



A Plan for Tendring Colchester Borders Garden Community: Issues & Options Report (Regulation 18)

**Draft Sustainability Appraisal (SA):
Scoping & Environmental Report – November 2017**



Essex County Council



Contents

1.	Introduction	1
1.1	Background	1
1.2	A Plan for Tendring Colchester Borders	1
1.3	The Principle of the Garden Community in emerging Local Plans	2
2.	Sustainability Appraisal / Strategic Environmental Assessment	3
2.1	The Requirement for Sustainability Appraisal	3
2.2	The Sustainability Appraisal Process	4
2.3	The Aim and Structure of this Report	5
3.	Setting the Scope of the SA: Sustainability Context, Baseline and Objectives	6
3.1	Introduction	6
3.2	Plans and Programmes (Stage A1)	6
3.3	Baseline Information (Stage A2)	13
3.4	Key Sustainability Issues and Problems and Sustainability Objectives (Stage A3)	23
3.5	The Approach to Assessing the Tendring Colchester Borders Garden Community Plan	38
3.6	The Appraisal of the Plan's Content	45
4.	The Appraisal of the Plan's Vision and Principles	47
4.1	Introduction	47
4.2	A Vision for the Garden Community	47
4.3	Planning Themes and Principles of the Garden Community	54
5.	The Plan's Development Concept Option	67
5.1	The Identification of Options for Assessment	67
5.2	What has Sustainability Appraisals involved at this point?	68
5.3	The Appraisal of the Garden Community Development Concept Option	69
6.	Non-Technical Summary, Conclusions and Recommendations	81
6.1	The Plan's Themes and Principles	81
6.2	The Plan's Development Concept Option	85
6.3	Key Impacts of the Plan as a Whole	89
7.	Next Steps	91
7.1	Consultation	91

List of Tables

Table 1:	Key Documents	7
Table 2:	Key Sustainability Issues and Problems	23
Table 3:	The SA Objectives	35
Table 4:	Sustainability Framework for Assessing the Plan	38
Table 5:	Compatibility with the Sustainability Objectives: Tendring Colchester Borders Garden Community Draft Vision	50
Table 6:	Impact on Sustainability Objectives: Theme 1 – Place and Integration	55
Table 7:	Impact on Sustainability Objectives: Theme 2 - Community	61
Table 8:	Impact on Sustainability Objectives: Theme 3 - Delivery	64
Table 9:	Summary of Impacts of the Plan's Themes and Principles	81
Table 10:	Summary of Impacts of the Plan's Development Concept Option	85

Glossary of Acronyms

AA	Appropriate Assessment
ALC	Agricultural Land Classification
AQMA	Air Quality Management Area
BDC	Braintree District Council
CA	Conservation Area
DCLG	Department for Communities and Local Government
DECC	Department of Energy and Climate Change
DEFRA	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
DPD	Development Plan Document
EA	Environment Agency
EC	European Commission
ECC	Essex County Council
EU	European Union
GC	Garden Community
GCP	Garden City Principle
Ha	Hectare
HE	Historic England
HMA	Housing Market Area
HRA	Habitats Regulations Assessment
I&O	Issues and Options
LB	Listed Building
LCA	Landscape Character Assessment
LEP	Local Enterprise Partnership
LPA	Local Planning Authority
MSA	Minerals Safeguarding Area
NE	Natural England
NEGC	North Essex Garden Communities
NHS	National Health Service
NPPF	National Planning Policy Framework
OAN	Objectively Assessed Need
PDL	Previously Developed Land
PO	Preferred Options
PPG	Planning Practice Guidance
PRoW	Public Right of Way
RAMS	Recreational Avoidance Mitigation Strategies



SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SFRA	Strategic Flood Risk Assessment
SHMA	Strategic Housing Market Assessment
SM	Scheduled Monument
SO	Sustainability Objective
SPA	Special Protection Area
SPD	Supplementary Planning Document
SSSI	Site of Specific Scientific Interest
SuDS	Sustainable Drainage System
TCBGC	Tendring Colchester Borders Garden Community
TCPA	Town and Country Planning Association
UDC	Uttlesford District Council
UK	United Kingdom
WPA	Waste Planning Authority

1. Introduction

1.1 Background

Tendring District Council and Colchester Borough Council commissioned Place Services of Essex County Council to undertake an independent Sustainability Appraisal (SA) for the Plan for Tendring Colchester Borders Issues and Options Report.

Place Services are acting as consultants for this work; therefore the content of this SA should not be interpreted or otherwise represented as the formal view of Essex County Council.

1.2 A Plan for Tendring Colchester Borders

The main purpose of the Plan is to set out a shared Vision for the new community at Tendring Colchester Borders and a strategy for its delivery. It intends to set out a strategy that includes both the requirement for 2,500 homes and related infrastructure to be delivered within the Plan period, with the majority of the development to be delivered over a longer-term beyond 2033.

It will also set out a range of development objectives that will help deliver this Vision, and more detailed policies that will guide land-use proposals and secure timely delivery of development and infrastructure in the short, medium and long term, in accordance with relevant Local Plan policies.

The Plan will need to have flexibility in the way that development might be delivered taking into account the long-term nature of a development of this scale, but must also be true to the development and design ambitions that are agreed for the new community.

The first stage in the plan-making process has been the preparation of an Issues and Options (Regulation 18) stage Plan. It intends to provide information to stakeholders and local communities, and invites comments and views on initial issues and options for the development of a Garden Community at Tendring Colchester Borders (TCBGC). The Plan represents the first stage of the production of a formal document to provide a framework for development which will guide the master planning stages that will follow.

This SA represents the appraisal of the Plan for Tendring Colchester Borders at the first Issues and Options stage and accompanies the consultation of the Plan.

1.3 The Principle of the Garden Community in emerging Local Plans

Local Plans are the main vehicle for conveying an area's growth requirements and how these will be accommodated. Braintree District Council, Colchester Borough Council and Tendring District Council agreed to come together through a shared desire to promote a sustainable growth strategy for the longer term. Each Local Planning Authority (LPA) in their production of Local Plans for their administrative areas, intend to adopt a strategic 'Section One' that addresses and articulates strategic priorities over the area of the three authorities. Central to this is the effective delivery of planned strategic growth, particularly housing and employment development, with the necessary supporting infrastructure.

The Plan for Tendring Colchester Borders Garden Community is being jointly prepared by David Lock Associates on behalf of Tendring District Council and Colchester Borough Council because the Garden Community area covers land in each authority's administrative boundary. This joint working has been brought about as a result of the Councils' inclusion of the principle of development of a new Garden Community in their emerging Local Plans.

It should be noted that development at the Tendring Colchester Borders Garden Community is identified in the joint Strategic Section One of the Tendring District, Colchester Borough and Braintree District Councils' Draft Local Plans. The principle of and need for allocating Garden Communities within the North Essex area is established within the strategic Section One for the aforementioned Local Planning Authorities' Local Plans. This is in consideration of a number of reasonable alternative approaches to delivering growth and meeting housing needs in both areas.

Within Section One, draft Local Plan Policy SP8 specifically refers to development of a Garden Community at the Tendring Colchester Borders and sets out the requirement for the preparation of a Strategic Growth Development Plan Document (DPD) that will provide a framework for the subsequent preparation of more detailed masterplans and other design and planning guidance for the site.

2. Sustainability Appraisal / Strategic Environmental Assessment

2.1 The Requirement for Sustainability Appraisal

The requirement for Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) emanates from a high level national and international commitment to sustainable development. The most commonly used definition of sustainable development is that drawn up by the World Trade Commission on Environment and Development in 1987 which states that sustainable development is:

‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’

This definition is consistent with the themes of the NPPF, which draws upon The UK Sustainable Development Strategy Securing the Future’s five ‘guiding principles’ of sustainable development: living within the planet’s environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance; and using sound science responsibly.

SEA originates from the European Directive 2001/42/EC “on the assessment of the effects of certain plans and programmes on the environment” (the ‘SEA Directive’) which came into force in 2001. It seeks to increase the level of protection for the environment; integrate environmental considerations into the preparation and adoption of plans and programmes; and promote sustainable development.

The Directive was transposed into English legislation in 2004 by the Environmental Assessment of Plans and Programmes Regulations (the ‘SEA Regulation’) which requires an SEA to be carried out for plans or programmes,

‘subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and required by legislative, regulatory or administrative provisions’.

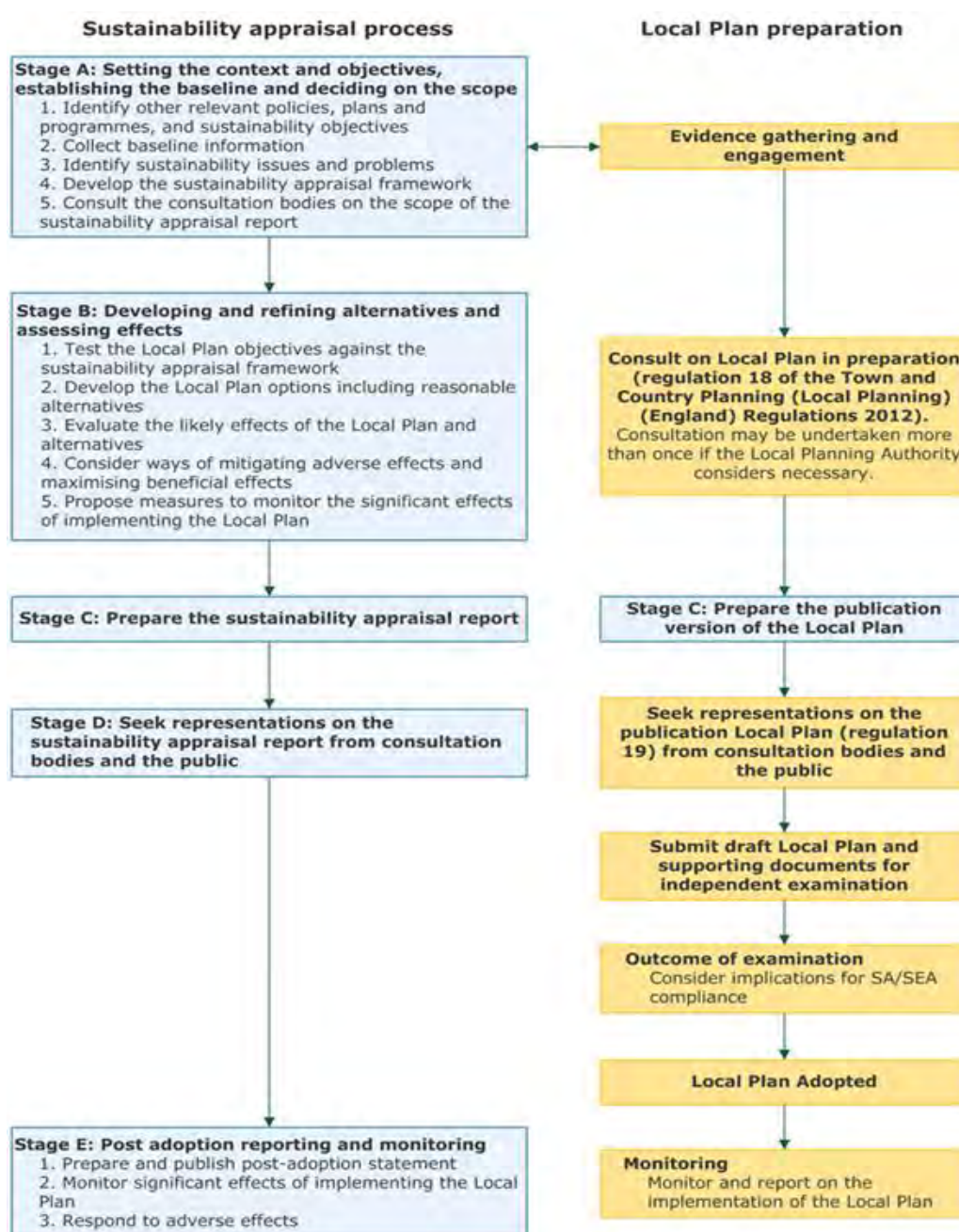
This includes Development Plan Documents. The aim of the SEA is to identify potentially significant environmental effects created as a result of the implementation of the plan or programme on issues such as *‘biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors’* as specified in Annex 1(f) of the Directive. SA examines the effects of proposed plans and programmes in a wider context, taking into account economic, social and environmental considerations in order to promote sustainable development. It is mandatory for Local Plans to undergo a Sustainability Appraisal in accordance with the Planning and Compulsory Purchase Act 2004 as amended by the Planning Act 2008, and in accordance with paragraph 165 of the NPPF.

