

SUPPORTING STATEMENT.

Location: Orchard House, Caerleon

Client: Pobl Group

Ref: 3258-PEN-RP-A-8600-S1-P2

Orchard House, Caerleon.

Supporting Statement for Planning Application.

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SECTION 1

INTRODUCTION

- 1.0 Introduction
- 1.1 Project Vision

1.0 Introduction

This document has been prepared by Pentan Architects on behalf of Pobl Group, in support of a planning application for the removal of the existing dormer windows, addition of an automatic opening vent (AOV) rooflight and the installation of PV panels to the roof of the single storey annex at Orchard House, Caerleon.

Pobl received planning permission for the refurbishment and alteration of the existing Orchard House building to provide 7no. supported living apartments (ref: 18/1236) in January 2022 and construction work has commenced on site.

A NMA application was submitted for the removal of dormer windows, addition of AOV and installation of PV panels (ref: 24/1014), however, they were considered too significant an alteration to be assessed as a non-material amendment and a new application required. As such, this document is updated to support this new application.

Largely, this document will outline Pobl's aspiration for the development in the context of reducing energy bills amidst a cost-of-living crisis, the planning background and the justification for the PV installation in the conservation area context, however, it will also note the rationale for the removal of dormer windows and installation of the AOV rooflight.

1.1 Project Vision

Pobl's vision for Orchard House is to secure the long-term sustainable use of an existing building to provide affordable residential accommodation for people with specialist needs. They believe that the most effective and responsible way of achieving this is to get the balance right between respecting the character and appearance of the Conservation Area, reducing the environmental impact of the building, and the need to provide comfortable and affordable accommodation for inhabitants that will not result in 'Fuel Poverty'. We aim to achieve this by embracing off-gas renewable energy solutions that will generate power and reduce carbon emissions – a mission that is central to Welsh Government's funding criteria.

Orchard House is a part two-storeys property, with single storey annex extensions. The main building is solid wall construction, built in 1906/07. Whilst not listed the building has historical significance: St Cadoc's House, initially a childrens home, and more recently a care home, operated by the National Autistic Society (NAS) providing a accommodation for people with autism. The later additions are masonry cavity construction. The buildings elevations are red facing brickwork, a plain clay tile roof with original timber roof structure and pitch-pine boarding, timber fascias and soffits, and generally timber double glazed windows. A few original window remain. The building is currently owned by Pobl Group and following conversion into 7no. self-contained apartments will be operated by Pobl Care & Support.

The site sits within the Caerleon Conservation Area and is Scheduled Ancient Monument (MM245), however the building itself is outside of the SAMC boundary.

SECTION 2

DORMER WINDOWS REMOVAL & AOV ROOFLIGHT

2.0 Removal of dormer windows and installation of AOV rooflight.

As the detailed design of the development has progressed it has become necessary to install an automatic opening vent (AOV) rooflight over the staircase for smoke evacuation in accordance with Approved Document B (Wales) - to provide a minimum of 1sqm of free area of ventilation. Utilising the existing dormer window was considered, however, the window falls below the area required, therefore it is proposed to remove the dormer and install a rooflight, which will satisfy the necessary standards. This rooflight will have a glazing bar and recessed flashing kit so it is appropriate to its conservation area setting. As the roof coverings are being replaced (as consented in 18/1236), the overall appearance will be consistent and will not show obvious 'patched-in' areas.



Existing Elevation 03



Proposed Elevation 03

SECTION 3

INSTALLATION OF PV PANELS

- 3.0 Project Scope
- 3.1 Planning Background
- 3.2 Proposal

3.0 Project Scope

The planning approved scheme will see the refurbishment and alteration to existing building to create 7no. self-contained supported living apartments, demolition of selected outbuildings and construction of single storey communal garden pavilion, including associated M&E works.

External works will comprise new incoming water and electricity mains, new patios and footpaths, slight extension of the parking area, erection of garden pavilion, bin store, pergola and associated drainage and landscaping works.

The project is funded by Welsh Government (WG), therefore, to satisfy the criteria of their development quality requirements, the proposed building must achieve a minimum SAP / EPC rating of 75 C.

Key Performance Targets: **EPC / SAP 75C rating**
 Air tightness <5.0m³/h.m²at 50 Pa
 Enhanced Robustness

The proposed dwelling will target EPC / SAP C/ Low carbon through a combination of thermal upgrade with external wall insulation, re-roofing, installation of electric underfloor heating, and individual air source heat pumps (ASHP) and cylinders. As the building pre-dates 1919, PAS 2035 and retrofit principles are being applied, so careful consideration and application of 'breathable' materials in the thermal upgrade.

A SAP/EPC 'C' rating is achieved when these measures collectively score 75 or more in the specialist SAP software.

3.1 Planning Background

The proposed refurbishment received Scheduled Monument Consent on 5th February 2021 and planning approval on 27th January 2022, ref 18/1236.

Since receiving this approval, the client, along with their consultant design team, have developed the design to meet the targets set out within Section 3.0. A design stage SAP assessment was carried out for the proposed works to provide an indication of the potential SAP Ratings, Environmental Ratings, CO2 emissions, which determined the extent of PV required to meet the targeted outcomes (refer to table below). As indicated below, in order to reach the target of SAP 75C Apartments 3 & 4 require a 1.6kw PV array. Apartments 1-2 and 5-7 achieve in excess of 75C without PV. This is due to the 'L' shaped layout of Apartments 3&4 and their subsequent external wall to floor area ratio.

