city centre and university area action plan 2006-2021 sustainability appraisal

issues and preferred options consultation

november 2008

 Plymouth city council
department of development
1 Introduction .................................................................................................................. 4
   What is Sustainability Appraisal? ............................................................................... 4
   What is the City Centre Area Action Plan? .............................................................. 4
   What does Sustainability Appraisal involve? ......................................................... 5

2 City Centre Sustainability Issues ............................................................................. 8
   Improve health, well being and community safety ................................................ 8
   Support communities and neighbourhoods that meet peoples' needs ................... 9
   A diverse and thriving economy that meets peoples' needs ................................. 11
   A well connected city that meets peoples' need for access to places and services with least damage to communities and the environment ................................. 12
   Maintain and enhance the quality of the city's built and natural environment .......... 14
   Minimise consumption of natural resources ......................................................... 16

3 Appraisal of the City Centre AAP ......................................................................... 17
   Testing Plan Objectives .......................................................................................... 17
   Testing the AAP - Strategic Approach .................................................................. 21
      Strategic Approach 1: The Do Nothing Option .................................................. 21
      Strategic Approach 2: A Sustainable City Centre Strategy .............................. 23
      Strategic Approach 3: A two-centred, bi-polar city .......................................... 24
      Strategic Approach 4: Flood risk options ......................................................... 25
      Strategic Approach 5: Heritage Driven, or Development Driven Regeneration ........................................................................................................ 26
      Strategic Approach 6: Regeneration led by sustainable transport options ......... 27
      Strategic Approach 7: Low Carbon Options .................................................... 28
      Strategic Approach 8: Low Retail Growth Option ............................................. 30
   Testing the AAP - Preferred Key Ingredients ......................................................... 31
      Key Ingredient 1: Quarters Plan ................................................................. 31
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Ingredient 2: Large retail led development</td>
<td>32</td>
</tr>
<tr>
<td>Key Ingredient 3: Historic Environment</td>
<td>33</td>
</tr>
<tr>
<td>Key Ingredient 4: Transport and Movement Principles</td>
<td>33</td>
</tr>
<tr>
<td>Key Ingredient 5: Design and Public Realm</td>
<td>34</td>
</tr>
<tr>
<td>Key Ingredient 6: The West End</td>
<td>34</td>
</tr>
<tr>
<td>4 Conclusions</td>
<td>36</td>
</tr>
<tr>
<td>5 Appendices</td>
<td>38</td>
</tr>
</tbody>
</table>
1 Introduction

1.1 Planning Authorities are required to produce a Sustainability Appraisal (SA), alongside plans that form part of a Local Development Framework (LDF). Plymouth's City Centre Area Action Plan (AAP) is such a plan. This document is the SA report to accompany the November 2008 Issues and Preferred Options Consultation document that has been produced as part of the preparation of that Area Action Plan.

What is Sustainability Appraisal?

1.2 Sustainability Appraisal uses a range of sustainability objectives and indicators to test whether the plans, policies and proposals are the best possible ones for delivering sustainable development. Sustainability Appraisal is a tool that is used to ensure the full range of environmental, social and economic effects of the LDF are considered during a plans formulation. It seeks to ask the following questions about these effects:

- Could these effects be of special significance?
- Are there ways of reducing or mitigating adverse effects?
- Can any beneficial effects be further enhanced by positive planning?

1.3 The SA plays an important role in improving the quality of the councils LDF by ensuring that it seeks to deliver national & local objectives for sustainable development.

1.4 Sustainability Appraisal is a mandatory requirement of the Planning & Compulsory Purchase Act 2004 for the production of all DPD's & SPD's. This SA will also fulfil the requirement for the AAP to assessed in line with the Strategic Environmental Assessment (SEA) Directive (2001/42/EC).

1.5 Whilst SA is an iterative process, a key output is a Sustainability Appraisal report which describes what elements of the plan have been appraised and how, and the likely significant sustainability effects of the implementation of the plan.

1.6 This document is published along with the AAP consultation document, to inform the process. It is also open to comment, as part of this consultation process.

What is the City Centre Area Action Plan?

1.7 AAP's are the part of the LDF that provide the planning framework for areas where significant change or conservation is needed. They are central to the delivery of Plymouth’s LDF in that they set the policies and proposals that direct development to the city's waterfront regeneration areas, as well as to the major opportunity sites located along Plymouth's Eastern and Northern Corridors.

1.8 The City Council's vision for the City Centre/University area is to create a lively and vibrant mixed use regional centre which provides high quality regional shopping, together with a range of facilities for living, working and recreation - both by day and night.
1.9 The City Centre Area Action Plan will set out land use policies and proposals to create a real 'downtown' centre that offers residents and visitors a 24-hour lifestyle, with specialised shops, restaurants and pubs alongside a choice of entertainment and culture; as well as improving connections with adjacent areas.

1.10 The Council anticipates there will be 4 key stages in the preparation of the City Centre & University AAP:

- Issues and Options (published March 2005)
- Issues and Preferred Options Consultation Document (November 2008)
- Pre submission draft (due August 2009)
- Submission, Public Examination & Adoption (by November 2010)

1.11 Each of these consultation stages will be subject to a Sustainability Appraisal. The results from these appraisals will be used to improve the plan.

**What does Sustainability Appraisal involve?**

1.12 Plymouth City Council's SA follow the 5 stages set out in ODPMs (2005) guidance: Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents (ODPM, 2005). These are:

- Stage A: Scoping - Setting the context and objectives, establishing the baseline and deciding on the scope of the appraisal
- Stage B: Appraisal & Options - Developing and refining options and assessing effects
- Stage C: Reporting - Preparing the Sustainability Appraisal Report
- Stage D: Consulting on the draft plan and the Sustainability Appraisal Report
- Stage E: Monitoring the significant effects of implementing the DPD.

1.13 The Council published its revised Sustainability Appraisal Scoping Report in March 2008. This is amplified by Chapter 2 of this document which scopes out key sustainability issues specific to the City Centre.

1.14 This report aims to achieve Stages B and C, and will focus on a consideration of the sustainability of the draft AAP's objectives, and the sustainability pros & cons of the different options, and preferred options that exist for delivering these objectives.

1.15 The appraisals are undertaken using an appraisal framework developed and set out in the Sustainability Appraisal Scoping Report (March 2008). The SA framework sets out the sustainability objectives and appraisal criteria that will be used to test whether the options being explored in the draft City Centre AAP, are the best possible ones for delivering sustainable development. The full SA Framework is included in Appendix 1. The SA objectives and appraisal criteria are summarised below in Table 1.
Appraisal Criteria: Does the policy or proposal?

<table>
<thead>
<tr>
<th>High Level SA Objective</th>
<th>Appraisal Criteria: Does the policy or proposal?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve health, well being, and community safety</td>
<td>Improve health &amp; support healthy lifestyles</td>
</tr>
<tr>
<td></td>
<td>Reduce health inequalities</td>
</tr>
<tr>
<td></td>
<td>Reduce anti social behaviour, crime and fear of crime</td>
</tr>
<tr>
<td>Support communities &amp; neighbourhoods that meet people’s needs</td>
<td>Help provide a suitable mix of housing that is available &amp; affordable for everyone</td>
</tr>
<tr>
<td></td>
<td>Support the delivery of a full range of community facilities</td>
</tr>
<tr>
<td></td>
<td>Give everyone access to local opportunities for learning, training, skills, knowledge &amp; culture</td>
</tr>
<tr>
<td></td>
<td>Provide a range of opportunities for people to work locally</td>
</tr>
<tr>
<td></td>
<td>Provide access to open space / greenspace for sports, play &amp; informal recreation</td>
</tr>
<tr>
<td></td>
<td>Help provide opportunities for participation in local action and decision making</td>
</tr>
<tr>
<td>A diverse and thriving economy that meets peoples needs</td>
<td>Support business and enterprise that will improve the quantity and quality of jobs within the city.</td>
</tr>
<tr>
<td></td>
<td>Support the development of a skilled workforce and increase levels of economic participation.</td>
</tr>
<tr>
<td></td>
<td>Encourage local enterprise and support markets for local labour, goods &amp; services.</td>
</tr>
<tr>
<td></td>
<td>Reduce the vulnerability of the economy to climate change</td>
</tr>
<tr>
<td>A well connected city that meets people’s need for access to places and services with least damage to communities and the environment</td>
<td>Reduce the need desire to travel by car or air.</td>
</tr>
<tr>
<td></td>
<td>Help everyone to access basic services easily safely and affordably</td>
</tr>
<tr>
<td></td>
<td>Make public transport, cycling &amp; walking easier and more attractive</td>
</tr>
<tr>
<td>Maintain &amp; enhance the quality of the city’s built &amp; natural environment</td>
<td>Avoid areas of high flood risk and reduce the vulnerability to future flooding</td>
</tr>
<tr>
<td></td>
<td>Maintain and enhance historical buildings, structures, monuments and remains of acknowledged importance</td>
</tr>
<tr>
<td></td>
<td>Provide for a high quality urban environment with highest possible standards of urban design</td>
</tr>
<tr>
<td></td>
<td>Protect &amp; enhance biological &amp; geological diversity</td>
</tr>
<tr>
<td></td>
<td>Protect and enhance local landscape &amp; green space</td>
</tr>
<tr>
<td>Minimise consumption of natural resources</td>
<td>Reduce non renewable energy consumption and green house gas emissions</td>
</tr>
<tr>
<td></td>
<td>Reduce water consumption</td>
</tr>
<tr>
<td></td>
<td>Minimise consumption and extraction of minerals</td>
</tr>
<tr>
<td></td>
<td>Reduce waste</td>
</tr>
<tr>
<td></td>
<td>Minimise land, water, air and light pollution</td>
</tr>
</tbody>
</table>

Table 1 The Plymouth LDF SA Framework: Objectives & Appraisal Criteria

1.16 This appraisal was undertaken alongside the publication of the November 2008 consultation document, with a view to documenting the direction of travel against SA objectives and make recommendations that could be used to improve the Pre-submission Draft. It has been completed in-house by officers within Plymouth
City Council's Planning Service (although separate from the team preparing the AAP), with particular support from colleagues with specialisms in transport and public health.
2 City Centre Sustainability Issues

2.1 The purpose of this chapter is to scope out the key sustainability issues facing the City Centre. The issues at a City wide scale have already been identified as part of the SA Scoping Report (March 2008). The purpose here is to identify the specific challenges or opportunities pertinent to the City Centre.