Whilst the requirements to produce a SA and SEA are distinct, Government guidance considers that it is possible to satisfy the two requirements through a single approach providing that the requirements of the SEA Directive are met. This integrated appraisal process will hereafter be referred to as SA.

2.2 The Sustainability Appraisal Process

The SA of the Tendring Colchester Borders Garden Community DPD follows that of the Sustainability Appraisal process as iterated in National Planning Practice Guidance on Sustainability Appraisal requirements for local plans. The following 5 sequential stages are documented below.

Figure 1: Stages in the Sustainability Appraisal Process and Local Plan / DPD Preparation



Source: Planning Practice Guidance – Sustainability appraisal requirements for local plans (Paragraph: 013 Reference ID: 11-013-20140306 Revision date: 06 03 2014)

2.3 The Aim and Structure of this Report

This report responds to Stages A and B in the SA process above. It is the intention of the Plan to follow the process of a second Regulation 18 consultation on the Plan's 'Preferred Options' in summer 2018 and with this in mind, elements of Stage B above will be completed through the accompanying SA at that stage.

The production of a Sustainability Appraisal (Environmental) Report is a statutory requirement at the Regulation 18 stage, and this SA Report has been produced to accompany the Plan for Tendring Colchester Borders.

This report is accompanied by two Annexes. These are:

- Annex A – Plans and Programmes
- Annex B – Baseline Information

Following the finalisation of this Report, the SA requires consultation. There are three statutory consultees or 'environmental authorities' that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. The relevant authorities may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties. The detailed arrangements for consultation are to be determined by Tendring District Council and Colchester Borough Council.

The environmental authorities and public are to be given 'an early and effective opportunity' within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the 'consultation databases' of the LPAs. This reflects those persons or bodies who have commented on previous planning documents through consultation.

This SA has been produced suitably in advance of the start of the formal consultation period, to accompany and influence decision making within the Plan process iteratively. Notably this SA has been produced to be available to inform the relevant LPAs' Local Plan Committee meetings.

3. Setting the Scope of the SA: Sustainability Context, Baseline and Objectives

3.1 Introduction

The SA of the Section One for Local Plans set the scope for the appraisal of options and Plan content relevant to that strategic area. Although still a strategic undertaking, this SA needs to develop a framework for appraising the Tendring Colchester Borders Garden Community options that is more specifically relevant to the area in question.

That established, the Section One SA forms a good starting point for identifying any sustainability issues relevant to the Tendring Colchester Borders Garden Community, both in the scope of that SA (identified in an initial Scoping Report) and the appraisal of the Garden Community itself. In addition, Policy SP8 of Section One identifies policy criteria relevant to the Garden Community and these also assist in the identification of sustainability issues. Further, the North Essex Garden Community Charter identifies a set of more general overarching principles, which can aid the identification of sustainability objectives.

The following sub-sections outline the relevant plans and programmes and the baseline information profile for the Tendring Colchester Borders area, building on the Section One SA.

3.2 Plans and Programmes (Stage A1)

DPDs must have regard to existing policies, plans and programmes at national and regional levels and strengthen and support other local plans and strategies. It is therefore important to identify and review those policies, plans and programmes and Sustainability Objectives which are likely to influence the DPD at an early stage. The content of these plans and programmes can also assist in the identification of any conflicting content of plans and programmes in accumulation with the DPD. Local supporting documents have also been included within this list as they will significantly shape policies and decisions in the three authority areas.

It is recognised that no list of plans or programmes can be definitive and as a result this report describes only the key documents which influence the Plan.

Table 1 outlines the key documents, whilst a comprehensive description of these documents together with their relevance to the Plan is provided within Annex A.

Table 1: Key Documents

International Plans and Programmes
European Commission (EC) (2011) A Resource-Efficient Europe – Flagship Initiative Under the Europe 2020 Strategy, Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee of the Regions.
European Landscape Convention (Florence, 2002)
European Union Water Framework Directive 2000
European Union Nitrates Directive 1991
European Union Noise Directive 2002
European Union Floods Directive 2007
European Union Air Quality Directive 2008 (2008/50/EC) and previous directives (96/62/EC; 99/30/EC; 2000/69/EC & 2002/3/EC)
European Union Directive on the Conservation of Wild Birds 2009
European Union Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992
European Community Biodiversity Strategy to 2020
United Nations Kyoto Protocol
World Commission on Environment and Development 'Our Common Future' 1987
The World Summit on Sustainable Development Johannesburg Summit 2002
Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations).
The Conservation of Habitats and Species Regulations, 2010
Review of the European Sustainable Development Strategy (2009)
Environment 2010: Our Future, Our Choice (2003)
SEA Directive 2001
The Industrial Emissions Directive 2010

Energy Performance of Buildings Directive 2010 on the energy performance of buildings 2010/31/EU
The Drinking Water Directive 1998
The Packaging and Packaging Waste Directive 1994
EU Seventh Environmental Action Plan (2002-2012)
European Spatial Development Perspective (1999)
European Convention on the Protection of the Archaeological Heritage (Valletta, 1992)
Aarhus Convention (1998)
National Plans and Programmes
National Planning Practice Guidance (2016)
The Localism Act 2011
National Planning Policy Framework (March 2012)
The Housing White Paper (February 2017)
The Future of Transport White Paper 2004
Housing Act (2004)
Building a Greener Future: Policy Statement (July 2007)
Community Infrastructure Levy Guidance (April 2013)
Underground, Under Threat - Groundwater protection: policy and practice (GP3)
Model Procedures for the Management of Land Contamination – Contaminated Land Report 11 (September 2004)
Natural Environment and Rural Communities Act 2006
Countryside and Rights of Way Act 2000
Planning and Compulsory Purchase Act 2004
The Education (School Information) (England) (Amendments) Regulations, 2002

Childcare Act, 2006
Flood & Water Management Act 2009
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland (2007)
Safeguarding Our Soils: A Strategy for England (2009)
Natural Environment White Paper: The Natural Choice: Securing the Value of Nature (2011)
The National Adaptation Programme – Making the Country Resilient to a Changing Climate (2013)
Planning Policy for Traveller Sites (2012)
National Planning Policy for Waste (2014)
Adapting to Climate Change: Ensuring Progress in Key Sectors (2013)
DECC National Energy Policy Statement EN1 (2011)
DCLG: An Introduction to Neighbourhood Planning (2012)
JNCC/Defra UK Post-2010 Biodiversity Framework (2012)
Mainstreaming Sustainable Development (2011)
UK Marine Policy Statement, HM Government (2011)
Electricity Market Reform White Paper 2011
DfT (2013) Door to Door: A strategy for improving sustainable transport integration
DCLG (2011) Laying the Foundations: A Housing Strategy for England
DEFRA (2011) Securing the Future: Delivering UK Sustainable Development Strategy
DECC (2011) UK Renewable Energy Roadmap (updates setting out progress and changes to the strategy dated 2013 and 2013)
Community Energy Strategy (DECC, 2014)
The National Flood and Coastal Erosion Risk Management Strategy for England (Environment Agency, 2011)
Waste prevention programme for England: Prevention is better than cure – The role of waste prevention in

moving to a more resource efficient economy (HM Government, 2013)

Future Water: The Government's Water Strategy for England (DEFRA, 2008)

Water for People and the Environment: Water Resources Strategy for England and Wales (Environment Agency, 2009)

Safeguarding our Soils: A Strategy for England (DEFRA, 2009)

Sub-national Plans and Programmes

Essex Gypsy and Traveller and Travelling Showpeople Accommodation Assessment – on behalf of EPOA (July 2014)

Looking Back, Moving Forward – Assessing the Housing Needs of Gypsies and Travellers in Essex (2006)

Greater Essex Demographic Forecasts Phase 7 (2015)

Essex Transport Strategy: the Local Transport Plan for Essex (2011)

2011 Essex Biodiversity Action Plan

Commissioning School Places in Essex 2016-2021

Essex County Council Joint Municipal Waste Management Strategy 2007-2032

Anglian River Basin Management Plan (2015)

Essex Wildlife Trust Living Landscape plans

Essex Wildlife Trust Living Landscape Statements

Respecting our Past, Embracing our Future: A Strategy for Rural Essex (2016)

ECC Parking Standards: Design and Good Practice (September 2009)

The Essex Local Area Agreement – 'Health and Opportunity for the People of Essex' 2008 – 2011 (2010 Refresh)

ECC Development Management Policies (February 2011)

The Essex Strategy 2008 – 2018

Sustainable Drainage Systems Design and Adoption Guide 2012

Essex Minerals Local Plan (2014)
Essex and Southend-On-Sea Waste Local Plan (2017)
Haven Gateway: Programme of Development: A framework for Growth, 2008 – 2017 (2007)
Haven Gateway: Integrated Development Plan (2008)
South East LEP Investment and Funding (March/April 2014)
Anglian Water Business Plan (2015-2020) (2012)
Draft Water Resource Management Plan (2014-2039) (2014)
Combined Essex Catchment Abstraction Management Plan (2013)
Haven Gateway Water Cycle Study: Stage 1 and 2 Reports (2008)
South East LEP Growth Deal and Strategic Economic Plan (2004)
ECC Developer's Guide to Infrastructure Contributions (Revised Edition 2016)
Vision for Essex 2013-2017: Where Innovation Brings Prosperity (2013)
Corporate Outcomes Framework 2014-2018 Essex County Council (2014)
Colchester Draft Surface Water Management Plan (2014)
A12/A120 Route Based Strategy (2013)
Highway Authority's Development Management Policies (2011)
Economic Plan for Essex (2014)
Essex Design Guide (2005)
North Essex Catchment Flood Management Plan (2009)
Essex and South Suffolk Shoreline Management Plan (second phase) (2011)
Dedham Vale AONB and Stour Valley Management Plan 2010 – 2015
Local Plans and Programmes

Braintree District Council, Chelmsford City Council, Colchester Borough Council, Tendring District Council, Objectively Assessed Housing Need Study - Peter Brett Associates (July 2015 and updated 2016)
North Essex Concept Feasibility Study (AECOM) - July 2016
HRA Report for North Essex Authorities Strategic Section 1 for Local Plans (LUC) (including Appropriate Assessment) – May 2017
North Essex Garden Communities Employment & Demographic Studies (2017) SQW and Cambridge Econometrics.
North Essex Garden Communities Movement and Access Study – March 2017
Landscape Character Assessment (Chris Blandford Associates, September 2006)
Garden Communities Concept Feasibility Study (2016)
Technical Groups and Workshops (2016-2017)
North Essex Local Plans (Strategic) Section 1 Viability Assessment (2017)
Colchester Borough Council, Braintree District Council, Tendring District Council and Essex County Council North Essex Garden Communities Employment & Demographic Studies – February 2017
North Essex Garden Communities Movement and Access Study – March 2017
Colchester Infrastructure Delivery Plan Report - March 2017
Retail and Town Centre Uses Study Colchester Borough Council: Retail Update 2013 (2013)
Landscape Character Assessment (Chris Blandford Associates, September 2006)
CBC Strategic Housing Market Assessment (SHMA) (2014)
Creative Colchester Strategy & Action Plan (2012)
Safer Colchester Partnership: Strategic Assessment of Crime and Annual Partnership Plan 2012-2013 (2012)
CBC Sustainable Design and Construction SPD (2011)
CBC Local Air Quality Management Progress Report (2013)
2016 Air Quality Annual Status Report (ASR) - July 2016

Colchester Borough Council Landscape Strategy (2013)
Colchester Cycling Strategy SPD (2012)
Colchester Borough Green Infrastructure Strategy (2011)
Tendring economic development strategy (2013)
Tendring Strategic Housing Market Assessment (2013)
TDC Strategic Flood Risk Assessment (SFRA) (2009)
Tendring Open Space Strategy (October 2009)
Tendring District Historic Characterisation Project, Essex County Council, 2008
Concept Framework Plan for Tendring Colchester Borders Garden Community (2017) DLA

3.3 Baseline Information (Stage A2)

Annex B details the complete Baseline Information profile for the area relevant to the Tendring Colchester Borders Garden Community and surrounds.