As no PV was indicated on the planning approved scheme, the following pages are prepared to support our planning application for the inclusion of PV and seeks to justify the rationale for its inclusion and their location on the building, which falls in the Caerleon Conservation Area.

	SAP Analysis: 3258 – Orchard House, Caerleon						Elmhurst SAP 10		
	As-Designed						Version 2.13.11 ERC v1.7.48		
	Flat 1 – GF	Flat 2 – GF	Flat 3 – GF		Flat 4 – GF		Flat 5 – FF	Flat 6 – FF	Flat 7 – FF
SAP Output Information	No PV	No PV	No PV	(SAP 75 ‘C’ Rating) 1.6 kW PV	No PV	(SAP 75 ‘C’ Rating) 1.6kW PV	No PV	No PV	No PV
SAP Rating	78C	79C	71C	76C	73C	77C	80C	82B	79C
EI Rating	95A	96A	94A	95A	94A	95A	96A	96A	96A
CO ₂ Emissions	0.35	0.37	0.43	0.34	0.42	0.34	0.29	0.26	0.31
Cost of Fuels (SAP)	-	-	-	-	-	-	-	-	-
Cost of Fuels <i>Including allowance of 3,000 kWh of electricity per year for unregulated energy usage</i>	Annual £1252.50	Annual £1285.75	Annual £1373.25	Annual £1279.99	Annual £1358.71	Annual £1256.89	Annual £1164.70	Annual £1127.55	Annual £1199.18
	Monthly £104.38	Monthly £107.15	Monthly £114.45	Monthly £106.67	Monthly £113.23	Monthly £104.75	Monthly £97.06	Monthly £93.97	Monthly £99.94

Fuel prices for cost data on this row calculated using primary energy demand as calculated in SAP 10, current energy price cap data (29th August 2024) and Octopus Economy 7 data (29th August 2024) as below:

Standing Charges: Electric (Standard) = £0.6012 / day; Electric (Off Peak) = £0.5827 / day; Gas = £0.3141 / day

Unit Prices: Electric (Standard) = £0.2236 / kWh; Electric (Off Peak) = £0.1195 / kWh (High Rate) & £0.2748 / kWh (Low Rate); Gas = £0.0548 / kWh

3.2 Proposal

The proposed roof-mounted PV installation would be on the single storey annex that sits behind the 'main' two-storeys building.

A roof-mounted solution is proposed for two reasons, the first being the client will likely be retaining the roof covering to this area as it is a later addition to the 'main' roof, and secondly we understand that Housing Association insurance providers are preferring on-roof PV arrays.

We feel this is justifiable for several reasons, which will be explained in more detail over the following pages:

- a. impact on the conservation area;
- b. other buildings with PV in the conservation area.



Updated elevation drawings 3258-PEN-ZZ-ZZ-DR-A-3100-B1-C7 with PV panels indicated on Elevation 02 and Elevation 06 - single storey annex roof slopes only.

a Impact on the conservation area

There is limited visibility of Orchard House from the conservation area, and the site is largely land-locked and hidden within its residential context. Access is either via a lane off Mill Street or via the one-way Norman Street, of which glimpses of the 'main' Orchard House building can be seen. The single storey annex on which the PV installation is proposed is screened from public view by the existing boundary wall and the two-storeys part of the building, therefore there is no impact on the conservation area. Likewise, located on the annex which is subservient to the main building, the PV installation will not have a negative impact on the historical building itself.



Aerial image highlights land-locked nature of site nestled amongst residential dwellings. Orchard House is barely visible from Conservation area.



PV installation would be on the roof slopes of the single storey annex (highlighted green) opposite.



View from Norman Street at junction with Church Street. First floor windows and roofs can be seen above the stone boundary walls and hedges.



View from the lane access just off Mill Street. Orchard House is just visible to left.



View from Norman Street at junction with Mill Street. Roof forms can just be seen above stone boundary wall and hedges.



A glimpse of the roof of Orchard House can be seen through the lane off Gold Croft Common.

b Other buildings with PV in conservation area

There are several buildings within the conservation area that have photovoltaic panels on their roof slopes, some of which are clearly visible from the public footways, which are identified in orange in the plan opposite.

Similarly there are several properties with PV panels that sit just outside the conservation area, but are still visible (indicated blue on the plan opposite), including the significant PV array within Caerleon Comprehensive School, a partnership project between Newport City Council and Egri Coop to reduce the schools carbon footprint.

It is also noted that planning permission has recently been granted for PV panels to the hidden roof slopes of St Cadoc's Church, sitting further along High Street, and offering a handsome contribution to the conservation area.

This demonstrates, that if handled sensitively, there is a committment within Newport City Council to address the low-carbon agenda and assist in the delivery of good-quality, sustainable developments within Caerleon.

KEY:

-  Conservation area boundary
-  Application site
-  Buildings with PV's outside conservation area
-  Building with PV's inside conservation area

**Ty Claire
(formally Belin Centre)**
Pobl scheme.
PV's to hidden slopes.

St Cadoc's Church
PV's to hidden slopes.
Planning permission granted
16th March 2023, ref: 22/0966

Whitehart Lane
PV's on rear roof slopes



4.0 Summary

In summary, we feel the above outlines that the installation of this modest PV array will have a negligible impact on Orchard House and, as such, the Caerleon Conservation area. Therefore, Pobl kindly request that Newport City Council reasonably considers the proposals contained within this planning application.