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31 JUL 2012

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Code for Sustainable Homes
PRE ASSESSMENT ESTIMATOR TOOL

Results

Development Name:	Ranelagh Road
Dwelling Description:	6 x 2 Bed Houses & 53 x 3 Bed Houses
Name of Company:	Orchard Homes & Developments Ltd
Code Assessor's Name:	Michael Hings
Company Address:	51-67 Commercial Road, Southampton, SO15 1GG
Notes/Comments:	

PREDICTED RATING - CODE LEVEL: 3

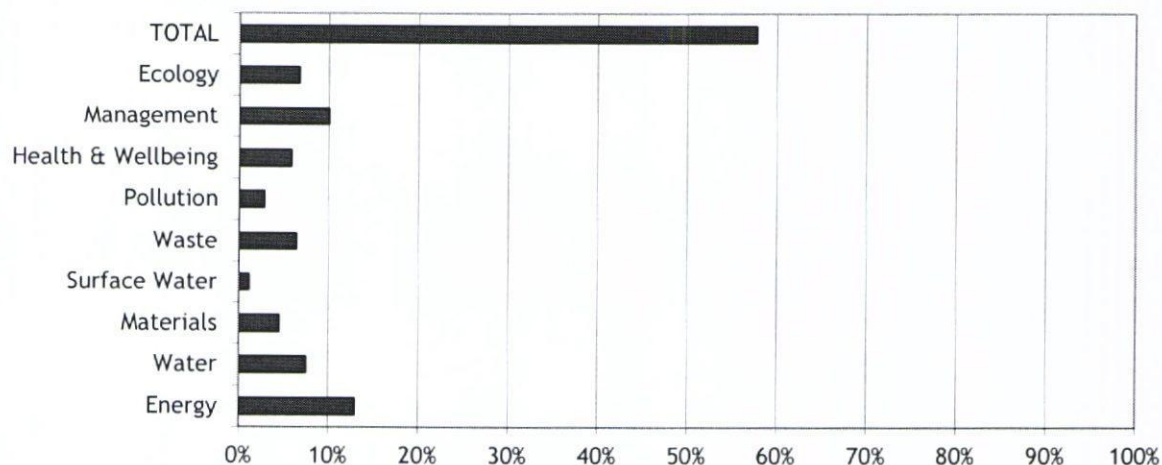
Mandatory Requirements: All Levels

% Points: 57.70% - Code Level: 3

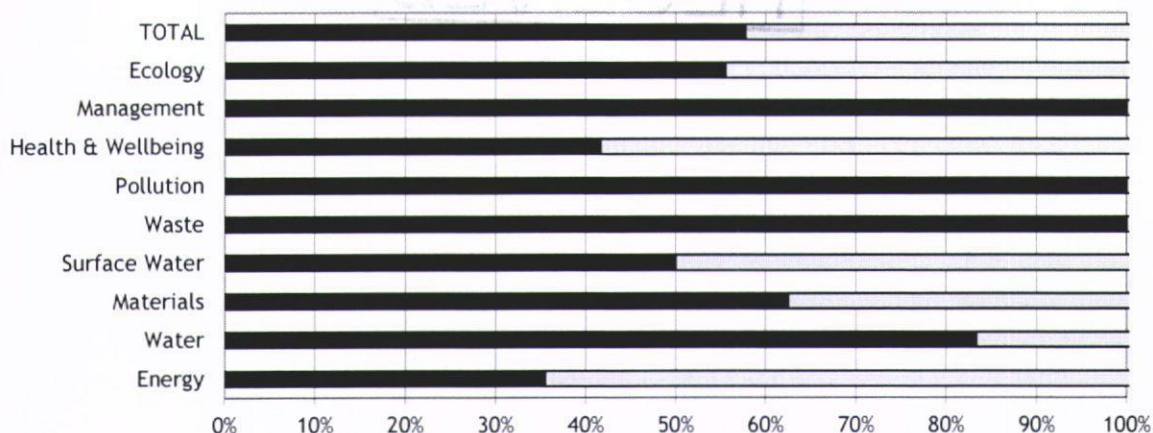
Breakdown: Energy - Code Level: 3

Water - Code Level: 4

Graph 1: Predicted contribution of individual sections to the total score and percentage of total achievable score



Graph 2: Predicted percentage of credits achievable: Total and by Category



NOTE: The rating obtained by using this Pre Assessment Estimator is for guidance only. Predicted ratings may differ from those obtained through a full assessment, which must be carried out by a licensed Code assessor.

