100-102 Arlington Road 16-18 Delancey Street NW1
EcoHomes Credit Summary Report

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Document Verification

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Introduction

This preliminary environmental assessment report reviews the expected performance of 100 - 102 Arlington Road 16-18 Delancey Street NW1 development based on drawings produced by Dunnett Craven and meetings/discussions with key members of the design team.

The proposals for the development currently include developing an existing public house and snooker hall into a new restaurant and residential development. As there is currently no specific environmental assessment for a restaurant only, the residential element of the development has currently been assessed using EcoHomes.

EcoHomes seeks to minimise the adverse effects of new buildings on the environment at global and local scale, whilst promoting healthy indoor conditions for the occupants.
The environmental implications of a new building are assessed at the design stage, and compared with good practice by independent assessors. A full description of the assessment criteria is given in the BRE Report EcoHomes: The Guidance 2006 (downloadable from the BRE website www.bre.co.uk).

Each design issue is measured against EcoHomes criteria and if these criteria are met, then the credit for that issue is obtained. The conclusions of the formal assessment are presented in the form of an EcoHomes certificate.

This development has not been formally registered under EcoHomes although we would recommend that this is done once the design has been completed following planning approval.

The suggested scoring is therefore provided as guidance only and subject to change following progression of the design and appointment of the contractor however a commitment to achieve an EcoHomes rating of Very good has been set and sufficient points to achieve this score will be achieved.

Camden Council recommends that developments get should aim to achieve Very Good.

A Very Good rating indicates that the development "*demonstrates very good environmental performance across the full range of issues*".

Development EcoHomes Credit Summary Table

EcoHomes Credit	Credits Achieved	Requirements
Home User Guide	3 out of 3	A stand alone non-technical document that contains information on the operation and environmental performance of their home and information relating to the site will be produced
Considerate Constructors	2 out of 2	A CCS greater than 32 will be set as an requirement of the contractor
Construction Site impacts	2 out of 3	A commitment to monitor, report and adopt best practice policies relating to construction activities
Security	2 out of 2	Achieve Secured by Design Award and security standards for external doors and windows to achieve a adequate security rating
Dwelling Emission Rate	6 out of 15	CO2 Emissions <26kg/m²/yr
Building Fabric –	1 out of 2	Average heat loss parameter (HLP) across the whole site < 1.3
Drying Space	0 out of 1	No Space Allocation (external 4m wide eg balconies)
EcoLabelled Goods	1 out of 2	Information on green purchasing
Internal Lighting	2 out of 2	75% of fixed internal lights dedicated to energy efficient fittings
External Lighting	2 out of 2	Energy Efficient External Lighting and space lighting
Public Transport	2 out of 2	Urban Site must be within 500m of a transport node
Cycle Storage	2 out of 2	Adequate Space Allocation Required
Local Amenities	3 out of 3	Site must be 0.5k from food shop and post box and 1k from 5 local amenities with safe pedestrian routes
Home Office	1	Space allocation required
Insulant ODP and GWP	1	No ODP Insulates or insulants with a GWP above 5 can be used
NOx Emissions	0 out of 3	Possible Use of Biomass Boilers or GSHP
Reduction of Surface Runoff	2 out of 2	Runoff attenuation and calcs
Zero Emission Energy Source	2 out of 3	10% Renewable energy
Flood Risk	2 out of 2	No Flood risk
Environmental Impact of Materials	5 out of 16	Green Guide “A” rating for all hard landscaping, fencing and internal walls required
Responsible sourcing of Materials: Basic Building Elements	4 out of 6	
Responsible sourcing of Materials: Finishing Elements	2 out of 3	
Recycling Facilities	6 out of 6	Dedicated bins and space allocation for recycling
Internal Water Use	5 out of 5	Water consumption of less than 32m³/bedspace/yr
External Water Use	1	Rainwater collection system
Ecological Value of Site – should be possible to achieve points here.	1	Ecological Report from registered Ecological Consultant to be provided
Ecological Enhancement	1	Ecological features designed in the Development – green roofs and roof top amenity
Protection of Ecological Features	1	Existing ecological features are not destroyed in construction
Change of Ecological Value of Site	2	0 change in ecological value
Building Footprint	2 out of 2	80% of development has a floor area ratio/footprint ratio of greater than 3.5
Daylighting	2 out of 3	Living rooms, dining rooms, studies meet BS 8206: Part 2 Good access to daylight incorporated in design – no overshadowing, suitably sized windows, use or roof lights in difficult spaces. Exact daylight figure TBC however preliminary assessment demonstrate that at least 1.5% daylight factor is achievable throughout and even 2% in some kitchens is likely therefore 2 credits is a conservative estimate at this time.
Sound Insulation	2 out of 4	3 sets of tests for every 10 dwelling in a group and improvement from Document E (2203) Building Regulations
Private Space to be developed	1	Private outdoor space provided via balconies