The following section outlines a summary of the key baseline information relevant to the Garden Community area and therefore the current state of the environment in the area.

3.3.1 Economy

- The area covered by this strategic planning approach comprises a large part of the Haven Gateway, an established partnership area which is identified in a range of existing strategy and investment documents. The Haven Gateway includes the Essex administrative areas of Braintree, Colchester, Maldon and Tendring Councils and extends northwards into parts of Suffolk.
- Braintree and Colchester are the major centres of employment within the broad area. While there are high levels of commuting to London, many residents work and live within the area with significant commuting across borough and district boundaries, reflecting a functional economic geography.
- The area has a mixed economy focused on the service sector, including wholesale and retail, business services, tourism, health and education, alongside manufacturing, logistics and construction. Due to the extensive rural area outside urban settlements, agriculture and its related industries play an important part in the overall economy.
- Tendring District includes Harwich International Port which has developed into a highly efficient, multi-purpose freight and passenger port handling bulk and container ships as well as roll-on,

roll-off ferries and cruise ships. Harwich is one of the major UK ports for ferry and cruise tourism. Harwich is also one of the leading UK freight ports for bulk and container ships.

- The sector employing the most people in Tendring, according to an Economic Development Strategy (2013), was Health which accounted for approximately 17% of jobs, followed by Retail and Education. The Cultural, Visitor and Tourism sector encompasses a range of activities which play an important role in the District's economy. This sector is worth more than £353 million per annum to the economy and is estimated to provide 7,900 jobs across Tendring District. The majority of jobs and businesses in this sector are located in and around Clacton.
- Model based unemployment figures for Tendring District during the period January 2015 – December 2015 show that the unemployment rate was 5.3% which is higher than that for the East of England.
- Colchester has maintained good levels of employment growth over the last two decades with declining industrial employment being offset by a growth in office jobs.
- Colchester registered 92,300 workforce jobs in 2014 representing an increase of 20% over 1991 levels. This increase was higher than in the UK (14.6%) and similar to the East of England (19.6%), but was lower than employment growth recorded across Essex as a whole (27.9%) over the same period.
- The town centre of Colchester serves as a centre not only for the Borough but for a much wider area of North East Essex, with residents of Braintree, Maldon and Tendring districts travelling into the town to work, shop and use its community facilities. The town centre is within easy access of the Garden Community.
- Compared to sub-national and national figures, Tendring district has experienced a lower start up rate and a lower de-registration rate of businesses indicating a slightly less robust local economy. Braintree and Colchester are more in line with the county and national business registration and de-registration rates.
- A North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017) undertaken for the emerging Colchester and Tendring local Plans states that the Garden Community is 'likely to be associated with significant jobs growth... The presumption is that jobs linked to exogenous growth processes will be physically on site (and appropriate provision will need to be made for them). Those linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important. Those related to the consumption of local services may or may not be on site, but all will be reasonably "local"; provision in relation to this component will need to be planned so as to complement, rather than displace, existing local service provision. In terms of the Garden City principle aspiration of 'one job per house', all three NEGCs appear to be "within range". Broadly, Tendring / Colchester Borders does best – which is plausible, given its proximity to a growing and ambitious university.'

3.3.2 Heath

- Participation in sport has seen a reduction in Tendring and Colchester since 2012-13. In addition, obesity in Tendring is more prevalent than the region and the nation. Colchester has lower percentages of both adults and children aged 4-5 classified as obese.
- Life expectancy of residents within Tendring District is lower than the regional and national averages with men living for an average of 78.7 years and women on average living 82.0 years. Colchester has a higher life expectancies for men and women than the national figures, but are both below the regional figures. In general, life expectancy is increasing nationwide.
- The site is in a broad area where there is little access to natural accessible greenspace (ANGSt). There is limited official public access beyond the footpath network.
- There are no existing GP surgeries within the Garden Community area, although there are 6 located within approximately 3 miles from the centre of the site in Elmstead Market, Parsons Heath, Colchester, Wivenhoe and Ardleigh.

3.3.3 Housing

- As life expectancy increases, the age structure is expected to change, with a marked increase in the number and proportion of the population who will be aged 65 and over. The number of one-person households is also expected to increase.
- Colchester delivered 12,644 new homes between 2001/02 and 2014/15 at an average rate of 903 dwellings per year. Given the continuing pressures on the South East housing market, Colchester will need to maintain its good rate of delivery over the next plan period to meet Objectively Assessed Needs, while also ensuring that increasing quantity is matched with high design quality and sustainable construction.
- In 2014/15, 3.8% of the net dwelling completions, which accounts for 10 dwellings, were affordable within Tendring, as opposed to 40.0% in Colchester. This data indicates that affordable housing is an issue, particularly in Tendring and to a lesser extent, in Colchester.
- The average property price in September 2012 in Tendring District was £180,408; this is noticeably lower than average prices in England and Essex. This is significantly lower than the county and national averages.
- Meeting the housing needs in the Districts and Borough is an important issue. The updated SHMA for Braintree, Colchester, Chelmsford and Tendring Councils indicates that the majority of market housing and affordable housing should be 2 and 3 bedroom properties. This trend is replicated when assessing all housing, with 70.3% of housing need across the Districts and Boroughs is 2 and 3 bedroom dwellings.
- Tendring has seen no increase in Gypsy and Traveller provisions since January 2014. Caravan counts in Braintree have increased since January 2014, but with fluctuations in measuring periods between 2014 and 2016 due to not tolerated sites being removed from the statistics, presumably due to eviction or inclusion in the statistics for tolerated sites. A similar trend is apparent in Colchester, with an overall increase in sites for Gypsy and Traveller populations.

3.3.4 Biodiversity

- Ramsar sites are wetlands of international importance designated under the Ramsar Convention which have a high degree of protection. They often incorporate Special Protection Areas (SPAs) and Special Areas for Conservation (SACs). In the Plan Area there are a number of Ramsar sites which include Hamford Water, and parts of the Colne and Blackwater estuaries which include coastal areas, estuaries, rivers and lakes/reservoirs. These Ramsar sites are also SPAs.
- SACs are sites of international importance designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive). There is 1 SAC in the area: a large coastal area known as Essex Estuaries stretching from Shoeburyness to Jaywick Sands.
- Tendring District has a rich geodiversity which is varied and largely irreplaceable. There are 10 sites of Special Scientific Interest (SSSIs) in the District, notified specifically for their geological value. The District is also home to the Stour, Orwell and Colne Estuaries and Hamford Water, SPA and Ramsar sites, designated for the conservation and protection of the habitats of migratory and endangered birds, scarce plants and invertebrates and for the conservation of wetlands and are sites of national and international importance.
- Colchester has a similarly rich biodiversity, including 8 SSSIs, the Colne Estuary SPA, the Blackwater Estuary and Abberton Reservoir SPA.
- There are a number of National Nature Reserves located in the wider area: Blackwater Estuary, Colne Estuary, Dengie and Hamford Water.
- All 15 SSSIs in Tendring and all 8 sites in Colchester are meeting the target of at least 95% of the SSSI area being brought into favourable condition. Colne Estuary in Tendring and Colchester, Stour Estuary in Tendring and Blackwater Estuary in Colchester are the only SSSIs and not meeting the PSA target for 100% of their area, however the area not in a favourable or favourable recovering condition is small.
- In addition to designated sites, consideration should also be given to non-designated value in regards to ecology on a site-by-site basis in order to protect and enhance species and habitats, including those that are protected. This could include Greenfield sites and areas of habitat considered to enrich appreciably the habitat resource within the context of local areas, such as species-rich hedgerows, municipal parklands or individual veteran trees.
- The HRA of the emerging Local Plans of Colchester and Tendring indicates that the site is within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence, and further suggests that there could be recreational pressure on the SAC resulting from the scale of development in this area and visitors to the estuary.
- The AA concludes that mitigation is possible regarding the loss of off-site habitats. It states that, 'wintering bird surveys will be required for Tendring Colchester Borders Garden Community as part of any project level development proposals and masterplanning, to determine the sites individual importance for golden plover and lapwing and inform mitigation proposals. A commitment to mitigation and phasing of Tendring Colchester Borders Garden Community is required within the Section 1 Strategic Plan dependent on the findings of bird surveys. In the unlikely but possible event that cumulative numbers of SPA birds affected are likely to exceed thresholds of significance (i.e. >1% of the associated European Site), appropriate mitigation in

the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere, will be required. If required, mitigation will need to create and manage suitably located habitat which maximises feeding productivity for these SPA species, and such mitigatory habitat would need to be provided and fully functional prior to development which would affect significant numbers of SPA birds.'

- The site area contains a SSSI (Bullock Wood) which is likely to require sensitive consideration in regard to preservation and enhancement.
- The Local Nature Reserves of Salary Brook and Welsh Wood are in close proximity to / within the site.

3.3.5 Landscapes

- In Colchester and the north west of Tendring District is the Dedham Vale Area of Outstanding Natural Beauty (AONB) covering an area of 90 sq. km, designated for conservation due to its significant landscape value. Made famous by the paintings of Constable and Gainsborough, its traditional grasslands, wildflower meadows and hedgerows provide an opportunity for both residents and visitors to enjoy the peace and beauty of what are among some of England's most precious and vulnerable landscapes. In addition, there are discussions currently underway regarding the possibility of expanding the Dedham Vale AONB westward into the northern part of Braintree District. Proposed by the Stour Valley Partnership, the proposals are supported by Essex County Council, Braintree District Council and Colchester Borough Council.
- Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process and through good design in development.
- There are existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches.
- The topography of the land indicates benefits to the proposals in the form of integrating development into a natural context.

3.3.6 Soil Quality

- Grade 1 and 2 agricultural land is predominantly in the north east of Colchester Borough, with some areas of grade 2 land to the west and north west. The Garden Community site area is predominantly within Grade 1 Agricultural Land (determined 'excellent' by Natural England).
- Tendring has a significant concentration of grade 1 and 2 agricultural land to the north west of the District on the border with Colchester Borough. The majority of the central party of the District is grade 3 land, with small areas of grade 2 running from south west to north east through the centre of Tendring. Coastal areas have lower quality land, with grade 4 land to the south around Colne Point and Holland-on-Sea and grade 4 and 5 land around Harwich and Dovercourt.

