

bre

Sherford Sustainability
Framework

This assessment was carried out by BRE to provide an overall sustainability rating of the proposed development at Sherford. This assessment has been informed by documentation provided by the developer, included the Sherford Masterplan November 2006 (Draft) and Town Code Final Draft version 5 _ 15 November 2006.

Background

The move towards sustainable developments is unstoppable. The Government's Sustainable Communities Agenda is challenging local authorities, developers and designers to ensure that all new developments and regeneration schemes are designed and built sustainably, creating places where people want to live and work in ways which address environmental issues.

The Sustainability Framework is a tool designed to facilitate this process, and assist developers and local authorities during the design and planning stages of a development to understand and deliver sustainable developments.

This tool has evolved from what was originally the National Sustainability Checklist for Development, led by BRE as part of a DTI/National Partners Technology funded programme in 2001. This checklist was then commissioned by SEEDA to produce a tailored version for the South-East of England in 2002.

As part of their One Million Sustainable Homes campaign, WWF secured match funding from the DCLG to roll out and tailor the checklist for the other English regions, including the South-West.

This Sustainability Framework for Sherford has been developed by BRE in collaboration with Red Tree and a wide range of stakeholders. It is based on the regional checklists approach, and has been tailored to take into full consideration local and regional planning policy and sustainability guidance, as well as other issues relevant to the Sherford site. The Framework is in line with PPS1, Sustainable Communities and Building Regulations.

Introduction

The Sherford Sustainability Framework comprises seven sections, covering a range of social, economic and environmental issues. These sections are as follows:

1. *Climate change - adaptation, mitigation and energy*
2. *Sustainable Construction and Procurement*
3. *Community and Sustainable Lifestyles*
4. *Placemaking*
5. *Transport*
6. *Ecology*
7. *Business*

Each section is underpinned by a series of quantitative questions, or “indicators”, which have been subsequently assessed by BRE to establish if minimum, “good” practice or “best” practice have been met. For each answer, a weighted score has been calculated to provide an overall percentage score for the Sherford development.

An overall performance rating for the development is also awarded based upon the final percentage score. These are categorised as follows:

No grade:	<50%
Good:	50% – 64%
Very Good:	65% – 74%
Excellent:	75% – 84%
Exemplar:	>84%

Scoring explained

There are two factors contributing to the total score for each indicator, firstly the performance rating achieved and, secondly, the weighting allocated.

Performance Ratings:

Each indicator has three performance ratings attached to it – “Minimum”, “Good Practice”, and “Best Practice”.

Each “Minimum” rating achieved gains a raw score of 0.3, each “Good Practice” rating achieves a raw score of 0.7 and each “Best Practice” rating achieves a raw score of 1.

Weightings:

Each indicator has a priority weighting assigned to show its relative importance to the success of the development taking into account regional strategies, and in consultation with key stakeholder groups:

Priority Group 1 (P1) has the highest weighting (x1),

Priority Group 2 (P2) is the medium (x0.85)

Priority Group 3 (P3) is the lowest (x0.7)

Total indicator score:

The total score for any indicator is calculated by the raw score awarded for the performance rating achieved, multiplied by the indicator.

Example: Indicator 2.5(3) is grouped in Priority Group 3. The developer achieves the Best Practice as 60% percentage of construction waste materials are diverted from landfill. Thus the mark for the question is

1	x	0.7	= 0.7
Raw score	x	Weighting for P3	= total score for this indicator

See Appendix A for the weightings table.

Assessment Information

Site details

Site name	<i>Sherford</i>
Developer	<i>Red Tree (2004) LLP</i>
Total number dwellings	<i>5,500</i>
Other details	<i>Up to 67,000 square metres of business and commercial space Up to 16,740 square metres of mixed retail accommodation Community, sports and open space facilities Three primary schools and one secondary school One health centre Two community wind turbines A park and ride interchange at deep lane junction.</i>

Developer Details

Developer	<i>Red Tree (2004) LLP</i>
Contact	<i>Rebecca Sturge</i>
Address	<i>7 Forest Gate Pewsham Chippenham Wiltshire SN15 3RS</i>
Email:	<i>rebecca@redtreellp.com</i>

Assessor Details

Assessor	<i>Stuart Blofeld</i>
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Development Background

Sherford is a large development, located in the South Hams District on the outskirts of Plymouth. When complete it will be home to a population of about 12,000 people. There will be up to 67,000 square metres of business and commercial space, up to 16,740 square metres of mixed retail accommodation, sports and open space facilities, including a Community park, three primary schools, a secondary school and Health Care centre.

Sherford will have a High Quality Public Transport service with excellent links within the site running along the main high street and neighbourhood centres, as well as to Plymouth City Centre.

Performance summary

Development: Sherford, South Hams

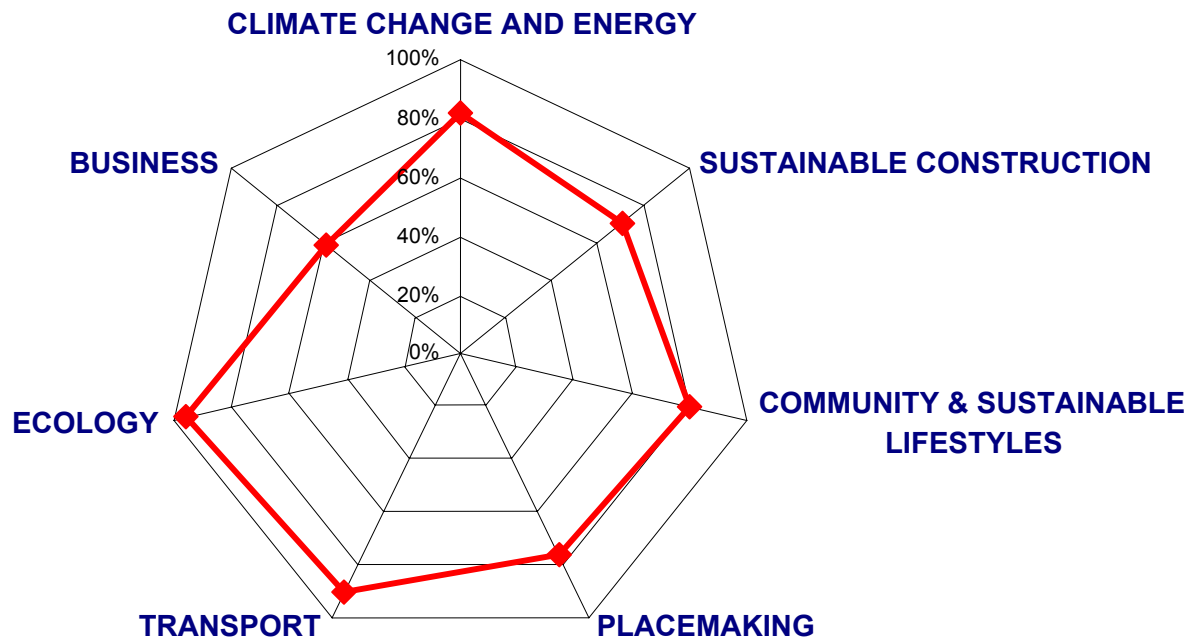
Date: 23rd November 2006

Sections		Number of Credits Achieved				Maximum possible score	Actual score achieved	%
		Best	Good	Minimum	Not Met			
1	CLIMATE CHANGE AND ENERGY	10	4	1	1	14.05	11.53	82%
2	SUSTAINABLE CONSTRUCTION	5	5	4	0	11.3	7.93	70%
3	COMMUNITY & SUSTAINABLE LIFESTYLES	5	1	0	1	6.4	5.10	80%
4	PLACEMAKING	6	7	2	0	13.2	10.12	77%
5	TRANSPORT	10	2	1	0	11.35	10.29	91%
6	ECOLOGY	6	1	0	0	5.65	5.44	96%
7	BUSINESS	1	1	2	0	3.85	2.26	59%
TOTAL SCORE		43	21	10	2	65.80	52.66	80%

Overall Performance Rating: **Excellent**

Table 1: Sherford Performance summary Table

Performance Summary



See Appendix B for the full Sustainability Framework assessment.

Performance Summary

Sherford has achieved an overall Sustainability score of 80%, and receives an 'Excellent' performance rating. This assessment is based upon the information provided to the assessors at the outline planning application stage.

The three main documents used to inform this assessment were:

- *Sherford Masterplan November 2006 (Draft)*
- *Town Code Final Draft version 5_ 15 November 2006*
- *Sherford Environmental Statement Ref: D108531 November 2006*

This initial score is a 'first cut' based upon the information provided. The assessors have not had time between completing the assessment and its submission to South Hams to discuss the findings with the developer or stakeholders. A further review meeting is planned with the developer. A more in-depth assessment of the final planning application will also be carried out, with a final report issued. This will also allow further evidence to be submitted in support of the application.

Sherford has certainly achieved a high standard, performing well across all seven sections of the Sustainability Framework, attaining 43 'Best Practice' credits out of a possible 76 credits, which sets a high benchmark for others to follow.

The percentage score for business, should be largely discounted when comparing percentage scores across each section, as there are far fewer questions within this section, thus distorting the percentage score.

Best Practice in Sherford

This section highlights some areas of the Sherford development that have achieved Best Practice as part of the assessment.

Climate change - adaptation, mitigation and energy

- Development has been designed to reduce the contribution to flash flooding through incorporation of Sustainable Urban Drainage systems, green roofs, ponds and wetlands, and the use of permeable surfaces.
- Two wind turbines within the Community park providing 50% of the development's electricity requirements.
- 80% of the roof area of the whole development used for rainwater harvesting.
- 75% of buildings will be equipped with solar thermal systems and/or photovoltaic devices.
- Installation of energy efficient appliances and water efficiency measures in all dwellings

Sustainable Construction and Procurement

- All dwellings to be built to ecohomes 'excellent' standards.
- All non residential buildings to be built to BREEAM 'excellent' standards.
- All timber sourced from independently verified sustainable sources as recognised by the Environment Agency.

Community and Sustainable Lifestyles

- Set-up of the Sherford Community Trust.
- Development of a sustainable lifestyles pack for all residents covering issues including sustainable travel advice, energy and water efficiency, recycling and environmental technologies installed in the development and dwelling.
- Measures to promote and facilitate the production of home-grown food by residents, and an Organic Community Farm and farmers market.

Placemaking

- Transport and movement strategy which places the pedestrian and cyclist at the heart of the development, minimising walking distances between home, workplace, schools shops and other daily needs, whilst designing streets, such that speed limits are self-enforcing.
- Delivering 'affordable' homes and a mix of accommodation types and tenures to meet current and future needs, with good integration of accommodation types and affordable housing throughout development that are 'tenure blind'.

Transport

- High Quality Public Transport service at the heart of the transport and movement strategy which will run down the main street linking the three neighborhood centres and proposed park and ride facility at deep lane to Plymouth City Centre.
- 20 mph design speed across much of the development.
- Fibre optic network throughout the development.

Ecology

- The Town Plan involves the replacement of more trees than currently exists, including 70 ha of new woodland as part of the 207 ha Community park, as well as lakes and double planting of hedgerows. The overall biodiversity of the site will be enhanced.
- Provision of wildlife corridors through the town from the west to the east and north to the south.
- Extensive planting across the development of locally occurring native deciduous and evergreen trees and shrubs.

Business

- Identification and development of priority business sectors, including clusters of related activity, and other key business sectors of sub-regional importance.

Recommendations

The assessors full report will follow, but below are a series of recommendations, which if addressed would increase the overall Sustainability score for the development from 80% to 85%, thus achieving an *'Exemplar'* rating.

Climate change - adaptation, mitigation and energy

- Undertake a grey water recycling pilot project within phase one of the development, installing and monitoring system performance within 2% of dwellings.

Sustainable Construction and Procurement

- Specify 80% of basic building materials used to be 'A' rated low impact, as specified in the Green Guide or equivalent.
- Increase use of local and reclaimed bulk construction materials sourced in line with Best Practice requirements.

Community and Sustainable Lifestyles

No recommendations

Placemaking

- Assess the strategy for public green spaces to locate 100% of dwellings within 200m of green space.

Transport

- Look to provide a central office facility with storage parking and customer collection / return for the car club.

Ecology

No recommendations

Business

- Provide training opportunities through on site facilities that will help local workers upskill.

Appendix A

Sustainability Framework Weightings

		Best Practice	Good Practice	Minimum
		1	0.7	0.3
P1	1	1	0.7	0.3
P2	0.85	0.85	0.595	0.255
P3	0.7	0.7	0.49	0.21

Appendix B

Sherford Sustainability Framework assessment

Category

Climate change - adaptation, mitigation and energy

Category Objective

To ensure that new developments are appropriately adapted to the potential future impacts of climate change and to minimise their own impact on greenhouse gases, flooding, heat gain and water resources.

