



ENERGY & SUSTAINABILITY STATEMENT

Proposed Change of Use from Public House to a Single Dwelling

The Cricketers Public House

107 Arlesey Road, Ickleford, Hitchin, Hertfordshire, SG5 3TH

1. Introduction

This Energy and Sustainability Statement has been prepared by Binney & Sims Design in support of a Full Planning Application for the change of use of the former Cricketers Public House, 107 Arlesey Road, Ickleford, from a public house (sui generis) to a single dwelling (Use Class C3), together with associated alterations, a replacement entrance extension, ancillary summer house, landscaping and external works.

The proposal seeks to secure the long-term future of a vacant building through its sensitive conversion into a high quality family dwelling. The development has been designed to improve the environmental performance of the existing building whilst retaining and reusing the majority of the existing structure.

This statement demonstrates how the proposal incorporates sustainable design principles through:

- Reuse of an existing building;
- Improved thermal performance and energy efficiency;
- Installation of renewable energy generation;
- Sustainable drainage measures;
- Water efficiency improvements;
- Sustainable transport provision;
- Biodiversity enhancements; and
- Responsible material selection and construction practices.

2. Reuse of Existing Building and Embodied Carbon Savings

The most significant sustainability benefit of the proposal is the retention and reuse of the existing building.

Rather than demolishing the former public house and constructing a replacement building, the proposal adapts an existing structure for a viable long-term residential use. This approach significantly reduces embodied carbon by retaining the majority of the existing walls, floors, roof structure and foundations.

The development also includes:

- Retention of the principal building fabric;
- Reuse of existing construction materials where practicable;
- Reuse of salvaged roofing materials from the existing lean-to structure;
- Reduction in construction waste compared with a full redevelopment; and
- Continued productive use of a previously developed site within the village boundary.

The proposal therefore represents an efficient use of existing resources and aligns with the principles of a circular economy.

4. Energy Strategy

The building will be upgraded where practical to improve thermal performance and reduce heat loss. Improvements will be undertaken in accordance with current Building Regulations requirements and best practice guidance.

Measures include:

- Insulation upgrades to the replacement extension;
- Improved roof, wall and floor insulation where feasible;
- Energy-efficient glazing;
- Improved airtightness detailing;
- Careful construction detailing to improve overall building performance.

These measures will reduce heating demand, improve occupant comfort and lower long-term energy consumption.

5. Building Fabric Improvements

The replacement entrance extension will be constructed to modern Building Regulations standards and will incorporate high-performance insulation throughout the building envelope.

The development will also include:

- Replacement windows and doors to secondary side and rear elevations;
- High-performance double-glazed units;
- Improved weather sealing and draught reduction;
- Enhanced thermal performance of altered building elements; and
- Energy-efficient construction methods and materials.

The principal elevation will be retained, preserving the character of the building whilst improving the overall energy performance of the property.

6. Renewable Energy Generation

The proposal incorporates solar photovoltaic (PV) panels to generate renewable electricity for use within the dwelling.

The installation of solar PV technology will:

- Reduce reliance on grid-supplied electricity;
- Lower operational carbon emissions;
- Contribute towards national renewable energy targets;
- Reduce long-term energy costs for occupants; and
- Improve the overall sustainability credentials of the development.

The solar installation forms an important component of the energy strategy and will contribute to the ongoing reduction of operational energy demand.

7. Heating and Hot Water

The property currently has no operational heating system.

The proposed dwelling will be served by a modern, energy-efficient heating and hot water system designed to comply with current Building Regulations requirements and achieve a high level of energy efficiency.

The current preferred solution is a high-efficiency mains gas condensing boiler with modern programmable controls and thermostatic regulation throughout the dwelling.

The development will also remain compatible with future low-carbon technologies, including air source heat pumps and other renewable heating solutions should these be adopted in the future.

The combination of improved building fabric, renewable electricity generation and efficient heating systems will substantially improve the environmental performance of the building when compared with its former commercial use.

8. Water Efficiency and Sustainable Drainage

The proposal incorporates a range of measures to reduce water consumption and improve surface water management.

Water efficiency measures will include:

- Dual-flush WCs;
- Water-efficient taps and fittings;
- Efficient shower and sanitaryware installations;
- Leak-resistant plumbing systems; and
- Compliance with Building Regulations water consumption standards.

The development also includes sustainable drainage measures through the use of permeable surfacing.

The proposed access area adjacent to the highway will utilise permeable block paving, while internal driveway and parking areas will comprise gravel surfacing over a permeable sub-base.

These measures will:

- Increase ground infiltration;
- Reduce surface water runoff;

- Improve drainage performance; and
- Reduce pressure on existing drainage infrastructure.

9. Sustainable Transport

The proposal supports sustainable travel through the provision of dedicated cycle storage and retained access to local services within Ickleford.

The development includes:

- Secure cycle storage for up to five bicycles;
- Retention of existing vehicular access arrangements;
- On-site parking provision;
- Access to local facilities within walking and cycling distance; and
- Access to local public transport services.

As the proposal involves the conversion of an existing building within an established settlement, it represents a sustainable pattern of development that reduces the need for greenfield land development.

Provision is also available for future electric vehicle charging infrastructure if required by the occupier.

10. Materials and Construction

The development will seek to minimise environmental impacts through responsible material selection and construction practices.

Measures include:

- Retention and refurbishment of existing building fabric;
- Reuse of salvaged roofing materials where practicable;
- Use of responsibly sourced timber products;
- Use of durable materials with long design lives;
- Recycling of demolition materials where feasible; and
- Reduction of construction waste through adaptive reuse.

The proposed materials palette reflects the character of the existing building whilst supporting sustainable construction principles.

11. Biodiversity and Landscaping

The proposal includes a number of measures that will contribute positively to biodiversity and the overall environmental quality of the site.

Measures include:

- Retention of existing boundary vegetation wherever possible;
- Protection of existing trees during construction works;
- Introduction of additional soft landscaping;
- Creation of new garden planting areas;
- Increased permeable surfaces across the site; and
- Opportunities for pollinator-friendly planting species.

The replacement of areas of former commercial hardstanding with private garden space and planting will improve biodiversity value and create a more attractive residential environment.

12. Conclusion

The proposal represents a sustainable and environmentally responsible conversion of a long-term vacant public house to a single family dwelling.

The development delivers sustainability benefits through:

- Reuse of an existing building and reduction in embodied carbon;
- Modern insulation and glazing improvements;
- Installation of solar photovoltaic panels;
- Efficient heating and hot water systems;
- Water conservation measures;
- Sustainable drainage solutions;
- Provision of cycle storage and support for sustainable travel;
- Responsible material selection and waste reduction; and
- Biodiversity and landscaping enhancements.

Collectively, these measures will significantly improve the environmental performance of the property whilst securing the long-term future of a vacant building.

The proposal is therefore considered to accord with national and local planning policies relating to sustainable development, climate change mitigation and energy efficiency, and the statement is respectfully submitted in support of the planning application.