2.2 There are a number of specific plans, strategies and evidence based studies that help us identify and understand the key sustainability issues facing the city centre. These are:

- The Plymouth Local Development Framework (LDF) Core Strategy (adopted 2007)
- City Centre Future Direction Investment Development Framework (2008)
- Plymouth Shopping Study (2006)
- City Centre Sustainable Neighbourhood Assessment (2007)
- Plymouth Infrastructure Study (2008)

2.3 To provide a baseline, the information from these key documents, and others, is presented against the six headline objectives from the SA Framework:

- Improve health, well being, and community safety
- Support communities & neighbourhoods that meet people's needs
- A diverse and thriving economy that meets peoples needs
- A well connected city that meets people’s need for access to places and services with least damage to communities and the environment
- Maintain & enhance the quality of the city's built & natural environment
- Minimise consumption of natural resources

Improve health, well being and community safety

2.4 The City Centre population can be complicated to analyse in public health terms, as the neighbourhood includes pockets of both relatively affluent and disadvantaged groups. The City Centre Sustainable Neighbourhood Assessment (SNA) stated that the health of the resident population (approx 400) was poor compared to much of the rest of the city, especially with respect to their Personal Assessments of their state of health.

2.5 Public health intelligence work in Plymouth routinely groups the city centre population with the third ‘most disadvantaged’ neighbourhoods (out of the 43 recognised neighbourhoods) in the city.

2.6 Families living in the City Centre are a cause for public health concern, with nearly 11% in temporary accommodation and 8.5% experiencing poor housing-related health effects. A third of families are described as vulnerable and 10% experience social isolation, a fifth have a parent with depression/mental ill-health; 23% are
single-parent families; 12% have problems with English; 41% are rated as low-income and benefit-dependent. In each case, these Health Visitor results are some of the worse in the city.

2.7 Life expectancy for all groups in Plymouth has risen by 3.2% since 1991. However, life expectancy for the most disadvantaged neighbourhoods such as the City Centre has only risen by 3%, in contrast with a rise of 3.3% for the most advantaged neighbourhoods.

2.8 The City Centre was seen as the 5th worst neighbourhood in terms of crime, perhaps resulting from previous design policies for the built environment. Crime statistics for the City Centre Neighbourhood for 2007/8 were:

<table>
<thead>
<tr>
<th>% total detected</th>
<th>Recorded this year</th>
<th>Recorded last year</th>
<th>%change year on year</th>
<th>Total detected this year</th>
<th>% total detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4196</td>
<td>4602</td>
<td>-8.8%</td>
<td>1715</td>
<td>40.9</td>
</tr>
</tbody>
</table>

2.9 To improve the legacy of this social environment, the AAP should not only aim to increase the number of residents in this area, in order to increase the critical mass necessary to support necessary services, but also broaden the provision of access to health facilities for the proposed additional residents in the city centre area.

2.10 Providing locations for primary and community health services needs to be considered as part of the development of the AAP. Alternatively, good access to facilities close to the city centre, but immediately outside of the boundary will be required to ensure that the ‘new community’ becomes a sustainable unit.

Support communities and neighbourhoods that meet peoples’ needs

2.11 The City Centre Sustainable Neighbourhood Assessment (SNA) indicates that the range, type and mix of the housing stock is not well balanced. Just 33% of the available homes were owner-occupied (as opposed to 64% for the city as a whole and 69% nationally). 82% of the stock was made up of flats and less than 1% was detached properties. The majority of the housing stock is occupied by the student population, with a small enclave of sheltered accommodation at Harwell Court. Currently, the lack of affordable housing in the City Centre is an issue.

2.12 Given the small number of schoolchildren currently living in the City Centre, there are no primary or secondary schools within the AAP area. The City Centre includes a large part of the campus of the University of Plymouth, which is a major international educational institution. Further tertiary educational facilities are provided at the City College, about 2 km from the City Centre. It is essential that good access to primary, secondary and tertiary facilities is provided for the schoolchildren and students, who will be living in the City Centre in future years.
2.13 With respect to local primary and secondary schools provision, the latest proposals contained with the Lifelong Learning strategy document (Ideas for Change II) envisage:

- the expansion of St Peter’s CE Primary School to meet the additional demand from the Millbay redevelopment;
- the expansion of Holy Cross RC Primary School on a new site in Exeter Street;
- the eventual demise of The Cathedral RC Primary School;
- a new secondary school, based on Stoke Damerel Community College, to meet the additional demands of the waterfront developments.

2.14 Any additional demand for primary school places arising from the City Centre development would be met at Pilgrim and Holy Cross Primary Schools, suitably expanded. The new secondary school referred to above and/or Lipson Community College would be expected to meet any additional demand for secondary school places.

2.15 The City Centre SNA stated that there was a poor balance of economic activity - with a large proportion of the population economically inactive, due to poor health and a lack of employment skills.

2.16 The Employment Land Review (Baker Associates 2006) stated that, whilst Plymouth as a whole has an excess of allocated employment land, there will be a shortfall of 10 hectares in the City Centre and Waterfront areas.

2.17 Plymouth City Council and the nearby University of Plymouth are the major public sector employers for the City Centre.

2.18 The Employment Land Review (ELR) stated that changes in the nature of employment, away from the manufacturing and distribution sectors towards knowledge-based commercial development, meant that considerably more jobs could be created on a given footprint of land. This would enable more employment and a wider range of employers to be concentrated in the City Centre.

2.19 The AAP will need to ensure that new residents are provided with a wider range of employment opportunities - and that a better quality of life is promoted to enable a higher proportion of existing residents to find work.

2.20 The City Centre has significant areas of open space in the form of public realm, but this is generally of poor quality. There is a shortage of accessible green space within the area, although significant green space assets such as Central Park and the Hoe are nearby, but access to these limited by a number of physical and perceptual barriers. There is one small play space in New George Street, but no allotment provision (although allotments exist in Central Park).
2.21 The City Centre is the main location for cultural activities, with several theatres and music venues in the area and adjacent to it. Sports facilities are provided at the nearby Pavilions complex and at Central Park. Although physically close to the area, the latter is not well connected to the City Centre.

2.22 The AAP should address the severance between the City Centre and neighbouring open space, leisure and cultural facilities - most notably those in Central Park.

A diverse and thriving economy that meets peoples' needs

2.23 The Plymouth Shopping Study (PSS 1996) indicated that a major expansion of the city's core retail area would be necessary. It estimated that within the Plymouth catchment area a total of about £1,245bn of retail expenditure was available. Of this, Plymouth City Centre only attracted about £637m (51%).

2.24 The Plymouth LDF Core Strategy states that:

- The City Centre performs at about the average level, in retail terms, for a city of its size. However, there is a need for continued investment to establish its regional shopping role and to deliver regeneration benefits.
- Much of the office accommodation within the City Centre is out of date and dispersed, rather than within a clearly identifiable office core.

2.25 The City Centre Future Direction Investment Development Framework (2008) concluded that:

- The current footprint of the retail core is too large (larger than both Manchester and Liverpool).
- The unit floor size for the prime stores is too small - and too inflexible.
- 75% of the shops in the retail core are poorly anchored (by major retailers).
- Much of the retail stock is over 40 years old and is in a poor physical condition.
- The build quality of many retail units - notably those to the North and West of the core - is of a low standard.
- This provides a series of opportunities to expand and renew large sections of the City Centre's retail offer.

2.26 Beyond 2011, the PSS forecast that there will be a growing capacity for additional floorspace, as a function of both greater available expenditure and expenditure growth per person.

2.27 By 2016, the PSS forecast that there will be capacity for a significant further development in the city - or a number of more modest developments. This could be of the order of two Drake Circus Developments.

2.28 The PSS estimated a growth in:

| By 2011 | By 2016 | By 2021 | By 2026 |
### City Centre Sustainability Issues

#### 2.29 To retain a greater proportion of retail spending within the city and to establish Plymouth as a Regional shopping destination, a significant increase in the quantity and quality of retail floorspace is required. This should include one or more new anchor stores.

#### 2.30 The economic base of the city centre should be diversified to include more, better-designed office accommodation.

**A well connected city that meets peoples’ need for access to places and services with least damage to communities and the environment**

#### 2.31 The City Centre is a multiple origin-and-destination trip generator for employment, residential, leisure and shopping purposes - and it is the principal destination for both the city’s residents and from those living further afield.

#### 2.32 The inner ring road, which surrounds the heart of the AAP area and separates the University Campus from the city centre core, performs a number of functions, some of which give rise to a conflict of purpose. Different sections of the inner ring road act as both arterial and distributor roads. Through traffic from the commercial ferry port and the east-west traffic movements occupy the same carriageways as local traffic. Public transport has some priority, but is still hostage to both private and commercial vehicular traffic flows at junctions - and to frequent interruptions at pedestrian crossings.

#### 2.33 The road demarcates the central area, but is perceived to be a 'concrete collar' that discourages pedestrian movement and commercial expansion. The nature and critical future role of the Inner Ring Road is currently the subject of an investigation facilitated by CABE, with consideration being given to the reassignment of the Royal Parade section as a public transport corridor. Severance from the surrounding neighbourhoods and facilities, particularly from Millbay and Central Park, is seen as a major difficulty to integrating the city centre with the surrounding urban area.