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CATEGORY 1 ENERGY		Overall Level: 3	Overall Score 57.70		
% of Section Credits Predicted: 35.48		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall % Score: 12.91 points		11.0 of 31 Credits	Level 3		
Ene 1 Dwelling Emission Rate	Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2009. Minimum standards for each Code level apply. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score _____ What is the predicted number of credits? 1.0 OR Are zero net CO₂ emissions achieved? ☐	1.0 of 10 Credits	Level 3	Building services strategy not confirmed. Typical specification: high efficiency combination gas boiler with gas flue heat recovery/ wholehouse ventilation with heat recovery/ insulation in accordance with best practice/ enhanced construction details.	
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m²/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score _____ Apartments, Mid-terrace ☐ OR End terrace, Semi and Detached ☒ OR Staggered Mid terrace ☐ What is the predicted number of credits? 3.0	3.0 of 9 Credits	Level 4	Insulation in accordance with best practice/ enhanced construction details.	
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption. Select whether the EDD monitors electricity and/or fuel _____ None Specified ☐ Primary Heating only ☐ OR Electricity only ☒ OR Electricity and primary heating fuel ☐	1 of 2 Credits	-		

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 4 Drying Space	One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater. Will drying space meeting the criteria be provided? _____ Yes ☒ OR No ☐	1 of 1 Credits	-	External drying space consisting of 6m+ rotary drying lines within secure garden.	
Ene 5 Energy Labelled White Goods	Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide. Select the appropriate option below _____ EU Energy labelling information only ☒ A+ rated appliances ☐ A+, A and B rated appliances ☐ Combination of compliant rated white goods with EU Energy Labelling Scheme ☐	1 of 2 Credits	-	EU Energy Labelling Scheme literature to be provided as part of Home User Guide (MAN1).	
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear.. Space Lighting _____ None provided ☐ OR Non Code compliant lighting ☐ OR Code compliant lighting ☒ Security Lighting _____ None provided ☒ OR Non Code compliant lighting ☐ OR Code compliant lighting and controls ☐ Dual lamp luminaires _____ Compliant with both above criteria ☐ * Statutory safety lighting is not covered by this requirement	2 of 2 Credits	-	Individual dwellings with private external entrance door: Lighting for external doors, front porch, steps/pathways, patio, garage, garden, carports and any other outbuildings will be controlled via manual switch or PIR with dusk to dawn sensor	

Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO₂ emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies Less than 10% of demand ☒ OR 10% of demand or greater ☐ OR 15% of demand or greater ☐	0 of 2 Credits	-	Credit not sought.	
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below Number of bedrooms: 3 Number of cycles stored per dwelling* 2.0 * if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling	2 of 2 Credits	-	Provide 2/3 cycle locking points per 3/4 bed dwelling in garden sheds.	
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? ☐ Yes ☐ OR No ☒	0 of 1 Credits	-	Credit not sought at present. If Daylight Factor study shows living/dining rooms have average daylight factor exceeding 1.5% then Home Office equipment may be supplied in a suitable area within this location.	

CATEGORY 2 WATER		Overall Level: 3	Overall Score 57.70		
% of Section Credits Predicted: 83.33		Credits		Level	
Contribution to Overall Score: 7.50 points		5 of 6 Credits		Level 4	
Wat 1 Indoor Water Use	Credits are awarded based on the predicted average household water consumption, calculated using the Code Water Calculator Tool. Minimum standards for each code level apply. Select the predicted water use / Mandatory Requirement greater than 120 litres/ person/ day ☐ OR ≤ less than 120 litres/ person/ day ☐ OR ≤ less than 110 litres/ person/ day ☐ OR ≤ less than 105 litres/ person/ day ☐ OR ≤ less than 90 litres/ person/ day ☒ OR ≤ less than 80 litres/ person/ day ☐	4 of 5 Credits	Level 3 AND Level 4	Typical specification: • 6/3 dual flush cisterns • 6 lpm shower flow • 130 litre capacity bath • 3 lpm wash hand basin tap flow • 4 lpm kitchen tap flow	Evidence Required
Wat 2 External Water Use	A credit is awarded where a compliant system is specified for collecting rainwater for external irrigation purposes. Where no outdoor space is provided the credit can be achieved by default. Select the scenario that applies No internal or communal outdoor space ☐ OR Outdoor space with collection system ☒ OR Outdoor space without collection system ☐	1 of 1 Credits	-	Individual gardens will be provided with water butts which will have a minimum capacity of 200 litres.	

CATEGORY 3 MATERIALS		Overall Level: 3	Overall Score 57.70		
% of Section Credits Predicted: 62.50		Credits Level			
Contribution to Overall Score: 4.50 points		15 of 24 Credits All Levels		Assumptions Made	Evidence Required
Mat 1 Environmental Impact of Materials	<u>Mandatory Requirement:</u> At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D. <u>Tradable Credits:</u> Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materials Calculator can be used to predict a potential score. Mandatory Requirement ☐ Will the mandatory requirement be met? ☒ Enter the predicted score What is the predicted number of credits? 12	12 of 15 Credits	All Levels	Consider use of A+ rated Green Guide ratings where possible.	
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	Credits are awarded where materials used in the basic building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits? 2	2 of 6 Credits	-	Consider use of responsibly sourced materials where possible.	
Mat 3 Responsible Sourcing of Materials - Finishing Elements	Credits are awarded where materials used in the finishing elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits? 1	1 of 3 Credits	-	Consider use of responsibly sourced materials where possible.	