3.3.7 Population and Social (including Education and Skills)

- The populations in Tendring and Colchester are predicted to increase over Local Plan Periods, with the highest growth rates in Colchester. The population structure in Colchester is more weighted towards 20-44 year olds. Contrastingly, Tendring has a higher population of people aged over 65.
- Colchester Borough's population has grown by 15.6% between 2001 and 2014 and was estimated to stand at 180,420 people in mid-2014. The borough's growing population is accommodated within a spatial structure defined by the urban area at its centre, surrounded by a rural hinterland with three smaller centres, Tiptree, West Mersea and Wivenhoe.
- Tendring District is projected to grow by 14.4% (from 2011 Census numbers) to approximately 158,000 by the end of the plan period. Recent decades have seen a trend towards an ageing population in the District and this is projected to continue in the future.
- Regarding general deprivation, of the 326 local authorities within England Tendring ranks within the top 25% for extent and the top 16% for the remaining three measures –local concentration, average score and average rank. Colchester is less deprived, with Colchester ranking 6th in Essex on average.
- In Colchester, pressure on primary school places is forecast to continue in line with considerable housing development in the area.
- Secondary school Year 7 intakes in Colchester are forecast to rise significantly from September 2017 onwards and options are being explored in active collaboration with the schools in Colchester town to provide the additional places required.
- While Colchester is less deprived than Essex as a whole, 2 small areas in Colchester were in the top 10% most deprived in England in 2010, Magnolia in St. Andrew's Ward and St Anne's Estate in St Anne's ward. Sustainable development for the future will require the development of sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities.

3.3.8 Air Quality and Noise

- There may be some concerns regarding air quality associated with development in the broad location and resultant traffic movements into Colchester town due to a number of AQMAs.
- There are four Air Quality Management Areas in Colchester, located in the following areas:
 1. Area 1 - Central Corridors (including High Street Colchester; Head Street; North Hill; Queen Street; St. Botolph's Street; St. Botolph's Circus; Osborne Street; Magdalen Street; Military Road; Mersea Road; Brook Street; and East Street).
 2. Area 2 - East Street and the adjoining lower end of Ipswich Road.
 3. Area 3 - Harwich Road/St Andrew's Avenue junction.
 4. Area 4 - Lucy Lane North, Stanway; Mersea Road; and Brook Street.
- The Tendring District Council Air Quality Progress Report shows that Tendring District is currently meeting the air quality objectives.

3.3.9 Climatic Factors

- Colchester Borough and Tendring District all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole. More than three quarters of Tendring District's 2,532.2GWh energy consumption is from petroleum products and natural gas. For Colchester, the percentage is just below 75% for the same energy sources.
- Industry, domestic and transport each produce roughly 1/3 of the total CO2 emissions within Colchester. The industry and commercial sector produces the smallest amount in both Colchester Borough and Tendring District.
- Registering 38.27% of their consumption deriving from petroleum, Tendring is lower than the percentage for Braintree, Colchester and the East of England. In contrast only 20.6GWh of energy consumed is from renewable bioenergy and waste sources, equating to just 0.81% of energy consumption.
- Regarding CO2 emission reductions, Colchester have a higher percentage than the Essex average at 18.6% respectively. Tendring has one of the lowest reductions in CO2 emissions relative to the 2005 data of all the Districts in Essex at just 11.5%.
- Mean summer precipitation has a 67% likelihood of decreasing by up to 10% across the whole region by 2020 and by 2050 the south of the East of England will see decreases by up to 20%. By 2050 much of the region is expected to see a mean winter precipitation increase of between 10% and 20%.

3.3.10 Transport

- The Great Eastern Main Line (GEML) provides rail services between London Liverpool Street and the East of England, including Witham, Chelmsford, Colchester and Clacton-on-Sea. It also carries freight traffic to and from Harwich International Port, which handles container ships and freight transport to and from the rest of the UK. Harwich is also one of the major UK ports for ferry and cruise departures.
- Transportation provision in Tendring District includes 14 railway stations with connections to Colchester, Chelmsford, Ipswich, Norwich, Stratford and London. The average journey time between Clacton-on-Sea and London Liverpool Street is 1 hour 26 minutes.
- Within Tendring, there are numerous bus routes throughout the District including frequent inter-urban routes linking villages to the larger urban areas of the district and the large town of Colchester in the adjoining borough. The dispersed geography of the District means that there is a reliance on the use of private cars.
- The growing demand for the use of airports, including London Stansted, will create additional associated pressures on road and rail infrastructure. The County Council, along with South East Local Enterprise Partnership, local and national agencies and other organisations, will also need to work collaboratively with the Local Planning Authorities to ensure infrastructure meets demand for enhanced economic growth.
- Colchester Borough's self-containment rate (share of residents who also work within the Borough) was 69% in 2011, with 24,850 employed residents leaving the Borough to work. Of these 25% go to Greater London, 15% to Tendring District, 15% to Braintree District and 10% to

Chelmsford City.

- Tendring and Colchester are above the regional and national averages for households owning 1 or more cars. Despite this, a lower proportion of people use a private car or van to travel to work. Similarly, Colchester has fewer employees travelling to work by car or van, which could be as a result of a higher number of employment opportunities closer to their homes negating the need for travel by car.
- The percentage of households owning 1 car or van within Tendring District at 45.3%, which is slightly higher than national and regional statistics. Colchester is also higher than the regional and national figures at 43.8%.
- The broad area is well located in terms of existing access and the presence of strategic roads and those that permeate the broad area and those eastern parts of Colchester.
- The presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester.
- The existing strategic and local bus networks currently set down and pick-up in close proximity to the site with a bus interchange located at the University campus. Within the Colchester Borough Council Local Plan, provision is made for a dedicated bus corridor to support development in North Colchester; anticipated to be delivered on the back of the redevelopment of the former Severalls Hospital.

3.3.11 Water

- Water management is challenging given the combination of development growth and Essex being one of the driest counties in England. In respect of water quantity a significant portion of the resource is considered to be 'water stressed'; the resource availability status of rivers and aquifers show that they are generally over abstracted; and not self-sufficient in relation to local sources of water supply and needs to import substantial quantities of water to satisfy existing demand.
- Regarding water quality, the Appropriate Assessment of the emerging Local Plans of Colchester and Tendring states that, 'the measures provided in the Section 2 Local Plans will also provide sufficient certainty that the overall strategic growth proposed in North Essex as part of the Section 1 for Local Plans will not result in significant adverse effects on the Stour and Orwell Estuaries SPA/Ramsar, Colne Estuary SPA/Ramsar, or Essex Estuaries SAC as a result of changes in water quality.'
- The latest Colchester Water Cycle Study identified issues with a number of smaller ward areas within the Borough. These are:
 1. East Colchester - Wastewater Treatment and Wastewater Infrastructure
 2. Wivenhoe/Rowhedge - Wastewater Treatment and Wastewater Infrastructure
- Water bodies altered by human activity may be classified as Heavily Modified (HMWB) or Artificial (AWB) and have an objective to achieve 'good potential'. Salary Brook to the west of the Garden Community site is within a Nitrate Vulnerable Zone and has a 'moderate' overall status. Pressures from development that could cause deterioration include:
 1. Alteration of river banks and river beds

2. Barriers that restrict movement of, for example, fish
3. Cumulative impacts in a particular catchment
4. Diffuse pollution from surface water
5. Reduced flow in rivers

3.3.12 Flooding

- The National Planning Policy Framework seeks to avoid inappropriate development in areas at risk of flooding, but where development is necessary, to ensure that it is safe and does not increase flood risk elsewhere.
- Significant levels of flood risk have been identified along river stretches. This is the case at the site's western boundary associated with Salary Brook.

3.3.13 The Historic Environment

- The historic environment should be effectively protected and valued for its own sake, as an irreplaceable record which contributes to our understanding of both the present and the past.
- Archaeological deposits across Colchester range in date from the Palaeolithic, through to structures related to the Cold War. However, it should also be remembered that the EHER records represent only the known deposits with many new sites being identified each year. Archaeological sites (and their setting) constitute a finite, non-renewable resource which is vulnerable to damage.
- Colchester Borough boasts 52 Scheduled Monuments. Tendring District has more than 960 Listed Buildings. The District also benefits from 27 Scheduled Monuments which include above and below ground features, 3 Historic Parks and Gardens and 9 Protected Lanes, preserved for their historic indication of ancient road patterns in the District. The District also contains 20 Conservation Areas.
- According to the Heritage at Risk Register (2016), there are 15 assets listed as being at risk in Tendring.
- The site contains a small number of Listed Buildings which should be preserved

3.3.14 Minerals and Waste

- The majority of local authority collected household waste is sent for recycling, composting or reuse in the Plan Area. Despite this, no non-household local authority collected waste is recycled, composted or re-used.
- The Strategic Area has extensive deposits of sand and gravel. The sand and gravel resources in Essex are significant in national, sub-national and local terms - Essex is one of the largest producers in the UK; most geographically extensive and significantly mixed within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester and Tendring.
- There are two sites within Tendring identified as preferred or reserved for primary mineral

extraction of sand and gravel in the allocated Minerals Local Plan (2014). These are Site Nos A20 – Sunnymead, Alresford and B1 – Slough Farm, Ardleigh. The Garden Community area is within a Minerals Safeguarding Area.

3.3.15 Utilities

- Due to the nature and scale of Garden Communities, utility provision does not exist within the site currently.
- There is capacity in the medium pressure gas network in the region, but local low pressure upgrades will be required.

3.3.16 Existing Communities

- The 'red-line boundary' of the site extends the Garden Community area towards Elmstead Market to the south east, however is not in close proximity. The boundary does however extend to Colchester / Greenstead to the east, separated by the Salary Brook nature reserve and river channel.
- A number of existing dwellings associated with farming exist within the site.

3.3.17 Trans-national Implications

This Scoping & Environmental Report explores the state of the environment within the broad area of the Plan; however consideration has since been given to the possibility of trans-national impacts resulting from the scale of growth and those broad locations identified for development.

In view of this, no trans-national effects are deemed likely as a result of the Plan singularly or in combination with the relevant Local Plans of Tendring and Colchester or any other plans and programmes. This is as result of the Section One Habitats Regulation Assessment Screening Assessment and associated Appropriate Assessment (AA) (2017) which explores the environmental impacts of the principle of the Garden Community on international and national designations for nature conservation. The AA identifies that although impacts arise as a result of the level of growth resulting from Garden Communities due to recreation, effective mitigation is possible.

3.3.18 Data Limitations

Relevant information is not available for the focused Garden Community area on a particularly detailed basis on all sustainability themes. As a result there are some gaps within the data set. It is believed however that the available information shows a comprehensive view on sustainability within the Garden Community area. New data that becomes available will be incorporated in the SA.

It should be noted that while the baseline will be continually updated throughout the SA process, the information outlined within this report represents a snapshot of the information available at the beginning of November 2017.

3.4 Key Sustainability Issues and Problems and Sustainability Objectives (Stage A3)

The outcome of Stages A1 – A2 in the SA Process is the identification of key sustainability issues and problems facing the Strategic Area which assist in the finalisation of a set of relevant Sustainability Objectives. Issues are also identified from the review of plans and programmes and a strategic analysis of the baseline information.

The appraisal of the Plan will be able to evaluate, in a clear and consistent manner, the nature and degree of impact and whether significant effects are likely to emerge from the Plan's content.

The following table outlines the thought process which has led to the formulation of the Sustainability Objectives for the Plan. The state of the environment in absence of the Plan is derived from the Baseline Information addressed in Annex B accompanying this report, the remit of the Plan in the wider planning policy context, and the wider benefits that can be expected of growth at the scale proposed in accordance with Garden City principles and the North Essex Garden Community Charter.