#### 2.34 The city’s main railway station is located just to the north west of the AAP area and is a critical element of public transport infrastructure. Its current poor relationship to the rest of the city, poor accessibility, lack of prominence and legibility and unattractive design and setting seriously denigrates the first image many travellers get of the city.

<table>
<thead>
<tr>
<th>Convenience Expenditure</th>
<th>£17m</th>
<th>£37m</th>
<th>£80m</th>
<th>£117m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison Expenditure</td>
<td>£158m</td>
<td>£429m</td>
<td>£859m</td>
<td>£1,443m</td>
</tr>
<tr>
<td>Floorspace capacity</td>
<td>22-38,000 sqm</td>
<td>57-92,000 sqm</td>
<td>106-172,000 sqm</td>
<td>165-268,000 sqm</td>
</tr>
</tbody>
</table>
2.35 The City Centre is a starting and finishing point for many of the local bus services, as well as for national and sub-regional bus and coach services. Bretonside bus station is a very poor gateway to the city. Remedial works have been carried out in recent years, but in addition to poor design and accessibility issues, problems such as vagrancy and anti social behaviour contribute to the overall negative perception. The relocation and replacement of the bus station facility are recognised as essential components of future transport infrastructure for Plymouth.

2.36 There are currently 23 public car parks serving the city centre, providing a total of 5,647 spaces, of which 244 are disabled parking spaces. Plymouth has low car parking to retail floor space in comparison to other equivalent cities. In addition, the city centre is served by 3 Park and Ride sites (at Central Park, Coypool and the George) with a total of 1,580 car parking spaces.

2.37 However, potential users to the east and west of the city are not currently served by Park and Ride services. The proposed High Quality Public Transport link serving Langage, Deep Lane Park & Ride, Sherford, Plymstock, Plymstock Quarry and the East End will improve the accessibility of the City Centre by public transport for all people using the A38 and living to the east of Plymouth. Longer term plans have identified a need for a Park & Ride at Saltash.

2.38 At peak times, the principal junctions and roads of the City Centre already suffer from significant congestion, which is believed to have a detrimental effect on the economic viability of the city centre. The construction of the Drake's Circus shopping centre and the provision of a surface-level pedestrian crossing on Royal Parade have added to congestion.

2.39 The tension between providing sufficient highway capacity to enable appropriate vehicular traffic movement to access the city centre - and for through-traffic driving through it to other destinations is a key sustainability issues facing the City Centre.

2.40 The traffic generated by the Drake's Circus redevelopment has resulted in significant congestion for public transport services on the City Centre loop. Bus operators have reported lost mileage and severe delays. Associated route amendments have reduced the accessibility of the East End from some parts of the City.

2.41 At present, there are capacity problems for public transport on Royal Parade. Longer and wider buses have been employed on routes around the city in recent years, resulting in the bus stop provision on Royal Parade becoming increasingly inadequate. Improvements in bus services, resulting in an increase in the frequency of services on key corridors, is exacerbating this problem, as typically more than one bus is at any given stop, at any one time.
2.42 Bus operators have concerns with the increasing number of pedestrian crossings on the City Centre loop. Operators cite delays at traffic lights as one of the reasons why extra resources have been put into their routes to maintain current frequencies.

2.43 Mayflower East car park currently houses the Community Transport Shopmobility hire centre. The site is some distance from the main bus stops on Royal Parade and does not have a high profile. The dedicated Ring and Ride stop on Derrys Cross, and the Shopmobility service in Mayflower East and Drake Circus, would benefit from having a greater prominence as they are both ways in which the access of disabled and elderly people to the City Centre could be improved.

2.44 The delivery of the national concessionary fares scheme is a key issue affecting the accessibility of the City Centre. Free travel, for the over 60’s and the eligible disabled, is improving the access of both the City’s residents and of people from further afield. However, the large number of concessionaires is currently posing the City Council a challenge because of reduced capacity on the buses for fare paying passengers and the withdrawal of commercial routes by operators due to reduced revenue.

2.45 The whole of the pedestrianised area of the city centre is currently a no cycling zone. This is clearly a barrier to the promotion and development of cycling in the city. Provision for cyclists on key arterial routes into the centre is very patchy. Few recent pedestrian or cycling surveys have been undertaken, but those available indicate that scale of pedestrian movement around, into and out of the City Centre is significant; but there is a lack of strategy as to how to accommodate and encourage increased demand for these modes.

2.46 The attractiveness of the City Centre to pedestrians & cyclist must be enhanced. Balancing these improvements, whilst also avoiding major detrimental impacts on other transport modes is a key sustainability issue for the City Centre.

2.47 The AAP needs to set out a transport strategy that takes account of the radical change in transport use that will take place in the city centre in the coming decades. This will need to accommodate the change in city centres social environment from a retail led destination to a mixed use neighbourhood with a large residential community. It will also be necessary for the changing nature of transport demand/supply to be taken into account with a projected long term decline in provision for driver only car journeys and a progressive emphasis on more sustainable modes such as walking, cycling and public transport.

Maintain and enhance the quality of the city’s built and natural environment

2.48 Although many of its historic buildings were extensively damaged or destroyed during the Second World War (1939-45), parts of the rebuilt Plymouth City Centre have considerable significance as a prime example of twentieth century design. The city centre plan, with its symmetrical axial boulevards is one of the last examples of
Beaux-Arts town planning. Plymouth has importance within the history of post-war reconstruction, as it was developed using a modular grid and an axial arrangement - and the reconstruction process was led by the key figure of Sir John Abercrombie.

2.49 At a local level, the rebuilding of the city centre is of great significance historically and socially, and it has shaped the character and appearance of the city today.

2.50 The architectural interest of the City Centre focuses predominantly on Royal Parade, Derry’s Cross, St. Andrew’s Cross and Old Town Street. Local Building historian Jeremy Gould also argues that buildings such as Pearl Assurance House, Dingles, and the former National Provincial Bank, are nationally significant examples of 1950’s and 1960’s architecture.

2.51 In defining its character and appearance, the existing City Centre is very much that proposed in the ‘Plan for Plymouth’. This is most evident in the arrangement of streets and land uses, which are based on what was envisaged, notably the axial arrangement of Armada Way, Royal Parade, and New George Street. The surviving building line, along these streets together with the wide ‘boulevards,’ are considered positive assets to be preserved, as are the principal views arising from the planned form. As a basis for the protection and improvement of the best parts of the existing centre, guiding principles and policies were set out in the City Centre Urban Design Framework, to include these aspects of the surviving plan.

2.52 Some aspects of the public realm are very strong and positive, particularly the re-landscaped part of Armada Way immediately north of Royal Parade, the tree lined southern side of Royal Parade, and the Jellicoe-designed civic square.

2.53 The Plymouth City Centre Precinct Urban Design Framework (2001) identifies a number of key issues for the City Centre:

- Over emphasis on shopping and day time uses
- Physical and psychological barriers to pedestrian movement & the poor relations with surrounding neighbourhoods and university
- General decline in quality of shop fronts
- Monotony of parts of town scape causes problems with legibility, and lack of inspiration (ie few landmarks or reference points)
- Large block sizes exacerbate permeability problems
- Buildings are too low compared to the width of its streets
- Links with Railway Station are very weak
- Railway & Bus station are poor gateways / points of arrival
- Poor weather protection / street comfort

2.54 The Plymouth’s Strategic Flood Risk Assessment identifies that there is a potential long-term risk of flooding in some parts of the City Centre if mitigation measures are not put in place in Millbay.
Minimise consumption of natural resources

2.55 The Plymouth LDF Core Strategy makes the following commitments:

- ‘... work towards carbon neutrality by minimising energy consumption and providing for renewable energy’.

- Reducing the consumption of non-renewable sources e.g. fossil fuels, land, soil, and minerals in line with national and regional targets.

- Ensuring that all major new developments incorporate onsite renewable energy production equipment to off-set at least 10% of predicted carbon emissions for the period up to 2010, rising to 15% for the period 2010-2016.

2.56 Since the publication of the Core Strategy, government has published Building a Greener Future (which requires all new homes to be carbon neutral by 2016) and the Climate Change Supplement to PPS1. These policy initiatives place responsibility on local authorities to look for opportunities to plan low / zero carbon developments through the investigation of area wide energy networks.

2.57 There is currently no significant renewable energy generation in the AAP area. The scale of redevelopment aspirations and land ownership patterns within the city centre means that potential to integrate area wide low carbon solutions to energy generation is significant.

2.58 Royal Parade, Cobourg Street and Western Approach all have high air pollution levels generated by vehicles. It is expected that parts, if not all, of the City Centre will be declared an Air Quality Management Area (AQMA) in the near future, due to nitrogen dioxide levels being above the National Air Quality threshold. The growth and development planned for the wider Plymouth area over the next 20 years, and the associated increase in traffic levels, could further worsen that air quality. The proposed change in building size and scale could have a further negative impact on air quality if it causes a canyon effect - already experienced at Mutley Plain.

2.59 As the AAP area would be a significant potential generator of waste, the AAP needs to ensure that the objective of waste minimisation is integrated into proposed development, both as part of the redevelopment as well as in terms of the City Centre's future operation.
3 Appraisal of the City Centre AAP

3.1 Sustainability Appraisal is an iterative process about improving a plan's ability to deliver sustainable development. SA will therefore be an ongoing part of the process of forming the Area Action Plan. In order to document this process there is a need to break this learning into a number of discrete tasks. At this stage in the AAP’s development the tasks are:

- Test the AAP’s Objectives against the SA Framework
- Test the AAP’s ‘options’ against the SA Framework.

3.2 The purpose of these tests and the associated commentary generated in this report is to predict and evaluate the effects of these objectives and options, and to ask the following questions:

- Could these effects be of special significance?
- Are there ways of reducing or mitigating adverse effects?
- Can any beneficial effects be further enhanced by positive planning?