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 3	Overall Score 57.70		
% of Section Credits Predicted: 50.00%			Credits	Level	
Contribution to Overall Score: 1.10 points			2 of 4 Credits	All Levels	
Sur 1 Management of Surface Water Run-off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the pre-development site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Designing the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters. Mandatory Requirement ☐ Will the mandatory requirement be met? ☒ Select the appropriate option ☐ No SUDS ☐ No runoff into watercourses for the first 5 mm of rainfall ☐ Runoff from hard surfaces will receive an appropriate level of treatment ☐	0 of 2 Credits	All Levels	Dependant on findings of drainage engineers report. However, pre-development site consists of a greater proportion of permeable surfacing. Therefore, the post-development site will be required to utilise an item of SUD's to infiltrate run-off originating from the roof and hard landscaping in order to satisfy the mandatory requirement. 2 credits should be achievable where a network of soakaways are utilised.	
Sur 2 Flood Risk	Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide. Select the annual probability of flooding (from PPS25*) ☐ Zone 1 - Low ☒ OR Zone 2 - Medium ☐ OR Zone 3 - High ☐ Select the appropriate option(s) ☐ Low risk of flooding from FRA** ☒ All measures of protection are demonstrated in FRA ☐ Ground floor level and access routes are 600 mm above design flood level ☐	2 of 2 Credits	-	Dependant on findings of drainage engineers report. However, PUSH (Partnership for Urban South Hampshire) GIS SFRA does not show development location to fall within Flood Risk Zone 2 or 3.	

* Planning Policy Statement 25 - Planning and Flood Risk

** FRA - Flood Risk Assessment

CATEGORY 5 WASTE		Overall Level: 3	Overall Score	57.70		
% of Section Credits Predicted: 100.00%		Credits		Level		
Contribution to Overall Score: 6.40 points		8 of 8 Credits		All Levels		
Was 1 Storage of non-recyclable waste and recyclable household waste	<u>Mandatory Requirement:</u> The space provided for waste storage should be sized to hold the larger of either all external containers provided by the Local Authority or the min capacity calculated from BS 5906. <u>Tradable Credits</u> are awarded for adequate internal and/ or external recycling facilities. Mandatory Requirement Will the minimum space be provided and be accessible to disabled people? ☒ Internal Recyclable household waste storage Where there is no external recyclable waste storage and no Local Authority collection scheme Internal storage (capacity 60 litres) ☐ Local Authority collection Scheme Post Collection sorting Internal storage (capacity 30 litres) ☒ Pre-collection sorting Internal storage (3 separate bins, capacity 30 litres) ☐ External Storage, no Local Authority collection scheme 3 separate internal storage bins (capacity 30 litres) ☐ AND Houses External Storage (capacity 180 litres) ☐ Flats Private recycling operator ☐ 3 or greater types of waste collected ☐	0 of 2 Credits	4 of 4 Credits	All Levels	Weekly LA collection for refuse, fortnightly collection of recyclable waste. Houses - BS5906 suggests that 240/310Litres be available to each 3/4 bed dwelling for refuse and recyclable waste. Internal recycling bins will be supplied to all units.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Was 2 Construction Site Waste Management	A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill. SWMP details Does the SWMP include: + No SWMP ☐ + SWMP with targets and procedures to minimise waste? ☐ + SWMP with procedures to divert 50% of waste ☐ + SWMP with procedures to divert 85% of waste ☒	3 of 3 Credits		A SWMP will be developed and implemented which shall monitor and report quantities of waste generated on site. It shall identify at least 3 key waste groups for reducing waste, along with procedures and commitments to sort and divert waste from landfill ie: reuse, recycle, compost or otherwise recover.	
Was 3 Composting	A credit is awarded where individual home composting facilities are provided, or where a community/ communal composting service, either run by the Local Authority or overseen by a management plan is in operation. Select the facilities available No composting facilities ☐ Individual composting facilities ☒ OR Communal/ community composting*? ☐ Local Authority ☐ OR Private with management plan ☐	1 of 1 Credit	-	An external container will be supplied for the disposal of compostable waste along with literature explaining how to treat kitchen and garden waste.	

* Including if an automated waste collection system is in place

CATEGORY 6 POLLUTION		Overall Level: 3	Overall Score 57.70		
% of Section Credits Predicted: 100.00%		Credits		Level	
Contribution to Overall Score: 2.80 points		4 of 4 Credits		All Levels	
		Assumptions Made		Evidence Required	
Pol 1 Global Warming Potential (GWP) of Insulants	A credit is awarded where <u>all</u> insulating materials only use substances (in manufacture AND installation) that have a GWP of less than 5. Select the most appropriate option All insulants have a GWP less than 5 ☒ OR Some insulants have a GWP of less than 5 ☐ OR No insulants have a GWP of less than 5 ☐	1 of 1 Credits	-	All insulation will be purchased from suppliers who can confirm a GWP of less than 5 for both the manufacture and installation of insulation.	
Pol 2 NOx Emissions	Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling. Select the most appropriate option Greater than 100 mg/kWh ☐ OR Less than 100 mg/kWh ☐ OR Less than 70 mg/kWh ☐ OR Less than 40 mg/kWh ☒ OR Class 4 boiler ☐ OR Class 5 boiler ☐ OR All space and hot water energy requirements are met by systems who do not produce NOx emissions ☐	3 of 3 Credits	-	For specification of gas boilers having dry Nox emissions of <40mg/kWh.	