Flooding

Objective

To reduce the risk of flooding on proposed development sites and adjacent areas of land.

P1

Question 1.1 (1)

Following a comprehensive Flood Risk Assessment, what level of rainfall event will the development be designed to contain?

Targets

Minimum

Site is demonstrated to be able to contain rainfall from 1:100 year rain events.

Good practice

Site is demonstrated to be able to contain rainfall from 1:250 year rain events.

Best Practice

Site is demonstrated to be able to contain rainfall from at least 1:500 year events.

Standard achieved

Minimum

Justification

Masterplan: Infrastructure and Utilities Section - '1 in 100 year events will be managed using SUDs features in conjunction with small existing watercourses to handle overflow expected in a 1 in 100 year event'.

Links to policy

P1

Objective
Question 1.1 (2)
Targets
Justification
Links to policy

To reduce the impact upon the development and its occupiers if flooding occurs.

Is the development designed to reduce the impact that predicted flood levels would have on the development?

Minimum	See relevant local planning authority standard for minimum required.	Standard achieved Best Practice
Good practice	Measures such as sleeved and valved utilities, safe entrance and egress routes, non habited ground floors, flood resistant materials, utilities to first floor levels, valved sewage pipes and sewers, buildings designed not to impede flow of water incorporated into scheme design.	
Best Practice	Development is not in an area defined as being at moderate or significant risk of flooding.	

The Sherford Development is not in an area that has been defined as being at moderate or significant risk of flooding.

P2

Objective

Question 1.1 (3)

Targets

Justification

Links to policy

To reduce the impact upon the development and its occupiers in extreme weather events.

Have new developments been designed to survive the expected impacts of forecast increased wind speeds and stronger rain events during the expected lifetime of the building?

Minimum	Building standards
Good practice	Exterior fittings (i.e. roof finishes, guttering, fencing etc) designed to withstand maximum predicted wind speeds. Rainwater goods designed to cope with anticipated increased flows.
Best Practice	Good Practice PLUS development designed to minimise overall impact on air flow through the site through wind breaks, orientation and aerodynamic design.

Standard achieved
Good Practice

Masterplan: Resource Efficiency of the Built Form section - *'Non residential building exterior fittings should be designed and specified to withstand any forecast increases in wind and rainfall over the expected lifetime of the building'*.

Sustainable Urban Drainage

<i>Objective</i>	To reduce the risk of flooding on proposed development sites and adjacent areas of land.							
P1 Question 1.2	<p>Is the development designed to reduce the contribution it may make to flash flooding?</p> <p>a) SUDS system incorporating swales, reed beds, detention ponds and infiltration basins</p> <p>b) Use of Green and Brown roofs to slow run-off</p> <p>c) Ponds and Wetlands</p> <p>d) Use of permeable surfaces in car parks, amenity areas, pavements, cycle routes, bridleways</p>							
<i>Targets</i>	Minimum Good practice Best Practice	<table border="1"> <tr> <td data-bbox="806 678 1534 726">C and D</td> <td data-bbox="1556 678 1888 726">Standard achieved</td> </tr> <tr> <td data-bbox="806 734 1534 782">Minimum PLUS A & B</td> <td data-bbox="1556 710 1888 742">Best Practice</td> </tr> <tr> <td data-bbox="806 790 1534 901">Good Practice PLUS implementation of other demonstrable measures to reduce flash flooding.</td> <td></td> </tr> </table>	C and D	Standard achieved	Minimum PLUS A & B	Best Practice	Good Practice PLUS implementation of other demonstrable measures to reduce flash flooding.	
C and D	Standard achieved							
Minimum PLUS A & B	Best Practice							
Good Practice PLUS implementation of other demonstrable measures to reduce flash flooding.								
<i>Justification</i>	<p>The following commitments are made:</p> <p>Masterplan: Infrastructure and Utilities Strategy section - <i>'SUDs will be used throughout the community in order to minimise and cleanse the surface water runoff' [and] 'Source treatment will be introduced for external paved areas such as parking courts and driveways and this is to be provided by using permeable surfaces'.</i></p> <p>Masterplan: Resource Efficiency of the Built Form section - <i>'Green and brown roofs will be utilised on non-residential buildings as part of sherford's overall SUD's strategy subject to compliance with the town Code'.</i></p> <p>Masterplan: Landscape section - <i>'Detailed design schemes for specific urban blocks will include garden designs to include ponds and wetlands ...'.</i></p> <p>Masterplan: Infrastructure and Utilities Strategy section - <i>'Multi level rain water harvesting techniques that can be applied at the building, block and community levels. This could range from individual water butts, to block scale holding tanks'.</i> [Additional measure].</p>							

Links to policy

Energy Demand

Objective

To reduce the impact of mechanical ventilation and cooling devices in offices.

P3

Question 1.3 (1)

How is ventilation and cooling provided for offices?

Targets

Minimum

Energy efficient electrically powered system but waste heat not discharged where it will affect neighbours or ecology. PLUS user information concerning efficient operation.

Good practice

Energy efficient electrically powered and waste heat recovered and reused.

Best practice

Powered by renewable energy or ground water heat exchanger.

Standard achieved

Good Practice

Justification

On the grounds that 51% of on site electricity demand will be met by two 1.8MW wind turbines the assessors award Good Practice against this credit. Best Practice can not be awarded as without 100% renewables it can not be categorically stated that ALL mechanical cooling and ventilation is powered by renewables.

Links to policy

SPG) 1.2: MINIMISE ENERGY USE

Objective

P3

Question 1.3 (2)

Targets

To take full advantage of passive ventilation and cooling techniques through design features, to reduce dependence on mechanical ventilation and cooling.

- What use is made of passive cooling techniques:
- a) External adjustable blinds/shutters/sunscreens
 - b) Passive ventilation within buildings e.g. temperature/humidity controlled roof vents
 - c) High thermal performance glass in accordance with Energy Efficiency Partnership Best Practice Standards
 - d) PV shading (external)
 - e) Brise - soleil (most appropriate for office buildings)
 - f) High thermal mass wall, ceiling, and floor materials
 - g) "Buffer zones" - external enclosed glass spaces which provide additional insulation on the south side of a building
 - h) External shaded space available to shade each building
 - i) Use of water / ponds to act as heat sinks
 - j) Green roofs to improve thermal insulation

Minimum	Local authority standard.	Standard achieved Good Practice
Good practice	5 from the list.	
Best practice	7 from the list.	

<p><i>Justification</i></p>	<p>The following commitments are made in the Resource Efficiency of the Built Form section - <i>'Passive cooling, ventilation and heating techniques will be utilised throughout sherford. These systems should make use of the latest energy efficient technologies'.</i> <i>'High thermal performance glass in accordance with energy efficiency partnership best practice standards should be utilised'.</i> <i>'Where their fitting does not create a conflict with the town Code, brise soleil will be utilised on buildings to assist cooling'.</i> <i>'High thermal mass wall materials should be utilised'.</i> <i>'Green and brown roofs will be utilised on non-residential buildings'</i></p> <p>Commitments made meets (b), (c), (e), (f), (j) from the above list.</p>						
<p><i>Links to policy</i></p>	<p>SPG) 1.2: MINIMISE ENERGY USE</p>						
<p><i>Objective</i></p> <p>P2</p> <p>Question 1.3 (3)</p> <p><i>Targets</i></p>	<p>To ensure that measures are incorporated into dwellings to increase energy efficiency in use.</p> <p>How many of the following energy efficiency measures has the developer installed in all dwellings?</p> <ul style="list-style-type: none"> a) A rated energy efficient lamps (100%) OR all lamps to be Compact Fluorescents Lamps (CFL's) b) Zoned switching (e.g. one switch per light, rather than one switch to many lights) c) Energy efficient fridge/freezer (A rated) d) Energy efficient washing machine/dryer (A rated) e) Energy efficient dishwasher (A rated) f) Energy efficient oven (A rated) <table border="1" data-bbox="577 1228 1904 1388"> <tr> <td data-bbox="577 1228 801 1295">Minimum</td> <td data-bbox="810 1228 1541 1295">Measure (a), plus any 3 energy efficiency measures from (b) to (f).</td> <td data-bbox="1572 1267 1904 1295">Standard achieved</td> </tr> <tr> <td data-bbox="577 1327 801 1388">Good practice</td> <td data-bbox="810 1327 1541 1388">Measure (a), plus any 4 energy efficiency measures from (b) to (f).</td> <td data-bbox="1572 1299 1904 1327">Best Practice</td> </tr> </table>	Minimum	Measure (a), plus any 3 energy efficiency measures from (b) to (f).	Standard achieved	Good practice	Measure (a), plus any 4 energy efficiency measures from (b) to (f).	Best Practice
Minimum	Measure (a), plus any 3 energy efficiency measures from (b) to (f).	Standard achieved					
Good practice	Measure (a), plus any 4 energy efficiency measures from (b) to (f).	Best Practice					

P3

Justification

Best practice All of the above energy efficiency measures.

Masterplan: Resource Efficiency of the Built Form section - 'All lighting will be fitted with CFL's when installed'. 'Where the developer supplies appliances as part of the construction and sales process, these will be A rated for energy use. Those appliances will be fridge freezer, washing machine and dryer, dishwasher and oven'. 'Zoned lighting will be installed in all dwellings which utilise one switch per light'.

Links to policy

SPG) 1.2: MINIMISE ENERGY USE

Objective

To ensure that street lighting is as energy efficient as possible and to minimise light spillage.

Question 1.3 (4)

How much of the street lighting will be energy efficient (low energy lamps or powered by renewable energy) with limited upward light transmission?

Targets

Minimum 70-80%
Good practice >80%
Best practice 100% low energy or powered by renewables with zero upward transmission

Standard achieved Best Practice

Justification

Masterplan: Resource Efficiency of the Built Form section - 'All street lighting will use low energy lamps. The design of all lighting will seek to minimise the amount of upward light transmission'.

Links to policy

SPG) 1.2: MINIMISE ENERGY USE

Planting

<i>Objective</i>	To ensure that the planting scheme is robust enough to survive any predicted impacts of climate change through its life span.	
P3	Question 1.4	
	Is the planting scheme resistant to predicted impacts of climate change i.e. - Higher quantities of UV light - Drought resistant - Copes with extremes of temperature - Wind resistant	
<i>Targets</i>	Minimum	Designed by ecologist or landscape architect.
	Good practice	Designed by ecologist and landscape architect and use of indigenous species.
	Best practice	Good Practice PLUS information on appropriate planting provided to residents.
<i>Justification</i>	Masterplan: Landscape section - <i>'Consideration should be given to the planting of native species across the whole site that are sensitive to the predicted climate change impacts through their lifespan. This could include species which are resilient to an increase in Uv light and are able to cope with extremes of weather conditions. Planting schemes will be designed by an appropriately qualified landscape architect and ecologist.'</i> Masterplan: Resource Efficiency of the Built Form section - A resident welcome pack will feature: <i>'Wildlife gardening advice and advice on appropriate planting for private gardens'</i> .	
<i>Links to policy</i>		

Standard achieved

Best Practice

Water Conservation

<i>Objective</i>	To ensure that measures are incorporated into buildings to increase water efficiency in use.							
P1	Question 1.5 (1)	How many of the following water efficiency measures has the developer installed in all buildings? a) water efficient low flush toilet (i.e. 6/4 litre dual flush or less) b) water efficient spray / aerated taps in all sinks c) water efficient shower d) water efficient washing machine (energy A rated) e) water efficient dishwasher (energy A rated) f) minimised pipe runs to hot taps <i>* These targets may need to be reviewed to achieve Level 5 water efficiency requirements of the Code for Sustainable Homes</i>						
<i>Targets</i>	Minimum Good practice Best practice	<table border="1"><tr><td data-bbox="810 909 1541 957">Any 4 water efficiency measures from (a) to (f).</td><td data-bbox="1568 925 1899 989">Standard achieved Best Practice</td></tr><tr><td data-bbox="810 986 1541 1034">Any 5 water efficiency measures from (a) to (f).</td><td></td></tr><tr><td data-bbox="810 1062 1541 1101">All of the above water efficiency measures.</td><td></td></tr></table>	Any 4 water efficiency measures from (a) to (f).	Standard achieved Best Practice	Any 5 water efficiency measures from (a) to (f).		All of the above water efficiency measures.	
Any 4 water efficiency measures from (a) to (f).	Standard achieved Best Practice							
Any 5 water efficiency measures from (a) to (f).								
All of the above water efficiency measures.								
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - ' <i>The developer will install low flush toilets, water efficient showers and aerated taps to all sinks. When considering the location of water tanks and plumbing layouts, consideration should be given to minimising pipe runs to high use hot water taps. In addition, where the developer supplies appliances as part of the construction and sales process, these will be a rated (dishwasher & washing machine)</i> '.							