Testing Plan Objectives

3.3 The purpose of this stage of the SA process is to pose a number of questions about the AAP’s Objectives:

- Do the AAP’s objectives provide a sustainable basis for developing options and reflect the key sustainable development issues set out in the SA Framework?
3.4  The planning vision for the City Centre is set out in Plymouth's Adopted LDF Core Strategy: This provides the agreed framework within which the AAP must be developed.

To reinforce the City Centre’s role as a vibrant and thriving regional destination, providing high quality shopping, recreation, culture, civic, education and commercial facilities, well connected to surrounding neighbourhoods, as well as being a safe place of quality in which to live.

The Council’s objectives to deliver this vision are to:

- diversify the current functions of the City Centre to give it more life outside shopping hours, including intensification of residential, office, and cultural uses, including, where appropriate, the introduction of tall buildings.
- significantly intensify the central area to include taller buildings at key locations, and offer visitors and residents a 24-hour life.
- identify a central office core within the City Centre in conjunction with the redevelopment of Millbay.
- provide some quieter areas with enough activity at all times to make it feel safe.
- attract specialised shops, pubs, entertainment and culture.
- ensure connections with adjacent areas are strong, direct and meaningful.
- positively integrate and reinforce the role of the University and the Cultural Quarter as vibrant and strong parts of the City Centre.
- create a more urban environment in the University area through developments which give a better sense of enclosure to the streets.
- enrich the quality of the environment in the City Centre, so that the public areas are clean, safe, accessible and attractive.
- seek opportunities to create better pedestrian permeability north south through the City Centre blocks and ensure that new developments seek to improve the legibility of the City Centre so that everyone can easily find their way around.
- consider the heritage value of the City Centre and University areas as part of its regeneration.
- selectively introduce traffic back into parts of the City Centre.

3.5 A preliminary SA was prepared as part of the development of the Issues and Options document for the City Centre AAP in February 2005. The vision and objectives for the City Centre AAP were also appraised as part of their inclusion within the submission version of Plymouth’s LDF Core Strategy (July 2005), and this appraisal has been refreshed in light of the 2008 revision of SA Scoping report.

3.6 The July 2005 work found the vision & objectives for the City Centre Area Action Plan to be broadly sustainable although, inevitably, some conflict of interest may arise. The issues raised were:
Will alterations to the transport infrastructure generate negative effects elsewhere, create “rat runs”, and increase traffic congestion?

Achieving sustainable urban communities is a positive approach to future planning. However in recreating and restoring residential areas it is important that the new housing stock and design of individual dwelling units meets the needs of the local community at prices they can afford. The design of buildings also needs to be sensitive to the surrounding built environment and should reflect/retain locally distinctive features.

Will the proposals to introduce sensitive design and increase pedestrian and cyclist usage, reduce crime, prostitution and improve safety or should additional/alternative solutions be explored?

Proposals to ease pedestrian movements may encourage more people to travel on foot or by cycle around the city centre and could have a positive effect on economic growth, but it is questionable as to how far proposals will go in encouraging people to switch to alternative modes of transport.

In considering plans for the development of a cultural quarter, uncertainty arises over the extent to which existing buildings will be reused and restored and what the future will be of existing green space.

Proposals to intensify development through increasing density and height will need to be designed with care in order to avoid wind funnelling, overshadowing, and visual conflicts with historic buildings and green space.

Proposals to extend activities outside shopping hours need to be carefully balanced against proposals to increase residential accommodation. Late opening hours and a possible increase in noise and rowdy behaviour may have a negative impact on local communities’ quality of life.

It is important to ensure that materials for construction are sourced locally, and that energy and waste consumption is reduced.

3.7 The refresh of this work in light of the 2008 Scoping report also concluded that the SA objectives and AAP objectives, both seek to enhance and improve the City Centre, and are therefore broadly compatible, but that the implementation of all of the elements would inevitably create some potential tensions: They key points being:

The objective of creating a stronger and more vibrant economy in the City Centre would be very likely to increase the use of natural resources, particularly energy, and manufactured materials. It would also increase the demand for transport services of all types. The AAP must take account of this potential outcome by ensuring that all available and practical means are employed to reduce waste, increase resource efficiency, and uptake of renewable energy solutions.
Tension between conservation of historic assets and the need for redevelopment to achieve increased diversity and intensification, as well as meeting current shopping & service infrastructure requirements.

The SA objectives aimed at encouraging the minimisation of demand and the promotion of sustainable transport modes could directly conflict with the reintroduction of vehicles to existing car-free zones. The presence of traffic and parking in shopping and employment areas will discourage the take-up of public transport and discourage walking and cycling for those purposes.

There is also tension within the competing alternative sustainable modes, in that greater pedestrian priority can impact on public transport journey times, and cyclists and pedestrians are sometimes uncomfortable fellow travellers in busier thoroughfares.

The selective reintroduction of traffic seeks, in part, to enhance street safety through increased activity, particularly during the evening. However, it also has the potential to reduce road safety, damage air quality and lead to an increase in vehicle-related crime.

3.8 The SA recommendation is that these issues be considered in the refinement of strategic options and the development of policy / proposals.
Testing the AAP - Strategic Approach

3.9 There are a number strategic, policy and site based options and alternatives for delivering the planning vision for the City Centre. The City Centre & University AAP Consultation document sets out potential strategic approaches along which the AAP could develop, plus six preferred key ingredients. The role of the SA at this stage is to:

- appraise how these options perform in relation to the SA Framework;
- to facilitate a comparison of how they perform in relation to each other;
- to help provide an objective documentation of the journey of travel towards the preferred approach;
- and to make recommendations about modifications or additions to the options being considered

3.10 In delivering these four elements this SA aims to, provide a transparent evaluation of the pros and cons of the various options that have been considered, and to identify any additional options or consideration that would could improve the emerging strategy’s ability to deliver Sustainable Development.

3.11 This section of the SA presents a commentary / response to Part 4 of the City Centre and University AAP Consultation document and presents this commentary against the range of Strategic Approaches that have been considered to date. These are presented under the following sub headings:

- The do nothing option
- A sustainable City Centre strategy
- A two-centred, bi-polar city
- Flood risk options
- Heritage driven regeneration
- Development driven regeneration
- Regeneration led by sustainable transport options
- Low carbon alternatives
- Low retail growth option

Strategic Approach 1: The Do Nothing Option

3.12 The first option considered in the development of the AAP is the do nothing option. This option would imply that the Local Development Framework does not put in place a strategy for change and regeneration, and does not pro actively attempt to create remedies for some of the issues which have been identified. In practical terms, this might mean that an AAP is not produced for the City Centre.

3.13 However, the lack of a City Centre strategy would have implications for sustainable development across Plymouth, not just the centre. The Core Strategy and Sustainable Communities Strategy still assume that the population of the City will expand to 300,000 by 2021. Therefore to deliver the SA objective for supporting communities that meet peoples needs there is a need to ensure this growing
The population is provided with the full range of services and facilities. A failure to plan for this extra demand for retail floor space in the most sustainable locations (i.e., the City Centre), would potentially generate negative impacts on SA objectives for a well-connected city, to minimise the consumption of natural resources, and maintaining and enhancing the city’s natural & built environment because:

- The lack of a strategy to meet this growing demand would mean development pressure for substantial amounts of out of centre retail floorspace would be hard to resist,
- More people would choose to shop at alternative locations, for example Truro, Exeter, and even Bristol. This would lead to long distance trips, most likely made by car, which would create unsustainable travel patterns as a result of the growth of Plymouth.

3.14 At a more local scale the clear implication of a ‘Do Nothing’ option is that the key sustainability issues identified as characterising Plymouth’s City Centre retail economy would not be addressed. In real terms this would not mean that the City Centre continues to function and ‘tick along’ as it has done. It would mean that the City Centre declines, both in comparison to neighbouring, competing centres, and in respect of the range of services and attractions it offers to the people of Plymouth and the subregion. This scenario would generate negative outcomes for SA objectives for supporting communities that meet peoples needs, a diverse and thriving economy, and maintaining and enhancing the city’s natural & built environment because:

- Any investment taking place would not be guided by a Strategy which could ensure that maximum sustainability benefits for the City Centre were gained by the form and location of new development.
- The poor distribution of anchors across the City Centre would remain as it is today. This, combined with the large geographical size of the City Centre, would mean that the focus of retail activity is pulled more and more to the east of Armada Way, leading to further decline of the West End and the market.
- Unit sizes in Plymouth would remain too small to meet the current demand from retailers, making it difficult for these retailers to invest in the City Centre. Plymouth City Centre would therefore find it increasingly difficult to attract the commercial investment it requires.
- The poor quality of some buildings in the City Centre would not be addressed in a cohesive way, and there would be less potential to pro-actively address the conservation of built heritage assets.

SA Recommendation: The City Centre & University Area Action Plan has a key role to play in the sustainable development of the City Centre and wider Plymouth sub-region.
Strategic Approach 2: A Sustainable City Centre Strategy

3.15 The aspiration to ensure that the strategy retains the ‘Golden Thread’ of contributing positively to the delivery of sustainable communities is an approach strongly supported and advocated by this appraisal. Many of the SA Objectives have strong parallels with those expressed in the LDF Core Strategy objectives for the Building of Sustainable Linked Communities, and therefore this approach to options for developing the strategy is endorsed. The weakness to this ‘golden thread’ is its failure to respond to the principle of ‘Living within Environmental Limits’. The sustainable linked communities policy within the Core Strategy makes no reference to environmental limits, (because they are covered by other Core Strategy objectives and policy).

3.16 The SA recommends that the golden thread for the AAP is broader than just the Core Strategy objective for sustainable linked communities and that the golden thread should be amended to include a more rounded definition of sustainable development and specifically the inclusion of the principle of environmental limits.

