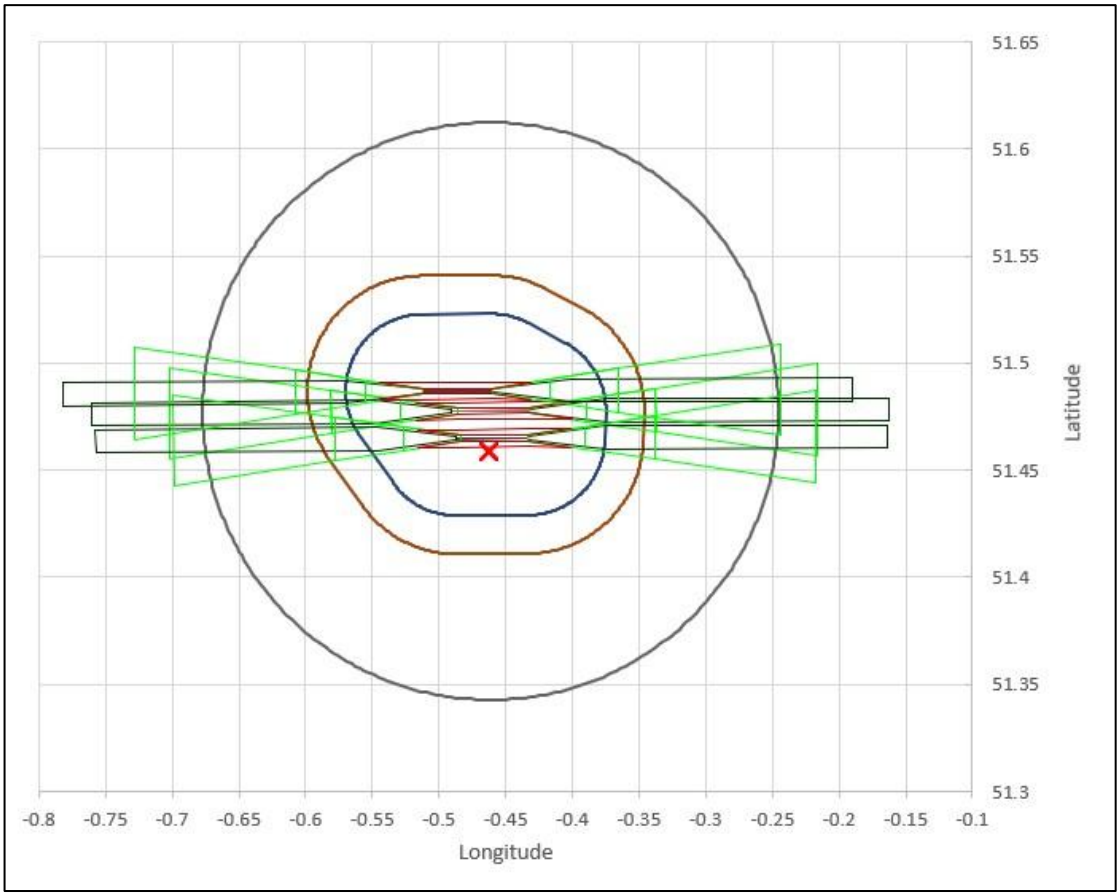


Figure 9 *London Heathrow Airport OLS chart*

## 5.3 Crane Usage

Crane usage during construction will need to be considered as their use may result in a breach of the Inner Horizontal Surface at London Heathrow Airport, depending on the size of the cranes. If any cranes whose height exceeds 67.95m amsl are proposed, then consultation with the safeguarding team at London Heathrow Airport is recommended as these will breach the OLS.

## 5.4 Aviation Lighting

Aviation lighting is required where an obstruction is considered a potential collision risk. This is most likely where there is an infringement of the OLS. It also becomes mandatory to have lighting where an object extends to 150m above ground level or more.

There is no formal requirement for aviation lighting on the proposed development, considering that the OLS of London Heathrow Airport are not breached, and the proposed development maximum height is below 150m above ground level.

