



**Code for Sustainable Homes
November 2010
Pre Assessment Report**

**40 Queens Road
Waterlooville**

On behalf of

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THE CODE FOR SUSTAINABLE HOMES

The Code for Sustainable Homes covers nine categories of sustainable design, and within each category there are a number of sections which the dwelling(s) are assessed against, including:

			1 Credit Weighting	Mandatory Sections (Level Applicability)
Cat 1	(Ene 1-9)	Energy and CO2 Emissions	1.17 %	Ene 1 DER/TER improvement (Code 4-6) Ene 2 FEES (Code 5- 6)
Cat 2	(Wat 1-2)	Water	1.50 %	Wat 1 Internal Water Usage (Code 1-6)
Cat 3	(Mat 1-3)	Materials	0.30 %	Mat 1 Green Guide Ratings
Cat 4	(Sur 1-2)	Surface Water Run-off	0.55 %	Sur 1 Surface Water Drainage
Cat 5	(Was 1-3)	Waste	0.80 %	Was 1 Storage of Waste and Recycling
Cat 6	(Pol 1-2)	Pollution	0.70 %	
Cat 7	(Hea 1-4)	Health and Wellbeing	1.17 %	Hea 4 LifeTime Homes (Code 6)
Cat 8	(Man 1-4)	Management	1.11 %	
Cat 9	(Eco 1-5)	Ecology.	1.33 %	

As noted in the table above there are 7 sections with mandatory requirements to be met. Where the section is indicated with a Code Level there is an increasing target the higher the Code Level Certification required. For the sections where no Code Level is indicated there is a fixed target to be met for any Code Level Certificate to be issued. Regardless of the overall score if any Mandatory requirements are not met a zero rated or lower level certificate can be issued.

Code Level	Min. Total % points
Level 1 ★	36 Points
Level 2 ★★	48 points
Level 3 ★★★	57 points
Level 4 ★★★★	68 points
Level 5 ★★★★★	84 points
Level 6 ★★★★★★	90 points

The Code assessment is designed to be flexible so that once the 'mandatory' requirements have been incorporated into the design the remaining credits required to achieve the desired Level Rating can be made up from the remaining optional credits.

For all sections where credit is sought compliant evidence as detailed within the Code for Sustainable Homes Technical Guide must be provided to the appointed Code Assessor for both Design Stage and Post Construction Stage report and certification.

The Code for Sustainable Homes Technical Guide can be downloaded at:

http://www.planningportal.gov.uk/uploads/code_for_sustainable_homes_techguide.pdf

Rund Partnership Ltd is licensed by the Building Research Establishment (BRE), to provide Code for Sustainable Homes assessments via a team of trained and accredited Code for Sustainable Homes Assessors.

Disclaimer: The assessor (for itself and as agent for its staff) and its staff shall not be liable whether in Contract or in Tort or otherwise for any loss or damage sustained as a result of using or relying on the information contained in this report or the final certificate from BRE that it is based on.

DEVELOPMENT DETAILS

Rund Partnership Ltd has been instructed to carry out a Code for Sustainable Homes Pre-Assessment report for the proposed development. At this early stage, detailed design information is not available and therefore the assessment is based on the limited information available.

Development	Queens Road, Waterloooville
BRE Registration number	BRE-00022560-DS-001-00
CSH Assessor	Clare Alsop / BREEAM-Assessor-393
Type of development	Houses
Number of units	2
Target Code Level	Code Level 3

The following details about the site have been confirmed or are reasonable to assume:

Existing site	Large rear garden plot
Drainage	TBC
Materials / type of construction	Traditional brick and block construction
Space heating and hot water	Mains gas, heating and hot water system
Renewable energy	TBC
Ecology	Typical maintained garden with pond

Local Planning Authority Requirements

The Local Planning Authority (Havant Borough Council) requires the following standards to be achieved:

Decision Notice

Application Number: APP/13/00589

Site Address: Land rear of 40 Queens Road, Waterlooville, PO7 7SB

Proposal: Erection of 2No. four bedroom detached dwellings with double garages and car parking with use of the existing access and creation of a new access.

Condition 11:

The development hereby permitted **shall not be commenced** until an Interim Certificate of Compliance with the Code for Sustainable Homes has been submitted to and approved in writing by the Local Planning Authority. The Certificate shall demonstrate that the development will attain a minimum standard of Level 3 in accordance with the Code. The development shall be carried out only in accordance with the details the subject of the Certificate.

Pre-assessment summary

A score sheet for the scheme has been produced and can be found at the end of this report. The score sheet shows estimated credits based on the credits listed in this report. The award of credits at both Design and Post Construction stages is subject to the provision of evidence compliant with the Code for Sustainable Homes technical guide.