3.17 This SA supports this ‘golden thread’ approach because it can help to understand and balance many of the strategic options faced in the production of the City Centre & University Area Action Plan. The City Centre is a unique form of sustainable neighbourhood, in which many of the challenges and issues for delivering sustainable development occur from the tension between the city centre potential function/role as a regionally significant centre and its potential role/function as a local neighbourhood where people live, and where communities thrive.

3.18 An example of this tension is the debate about the AAP’s direction in relation to the following issues:

- The need to set a framework that provides a commercially attractive investment opportunity to large retailing organisations that can provide the commercial injections required to generate a sustained change in the city’s retail economy,
- Against the need to support strategic measures that support SME’s, create a culture of local enterprise, and generate markets for local goods and services.

3.19 There is a strong case to be made that both approaches support the SA objective for ‘a diverse and thriving economy that meets peoples need’, but the definition of need is difficult to interpret for a city centre that aspires to function as a local neighbourhood, a city centre and ‘the economic hub of the far south west’.

3.20 These strategic options do not need to be mutually exclusive, but there is a risk that the natural gravity associated with large scale city centre redevelopment options could overshadow or preclude interventions focused around more bottom up measures to support the local economy.
3.21 These complex characteristics reinforce the need for a strategy that retains a strong golden sustainability thread to ensure that the AAP continues to deliver the required balancing act.

**SA Recommendation**: Golden thread approach is strengthened to include the principle of environmental limits. The golden thread approach should be given greater weight in the shaping the preferred strategy for City Centre to ensure that all proposals are directly linked back to this central theme. For the City Centre this is likely to mean a strategy that gives more emphasis to initiatives that promote low carbon approaches, and address the areas’ growing air quality issues.

**Strategic Approach 3: A two-centred, bi-polar city**

3.22 The Plymouth Shopping Study (2006) identify the need for significant increases in the levels of retail provision to ensure the city has the range of services to provide for the anticipated growth in population and to ensure that it presents an attractive proposition for the inward investment in the employment sectors identified in the Local Economic Strategy.

3.23 There are different ways in which this increase in retail space / employment space could be geographically accommodated. The option of developing a city with two centres has been considered as a part of the development of the LDF Core Strategy and this AAP. These options explored the potential to develop a second centre in northern Plymouth, and therefore focus a large proportion of new development in the City’s Northern Corridor. This option would lead to a substantial reduction in the levels of retail and employment space allocated in the city centre.

3.24 This option scores poorly against the SA objective for a well connected city that meets peoples needs for access to services with least damage to the communities and the environment. Whilst a new centre in northern Plymouth could increase access to services for residents in neighbourhoods to north of the city, the scale of additional commercial development implied by the bipolar city option would probably generate direct competition for services currently provided by the city centre. The likely impact would therefore be an increased desire, and/or need for travel between the two centres, particularly for comparison retailing. Given the substantive public transport infrastructure that already exists around the city centre, there is also a likelihood that this ‘out of centre’ option, would generate an increase in car based trips.

3.25 The SA also identifies concerns about how a bipolar city would support SA objectives for a diverse and thriving economy that meets peoples needs’. These concerns are based around the probability that this option would increase the need to travel and therefore potentially increase the vulnerability of the city’s economy to climate change, but more substantially around the opportunity cost of spreading the
commercial investment across 2 different areas. Chapter 3 identifies a number of very significant structural issues associated with the city centres physical form and economic characteristics. To address these problems Cushman & Wakefield (2008) state that substantial investment is required to deliver a sustained change in the status quo, and that large scale retail led development at Derriford could compromise deliver of City Centre objectives.

SA Recommendation: That a proposal for a bipolar city has significant flaws when tested against SA Objectives, and that council is correct in focusing on the City Centre as the place where the main new retail developments should be concentrated. To achieve sustainable communities at a local scale, additional retail service provision will be required in the northern corridor, but the quantum's associated with this should be restricted so as not to compromise plans for the City Centre's regeneration.

Strategic Approach 4: Flood risk options

3.26 PCC Strategic Flood Risk Assessments identified that due to sea level rise parts of the City Centre could be subject to significant tidal flooding in the period after 2050. The areas within the AAP with the most potential to be affected were the transport infrastructure around Western Approach / Union Street, and the developments around Toy R US, and Colin Campbell Court.

3.27 Development within areas at risk of flooding perform badly against the SA appraisal criteria Avoid areas of high flood risk, and for the SA broader objective around Improving Health Well being and Community Safety. However the risks associated with tidal over topping at Millbay have been addressed through the proposals, and subsequent planning application brought forward through the Millbay & Stonehouse Area Action Plan, and these developments, once in place, will provide protection for the City Centre.

3.28 However the tidal inundation is not the only source of flooding. The low lying nature of the areas noted above means that they are also at risk to flooding generated by surface water drainage issues. Low lying locations around Plymouth suffer from localised flooding associated with surface drainage networking being 'locked' at high tide (ie there is nowhere for the water to drain to). This problem will be exacerbated by sea level rise and the increased intensity of rainfall that is expected in association
with climate change. Data gaps exist in relation to understanding current capacity of surface water drainage system, and where the key areas of future risk are, this knowledge needs to be expanded as part of development proposals.

**SA recommendation:** Flood risk does not represent a strategic constraint to sustainable development within the City Centre, in that it has been mitigated by proposed developments at Millbay. But improvements to essential drainage infrastructure may be required for development proposals around the junction of Union St and Western Approach to ensure regeneration is future proofed against flood hazards caused by tide locking.

---

**Strategic Approach 5: Heritage Driven, or Development Driven Regeneration**

3.29 The tension between the strategic options that the AAP could take in its approach to conserving the city centre’s built heritage against the options for creating a relatively unconstrained investment climate for large retail interests is a significant undercurrent through the AAP consultation document. The evidence base on the City Centre’s heritage assets come to significantly different conclusions of the benefit on different elements of the city's built form to the regeneration agenda.

3.30 This tension is expressed as two opposing options in the AAP consultation document. Heritage driven Regeneration, or Development driven Regeneration.

3.31 A strategy that prioritised heritage driven regeneration could be based on the designation of a Conservation Area for the City Centre, and the consideration of specific buildings for statutory listing. This approach would strongly support SA appraisal criteria *Maintain & enhance historical buildings and structures*, and by endorsing the built heritage role in supporting local distinctiveness could play a positive role in creating a *high quality urban environment with highest possible standards of urban design*. By reducing the need for demolition & rebuild and focusing on retention & reuse, such a strategy could also score high against SA Objective for *minimise the consumption of natural resources*, as long as satisfactory ways of increasing their energy and water efficiency could be retrofitted.

3.32 A focus on heritage conservation would be a potential constraint on the scale and nature of the redevelopment opportunities and aspirations for certain parts of the city centre. If the scale of additional retail floor space set out in the LDF Core Strategy and supported by Plymouth Shopping Study (2006)& Cushman & Wakefield (2008) is what is required to provide the level of retail services that a growing city needs, then this primary requirement must be met without generating an increased need for travel ie shopping at Exeter or Truro. Therefore a strategy that is focused on heritage conservation within the locality of the city centre, would generate significant impacts at a city wide scale in relation to SA Objectives for *peoples need for access to services with least damage to the environment*, and *supporting communities and neighbourhoods that meet peoples needs.*
3.33 The counter position set out in the AAP consultation document is a strategy focused on development led regeneration. This is tabled as a polar opposite to an approach that embraces heritage characteristics. This option would respond strongly to commercial interests and would likely result in a significant reduction in the constraints placed on investors wishing to bring forward development proposals to ensure that the headline objective delivering the growth in retail floor space was achieved, within the desired timetable.

3.34 Given the concerns noted above about the potential negative impacts for the city's sustainable growth of a heritage led approach, a case could be made for a strategic approach that lifts these kinds of constraints. However when consider against all the SA objectives there is little else to recommend a planning approach that reduces the checks and balances that exist to minimise the impacts of development and support the delivery of potential wider community benefits. Whilst there will be confidence drawn from 'enterprise zones' that this approach will deliver the growth agenda there is little evidence or confidence that this approach will deliver it in a manner compatible with the AAP’s Golden Thread or the SA objectives for health / well being, provision of community needs for housing or services, sustainable transport and access, or protecting the built environment.

SA Recommendation: This SA clearly recommends that neither extreme provides a sustainable footing for the City Centre or Plymouth as a whole. The priority heritage assets need to be conserved on a clear understanding of their merit. Their conservation should be debated in the light of a wider understanding of the commercial pressures that will be key in providing local services for Plymouth’s sustainable growth.

Strategic Approach 6: Regeneration led by sustainable transport options

3.35 A transport strategy for the city centre that prioritises, and sets a vision for access to the city centre by sustainable modes is clearly desirable at one level, and completely compatible with the SA objective for A well connected city that meets peoples needs of services with least damage to communities and the environment. It would also score highly against SA criteria for improving health and healthy lifestyles. However in common with the commentary above about the approach to heritage conservation there is a risk that a strategy too heavily focused, in the short term, on sustainable transport solutions could act as a disincentive to the required private sector investors. This in turn would lead to the City Centre potentially performing poorly against its ability to provide the services that a sustainable city requires, and generating a perverse outcome of increasing car based trips to alternative venues such as Exeter.

3.36 Unsurprisingly, to achieve sustainable development, the AAP needs to strike a balance. But this balancing act can only be delivered through the provision of a vision/strategy for sustainable transport within the City Centre that the AAP can the
help to deliver. The Cushman & Wakefield (2008) report clearly articulates an approach / vision for future redevelopment in parts of the City Centre. Whilst section 7.1.2 makes positive noises about the value of an accessible city centre, and the role pedestrians cyclist & public transport have to play in this mix, it also articulates a compelling case for access by car (Plymouth currently has a lower car park / retail floor space ratio than other comparable cities). The lack of this sustainable transport vision means that the required trade offs between the commercial requirements of current and future investors, and the longer term aspirations for sustainable transport infrastructure, cannot be debated equitably. This is a significant gap in the required understanding, and if left unaddressed would generate negative outcomes for SA objectives for health, access, and resource consumption.

