eight
associates

31-32 John Street
Ecohomes
Planning Statement

Eight Associates
178 Ebury Street
London SW1W 8UP

+ (44) 020 7881 3090 Telephone
+ (44) 0845 458 1522 Fascimile

www.eightassociates.co.uk
info@eightassociates.co.uk

Prepared by:
Ross Standaloft
Eight Associates
The Old School House
London SW1W 8UP

email:
Ross@eightassociates.co.uk

Date:
07.11.2011

Our Ref:
E231-Planning-1111-07rs

Prepared for:
Jonathan Kennedy
Cousins | Wojciechowski Architects
28 Margaret Street
London
W1W 8RZ

Issue Status
31-32 John Street

Prepared by:	Ross Standaloft
Company Name:	Eight Associates
Signature:	
Quality Assured by:	Emma Storey
Signature	

Revision Number	Issue Date	Issued by
Revision 1	27.07.2011	Ross Standaloft
Revision 2	04.11.2011	Ross Standaloft
Revision 3	07.11.2011	Ross Standaloft

Contents
31-32 John Street

Executive Summary
31-32 John Street

Introduction

EcoHomes is an environmental rating for homes. It forms part of the Building Research Establishment's (BRE) suite of environmental tools. The John Street Development is to be registered with the BRE under EcoHomes 2006.

Eight Associates have been appointed, as registered EcoHomes assessors, to undertake an outline stage review of the likely EcoHomes rating for 31-32 John Street, in the Camden area, London. The objective and planning requirement for the development is to meet a VERY GOOD EcoHomes rating and achieve a minimum 60% of credits in the Energy, Water and Materials sections of Ecohomes.

The proposed scheme is a major refurbishment of two, Grade II listed, six-storey town houses in central London. There will be a change of use of from commercial to residential use, with the new scheme incorporating 15 apartments.

Planning Requirements

Camden Council has planning requirements for the development. There is a condition to gain an Ecohomes 'Very Good' certificate at design stage. Furthermore, 60% of the credits in the Energy, Materials and Water Sections should be achieved.

Score Summary

This preliminary assessment states the likely rating for the site at present specification, including details of why the site scores certain credits and not others.

The site reviewed currently scores a VERY GOOD rating, scoring 61.42%. The required VERY GOOD rating requires a score of at least 58% at formal assessment.

On current plans, the Water, Materials and Energy sections will comply with the 60% of credits requirement. Reaching the target 60% energy credits in a Grade II listed building is difficult. On initial energy modelling this is achievable in this scheme due considerable thermal upgrades and an efficient servicing strategy.

The proposed method to reach the energy target is through Part L1b 2010 fabric standards, as a minimum, to all new build areas (i.e. rear façade / top floor). The existing front façade will also be upgraded thermally , but will retain existing windows. All rear façade windows will be double glazed units with a u-value of 1.8. Heating will be supplied through the use of highly efficient 'Altherma' Air to Water heat pumps. Five anticipated worst-case units have been modelled to give an indicative result of carbon emissions for all units. Further modelling to all units at detailed design stage is required to finalise the energy strategy and firmly establish the credits awarded.

	Required	Achieved		Comments
Energy	15 of 24 credits 60%	15 of 24 credits 62.50%	✓	Requirements fully met
Water	4 of 6 credits 60%	4 of 6 credits 66%	✓	Requirements fully met
Materials	19of 31 credits 60%	28 of 31 credits 90%	✓	Requirements fully met