CATEGORY 7 HEALTH & WELLBEING		Overall Level: 3	Overall Score	57.70	Assumptions Made	Evidence Required
% of Section Credits Predicted: 41.00%		Credits	Level			
Contribution to Overall Score: 5.83 points		5 of 12 Credits	No level			
Hea 1 Daylighting	Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky. Select the compliant areas Room Kitchen: Avg DF of at least 2% ☐ Living Room*: Avg DF of at least 1.5% ☐ Dining Room*: Avg DF of at least 1.5% ☐ Study*: Avg DF of at least 1.5% ☐ 80% of working plane in all above rooms receive direct light from the sky? ☐ Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.	0 of 3 Credits	-		Dependant on outcome of Average Daylight Factor study.	
Hea 2 Sound Insulation	Credits are awarded where performance standards exceed those required in Building Regulations Part E. This can be demonstrated by carrying out pre-completion testing or through the use of Robust Details Limited. Select a type of property Detached Property ☐ Attached Properties: - Separating walls and floors only exist between non habitable spaces ☐ - Separating walls and floors exist between habitable spaces ☒ Select a performance standard Performance standard not sought ☐ Airborne: 3db higher; Impact: 3dB lower ☐ OR Airborne: 5db higher; Impact: 5dB lower ☐ OR Airborne: 8db higher; Impact: 8dB lower ☒	4 of 4 Credits	-		A UKAS/ANC accredited acoustic consultant, who is registered to perform pre-completion testing will be instructed to undertake pre-completion testing in accordance with Document E (2003) requirements including grouping and frequency of testing. Orchard Homes aim to achieve a 8 db improvement on Document E (2003) requirements for all tests undertaken.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants. Will a private/ semi-private space be provided? _____ Yes, private/semi-private space will be provided ☒ OR No private/semi-private space ☐	1 of 1 Credits	-	An area of individual amenity space of sufficient size, having level access and for use by residents only will be provided.	
Hea 4 Lifetime Homes	<u>Mandatory Requirement:</u> Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. <u>Tradable credits:</u> Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. Mandatory Requirement _____ Dwelling to achieve Code Level 6? ☐ Lifetime Homes Compliance _____ All Lifetime Homes criteria will be met ☐ OR Exemption from LTH criteria 2/3 applied ☐ Credit not sought ☒	0 of 4 Credits	No level	Credit not sought.	

CATEGORY 8 MANAGEMENT		Overall Level: 3	Overall Score: 57.70		
% of Section Credits Predicted: 100.00%		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall Score: 10.00 points		9 of 9 Credits	All Levels		
Man 1 Home User Guide	Credits are awarded where a simple guide is provided to each dwelling covering information relevant to the 'non-technical' home occupier, in accordance with the Code requirements. Tick the topics covered by the Home User Guide Operational Issues? ☒ Site and Surroundings? ☒ Is available in alternative formats? ☒	3 of 3 Credits	-	A tenant information pack/home user guide will be provided to all dwellings. This is to be fully developed in accordance with Code for Sustainable Homes Man 1 - Home User Guide checklist Part 1 A-H and Part 2 A-G.	
Man 2 Considerate Constructors Scheme	Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/nationally recognised scheme. Select the appropriate scheme and score No scheme used ☐ Considerate Constructors OR Best Practice: Score between 24 and 31.5 ☐ OR Best Practice+: Score between 32 and 40 ☒ Alternative Scheme* OR Mandatory + 50% optional requirements ☐ OR Mandatory + 80% optional requirements ☐ * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	2 of 2 Credits	-	The scheme is to be registered with the Considerate Constructors Scheme (CCS) and as a minimum is to achieve an overall score of least 32 with a minimum of 3 points for each section.	
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following: Tick the impacts that will be addressed Monitor, report and set targets, where applicable, for: - CO₂/ energy use from site activities ☒ - CO₂/ energy use from site related transport ☐ - water consumption from site activities ☒ Adopt best practice policies in respect of: - air (dust) pollution from site activities ☒ - water (ground and surface) pollution on site ☒ 80% of site timber is reclaimed, re-used or responsibly sourced ☐	2 of 2 Credits	-	Procedures are to be put in place to undertake the 4 following site monitoring/best practice policies to minimise site construction environmental impact. a) Monitor, report and set targets for CO₂ or energy use arising from site activities 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	

Issue	Credits	Level	Assumptions Made	Evidence Required
Man 4 Security	Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated.		The Architectural Liaison Officer (ALO) for the development area has been contacted and requested to provide details of requirements in order for the scheme to achieve Secure by Design Part 2 compliance. All requirements identified by the ALO will be incorporated into the scheme design.	
Secured by Design Compliance Credit not sought ☐ OR Secured by Design Section 2 Compliance ☒	2 of 2 Credits	-		