If any cranes whose height exceeds 67.95m amsl are proposed, then consultation with London Heathrow Airport is recommended to confirm if aviation lighting is required as these will breach the OLS.

## 5.5 Conclusions

The proposed development lies laterally underneath the Inner Horizontal Surface and is predicted to be vertically clear with a minimum vertical clearance margin of 27.95m. As such, no impact upon the OLS at London Heathrow is predicted.

# 6 HIGH-LEVEL INSTRUMENT FLIGHT ANALYSIS

## 6.1 Overview

Instrument Flight Procedures (IFPs) are published documents that consist of defined three dimensional routes for aircraft arriving and departing airports. In practice, aircraft do not necessarily fly these routes exactly due to limitations on the performance of aeronautical instruments, pilots and variations in wind and pressure conditions. This means that an area around and beneath these three-dimensional routes must be kept clear of obstacles to ensure that there is no significant collision risk to aircraft flying these procedures, as shown in Figure 10 below.

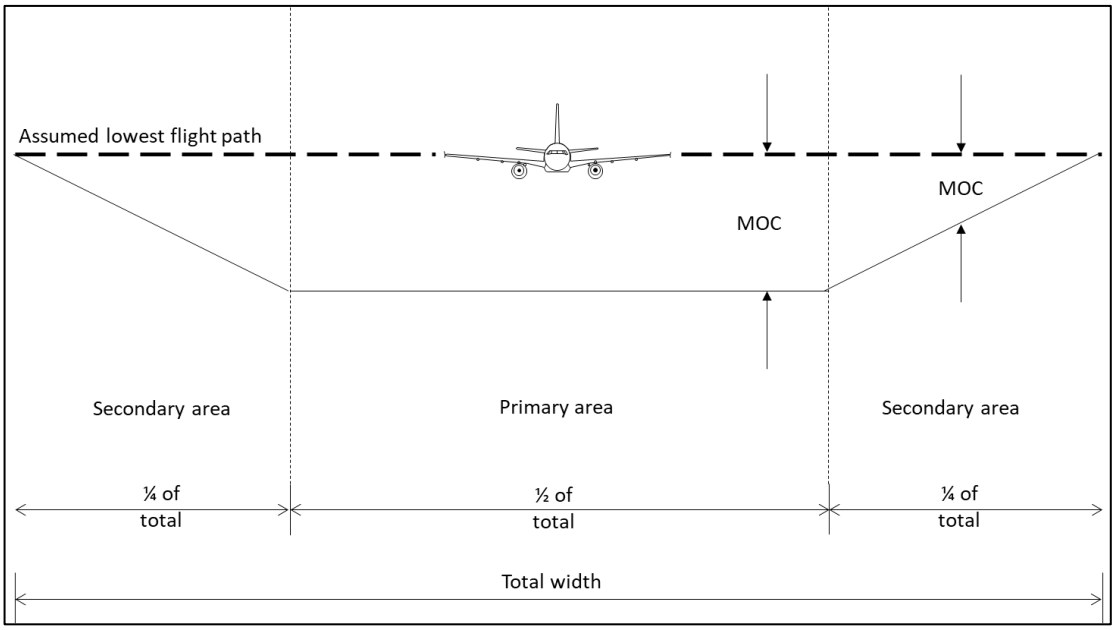


Figure 10 *Instrument Flight Procedure Minimum Obstacle Clearances*

As a general rule, IFPs are designed so that there are vertical and horizontal safety margins between the specified trajectory and surrounding terrain and obstacles. These margins vary depending on the phase of flight and whether UK, European or International rules are being considered. Nevertheless, the vertical margins are typically 300m (984 feet)[7] except in particularly mountainous regions, which the area around London Heathrow is not. This means that if the vertical clearance between an IFP route and the top of the proposed development

[7] 300m (984ft). Procedures for Air Navigation Services, Aircraft Operations (PANS OPS) guidance states 1,000ft. It is open to interpretation whether to apply 984ft or 1000ft. In this report the former has been applied. Procedures for Air Navigation Services, Aircraft Operations, Volume II Construction of Visual and Instrument Flight Procedures. Fifth edition (2006). International Civil Aviation Organization (ICAO). Section 1-1-1-5. Part I — Section I, Chapter I. *'Minimum sector altitude (MSA). The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centred on a radio aid to navigation.'*

exceeds 300m (984 feet) then it will likely not have a significant safety impact on aircraft flying the route.

