

**DESIGN AND ACCESS STATEMENT
SUSTAINABLE CONSRUCTION AND ENERGY STATEMENT
SITE WASTE MANAGEMENT PLAN**

FOR THE DEVELOPMENT OF

LAND ADJOINING

**47 ASHAMPSTEAD ROAD
SOUTHCOTE
READING
RG30 3LA**

Ref: 2996/wmg/cm

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DESIGN AND ACCESS STATEMENT

The proposal is to build a new dwelling on land adjoining 47 Ashampstead Road in the Southcote area of Reading. The site is close to the Bath Road and Southcote Lane with Reading town centre and Reading and Reading West train stations accessible on foot, bicycle and via the regular bus services that operate in this area.

The existing dwelling at 47 Ashampstead Road is a two bed semi-detached dwelling and the site adjacent to this property lends itself to a new detached three bed dwelling. The rear garden areas are spacious with ample room for bicycle and refuse and recycling storage. The proposed development will result in rear garden areas for the existing dwelling (No.47) of 126m² and 223m² for the new dwelling and garden depths of 16.6m and 11.8m for the existing and new dwelling respectively. The proposed dwelling garden depth is detailed on the proposed site plan, dwg. 2996/02.

No infringement on adjacent dwellings is anticipated from the proposals and the room sizes are comfortable. In relation to the existing dwelling, No.47, the flank to flank distance will be 2m with a fence dividing this space equally. With regard to other neighbouring properties, the flank to rear wall and rear to flank wall distances are noted on dwg 2996/02 and are sufficient to avoid infringement of privacy to existing surrounding dwellings.

There are no issues arising due to the proximity of any trees to the proposed dwelling and as a result an arboricultural report has not been provided with this application. As no demolition work is taking place, no daylight bat survey has been carried out. Details of landscaping such as the use of gravel and rear garden lawn areas are detailed on dwg.: 2996 / 04E.

Regarding the impact on character and appearance, the proposed design fits in with the surrounding properties. Care has been taken to ensure the eaves heights of the existing dwelling (No.47) and the proposed dwelling align noting that there are slight level differences across the sight.

In reference to the eaves heights and other issues, care has been taken to ensure alignment is maintained and noting that there is an incline on the ground levels across the site. A mid-height dividing wall is proposed for a section along the proposed shared driveway so as to provide safe access from the dwellings across the driveway area to the roadside.

Disabled access issues have also been considered and allowed for in terms of space around the stairwells, entrance ways and door widths.

SITE WASTE MANAGEMENT PLAN

Under the current legislation covering site safety and organisation, the aim is to minimise excessive expenditure and crucially maintain site safety and deploy an appropriate method of disposal of waste material. This is essential for health and safety of individuals on the site and for protection of the environment.

Burning of materials will not be permitted on site and the tree protection will be in place in accordance with current legislation. Several skips will be used for the disposal of waste material. The main concern for a project of this nature is the disposal of plasterboard and cement waste. These materials will have to be disposed in skips specifically for this purpose and taken to an appropriate tipping location which will involve charges.

Asbestos waste has to be dealt with by a specialist company and if discovered will be dealt with accordingly under the clients control. Other materials such as wood and metal will be separated into similar skips and disposed in the appropriate manner legally.

SUSTAINABILITY AND ENERGY STATEMENT

1. General Note and Description

The proposals envisage the redevelopment of the land into a detached three bedroom dwelling which will be of a similar size to the existing two bedroom semi-detached dwelling (No.47).

Services such as gas, water and electricity are available for the new dwelling. Foul connections and mains connections are also available.

Dwelling Area Details:

Dwelling	No. of habitable rooms	No. of bedrooms	Gross Internal Area	
			m ²	ft ²
1	4	3	97.4	1048.4

For parking, space is provided for one space for the existing two bedroom dwelling and two spaces for the proposed three bed dwelling as detailed on dwg. 2996 / 04E. This drawing also details the existing and proposed driveway entrance location. The driveway will be widened from 3.2m to 6.6m and the kerb lowered in the sections shown. As with many of the other properties along this quiet residential street, reversing off the driveway is envisaged as a suitable means of accessing the road.

Cycle and bin stores for the proposed dwelling have been incorporated into the design along with garden and amenity space to the rear.

It is intended that the proposed development will be to the best and current building standards. This report seeks to note the sustainable construction proposed along with an energy statement and an overview of details of the hot water and heating system proposed.

2. Sustainable Construction

The design envisaged for the dwelling, brickwork with decorative features is detailed on the elevation drawings and will benefit from tiled sloping roofs and high quality finishes. The roof structure will be a combination of timber and steel with sloping roofs lead flashed to the walls. Gutters will be uPVC system. Internal construction will be beam and block on the ground floor and timber first floor and a truss roof.