Rating Summary
31-32 John Street

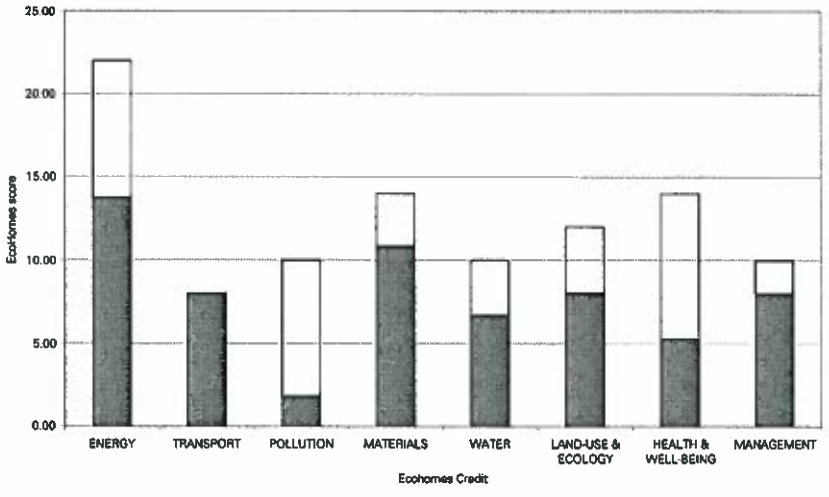
Introduction

The below chart gives a summary of the proposed scheme score based on current designs and general assumptions, detailed in this Planning Summary.

Summarised Score

	Credits available	No. Achieved	% Achieved	Weighting Factor	Credits Score
Energy	24	15	**62.5%**	0.22	13.75%
Transport	8	8	100%	0.08	8.00%
Pollution	11	2	18%	0.10	1.82%
Materials	31	22	**71%**	0.14	9.94%
Water	6	4	**66%**	0.10	6.67%
Land Use and Ecology	9	6	66%	0.12	8.00%
Health and Wellbeing	8	3	38%	0.14	5.25%
Management	10	8	80%	0.10	8.00%
Total					**61.42%**
Rating					VERY GOOD

Graphic Breakdown



Preliminary Assessment
31-32 John Street
Ecohomes

		Likely Credits
ENERGY		
Ene 1 – Dwelling Emission Rate	All new build areas (i.e. rear façade / top floor) will be built to Part L1b 2010 standards as a minimum. The existing front façade will also be upgraded thermally and all windows to the rear of the property will be double glazed with a minimum u-value of 1.8. The single glazed sashes situated on the front façade of the building will be retained to maintain the historic aesthetic of the area. The carbon emissions of five anticipated worst-case units have been modelled. The anticipated worst-case scenario shows dwelling emission rates (DER) ranging from 19.00 to 24.06 kg/m^2/yr. This will result in a minimum 6 credits gained under Ene1. The successful implementation of Solar PV panels will further increase this score.	6 of 15
Ene 2 – Building Fabric	Based on initial SAP calculations, the average Heat Loss Parameter (HLP) is 1.17; therefore two credits are likely to be awarded.	2 of 2
Ene 3 – Drying Space	A drying line will be specified in either the bathroom or private external space of each dwelling. The line will be of at least 4m in length. In addition, the bathroom will have controlled ventilation.	1 of 1
Ene 4 – Eco-labelled Goods	The design team are committed to specifying energy efficient white goods in line with Ecohomes requirements for full credits to be awarded under this issue.	2 of 2
Ene 5 – Eco-labelled Goods	The design team have committed to specifying at least 75% of internal light fittings as dedicated energy efficient fittings.	2 of 2
Ene 6 – External Lighting	The design team will specify space lighting to communal areas that is specifically designed to accommodate CFLs / strip lighting. Also, external lighting is designed for energy efficiency and has Ecohomes compliant controls.	2 of 2
TRANSPORT		
Tra 1 - Public Transport	Russell Square and Holborn Tube stations are within 500m of the development ensuring high frequency transport links. There are also many buses servicing the area. Therefore two credits will be achieved.	2 of 2
Tra 2 – Cycle Storage	Two Ecohomes compliant cycle storage spaces will be provided per dwelling, scoring full credits for this issue.	2 of 2
Tra 3 – Local Amenities	The area has safe pedestrian access to all relevant amenities; therefore three credits can be awarded.	3 of 3
Tra 4 – Home Office	One non-master bedroom will be specified with two double sockets and two telephone points on a wall of at least 1.8m in length to provide the necessary space and services for residents to work from home. The room will also have adequate ventilation and good levels of daylight through an openable window.	1 of 1