CATEGORY 9 ECOLOGY		Overall Level: 3	Overall Score	57.70	Assumptions Made	Evidence Required
% of Section Credits Predicted: 55.00%		Credits		Level		
Contribution to Overall Score: 6.66 points		5 of 9 Credits		All Levels		
Eco 1 Ecological Value of Site	One credit is awarded for developing land of inherently low value. Select the appropriate option Credit not sought ☐ OR Land has ecological value ☐ OR Land has low/ insignificant ecological value* ☒ * Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.	1 of 1 Credits	-		The site as existing is a brown field development site consisting almost entirely of buildings and hard-standing. The proposed development will consist of residential buildings, bin & cycle stores and soft landscaping including retained trees. An Ecological report has been undertaken by a suitably qualified ecologist (SQE) as defined within Code for Sustainable Homes Technical Guide which determined the site to be of 'low value botanically' with the exception of some trees. Protected species surveys were also undertaken to determine the presence of protected species of which none were found.	Orchard Homes confirm that all ecological features identified as requiring protection will be retained and all EU and UK laws with regards to protected species will be adhered to.
Eco 2 Ecological Enhancement	A credit is awarded where there is a commitment to enhance the ecological value of the development site. Tick the appropriate boxes Will a <i>Suitably Qualified Ecologist</i> be appointed to recommend appropriate ecological features? ☒ AND Will all key recommendations be adopted? ☒ AND 30% of other recommendations be adopted? ☒	1 of 1 Credits	-		It is expected that all key recommendations and at least 30% of additional recommendations as made by the SQE will be incorporated in to the landscaping proposals.	
Eco 3 Protection of Ecological Features	A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. Type and protection of existing features Site with features of ecological value? ☐ OR Site of low ecological value (as Eco 1)? ☒ AND All* existing features potentially affected by site works are maintained and adequately protected? ☐ *If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.	1 of 1 Credits	-		See Eco 1.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Eco 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value Major negative change: fewer than -9 ☐ Minor negative change: between -9 and -3 ☐ OR Neutral: between -3 and +3 ☒ Minor enhancement: between +3 and +9 ☐ Major enhancement: greater than 9 ☐	2 of 4 Credits		Calculations for change in ecological value to be provided by SQE although it is expected that 1 credit can be achieved.	
Eco 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: Ratio of Net Internal Floor Area: Net Internal Ground Floor Area Credit Not Sought ☒ OR Houses: 2.5:1 OR Flats: 3:1 ☐ OR Houses: 3:1 OR Flats: 4:1 ☐ OR Houses & Flats Weighted (2.5:1 & 3:1) ☐ OR Houses & Flats Weighted (3:1 & 4:1) ☐	0 of 2 Credits			

CATEGORY 1 ENERGY		Overall Level: 3	Overall Score: 57.02		
% of Section Credits Predicted: 35.80		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall % Score: 13.03 points		11.1 of 31 Credits	Level 3		
Ene 1 Dwelling Emission Rate	Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2009. Minimum standards for each Code level apply. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score _____ What is the predicted number of credits? 1.1 OR Are zero net CO₂ emissions achieved? ☐	1.1 of 10 Credits	Level 3	Building services strategy not confirmed. Typical specification: high efficiency combination gas boiler with gas flue heat recovery/ wholehouse ventilation with heat recovery/ insulation in accordance with best practice/ enhanced construction details.	
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m²/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score _____ Apartments, Mid-terrace ☐ OR End terrace, Semi and Detached ☒ OR Staggered Mid terrace ☐ What is the predicted number of credits? 3.0	3.0 of 9 Credits	Level 4	Insulation in accordance with best practice/ enhanced construction details.	
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption. Select whether the EDD monitors electricity and/or fuel _____ None Specified ☐ Primary Heating only ☐ OR Electricity only ☒ OR Electricity and primary heating fuel ☐	1 of 2 Credits	-		
Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 4 Drying Space	One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater. Will drying space meeting the criteria be provided? _____ Yes ☒ OR No ☐	1 of 1 Credits	-	Internal drying space consisting of 6m+ retractable drying line over bath.	
Ene 5 Energy Labelled White Goods	Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide. Select the appropriate option below _____ EU Energy labelling information only ☒ ☐			EU Energy Labelling Scheme literature to be provided as part of Home User Guide (MAN1).	

