

**Sustainability Statement 11 Prince Regent Ave.**

The proposed extension and alterations will all be built in line with the aspirations set out with in the Cheltenham Climate Change SPD and the following Building Regulation Approved Documents relating directly to sustainability, energy performance and resources;

- F - Ventilation
- G - Sanitation, hot water safety and water efficiency
- H - Drainage and waste disposal
- L - Conservation of fuel & power
- O –Overheating
- S –Infrastructure for charging electric materials

**As Part of the Proposed Development**

Water efficiency: N/A

Surface water drainage: Subject to suitable ground and subsoil conditions - A soak away will be provided to service surface water drainage collected from the roof of the extension/dwelling. Hard standing surfaces will be constructed with a fall in order to drain water naturally away from the property. The above will be implemented in order to eliminate additional demand on the existing drainage infrastructure in the locality. Foul drainage will remain connected to the main sewer.

The walls, floor and roof will all be constructed using modern insulation which will meet all U-value requirements of the Building Regulation Approved Documents

All light fittings will be fitted with low voltage, high efficiency bulbs.

New windows and glazed doors will be fitted with high performance glazing designed specifically to reduce heat loss and maximise solar gain

Smart Energy: Smart technology and appliances will be incorporated where possible.

Construction materials and internal fittings where available locally will be considered in order to reduce transportation CO2 emissions.

Embodied carbon: The extension has been designed so that all materials can be sourced locally in order to reduce transport related carbon emissions

All measures will be taken throughout the construction process to reduce carbon emissions and waste product. Carbon reduction technologies will be incorporated ever the technology is available and in the best interest of the environment and health of the future owner/occupier.

Waste disposal: N/A



**Future Considerations**



**When the heating system is next upgraded the applicant will explore the feasibility of installing and incorporating the following : -**

1. The system to be zoned and each zone to have an independent heat control valve.
2. Renewable energy a AAA + rated Air Source Heat Pump system to replace the existing hot water and central heating system.
3. Solar photo voltaic technology in order to reduce the reliance on mains electricity