Preliminary Assessment
31-32 John Street
Ecohomes

		Likely Credits
POLLUTION		
Pol 1 – Insulant GWP	All new insulation specified (mainly building services insulation) will have a GWP of less than 5 and an ODP of zero. Final confirmation of this from the services engineer is required at design stage to award the credit.	0 of 1
Pol 2 – NOx Emissions	The scheme will be heated and cooled using reversible air-source heat pumps. Despite being efficient, these systems run using grid electricity and therefore have high NOx emissions.	0 of 3
Pol 3 – Reduction in Surface water run-off	This credit is currently not targeted.	0 of 2
Pol 4 – Renewable and Low emission energy source	This credit is currently not targeted.	0 of 3
Pol 5 – Flood Risk	The development is outside a flood risk area as confirmed by Environment Agency flood risk map, therefore has a low probability of flooding and two credits will be achieved.	2 of 2
MATERIALS		
Mat 1 – Environmental Impact of Materials	**The current specification is as follows:** Roof – 30% Re-used In-situ, 70% new timber/steel – B rated External walls – 60% Re-used In-situ / 20% Brickwork – A rated Internal walls – Timber stud wall and plasterboard – A rated Floors – Upper – >80% reused In-situ - A rated Windows – 50% Re-used In-situ / 50% Aluminium – B rated Boundary protection – 100% Re-used In-situ – A rated Hard Landscaping – New concrete/paving/stone – C rated The above specification will gain 12 of the available 16 credits.	12 of 16
Mat 2 – Responsible Sourcing: Basic Building Elements	Most basic building elements will be retained and all timber will be FSC certified; therefore 3 out of 6 credits are likely to be achieved.	3 of 6
Mat 3 – Responsible Sourcing: Finishing Building Elements	It will be an employer's requirement for the contractor to source FSC certified timber for all finishing elements including: skirting, architraves and other finishing elements.	2 of 3
Mat 4 – Recycling Facilities	The site is included under Camden Council's waste and recycling collection service. The design team will dedicate a cupboard within the kitchen for a recycling bin to be fitted to the door. The bin will be at least 30 litres in total capacity and will be in addition to an ordinary bin for household waste.	6 of 6

Preliminary Assessment
31-32 John Street
Ecohomes

		Likely Credits
WATER		
Wat 1 – Internal Water Use	The following specification of water consuming appliances will achieve a minimum of 3 credits under this issue. • Mix of Small and Standard Baths – <150 and <200 litres. • A-rated and very low water use washing machine and dishwasher • 9 Litre/minute shower flow rate (can use restrictor valves) • 6/4 litre flush WC • Aerated taps throughout the house.	3 of 5
Wat 2 – External Water Use	An Ecohomes compliant water butt (200 litre) will be specified to serve the communal area of external space to the rear of the site.	1 of 1
ECOLOGY		
Eco 1 – Ecological Value of Site	The current site is of low ecological value due to absence of trees or any substantial fauna.	1 of 1
Eco 2 – Ecological Enhancement	At present, an ecologist is not appointed to provide advice on enhancements for the site, as the external area to the property is limited.	0 of 1
Eco 3 – Protection of Ecological Features	No trees will be removed during the construction process.	1 of 1
Eco 4 – Change of Ecological Value of Site	The current scheme has hard landscaping to the rear of the site. Based on the Eco4 calculator for number of species per land type there is likely to be no significant change in ecological value (i.e. between –3 and +3 species)	2 of 4
Eco 5 – Building Footprint	The building will score full credits, as there are six storeys giving a floor area to footprint ratio over 3.5:1.	2 of 2