Table 2: Key Sustainability Issues and Problems

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
Economy	Due to its rural nature the site does not currently accommodate many retail uses. It is however well located to Colchester via public transport means.	Despite emerging policy in regard to ensuring services and facilities are integrated into the Garden Community existing in the form of the Strategic Section One for Tendring and Colchester's Local Plans, the Plan can ensure that sufficient retail and employment premises are integrated into any new community through an effective framework regarding the eventual form of the development. The Plan can ensure that provision can need to be planned to complement, rather than displace, existing local service provision in the town of Colchester. This may not be the case in the absence of the Plan.	To ensure that new retail space is suitably provided and located within the Garden Community, with no subsequent harm to the retail function of Colchester town centre.
	There are significant economic 'anchors' in the wider vicinity such as the University and employment provision at the Hythe; however links need to be made to utilise these.		To ensure that new employment complimentary uses are suitably provided and located within the Garden Community.

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	The site is close to the established employment centre of Colchester and notable the University of Essex at the site's southern boundary. The site has good access to ports in the east.	The growth of the university of Essex will also provide an opportunity for the Garden Community to capture future associated employment growth. Utilising the existing strengths of existing employment providers and centres is a key opportunity for the Garden Community. The Plan can provide this opportunity, which perhaps could not be expected to be realised through alternative development approaches.	To maximise existing linkages and strengths in the local economy.
	Jobs linked to homeworking will be physically associated with the homes of residents and therefore also on site; in relation to these jobs, the design of housing will be crucially important (The North Essex Garden Communities Employment & Demographic Studies (SQW / Cambridge Econometrics 2017)).	The planning of the Garden Community provides a unique opportunity to deliver truly innovative forms of emerging utility-related technologies, including but not limited to state of the art telecommunications infrastructure which could provide an ultra-fast broadband service for existing and future residents. This could otherwise not be forthcoming within the Garden Community in the absence of the Plan.	To ensure the design of new development is capable of maximising innovative forms of emerging utility-related technologies.
Health	Public access to natural greenspace (ANGSt) is an issue within the wider area, although the site borders the Salary Brook nature reserve to the west.	The Plan has the opportunity to suitably include accessible natural green space throughout the design and layout of the Garden Community. This might not be the case in the absence of a plan-led approach, or otherwise not be given due weight in favour of marketable land uses.	To ensure sufficient accessible natural green space throughout the Garden Community to benefit the new community and the surrounding rural areas.
	There are no existing GP surgeries within the Garden Community area, the closest being in the surrounding villages and town of Colchester. Serving specific communities, capacities of these are unlikely to cumulatively service	In facilitating inclusive facilities, the Plan can ensure that a new Garden Community can incorporate premises for a local centre, including doctors' surgeries and sports provision. In the absence of the Plan it can not be certain whether this would be forthcoming	To ensure that a range of services and facilities are included and suitably located within the Garden Community to

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	<p>the Garden Community.</p> <p>The proportion of adults participating in 30 minutes, moderate intensity sport has decreased in recent surveys at local, sub-national and national levels.</p>	through more traditional delivery models and a possible lack of liaison with service providers.	maximise social inclusivity and to ensure sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities.
Housing	<p>As life expectancy increases, the age structure is expected to change, with a marked increase in the number and proportion of the population who will be aged 65 and over. The number of one-person households is also expected to increase.</p> <p>The SHMA for Braintree, Colchester, Chelmsford and Tendring Councils indicates that the majority of market housing and affordable housing should be 2 and 3 bedroom properties. This trend is replicated when assessing all housing, with 70.3% of housing need across the Districts is 2 and 3 bedroom dwellings.</p>	<p>The Plan is committed to ensuring varied housing tenures, ensuring affordability and ownership models. This can not be considered as forthcoming through development that is not plan-led, where it is likely that outcomes are sought that are most profitable.</p> <p>A plan-led Garden Community can enable large scale development that is sustainable. The scale of development, established within the Strategic Section One, ensures that a larger amount of affordable units can be delivered without affecting viability. Whereas a higher percentage can not be ensured through the Plan, instead being subject to exploration within the Local Plans the Plan can ensure that affordable units are appropriately located within the development. This can be considered comparatively unlikely to be forthcoming without a plan led approach.</p>	To ensure a mix of housing types and tenures with as high a proportion of affordable units as possible.

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	Suitable Gypsy and Traveller accommodation proposals have not been forthcoming through the Local Plan call-for-sites mechanisms of Colchester Borough and Tendring District Councils.	The Section One of Colchester and Tendring's Local Plan includes Policy SP8 which ensures that Garden Community in this location would require accommodation provision of Gypsy and Travellers. The Garden Community Plan can ensure that such provision is located with the interests of the envisaged new community in mind.	To ensure that provision for Gypsy and Traveller accommodation is appropriately located within the Garden Community with regard to access to services and social integration.
Biodiversity	The site area contains a SSSI (Bullock Wood) which is likely to require sensitive consideration in regard to preservation and enhancement.	A plan-led approach to strategic development can ensure that existing features of biodiversity are protected and integrated into the Garden Community's green infrastructure. Comparatively, this is unlikely to be the case through more traditional strategic development approaches.	To protect and enhance existing features of biodiversity through green corridors and ensure links between new habitats within the Garden Community and those that exist over a wider area.
	The Local Nature Reserves of Salary Brook and Welsh Wood are in close proximity to / within the site.		
	There are existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches.		
	As identified within the HRA / AA of the Strategic Section One (and Two) of Braintree's emerging Local Plan, a Recreational Avoidance and Mitigation Strategy will be needed to ensure that the level of growth does not have likely significant effects on Natura 2000	The relationship between areas of biodiversity interest and human activity through recreation are often incompatible in terms of wildlife conservation. A plan led approach can ensure that such management and the identification of land for recreational purposes is ensured.	To ensure that recreational activity does not have negative effects on wildlife conservation and protection in the wider area.

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	sites within the wider area.		
Landscape	Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process and through good design in development. despite this, the topography of the land indicates benefits to the proposals in the form of integrating development into a natural context.	A plan-led Garden Community can ensure that sensitive natural features are integrated, protected and enhanced through a framework approach to design and layout. This is not unique to Garden Communities and can be expected to be ensured through more traditional approaches to development.	To ensure the protection, enhancement and creation of features of a landscape value throughout the Garden Community.
	There are existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches.		
	There are a number of sensitive receptors associated with the surrounding area and large scale development has the potential to impact on the rural character of the small settlements surrounding and within the site.	A plan-led Garden Community, adhering to Garden City principles and the Garden Community Charter, can ensure better integration of development within the open countryside. This would otherwise be unlikely to be the case through more traditional development approaches.	To ensure that the Garden Community is integrated into the existing rural landscape.
Soil quality	The Garden Community site area contains Grade 1 Agricultural Land (determined 'excellent' by Natural England) along much of the eastern boundary.	The loss of agricultural land is inevitable through any strategic scale development. In the absence of the Plan, it can be considered that there would be a similar loss of such land.	To minimise the loss of the best and most versatile agricultural land.
Education and	In Colchester, pressure on primary school places is forecast to	A plan led approach enables an 'infrastructure first' approach to	To ensure the delivery of new

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
skills	continue in line with considerable housing development in the area. Secondary school Year 7 intakes in Colchester are forecast to rise significantly from September 2017 onwards and options are being explored in active collaboration with the schools in Colchester town to provide the additional places required.	delivering the Garden Community, through effective working with the commissioning authority. It is more likely that a less holistic approach to ensuring adequate school capacity would be forthcoming in the absence of the Plan.	schools and other infrastructure to support the Garden Community.
	Within Tendring, Primary school numbers, as forecast in the Commissioning Schools for Essex document, are set to rise in the five year period 2016-2021, due to rising births and new housing, requiring plans to be developed with local schools to increase the provision in the District.		
Energy consumption	Colchester Borough and Tendring District all consume more energy from non-renewable sources as a percentage of their consumption compared to the East of England as a whole. More than three quarters of Tendring District's 2,532.2GWh energy consumption is from petroleum products and natural gas. For Colchester, the percentage is just below 75% for the same energy sources.	The Garden Community offers a significant opportunity for the utilisation of renewable energy sources to be utilised. The Plan can ensure that renewable energy generation and energy efficiency measures are included within the development that would otherwise be unlikely to be integrated in its absence.	To embrace sustainable forms of energy production and distribution.
	Regarding CO2 emission reductions, Colchester have a higher percentage than the Essex average at 18.6% respectively. Tendring has one of the lowest reductions in CO2 emissions relative to the 2005 data of all the		

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	Districts in Essex at just 11.5%.		
Transport and Access	Colchester Borough's self-containment rate (share of residents who also work within the Borough) was 69% in 2011, with 24,850 employed residents leaving the Borough to work. Of these 25% go to Greater London, 15% to Tendring District, 15% to Braintree District and 10% to Chelmsford City.	A plan-led approach, together with the delivery model of the Garden Community, can ensure the integration of rapid transit. It is unlikely that this would be ensured through any planning application without such a requirement either physically or through sufficient contributions.	To maximise sustainable transport modes on site, minimise vehicle emissions and to ensure effective links to existing off-site public transport services and interchanges.
	There are highway network efficiency issues on a number of strategic inter-urban routes which are operating at or near to capacity.	It is considered that the Plan can ensure an appropriate level of services and facilities on-site. This can ensure that residents take fewer trips outside the Garden Community for convenience shopping and day to day needs. This can offset traffic implications on existing roads as much as possible. It is thought that without this requirement established within the Plan, planning applications are unlikely to ensure provision to the same level.	To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social inclusivity and to ensure safe, sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities.
	The area is well located in terms of existing access and the presence of strategic roads and those that permeate the broad area and those eastern parts of Colchester.	Development at the scale proposed can ensure that such issues are overcome and solutions become viable. These are best consulted on and ensured through a plan-led system. This can not be expected in the absence of the Plan	To ensure suitable and permeable access to and within the site and to ensure appropriate linkages to the existing road network.

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	Proportionately more households own 1 car or van within Colchester than the regional and national figures at 43.8%. Braintree has a lower proportion of households owning 1 or more car at 40.3% however this is still above the regional average.	The Plan can ensure a level of car parking, and design in such parking, that is suitable for the number of homes. The requirements are unlikely to be clear and specifically suitable to the wider design requirements of the Garden Community in the absence of the Plan.	To ensure an appropriate level of car parking.
Sustainable Transport	The percentage of households owning 1 car or van within Tendring District at 45.3%, which is slightly higher than national and regional statistics. Colchester is also higher than the regional and national figures at 43.8%.	A plan-led approach, together with the delivery model of the Garden Community, can ensure the integration of rapid transit within the wider area. It is unlikely that this would be ensured through any planning application without such a requirement either physically or through sufficient contributions.	To maximise sustainable transport modes on site, minimise vehicle emissions and to ensure effective links to existing off-site public transport services and interchanges.
	The presence of the Great Eastern Mainline and rail links at Hythe exist as a rapid public transport link to Colchester. The existing strategic and local bus networks currently set down and pick-up in close proximity to the site with a bus interchange located at the University campus. Within the Colchester Borough Council Local Plan, provision is made for a dedicated bus corridor to support development in North Colchester; anticipated to be delivered on the back of the redevelopment of the former Severalls Hospital.		
Air Quality	There may be some concerns regarding air quality associated with development in the broad location and resultant traffic movements into Colchester town	A plan-led approach, and the delivery model established in the Plan, enables development to be supported by effective sustainable transport means designed to minimise vehicle emissions.	