Sustainable Construction Requirements	Details / Comments
Demonstrate the ratings of materials to be used, as set out in the BRE Green Guide to Specification. Materials should	The following construction elements are anticipated to be used. Their description, assessment number and the BRE Green guide rating are described with each element.

be all rating B and above, with over 60% A rated.	Pitched roof with tiles on battens and counter battens, underlay, rafters and insulation. 812410006-A+ External walls - brick, insulated block, cement mortar. 806170061-A+ Ground floor screed on insulation on grouted aircrete beam and block flooring. 82014007-B First floor to be timber. 807280031-B Windows PVC-U double glazed 813100009-A Internal partitions timber stud, plasterboard, plaster skim coat and paint. 809760003-A+ Glass Wool Insulation 821532000-A+ Semi flexible Poly Vinyl Chloride tiles 821570012-A Close boarded fencing or railings 827020020-A Hard landscaping area to be gravel 82212001-B
Maximise reclamation of materials following demolition. Demonstrate the % of construction materials which are from recycled or reused contents. Demonstrate the % of local reclaimed or recycled materials to be used in paved areas	The development is of sufficient value to require a Site Waste Management Plan to be prepared as part of the building contract. The specification of all other elements will seek to incorporate, where reasonable practical and element of recycled materials for the new build

Maximise the % of locally resourced materials (i.e. within 35 miles of the site)	Wherever possible the specification of materials will seek to use locally sourced materials wherever they are available.
An assessment of the energy demand of the development and predicted CO2 emissions by at least 10% of the predicted level.	To be provided by SAP calculations
Demonstrate the % of energy demand has reduced CO2 emissions by at least 10% of the predicted level.	To be provided by SAP calculations.
Demonstrate the % of energy to be provided from on site renewable generation including an explanation of the proposed choice of renewable energy technology.	See heating and hot water system details. SAP calculations to provide more information so as to allow provision of conventional heating system and avoid air source heat pumps and solar panels.
Target of average domestic water use to be 105 litres/person/day.	To be proved by calculations. Use of water butts to provide garden water supply to be considered.
Show how adaptation to microclimate is considered through design principles and use of shading	The design of the development and its orientation is primarily driven by the site location, size and careful consideration of the adjacent dwellings. Generally the internal design of the dwelling has been arranged to ensure that the primary habitable room within each dwelling will benefit from the best available daylight.
Demonstrate that there is adequate storage for waste and recycling containers.	The scheme design is such that waste bins, recycling containers and bicycle storage are located on the development.
Flooding Assessment	The site is not considered to be at risk of flooding and any new hard standing areas will be gravel and therefore pervious.
Refuse and Recycling Collection	The accepted norm for the area is general household waste in grey wheelie bins for general waste, red

	wheelie bins for recycling and green bins or bags for garden waste collected on two week cycles as per the waste collection calendars published by RBC. Refuse vehicles are not expected to enter the site but collect waste from the kerbside placed there the night before the collections are due.
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Energy Statement - General Points

The aim is to provide a gas heated hot water system with radiators to try and avoid the use of solar panels or heat pumps.

Several systems have been considered as noted.

Orientation and day lighting along with insulation levels and air tightness.

Combined with the above and U values as follows, subject to SAP calculations: -

Ground Floor 1.10
Walls 0.25
Roof Ceiling 0.11
Roof Slope 0.18
Windows 1.30
Doors 2.30

All to comply with Part Q

Technology	Generation	Feasible	Reasons
Combined heat and Power	Thermal + Electrical	Yes	SAP calculations to provide details supporting conventional heating system
Solar Thermal	Thermal	No	Limited roof space and orientation
Solar Photovoltaics	Electrical	No	Inadequate south facing roof slopes Roof areas are unshaded
Ground Source Heat Pump	Thermal	No	Limited space
Biomass Boiler	Thermal	No	Local biomass fuel suppliers available Insufficient space for delivery

			vehicle Insufficient plant space for boiler Insufficient space for fuel storage
Wind Turbine	Electrical	No	Obstruction which may cause turbulence Insufficient open space for turbines Issues arising from surrounding residents

Selected System

Heating System to be gas heated hot water system with radiators. Heating system supplier to be confirmed.

Notes

- 100% low energy lights

Energy Saving Measures

Best practice and appropriate measures have been factored into the design to minimise the environmental impact on the site,

Orientation and Day Lighting

Building design is a compromise between the relative high u-value of windows compared to the lower values of walls, having a large area of glass allows more daylight into the building at the cost of losing heat during the winter and gaining excess solar radiation during the summer. Window orientation also has an effect e.g. north facing windows will only transmit a small level of daylight and have relatively high heat loss in the winter. Conversely south facing windows allow higher levels of daylight into the building but also admit higher solar gains in the summer.

The building has a natural North West – South East orientation, due to the street layout and surrounding buildings which will provide generous levels of solar gain to the rear of the dwelling where the main living areas are. This will help to contribute to reducing heating and lighting loads and, given the constraints of the site, the building is sited in the most feasible position possible.

Insulation and Air Tightness

All of the thermal elements have been assessed and will be built with adequate amounts of insulation to comply with or improve on the Part L building regulations minimum standards in order to reduce heat loss as much as possible.

This building will be built to best practice and it is expected that after an air test is completed an air permeability figure of at least $5\text{m}^3/\text{hm}^2 @ 50 \text{ pa}$ will be achieved, which comfortably exceeds the building regulations standard of $10\text{m}^3/\text{hm}^2 @ 50 \text{ pa}$.

The property will be built with continuity of insulation throughout to minimise the effects of thermal bridging and to reduce the likelihood of cold spots forming. The dwelling will achieve a thermal bridging U-Value of at least 0.08 to match that of accredited construction details subject to SAP calculations.

Ecology Issues

The rear garden area is already established and considered a suitable and stable environment for the local wildlife such as birds and pollinating insects and will not be disturbed during the construction phase.

Secure by Design

The development will be provided with fencing to protect the rear and side elevations. Lights will be provided on the main corners, over doors and in the garden and bin store and bike areas.

All doors and windows will be to Part Q of the Building Regulations Act.

Fire Safety, Part B and Part M

Disabled Access

Level Access will be provided into the building.

Other details such as switches and sockets will be dealt with in the building regulations submission

Grey Water

It is intended that grey water will be used where possible.

Services

Water, electrical supply, gas, BT connections and TV cables will be provided.

End