OAKWORTH HOMES

PRE-ASSESSMENT STATEMENT AND EVALUATION REPORT TO ACHIEVE CODE FOR SUSTAINABLE HOMES – CODE LEVEL 3:

CLIENT: Mr. & Mrs. P Davies

PROJECT ADDRESS: 'Southfield', Lingard Street, Barnsley. S75 2SW

PROJECT: Proposed erection of 1No. detached dwelling

STATEMENT:

Oakworth Homes are an established producer of timber frame structures and design to meet and exceed current levels required for the construction of sustainable homes with inherent environmental benefits, as standard. Our base products and respective applied insulation fully comply with all U Value requirements throughout as necessary for the provision of valid SAP Calculations at Building Regulations submission stage.

This development aims to achieve not less than a Code Level 3 standard. It intends to do this with the use of the following technologies and construction methods:

- The storage and / or reuse of any hardcore / waste materials produced during demolition. These products are to be incorporated back into the development where possible to minimise waste disposal.
- A highly insulated, sustainable timber frame construction.
- The offsite manufacture of structural components, wherever possible.
- Renewable energy systems ie. heat pumps.
- The use of under-floor heating.
- Rainwater recovery and storage tanks / system.
- Photo-voltaic panels.

In the wider sense, the plot itself is well situated to take full advantage of it's close proximity to bus and cycle routes; local shops and facilities (medical, recreational etc.) which are within walking distance and the main line train service for travelling further afield – particularly useful to the clients as they have various business travel requirements.

Taking into consideration all of the above, it is easily acceptable that the 2.5 storey, detached property proposed for this site will attain a strong credit rating against ENE1 criteria for a Code Level 3 home.

PRE-ASSESSMENT EVALUATION:

ENERGY AND CO^2 EMISSIONS:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
ENE1 – mand.	Minimum expected result from SAP Calc's package – 37% improvement over TER	15 @ 1.26%	7 = 8.82%
ENE2	Highly insulated timber frame construction	2 @ 1.26%	2 = 2.52%
ENE3	75% of lighting fixtures to be compliant with energy efficient bulbs / fittings	2 @ 1.26%	2 = 2.52%
ENE4	Space available externally for the provision of a satellite clothes dryer or washing line	1 @ 1.26%	1 = 1.26%
ENE5	White goods to meet relevant EU Energy Efficiency levels	2 @ 1.26%	2 = 2.52%
ENE6	Security lighting to be compliant with energy efficient bulbs(with a maximum wattage of 150W)and include PIR and daylight cut-off sensors	2 @ 1.26%	2 = 2.52%
ENE7	Heat pumps to be used as central heating system	2 @ 1.26%	2 = 2.52%
ENE8	Potential storage for 2 bicycles to be included within amenity space	2 @ 1.26%	1 = 1.26%
ENE9	Layout includes space for potential home office/study.	1 @ 1.26%	1 = 1.26%
TOTAL:	-	29 x 1.26% = 36.54%	20 = 25.2%

WATER:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
WAT1 – mand.	All sanitary fittings to meet minimum required flow rates and capacities	5 @ 1.5%	4 = 1.5%
WAT2	Rainwater harvesting system to be installed	1 @ 1.5%	1 = 1.5%
TOTAL:	-	6 x 1.5% = 9%	5 = 7.5%

MATERIALS:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
MAT1 – mand.	It is highly likely that 3 of the 5 specified categories will achieve the minimum required levels for an appropriate Green	15 @ 0.3%	7 = 2.1%

	Guide rating		
MAT2	It is highly likely that the 80% target for responsibly sourced materials throughout the entire structure will be achieved	6 @ 0.3%	4 = 1.2%
MAT3	Details not known at this time	3 @ 0.3%	0 = 0
TOTAL:	-	24 x 0.3% = 7.2%	11 = 3.3%

SURFACE WATER RUN-OFF:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
SUR1 – mand.	Proposed installation of rainwater harvesting system, as suggested by SUDs CIRIA Initiative	2 @ 0.55%	1 = 0.55%
SUR2	Site is in an area classed as not being at risk of flooding (confirmed by the Environment Agency)	2 @ 0.55%	2 = 1.1%
TOTAL:	-	4 x 0.55% = 2.2%	3 = 1.65%