Unit types	All
Pre-Assessment predicted score(s)	57.56%
Required rating	Level 3
Required rating % score	57%
Shortfall	n/a
Additional credit identified	5.85%

Accommodation schedule

The accommodation schedule has been confirmed as follows:

Total of 2 units:

2 No. 4 bedroom houses

Information received

The pre-assessment report is based on the following information:

Drawings:

120051_100_sitelocationplan-A3 SHEET.pdf
120051_101_proposedsiteplan-A1 SHEET.pdf
120051_102_proposedfoundationplanP1-A1 SHEET.pdf
120051_103_proposedgroundfloorplanP1-A1 SHEET.pdf
120051_104_proposedfirstfloorplanP1-A1 SHEET.pdf
120051_105_proposedroofplanP1-A1 SHEET.pdf
120051_106_proposedelevationsP1-A1 SHEET.pdf
120051_107_proposedelevationsP1-A1 SHEET.pdf
120051_108_proposedfoundationplanP2-A1 SHEET.pdf
120051_109_proposedgroundfloorplanP2-A1 SHEET.pdf
120051_110_proposedfirstfloorplanP2-A1 SHEET.pdf
120051_111_proposedroofplanP2-A1 SHEET.pdf
120051_112_proposedelevationsP2-A1 SHEET.pdf
120051_113_proposedelevationsP2-A1 SHEET.pdf
120051_114_proposedsectionsP1andP2-A1 SHEET.pdf
120051_115_proposedsitesections-A1 SHEET.pdf

CODE FOR SUSTAINABLE HOMES ASSESSMENT

Ene 1: Dwelling Emission Rate

Mandatory requirement:	All units to achieve Building Regulations compliance (Code Level 3)
Assessment criteria:	The Dwelling Emission Rate (DER) to be no greater than the Target Emission Rate (TER)
Technical Constraints:	None at present.
Comments:	SAP worksheets have been received which currently show an 8% DER/TER improvement, which achieves 1 credit.
Predicted credits:	1

Ene 2: Fabric Energy Efficiency (FEE)

Mandatory requirement:	None at Code Level 4
Assessment criteria:	To improve the fabric energy efficiency performance, as measured by the Fabric Energy Efficiency (FEE) kWh/m ² /year
Technical Constraints:	None at present.
Comments:	SAP worksheets have been received which meet the following standards: • End of terrace, semi and detached houses ≤ 53.2 kWh/m²/year
Predicted credits:	4.6

Ene 3: Energy Display Device (EDD)

Assessment criteria:	Provide each unit with a correctly specified Energy Display Device which measures and displays both the electricity usage and the primary fuel usage. The device must comprise of self-charging sensor(s) fixed to the incoming mains and dedicated for the assessed dwelling. The visual display unit must be capable of displaying the following: • Local time
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- Current mains energy consumption (kilowatts and kilowatt hours)
- Current emissions (g/kg CO₂)
- Current tariff
- Current cost (in pounds and pence)
- Accurate account balance information (amount in credit or debit)
- Visual representation of data (non numeric, graph display)
- Historical consumption data for comparison purposes, and should include cumulative consumption data in any of the following forms day/week/month/billing period

Technical Constraints: To take advantage of free monitors via www.thecodestore.co.uk units must have connection with Eon arranged via The Code Store.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that a compliant EDD will be provided to all dwellings.

Predicted credits: 2

Ene 4: Drying Space

Assessment criteria: Provide compliant external natural drying facilities.

External:

Rotary line or post and line system (with secure footings) which provides 4m of useable line for 1 and 2 bed units or 6m of useable line for 3+ bed units and is within a secure enclosed garden so that the drying facility is only accessible to residents of the unit. Any garden gates must have a permanent BS 3621:2007 mortice/sash lock.

Technical Constraints: None at present.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that compliant drying facilities will be provided.

Predicted credits: 1

Ene 5: Energy Labelled White Goods

Assessment criteria: Provide energy efficiency literature which has an example of the EU Energy Label within the Home User Guide (see Man 1). If any white goods are supplied by the developer for use within the dwellings, each appliance must meet minimum energy and water efficiency requirements as noted below to still achieve this single credit.

Technical Constraints If any supplied white goods exceed maximum water usage limits this will reduce the credits achieved under section Wat 1 and may not meet the mandatory requirement for Wat 1.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that no white goods will be supplied, and that information relating to the EU energy label will be provided.

Predicted credits: 1

Additional credits: 1 credit

Provide energy efficiency literature as detailed above and also provide three white goods which have the following minimum energy efficiency ratings, also ensuring the maximum water usage is not exceeded.

