

APPENDIX C - Development of Affordable Housing - Highgrove site

Proposed Supported Living Housing at the Highgrove Lodge Site Sustainable Development Standards.

1. Current Legislative and Planning Authority Requirements:

Portsmouth City Council is keen to ensure that new dwellings are of exemplary energy efficiency standards. As such the Council aims to reduce the impact of new developments wherever possible in terms of carbon emissions and air quality; whilst keeping energy bills low for the end users.

Despite the withdrawal of the Code for Sustainable Homes in 2015; the Council have continued to build homes above and beyond national standards. Locally, the Council have sought to impose a requirement that new homes be built to be at least 19% more energy efficient than mandated by Part L1A of the Building Regulations.

2. Current Proposed Measures:

The design is at an early stage, and will be developed further during the pre-construction design development process. The initial budget cost estimate was based on adopting a similar build specification to that used at the recent supported living housing project at 415-425 Eastern Road. The as built energy efficiency calculations for the project demonstrated a 28% improvement in CO₂e emissions over national building regulations.

The current proposals for the Highgrove Lodge site include these same measures. However the project team are committed to exploring additional technological interventions to reduce energy and carbon consumption, as well as keeping energy bills low for the end users.

As the scheme is taken forward the current design and cost estimates will be firmed up, and there will be an ongoing review of the measures and technologies employed.

3. How does this help our residents?

The measures described above in practical terms means that the occupiers will benefit from:

- **Solar PV and battery storage:** The maximum possible amount of solar PV will be installed upon the development's roof for direct use by the residents. This will be coupled with battery storage. The battery allows excess clean power to be stored and used at times of high demand; as well as storing low-cost power at night time rates, and discharging during the day to keep bills low.
- **Low carbon, high-efficiency heating system:** Heating systems will be designed to reduce carbon emissions and air pollution; including heat pumps and micro-CHP

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- **High thermal efficiency:** Very high levels of floor, wall and roof insulation, air tightness and thermal mass to reduce heating bills to a minimum. Mechanical ventilation and heat recovery to ensure that properties stay warm in winter and cool in summer. High efficiency glazing throughout.
- **Highly efficient LED lighting:** To ensure that electricity bills are kept low for tenants with high levels of occupancy
- **Landlords communal services:** Access through to low cost, green power and utilities from the Council's corporate contracts to keep communal heating and electricity services charges to a minimum