SA Recommendations: The AAP should not be led solely by sustainable transport options, but it must be informed by a vision and strategy for sustainable transport that provides a clear statement as to what those options are, and that matches the timescale and ambitions being expressed for regeneration and redevelopment. Additional work should be progressed as a priority to:

- Better articulate the role of pedestrian and cyclist in future movement patterns within the city centre, but also as the primary method of movement from surrounding neighbourhoods
- Take account of the change in transport use in the City Centre which will take place in the coming decades as a result of a response to climate change, to allow this flexibility to be built into the AAP
- Identify preferred locations for public transport routes and provision of attractive multi-modal transport hubs
- Set an aspiration for the level of mode split all new development should be seeking, and provide parameters for all future pedestrian and vehicular movement modelling.
- Recognise the challenges faced by the inner ring road and identify where vehicular capacity of current road network could be compromised to accommodate improvements for pedestrians, cyclists and public transport.
- To explore a low emissions approach to transport, to future proof transport solutions against already anticipated air quality issues
- To identify the most sustainable locations for car parking

Strategic Approach 7: Low Carbon Options

3.37 The recognised need to shift towards a low carbon economy could provide a number of discrete strategic options for the AAP’s ability to generate reduction in the city’s carbon footprint. These are

- Sustainable transport (see points above)
3.38 The scale and character of redevelopment proposed for Cornwall Street, and the northern Triangle provides opportunity for the AAP to set parameters of how these could reduce the vulnerability of the economy to climate change, and minimise the consumption of non-renewable resources.

3.39 The Government has announced that all new homes in England and Wales must be zero carbon by 2016, and there are similar ambitions to cut carbon emissions from new non-domestic buildings by 2019. These targets are to be delivered through a phased increase in Building Regulations. However, the Government has also identified that the planning system has a key role to play in supporting the delivery of this timetable for reducing carbon emissions from domestic and non-domestic buildings.

3.40 The scale and characteristics of developments and redevelopments at the City Centre have a significant and potentially complementary demand for energy that may provide the opportunity for energy solutions at a scale that would not be viable if each part of the site was considered separately. The development of an integrated low / zero carbon energy strategy for these developments as a whole, therefore has the potential to deliver significant additional CO₂ savings, and reduce the level of cost to the developer, and future occupants / residents. Understanding about the practicalities of delivering area wide solutions to low carbon development is growing. This learning needs to be applied within the Plymouth development context to explore its suitability / viability and the output included in emerging proposals of this AAP.

3.41 The City Centre AAP could also set out a pathway towards a low carbon economy based around an approach that sought to reduce / minimise consumption. The high levels of consumption that most developed nations are characterised by are intrinsically linked to our high carbon lifestyles. Against this backdrop, a strategy that sets out a redevelopment agenda focused largely around retail expansion could potentially score poorly against SA objectives for resource use.

3.42 Retailing is responsible for 2.5% of the UK’s Carbon Dioxide emissions (ONS, 2007) and will have a significant influence over a low carbon society and its economy through its marketing, regular customer transactions and globalised supply chains. There is therefore a concern that significant increases in retail floor space will have further unsustainable patterns of consumption and resource use. However unless low carbon living rewrote the book about the nature of society and the need for exchange there is likely to be continuing need for retailing.

3.43 Forum for the Futures (2007) Retail futures - Scenarios for the future of UK retail and sustainable development, identifies that retail has a vital role to play in delivering sustainable development. It employs 2.9 million people and generates almost 6% of GDP. The scenarios explored within this work highlight the significant uncertainty that climate change, new energy systems, resource scarcity amongst others generate for the retail industry.
3.44 Low carbon economies will need to thrive on products / services that are low carbon and are manufactured from renewable resources. It is currently unclear what this will do to patterns of consumption. As no established models for what retailing in a low carbon economy will look like, the only reasonable approach is for the AAP to be progressed on best available evidence / trend data about past patterns, and ensure that sufficient flexibility is built into proposals to accommodate future change. Cushman & Wakefield (2008) work upon which the AAP is evidenced is based on industry’s standard trend data and builds in significant flexibility to accommodate for shifts in patterns of retailing ie economic down turns / recession, shift to internet shopping. Retail markets and potential spatial plans will need to respond to changes in patterns in retailing driven by the climate change agenda, but it is not the role of the AAP to second guess these in relation to how much additional floor space the city will require.

SA recommendation: Low Carbon options should be given significantly more consideration within the strategic direction of the AAP. Reduction of carbon emissions in line with Plymouth’s Local Area Agreement target should be included as an objective for the plan. The AAP can then maximise its potential as a vehicle for delivering against this target by focusing on interventions around the proposed transport strategy for the City Centre, and an integrated approach to low carbon energy solutions.

Strategic Approach 8: Low Retail Growth Option

3.45 The Cushman & Wakefield’s (2008) City Centre Future Direction Investment Development Framework explores some options around smaller quantum’s of retail development in the City Centre. It concludes that these smaller amounts of retail floorspace would provide less scope to provide solutions to the main issues in the City Centre. If these issues are not addressed, a ‘low retail floor space increase’ option would in fact be similar to the ‘Do Nothing’ option discussed under Strategic Approach 1. This would therefore raise similar concerns in relation to delivery of SA Objectives.
Testing the AAP - Preferred Key Ingredients

3.46 This section of the SA presents a commentary / response to Part 5 of the City Centre and University AAP Consultation document and presents this commentary against each of the Preferred Key Ingredients that have been identified:

- Quarters Plan
- Large retail led redevelopment
- Historic Environment
- Transport & Movement principles
- Design & Public realm
- The West End

Key Ingredient 1: Quarters Plan

3.48 The proposal for a Quarters plan contributes positives for a broad range of the SA Objectives. At a high level it indicates the potential to increase the range / diversity of services offered within the city centre and therefore play a role in making Plymouth a more attractive destination for investors that can help stimulate the sectors identified in the Local Economic Strategy. It can play a key role in delivering a higher quality of urban design for the city centre and bring a diversity of street scape that will help objectives for sustainable movement by providing points of reference and making the centre more legible for pedestrian users.

3.49 The detail indicated on page 28 is that this Quarters Plan could encompass a raised profile for the pannier market as a focus for local food retailing. This is a significant plus point for SA objective for health and for SA criteria encouraging local enterprise and markets for local goods / services.

SA Recommendation: SA supports principle of quarters approach. Detail of delivery of quarters plan needs to hold strong to the sustainable communities golden thread and the importance of maintaining a mix of uses within the quarters to avoid impacts of land use zoning. Need to ensure sufficient emphasis is placed in relevant zones for unit sizes that further the enterprise culture within the city and support business start up.
Key Ingredient 2: Large retail led development

3.50 The proposals support SA objective for providing Plymouth with the services it needs and sets out to pro actively tackle the core structural issues around the city centre’s retailing dynamics.

3.51 A healthy and vibrant city centre will help deliver Plymouth’s Local Economic Strategy aspirations by increasing Plymouth’s attractiveness offer' for inward investors and future job seekers within the targeted sectors and therefore can help deliver against the SA objective for **A diverse and thriving economy that meets peoples needs.** Given the scale of inward investment this proposal will require, the sustainability of this ingredient of the AAP could be significantly enhanced by these proposals being developed alongside a strong commitment to measures such as Local Labour Agreement that could assist in the development of a skilled workforce, and measures that could increase business start up.

3.52 The scale and character of redevelopment made possible by the AAP provide opportunities for the plan to set parameters as to how it could reduce the vulnerability of the economy to climate change, and minimise the consumption of non renewable resources.

3.53 The Government has announced that all new homes in England and Wales must be zero carbon by 2016, and there are similar ambitions to cut carbon emissions from new non-domestic buildings by 2019. These targets are to be delivered through a phased increase in Building regulations. The Government has also identified that the planning system has a key role to play in support the delivery of this timetable for reducing carbon emissions from domestic and non-domestic buildings.

3.54 The scale and characteristics of developments and redevelopments at the City Centre have a significant, and potentially complementary demands for energy that may provide the opportunity for energy solutions at a scale that would not be viable if each part of the site was considered separately. The development of an integrated low / zero carbon energy strategy for these developments as a whole therefore has the potential to deliver significant additional CO₂ savings, and reduce the level of cost to the developer, and future occupants / residents.

3.55 Whilst this proposal primarily deals with retail led redevelopment it also tables the proposal of significant residential units. To achieve the SA objective **support communities & neighbourhoods that meet peoples needs and reduce the need to travel** there is a need to ensure that this ingredient of the AAP is developed alongside proposals for provision of a range of services that new residential community will require.

SA recommendation: Evolution of policies and proposals around this ingredient of the AAP need to include commitments to Local Labour Agreement, integrate low carbon energy solutions, and consider mix of uses needed for new residential community
Key Ingredient 3: Historic Environment

3.56 This proposal scores strongly against SA criteria for Maintain and enhance historical building of acknowledge importance. The various built heritage assets within the city centre have been the subject significant analysis relating to their merit and the best mechanism for ensuring their conservation. This ingredient of the draft AAP is based on the results of that analysis, and would therefore appear to be a well evidenced step toward the SA objective for maintaining & enhancing the built environment.

3.57 There is a potential tension between this ingredient and SA Objective for Minimse the consumption of natural resources. The city's existing built stock provides one of the most significant challenges to the reduction of carbon emissions. Therefore the identification of specific heritage assets, that will form a long lasting part of the centre's built form need to be accompanied by positive policies that pro actively require the retrofit of energy efficiency and renewable or low carbon energy solutions.