Links to policy	LDF SNC2	
Objective	To reduce the overall consumption of clean water for non-potable uses.	
Question 1.5 (2)	<p>What percentage of the roof area of the development will be used for an integrated rainwater harvesting system?</p> <p><i>Note: An integrated system means that the water must be capable of being used for internal use including flushing one or more toilets within the premises.</i></p>	
Targets	<p>Minimum</p> <p>Good practice</p> <p>Best practice</p>	<p>100% of all communal building roofs used for rainwater harvesting.</p> <p>50% of the roof area of the whole development used for rainwater harvesting.</p> <p>80% of the roof area of the whole development used for rainwater harvesting.</p>
Justification	<p>Masterplan: Resource Efficiency of the Built Form section - <i>'Residential Building Standards: Rainwater harvesting to be used for 80% of roofs'.</i> <i>'Rainwater harvesting to be used for 80% of non residential buildings'.</i></p>	
Links to policy	SPG) 1.4: MINIMISE WATER DEMAND, 1.5: CONSERVE SURFACE AND UNDERGROUND WATER RESOURCES	

Standard achieved

Best Practice

P2

Objective

Question 1.5 (3)

Targets

Justification

Links to policy

To reduce the overall consumption of clean water for non-potable uses.

What % of buildings incorporate grey water recycling systems?

Minimum

Grey water pilot demonstration project undertaken within phase one of the development. A minimum of 2% of dwellings to have grey water systems installed and monitored over the first phase of the development.

Good practice

10% - 50%

Best practice

>50%

Standard achieved

Not met

No commitment has been made to deliver grey water recycling systems in 2% of homes in the first phase.

SPG) 1.4: MINIMISE WATER DEMAND, 1.5: CONSERVE SURFACE AND UNDERGROUND WATER RESOURCES, 2.5: WASTE WATER

Towards Carbon Neutral developments

<i>Objective</i>	To encourage the development of highly energy-efficient carbon neutral developments through use of on site renewables and carbon offset schemes.	
P1 Question 1.6	<p>What is the percentage reduction in net carbon emissions of the development from energy use on site, on an annual basis?</p> <p>NB: Onsite renewable energy generation must deliver a net reduction in CO2 emissions that is at least equal to any net reduction delivered through a carbon off set scheme.</p> <p>On site renewable schemes including wind, PV, micro hydro, biomass and CHP. Phase(s) at which renewables technologies will be introduced should be agreed at the planning stage. Please note that all technologies should be installed prior to completion of the whole development. Any delay of installation of renewable technologies to the final phase should be avoided.</p> <p>On site CO2 sequestration scheme. Where a site location provides the ideal opportunity to plant woodland for the sole purpose of CO2 sequestration this can be used as a carbon off-set to reduce the net carbon emissions of the development. It should be noted that general tree planting as part of the overall landscaping scheme e.g. planting in open green areas, parks and gardens does not count towards CO2 sequestration. The sequestration scheme must be independently verified and certified by a suitable body. Such verification would be expected to include an assessment of the project's management capability and infrastructure, to determine it's ability to accomplish the CO2 sequestration targets proposed and an assessment of the scientific methodology focusing particularly on data availability and quality.</p>	
<i>Targets</i>	Minimum	10% > 50%
	Good practice	50% or more - Low carbon development: A low carbon development is one that achieves a reduction in net carbon emissions of 50% or more from energy use on site, on an annual basis.
	Best practice	100% - Carbon neutral development: A carbon neutral development is one that achieves zero net carbon emissions from energy use on site, on an annual basis.
	<p>Standard achieved</p> <p>Good Practice</p>	

Justification

Masterplan: Infrastructure and Utilities Strategy section -
'Two 1.8mW community wind turbines (total height to blade tip of up to 120m), within the Community park, will provide 32-41% of Sherford's electrical and domestic hot water demand Community Trust' [and] 'In total, buildings (residential and non-residential) are targeted to generate 12% (and will generate no less than 8%) of electrical and domestic hot water demand from small and micro scale renewables...'

Masterplan: Landscape section - *'There are available approximately 70ha of the Community park/green space to plant with native broadleaf trees to provide a carbon sink, that will sequester carbon dioxide, effectively offsetting the balance of sherford's carbon dioxide emissions for approximately 16 years. Timber thinnings should not be utilised for combustion purposes but processed for construction use. Woodland planted will be maintained [by the Community Trust] in perpetuity to maintain the carbon sink'.*

Masterplan: Resource Efficiency of the Built Form section - Table 1 details the carbon sink capable of absorbing 1778 tonnes/CO2 per hectare.

The CLA methodology adopted by the developer (called CALM) is detailed in the report 'Climate Change and the European Countryside: Impacts on Land Management and Response Strategies. Scientific Report of the CLIO Project 2006' produced by the Climatic Research Unit, School of Environmental Sciences, University of East Anglia. The assessors are also aware of many other methodologies applied as detailed in various carbon sequestration reports including those produced by the Edinburgh Centre for Carbon Management. As yet there appears to be no consensus within the scientific community over a common methodology for calculating carbon sequestration. Carbon sequestration figures presented by various institutes range from 500 t/CO2/ha/yr to over 5000 t/CO2/ha/yr. For these reasons the assessors do not feel able to verify the figures quoted in the proposed carbon sink scheme, albeit the figures used by the developer are towards the lower end of the range. The assessors however, fully recognise the part a carbon sink can play in an overall carbon neutrality strategy and it is suggested that this is kept under review pending some consensus from within the scientific com

Links to policy

SPG) 1.1: NON-RENEWABLE RESOURCES, 1.3: RENEWABLE ENERGY PRODUCTION

On-site renewable energy production

<p><i>Objective</i></p> <p>P1</p> <p>Question 1.7 (1)</p> <p><i>Targets</i></p> <p><i>Justification</i></p> <p><i>Links to policy</i></p>	<p>To encourage the integration of solar/pv technologies during the design stage.</p>							
	<p>What percentage of buildings are equipped with solar hot water and/or photo voltaic?</p>							
	<table border="0"> <tr> <td>Minimum</td> <td>5-25%</td> <td rowspan="3" style="text-align: right;">Standard achieved</td> </tr> <tr> <td>Good practice</td> <td>25-50%</td> </tr> <tr> <td>Best practice</td> <td>>50%</td> </tr> </table>	Minimum	5-25%	Standard achieved	Good practice	25-50%	Best practice	>50%
	Minimum	5-25%	Standard achieved					
	Good practice	25-50%						
Best practice	>50%							
<p>Masterplan: Infrastructure and Utilities Strategy section - '75% of buildings will be equipped with solar thermal systems and / or photovoltaic devices'.</p>								
<p>SPG) 1.1: NON-RENEWABLE RESOURCES, 1.3: RENEWABLE ENERGY PRODUCTION</p>								
<p><i>Objective</i></p> <p>P3</p> <p>Question 1.7 (2)</p> <p><i>Targets</i></p> <p><i>Justification</i></p> <p><i>Links to policy</i></p>	<p>To encourage the future use of active solar technologies where they are not initially supplied.</p>							
	<p>What percentage of the development is designed to allow retrospective installation of active solar devices such as photovoltaic and solar hot water heating (where these are not fitted initially)?</p>							
	<table border="0"> <tr> <td>Minimum</td> <td><80%</td> <td rowspan="3" style="text-align: right;">Standard achieved</td> </tr> <tr> <td>Good practice</td> <td>80-90%</td> </tr> <tr> <td>Best practice</td> <td>100%</td> </tr> </table>	Minimum	<80%	Standard achieved	Good practice	80-90%	Best practice	100%
	Minimum	<80%	Standard achieved					
	Good practice	80-90%						
Best practice	100%							
<p>Masterplan: Infrastructure and Utilities Strategy section - '100% of all roofs will be built to be capable of accomodating renewable energy devices'.</p>								
<p>SPG) 1.1: NON-RENEWABLE RESOURCES, 1.3: RENEWABLE ENERGY PRODUCTION</p>								

Sustainable Heating

<i>Objective</i>	To increase the use of sustainable heating techniques.							
P1	<p>Question 1.8</p> <p>To what extent does the development (commercial / residential) take into account the hierarchy for feasible heating systems</p> <ul style="list-style-type: none"> a) Solar Water heating b) Tri-generation or co-generation, preferably powered by renewable c) Community Heating d) Heat pumps e) Gas condensing boilers f) Gas central heating 							
<i>Targets</i>	<table border="0"> <tr> <td>Minimum</td> <td>(e) and (f)</td> </tr> <tr> <td>Good practice</td> <td>c and d</td> </tr> <tr> <td>Best practice</td> <td>(a) and (b)</td> </tr> </table>	Minimum	(e) and (f)	Good practice	c and d	Best practice	(a) and (b)	<p>Standard achieved</p> <p>Best Practice</p>
Minimum	(e) and (f)							
Good practice	c and d							
Best practice	(a) and (b)							
<i>Justification</i>	<p>Masterplan: Infrastructure and Utilities Strategy section - '75% of buildings will be equipped with solar thermal systems and / or photovoltaic devices'.</p> <p>On site renewable energy generation will also deliver a significant percentage of heating needs, and therefore these two commitments combined are awarded Best Practice.</p>							
<i>Links to policy</i>	SPG) 1.1: NON-RENEWABLE RESOURCES, 1.2: MINIMISE ENERGY USE, 1.3: RENEWABLE ENERGY PRODUCTION							

Category

Sustainable Construction and Procurement

Category Objective

To encourage the selection of environmentally friendly processes and materials for development in a sustainable manner that supports the local economy with minimal impact upon the surrounding environment and community.

Environmental Standard

Objective

To ensure individual dwellings underpin the sustainability of the development.

P1

Question 2.1 (1)

Will dwellings be built to EcoHomes standards, to meet the following:

Targets

Minimum

No standard

Standard achieved

Best Practice

Good practice

EcoHomes 'Very Good' rating for ALL dwellings.

Best practice

EcoHomes 'Excellent' rating for ALL dwellings.

Justification

Masterplan: Resource Efficiency of the Built Form section - 'All dwellings to be built to ecohomes 'excellent' standards'.

Links to policy

LDF - SNC2

P1

Objective	To ensure individual buildings (Schools, Retail, Offices and Leisure) underpin the sustainability of the development.	
Question 2.1 (2)	Will buildings be built to BREEAM standards, to meet the following:	
Targets	Minimum	BREEAM 'Excellent' rating for all Schools.
	Good practice	Minimum PLUS BREEAM 'Excellent' rating for all Offices and Retail buildings.
	Best practice	Good Practice PLUS BREEAM 'Excellent' rating for all Leisure buildings.
Justification	Masterplan: Resource Efficiency of the Built Form section - <i>'All non residential buildings to be built to ecohomes 'excellent' standards'.</i>	
Links to policy	LDF - SNC2	

Standard achieved

Best Practice

Low Impact Materials

<i>Objective</i>	To reduce the environmental impact of materials used in the development.	
P3	Question 2.2 (1)	Percentage of basic building elements (by element) specified as having low environmental impact (specification to be informed by Green Guide or equivalent).
<i>Targets</i>	Minimum	<ul style="list-style-type: none"> • No less than 40% of basic building elements to be Green Guide 'A' rated. • All of the remaining basic building elements to be Green Guide 'B' rated.
	Good practice	<ul style="list-style-type: none"> • No less than 60% of basic building elements to be Green Guide 'A' rated. • All of the remaining basic building elements to be Green Guide 'B' rated.
	Best practice	<ul style="list-style-type: none"> • No less than 80% of basic building elements to be Green Guide 'A' rated. • All of the remaining basic building elements to be Green Guide 'B' rated.
	Standard achieved Minimum	
<i>Justification</i>	<p>Masterplan: Resource Efficiency of the Built Form section - <i>'Sherford will aim to utilise materials in the construction of dwellings that have been proven to have a low embodied energy and low environmental impact, for example, the selection process for materials should be informed by BRE Green Guide or equivalent'</i>.</p> <p>There is a clear commitment from the developer to use low embodied materials but no percentages have been defined within the Masterplan. The developer has sited the reason for this is because the new version of the Green Guide is not yet published. Whilst the assessors can understand the reason, Good or Best Practice can not be awarded unless there is sufficient evidence to support it. A minimum rating has therefore been applied.</p> <p>It is expected that the new Green Guide for Specification will be published electronically in April/May 2007 with hard copies to follow.</p>	
<i>Links to policy</i>		

P3

Objective
Question 2.2 (2)
Targets
Justification
Links to policy

To reduce the environmental impact of materials used in the development and encourage selection from sustainable supply sources.

Percentage of timber used for basic building elements (by type) from independently verified sustainable sources as recognised by the Environment Agency (also includes FSC and PEFC sources).