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	due to a number of AQMAs.	This approach would be unlikely to be forthcoming in the absence of the Plan, which can also ensure the promotion of active modes through significant green infrastructure.	
Water	Opportunities for improving the status of water bodies should be identified as part of development proposals. Typical water body improvements might be creating 'natural' river banks, overcoming barriers to fish movement or providing sustainable drainage systems.	As stated in the Plan, substantial investment in this essential area of infrastructure will be required to facilitate the improvements needed and ensure adequate ongoing maintenance. It is uncertain whether this infrastructure would be forthcoming from development proposals in the absence of the Plan.	To ensure that there is no deterioration in water quality as a result of development.
	The latest Colchester Water Cycle Study identified issues with a number of smaller ward areas within the Borough. Relevant to the Garden Community area These are: 1. East Colchester - Wastewater Treatment and Wastewater Infrastructure 2. Wivenhoe/Rowhedge - Wastewater Treatment and Wastewater Infrastructure		
	Water bodies altered by human activity may be classified as Heavily Modified (HMWB) or Artificial (AWB) and have an objective to achieve 'good potential'. Salary Brook to the west of the Garden Community site is within a Nitrate Vulnerable Zone and has a 'moderate' overall status. Pressures from development that could cause		

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
	<p>deterioration include:</p> <ol style="list-style-type: none"> 1.Alteration of river banks and river beds 2.Barriers that restrict movement of, for example, fish 3.Cumulative impacts in a particular catchment 4.Diffuse pollution from surface water 5.Reduced flow in rivers 		
Flood Risk	<p>The National Planning Policy Framework seeks to avoid inappropriate development in areas at risk of flooding, but where development is necessary, to ensure that it is safe and does not increase flood risk elsewhere. Significant levels of flood risk have been identified along river stretches. This is the case at the site's western boundary associated with Salary Brook.</p>	<p>In the absence of the Plan there is unlikely to be any significant difference in how areas of flood risk are considered within the Garden Community. That said, the design and layout of the Garden Community can ensure that existing water courses are maximised as features of a blue infrastructure interest throughout the site. The delivery of the Garden Community provides an unprecedented opportunity to integrate innovative sustainable urban drainage systems into the design of new development. It is unlikely that this would be the case to the same degree through development proposals in the absence of the Plan.</p>	<p>To ensure that there is no increase in fluvial or surface water flood risk as a result of development, with positive outcomes sought in regards to biodiversity gain and blue infrastructure networks through SuDS.</p>
The Historic Environment	<p>The site contains a small number of Listed Buildings which should be preserved</p>	<p>In the absence of the Plan, such features would have to be protected through suitable schemes both in regard to designations and their settings. The Plan can further ensure that enhancements to assets are sought where possible.</p>	<p>To protect, and where possible, enhance designated and non-designated heritage assets and their settings both above and below ground.</p>

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
Utilities	Due to the nature and scale of Garden Communities, utility provision does not exist within the site currently.	The development of a new Garden Community provides significant opportunities to not only provide new infrastructure but also the opportunity to deliver innovative forms of infrastructure and ensure their integration from the outset, reducing and avoiding the need for disruptive retrofitting which could otherwise be the case in the absence of the Plan.	To ensure suitable and innovative utility provision, including high-speed and broadband.
	There is capacity in the medium pressure gas network in the region, but local low pressure upgrades will be required.		
	Broadband provision is integral to the Garden Community's target of 'one job per home' through effective home working.		
Existing communities	Numerous farm buildings and other individual dwellings exist within the area.	The proximity of existing villages to the Garden Community opens up opportunities to improve areas between these existing settlements and new development. Existing private farmland, for example, could be opened up as publicly accessible parkland with new green links formed to improve walking and cycling connectivity in the area for both existing and future residents. It can be considered comparably less likely that such a joined up approach to development would be forthcoming in the absence of the Plan and the reliance on Policy SP8 within the LPAs' emerging Local Plans.	To improve areas between existing settlements and new development and to ensure that there is no coalescence with existing settlements.
	The 'red-line boundary' of the site extends the Garden Community area towards Elmstead Market to the south east, however is not in close proximity. The boundary does however extend to Colchester / Greenstead to the east, separated by the Salary Brook nature reserve and river channel.		
	Due to the nature and scale of Garden Communities, few local facilities exist within the site currently.	Despite emerging policy in regard to ensuring services and facilities are integrated into the Garden Community existing in the form of the Strategic Section One for Tendring and Colchester's Local Plans, the Plan can ensure that sufficient retail and employment premises are integrated	To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social

General theme	Description / Supporting Evidence	State of environment in absence of the plan	Sustainability Objective (SO)
		into any new community through an effective framework regarding the eventual form of the development. The Plan can ensure that provision can need to be planned to complement, rather than displace, existing local service provision in local town centres. This may not be the case in the absence of the Plan.	inclusivity.

The following table explores whether the identified Sustainability Objectives above fall into the three broad categories of sustainability, namely social, environmental and economic themes.

Table 3: The SA Objectives

SA Objective	Economic	Social	Environmental
1) To ensure that new employment and complimentary uses are suitably provided and located within the Garden Community.	✓		
2) To ensure that new retail space is suitably provided and located within the Garden Community, with no subsequent harm to the retail function of Colchester town centre.	✓		
3) To maximise existing linkages and strengths in the local economy.	✓		
4) To minimise the loss of the best and most versatile agricultural land.	✓		
5) To ensure sufficient accessible natural green space throughout the Garden Community to benefit the new community and the surrounding rural areas.		✓	
6) To improve areas between existing settlements and new development and to ensure that there is no coalescence with existing settlements.		✓	
7) To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social inclusivity and to ensure sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities		✓	
8) To ensure a mix of housing types and tenures with as high a proportion of affordable units as possible.		✓	
9) To ensure that provision for Gypsy and Traveller accommodation is appropriately located within the Garden Community with regard to access to services and social integration.		✓	
10) To ensure the delivery of new schools and other infrastructure to support the Garden Community.		✓	
11) To ensure suitable public transport improvements and maximise sustainable transport modes on site, minimise vehicle emissions, and to ensure effective links to existing off-site public transport services and interchanges.		✓	
12) To ensure suitable and permeable access to and within		✓	

SA Objective	Economic	Social	Environmental
the site and to ensure appropriate linkages to the existing road network.			
13) To ensure an appropriate level of car parking.		✓	
14) To ensure suitable and innovative utility provision, including high-speed and broadband and to ensure the design of new development is capable of maximising innovative forms of emerging utility-related technologies.		✓	
15) To protect and enhance existing features of biodiversity through green corridors and ensure links between new habitats within the Garden Community and those that exist over a wider area.			✓
16) To ensure that recreational activity does not have negative effects on wildlife conservation and protection in the wider area.			✓
17) To ensure the protection, enhancement and creation of features of a landscape value throughout the Garden Community.			✓
18) To ensure that the Garden Community is integrated into the existing rural landscape.			✓
19) To embrace sustainable forms of energy production and distribution.			✓
20) To ensure that there is no deterioration in water quality as a result of development.			✓
21) To ensure that there is no increase in fluvial or surface water flood risk as a result of development, with positive outcomes sought in regards to biodiversity gain and blue infrastructure networks through SuDS.			✓
22) To protect, and where possible, enhance designated and non-designated heritage assets and their settings both above and below ground.			✓

3.4.1 The Compatibility of the SA Objectives

A total of 22 SA Objectives have been derived for the appraisal of the Plan. They are based on the scope of the document, policy advice and guidance and to the assessment of the current state of the environment.

It is useful to test the compatibility of SA Objectives against one another in order to highlight any areas where potential conflict or tensions may arise.

It is to be expected that some objectives are not compatible with other objectives thereby indicating that tensions could occur. Objectives which are based around environmental issues sometimes conflict with economic and social objectives, and vice versa.

Areas of potential incompatibility or uncertainty between the objectives relevant to the Plan are explained within the following bullet points:

- **Protecting soil quality and the majority of the economic and social based objectives:**
There can be expected to be unavoidable harm in regard to minimising the loss of the best and most versatile agricultural land with all other objectives relevant to build development within the Garden Community. The site is within Grade 1 Agricultural Land, which represents the best and most versatile agricultural land within both Tendring District and Colchester Borough.
- **Sustainable transport and the need to ensure road access and car parking:** The integration of sustainable transport modes and necessary infrastructure, and the promotion of their uptake, can be seen as potentially incompatible with the needs of ensuring appropriate linkages to the existing road network. Similarly, the impacts of poorly designed and insufficient car parking can be significant negative from both design and safety aspects. Although truly sustainable outcomes can be seen to correspond to a modal shift to sustainable transport methods, notions of inclusivity determine that safe and efficient road access need to also be ensured to reflect the baseline of car ownership and the reality that sustainable transport modes can not be considered suitable for all demographics. An effective balance of private and public transport accessibility should be considered the most realistic outcome for the Garden Community.
- **Landscape based objectives with those associated with recreation and wildlife conservation / enhancement:** Although similar in form, it must be noted that the inclusion of recreational land should largely be provided in isolation from those areas that have been identified as contributing to green infrastructure. Similarly, land for purely landscape purposes should be managed in a way that offers either recreational or biodiversity value. The impacts of recreational activity on biodiversity and wildlife conservation can be significantly damaging to habitats.

3.5 The Approach to Assessing the Tendring Colchester Borders Garden Community Plan

3.5.1 Introduction

As previously set out, the Plan will include specific proposals, strategies and detailed policies to inform the delivery of the Tendring Colchester Borders Garden Community. At this Issues and Options stage, these proposals, strategies and policies are at an early stage of development but will be refined during the Plan-making process. The final Plan will provide certainty for stakeholders on the type, scale and location of specific land uses including the infrastructure required to accommodate them.

The SA, in line with the scope of the Plan, is required to assess the impacts of the Plan's content. For this purpose, and as required of SA, a broad sustainability framework relevant to the geographical scope of the Garden Community has been devised. The sustainability framework takes the Sustainability Objectives identified previously in this report as a starting point, and elaborates on each objective in turn with a series of criteria or 'key questions' to aid the assessment of the Plan's content in more detail.

3.5.2 The Sustainability Framework for Assessing Options

The following sustainability framework forms the basis of the methods used to evaluate the effects of the Plan. Quantitative analysis is used where available; however a number of assumptions are required in order to make qualitative and comparable judgements to assess options to the same level of detail. It is important that a level playing field is ensured for the assessment of options, with the same level of information being used to assess all options. Assumptions are set out in the relevant sections of this SA in which specific elements of the Plan are appraised.

Table 4: Sustainability Framework for Assessing the Plan

SA Objective	SA Criteria	Potential Indicators
1) To ensure that new employment and complimentary uses are suitably provided and located within the Garden Community.	<ul style="list-style-type: none"> - Will it ensure the delivery of a range of employment opportunities to support the Community? - Will it tackle employment associated deprivation? - Does it seek to improve existing training and learning facilities and/or create more facilities? - Will the employment opportunities available be mixed to suit a varied employment skills base? 	<ul style="list-style-type: none"> - Amount of floor space developed for employment, sqm - Level 2 qualifications by working age residents. - Level 4 qualifications and above by working age residents. - Employment status of residents. - Average gross weekly earnings. - Standard Occupational Classification.