SA Recommendation: Develop policy approach that supports the retrofit of energy efficiency and renewable or low carbon energy solutions as part of renovation / refurbishment of key heritage assets

Key Ingredient 4: Transport and Movement Principles

3.58 In line with the SA commentary provided in preceding sections of this document, it would appear that this element of the strategy is significantly less developed than other key ingredients. Given that sustainable patterns of movement must be central to the AAP’s approach to delivering A well connected city that meets people needs for for access to services / places with least damage, this area needs to be prioritised for additional work.

3.59 The transport principles articulated in the strategy build on the evidenced need to ensure that the City Centre provides an attractive option for the investors who can assist in the delivery of the required retail expansion and diversification of uses. Given the debate articulated under the section on strategic options, this is an approach that is consistent with some aspects of the city's sustainable development, but is weakened by the lack of a comparable vision & objectives for what is required to deliver sustainable patterns of movement.

3.60 This ingredient could significantly improve its contributions to delivering A well connected city that meets people needs for for access to services / places with least damage by balancing its pragmatic approach to short term requirements for car parking / and maintaining road capacity for vehicle movements, with longer term measures that:
• Articulate and reinforce the role of pedestrian and cyclist in future movement patterns, both within the city centre, but also as a primary method of movement in from surrounding neighbourhoods
• Take account of the change in transport use in the City Centre which will take place in the coming decades as a result of a response to climate change, to allow this flexibility to be built into the AAP
• Identify preferred locations for public transport routes and provision of multi-modal transport hubs
• Set an aspiration for the level of mode split new developments should be seeking, and provide parameters for all future pedestrian and vehicular movement modelling.
• Explore a low emissions approach to future proof transport solutions against already anticipated air quality issues
• Identify the most sustainable locations for car parking

3.61 These measure would significantly increase the way in which this ingredient of the strategy performs against all three SA criteria related to transport. They could also make a positive contribution to Improving health & supporting healthy lifestyles.

**SA Recommendation: Principles need to be rebalanced in terms of a vision for pedestrian, cycle and public transport movements.**

**Key Ingredient 5: Design and Public Realm**

3.62 The principles expressed are broadly in line with a number of SA Objectives around health, local service provision, accessibility & enhancing the built environment. It would be beneficial to SA objective for minimising natural resource use, and the criteria for reducing the vulnerability of the economy to climate change, if the principles around design quality are broadened to encompass the issues around sustainable construction and energy supply. Future critiques about the legacy of quality design left by this period of regeneration & redevelopment within the city will focus on the ability to embrace the required resource efficiency agenda. This agenda needs to placed at the heart of the aspirations for a quality city.

**SA Recommendation: Integrate sustainable construction into approach towards delivery of design quality**

**Key Ingredient 6: The West End**

3.63 The principle of reinforcing and enhancing the role of the West End as the focus for small independent retailing, with the Pannier Market as a focus for local food retailing, could make a strong positive contribution to SA Objectives for Health,
and Economy. Whilst being covered by higher level policies within the LDF Core Strategy, explicit reference to the heritage merits of the Pannier market could help reinforce the role of built heritage in the regeneration of this area.

SA Recommendation: Ensure development raises profile of heritage value of Pannier Market
4 Conclusions

4.1 This SA recognises that City Centre & University Area Action Plan has a significant role to play in the sustainable development of the City Centre, and the wider Plymouth sub region.

4.2 The SA has explored the pros & cons of a number of the strategic options for the future development of the Area Action Plan. This analysis results in a number of recommendations which are summarised below.

- The approach to ensuring sustainable communities is the cross cutting theme throughout the strategy and should be strengthened and widened to include the principle of environmental limits. For the City Centre this is likely to mean a strategy that gives more emphasis to policy and proposals that promote low carbon approaches, and address the growing air quality issues.
- Improvements to essential drainage infrastructure may be required for development proposals around junction of Union St and Western Approach to ensure regeneration is future proofed against flood hazards caused by tide locking.
- Priority heritage assets need to be conserved on a clear understanding of their merit, and their conservation debated in the light of a wider understanding of the commercial pressures that will be key in providing local services for Plymouth’s sustainable growth.
- The AAP must be informed by a vision and strategy for sustainable transport that provides a clear statement as to what those options are, and that matches the timescale and ambitions being expressed for regeneration and redevelopment. This work must be progressed as a priority.
- Low Carbon options should be given significantly more consideration within the strategic direction of the AAP. Reduction of carbon emissions in line with Plymouth’s Local Area Agreement target should be included as an objective for the plan. The AAP can then maximises its potential as a vehicle for delivering against this target by focusing on interventions around the proposed transport strategy for city centre, and an integrated approach to low carbon energy solutions.

4.3 The SA has considered each of the Preferred the Key Ingredients identified in Part 5 of the City Centre & University AAP Issues & Preferred Options Consultation document, and made the following recommendations:

- Detail of delivery of quarters plan needs to hold strong to the sustainable communities golden thread and the importance of maintaining a mix of uses within the quarters to avoid impacts of land use zoning. Need to ensure sufficient emphasis placed in relevant zones for unit sizes that further the enterprise culture within the city and support business start up.
- Evolution of policies and proposals around large retail led redevelopment need to include strong commitments to Local Labour Agreements; the integration of
low carbon energy solutions, and the consideration of the broad mix of uses needed for proposed new residential community

- The development of a policy approach that requires the retrofit of energy efficiency and renewable or low carbon energy solutions as part of renovation/refurbishment of key heritage assets
- Sustainable movement principles need to be rebalanced in terms of a stronger vision and objectives for pedestrian, cycle and public transport movements.
- There is a need to integrate sustainable construction benchmarks as a key criteria for assessing delivery of quality design within the City Centre
## 5 Appendices


<table>
<thead>
<tr>
<th>High Level Objective</th>
<th>Appraisal Criteria: Does the policy or proposal...?</th>
<th>Explanation of the appraisal criteria (where not obvious)</th>
<th>As indicators of progress towards these objectives the Sustainability Appraisal will look for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Improve health, well being, and community safety</td>
<td>1.1 Improve health &amp; support healthy lifestyles</td>
<td>Measures that will reduce physical &amp; mental illness, and improve safety. Sedentary lifestyles and lack of routine basic exercise are one of the main threats to health.</td>
<td>Development that contributes to positive well being through pleasant surroundings/living conditions, access to natural greenspace, freedom from noise &amp; pollution etc. Development that proactively reduces risks associated with known safety hazards ie. road safety, blast zones, tombstoning. Patterns of development that promote active lifestyles ie. where walking &amp; cycling are made attractive as routine forms of transport.</td>
</tr>
<tr>
<td></td>
<td>1.2 Reduce health inequalities</td>
<td>Where you live or your level of income (or other disadvantage) should not increase exposure to health risks or reduce access to a healthy lifestyle.</td>
<td>Development proposals that proactively address existing health inequalities through measures that seek to improve the provision of health care services, address current causes of poor health.</td>
</tr>
<tr>
<td></td>
<td>1.3 Reduce anti social behaviour, crime and fear of crime</td>
<td>Development that designs out crime, eg by providing passive surveillance &amp; avoiding dead spaces and times. Proposals that incorporate design features that address existing issues associated with anti social behaviour.</td>
<td></td>
</tr>
<tr>
<td>2. Support communities &amp; neighbourhoods that meet people's needs</td>
<td>2.1 Help provide a suitable mix of housing that is available &amp; affordable for everyone</td>
<td></td>
<td>Development that delivers appropriate levels of affordable housing and Lifetime Homes. Development that delivers a well-integrated mix of decent homes of different types and tenures to support a range of household sizes, ages and incomes. Development that promotes energy efficiency and affordable warmth in existing housing.</td>
</tr>
<tr>
<td>High Level Objective</td>
<td>Appraisal Criteria: Does the policy or proposal...?</td>
<td>Explanation of the appraisal criteria (where not obvious)</td>
<td>As indicators of progress towards these objectives the Sustainability Appraisal will look for...</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>2.2 Supports the delivery of a full range of community facilities</td>
<td>Community facilities could include shops, GP surgery, pub, bank, places of worship, community centres, leisure or cultural facilities.</td>
<td>Development that addresses identified deficiencies in the provision of community facilities. In providing these facilities they should be grouped to provide strongly identifiable local, neighbourhood or district centres. Cultural facilities as integral part of new development.</td>
<td></td>
</tr>
<tr>
<td>2.3 Give everyone access to local opportunities for learning, training, skills, knowledge &amp; culture</td>
<td>Important both to equip people for economic success and for personal development.</td>
<td>Development that addresses identified deficiencies in the quality and/or accessibility of schools, colleges, libraries and training establishments. Encouragement for a diversification of choice of employment, particularly in areas of deprivation. Schools need to be encouraged to support a wider range of community facilities.</td>
<td></td>
</tr>
<tr>
<td>2.4 Provide a range of opportunities for people to work locally</td>
<td>This can help to promote community strength &amp; identity and vibrancy and also reduce the need to travel.</td>
<td>A balance between the areas economically active population and numbers of jobs. Encouragement for a diversification of choice of employment, particularly in areas of deprivation.</td>
<td></td>
</tr>
<tr>
<td>2.5 Provide access to open space / greenspace for sports, play &amp; informal recreation</td>
<td></td>
<td>Patterns of development that support the provision of a range publicly accessible open space / green space within walking distance of the home. Improvements to the quality of open space / greenspace facilities within walking distance of the home.</td>
<td></td>
</tr>
<tr>
<td>2.6 Help provide opportunities for participation in local action and decision making</td>
<td></td>
<td>Development proposals incorporate provision for community governance.</td>
<td></td>
</tr>
<tr>
<td>3. A diverse and thriving economy that meets peoples needs</td>
<td>Support sectors that can benefit from Plymouth’s competitive advantage as identified within the Local Economic Strategy.</td>
<td>Development that proactively supports the following sectors: advanced engineering, marine industries, and medical/healthcare sectors, financial/business services, creative industries, and tourism.</td>
<td></td>
</tr>
</tbody>
</table>