Minimum

>60% from independently verified sustainable sources and balance from temperate sources.

Good practice

>80% from independently verified sustainable sources and balance from temperate sources.

Best practice

100% of timber from independently verified sustainable sources.

Standard achieved

Best Practice

Masterplan: Resource Efficiency of the Built Form section - '100% of construction timber will be forest stewardship Council certified or equivalent and preference shall be given to renewable locally sourced and milled timber from within the Devon or South West area'.

Local Materials

<i>Objective</i>	To encourage the use of local materials, reducing the use of vehicular transport of materials, enhance local distinctiveness and promote local economies (where available and suitable)		
P1	Question 2.3	Percentage of bulk construction materials sourced within 50 miles (by road) of the development (106.5miles is an industry average)	
<i>Targets</i>	Minimum	> 35% of bulk construction materials by mass	Standard achieved Minimum
	Good practice	> 50% of bulk construction materials by mass	
	Best practice	> 65% of bulk construction materials by mass	
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - ' <i>Sherford will seek to localise the sourcing of bulk materials with an aspiration to acquire 65% (with a minimum requirement of 35%) by mass from within 50 miles (by road) of the development...</i> '. The assessors can not award Best Practice on the basis of an 'aspiration' to meet 65%. This must be a firm commitment.		
<i>Links to policy</i>			

Locally Reclaimed and Recycled Materials

<p><i>Objective</i></p> <p>P2</p> <p>Question 2.4 (1)</p> <p><i>Targets</i></p> <p><i>Justification</i></p> <p><i>Links to policy</i></p>	<p>To promote the use of reclaimed and recycled materials in the development.</p>							
	<p>Has the developer made a commitment for the amount of recycled/reclaimed content to be used in bulk building materials for the whole development (as a percentage of the value of materials used).</p>							
	<table border="0"> <tr> <td data-bbox="546 426 763 488">Minimum</td> <td data-bbox="770 426 1489 488">15% of materials to be purchased.</td> <td data-bbox="1518 456 1836 518" rowspan="3"> <p>Standard achieved</p> <p>Minimum</p> </td> </tr> <tr> <td data-bbox="546 509 763 571">Good practice</td> <td data-bbox="770 509 1489 571">>20% of materials to be purchased.</td> </tr> <tr> <td data-bbox="546 592 763 654">Best practice</td> <td data-bbox="770 592 1489 654">>25% of materials to be purchased.</td> </tr> </table>	Minimum	15% of materials to be purchased.	<p>Standard achieved</p> <p>Minimum</p>	Good practice	>20% of materials to be purchased.	Best practice	>25% of materials to be purchased.
	Minimum	15% of materials to be purchased.	<p>Standard achieved</p> <p>Minimum</p>					
	Good practice	>20% of materials to be purchased.						
Best practice	>25% of materials to be purchased.							
<p>Masterplan: Resource Efficiency of the Built Form section - <i>'Bulk building materials will include 15% (as a percentage of the value of materials used) recycled content'</i>.</p>								
<p></p>								
<p><i>Objective</i></p> <p>P1</p> <p>Question 2.4 (2)</p> <p><i>Targets</i></p> <p><i>Justification</i></p> <p><i>Links to policy</i></p>	<p>To increase the proportion of locally (50 miles) reclaimed or recycled materials in road/pavement/carpark construction.</p>							
	<p>How much local reclaimed or recycled materials (by mass) will be used for road and external hard surfaces construction?</p>							
	<table border="0"> <tr> <td data-bbox="546 1018 763 1061">Minimum</td> <td data-bbox="770 1018 1135 1061"><25%</td> <td data-bbox="1518 1018 1836 1080" rowspan="3"> <p>Standard achieved</p> <p>Best Practice</p> </td> </tr> <tr> <td data-bbox="546 1075 763 1118">Good practice</td> <td data-bbox="770 1075 1135 1118">25-30%</td> </tr> <tr> <td data-bbox="546 1129 763 1166">Best practice</td> <td data-bbox="770 1129 1135 1166">>30%</td> </tr> </table>	Minimum	<25%	<p>Standard achieved</p> <p>Best Practice</p>	Good practice	25-30%	Best practice	>30%
	Minimum	<25%	<p>Standard achieved</p> <p>Best Practice</p>					
	Good practice	25-30%						
Best practice	>30%							
<p>Masterplan: Resource Efficiency of the Built Form section - <i>'Materials used in the construction of road and external hard surfaces will utilise a 30% recycled content from local (within 50 miles) reclaimed or recycled sources'</i>.</p>								
<p></p>								

Waste and recycling

<i>Objective</i>	To ensure that the necessary strategies are in place before work commences on site, to effectively manage the waste produced during the construction process.	
P3	Question 2.5 (1)	
<i>Targets</i>	Minimum	Compliance with 'Construction Environmental Management Plan'.
	Good practice	Minimum PLUS Site Waste Management Plan (SWMP) which exceeds 'Construction Environmental Management Plan'. Periodic reporting over the entire development phase addressing ongoing waste management issues including performance on waste minimisation, segregation, recovery and disposal, and use of recycled and secondary materials, and cost savings identified.
	Best practice	Good Practice PLUS use of benchmarking and measuring tools (e.g. SMARTWaste), with provision of training and awareness raising for onsite waste management. Utilise the nearest and most suitable waste management site for waste streams, possibly with the use of a locational mapping tool such as BREMAP, or similar.
	Standard achieved Good Practice	
<i>Justification</i>	<p>Masterplan: Resource Efficiency of the Built Form section - 'A Site Waste Management Plan (SWMP) will be an integral part of the 'Construction environmental management plan'. This plan will seek to reduce the amount of waste produced on the site and ensure that the percentage of this waste disposed of via land-fill is kept to a minimum through waste segregation, recycling, and packaging reduction initiatives'.</p> <p>Whilst specific reference on reporting of waste performance has not been made by the developer the commitment to a one 7 yard skip of waste per dwelling, requires monitoring and reporting to take place in order to deliver on this commitment, as required in the 'Good Practice' credit.</p>	
<i>Links to policy</i>		

P3

Objective
Question 2.5 (2)
Targets
Justification
Links to policy

To reduce the amount of waste generated by the construction process, and reduce the total amount of waste removed from the site.

Average number of 7 yard waste skips (or equivalent) removed per dwelling produced.

Minimum	< 5 skips	Standard achieved Best Practice
Good practice	< 3 skips	
Best practice	< 1 skip	

Masterplan: Resource Efficiency of the Built Form section - 'A target of one 7 yard skip of waste per dwelling will be set'.

P3

Objective
Question 2.5 (3)
Targets
Justification
Links to policy

To increase the amount of waste diverted from landfill.

Total percentage of construction waste materials (by mass) diverted from landfill.

Minimum	> 40%	Standard achieved Good Practice
Good practice	> 50%	
Best practice	> 60%	

Masterplan: Resource Efficiency of the Built Form section - '50% of all construction waste (by mass), will be recycled. This will ensure that no more than 50% of construction waste will be disposed of via landfill'.

Resource Efficiency

P3	<i>Objective</i>	To reduce energy use during construction.		
	Question 2.6 (1)	Constructing Excellence KPI Benchmark score to be achieved for Energy Use – Construction Process.		
	<i>Targets</i>	Minimum	30%	Standard achieved Good Practice
		Good practice	>50%	
		Best practice	>70%	
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - 'Sherford will achieve a 50% benchmark score in regards to the 'Constructing excellence' KPI for energy and mains water use within the construction process'.			
<i>Links to policy</i>				

P3	<i>Objective</i>	To reduce mains water use during construction.		
	Question 2.6 (2)	Constructing Excellence KPI Benchmark score to be achieved for Mains Water Use – Construction Process.		
	<i>Targets</i>	Minimum	30%	Standard achieved Good Practice
		Good practice	>50%	
		Best practice	>70%	
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - 'Sherford will achieve a 50% benchmark score in regards to the 'Constructing excellence' KPI for energy and mains water use within the construction process'.			
<i>Links to policy</i>				

Local Labour Utilisation

<i>Objective</i>	To improve the local construction industry skills base by providing employment for apprentices.	
P2	Question 2.7 (1)	Provision of valuable employment opportunities for school-leavers and the local community.
<i>Targets</i>	Minimum	Opportunities for construction skills training identified in line with 'Employment, Retail and Commercial Strategy'.
	Good practice	On-site training opportunities created for local residents and school-leavers (i.e. within 20 mile radius), and strategy in place to provide structured skills training and apprenticeships.
	Best practice	Good Practice PLUS opportunities created for training and apprenticeships in specialist construction areas.
	Standard achieved Good Practice	
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - ' <i>On-site training opportunities will be created at Sherford for local residents (within 20 miles) and school leavers within the Construction process. Much of this training will be in the form of structure skills training and apprenticeships</i> '.	
<i>Links to policy</i>	SNC8 - Economy	

Objective

To reduce the environmental impacts from construction operatives transport during construction.

P3

Question 2.7 (2)

Which of the following measures will be put in place, or are already in place to reduce the impact of operatives travelling to site by private vehicles.

- a) Shared transport provided by developer(s) to bring operatives to and from site, with limited on site car parking provided.
- b) Monitoring programme established to measure average distance travelled by private vehicle to site, with measures put in place to reduce this to below 20 miles.
- c) Existing public transport routes provide good regular access to and from site and are actively promoted to operatives, with limited on site car parking provided.
- d) New planned public transport routes to the site are to be completed in the first phase of the development and actively promoted to operatives, with limited on site car parking provided.
- e) Secure storage facilities provided on site to store contractor tools and equipment.

Targets

Minimum

(a) and (e)

Standard achieved

Minimum

Good practice

(b)

Best practice

(c) or (d) and (e)

Justification

Masterplan: Resource Efficiency of the Built Form section - 'Shared transport will be provided by developers at sherford to move operatives to and from the site. On site parking will be limited in order to ensure modal shift' . The developer has also made a commitment to provide secure storage.

Links to policy

SNC8 - Economy

Category

Community and Sustainable Lifestyles

Category objective

To ensure that the development supports a vibrant, diverse and inclusive community which integrates with surrounding communities.

Promoting community networks and interaction

P1	<i>Objective</i>	To avoid detrimental effects upon the surrounding community and highlight issues that the development must address.		
	<i>Question 3.1 (1)</i>	Has a social impact assessment been carried out to examine the impact of the development on the existing community?		
	<i>Targets</i>	Minimum	Yes	Standard achieved Good Practice
		Good practice	Yes, with supplementary evidence showing how results were taken into account.	
		Best practice	Good Practice PLUS evidence showing how the outcome of the study and measures taken were communicated back to residents in the surrounding communities.	
	<i>Justification</i>	A Social Impact Assessment has been carried out as part of the Environmental Impact Assessment (EIA) and details evidence of it's considerations throughout the EIA. No details have been found on how the outcome of the study and measures taken was reported back to the surrounding communities.		
<i>Links to policy</i>	SPG) 5.4: SOCIAL COHESION			

P1

<i>Objective</i>	To promote community involvement in the design of the development to ensure their needs, ideas and knowledge are taken into account to improve the quality and acceptability of the development.	
<i>Question 3.1 (2)</i>	Has the community been actively involved in the development proposal: a) Has a stakeholder analysis been carried out (listing the types of groups it is proposed to involve and how each will be identified/approached/communicated with)? b) Has consultation been carried out with the community as to the needs and aspirations of their locality at the conception stage? c) Has a communication campaign providing information to the community about the impact and implications of the proposed development been carried out at an early stage? d) Has information been provided for the community informing them about how they can get involved and influence the development? e) Are there opportunities for the community to have continued involvement in the development of the project? f) Feedback provided to those taking part in the consultation exercises as to how their views have had a tangible impact on the final outcomes.	
<i>Targets</i>	Minimum	Statement of Community Involvement submitted.
	Good practice	Minimum PLUS (a) through to (d).
	Best practice	Good Practice PLUS (e) and (f).
<i>Justification</i>	Enquiry by Design process was undertaken led by the Princes Trust 4th and 6th October 2004, which involved full and active participation from a wide range of stakeholders across the community.	
<i>Links to policy</i>		