Appliance	Energy Rating	Max Water Usage
Fridge/Freezer	A+	-
Washing machine	A	8.17 litres/kg
Dishwasher	A	1.25 litres/place setting

Ene 6: External Lighting

Assessment criteria: Provide energy efficient external lighting with automatic controls to ensure the lighting is only activated when the area is in use and there is insufficient natural daylight.

Assessed areas include:

- external doors
- front porch
- patio/balcony
- steps/pathways
- garden
- carports
- garage
- any other outbuildings/stores
- communal areas

Space Lighting (1 credit)

- Lamp efficacy to be 40 lumens per circuit watt or better, controlled by PIR and 'dusk to dawn' daylight sensors, or time switches.

Note that a minimum of 1 No. space light fitting **must** be provided per dwelling where there are no internal communal areas associated with the unit.

Security Lighting (1 credit)

- Maximum 150W controlled by PIR and daylight sensors OR
- Lamp efficacy to be 40 lumens per circuit watt or better, controlled by daylight sensor or time switch

Where no security lighting is necessary the second credit for security lighting is

awarded by default providing compliant space lighting is provided for the unit.

Technical Constraints: None at present.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that compliant energy efficient lighting will be specified.

Predicted credits: 2

Ene 7: Low and Zero Carbon (LZC) Technologies

Assessment criteria: None, credit not included.

Technical Constraints: None.

Comments: SAP calculations have been received which indicate that no credit is achieved based on the current information. Therefore at this stage no credits are predicted.

Predicted credits: 0

Ene 8: Cycle Storage

Assessment criteria: Provide either individual or communal cycle storage which provides sufficient space and is secure, weather-proof (at least three walls and a roof) and convenient.

Allowable cycle storage options are:

- 1) Garage or shed
- 2) External or internal communal store
- 3) Proprietary store

Provide cycle storage which complies with the following:

Storage Option	Individual Storage, Garage – (2 CREDITS)
No. of cycles to be stored	4 bed unit – storage for 4 No. cycles
Sufficient space	2m x 0.75m per cycle

Secure Store (solid enclosed structure)	Provide either secure entrance OR secure cycle locking points Secure Entrance: Permanent mortice deadlock that conforms to BS 3621:2007 on a door at least 44mm thick which is locked to the door frame <i>or</i> A 'sold secure' Silver Standard padlock with hasp and staple which are coach bolted through the structure Secure cycle locking points A 'sold secure' Silver Standard ground anchor fixed to concrete base for each cycle to be stored <i>or</i> A stand which allows the wheel and frame of cycle to be locked, which is made of galvanised steel with welded anchor T-bar set in concrete base for each cycle to be stored
Direct access to highways	An external route to public highways which is not via dwelling

Technical Constraints: Drawings 103 & 109 both show 2 No cycle storage points within the garage, to achieve the 2 credits for this section this must be increased to 4 cycle storage spaces, however these could be split between garage and shed if required.

Comments: It is assumed that 4 No. secure cycle storage spaces will be provided for each unit to achieve 2 credits.

Predicted credits: 2

Ene 9: Home Office

Assessment criteria: Provide a Home Office area to each dwelling which complies with all of the following requirements:

- Suitable Room –**For 3+ bed dwelling:** any room other than kitchen, living room, master bedroom or bathroom which is large enough to accommodate typical furniture for that type of room and Home Office furniture
- Sufficient Space – 1.8m wall length (to allow provision of desk, chair and filing cabinet / bookshelf, with space to move around and use chair and cabinet/bookshelf safely and appropriately)
- Sufficient Services –
 - Two double power sockets
 - Two or double telephone point, or one telephone point where cable or

broadband is available

- A Window – room **must** have daylight factor of at least 1.5%
- Adequate Ventilation – an openable window casement of at least 0.5m² OR other ventilation such as passive stack

Technical Constraints: None at present.

Comments: Calculations based on current drawings show that the study within each unit has sufficient daylight. It has therefore been assumed at this stage that the requirements of this section will be met in full.

Predicted credits: 1

Wat 1: Internal Potable Water Use

Mandatory requirement: All assessed dwellings to have water consumption no greater than 105 litres per person per day for Code Levels 3 and 4

Assessment criteria: Achieve water consumption of no more than 105 litres per person per day. Water consumption must be confirmed by the 'Water Efficiency Calculator for New Dwellings'.

A typical specification which meets this target is as follows.

- 4/2.6 litre dual flush cisterns
- Shower flow - maximum 7 litres per minute
- Smaller sized bath - maximum 130 litre capacity to overflow
- WHB taps - maximum flow of 3 litres per minute
- Kitchen taps - maximum flow of 3 litres per minute
- No white goods supplied and default usage figures included in calculation (i.e. washing machine 8.17 litres/kg and dishwasher 1.25 litres/place setting)
- No bidets, water softeners or waste disposal units

Specific shower and tap flows should be at a water pressure and temperature as described within 'Water Efficiency Calculator for New Dwellings' guide. See website:

www.communities.gov.uk/publications/planningandbuilding/watercalculator

Confirmation is also required that a risk assessment of microbial contamination (i.e. Legionella) has been carried out on the hot and cold water system, and that appropriate action is undertaken where identified.