Preliminary Assessment
31-32 John Street
Ecohomes

		Likely Credits
HEALTH AND WELLBEING		
Hea 1 – Daylighting	Average Daylight Factors will meet minimum requirements for planning.	0 of 3
Hea 2 – Sound Insulation	A commitment has been made to target levels 3db lower than Building Regulations: Part E requirements for acoustic levels. This will be demonstrated through acoustic testing at pre-completion stage by a UKAS accredited acoustician.	2 of 4
Hea 3 – Private Space	All dwellings in the scheme benefit from a communal garden area and most have a private balcony – therefore all units comply with the requirements of Ecohomes	1 of 1
MANAGEMENT		
Man 1- Home User Guide	A home user guide will be provided for each dwelling to provide residents with information on how to operate their home efficiently and how to make the best use of local facilities in line with BRE requirements.	3 of 3
Man 2 – Considerate Constructors Scheme	The Contractor will be required to register the site under the Considerate Constructors Scheme and is required to achieve a score of at least 32 out of 40, including at least 3 within each section of the scheme.	2 of 2
Man 3 – Construction Site Impacts	The contractor will be required to monitor, report and set targets for energy and water consumption arising from site activities. The contractor is also required to adopt best practice policies in respect of air and water pollution from the site in line with best practice guidance.	3 of 3
Man 4 – Security	An ALO or CPDA form Camden Police will be consulted. The outputs of this consultation may be implemented into the scheme to achieve these credits at a later stage.	0 of 2

Appendix 1 Score Sheet

31-32 John Street

ECOHOMES 2006 Job No. E300 31-32 John Street Score Summary July 2011			Score	Credits available	Score assessment Sub-total	Credits available	% achieved	Weighting factor	Credits Score
Energy	Ene 1	Carbon Dioxide	6	15	15	24	62.50	0.2	13.75
	Ene 2	Building fabric	2	2					
	Ene 3	Drying space	1	1					
	Ene 4	EcoLabelled goods	2	2					
	Ene 5	Internal lighting	2	2					
	Ene 6	External lighting	2	2					
Transport	Tra 1	Public transport	2	2	8	8	100.00	0.1	8.00
	Tra 2	Cycle storage	2	2					
	Tra 3	Local amenities	3	3					
	Tra 4	Home office	1	1					
Pollution	Pol 1	Insulant GWP	0	1	2	11	18.18	0.1	1.82
	Pol 2	NO_x Emissions	0	3					
	Pol 3	Reduction of Surface Runoff	0	2					
	Pol 4	Zero/Low Carbon Energy Source	0	3					
	Pol 5	Flood Risk	2	2					
Materials	Mat 1	Environmental Impact of Materials	11	16	22	31	70.97	0.1	9.94
		Roof	0	3					
		External Walls	3	3					
		Internal Walls	3	3					
		Floors - upper and ground	3	3					
		Windows	0	2					
		Hard landscaping	1	1					
		Boundary Protection	1	1					
	Mat 2	Responsible materials: Basic elemer	3	6					
	Mat 3	Responsible materials: Finishes	2	3					
	Mat 4	Recycling facilities	6	6					
Water	Wat 1	Internal Water Use	3	5	4	6	66.67	0.1	6.67
	Wat 2	External Water Use	1	1					
Land Use and Ecology	Eco 1	Ecological Value of Site	1	1	6	9	66.67	0.1	8.00
	Eco 2	Ecological Enhancement	0	1					
	Eco 3	Protection of Ecological Features	1	1					
	Eco 4	Change of Ecological Value of Site	2	4					
	Eco 5	Building footprint	2	2					
Health and Wellbeing	Hea 1	Daylighting	0	3	3	8	37.50	0.1	5.25
	Hea 2	Sound Insulation	2	4					
	Hea 3	Private space	1	1					
Management	Man 1	Home user guide	3	3	8	10	80.00	0.1	8.00
	Man 2	Considerate Constructors Scheme	2	2					
	Man 3	Construction Site Impacts	3	3					
	Man 4	Security	0	2					
							Score:		61.42
							Rating:		Very Goo