Standard achieved

Best Practice

P1

Objective	To ensure that community facilities are maintained by the 'community trust' to foster a sense of ownership within the community.		
Question 3.1 (3)	Does the development provide long term arrangements for support and management of community development, facilities and services, open space, SUDS, grey water schemes etc (including the Community Trust itself).		
Targets	Minimum	Appropriate body proposed to manage community assets.	Standard achieved Best Practice
	Good practice	Minimum PLUS Community Trust actively marketed to potential occupiers / owners.	
	Best practice	Good practice PLUS support sources identified to help in initial stages (local authority, community group, charity etc); AND demonstration that sufficient sustainable sources of funding available / able to be generated for the long term management of community assets.	
Justification	The Masterplan contains a comprehensive section outlining the set-up and role of the Community Trust. It includes this description - <i>'The Sherford Community trust will be an integral part of community life in Sherford. It will own property and infrastructure, have management responsibility over the delivery of a range of services, be the promoter and protector of design and civic codes and the sustainability agenda for the community and most importantly deeply involve community members in its management. It will have forged strong relationships with statutory, public sector bodies, service providers, special interest groups and neighbouring community associations and will be instrumental in maintaining and enhancing sherford as the exemplar sustainable community that it aims to be'</i> .		
Links to policy	SPG) 4.3: COMMUNITY OWNERSHIP AND ENTERPRISE, 5.4: SOCIAL COHESION		

Sustainable Lifestyles

<i>Objective</i>	To encourage sustainable lifestyles and help integration into the local community.	
	P3	<i>Question 3.2 (1)</i>
Will a pack be provided to each building, occupied unit and commercial space containing information on:		
<ol style="list-style-type: none"> 1) local transport services 2) active travel information and sustainable travel advice 3) utility suppliers 4) energy efficiency - including measures incorporated into the development and/or dwelling 5) local amenities 6) refuse collection 7) recycling facilities 8) local organisations and community groups 9) environmental technologies installed in the development and dwelling 10) water efficiency information pack 11) wildlife gardening advice including appropriate species for planting in private gardens 		
<i>Targets</i>	Minimum	See relevant local planning authority standard for minimum required.
	Good practice	Pack provided covering elements under developer control PLUS additional information on services provided by other organisations.
	Best practice	Good Practice PLUS Community Development / Arrivals Officers to visit new residents upon arrival.
		Standard achieved Best Practice

<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - <i>'In order to promote sustainable lifestyles, a welcome pack will be provided to all residents with the following information'</i> . The pack as described covers all of the above elements.			
	RSDf) 2.4: ENCOURAGE COMMUNITY INVOLVEMENT IN LOCAL ECONOMIES			
<i>Links to the RSS/IRF</i>	To provide designated internal and external space to enable waste segregation for recycling of separate waste streams.			
	Provision of suitable waste storage to encourage recycling and composting.			
Question 3.2 (2)	Provision of suitable waste storage to encourage recycling and composting.			
	<i>Targets</i>	Minimum	A Local Authority collection scheme for recyclable material.	Standard achieved Best Practice
		Good practice	Provision of 3 internal recycling waste storage bins in a dedicated location with: <ul style="list-style-type: none"> • Minimum total capacity of 30 litres • No individual bin smaller than 7 litres Plus a minimum of 3 external recycling waste storage bins with: <ul style="list-style-type: none"> • A maximum total capacity of 180 litres (excluding garden waste) • General waste bin (non recycables) no larger than 80 litres capacity • No individual bin smaller than 40 litres • All bins in a dedicated position (within 10m of the external door) incorporating easy access for waste operatives and service vehicles. • (For flats only) - external storage bins large enough to cater for all dwellings allocated to the bins, with written agreement from the Local Authority or other company to maintain and empty the bins on a regular basis. It should be insured that bins are located for easy access by service vehicles. 	
		Best Practice	Good Practice PLUS composters provided for all dwellings with gardens including an information leaflet on how to compost.	

P1

<i>Justification</i>	<p>Masterplan: Resource Efficiency of the Built Form section - <i>'Every household will be provided with the maximum opportunities to recycle their waste via internal and external storage facilities. The developer will work with the local planning authorities and Community trust to establish an integrated waste strategy that is designed to achieve maximum credits from the waste section of BRE, Ecohomes'</i>.</p> <p>Within the same section commitments are also made for areas to be made available for home composting where appropriate, and block scale composting. The assessors are satisfied that the Developer is committed to working with the Local Planning Authorities and Community Trust to deliver an integrated scheme that will deliver upon the areas described within Best Practice.</p>
<i>Links to policy</i>	LDF SNC2

Accessibility

<i>Objective</i>	To provide residential units that can satisfy the housing needs of the occupant at all stages of their life.							
P1	Question 3.3							
<i>Targets</i>	<table border="1"> <tr> <td>Minimum</td> <td>>50% of dwellings built to 'Lifetime Homes' standards.</td> <td rowspan="3" style="text-align: center; vertical-align: middle;"> Standard achieved Not met </td> </tr> <tr> <td>Good practice</td> <td>100% of dwellings built to 'Lifetime Homes' standards.</td> </tr> <tr> <td>Best practice</td> <td>Good Practice PLUS: 10% of dwellings built to meet Wheelchair housing standards.</td> </tr> </table>	Minimum	>50% of dwellings built to 'Lifetime Homes' standards.	Standard achieved Not met	Good practice	100% of dwellings built to 'Lifetime Homes' standards.	Best practice	Good Practice PLUS: 10% of dwellings built to meet Wheelchair housing standards.
Minimum	>50% of dwellings built to 'Lifetime Homes' standards.	Standard achieved Not met						
Good practice	100% of dwellings built to 'Lifetime Homes' standards.							
Best practice	Good Practice PLUS: 10% of dwellings built to meet Wheelchair housing standards.							
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - <i>'Lifetime homes' standards will be applied to 10% of the dwellings at Sherford'</i> .							
<i>Links to policy</i>								

Health and Well-Being

<i>Objective</i>	To encourage production of homegrown food by residents.		
P3	Question 3.4	What measures have been taken to promote/facilitate the production of home-grown food by residents in the development?	
<i>Targets</i>	Minimum	For dwellings with private gardens: designated spaces for crop growing and provision of appropriate topsoil PLUS information on most appropriate vegetables for the site, considering soil conditions.	Standard achieved Best Practice
	Good practice	Minimum PLUS access for all residents to plots at communal gardens.	
	Best practice	Good Practice PLUS promotion of local food through Organic Community Farm and farmers market.	
<i>Justification</i>	Masterplan: Landscape section - <i>'Policy SNC9 identifies that an organic farm be incorporated into plans for the Community Park, subject to a viability assessment'</i> . There are also commitments within this section to provide community gardens and allotments, whilst it also states that the Community Trust will encourage a 'Gardening Club' with advice, free seed offers and / or the potential inclusion of a small nursery / garden centre.		
<i>Links to policy</i>	LDF SNC4 - Community Facilities		

Category

Placemaking

Category objective

To ensure that the most sustainable sites are used for development and that the design process, layout structure and form provide a development that is appropriate to the local context and supports a sustainable community.

Settling into the land

P3

Objective
Question 4.1
Targets
Justification
Links to policy

To ensure that heritage or archaeologically important features are conserved or preserved if present.

What will happen to heritage/archaeologically important features on the site?

Minimum

Important features identified by the Landscape, Biodiversity and Cultural Heritage Strategy and protected (or no important features identified).

Good practice

Minimum **PLUS** both protected and enhanced either physically or through public access/interpretation.

Best practice

Good Practice **PLUS** important features recognised in 'The Vision' and used as key focal points for open spaces within the development.

Standard achieved
Best Practice

Masterplan: The Vision - *'Wherever possible traces of the site are celebrated in the Town Plan. Traces include paths, roads, ponds, woods, slopes, streams, and wetlands. The incorporation of the significant existing natural and cultural features into the urban form and the enhancement of those elements to create a more diverse and rich setting can only add value to Sherford in every sense of the word'.*

Design Process

<i>Objective</i>	To ensure that the preparation of a statement of design intent, that is informed by studies of the site and its surroundings, is discussed with the appropriate parties prior to finalisation.		
P1	Question 4.2	Has a design strategy been prepared, explaining emerging design principles?	
<i>Targets</i>	Minimum	Design Strategy prepared in conjunction with Local Authority.	Standard achieved Best Practice
	Good practice	Minimum PLUS Town Design Code prepared.	
	Best practice	Good Practice PLUS recognised design champion / design body involved in Town Design Code (the design champion or body should be from an independent group).	
<i>Justification</i>	The Masterplan and the Sherford Town Code documents and the involvement of The Princes Foundation in its creation are evidence of this.		
<i>Links to policy</i>	SPG) 3.4: LOCAL DISTINCTIVENESS, LDF:SNC3 - Design		

Neighbourhood Structure

P2

<i>Objective</i>	To deliver a development at an appropriate scale for all users.		
Question 4.3	Has the development proposed an appropriate scale in terms of height and massing?		
<i>Targets</i>	Minimum	Design Strategy prepared in conjunction with Local Authority.	Standard achieved Good Practice
	Good practice	Town Design Code making recommendations for scale and massing.	
	Best practice	Good Practice PLUS scale and massing proposed within recommended height:width ratios of the Urban Design Compendium.	
<i>Justification</i>	<p>Sherford Town Code: Part I: Town wide Regulation, <i>Massing</i> section - 'Sherford shall accommodate a range of different building types of differing sizes and heights, to provide for a diverse range of households and uses. The town wide massing strategy aims to create a logical hierarchy of places, to maximise day lighting opportunities, and to provide appropriate building heights for key locations, streets and public spaces.</p> <p>Height and Massing is addressed in 'The Vision' within the Masterplan. The Town Plan and Masterplan predominately addresses height issues only and does not address the issue of width of buildings. Whilst this is inferred through various statements in the Town Plan in relation to 'size' more generally, as well as reference to maximising daylighting within buildings, no specific consideration of building widths has been made.</p>		
<i>Links to policy</i>	SPG) 3.4: LOCAL DISTINCTIVENESS		

Ease of Movement

<i>Objective</i>	To achieve visual and physical connectivity that makes it easy to find and navigate around the development.	
<p>P1</p> <p>Question 4.4 (1)</p> <p><i>Target</i></p>	<p>Are there physical and visual links between the development and the surrounding area, and how do they integrate the development with the surrounding area?</p> <p>1) Are new routes into the site continuations of existing access points from the surrounding area?</p> <p>2) How direct are sight lines of existing neighbourhood streets continued through the site?</p> <p>3) Are main routes within the site connected directly to main routes in the wider area without feeding through existing routes with less capacity or with a primarily residential function?</p>	
	Minimum	<p>See relevant local planning authority standard for minimum required.</p> <p style="text-align: right;">Standard achieved</p> <p style="text-align: right;">Best Practice</p>
	Good practice	A design strategy addressing issue 3 above.
	Best practice	A design strategy addressing all three issues outlined above.
<i>Justification</i>	<p>The Masterplan: Movement and Transport section addresses the issues raised within this question, as well as 'The Vision' which states: <i>'Reference to the how two existing roads will continued through the site to aid movement and create a central cross roads' [and] 'To the southeast of the Main Street the streets have been aligned so that at regular intervals views can be glimpsed out into the southern slope of the valley thereby giving a connection to the surrounding landscape'.</i></p> <p>Issue (2) is not relevant to the Sherford development as there are no existing neighbourhood streets in close proximity of the new site that would be considered necessary to influence the site street layout.</p>	
<i>Links to policy</i>	RSS) CC7 Urban focus	

P1

Objective	To make pedestrian movement attractive and safe, reducing reliance upon private cars for local journeys.		
Question 4.4 (2)	Does the proposed street network provide a high quality public realm with a pedestrian friendly environment? 1) Clear network of pedestrian routes that follow pedestrian desire lines to key services and facilities 2) Pedestrian routes are direct with safe crossings at points where pedestrians want to cross 3) Movement Strategy and Town Design Code offer guidelines to ensure that pedestrian routes are attractive, well-lit and safe 4) Overall street design used to calm traffic as part of the Integrated Movement and Transport Strategy?		
Targets	Minimum	< 2 points addressed	Standard achieved Best Practice
	Good practice	Yes to 2 or more	
	Best practice	Yes to all questions	
Justification	The following commitments are made: Masterplan: Movement and Transport section - <i>'The physical layout of the town is a gridded network of streets which minimise walking distances between home, workplace, schools shops and other daily needs'</i> [and] <i>'All streets will be laid out and designed such that speed limits are self-enforcing, for example using building deflections, limiting visibility and changes to materials'</i> . Masterplan: Resource Efficiency of the Built Form section - <i>'All lighting levels to conform to the BS EN 134201 and BS 5489-1:2003 Codes of practice for design of roads lighting and public amenity areas, and it's successors'</i> .		
Links to policy			

Legibility

Objective

P2

Question 4.5 (1)

Targets

To create a place with a clear identity that is easy to understand and navigate.

Has the development been designed to be easy for users to understand and orientate themselves in, and does it promote a neighbourhood identity?

- 1) Have entrances to the development and its different areas been designed as gateways?
- 2) Have landmarks, including memorable buildings, been used to help users orientate themselves?
- 3) Have clear views and deflected views of landmarks been created?
- 4) Have corner buildings been heightened or building line altered to act as landmarks?
- 5) Have nodes been emphasised through surface treatment?