Technical Constraints: If any white goods such as washing machines, washer dryers or dish washers are provided, water consumption figures should be checked. In particular washer dryers can have very high water consumption which will impact on achieving the overall water consumption target.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that water consumption of no more than 105 litres per person per day will be achieved.

Predicted credits: 3

Wat 2: External Water

Assessment criteria: Provide suitably sized and specified water butt(s) to each private and communal garden which comply with all the following requirements:

- water butt of sufficient capacity (as below)
- with lid and draw off tap
- connection via detachable automatic overflow to rain water pipe (with onward connection to the surface drainage system)
- placed so that it is stable and adequately supported

Private Gardens

3+ Bedroom dwellings with private garden - minimum 200 litres capacity

Technical Constraints: None at present.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that compliant water butts will be provided.

Predicted credits: 1

Mat 1: Environmental Impacts of Materials

Assessment criteria: Specify elements with a low life-cycle environmental impact, as assessed in the BRE's Green Guide to Specification.

The following are example Green Guide ratings. For alternative options please visit the Green Guide Ratings website (www.thegreenguide.org.uk), registration is free and available to everyone.

The following are typical brick & block Green Guide Ratings.

Elements	Element Materials and Build-up
Roof	Timber trussed rafters and joists with insulation, roofing underlay, counter battens, battens and concrete interlocking tiles. Element Number 812410007, Summary Rating A+.
External Walls 1	Brickwork outer leaf, insulation, aircrete blockwork inner leaf, cement mortar, plasterboard on battens, paint. Element Number 806170615, Summary Rating A+.

External Walls 2	Clay tiles on timber battens, aircrete block cavity wall, insulation, plasterboard on battens, paint. Element Number 806290615, Summary Rating A.
Internal Walls 1	Aircrete blockwork, plasterboard, paint. Element Number 809180003, Summary Rating B.
Internal Walls 2	Timber stud, plasterboard, paint. Element Number 809760003, Summary Rating A+.
Floors 1	<u>Ground floor:</u> Screed on insulation laid on grouted beam and aircrete block flooring. Element Number 820140014, Summary Rating B.
Floors 2	<u>Upper floor:</u> Chipboard decking on timber I joists. Element Number 807280024, Summary Rating A+
Windows	PVC-U window with steel reinforcement, double glazed. Element Number 813100009, Summary Rating A.

Mandatory requirement: At least 3 of the 5 elements (roof, external walls, internal walls, floors and windows) must achieve a minimum of a 'D' rating for 100% of the element according to the 2008 "Green Guide".

Technical Constraints: None at present.

Comments: It is understood that the dwellings will be of traditional brick and block construction similar to Warsash Road. It has therefore been assumed at this stage that the mandatory requirement will be met and overall 10 credits will be achieved.

Predicted credits: 10

Mat 2 and Mat 3: Responsibly Sourcing Materials (RSM) Basic and Finishing

Assessment criteria: Source at least 80% of materials for each assessed element which is documented as being responsibly sourced.

Materials must have appropriate certification such as FSC or PEFC for timber or ISO 14001 or BES 6001 (Very Good or Good rated) for other materials i.e. bricks, blocks, tiles etc.

Assessed elements are as follows:

Mat 2 Basic Building Elements

- Frame
- Ground floor
- Upper floors (including separating floors)
- Roof (structure and cladding, including any loft boarding)
- External walls (including external cladding)

- Internal walls (including partition and separating walls)
- Foundation / substructure (excluding sub-base materials)
- Staircase (includes the tread, risers and stringers)

Mat 3 Finishing Elements

- Stair (including handrails, balustrades, banisters, other guarding/rails)
- Window (including sub-frames, boards and sills)
- External and internal doors (including sub-frames, frames, linings, door)
- Skirting (including architrave, skirting board and rails)
- Panelling (including any other trim)
- Furniture (including kitchen, bedroom and bathrooms units)
- Fascias (soffit boards, bargeboards, gutter boards, others)
- Any other significant use

Technical Constraints: None, but it is recommended that further consultation with the Code Assessor is undertaken prior to purchasing any of the materials as listed above, to ensure compliance with the requirements.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that responsibly sourced materials will be sourced wherever possible.

Predicted credits: Mat 2: 2 credits Mat 3: 2 credits

Sur 1: Management of Surface Water Run-off from Developments

Mandatory requirement: Ensure that the peak rate of run-off from the site post development (allowing for climate change) is no greater than pre development.