The maximum altitude of the proposed development is approximately 150 feet. This means that aircraft subject to any IFP route or limit of more than 1,134 feet will not be affected. Key IFPs are discussed in the following subsection.

Aircraft flying IFR are assessed at a high-level by considering:

- Impact on London Heathrow Airport Surveillance Minimum Altitude Chart (SMAC);
- Impact on current London Heathrow Airport Standard Instrument Departures;
- Impact on current London Heathrow Airport Standard Arrival Charts;
- Impact on current London Heathrow Airport Instrument Approach Charts.

This assessment has been undertaken based on Pager Power's understanding of IFPs to give an indication of whether any of the published IFPs will be impacted by the proposed development. This analysis should not replace an official IFP assessment undertaken by an Approved Procedure Design Organisation (APDO).

## 6.2 High-Level Assessment

It is likely that if an obstacle does not infringe the OLS, it will not adversely affect the IFP. The London Heathrow Airport OLS will not be infringed by the proposed development.

Due to the recently demolished building which was within the site boundary, and the neighbouring buildings which are a similar height to the proposed development – in addition to clearance of the OLS – no impact upon IFPs at London Heathrow Airport is predicted.

## 6.3 Conclusions

No impact upon London Heathrow's IFPs is predicted and a detailed IFP assessment is not expected to be required, however may still be requested by the safeguarding team at London Heathrow Airport.

# 7 PUBLIC SAFETY ZONES

## 7.1 Heathrow Airport Public Safety Zones

Public Safety Zones (PSZ) are areas of land at the ends of the runways at the busiest airports, within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing.

Heathrow Airport PSZ, for the existing and proposed runways, and the location of the proposed development are shown in Figure 11 below. Restricted areas are outlined in red. Controlled areas are outlined in blue.

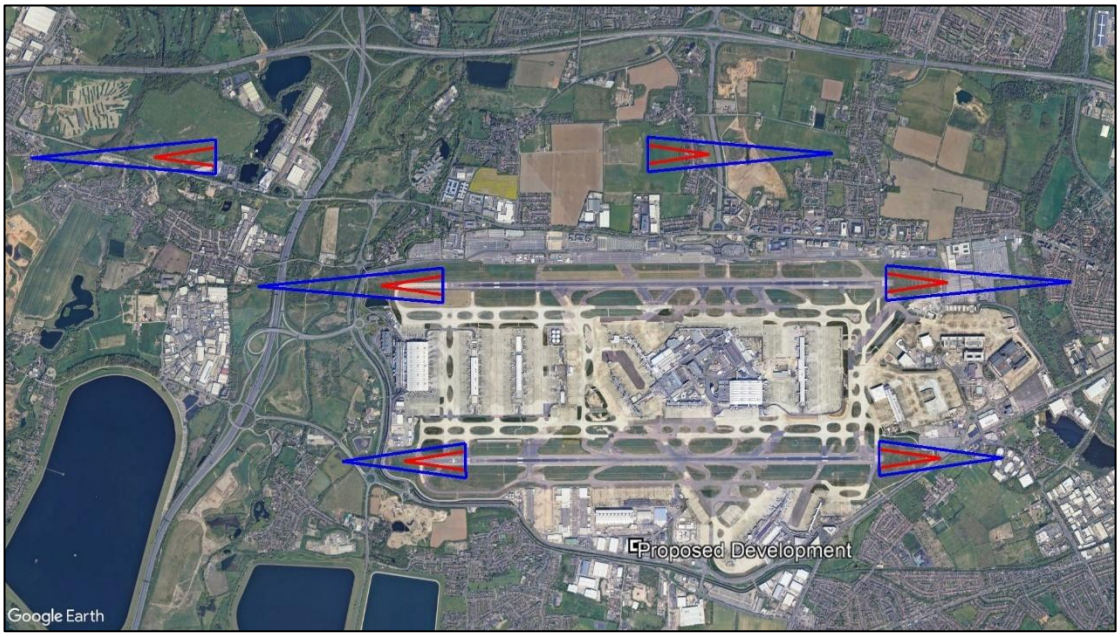


Figure 11 *Public Safety Zones*

## 7.2 Heathrow Airport PSZ conclusions

The analysis has shown that the development is laterally clear of all Heathrow Airport PSZs. Therefore, no impact upon the safety zones is predicted.