Detailed Summary Table

Issue		*Credit*	*Input*	*Comment*
Energy				
Ene1	**CO_2 emission** Credits are awarded to achieve CO_2 emissions as follows: • Less than or equal to 26 kg/m^2/yr	6 out of 15	Arch & MEP	SAP Worksheet U-Values Condensing Boilers Low Energy Lights Heat Recovery Renewable Energy District Heating
Ene2	**Building Fabric** Improving the performance of the building envelope compared with the relevant building regulations: • Average Heat Loss per m2 of floor area <1.3	1 out of 2	Arch & MEP	Specification of insulation values and air-tightness
Ene3	**Drying space** Provision of drying space	0 out of 1	Arch	Space allowance not available
Ene4	**Eco Labelled white goods** Provision of eco labelled white goods with the following energy ratings: • All fridges, freezers, fridge-freezers with an A rating • All washing machines, and dishwashers where supplied, with an A rating and washer dryers and dryers with a rating of C or higher Where not provided • No white goods provided but info on Eco labelling	0 0 **1** 1 point to be Achieved	Client & MEP	Specification of A rated Appliances or provide information on purchasing of A rated appliances
Ene4	**Internal Lighting** Provision of internal lighting systems which are low energy: • 75% of fixed internal light fittings dedicated energy efficient fittings	2 2 out of 2	MEP & Arch	Specification of light fittings

Ene5	**External Lighting**
	
	Provision of external lighting systems which are low energy:
	• All out building lighting and feature external lighting to accommodate CFLs or fluorescent strips only
	• For security/intruder lighting
	  • All security/ safety lighting to accommodate CFLs or fluorescent strips only and be fitted with dawn to dusk sensors or timers and
	  • all intruder lighting to be 150 watts maximum and be fitted with PIR and day light sensor
		1
		
		1
		
		2 out of 2 to be achieved
			MEP	Specification of CFL luminaries and security have a maximum of 150W and PIR and dawn to dusk sensors

Management				
Man1	**Home User guide** Provision of a simple guide to enable home owners/occupiers to understand and operate their home efficiently. + knowledge relating to the site and its surroundings	2 1 3 credits achieved	Team	
Man 2	**Considerate Constructors** Construction sites to be managed in an environmentally and socially considerate and accountable manner to comply with best practice site management principles Construction sites to be managed in an environmentally and socially considerate and accountable manner to go significantly beyond best practice	1 2 2 credits sought	Constructor	Contain in tender
Man 3	**Construction Site Impacts** Commitment and a strategy to monitor, sort and recycle construction waste on site 2 or more of the items listed below monitor and report CO2 or energy arising from site activities monitor and report CO2 or energy arising from transport to and from site monitor and report water arising from site activities adopt best practice policies in respect of air pollution adopt best practice policies in respect of water pollution 80% of site timber is reclaimed, reused or responsibly sourced	1 1 2 credits sought	Constructor	Contain in tender
Man 4	**Security** Commitment to work with an architectural Liasion Officer and to achieve the Secured by Design award Security standards for external doors and windows to achieve a minimum of either LPS1175 SR1 OR PAS24-1 (doorsets) AND BS7950 (windows)	1 1 2 credits achieved	Arch	Contain in tender

Transport				
Tra1	**Public Transport** Developing a site with good access to public transport • 80% of the development within 500m of a well served public transport node	2 out of 2	Site	Camden and Mornington Crescent tube are located very near to the site while Delancey Street is served by numerous bus routes
Tra2	**Cycle storage** Provision of cycle storage for: • 95 % of dwellings	2 out of 2	Arch	1 secure cycle storage per 1 and 2 bed dwellings; 2 secure cycle storage per 3 bed dwellings provided 11 cycle stores in total.
Tra3	**Local Amenities** Proximity to local amenities: • Within 500m of a food shop and post box; • Within 1000m of 5 of the following: post office, bank, chemist, school, medical centre, leisure centre, community centre, public house, children's play area • Safe pedestrian routes to the local amenities	1 1 1 3 credits Achieved	Site	Refer to local map
Tra4	**Home office** Provision of space, and services, for a home office	1 out of 1	Arch	Two double sockets and telephone points located along a wall (minimum length 1.8m) which allows a desk and filling cabinet or bookshelf to be installed. Room must have space to move around and open the door; it must also have a window and be adequately ventilated. For one bed dwellings space will be in living room or bedroom. For dwellings of two bedrooms or more the space shall be in second bedrooms.

Pollution				
Pol1	**Insulant GWP** Ensuring that no ozone depleting substances or insulants with Global warming potential greater than 5 are used in the construction of the building	1	Arch & MEP	Specification that says no HCFC or GWP greater than 5 will be used in the construction i.e. mineral, glass wool etc
Pol2	**NOx emissions** The specification of boilers with low NO_x emitting burners: • Likely to be Greater than 100 NO_x mg/kWh	0 out of 3	MEP	Use of biomass boilers or GSHP prevent this point being achieved
Pol3	**Reduction of surface runoff** Reducing peak surface runoff rates to either natural or municipal systems by 50% for: • Hard surface runoff • Roof runoff	1 1 max 2	Arch	Green roofs
Pol4	**Renewable and Low Emission Energy Source** 10% of the total energy demand to be met by renewable energy	2	Arch & MEP	Biomass Boiler Ground source heat pump Solar thermal tubes
Pol5	**Flood Risk** Development located in a zone defined as having a low annual probability of flooding	2	Arch & MEP	Environmental agency flood map assessment