SA Objective	SA Criteria	Potential Indicators
2) To ensure that new retail space is suitably provided and located within the Garden Community, with no subsequent harm to the retail function of Colchester town centre.	<ul style="list-style-type: none"> - Does it seek to include a suitable level of convenience shopping? - Does it promote and enhance the viability of existing centres? - Does it seek to locate development within easy public travelling distance to town centres? - Does it seek to improve public transport networks to town centres? 	<ul style="list-style-type: none"> - Footfalls in Colchester town centre - Traffic flows
3) To maximise existing linkages and strengths in the local economy.	<ul style="list-style-type: none"> - Will it support business innovation, diversification, entrepreneurship and changing economies? - Will it provide complimentary employment to existing major employment areas? 	<ul style="list-style-type: none"> - Type and amount of employment uses delivered
4) To minimise the loss of the best and most versatile agricultural land.	<ul style="list-style-type: none"> - Will it seek to locate development in areas of lower soil quality or not in farming use? - Will it ensure that soil quality is not compromised? - Will it support or lead to the remediation of contaminated land, avoiding environmental pollution or exposure of occupiers or neighbouring land uses to unacceptable health risk? 	<ul style="list-style-type: none"> - Loss of Grade 2 ALC (Ha). - Contaminated land brought back into beneficial use, hectares
5) To ensure sufficient accessible natural green space throughout the Garden Community to benefit the new community and the surrounding rural areas.	<ul style="list-style-type: none"> - Does it ensure that new green and open space provision is accessible to all? 	<ul style="list-style-type: none"> - Walking distances to natural greenspace over 800m
6) To improve areas between existing settlements and new development and to ensure	<ul style="list-style-type: none"> - Will landscapes and features sensitive to development be protected? - Will it lead to coalescence with 	<ul style="list-style-type: none"> - Loss of landscape features - Number of proposals permitted contrary to a desire to restrict coalescence

SA Objective	SA Criteria	Potential Indicators
that there is no coalescence with existing settlements.	neighbouring settlements?	
7) To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social inclusivity and to ensure sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities	<ul style="list-style-type: none"> - Does it ensure a high quality and safe public realm? - Does it seek to preserve PRowS and bridleways? - Does it seek to promote active modes? - Will services and facilities be located in strategic locations within the Garden Community? - Will it provide a mix of leisure and sports pitch provision? - Does it seek to provide facilities for young people? 	<ul style="list-style-type: none"> - New leisure and sports provision (Sqm) - Loss of bridleways / PRowS - Traffic flows within the Garden Community
8) To ensure a mix of housing types and tenures with as high a proportion of affordable units as possible.	<ul style="list-style-type: none"> - Does it seek to provide housing for an ageing population? - Does it ensure a proportion of housing for social rent? - Does it seek to ensure a mix of dwelling types? - Does it seek to include a mix of dwelling sizes? - Does it seek to provide as high a proportion of affordable units as possible / viable? 	<ul style="list-style-type: none"> - Number of lifetime homes - Number of homes for social rent - Number of affordable units - Housing mix - Housing size (bedrooms)
9) To ensure that provision for Gypsy and Traveller accommodation is appropriately located within the Garden Community with regard to access to services and social integration.	<ul style="list-style-type: none"> - Does it seek to provide Gypsy and Traveller pitches? - Are Gypsy and Traveller pitches located within easy access of services and facilities? 	<ul style="list-style-type: none"> - Caravan counts on site - Amount of pitch provision
10) To ensure the delivery of new schools and other	<ul style="list-style-type: none"> - Will it ensure adequate school places (through expansion / new facilities) 	<ul style="list-style-type: none"> - Percentage of new residential development within 30 minutes of

SA Objective	SA Criteria	Potential Indicators
infrastructure to support the Garden Community.	<p>and early years provision to support growth?</p> <ul style="list-style-type: none"> - Will it ensure the required improvements to utilities infrastructure? - Will it ensure the required improvements in capacity to GP services? 	<p>public transport time of a GP, hospital, primary and secondary school, employment and a major retail centre</p> <ul style="list-style-type: none"> - Additional capacity of local schools / incidents of new school applications
11) To ensure suitable public transport improvements and maximise sustainable transport modes on site, minimise vehicle emissions, and to ensure effective links to existing off-site public transport services and interchanges.	<ul style="list-style-type: none"> - Will it increase and/or improve the availability and usability of sustainable transport modes? - Will it seek to encourage people to use alternative modes of transportation other than private vehicle? - Will it lead to the integration of transport modes? - Will it improve rural public transport? - Does it seek to increase the uptake or viability of walking and cycling as methods of transportation, through new infrastructure or integration? - Will it improve, or not detrimentally affect air quality along the A120? - Does it direct growth away from AQMAs? - Does it seek to improve or avoid increasing traffic flows generally? 	<ul style="list-style-type: none"> - Percentage of journeys to work by walking and cycling and percentage of journeys to work by public transport - Traffic flows
12) To ensure suitable and permeable access to and within the site and to ensure appropriate linkages to the existing road network.	<ul style="list-style-type: none"> - Will it contribute positively to reduce social exclusion by ensuring access to jobs, shopping, services and leisure facilities for all? - Does it seek to concentrate development and facilities where access via sustainable travel is greatest? - Does it seek to minimise congestion at key destinations / areas that witness a large amount of vehicle 	<ul style="list-style-type: none"> - Number / amount of new homes / employment development completed at ward level within Growth / Regeneration Areas - Percentage of new development within 30 minutes of community facilities (as defined by each authority)

SA Objective	SA Criteria	Potential Indicators
	movements at peak times? - Would the scale of development require significant supporting transport infrastructure? - Will it provide a suitable amount of sports, recreational, leisure and open space facilities?	
13) To ensure an appropriate level of car parking.	- Does it seek to provide an appropriate level of car parking? - Are parking spaces of a suitable size? - Are the locations of parking spaces suitable?	- Parking violations - Number of parking spaces per dwelling approved.
14) To ensure suitable and innovative utility provision, including high-speed and broadband and to ensure the design of new development is capable of maximising innovative forms of emerging utility-related technologies.	- Does it ensure energy efficiency measures? - Does it seek to reduce building emissions? - Does it seek to integrate renewable sources of energy? - Does it seek to ensure high speed broadband?	- Energy consumption per dwelling - Percentage of energy consumption from renewable sources - Broadband speeds
15) To protect and enhance existing features of biodiversity through green corridors and ensure links between new habitats within the Garden Community and those that exist over a wider area.	- Will development have a potential impact on a national, international or European designated site (SPA, SAC, Ramsar, SSSI)? - Will it maintain and enhance sites otherwise designated for their nature conservation interest, such as LoWSs? - Will it conserve and enhance natural/semi natural habitats? - Will it conserve and enhance species diversity, and in particular avoid harm to indigenous BAP priority species?	- Impacts (direct and indirect) on designated sites - Amount of development in designated areas - Area of land offset for biodiversity
16) To ensure that recreational activity does not have negative effects	- Will recreational spaces be carefully managed and promoted? - Will habitats be suitably protected and	- Journeys to Natura 2000 sites for recreational uses - Condition of habitats on site

SA Objective	SA Criteria	Potential Indicators
on wildlife conservation and protection in the wider area.	enhanced, either physically or through careful management?	
17) To ensure the protection, enhancement and creation of features of a landscape value throughout the Garden Community.	<ul style="list-style-type: none"> - Does it seek to create new landscape features on site? - Does it seek to include public art and a high quality public realm? - Does it seek to protect and enhance existing on-site features of a landscape value? 	<ul style="list-style-type: none"> - Loss of TPOs
18) To ensure that the Garden Community is integrated into the existing rural landscape.	<ul style="list-style-type: none"> - Does it seek to utilise current conditions and character in the wider landscape? - Will existing features be utilised as part of landscape character of newly created areas? 	<ul style="list-style-type: none"> - Presence of indigenous and non-indigenous species through ecological surveys and requirements ant the planning application stage
19) To embrace sustainable forms of energy production and distribution.	<ul style="list-style-type: none"> - Will it reduce emissions of greenhouse gases by reducing energy consumption? - Will it lead to an increased generation of energy from renewable sources? - Will it encourage greater energy efficiency? - Will it improve the efficient use of natural resources, minimising waste and promoting recycling? 	<ul style="list-style-type: none"> - Total CO2 emissions - Renewable Energy Installed by Type - Number of zero carbon homes delivered
20) To ensure that there is no deterioration in water quality as a result of development.	<ul style="list-style-type: none"> - Will it lead to no deterioration on the quality of water bodies? - Will water resources and sewerage capacity be able to accommodate growth? 	<ul style="list-style-type: none"> - Quality of Rivers (number achieving ecological good status) - Number of planning permissions granted contrary to the advice of the Environment Agency on grounds of water quality

SA Objective	SA Criteria	Potential Indicators
21) To ensure that there is no increase in fluvial or surface water flood risk as a result of development, with positive outcomes sought in regards to biodiversity gain and blue infrastructure networks through SuDS.	<ul style="list-style-type: none"> - Does it seek to avoid development in areas at risk of flooding (fluvial, coastal, surface water)? - Does it seek to avoid increasing flood risk (fluvial, surface water, groundwater) in areas away from initial development? - Does it promote the inclusion of Sustainable Drainage Systems (SuDS) in new developments and will their integration be viable? 	<ul style="list-style-type: none"> - Number of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds - Number of SuDS schemes approved by ECC
22) To protect, and where possible, enhance designated and non-designated heritage assets and their settings both above and below ground.	<ul style="list-style-type: none"> - Will it protect and enhance designations, features and areas of historical, archaeological and cultural value in both urban and rural areas? - Will it have a negative impact on the significance of a designated historic environment asset or its setting? - Does it seek to enhance the range and quality of the public realm and open spaces? - Does it encourage the use of high quality design principles to respect local character? - Will / can any perceived adverse impacts be reduced through adequate mitigation? 	<ul style="list-style-type: none"> - Percentage of new and converted dwellings on previously developed land - Number of listed buildings demolished, repaired or brought back to use, including locally listed buildings - New Conservation Area Appraisals adopted - Number of Listed Buildings, Scheduled Monuments, Conservation Areas, Registered Parks and Gardens (and percentage at risk) - Area of highly sensitive historic landscape characterisation type(s) which have been altered and their character eroded - Number of major development projects that enhance or detract from the significance of heritage assets or historic landscape character - Percentage of planning applications where archaeological investigations were required prior to approval or mitigation strategies developed or implemented

3.6 The Appraisal of the Plan's Content

The SA of the Tendring Colchester Garden Community Plan appraises the document's thematic content against the Sustainability Objectives (SOs) outlined in the above framework. The aim is to assess the sustainability effects of the document following implementation. The appraisal will look at the secondary, cumulative, synergistic, short, medium and long-term permanent and temporary effects in accordance with Annex 1 of the SEA Directive, as well as assess alternatives and suggest mitigation measures where appropriate. The findings will be accompanied by an appraisal matrix which will document the effects over time.

The content to be included within the table responds to those 'significant effects' of the element of the Plan subject to appraisal. Appraisals will also look at the following:

- Temporal effects;
- Secondary, Cumulative and Synergistic effects;
- The appraisal of Alternatives; and
- Proposed mitigation measures / recommendations.

These, and 'significant effects' are further described in the following sub-sections.

3.6.1 Description of 'Significant Effects'

The strength of impacts can vary dependant on the relevance of the policy content to certain sustainability objectives or themes. Where the policies have been appraised against the Sustainability Objectives the basis for making judgements within the assessment is identified within the following key:

Possible impact	Basis for judgement
++	Strong prospect of there being significant positive impacts
+	Strong prospect of there being minor positive impacts
?	Possibility of either positive or negative impacts, or general uncertainty where there is a lack on current information (to be elaborated in commentary in each instance)
0	No impact
N/A	Not applicable to the scope or context of the appraised content
-	Strong prospect of there being minor negative impacts and mitigation would be possible / issues can be rectified
--	Strong prospect of there being significant negative impacts with mitigation unlikely to be possible (pending further investigation) / further work is needed to explore whether issues can be rectified

Commentary is also included to describe the significant effects of the policy on the sustainability objectives.

