

Shadow Impact Assessment

Proposed Development:

Erection of New Garage and home office at 30A Fearne House Crescent, Hoyland, Barnsley

1. Introduction

This Shadow Impact Assessment has been prepared in support of a planning application for the construction of a new garage at the above address. The purpose of the assessment is to determine whether the proposed structure would result in any unacceptable overshadowing or loss of sunlight to neighbouring properties or their private amenity spaces.

The analysis follows standard practice for small-scale domestic development and considers the effect of the proposal at key times of day during both the **Summer Solstice** and **Winter Solstice**, representing the extremes of annual solar movement.

2. Methodology

Shadow modelling was undertaken for the following scenarios:

- **Summer Solstice (21 June)**
 - 09:00
 - 12:00
 - 16:00
- **Winter Solstice (21 December)**
 - 09:00
 - 12:00
 - 16:00

For each time period, two conditions were compared:

1. **Existing Situation (No Garage)**
2. **Proposed Situation (With Garage)**

This allows a clear understanding of the incremental impact of the proposed structure.

The modelling is based on the site's true orientation, the proposed garage footprint, and its intended height and massing.

3. Results and Analysis

3.1 Summer Solstice

09:00

- Morning shadows extend westward due to the low sun angle.
- The proposed garage introduces a small additional area of shadow, but this remains almost entirely within the applicant's own garden.

- No overshadowing of neighbouring windows or primary amenity areas is indicated.

12:00

- Shadows are at their shortest.
- The garage produces only a minimal, tightly contained shadow.
- No measurable impact on adjacent properties.

16:00

- Afternoon shadows extend eastward.
- The garage results in a slightly longer localised shadow, again contained within the site boundary.
- No adverse effect on neighbouring gardens or habitable rooms.

Summer Summary:

The proposed garage has **negligible impact** on neighbouring sunlight levels during summer months.

3.2 Winter Solstice

Winter represents the most sensitive period due to the low sun angle and naturally long shadows.

09:00

- Long morning shadows extend across the site.
- The garage marginally increases shadow length, but the additional shadow falls predominantly within the applicant's land.
- No material impact on neighbouring windows or gardens.

12:00

- Shadows remain long even at midday.
- The garage introduces a modest increase in shadowing, but this does not extend significantly beyond the boundary.
- No loss of direct sunlight to neighbouring habitable rooms.

16:00

- By late afternoon, most of the area is already in shadow due to the low winter sun.
- The presence of the garage makes **no meaningful difference** to the overall extent of overshadowing.

Winter Summary:

Even during the most sensitive time of year, the garage does **not** cause unacceptable overshadowing.

4. Impact on Adjacent Properties

Across all modelled times:

- No neighbouring dwelling loses direct sunlight to habitable room windows.
- No private garden or primary amenity space experiences a significant increase in overshadowing.
- All additional shadows created by the garage are **minor, localised, and contained within the applicant's site**.
- The proposal does not materially reduce daylight or sunlight to any adjoining property.

5. Policy Considerations

The proposal is consistent with:

- **NPPF Paragraph 130(f)** – ensuring development provides a high standard of amenity for existing and future users.
- **Local Plan residential amenity policies** (wording varies by authority) requiring development to avoid unacceptable overshadowing or loss of daylight/sunlight.
- **BRE Guidance: Site Layout Planning for Daylight and Sunlight (2011)** – while not mandatory for small domestic outbuildings, the principles indicate no harmful impact.

6. Conclusion

The shadow analysis demonstrates that the proposed garage will **not** result in any unacceptable overshadowing or loss of sunlight to neighbouring properties. Any additional shadowing is minimal, occurs only at limited times of day, and remains within the applicant's own boundary.

The proposed development is therefore considered to have **no adverse impact** on neighbouring amenity and is acceptable in planning terms.