Ensure that the volume of run-off from the site post-development (allowing for climate change) is no greater than for the site pre-development

If there is no increase in impermeable surfaces post development then the mandatory criteria will be achieved by default.

Where there is an increase in the impermeable area, the additional volume of run-off must be prevented from leaving the site using infiltration.

If infiltration systems cannot be used rainwater harvesting systems must be installed so water is made available for use in the dwellings and detailed guidance provided in the Code Technical Guide must be adhered to.

Drainage calculations, produced by an Appropriately Qualified Professional (AQP) must be provided in order to confirm that the two mandatory criteria have been met.

Calculations must demonstrate compliance for the site peak run-off rates (1 year and 100 year return periods) and annual volume of run-off (for a 1 in

100 year, 6 hour storm). Post development calculations must include the climate change factor.

It must also be demonstrated that local residences and the proposed dwellings will not flood in the event of local drainage system failure/blockage. Maintenance responsibilities for all SUDS systems to be installed must also be confirmed.

Assessment criteria:	In addition to the mandatory requirements, 1 credit is available for each of the following requirements: 1) Ensuring no discharge from the development site for rainfall depths up to 5mm (see Technical Guidance calculation procedures) 2) The run-off from all hard surfaces shall receive an appropriate level of treatment in accordance with the SuDS Manual to minimise the risk of pollution
Technical Constraints:	It is understood that the soil conditions are of clay combination.
Comments:	The plot is currently undeveloped therefore consultation with Appropriately Qualified Professional to confirm mandatory and credit requirements in Sur1 template report format should be undertaken at the earliest opportunity.
Predicted credits:	2

Sur 2: Flood Risk

Assessment criteria:	Provide a Flood Risk Assessment report produced by an Appropriately Qualified Person (AQP) which confirms the entire site is within Flood Zone 1 (low risk zone) along with confirmation that there is a low risk of flooding from all other sources, as listed below. Sources of flooding and flood risk: • Streams and rivers • Coastal or estuarine • Groundwater • Sewers and highway drains • Surface water • Infrastructure failure
Technical Constraints:	None at present.
Comments:	A Flood Risk Assessment has not been provided at this stage, however the Environment Agency flood map indicates that the site is located in a low flood risk zone.
Predicted credits:	2

Was 1: Household Waste Storage and Recycling Facilities

Mandatory requirement: Provide adequate household waste storage in accordance with the Local Authority collection scheme with a minimum of 100 litres for each single bedroom dwelling, and a further 70 litres volume for each additional bedroom (BS5906 requirement).

Storage must be easily accessible and compliant with Checklist IDP (Inclusive Design Principles).

Assessment criteria: Provide a compliant external waste store or hard standing for all units which provides sufficient space for the required number of bins to be stored (in accordance with the Local Authority requirements). Waste storage must be easily accessible in accordance with all requirements of Checklist IDP including a level access route and a wheelchair turning area (to be adjacent to hard standing or within the store if enclosed).

Also provide each dwelling with a 30 litre internal recycling bin or multiple bins providing 30 litres overall capacity with no individual bin being less than 7 litres. Bins must be in a fixed, dedicated, non-obstructive position, where possible within a kitchen/utility room cupboard close to the non-recyclable waste bin.

For reference a summary of Checklist IDP is as follows:

- 1) The distance between the **closest** external door and the amenity (i.e. waste store for Was 1, compost bin for Was 3 and garden for Hea 3) must be kept to a minimum and be level or gently sloping
- 2) Distance should not be greater than 30m as required by Building Regulations Part H
- 3) Paths should be of suitable surface (firm, slip-resistant and reasonably smooth) and must contrast visually against adjacent surfaces
- 4) Waste containers should be sited on suitable surface (as 3 above)
- 5) Space for turning a wheelchair at the amenity (if enclosed store is provided the turning area must be inside the store). The minimum is a 1500mm circle or 1400x1700mm ellipse.
- 6) The **closest** external entrance door from dwelling to amenity must have
 - a. level threshold
 - b. clear opening width of 800mm for private entrance or 875mm for communal entrances
 - c. fitted with door opening furniture in accordance with section 6.4 of BS 8300:2009.
- 7) Gates along access route must have
 - a. level threshold
 - b. clear opening width of 900mm
- 8) N/A - Only applicable to 'walk up' or basement flats
- 9) Communal waste storage must have
 - a. signs and information in accordance with section 9.2 of

BS8300:2009

- b. lighting specified in accordance with section 9.2 of BS8300:200 and be dedicated energy efficient fittings with adequate controls (see Code section Ene 6)
- 10) Switches, sockets and services controls at a height between 450mm and 1200mm from the floor

Technical Constraints: Drawings presently do not confirm a level entrance threshold & access route to the waste storage hard standing.