	A+ rated appliances ☐ A+, A and B rated appliances ☐ Combination of compliant rated white goods with EU Energy Labelling Scheme ☐	1 of 2 Credits	-		
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with dedicated energy efficient fittings and security lighting fittings with appropriate control gear.. Space Lighting None provided ☐ OR Non Code compliant lighting ☐ OR Code compliant lighting ☒ Security Lighting None provided ☒ OR Non Code compliant lighting ☐ OR Code compliant lighting and controls ☐ Dual lamp luminaires Compliant with both above criteria ☐ * Statutory safety lighting is not covered by this requirement	2 of 2 Credits	-	Flats with entrance door off internal communal areas 1. Lighting for building main external entrance(s), external steps and pathways will be controlled via time clock or dusk to dawn sensor 2. Lighting for hallways, landings, stairwells, internal corridors will be controlled via push button time delay switches or PIR sensors 3. Lighting for bin stores, cycles stores, laundries will be controlled via manual switch or PIR sensor	
Issue		Credits	Level	Assumptions Made	Evidence Required
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO₂ emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies Less than 10% of demand ☒ OR 10% of demand or greater ☐ OR 15% of demand or greater ☐	0 of 2 Credits	-	Credit not sought.	
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below Number of bedrooms: 2 Number of cycles stored per dwelling* 2.0 * If you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling	2 of 2 Credits	-	Provide 1/2 cycle locking points per 1 or 2 & 3 bed dwelling in communal store.	
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? Yes ☐ OR No ☒	0 of 1 Credits	-	Credit not sought at present. If Daylight Factor study shows living/dining rooms have average daylight factor exceeding 1.5% then Home Office equipment may be supplied in a suitable area within this location.	

CATEGORY 2 WATER		Overall Level: 3	Overall Score	57.02	Assumptions Made	Evidence Required
% of Section Credits Predicted: 83.33		Credits	Level			
Contribution to Overall Score: 7.50 points		5 of 6 Credits	Level 4			
Wat 1 Indoor Water Use	Credits are awarded based on the predicted average household water consumption, calculated using the Code Water Calculator Tool. Minimum standards for each code level apply. Select the predicted water use / Mandatory Requirement greater than 120 litres/ person/ day ☐ OR ≤ less than 120 litres/ person/ day ☐ OR ≤ less than 110 litres/ person/ day ☐ OR ≤ less than 105 litres/ person/ day ☐ OR ≤ less than 90 litres/ person/ day ☒ OR ≤ less than 80 litres/ person/ day ☐	4 of 5 Credits	Level 3 AND Level 4	Typical specification: • 6/3 dual flush cisterns • 6 lpm shower flow • 130 litre capacity bath • 3 lpm wash hand basin tap flow • 4 lpm kitchen tap flow		
Wat 2 External Water Use	A credit is awarded where a compliant system is specified for collecting rainwater for external irrigation purposes. Where no outdoor space is provided the credit can be achieved by default. Select the scenario that applies No internal or communal outdoor space ☐ OR Outdoor space with collection system ☒ OR Outdoor space without collection system ☐	1 of 1 Credits	-	Communal amenity spaces will be provided with water butts which will have a minimum capacity of 200 litres or 1Litre per m2.		

CATEGORY 3 MATERIALS		Overall Level: 3	Overall Score	57.02	Assumptions Made	Evidence Required
% of Section Credits Predicted: 62.50		Credits		Level		
Contribution to Overall Score: 4.50 points		15 of 24 Credits		All Levels		
Mat 1 Environmental Impact of Materials	Mandatory Requirement: At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D. Tradable Credits: Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materials Calculator can be used to predict a potential score. Mandatory Requirement ☐ Will the mandatory requirement be met? ☒ Enter the predicted score What is the predicted number of credits? 12	12 of 15 Credits	All Levels		Consider use of A+ rated Green Guide ratings where possible.	
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	Credits are awarded where materials used in the basic building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits? 2	2 of 6 Credits	-		Consider use of responsibly sourced materials where possible.	
Mat 3 Responsible Sourcing of Materials - Finishing Elements	Credits are awarded where materials used in the finishing elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits? 1	1 of 3 Credits	-		Consider use of responsibly sourced materials where possible.	

CATEGORY 4 SURFACE WATER RUN-OFF		Overall Level: 3	Overall Score 57.02		
% of Section Credits Predicted: 50.00%		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall Score: 1.10 points		2 of 4 Credits	All Levels		
Sur 1 Management of Surface Water Run-off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the pre-development site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Designing the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters. Mandatory Requirement ☐ Will the mandatory requirement be met? ☒ Select the appropriate option ☐ No SUDS ☐ No runoff into watercourses for the first 5 mm of rainfall ☐ Runoff from hard surfaces will receive an appropriate level of treatment ☐	0 of 2 Credits	All Levels	Dependant on findings of drainage engineers report. However, pre-development site consists of a greater proportion of permeable surfacing. Therefore, the post-development site will be required to utilise an item of SUD's to infiltrate run-off originating from the roof and hard landscaping in order to satisfy the mandatory requirement. 2 credits should be achievable where a network of soakaways are utilised.	
Sur 2 Flood Risk	Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide. Select the annual probability of flooding (from PPS25*) ☐ Zone 1 - Low ☒ OR Zone 2 - Medium ☐ OR Zone 3 - High ☐ Select the appropriate option(s) ☐ Low risk of flooding from FRA** ☒ All measures of protection are demonstrated in FRA ☐ Ground floor level and access routes are 600 mm above design flood level ☐ * Planning Policy Statement 25 - Planning and Flood Risk ** FRA - Flood Risk Assessment	2 of 2 Credits	-	Dependant on findings of drainage engineers report. However, PUSH (Partnership for Urban South Hampshire) GIS SFRA does not show development location to fall within Flood Risk Zone 2 or 3.	