Minimum	Design Strategy prepared in conjunction with Local Authority.
Good practice	Issues 1-5 to be addressed in Town Design Code.
Best practice	Commitment for Detailed Design Codes to address all legibility issues within the neighbourhood context.

Standard achieved
Good Practice

Justification

The following statements have been made within the Town Code and Masterplan, which supports Good Practice.

Sherford Town Code: Part I: Town wide Regulation, Massing section - *'The northern entrance, where the Main Street evolves into a tree-lined boulevard, is where buildings are expected to be greater in height, framing this important gateway'*.

Sherford Town Code: Legibility Plan -

'Locating civic or distinctive buildings in a position which will aid the legibility of the streets and spaces, such as squares, at the termination of street vistas and as corner buildings at key crossroads, which will serve as landmarks'.

'The highest point in the development will be celebrated with a proposed circus where the streets radiate into the surrounding structure'.

Masterplan: Transport and movement section - *'All streets will be laid out and designed such that speed limits are self-enforcing, for example using building de-flections, limiting visibility and changes to materials'*.

Links to policy

SPG) 3.4: LOCAL DISTINCTIVENESS

P2

Objective

To ensure that building frontages encourage pedestrian usage of streets contributing to vitality.

Question 4.5 (2)

Have 'Active Frontage Guidelines' of the English Partnerships Urban Design Compendium been met in order to promote vitality? *Note active frontages means encouraging pedestrian entrances and exits onto streets, which are frequently used.*

The publication of the Urban Design Compendium in 2000 takes English Partnerships' role an important stage further in providing practical advice on many aspects of urban design to the whole regeneration and development industry. Developed in partnership with the Housing Corporation, and alongside the DTLR publication, By Design: Urban Design in the Planning System, the Urban Design Compendium set a high standard in the provision of accessible design advice to the industry.

Targets

Minimum

Design Strategy prepared in conjunction with Local Authority.

Standard achieved

Minimum

Good practice

100% of frontages achieve at least Grade C frontage, 25% Grade A.

Best practice

100% of frontages achieves at least Grade C frontage, 50% Grade A.

Justification

The Sherford Town Code and Masterplan make reference to Active Frontages, such as to '*establish active frontage to open space in order to enhance surveillance and secure by design principles*'. However, no firm commitment to delivering a design strategy that meets the above 'Active Frontage Guidelines' described within Good or Best Practice has been given.

Links to policy

Objective

To ensure that the development responds to local character whilst reinforcing its own identity.

P2

Question 4.5 (3)

Will the appearance of the development be visually appropriate, taking into consideration local character studies, and will it complement local character whilst creating a strong identity for Sherford?

- 1) Use of Local building materials and colour to reinforce local character
- 2) Continuity of local building details such as windows and doors
- 3) Local building scale, proportions and massing reflected in new development
- 4) Existing positive site features and views and historic associations retained or enhanced
- 5) Residential component of the development fostering a potential for personalisation by prospective residents
- 6) Contemporary approach to reflecting the local vernacular
- 7) Design allows for reinforcement of sense of place through integrated artworks and craftworks into buildings and spaces

Targets

Minimum

Design Strategy prepared in conjunction with Local Authority.

Good practice

Town Design Code provides evidence of achieving 5 of the above.

Best practice

Town Design Code provides evidence of achieving all 7 of the above.

Standard achieved

Good Practice

Justification

The following evidence in support of this credit was found:
Sherford Town Code: Part I: Town wide Regulation, Building Materials - *'Developers should utilise materials and designs that are in keeping with the character of the South Hams'*.
Sherford Town Code: Part I: Town wide Regulation, Massing section.
Masterplan: The Vision *'Height and Massing'*
Masterplan: The Vision - *'Wherever possible traces of the site are celebrated in the Town Plan. Traces include paths, roads, ponds, woods, slopes, streams, and wetlands. The incorporation of the significant existing natural and cultural features into the urban form and the enhancement of those elements to create a more diverse and rich setting can only add value to Sherford in every sense of the word'*.
Masterplan: The Vision - *'A Pattern book of Urban and Architectural Form has been produced for Sherford. It used the whole of South Devon as its resource selecting towns that most people regard as still having local distinctiveness'*.

Links to policy

SPG) 3.4: LOCAL DISTINCTIVENESS

Open space

<i>Objective</i>	To ensure access to green space for all.		
P1	Question 4.6 (1)	What level of access does the local community have to public green space?	
<i>Targets</i>	Minimum	Every home within 300 metres of an accessible natural green space of at least 2 Hectares (<i>South Hams advise that this English Nature standard is the most relevant</i>).	Standard achieved Minimum
	Good practice	75% of dwellings are within 200m.	
	Best practice	100% of dwellings are within 200m.	
<i>Justification</i>	Masterplan: Landscape section - Figure 3: Landscape Masterplan.		
	From assessing the Landscape Masterplan map it would suggest that all homes are within 300 metres of natural green		
<i>Links to policy</i>			

P2

Objective	To promote outdoor recreation.	
Question 4.6 (2)	Is there provision of accessible play space and outdoor social spaces for the new development?	
Targets	Minimum	National Playing Fields Association standards met.
	Good practice	Each dwelling: <ul style="list-style-type: none">• 400 metres from Equipped Play Space, 0.3 Hectare per 1000.• 100 metres from Informal Play Space, 0.4 Hectare per 1000.
	Best practice	Meets ODPM Good Practice guide "Developing accessible play space: a good practice guide" which provides a framework for developing accessible play space covering: <ul style="list-style-type: none">• making connections• setting a policy context• establishing responsibility for play• promoting partnership working• involving the community
Justification	Sherford Town Code: Part I: Town wide Regulation, Play: Local Area of Play (LAP) characteristics: 'As a general guide they are within a 100m walking distance of a home'. Locally Equipped Areas of Play characteristics: 'They are within a 400m walking distance of a home'.	
Links to policy		

Standard achieved

Good Practice

Street lighting/ pollution

<i>Objective</i>	To ensure that the development's lighting scheme is as energy efficient as possible and minimises light pollution.	
P2	Question 4.7 What steps have been taken to ensure that the development lighting scheme (street lighting, way marking and security lighting - including those on buildings) has been designed to be energy efficient and minimise light pollution.	
<i>Targets</i>	Minimum	Lighting Strategy submitted in-line with Local Planning Authority requirements.
	Good practice	Lighting columns, timers, duration, illumination patterns varied according to the different lighting requirements of different locations within the site, with energy efficient bulbs used in each type. See CPRE 'Dark Skies Campaign' for guidance
	Best practice	Good practice PLUS lighting elements powered by renewable power sources with zero upwards transmission.
<i>Justification</i>	Masterplan: Resource Efficiency of the Built Form section - 'All lighting levels to conform to the BS EN 134201 and BS 5489-1:2003 Codes of practice for design of roads lighting and public amenity areas, and it's successors' [and] 'The design of all lighting will seek to zero the amount of upward light transmission'. Masterplan: Infrastructure and Utilities Strategy section - '50% of the new community's overall energy requirement will come form on site renewable energy sources by the completion of phase 4'.	
<i>Links to policy</i>	RSDF) 3.1: PROMOTE EFFICIENT USE OF AFFORDABLE ENERGY WHILST REDUCING ENERGY DEMAND. 3.2) INCREASE ROLE OF RENEWABLE ENERGY AND COMBINED HEAT AND POWER (CHP) WHILST REDUCING THE ADVERSE ENVIRONMENTAL IMPACTS OF ALL FORMS OF ENERGY PRODUCTION	

Standard achieved
Best Practice

Density

<i>Objective</i>	To develop at a density that improves the efficiency of all development processes, and allows land as a resource to be preserved for the needs of future generations.		
P1	Question 4.8		
<i>Targets</i>	Minimum	35-40 DPH average across site.	Standard achieved Good Practice
	Good practice	41-50 DPH average across site.	
	Best practice	Densities any higher than 50 DPH located within 400 metres of facilities and transport facilities.	
<i>Justification</i>	Masterplan: 'The Vision' - 'An average of 40-50 dwellings per hectare is the target'.		
<i>Links to policy</i>	Soth-West RSS Policy H5. PPG3		

Adaptability

Objective

To ensure that new buildings can be adapted to the demands of new uses.

P3

Question 4.9 (1)

Has flexibility been designed into commercial units to provide adaptability to changing market needs?

- 1) Optimum adaptability to future use changes in terms of building depth (9-13m - English Partnership Urban Design Compendium figures which will be to be assessed and applied in line with the Sherford Town Code)
- 2) Optimum adaptability to future uses in terms of building width (5-7m frontages or multiples of - English Partnership Urban Design Compendium figures which will be to be assessed and applied in line with the Sherford Town Code)
- 3) Building height allowing for vertical segregation of mixed uses (with height and design of ground floors allowing adaptability between uses)
- 4) Design of building fabric and layout, positioning of stairs and services to allow internal changes between accommodation types
- 5) Design of building fabric and layout, positioning of stairs and services to allow future extension of building (vertically or to the rear of the property)

Targets	Minimum	See relevant local planning authority standard for minimum required.	Standard achieved Good Practice
	Good practice	A design strategy which addresses points 1 - 5 for commercial units.	
	Best practice	Good practice PLUS points 1-5 addressed for all buildings.	
Justification	<p>Masterplan: Employment, retail and commercial section - <i>'Other key themes that run throughout the strategy for sherford include the need to allow for flexibility in planning use for retail and commercial units. This will allow space to evolve to meet the changing needs of occupiers. The adaptability of buildings will also have a large part to play in this. attention will be paid to creating lifetime, sustainable business premises as well as durable, sustainable housing. Commercial units that can be adapted through a series of economic cycles will be provided for different users; meeting the changing needs and requirements of their occupiers over time'.</i></p> <p>Whilst the strategy and evidence within the Masterplan and Town Code perhaps does not address each of the above statements in turn, the assessors are confident from the strategy in place will adequately address building adaptability for commercial premises.</p>		
Links to policy	SPG) 3.1: ADAPTABILITY, 3.2: HOUSING		

P2

Objective	To meet local housing needs and encourage mixed communities.		
Question 4.9 (2)	Does the development provide a mix of housing to meet current and future needs considering the following? 1) Does the affordable housing exceed LA standard? 2) Does the development include a mix of accommodation types to meet current and future needs? 3) Does the development include a mix of accommodation tenures to meet current and future needs? 4) Is there good integration of accommodation types and affordable housing throughout development? 5) Is the affordable housing indistinguishable from the rest of development in terms of quality?		
Targets	Minimum	Local Authority Minimum requirements for affordable housing are met.	Standard achieved Best Practice
	Good practice	Minimum PLUS issues 1- 3 addressed.	
	Best practice	Good Practice PLUS issues 4 and 5 addressed.	
Justification	South Hams requirement for 50% Affordable Housing, and Sherford states that it will deliver a minimum of 40% and a Max of 50%. Within the Housing Strategy section it also states that <i>'Red Tree is confident that the scale of the pool funding, which may be further enhanced by Housing Grant, will comfortably deliver the additional provision, from 40% to 50%, required'</i> . Masterplan: Housing Strategy section - Table 2: Indicative housing mix by type and tenure - details a good mix of accomodation types and tenures. It is also stated that <i>'Market and affordable housing will not be isolated from each other or zoned but may be clustered for management effi ciency. affordable housing will not be separated from market housing by the quality of their design. It will be 'tenure-blind'</i> .		
Links to policy	SPG) 3.2: HOUSING, 3.3 HOUSING		

Crime reduction and Security

P2

<i>Objective</i>	To apply design principles to increase the security of the development.		
Question 4.10	Will development be designed to 'Secure By Design' or equivalent standards?		
<i>Targets</i>	Minimum	Evidence that Secure By Design principles have been incorporated.	Standard achieved Good Practice
	Good practice	Secure By Design plus involvement of a Police Architectural Liaison Officer (ALO) or Crime Reduction Design Officer (CRDO).	
	Best practice	Good Practice PLUS use of Community Development Trust knowledge database (or equivalent) to monitor and set targets for crime reduction.	
<i>Justification</i>	Each phase at Sherford will be designed to 'secure by design' standards (or equivalent) following consultation with a Police Architectural Liaison Officer or a Crime reduction Design Officer.		
<i>Links to policy</i>	SPG) 3.5: SAFETY		

Category

Transport

Category objective

To ensure people can reach facilities they need by appropriate transport modes, encouraging walking and public transport use and reducing the use of private cars for shorter journeys.