Comments: Site plan 101 shows 2 no. 240 bin hard standing to the front of each property. It is presently assumed that the mandatory and credit requirements for this section will be met in full.

Predicted credits: 4

Was 2: Construction Site Waste Management Plan

Assessment criteria: Produce and implement a SWMP which details procedures to:

- 1) Minimise construction waste generated (by design and material selection decisions)
- 2) Divert from landfill the actual waste generated on site (by reuse on/off site, recycling, etc)
- 3) At least 85% of site waste will be diverted from landfill

The SWMP must detail/record:

Waste minimisation (reducing)

- Set target benchmarks for resource efficiency according to best practice
- Procedures/actions to minimise at least 3 non-hazardous construction waste groups
- Procedures/actions to minimise hazardous waste
- Procedures/actions for monitoring, measuring and reporting of hazardous and non-hazardous site waste throughout the development

Procedures/actions to sort and divert waste from landfill by recording all waste generated on site and identifying how the waste is disposed of, i.e.:

- Re-use on site
- Re-use on other sites
- Salvage/reclaim for re-use
- Return to supplier via a 'take-back' scheme
- Recovery and recycling using an approved waste management contractor
- Compost
- Landfill (only where all other avenues of disposal have been exhausted)

Technical Constraints: None

Comments: Note that at PCS the credit awarded will be based on actual data collected. No information has been provided at this stage, however it is assumed that the requirements of this credit can be met in full.

Predicted credits: 3

Was 3: Composting

Assessment criteria: Provide a compost bin which is compliant with Checklist IDP (see IDP Summary in Was 1) and is positioned away from openable windows or other ventilation intake areas. Also ensure sufficient space for an internal food scraps collection caddy and provide information about composting within the Home User Guide (also see Man 1).

Technical Constraints: The plot as existing is sloped, ensure full compliance with Checklist IDP, including level threshold and access route, is achieved.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that compliant compost facilities will be provided.

Predicted credits: 1

Pol 1: GWP (Global Warming Potential)

Assessment criteria: Source all insulation with a Global Warming Potential (GWP) of less than 5. This is applicable to both the manufacture of and installation of insulation (where blown) and includes the following elements:

- Roofs including loft hatches
- Walls including external and internal walls, doors, lintels and all thermal and acoustic insulation
- Floors including ground floor, basements and foundations
- Hot water cylinder, pipe insulation and any other thermal stores

Technical Constraints: None at present.

Comments: No information has been received relating to this section. It has therefore been assumed at this stage that the requirements of this section will be met in full.

Predicted credits: 1

Pol 2: NOx

Assessment criteria:	Specify primary heating, secondary heating and hot water systems with dry NOx emissions of no greater than 40 mg/kWh.
Technical Constraints:	It is understood that no log burners are to be installed.
Comments:	No information has been received relating to this section. It has therefore been assumed at this stage that the requirements of this section will be met in full.
Predicted credits:	3

Hea 1: Daylighting

Assessment criteria:	Kitchens to achieve a daylight factor of 2% (1 credit) Living room, dining room and Home Office (study) to achieve a daylight factor of 1.5% (1 credit). All assessed rooms to achieve View of the Sky for 80% of the room depth (1 credit).
Technical Constraints:	None at present.
Comments:	Calculations based on current drawings show that all assessed rooms will have sufficient daylight and also meet View of the Sky requirement. Therefore based on the current drawings, the maximum credits for this section will be achieved.
Predicted credits:	3

Hea 2: Sound Insulation

Assessment criteria:	Detached dwellings achieve the maximum credit by default as there are no adjoining dwellings.
Technical Constraints:	None.
Comments:	The proposed scheme is for 2 no. detached dwellings, therefore the maximum credits are achieved by default.
Predicted credits:	4

Hea 3: Private Space

Assessment criteria: Provide a private garden, balcony or terrace for each dwelling which is of sufficient size and is completely sealed off by buildings and / or boundary fencing. The gardens must also be easily accessible (nearest dwelling entrance must be level), compliant with all Checklist IDP requirements* (see IDP Summary in Was 1) and only accessible to designated occupants.

* Balconies must meet criterion 6 of Checklist IDP only and roof terraces or balconies over habitable rooms, which require a step up to increase slab thickness are exempt from requirement 6a.

Minimum garden size for private gardens: 1.5m² per bedroom

Technical Constraints: The plot as existing is sloped, ensure full compliance with Checklist IDP, including level threshold and access route, is achieved.

Comments: Site plan 101 shows private rear garden for each unit, it has therefore been assumed at this stage that the requirements of this section will be met in full.