# 8 NATS NERL - NATS EN ROUTE

## 8.1 London Heathrow Beacons

The aviation risk analysis has identified the beacons at London Heathrow airport due to the proximity of the proposed development.

## 8.2 Building Restricted Areas

The Building Restricted Areas (BRAs) have been mapped for the closet beacon: the ILS Distance Measuring Equipment (DME) – IBB. A detailed methodology with respect to building restricted areas can be provided upon request.

The proposed development is predicted to be laterally within the BRA for the ILS DME IBB. Figures 12 below show the BRA overlaid upon aerial imagery.


Figure 12 *ILS DME ILL – Building restricted areas*

The proposed development is predicted to vertically infringe this building restricted area by approximately five to seven metres. Therefore, an impact cannot be conclusively ruled out.

However, it is noted that the recently demolished building, of a similar height, would likely also have infringed the restricted area.

## 8.3 Consideration of Existing Environment

Considering the existing environment of buildings which neighbour the development and the identified equipment, there are existing structures which are predicted to screen line of sight between the proposed development and the equipment. The identified structures are highlighted in orange in Figure 14 below.


Figure 13 *Identified additional screening – DME*

The existing building which was previously situated within the site boundary was located in a similar location to the proposed. While the proposed building is slightly taller than the existing building within the site, it would likely have infringed the restricted area as well.

Overall, no significant impact upon the equipment is predicted as a result of the proposed development.

## 8.4 Conclusions

With consideration of the existing structures which were located within the development boundary, and the existing buildings which neighbour the proposed development, no significant impact upon the London Heathrow Beacons is predicted as a result of the proposed development. Consultation with the airport safeguarding team is recommended to confirm their position.

# 9 ASSESSMENT CONCLUSIONS

## 9.1 London Heathrow Radar

The proposed development is predicted to be partially visible to the Secondary Surveillance Radar based on bare-earth terrain and consideration of existing obstructions, i.e. neighbouring buildings.

While the potential for a technical impact on the radar cannot be conclusively ruled out, considering the intervening buildings, and the distance to the proposed development, it is predicted that the proposed development could be operationally accommodated.

It is recommended that the safeguarding team at London Heathrow Airport and NATS are consulted to confirm if the proposed development could be operationally accommodated with respect to their radar facilities.

## 9.2 Obstacle Limitation Surfaces

The proposed development lies laterally underneath the Inner Horizontal Surface and is predicted to be vertically clear with a minimum vertical clearance margin of 27.95m. As such, no impact upon the OLS at London Heathrow is predicted.

## 9.3 Instrument Flight Procedures

Due to the recently demolished building of similar height which was within the site boundary, the neighbouring buildings which are a similar height, in addition to the OLS not being infringed; no impact upon IFPs at London Heathrow Airport is predicted.

A detailed IFP assessment is not expected to be required, however may still be requested by the safeguarding team at London Heathrow Airport.

## 9.4 Public Safety Zones

The analysis has shown that the development is laterally clear of all Heathrow Airport PSZs. Therefore, no impact upon the safety zones is predicted.

## 9.5 London Heathrow Beacons

The proposed development is predicted to vertically infringe this building restricted area by approximately five to seven metres. Therefore, an impact cannot be conclusively ruled out.

However, it is noted that the recently demolished building, of a similar height, would likely also have infringed the restricted area. No significant impact upon the London Heathrow Beacons is predicted as a result of the proposed development. Consultation with the airport safeguarding team is recommended to confirm their position.

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