General policy

<i>Objective</i>	To encourage and enable the use of public transport.	
P1	Question 5.1 (1) Is the development within an existing or proposed public transport corridor that can facilitate a modal shift in transport patterns?	
<i>Targets</i>	Minimum	Yes - spare capacity unknown or required.
	Good practice	Yes, sufficient capacity to accommodate users of development can be brought on-stream during the build process.
	Best practice	Yes, excess capacity already exists which can accommodate users of
<i>Justification</i>	A fundamental element of the sustainable movement strategy is the implementation of a High Quality Public Transport System.	
<i>Links to policy</i>	SPG) 8.2: PUBLIC TRANSPORT	

Standard achieved
Best Practice

P2

<i>Objective</i>	To promote the use of virtual communications as an alternative to transport where possible.		
<i>Question 5.1 (2)</i>	Has the developer installed infrastructure in homes and commercial / industrial buildings which will allow the use of virtual communications as an alternative to transport?		
<i>Targets</i>	Minimum	See relevant local planning authority standard for minimum required.	Standard achieved Best Practice
	Good practice	Ducting in place to allow self-installation.	
	Best practice	Fibre Network throughout.	
<i>Justification</i>	Masterplan: Infrastructure and Utilities section - Fibre optic Network throughout the development. A community intranet is also planned.		
<i>Links to policy</i>			

Public transport

<i>Objective</i>	To ensure the availability of frequent and convenient public transport links.	
P1	Question 5.2 (1)	
	What will be the furthest distance that any occupier will have to travel to bus stop (new or existing) providing a regular bus service to a local centre? <i>(‘regular’ as defined by EcoHomes as: half hourly during peak rush hours (08:00-10:00 and 17:00-19:00) Monday to Friday. At all other times between 07:00 and 22:00, Monday to Saturday, the service must be hourly.)</i>	
<i>Targets</i>	Minimum	Meets requirements for Full Ecohomes credits with a regular service within 500metres of all dwellings.
	Good practice	Minimum PLUS 80% of all dwellings within 400 metres of a bus stop providing a regular service to a local centre.
	Best practice	Minimum PLUS 100% of dwellings within 400 metres of a bus stop providing a regular service to a local centre.
<i>Justification</i>	Masterplan: The Vision - <i>'A bus stop can be up to 400 metres away from some homes'</i> . Masterplan: Resource Efficiency of the Built Form section - <i>'All dwellings to be built to Ecohomes 'Excellent'</i> .	
<i>Links to policy</i>	SPG) 8.2: PUBLIC TRANSPORT LDF) SNC7 - Movement and Transport	

Standard achieved
Best Practice

P3

Objective	To encourage more frequent use of public transport during the entire year, by having waiting areas which are considered safe and out of the weather.		
Question 5.2 (2)	What provision has been made for a comfortable/safe bus shelter or waiting rooms?		
Targets	Minimum	See relevant local planning authority standard for minimum required.	Standard achieved Best Practice
	Good practice	Bus shelters provided.	
	Best practice	Comfortable, lit waiting areas in key locations with access to real time information.	
Justification	Masterplan: Movement and Transport section - 'Public transport stops will be sheltered, secure, well maintained and will carry real time bus information displays'.		
Links to policy	SPG) 8.2: PUBLIC TRANSPORT LDF) SNC7 - Movement and Transport		

Parking

<i>Objective</i>	To reduce levels of car parking available as an incentive to use public transport and other methods of mobility and communication.	
P1	Question 5.3 (1)	
<i>Targets</i>	Minimum	Between local authority minimum and maximum standards with car parking strategy for Sherford that discourages car use.
	Good practice	<LA Max with parking restraint measures (limited on-site spaces, limited garage space, cycle parking space in dwellings and on-street) and a development travel plan that focuses restraint measures when dwellings are located within 400 metres of transport nodes.
	Best practice	Good Practice PLUS tailored advice provided to each dwelling to help them create individual travel plans and provision of sustainable transport alternatives, including community buses, car share/ car club or pool (with associated infrastructure and dedicated spaces for these).
	<i>Justification</i>	Commitments within Masterplan: Movement and Transport section: <i>'The required parking spaces (1.5) per unit'.</i> <i>'All dwellings to be built to Ecohomes 'Excellent' (including <400m to nearest bus stop)'.</i> <i>'A welcome pack will be provided to all residents including information on local travel services'.</i> <i>'A car club and car share network will be developed'.</i>
<i>Links to policy</i>	RPG) TRAN 3: THE URBAN AREAS, TRAN 5: DEMAND MANAGEMENT	

Standard achieved
Best Practice

P3

Objective	To provided flexible space which can accommodate other uses outside the areas of peak parking demand.	
Question 5.3 (2)	What % of car parks have been designed to be for flexible use (e.g. play space, market space, when not being used for parking) or dual use which allows overlap between different uses at different times?	
Targets	Minimum	<10%
	Good practice	10-20%
	Best practice	>20%
Justification	Masterplan: Movement and Transport section - <i>'Twenty percent of all car parks will be designed to allow for flexible or dual use. The design will allow the areas to overlap different uses at different times'.</i>	
Links to policy		

Standard achieved

Best Practice

Pedestrians/ cyclists

<i>Objective</i>	Promote walking around the site in order to enhance convenience, community interaction and reduce the requirement for private car use.		
P1	Question 5.4 (1)	Has a network of safe pedestrian routes around site and to local facilities been provided?	
<i>Targets</i>	Minimum	Masterplan clearly prioritises the requirements of pedestrians.	Standard achieved Best Practice
	Good practice	Minimum PLUS Masterplan clearly provides a highly permeable pedestrian network that links to local facilities, which is well overlooked, direct, convenient, safe and secure with a good standard of energy-efficient lighting.	
	Best practice	Good Practice PLUS Traffic dispersed across site with pedestrian priority throughout (i.e. use of shared surfaces and design measures to slow traffic speeds).	
<i>Justification</i>	<p>Statements within Masterplan: Movement and Transport section:</p> <p><i>'The design of the town elevates walking and cycling to become the principle modes of short and medium distance travel within the town'.</i></p> <p><i>'The physical layout of the town is a gridded network of streets which minimise walking distances between home, workplace, schools shops and other daily needs' [and] 'All streets will be laid out and designed such that speed limits are self-enforcing, for example using building deflections, limiting visibility and changes to materials'.</i></p>		
<i>Links to policy</i>	LDF) SNC7 - Movement and Transport SPG) 3.5: SAFETY, 6.2: MIXED USE		

P1

Objective	To promote cycling as a real alternative to the use of private cars for shorter journeys, whilst reducing the fear of crime.		
Question 5.4 (2)	Is there a network of safe bike routes to local facilities near to and overlooked by, roads and pavements?		
Targets	Minimum	Routes provided on road side.	Standard achieved Best Practice
	Good practice	Key facilities served by cycle routes.	
	Best practice	Site wide network with direct links to neighbouring routes.	
Justification	Statements within the Masterplan: Movement and Transport section - <i>'The town plan is designed as a permeable network of streets in a deformed grid formation provides a choice of routes to every destination. This form of more permeable network encourages cycling by providing the cyclist with a series of alternative routes which they choose to navigate depending upon traffic conditions, topography and cycling ability' [and] 'All streets within the community are suitable for cycling. This approach is reinforced by using the layout, in terms of buildings, car parking and landscape, to keep traffic at speeds of 20 mph or less, encouraging cyclists to share the road space with vehicular traffic because of reduced speeds'.</i>		
Links to policy	LDF) SNC7 - Movement and Transport SPG) 3.5: SAFETY		

P2

Objective	To promote cycling as a real alternative to the use of private cars for shorter journeys, whilst reducing the fear of crime.		
Question 5.4 (3)	What provision has been made for secure bicycle storage at local facilities, transport nodes, and places of employment?		
Targets	Minimum	Integrated Movement and Transport Strategy prepared in conjunction with Local Authority, Highways Authorities and the Highways Agency.	Standard achieved Best Practice
	Good practice	Studies carried out on likely facility requirements and conclusions implemented (such as changing facilities, showers, and lockers at places of employment).	
	Best practice	Good Practice PLUS Community Trust funds available for facility adjustment according to actual use once development is completed.	
Justification	Statements within the Masterplan: Movement and Transport section - 'Secure, covered cycle parking will be provided at HQPT stops, main public areas and at each dwelling' [and] 'Workplaces will have secure bike storage and changing and showering facilities'.		
Links to policy	LDF) SNC7 - Movement and Transport SPG) 3.5: SAFETY		

Proximity of local amenities

<i>Objective</i>	To reduce any need or requirement to travel by car to essential facilities by having them within a reasonable walking distance.
P2 Question 5.5	<p>Which of the following will be available within the stated distance of all dwellings, located on key pedestrian routes focused around public transport nodes?</p> <ul style="list-style-type: none">a) Shop selling food and fresh groceries (500m)b) Post box (400m)c) Childrens' Playground/ amenity area (500m)d) Postal facility (500m)e) Bank or cash point machine (500m)f) Pharmacy (1000m)g) Primary School (400m)h) Secondary School (1000m)i) Youth Centre (1000m)j) Health and Social Care / Medical Centre (1000m)k) Leisure / Entertainment facility (1000m)l) Police Station (1000m)m) Local meeting place/ community centre or Library (1000m)n) Public House (1000m)o) Public park or village green (300m)p) Childcare facilities (nursery/ crèche) (1000m)

Targets	Minimum	Community Services and Infrastructure Strategy for deliver of facilities is prepared by developer.	Standard achieved Good Practice
	Good practice	a,b and c.	
	Best practice	a, b and c, plus any 10 of the remaining facilities.	
Justification	<p>Masterplan: Vision section - Neighbourhoods: 'From Home To Everything You Need' details how the developer intends to apply the 400 metre 'rule of thumb' within the layout and design of the town. It highlights that access to 'daily needs' is essential. It states that '<i>Ideally, daily needs should at least cover shopping for food, news and general household goods, schools, healthcare and community meeting space, open space, potential workspace, a post office, public transport and a pub or other forms of daytime and evening entertainment.</i>'</p> <p><i>These amenities will be located within the town centre, three neighbourhood sub-centres, and surrounding areas with at least 80% of all dwellings located within a 5 minute walk of one of these centres.</i></p> <p>At this stage it is not possible to accurately assess proximity of the above amenities, and therefore Good Practice has been awarded.</p>		
Links to policy	SPG) 4.1: ACCESSIBILITY TO SERVICES, 6.2: MIXED USE LDF) SNC4 - Community Facilities		

Traffic management

P3

<i>Objective</i>	To ensure vehicle speeds are appropriate to all road users.	
Question 5.6 (1)	Is there a traffic management plan in place which encourages the safe passage of vehicles through the development, at an appropriate speed? <i>Note this could include passive design measures (e.g. Shared surfaces, Road narrowing, surface treatments etc).</i>	
<i>Targets</i>	Minimum	<p>Integrated Movement and Transport Strategy prepared in conjunction with Local Authority, Highways Authorities and the Highways Agency.</p>
	Good practice	<p>Design strategies for major routes, and a design speed of 20mph on residential streets.</p>
	Best practice	<p>Design strategies for entire site, and a site wide design speed of 20mph.</p>
<i>Justification</i>	<p>Sherford Town Code: Part I: Town wide Regulation: Street Design Design Speed = 30mph: A1.1, A1.2 street types (inc. main high street) Design Speed = 20mph: A1.3, A2-A3,A5,A6.1street types Design Speed = 10mph: A4, A6.2, A6.3, A7, A8 street types</p>	
<i>Links to policy</i>	RPG) TRAN 3: THE URBAN AREAS LDF) SNC7 - Movement and Transport	

Standard achieved

Good Practice

P2

Objective	To enable residents to use and enjoy space around homes whilst maintaining vehicular access.	
Question 5.6 (2)	Will the development have residential / mixed use streets (excluding primary and public transport routes) designed for pedestrian priority with design speeds, and parking within a high quality environment?	
Targets	Minimum	Town Design Code and Movement and Transport Strategy propose shared surface and shared use streets.
	Good practice	60 – 80% of residential/ mixed use area.
	Best practice	>80% of residential/ mixed use area.
Justification	Masterplan: The Vision - <i>'Mixed use has been and remains, fundamental to the design and development of Sherford'</i> .	
Links to policy	LDF) SNC7 - Movement and Transport	

Standard achieved

Best Practice

Car Club

P2

<i>Objective</i>	To reduce residents dependency on private car ownership and use.		
Question 5.7	Will the developer support the provision of a car club?		
<i>Targets</i>	Minimum	Commitment to a Community Car Club in Movement and Transport Strategy.	Standard achieved Minimum
	Good practice	Minimum PLUS central office facility with storage parking and customer collection / return. Also ability for car club members to book using the telephone or internet and for a wide range of vehicles to be available to attract a diverse range of users.	
	Best practice	Good Practice PLUS Car Club spaces across the development with smart card access system (such as the system used by CityCarClub).	
<i>Justification</i>	The following measures are highlighted in the Masterplan: Movement and Transport section: 'A car club to promote shared use and hire' 'A car share network'		
<i>Links to policy</i>	LDF) SNC7 - Movement and Transport		

Category

Ecology

Category Objective

To ensure that the ecological value of the site is conserved and enhanced maintaining biodiversity and protecting existing natural habitats which can contribute to and enhance the amenity of the area.