Predicted credits: 1

Hea 4: Lifetime Homes (LTH)

Mandatory requirement: None at Code Level 4

Assessment criteria: None credit not included.

Technical Constraints: None at present.

Comments: It is understood that credit is not sought for this section.

Predicted credits: 0

Man 1: Home User Guide (HUG)

Assessment criteria: Provide all dwellings with a detailed Home User Guide, which covers all requirements as listed in the Man 1 Checklist, Parts 1 and 2.

Technical Constraints: None at present.

Comments: No information has been received in relation to this section. It is currently assumed that the requirements of this section will be met in full.

Predicted credits: 3

Man 2: Considerate Constructors Scheme

Assessment criteria: None credit not included

Technical Constraints: None.

Comments: It is understood that credit is not sought for this section.

Predicted credits: 0

Additional credits: 1 credit

Register with the Code of Considerate Practice (CCP) scheme, previously known as Considerate Constructors Scheme (CCS) prior to commencement of the construction phase. Audits to be undertaken in accordance with the scheme confirming an overall final score of at least 25, with a minimum of 7 points for each of the five sections.

Man 3: Construction Site Impacts

Assessment criteria: Undertake at least four of the site management procedures listed A-F below. These will need to be implemented, documented and displayed on site, all in accordance with Man 3 checklist requirements.

- a) Monitor, report and set targets for CO₂ production or energy use arising from site activities
- b) Monitor and report CO₂ or energy use arising from commercial transport to and from site
- c) Monitor, report and set targets for water consumption from site activities
- d) Adopt best practice policies in respect of air (dust) pollution arising from site activities
- e) Adopt best practice policies in respect of water (ground and surface) pollution occurring on the site
- f) 80% of site timber is reclaimed, re-used or responsibly sourced

Technical Constraints: None at present.

Comments: Typically A, C, D & E are the simplest to implement, please advise if example policies are required. It is currently assumed that the requirements of this section will be met in full.

Predicted credits: 2

Man 4: Security

Assessment criteria: All dwellings to comply with **SBD Part 2 ONLY** which includes front door, side and back door, sliding patio doors, communal entrance doors, flat entrance doors served off a shared corridor or stairway, French windows, garages, windows, dwelling security lighting, conservatories, intruder alarms and utilities.

Technical Constraints: None, however it is recommended that consultation with SBD/ALO Officer is undertaken at the earliest opportunity.

Comments: No information has been received in relation to this section. It is currently assumed that the requirements of this section will be met in full.

Predicted credits: 2

Eco 1: Ecological Value of Site

Assessment criteria: None credit not included.

Technical Constraints: The presence of a pond and further recommended surveys would likely cause delay commencing works.

Comments: It is presently assumed that credit will not be sought for this section.

Predicted credits: 0

Eco 2: Ecological Enhancement

Assessment criteria: None credit not included

Technical Constraints: As per Eco 1, the presence of a pond and further recommended surveys would likely cause delay commencing works.

Comments: It is presently assumed that credit will not be sought for this section.

Predicted credits: 0

Eco 3: Protection of Ecological Features

Assessment criteria:	None credit not included.
Technical Constraints:	The presence of a pond and further recommended surveys would likely cause delay commencing works.
Comments:	It is presently assumed that credit will not be sought for this section.
Predicted credits:	0

Eco 4: Change of Ecological Value of Site

Assessment criteria:	Measure the ecological value of the site before and after development, and achieve an overall change in species per hectare of: • Minor negative change -9 to -3 species – 1 credit • Neutral change -3 to +3 species – 2 credits • Minor positive change +3 to +9 species – 3 credits • Major enhancement +9 species – 4 credits
Technical Constraints:	None at present.
Comments:	Assessment using Technical Guide landscape types, show pre and post landscapes as buildings & typical gardens, therefore a neutral change will be achieved.
Predicted credits:	2

Eco 5: Building Footprint

Assessment criteria:	Achieve a <i>net internal floor area: net internal ground floor area</i> ratio of greater than or equal to 2.5:1, assessed on a site wide basis and averaged across flats and houses.
Technical Constraints:	The assessed units are of 2 storey design.
Comments:	2 storey houses do not meet the minimum 2.5:1 ratio, therefore no credit is achieved for this section.
Predicted credits:	0

