

Phase I of the Green Heritage Homes is a partnership project, managed by Bath & West Community Energy and funded by the South West Net Zero Hub, which is hosted by the West of England Mayoral Combined Authority through the Local Energy Advice Demonstrator Programme.

Local Energy Advice Demonstrator (LEAD) Project: Green Heritage Homes

Level 0 Pre-App Phase I Case Studies: 2024- 2025

Case Study Nine: Secondary glazing, slim-profile double glazing, solar panels, air source heat pump (ASHP)

**All Level 0 pre-app case studies have been anonymised in accordance with GDPR requirements*

History and building type

Building age: Late 17th century

Building type: Detached dwelling

Grade listing: Grade II

Wall construction type: Coursed sandstone

Existing retrofit measures: Some double glazed windows/doors and secondary glazing

Previous Applications for Listed Building Consent (LBC): None

Proposals & Matters Discussed:

- Replacement of modern windows and doors with slim-profile double glazing.
- Upgrades to existing secondary glazing.
- Installation of roof-mounted solar panels.
- Installation of ASHP in garden setting

Heritage Assessment:

- Secondary glazing could be installed without change to or loss of existing windows, and improve their energy efficiency.
- Windows and doors identified for replacement are modern, inappropriate additions to the listed building – replacement would be acceptable in principle, with opportunity to reinstate a more appropriate material treatment (e.g. timber).
- Several roof slopes were identified for further assessment relating to solar panel installation, such as roofs on the Victorian extension and the modern infill extension. The pitched garage roof was also identified as a potential location set back from the main building.
- An ASHP may be acceptable in a discreet location set back from principal and significant elevations. Assessment of proposed locations is required.

Possible Retrofit Options:

- Removal of solid frame secondary glazing and replacement with 'seasonal' units fitted with no material fixings (no consent required).
- Replacement of modern metal-framed windows and uPVC glazed door with timber-framed slim-profile double glazing would be acceptable.
- There is an opportunity to explore locations for roof-mounted solar panels, pending assessment of impact to building in surrounding views.
- An ASHP set back from key building elevations may be acceptable.

Listed Building Consent:

- In this context, the system of secondary glazing proposed would not require consent.
- Upgrades to replace existing windows and doors with more energy efficient glazing would require listed building consent.

- Installation of roof-mounted solar panels would require listed building consent.
- Installation of an ASHP would require listed building consent and planning permission.

Measures Discounted:

- Certain roof slopes were identified as being sensitive in surrounding views of the listed building, and installation of solar panels would result in harm. Proposals would therefore not be supported. Further assessment is required in the form of a visual impact assessment.

What Next?

The applicant provided further details of a proposed roof-mounted solar array and a shade assessment indicating which roof slopes would be most viable. Following further advice from the officer, a listed building application is being prepared.