Conservation

Objective

To determine the ecological value of the habitats in and around the site in order to maintain biodiversity and protect existing natural habitats.

P1

Question 5.1 (1)

Has an ecological survey been carried out, by a qualified ecologist, to examine habitats in and around the site and migration routes across the site?

Targets

Minimum

Landscape, Biodiversity and Cultural Heritage Strategy with comprehensive survey of existing landscape and biodiversity.

Good practice

Survey and mitigations/ harm avoidance strategy.

Best Practice

As good practice with strategy for enhancements.

Standard achieved

Best Practice

Justification

A comprehensive Environmental Impact Assessment has been undertaken by the appropriately qualified individuals. Chapter 10 - Ecology and Nature Conservation of the EIA report provides an comprehensive evaluation on the impact of the proposed development. This included a walkover survey of the site undertaken by a Scott Wilson ecologist, as well as indepth on site habitat surveys informed by desk study data.

Table 10.17 of the Ecology section summarises the impacts and effects pre and post mitigation of the development.

In respect to mitigation and enhancements to the site the Masterplan contains the following statements:

Masterplan: Vision section - 'To make Sherford, some hedgerows and their associated trees will have to be removed. However, the removal of hedgerow trees from the development areas will be mitigated by the replacement of street trees and trees within the green corridors. The Town Plan will involve the replacement of more trees than currently exists. The overall biodiversity of this Sherford land will improve markedly'.

Masterplan: Landscape, Biodiversity and Cultural Heritage section -

'Protection of bat roosts and foraging areas, particularly the sherford kilns in sherford Quarry Wood and various farm buildings (such as West and east sherford)'.

'The sherford hedgerow network has been accorded medium (county) value as a botanical resource, in addition to its value for nesting birds and commuting bats. Existing trees should be retained where possible in order to create a sense of maturity to the development'.

'Local Wildlife sites should be retained, protected and enhanced'.

Links to policy

SPG) 7.1: NATURAL ENVIRONMENT, 7.2: BIODIVERSITY LDF) SNC10 - Landscape, Biodiversity and Cultural Heritage

P2

Objective	To maintain biodiversity and protect any identified habitats.	
Question 5.1 (2)	What percentage of important or sensitive habitats (identified in ecological survey) will be protected? (No points if any BAP/protected habitats damaged).	
Targets	Minimum	<60%
	Good Practice	60-90%
	Best practice	>90% or no important or sensitive habitats identified.
Justification	EIA report: Chapter 10 - Ecology and Nature Conservation section: <i>'Extensive measures detailed in 'Mitigation and Monitoring' [including] the strategic retention and expansion of 'key corridors' within and around the development to ensure that roost connectivity, coupled with the creation of 70 ha of new woodland and lakes, double planting of hedgerows, sympathetic management and the placement of artificial summer and hibernation roosts within the Community Park, it is considered that any adverse effects will not be ecologically significant'.</i> All ' <i>Residual Effects</i> ' of the development following pre and post mitigation (Table 10.17: Ecology section) across all Habitats and Faunal species are stated as 'not significant'.	
Links to policy	SPG) 7.1: NATURAL ENVIRONMENT, 7.2: BIODIVERSITY LDF) SNC10 - Landscape, Biodiversity and Cultural Heritage	

Standard achieved
Best Practice

Enhancement of ecology

<i>Objective</i>	To improve and strengthen the ecological value of the site and existing habitats.	
P2	Question 5.2 (1)	Will there be an increase in the valued habitats either by area or increased ecological value (as assessed by an ecologist)?
<i>Targets</i>	Minimum	Landscape, Biodiversity and Cultural Heritage Strategy with detailed measures for enhancement to increase ecological value.
	Good practice	Minimum PLUS increase in one habitat.
	Best practice	Minimum PLUS increase in more than one habitat (or no valued habitats identified).
	Standard achieved Best Practice	
<i>Justification</i>	<p>Masterplan: Landscape section details the key aims and features of the 207 ha Community Park. These include:</p> <p><i>'Habitat protection and where necessary translocation'</i></p> <p><i>'Enhancement of biodiversity value through habitat creation'</i></p> <p><i>'Protection, enhancement and the creation of habitats within the park, including the local Wildlife site close to sherford Cottages, to encourage diversity, reinforce the local flora and fauna and mitigate for loss of habitat in the development area'</i></p>	
<i>Links to policy</i>	SPG) 7.1: NATURAL ENVIRONMENT, 7.2: BIODIVERSITY LDF) SNC10 - Landscape, Biodiversity and Cultural Heritage	

P3

<i>Objective</i>	To improve the ecological value of the site and provide additional ecological features and habitats.		
<i>Question 5.2 (2)</i>	Will any additional ecological features like woodland or wetland be created?		
<i>Targets</i>	Minimum	Landscape, Biodiversity and Cultural Heritage Strategy with detailed measures for enhancement.	Standard achieved Best Practice
	Good practice	One additional feature.	
	Best practice	More than one additional feature.	
<i>Justification</i>	Masterplan: Landscape section details key features of the 207 ha Community Park. These include: <i>'Protection and enhancement of the more sensitive landscape character of the south west Sherford Valley'. 'Habitats that will be enhanced by the creation of the Community Park include, native woodland, wetland areas in the valley floor, existing hedgerows and grasslands'. 'This would also include additional identification and mapping of existing features and the creation of additional areas of: Native woodland and woodland edge planting (mixed age planting), including planting of groundflora; New wetland areas in the valley (incorporating open water, aquatic, marginal and marsh habitats.); Reinforcement of existing hedgerows (through the creation of a second hedge parallel to the first (double planting) less intensive hedgerow management regimes and new hedgerow planting'.</i>		
<i>Links to policy</i>	SPG) 7.1: NATURAL ENVIRONMENT, 7.2: BIODIVERSITY		

P2

Objective	To improve the ecological value of the site and support the viability of species by linking populations and habitats.	
Question 5.2 (3)	Will any new wildlife corridors be created to link habitats within the site or link to habitats outside the development?	
Targets	Minimum	Wildlife corridors internal to site only.
	Good practice	Link to 2 habitats.
	Best practice	Links to more than 2 habitats with 1 habit external of the development site.
Justification	Masterplan: Vision - <i>'Provide wildlife corridors through the town from the west to the east and north to the south, and enable these to link to the wider network for example Saltram House'.</i>	
	Masterplan: Landscape section - <i>'Wildlife Corridors: These are primarily designed to provide potential linkages to off-site areas including saltram house for wildlife movement and use and not for public access'.</i>	
Links to policy	SPG) 7.1: NATURAL ENVIRONMENT, 7.2: BIODIVERSITY LDF) - SNC10 - Landscape, Biodiversity and Cultural Heritage	

Standard achieved

Best Practice

Planting

<i>Objective</i>	To increase the number of trees on the development for wildlife, amenity and pollution purposes.		
P3	Question 5.3 (1)	Will the development increase the number of trees on the site (after deducting any destroyed by development)?	
<i>Targets</i>	Minimum	<5%	Standard achieved Best Practice
	Good practice	5-10%	
	Best practice	>10%	
<i>Justification</i>	The entire scheme will result in a net increase in the number of native trees within Sherford and it has been stated by the Landscape Architect that he believes the overall biodiversity of the site will improve markedly after the completion of the development. Within the Community Park 70 ha is expected to be planted with native broadleaved trees which will deliver a net increase in the number of trees on the site.		
<i>Links to policy</i>	SPG) 7.2: BIODIVERSITY		

P3

<i>Objective</i>	To ensure that the trees and shrubs that are specified contribute to the ecological value of the site.	
<i>Question 5.3 (2)</i>	Has a mixture of locally occurring native deciduous and evergreen trees and shrubs been specified?	
<i>Targets</i>	Minimum	<60%
	Good practice	60-90% native
	Best practice	>90% native
<i>Justification</i>	<p>Masterplan: Landscape section - <i>'Consideration should be given to the planting of native species across the whole site'.</i></p> <p>Sherford Town Code: Part I: Town wide Regulation:Green Structure contains the following commitment regarding 'Street Trees' - <i>'At least 80% of the mix chosen shall be of a native species for the Town Plan as a whole'.</i></p> <p>Sherford Town Code: Part I: Town wide Regulation:Green Structure contains the following commitment regarding 'Greenways' -<i>'Tree and shrub schedules will contain 75% native species'.</i></p>	
<i>Links to policy</i>		

Standard achieved
Good Practice

Category

Business

Category objective

To ensure that the development contributes to the sustainable economic vitality of the local area and region.

Competitive business

<i>Objective</i>	That new business space should complement and enhance those businesses already in the local area, as well as encouraging new inward investment and business start ups.	
P1	Question 7.1 (1)	Will new business premises increase/maintain the viability of existing businesses, whilst developing priority business sectors and actively encouraging new inward investment?
<i>Targets</i>	Minimum	Economic study carried out shows that business premises will meet the needs of existing businesses in the area.
	Good practice	Minimum PLUS a range and choice of appropriate premises for business needs, including incubator units for business starts ups, and units for micro, small and medium sized enterprises, to cater for organic growth and active encouragement of new inward investment.
	Best practice	Good Practice PLUS identification and development of priority business sectors for the area, including clusters of related activity, and other key business sectors of importance sub-regionally as identified in the RES.
<i>Justification</i>	In the development of the Employment, Retail and Commercial Strategy for Sherford an economic study was carried out assessing the existing and future needs of the area. This was created using the Regional Spatial Strategy, the Local Development Framework for Plymouth and Plymouth's Core Strategy among other documents. The results of this research have been taken on board in the provision of commercial and business space within the development. The development of a variety of commercial space forms a key element of the strategy for Sherford including the development of appropriate units for start-up businesses.	
<i>Links to policy</i>	Policy E1 and E2 of the South-West RSS Strategy document.	

Standard achieved
Best Practice

Employment

P1

<i>Objective</i>	To create additional permanent jobs within the local area.		
Question 7.2	What is the potential for the development to create additional permanent jobs either through new business or for maintenance of the development?		
<i>Targets</i>	Minimum	Net % increase in jobs in local area (Sherford and surrounding towns).	Standard achieved Good Practice
	Good practice	Increase in jobs and local skills base.	
	Best practice	Good Practice PLUS training opportunities to be provided by site facilities that will help local workers upskill.	
<i>Justification</i>	Masterplan: Employment, Retail & Commercial section - <i>'Based on evidence derived from the comparator town study, we estimate that the number of jobs that will derive from the resident population could total up to 2,000'.</i>		
<i>Links to policy</i>			

Live-Work

<i>Objective</i>	To reduce dependency on private car use for trips to work generated by an increased population.	
P1	Question 7.3 Percentage of dwellings with designated live-work premises.	
<i>Targets</i>	Minimum	<p>Commitment for all Dwellings to meet criteria for EcoHomes Credit Tra 4 'Home Office'</p> <ul style="list-style-type: none"> - minimum wall size of 1.8m - 2 double mains sockets - 2 phone points - window and adequate ventilation <p><i>(in dwellings with two bedrooms or more this must be in a room other than the kitchen, living room, master bedroom or bathroom. One-bedroom / studios the work space may be in the living room or bedroom)</i></p>
	Good practice	Provision for <5% of all buildings to be used for commercial premises (with priority to purchase / rent given to residents).
	Best practice	Provision for >5% of all buildings to be used for commercial premises (with priority to purchase / rent given to residents).
<i>Justification</i>	In complying with EcoHomes 'Excellent' all dwellings will meet the requirements of the minimum standard requested within the 'Minimum' standard.	
<i>Links to policy</i>	LDF) SNC8 - Economy	

Standard achieved

Minimum

Lifelong Learning

<i>Objective</i>	To support the local skills base by providing appropriate training facilities and infrastructure to accompany incoming businesses.		
P2	Question 7.4	Distance for residents to travel to a facility offering job, general career training and business advice.	
<i>Targets</i>	Minimum	All residents within a 10km radius of the facility.	Standard achieved Minimum
	Good practice	All residents within a 5km radius of the facility.	
	Best practice	All residents within a 1km radius of the facility.	
<i>Justification</i>	The Sherford Development is located within 10km of central Plymouth where all the above facilities are situated.		
<i>Links to policy</i>			

Sustainability Framework Weightings

		Best	Good	Min
		1	0.7	0.3
P1	1	1	0.7	0.3
P2	0.85	0.85	0.595	0.255
P3	0.7	0.7	0.49	0.21