Materials

Mat1	**Environmental Impact of Materials** The following elements obtaining an A rating from the Green Guide for Housing: • Roof • External walls • Internal walls • Floors • Windows • Hard landscaping • Fencing	0 out of 3 0 out of 3 3 out of 3 0 out of 3 0 out of 2 1 out of 1 1 out of 1 5 out of 16 credits to be sought	Arch	Architectural Specification to green guide
Mat2	**Responsible sourcing of materials: Basic building Elements** To recognise and encourage the specification of responsibly sourced materials for key building elements	4 out of 6	Arch	Architectural/ Structural Specification
Mat3	**Responsible sourcing of materials: Finishing Elements** To recognise and encourage the specification of responsibly sourced materials for secondary building and finishing elements	2 out of 3	Arch	Architectural Specification
Mat3	**Recyclable Materials** Storage of recyclable waste: • Provision of internal and external storage:	6 out of 6	Arch	Space allowance for 3 No 10 litre internal storage bins and external bins sized to suit collection frequency located next to external door

Water				
Wat1	**Internal water use** • Less than 32 m^3 per bedspace per year	5	MEP	Dual Flush Toilets Spray Taps and Fittings Low Flow Shower Rain Water Harvesting Water Efficient Appliances
Wat2	**External water use** Rain water collection system for watering gardens and landscaped areas	1	MEP	no external land allocated credit awarded by default

Land Use and Ecology				
Eco1	**Ecological value of site** • Building on land which is of low ecological value	1	Site	Subject to ecologist appraisal however site is unlikely to be of ecological value
Eco2	**Ecological enhancement** • Enhancing the ecological value of the site through consultation with an accredited expert	1	Arch	Appoint an Ecologist
Eco3	**Protection of ecological features** • Ensuring the protection of any existing ecological features on the site	1	Arch	Specification Preliminaries shall state that all ecological features shall be protected
Eco4	**Change of ecological value of site** • • A change of between –3 and +3 species • 2 out of 4	2	Arch	Green roof and roof top amenity
Eco5	**Building footprint** Making effective use of the building foot-print; • • All dwellings floor area/footprint greater than 3.5	2 2 credits achieved	Arch	Site and Building Form

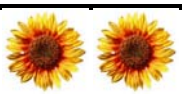
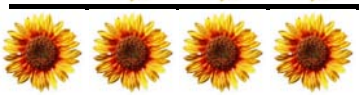
Health and Well Being				
Hea1	**Daylighting** Provision of adequate daylighting, according to BS 8206:pt2 in: • In the kitchen 2% • In living rooms, dining rooms and studies 1.5% • View of sky in all above rooms	0 1 1 2 credits achieved	Arch	Adequate area of glazing to floor, good use of roof lights to areas that have no access to external facades. Daylight factor likely to be greater than 1.5% throughout however some kitchens at the back of space may not achieve 2% although some will conservatively assume no kitchens achieve 2% DF
Hea2	**Sound Insulation** Pre-completion testing to comply or improve on performance standards in Approved Document E (2003 Edition). • 2 tests* meeting part E requirements • 3 tests* meeting part E requirements • * for every **ten** dwellings in a group or subgroup.	1 1 2 credits sought	Arch	Architectural specification and compliance with Part E
Hea3	**Private space** Provision of private or semi private space Balconies. Private space minimum of 1.5m2 per bedspace.	1 1 credits achieved	Arch	

Summary

All of the 89 credits that can be obtained through EcoHomes are weighted and therefore one credit can be worth more to the score than other credits in other categories, in total a score of 100 is possible.

EcoHomes has been constructed so that it will be difficult to achieve all of the credits in a development. For example achieving all of the daylighting credits can mean that it will be extremely difficult to obtain the U-value credits in the energy category.

To achieve “Excellent” a score of over 70 must be achieved

	Rating	**Score**
	Pass	36
	Good	48
	Very Good	60
	Excellent	70

EcoHomes Category	Credits	Score per Credit	Score Available	Credits Predicted	Score Achieved
Energy	24	.92	22	12	11.04
Management	10	1	10	9	9
Transport	8	1	8	8	8
Pollution	11	.91	10	7	6.37
Materials	31	0.45	14	17	7.65
Water	6	1.67	10	6	10
Land Use and ecology	9	1.33	12	7	8.3
Health and well being	8	1.75	14	5	8.75
Total	89		100	**Approx total**	**69.11**

It is likely that the development will achieve a high score of Very Good.

It will be investigated how the score can be increased from Very Good to Excellent during design development.

For example extra points can be attained by increasing the performance of the façade beyond building regulation requirements; however this may have architectural or structural issues and will need to be

discussed by the design team. Other alternatives may be to increase the proportion of renewable energy systems or increasing the commitment of the contractor.