WASTE:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
WAS1 – mand.	Level access to and adequate storage space for general household and recyclable waste is available in the Kitchen/Utility areas (access via side entrance). A further surfaced area will be provided externally for bin/box storage – exact location to be confirmed	4 @ 0.91%	4 = 3.64%
WAS2 – mand.	A comprehensive SWMP will be produced by an accredited Site Manager in accordance with relevant site waste disposal practices for the duration of the development.	2 @ 0.91%	2 = 1.82%
WAS3	Details not known at this time	1 @ 0.91%	0 = 0
TOTAL:	-	7 x 0.91% = 6.37%	6 = 5.46%

POLLUTION:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
POL1	It is assumed that all insulation products will comply with or have a value less than GWP 5	1 @ 0.7%	1 = 1.17%
POL2	Dwelling is to be reliant on heat pumps and under-floor heating for all heating and hot water consumption.	3 @ 0.7%	3 = 2.1%
TOTAL:	-	4 x 0.7% = 2.8%	4 = 2.8%

HEALTH AND WELLBEING:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
HEA1	The extensive use of glass within this property means that all recommended daylight levels in specified rooms comply	3 @ 1.17%	3 = 3.51%
HEA2	The reduction in overall width of the proposed property, highly insulated timber frame panels and floor construction and screed layers to ground and first floors all provide additional sound dampening benefits. The client may also wish to use acoustic insulation at the panel manufacture stage	4 @ 1.17%	3 = 3.51%
HEA3	Majority of the open amenity space to the rear to remain enclosed by fencing for private use	1 @ 1.17%	1 = 1.17%
HEA4 - mand.6	Dwelling has been designed to satisfy Part M requirements for level threshold access and internal circulation space; available space provided for ramps to a principle entrance, as necessary	4 @ 1.17%	1 = 1.17%
TOTAL:	-	12 x 1.17% = 14.04%	8 = 9.36%

MANAGEMENT:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
MAN1	Provision of a comprehensive 'User Guide' is feasible	3 @ 1.17%	3 = 3.51%
MAN2	Compliance with the Considerate	2 @ 1.17%	1 = 1.17%

	Constructor's Scheme will be carried out by an accredited Site Manager		
MAN3	All works to be carried out accordingly to reduce the impact of the development process on the site and surrounding area/residents. This will be monitored by an accredited Site Manager.	2 @ 1.17%	1 = 1.17%
MAN4	Whilst several security measures are intended to be included at the property, no official body has been consulted	2 @ 1.17%	0 = 0
TOTAL:	-	9 x 1.17% = 10.53%	5 = 5.85%

ECOLOGY:

SAMPLE SECTIONS:	PROPOSED MEASURES:	AVAILABLE TOTAL:	PREDICTED TOTAL:
ECO1	Details not known at this time	1 @ 1.33%	0 = 0
ECO2	Details not known at this time	1 @ 1.33%	0 = 0
ECO3	A large portion of the site is to be retained during the clearance & subsequent reconstruction for the protection of the existing dwelling & gardens. Any notable planting that may be removed is to be replaced and/or replanted where possible.	1 @ 1.33%	1 = 1.33%
ECO4	It is predicted that the overall change to the ecological value of the site will remain as neutral	4 @ 1.33%	2 = 2.66%
ECO5	The floor area complies with the ratio's stated for a single detached dwelling	2 @ 1.33%	1 = 1.33%
TOTAL:	-	10 x 1.33% = 13.3%	4 = 5.32%

OVERALL TOTAL:	105 / 101.98%	66 = 62.5%

PLEASE NOTE: ALL DATA IS ASSUMED AND BASED ON KNOWLEDGE AT TIME OF WRITING REPORT (20.05.11). DETAILS ARE SUBJECT TO CHANGE DEPENDANT ON CLIENT DECISIONS, PRODUCT AVAILABILITY, AVAILABILITY OF ALL COMPANIES / BODIES NOTED ETC.