CATEGORY 5 WASTE		Overall Level: 3	Overall Score	57.02	Assumptions Made	Evidence Required
% of Section Credits Predicted: 87.00%		Credits		Level		
Contribution to Overall Score: 5.60 points		7 of 8 Credits		All Levels		
Was 1 Storage of non-recyclable waste and recyclable household waste	Mandatory Requirement: The space provided for waste storage should be sized to hold the larger of either all external containers provided by the Local Authority or the min capacity calculated from BS 5906. <u>Tradable Credits</u> are awarded for adequate internal and/ or external recycling facilities. Mandatory Requirement Will the minimum space be provided and be accessible to disabled people? ☒ Internal Recyclable household waste storage Where there is no external recyclable waste storage and no Local Authority collection scheme Internal storage (capacity 60 litres) ☐ Local Authority collection Scheme Post Collection sorting Internal storage (capacity 30 litres) ☒ Pre-collection sorting Internal storage (3 separate bins, capacity 30 litres) ☐ External Storage, no Local Authority collection scheme 3 separate internal storage bins (capacity 30 litres) ☐ AND Houses External Storage(capacity 180 litres) ☐ Flats Private recycling operator ☐ 3 or greater types of waste collected ☐	0 of 2 Credits	4 of 4 Credits	All Levels	Weekly LA collection for refuse, fortnightly collection of recyclable waste. Houses - BS5906 suggests that 170/240/310Litres be available to each 1/2/3 bed dwelling for refuse and recyclable waste. Internal recycling bins will be supplied to all units.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Was 2 Construction Site Waste Management	A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill. SWMP details Does the SWMP include: + No SWMP ☐ + SWMP with targets and procedures to minimise waste? ☐ + SWMP with procedures to divert 50% of waste ☐ + SWMP with procedures to divert 85% of waste ☒	3 of 3 Credits		A SWMP will be developed and implemented which shall monitor and report quantities of waste generated on site. It shall identify at least 3 key waste groups for reducing waste, along with procedures and commitments to sort and divert waste from landfill ie: reuse, recycle, compost or otherwise recover.	
Was 3 Composting	A credit is awarded where individual home composting facilities are provided, or where a community/ communal composting service, either run by the Local Authority or overseen by a management plan is in operation. Select the facilities available - No composting facilities ☒ - Individual composting facilities ☐ OR - Communal/ community composting*? ☐ - Local Authority ☐ - OR Private with management plan ☐	0 of 1 Credit	-	Credit not sought.	

* including if an automated waste collection system is in place

CATEGORY 6 POLLUTION		Overall Level: 3	Overall Score 57.02		
% of Section Credits Predicted: 100.00%		Credits	Level	Assumptions Made	Evidence Required
Contribution to Overall Score: 2.80 points		4 of 4 Credits	All Levels		
Pol 1 Global Warming Potential (GWP) of Insulants	A credit is awarded where <u>all</u> insulating materials only use substances (in manufacture AND installation) that have a GWP of less than 5. Select the most appropriate option — All insulants have a GWP less than 5 ☒ OR Some insulants have a GWP of less than 5 ☐ OR No insulants have a GWP of less than 5 ☐	1 of 1 Credits	-	All insulation will be purchased from suppliers who can confirm a GWP of less than 5 for both the manufacture and installation of insulation.	
Pol 2 NOx Emissions	Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling. Select the most appropriate option — Greater than 100 mg/kWh ☐ OR Less than 100 mg/kWh ☐ OR Less than 70 mg/kWh ☐ OR Less than 40 mg/kWh ☒ OR Class 4 boiler ☐ OR Class 5 boiler ☐ OR All space and hot water energy requirements are met by systems who do not produce NOx emissions ☐	3 of 3 Credits	-	For specification of gas boilers having dry Nox emissions of <40mg/kWh.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Hea 3 Private Space	A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants. Will a private/ semi-private space be provided? _____ Yes, private/semi-private space will be provided ☒ OR No private/semi-private space ☐	1 of 1 Credits	-	An area of individual amenity space of sufficient size, having level access and for use by residents only will be provided.	
Hea 4 Lifetime Homes	<u>Mandatory Requirement:</u> Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. <u>Tradable credits:</u> Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. Mandatory Requirement _____ Dwelling to achieve Code Level 6? ☐ Lifetime Homes Compliance _____ All Lifetime Homes criteria will be met ☐ OR Exemption from LTH criteria 2/3 applied ☐ Credit not sought ☒	0 of 4 Credits	No level	Credit not sought.	