Appendices
### High Level Objective

<table>
<thead>
<tr>
<th>Appraisal Criteria: Does the policy or proposal...?</th>
<th>Explanation of the appraisal criteria (where not obvious)</th>
<th>As indicators of progress towards these objectives the Sustainability Appraisal will look for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>the quantity and quality of jobs within the city</td>
<td>There is a need to raise skill levels to enable people to take advantage of better jobs and maximise job opportunities for all. Sustainable Economic growth requires a high levels of economic participation from within local communities and will necessitate targeted effort to enable the most deprived communities to realise higher and more sustainable rates of economic activity.</td>
<td>Proactive measures to address social / economic / environmental causes of worklessness and barriers to employment. Development that provides for training of local work force.</td>
</tr>
<tr>
<td>3.2 Support the development of a skilled workforce and increase levels of economic participation</td>
<td>There is a need to increase the circulation of wealth within the city. If business spend more of their income on goods and services within the locality this increases the benefits of business activities to the city and its economic security. This contributes to community strength, cohesion and resilience, as well as reducing the transport and energy intensity of the economy. There is a need to ensure goods &amp; services are procured in a fair and ethical manner when local sourcing is not possible.</td>
<td>Promotion of local &amp; regional markets in goods and services. Business start up units, encouragement to local businesses, especially micro &amp; SMEs that adopt sustainable practices. Use of local labour and materials.</td>
</tr>
<tr>
<td>3.3 Encourage local enterprise and support markets for local labour, goods &amp; services</td>
<td>Need to harness the opportunities associated with the growing market for low carbon goods and services. Extreme weather, crop failures, water shortages at home or abroad may disrupt trade, long distance transport and availability of energy and other resources, and increase insurance liabilities. Need to ensure new employment buildings are designed to provide thermal comfort within higher summer temperatures that can be expected, without a reliance on the expense of air conditioning.</td>
<td>Economic activity that supports the development of a low carbon economy avoids unnecessary dependence on long distance trade and travel. A leisure economy that will encourage people to stay within the city, district or neighbourhood rather than go further a field. Enterprise that seeks to harness the economic opportunities that climate change will bring i.e. renewable or decentralised energy, sustainable construction.</td>
</tr>
<tr>
<td>3.4 Reduce the vulnerability of the economy to climate change</td>
<td>Road traffic is the only major terrestrial source of green house emissions still increasing, the main source of local air pollution and is regularly identified as one of the main threats to local quality of life, due to danger, noise &amp; community severance. Car dependence deepens social exclusion and adds to pressures for unsustainable land use patterns. Reliance on road links for external transport is a particular issue in Plymouth due to poor quality rail links. Air travel is a primary contributor to the causes of climate change, and it is widely recognised that demand for air travel requires management to alleviate some of the ongoing impacts.</td>
<td>Developments that reduce the need to travel, such as ensuring that people live closer to their work, and increasing access to IT facilities to promote modern communication methods that reduce car dependency. Avoid developments that generate further road traffic. Improvement of alternatives to the car e.g., public transport, video conferencing facilities. Live work units and design that facilitate home working. Proposals that improve strategic cycling and walking networks.</td>
</tr>
</tbody>
</table>

4. A well connected city that meets people’s need for access to places and services with least damage to communities and the environment

4.1 Reduce the need / desires to travel by car or air.

Road traffic is the only major terrestrial source of green house emissions still increasing, the main source of local air pollution and is regularly identified as one of the main threats to local quality of life, due to danger, noise & community severance. Car dependence deepens social exclusion and adds to pressures for unsustainable land use patterns. Reliance on road links for external transport is a particular issue in Plymouth due to poor quality rail links. Air travel is a primary contributor to the causes of climate change, and it is widely recognised that demand for air travel requires management to alleviate some of the ongoing impacts.

Developments that reduce the need to travel, such as ensuring that people live closer to their work, and increasing access to IT facilities to promote modern communication methods that reduce car dependency. Avoid developments that generate further road traffic. Improvement of alternatives to the car e.g., public transport, video conferencing facilities. Live work units and design that facilitate home working. Proposals that improve strategic cycling and walking networks.
As indicators of progress towards these objectives the Sustainability Appraisal will look for:

<table>
<thead>
<tr>
<th>High Level Objective</th>
<th>Appraisal Criteria: Does the policy or proposal...?</th>
<th>Explanation of the appraisal criteria (where not obvious)</th>
<th>As indicators of progress towards these objectives the Sustainability Appraisal will look for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.2 Help everyone to access basic services easily, safely and affordably</td>
<td>Enabling people to get access to what they want in life with less travel is a win-win, reducing costs, effort and environmental damage. In order to achieve sustainable communities, the starting point should be that all facilities should be grouped together to form local and neighbourhood centres which are easily accessible, ideally on foot.</td>
<td>Distance to, and ease of accessing schools, shops, places of work and recreation.</td>
<td></td>
</tr>
<tr>
<td>4.3 Make public transport, cycling and walking easier and more attractive</td>
<td>Development that provides safe, attractive and direct routes for cyclists and walkers. Delivery of gaps in strategic cycle and walking networks. Patterns of development that support their use eg short distance to local services, and that improves the public transport offer. Development that contributes to delivering priorities of the Rights of Way Improvement Plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Maintain &amp; enhance the quality of the city's built &amp; natural environment</td>
<td>There is need to ensure that maintain and enhance the quality of these assets not only within our designated sites, Contact with nature is a key determinant of quality of life is essential component of sustainable communities.</td>
<td>Protection not only of designated sites but of wildlife interest everywhere. Proposals that integrate biodiversity enhancements ie wildlife friendly landscaping &amp; SUDs, green roofs, Development that proactively addresses deficiencies in the city's Biodiversity Network to support adaptation to climate change. Proposal that increase the area of accessible natural greenspace.</td>
<td></td>
</tr>
<tr>
<td>5.1 Protect &amp; enhance biological &amp; geological diversity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2 Protect and enhance local landscape &amp; green space</td>
<td>Pattern and form of development that is sensitive to the qualities and functions of existing green space assets. Development that supports the long term sustainable management of green space assets. (ie recognising &amp; supporting the role of agriculture in the urban fringe).</td>
<td>Development that ensures recreation and access is appropriately managed to ensure landscape and biodiversity is not damaged. Development that supports the delivery of the City’s Greenspace Strategy, and avoids impacts on adjoining Areas of Outstanding Natural Beauty.</td>
<td></td>
</tr>
<tr>
<td>High Level Objective</td>
<td>Appraisal Criteria: Does the policy or proposal...?</td>
<td>Explanation of the appraisal criteria (where not obvious)</td>
<td>As indicators of progress towards these objectives the Sustainability Appraisal will look for...</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>5.3 Avoid areas of high flood risk and reduce the vulnerability to future flooding</td>
<td>Existing &amp; new development needs to plan for increased flood risk associated with climate change. New development should seek to reduce flood risk overall.</td>
<td>Appropriate use of analysis from Strategic Flood Risk Assessment, measures to alleviate existing or potential surface water drainage problems, the incorporation of the principles of SUDs from early stage of design (master planning).</td>
<td></td>
</tr>
<tr>
<td>5.4 Maintain and enhance historical buildings, structures, monuments and remains of acknowledged importance</td>
<td>Plans and proposals should recognise the role of the historic environment in establishing local distinctiveness and its role in regeneration, leisure, recreation and tourism. The importance of partnership working (public/private and voluntary) in addressing the opportunities and challenges facing the historic environment should be recognised.</td>
<td>Development that ensures the historic environment is accessible and raise its profile, whilst ensuring access is managed do assets are not eroded. Development that protects and enhance Plymouth's historic and archaeological heritage, and value its role in regeneration.</td>
<td></td>
</tr>
<tr>
<td>5.5 Provide for a high quality urban environment with highest possible standards of urban design</td>
<td>Proposals which seek to deliver high quality and inclusive design solutions which improve the character and the quality of an area, and the way it functions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Minimise consumption of natural resources</td>
<td>6.1 Reduce non-renewable energy consumption and greenhouse gas emissions</td>
<td>Plans &amp; proposals should look for ways to design out energy use and incorporate energy efficiency measures.</td>
<td>Proposals that facilitate the incorporation of decentralised energy systems, that encourage energy efficiency and allow the use of renewable energy sources.</td>
</tr>
<tr>
<td></td>
<td>6.2 Reduce water consumption</td>
<td>Plans and proposals should consider the impact on water supply.</td>
<td>Designs that integrate grey water recycling.</td>
</tr>
<tr>
<td></td>
<td>6.3 Minimise consumption and extraction of minerals</td>
<td></td>
<td>Greatest possible use of old material in new construction, provision for reuse and recycling.</td>
</tr>
</tbody>
</table>
As indicators of progress towards these objectives the Sustainability Appraisal will look for...

**High Level Objective**

<table>
<thead>
<tr>
<th>Appraisal Criteria: Does the policy or proposal?</th>
<th>Explanation of the appraisal criteria (where not obvious)</th>
<th>As indicators of progress towards these objectives the Sustainability Appraisal will look for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4 Reduce waste</td>
<td>Apply principles of waste hierarchy at a local level. Avoid the creation of waste at source. Reuse, recycling, digestion and composting are better than landfill.</td>
<td>Development that encourages waste minimisation and the sustainable management of future waste streams, eg. community recycling or composting infrastructure. Reuse &amp; recycling of demolition waste.</td>
</tr>
<tr>
<td>6.5 Minimise land, water, air and light pollution</td>
<td>Projected growth in the city may cause localised air quality issues due to increases in vehicle traffic. Regeneration provides opportunity to clean up areas of contaminated land.</td>
<td>Proactive measures to address localised air quality issues.</td>
</tr>
</tbody>
</table>

Table 2 Plymouth LDF Sustainability Appraisal Framework