ESTIMATED SCORE SHEETS

Code for Sustainable Homes November 2010									
RUND partnership	Site	Queens Road, Waterlooville							
	Client	Southcott Homes Ltd							
	Target	Code Level 3 (57%)							
	Stage	Pre Assessment							
	Ref/Date	22463 /28th February 2014							
Unit Types			1						
Section / Max Score			Est		Add				
	Section	Max	credit	%	credit	%	Summary of Requirements		
Ene 1 (m)	DER	10	0.2	0.23		0.00	Building Regulations compliance / Code 3		
Ene 2 (m)	FEE	9	4.6	5.40		0.00	FEE no greater than 53.2		
Ene 3	Energy Dis.	2	2	2.35		0.00	Energy Display Devide recording electricity + primary heating fuel consumption		
Ene 4	Drying	1	1	1.17		0.00	Internal tidy line + ventilation - 1&2 bed 4m, 3+ bed 6m of line		
Ene 5	W. goods	2	1	1.17	1	1.17	Energy efficiency literature provided to tenants / 3 No. white goods all with required energy ratings and water efficiency		
Ene 6	Ext Light	2	2	2.35		0.00	All external lighting 40 l/watt efficiency with automatic controls		
Ene 7	LZC's	2		0.00	1	1.17	10% reduction of CO2 emissions via renewable technology		
Ene 8	Cycles	2	2	2.35		0.00	Secure, weather-proof, accessible cycle storage for 2 no. cycles		
Ene 9	H. Office	1	1	1.17		0.00	Grouped power & tel sockets in appropriate room with sufficient space, 1.5% daylight & ventilation		
Wat 1 (m)	Int Water	5	3	4.50	1	1.50	Maximum 105 litres/person/day / 90 l/p/d		
Wat 2	Ext Water	1	1	1.50		0.00	200 litre water butts to private gardens		
Mat 1 (m)	Roof	3	3.00				GG ratings to be confirmed		
	Ext wall	3	3.00						
	Int wall	3	1.00						
	Floors	3	1.00						
	Windows	3	2.00		1.00				
	GG Total	15	10	3.00	1	0.30			
Mat 2	RSM Basic	6	2	0.60	1	0.30	Responsibly source materials (Chain of Custody timber/ ISO14001/BES 6001)		
Mat 3	RSM Finish	3	2	0.60	1	0.30	Responsibly source materials (Chain of Custody timber/ ISO14001/BES 6001)		
Sur 1 (m)	Runoff	2	2	1.10		0.00	Ensure run-off and volume for all rainfall events are no greater than present conditions and no discharge from site for rainfall events upto 5mm + appropriate		
Sur 2	Flood Risk	2	2	1.10		0.00	FRA to confirm low risk of flooding from all sources		
Was 1 (m)	Recycling	4	4	3.20		0.00	External storage of sufficient size & IDP Checklist compliant + 30 litre internal recycling bin(s)		
Was 2	SWMP	3	3	2.40		0.00	SWMP minising 3 types of waste & 85% of site generated waste diverted from landfill		
Was 3	Compost	1	1	0.80		0.00	Compost bin & IDP Checklist compliant		
Pol 1	GWP	1	1	0.70		0.00	All insulation to have GWP less than 5		
Pol 2	NOx	3	3	2.10		0.00	Main heating & hot water system to have dry NOx figure less than 40 mg/kWh		
Hea 1	Daylight	3	3	3.50		0.00	Daylighting & VoS calculations confirm 3 credits		
Hea 2	Sound	4	4	4.67		0.00	Detached property, max credits achieved by default		
Hea 3	Gardens	1	1	1.17		0.00	Private garden of sufficient size & IDP Checklist compliant		
Hea 4 (m)	LTH	4	0	0.00		0.00	Units compliant with all 16 requirements of LTH		
Man 1	HUG	3	3	3.33		0.00	Detailed HUG, Checklist parts 1 & 2 compliant		
Man 2	CCS	2	0	0.00	1	1.11	CCS monitoring achieving 25 points with a min of 5 points for each section		
Man 3	S. Impacts	2	2	2.22		0.00	Set targets, record data & report on 4 site management procedures		
Man 4	SBD	2	2	2.22		0.00	SBD Part 2 compliance		
Eco 1	Eco Value	1	0	0.00		0.00	SQE report confirms the site is of low value/features protected		
Eco 2	Enhance	1	0	0.00		0.00	Provide all key recommendations & 30% additional recommendations as per SQE report		
Eco 3	Protection	1	0	0.00		0.00	SQE report confirms the site is of low value/features protected		
Eco 4	Change	4	2	2.67		0.00	Neutral change of ecological value / SQE report confirms change greater than 3		
Eco 5	Footprint	2	0	0.00		0.00	Min requirement will not be met		
Sub Total Scores %			57.56		5.85		NOTES		
Code Level Req'd (Code 3)			57.00						
Est +/- Req'd Code Level			0.56						
Est+Add Total %			63.41						
Est+Add +/- Req'd Code Level			6.41						
© Rund Partnership 2013-2015 Key: (m) = Mandatory sections Est = Estimated/predicted Ach = Achieved Add = Additional % = Approx weighted %									