CATEGORY 8 MANAGEMENT			Overall Level: 3	Overall Score	57.02
% of Section Credits Predicted: 100.00%			Contribution to Overall Score: 10.00 points	Overall Credits	Level
			9 of 9 Credits	All Levels	
Man 1 Home User Guide	Credits are awarded where a simple guide is provided to each dwelling covering information relevant to the 'non-technical' home occupier, in accordance with the Code requirements. Tick the topics covered by the Home User Guide ☐ Operational Issues? ☐ Site and Surroundings? ☐ Is available in alternative formats?		3 of 3 Credits	-	
Man 2 Considerate Constructors Scheme	Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/nationally recognised scheme. Select the appropriate scheme and score ☐ No scheme used ☐ Considerate Constructors OR ☐ Best Practice: Score between 24 and 31.5 ☒ OR ☐ Best Practice+: Score between 32 and 40 ☐ Alternative Scheme* OR ☐ Mandatory + 50% optional requirements ☐ OR ☐ Mandatory + 80% optional requirements * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.		2 of 2 Credits	-	
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following: Tick the impacts that will be addressed Monitor, report and set targets, where applicable, for: - CO₂/ energy use from site activities ☒ - CO₂/ energy use from site related transport ☐ - water consumption from site activities ☒ Adopt best practice policies in respect of: - air (dust) pollution from site activities ☒ - water (ground and surface) pollution on site ☒ 80% of site timber is reclaimed, re-used or responsibly sourced ☐		2 of 2 Credits	-	
			Assumptions Made		
			A tenant information pack/home user guide will be provided to all dwellings. This is to be fully developed in accordance with Code for Sustainable Homes Man 1 - Home User Guide checklist Part 1 A-H and Part 2 A-G.		
			The scheme is to be registered with the Considerate Constructors Scheme (CCS) and as a minimum is to achieve an overall score of least 32 with a minimum of 3 points for each section.		
			Procedures are to be put in place to undertake the 4 following site monitoring/best practice policies to minimise site construction environmental impact.		
			a) Monitor, report and set targets for CO ₂ or energy use arising from site activities 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		
			Evidence Required		

Issue	Credits	Level	Assumptions Made	Evidence Required
Man 4 Security Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated. Secured by Design Compliance ☐ Credit not sought ☐ OR Secured by Design Section 2 Compliance ☒	2 of 2 Credits	-	The Architectural Liaison Officer (ALO) for the development area has been contacted and requested to provide details of requirements in order for the scheme to achieve Secure by Design Part 2 compliance. All requirements identified by the ALO will be incorporated into the scheme design.	

CATEGORY 9 ECOLOGY		Overall Level: 3	Overall Score	57.02	Assumptions Made	Evidence Required
% of Section Credits Predicted: 55.00%			Credits	Level		
Contribution to Overall Score: 6.66 points			5 of 9 Credits	All Levels		
Eco 1 Ecological Value of Site	One credit is awarded for developing land of inherently low value. Select the appropriate option Credit not sought ☐ OR Land has ecological value ☐ OR Land has low/ insignificant ecological value* ☒ * Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.	1 of 1 Credits	-		The site as existing is a brown field development site consisting almost entirely of buildings and hard-standing. The proposed development will consist of residential buildings, bin & cycle stores and soft landscaping including retained trees. An Ecological report has been undertaken by a suitably qualified ecologist (SQE) as defined within Code for Sustainable Homes Technical Guide which determined the site to be of 'low value botanically' with the exception of some trees. Protected species surveys were also undertaken to determine the presence of protected species of which none were found.	Orchard Homes confirm that all ecological features identified as requiring protection will be retained and all EU and UK laws with regards to protected species will be adhered to.
Eco 2 Ecological Enhancement	A credit is awarded where there is a commitment to enhance the ecological value of the development site. Tick the appropriate boxes Will a <i>Suitably Qualified Ecologist</i> be appointed to recommend appropriate ecological features? ☒ AND Will all key recommendations be adopted? ☒ AND 30% of other recommendations be adopted? ☒	1 of 1 Credits	-		It is expected that all key recommendations and at least 30% of additional recommendations as made by the SQE will be incorporated in to the landscaping proposals.	
Eco 3 Protection of Ecological Features	A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value. Type and protection of existing features Site with features of ecological value? ☐ OR Site of low ecological value (as Eco 1)? ☒ AND All* existing features potentially affected by site works are maintained and adequately protected? ☐ *If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.	1 of 1 Credits	-		See Eco 1.	

Issue		Credits	Level	Assumptions Made	Evidence Required
Eco 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value Major negative change: fewer than -9 ☐ Minor negative change: between -9 and -3 ☐ OR Neutral: between -3 and +3 ☒ Minor enhancement: between +3 and +9 ☐ Major enhancement: greater than 9 ☐	2 of 4 Credits	-	Calculations for change in ecological value to be provided by SQE although it is expected that 1 credit can be achieved.	
Eco 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: Ratio of Net Internal Floor Area: Net Internal Ground Floor Area Credit Not Sought ☒ OR Houses: 2.5:1 OR Flats: 3:1 ☐ OR Houses: 3:1 OR Flats: 4:1 ☐ OR Houses & Flats Weighted (2.5:1 & 3:1) ☐ OR Houses & Flats Weighted (3:1 & 4:1) ☐	0 of 2 Credits			