3.6.2 Description of ‘Temporal Effects’

The appraisal of the Plan’s content recognises that impacts may vary over time. Three time periods have been used to reflect this and are shown in the appraisal tables as S (short term), M (medium term) and L (long term). For the purpose of the policy elements of the Plan S, M and L depict:

(S) Short term: early stages of the plan period / development of the Garden Community.

(M) Medium Term: middle stages of the plan period / development of the Garden Community.

(L) Long term: latter stages of the plan period (2033) / development of the Garden Community and where relevant beyond.

3.6.3 Description of ‘Secondary, Cumulative and Synergistic Effects’

In addition to those effects that may arise indirectly (secondary effects), relationships between different elements of the Plan will be assessed in order to highlight any possible strengthening or weakening of impacts from their implementation together. Cumulative effects respond to impacts occurring directly from two different policies together, and synergistic effects are those that offer a strengthening or worsening of more than one policy that is greater than any individual impact. Additionally, any cumulative impacts with other plans or projects will be highlighted within the appraisal.

3.6.4 Description of ‘Alternatives Considered’

Planning Practice Guidance states that reasonable alternatives are the different realistic options considered by the plan-maker in developing the policies in its plan. They must be sufficiently distinct to highlight the different sustainability implications of each so that meaningful comparisons can be made. The alternatives must be realistic and deliverable.

At this current stage, it is envisaged that further alternatives will be identified and developed during further stages of the Plan and as a result of the (this) Issues and Options consultation. The SA process will refine what constitutes a reasonable alternative at each consultation stage, and assess reasonable alternatives as they emerge, with findings shared with the Local Planning Authorities ahead of Local plan committee meetings for consideration.

3.6.5 Description of ‘Proposed Mitigation Measures / Recommendations’

Negative or uncertain impacts may be highlighted within appraisals. As such, mitigation measures may be needed and these will be highlighted in this section for each policy where relevant. In addition to this, this section will also include any recommendations that are not directly linked to negative or uncertain impacts, but if incorporated may lead to sustainability improvements.

4. The Appraisal of the Plan's Vision and Principles

4.1 Introduction

The following sub-sections respond to an initial appraisal of each element of the Plan. This responds to an appraisal of each part of the document that could give rise to environmental, social or economic effects. In each sub-section, an appraisal of all identified reasonable alternatives, where they exist at this stage, has been included for transparency and robustness. The process behind the identification of each alternative has been included, citing the source of each alternative in each instance. The following elements of the Plan are subject to assessment in this Sustainability Appraisal:

- Tendring Colchester Borders Garden Community Draft Vision;
- Theme 1: Place and Integration;
- Theme 2: Community; and
- Theme 3: Delivery.

4.2 A Vision for the Garden Community

4.2.1 Context / Justification

A Vision for Tendring Colchester Borders Garden Community will provide a mandate for its future development. It should be a shared Vision that governs all processes from design through to delivery of the development and indeed management of community assets.

It should create an identity for the new community where residents and business feel like they “belong”. It should foster a collective sense of ownership and pride in the place where people will live, work and spend their leisure time.

The Vision combines and reflects the evidence, community workshops, the Garden Communities Charter and design principles set out above. It is a good starting point from which to develop a more succinct, and shared Vision with which people can fully identify.

The Vision for the Garden Community is as follows:

Tendring Colchester Borders Garden Community Draft Vision

Tendring Colchester Borders Garden Community (TCBGC) is an ambitious plan to create an exemplar Garden Community. It will be a beautiful community with a strong sense of identity and belonging.

21st CENTURY COMMUNITY, ROOTED IN ESSEX TRADITIONS

TCBGC will combine the best of traditional Essex residential environments with the expectations of a 21st century lifestyle. It will have low-energy, high performance homes in a rich landscape setting with natural green space directly accessible to every home. It will be well served by sustainable transport modes to encourage travel behaviour change, with a network of Public Rights of Way, streets and greenspaces that will integrate its distinctive neighbourhoods with each other and with neighbouring communities in particular Wivenhoe, Elmstead Market, Greenstead and with Colchester Town.

A NEW COUNTRY PARK

A new Country Park in the valley of the Salary Brook will be the centrepiece of an open space framework that will preserve important habitats – wetlands, woodlands, hedgerows, meadows, etc - and give existing and new residents access to extensive green landscape areas for leisure and recreation. There will be a network of leisure routes to, through and around the Garden Suburb.

NEW COMMUNITY FACILITIES AND SERVICES, PLANNED FROM THE START

There will be a new District Centre and smaller Local Centres to provide for convenience shopping, healthcare and community services and facilities, and space for businesses, located alongside primary schools and key public transport stops. These will be planned to be convenient to every new home, and, where possible, to serve passing trade. TCBGC will have a range of early years and childcare facilities, primary and secondary schools developed alongside its housing.

ACTIVE MOBILITY – WALKING AND CYCLING

It will be a place where walking and cycling to local destinations – schools, convenience shops, play spaces, places of work – will be as attractive and convenient than getting in the car. Every new home will be within walking distance of local shops and other services that support daily life, supporting health and wellbeing objectives.

ALINGING UNIVERSITY ASPIRATIONS

An extension to the campus of the University of Essex will be planned as part of the new community with opportunities to deliver a mix of uses – academic space, student housing, sports facilities, etc, to complement the district centre. There will be land to expand the

University's Knowledge Hub business park.

PUBLIC TRANSPORT FOR ALL

Good value, frequent, high-quality, reliable public transport will connect the Community to the University, Colchester Town centre, Colchester Station and to the main employment areas, and could link TCBGC to Clacton and Braintree and to other destinations across North Essex. A choice of travel modes, including high quality public transport, will provide households in TCBGC with the opportunity to seek employment in locations across North Essex and beyond.

NEW JOBS ALONGSIDE NEW HOMES

TCBGC will support the economic growth of Colchester Town and the regeneration of towns and villages in Tendring, and provide opportunities for established and new residents to access a wide range of employment opportunities. There will be a variety of jobs available in businesses housed in modern accommodation – in the district centre, in business parks located close to the A120, and in an expanded Knowledge Gateway close to the University, all accessible from new homes by sustainable transport routes. Support will be given to local small and medium sized businesses to help promote entrepreneurship and embed local firms within the wider Colchester and Tendring economy. This might also include an element of homeworking.

DEALING WITH STRATEGIC TRAFFIC AND CONGESTION

TCBGC will benefit from good links to the strategic road network, aligned to keep more through-traffic away from where people live but accessible to make journeys over a wide area as convenient as possible.

FUTURE-PROOFING TRANSPORT AND MOBILITY

The timescales over which the Garden Community will grow and develop will need flexibility to incorporate exciting new technologies for future mobility, allowing the emerging neighbourhoods to respond to changes in patterns of travel behaviour which are constantly evolving in parallel with advances in new transport technology.

A NEW, EXCEPTIONAL PLACE

The Tendring Colchester Borders Garden Community will be an exceptional place to be born, to grow up, to make a career, to raise a family, to retire; to enjoy a rich and fulfilling life.

4.2.2 Significant and Temporal Effects

The following assessment explores whether the plan's Vision is broadly compatible with the Sustainability Objectives that have been specifically devised for the Garden Community area.

Table 5: Compatibility with the Sustainability Objectives: Tendring Colchester Borders Garden Community Draft Vision

Sustainability Objectives (SO)		Is the Vision compatible with the Sustainability Objectives?
ECONOMIC OBJECTIVES	1) To ensure that new employment and complimentary uses are suitably provided and located within the Garden Community.	✓
	2) To ensure that new retail space is suitably provided and located within the Garden Community, with no subsequent harm to the retail function of Colchester town centre.	✓
	3) To maximise existing linkages and strengths in the local economy.	✓
	4) To minimise the loss of the best and most versatile agricultural land.	X
Commentary	<p>The Plan's Vision adheres to the majority of the 'on-site' requirements of the Garden Community as established within Policy SP8 of Section One of the emerging Local Plans of Tendring and Colchester. The Vision refers to the need for retail (convenience shopping in a District Centre and smaller Local Centres) and employment opportunities within the development. The Vision states that, 'TCBGC will support the economic growth of Colchester Town and the regeneration of towns and villages in Tendring, and provide opportunities for established and new residents to access a wide range of employment opportunities. There will be a variety of jobs available in businesses housed in modern accommodation – in the district centre, in business parks located close to the A120, and in an expanded Knowledge Gateway close to the University, all accessible from new homes by sustainable transport routes. Support will be given to local small and medium sized businesses to help promote entrepreneurship and embed local firms within the wider Colchester and Tendring economy. This might also include an element of homeworking.' The Vision does not aspire to minimising the loss of the best and most agricultural land; however this cannot be seen to be influenced through the Plan or indeed the notion of Garden Community at this location or within the wider area.</p>	
SOCIAL OBJECTIVES	5) To ensure sufficient accessible natural green space throughout the Garden Community to benefit the new community and the surrounding rural areas.	✓
	6) To improve areas between existing settlements and new development and to ensure that there is no coalescence with existing settlements.	✓

Sustainability Objectives (SO)		Is the Vision compatible with the Sustainability Objectives?
	7) To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social inclusivity and to ensure sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities	✓
	8) To ensure a mix of housing types and tenures with as high a proportion of affordable units as possible.	?
	9) To ensure that provision for Gypsy and Traveller accommodation is appropriately located within the Garden Community with regard to access to services and social integration.	?
	10) To ensure the delivery of new schools and other infrastructure to support the Garden Community.	✓
	11) To ensure suitable public transport improvements and maximise sustainable transport modes on site, minimise vehicle emissions, and to ensure effective links to existing off-site public transport services and interchanges.	✓
	12) To ensure suitable and permeable access to and within the site and to ensure appropriate linkages to the existing road network.	✓
	13) To ensure an appropriate level of car parking.	?
	14) To ensure suitable and innovative utility provision, including high-speed and broadband and to ensure the design of new development is capable of maximising innovative forms of emerging utility-related technologies.	✓
Commentary	<p>The Vision states that the Garden Community will have a 'rich landscape setting with natural green space directly accessible to every home.' This ensures adherence to Sustainability Objective 5 regarding accessible natural greenspace. This will also encourage and enable transport by active modes, building on the established public transport links in the wider area and ensure that the Garden Community improves areas between existing settlements. Further, the Plan states of public transport, 'Good value, frequent, high-quality, reliable public transport will connect the Community to the University, Colchester Town centre, Colchester Station and to the main employment areas, and could link TCBGC to Clacton and Braintree and to other destinations across North Essex.' This ensures compatibility with Sustainability Objectives 7 and 10. Similarly, compatibility with Sustainability Objective 9 is ensured through the Vision's statement that, 'TCBGC will have a range of early years and childcare facilities, primary and secondary schools developed alongside its housing.' Compatibility is also ensured regarding permeable access (Sustainability Objective 11), through a commitment for the Garden Community to provide good links to the strategic road network, aligned to keep more through-traffic away from where people live but accessible to make journeys</p>	

Sustainability Objectives (SO)		Is the Vision compatible with the Sustainability Objectives?
	<p>over a wide area as convenient as possible.</p> <p>Uncertainty surrounds the compatibility of the Vision with those Sustainability Objectives relevant to a housing mix and Gypsy and Traveller accommodation provision. It is recommended that the Vision could be expanded to include these requirements of the Garden Community as set out in Section One Policy SP8 within the emerging Local Plans of Colchester and Tendring. Further uncertainty surrounds innovative utility provision and the inclusion of high-speed broadband at the high level. The Vision also does not address car parking issues, however this cannot be considered a suitable inclusion in an overarching Vision.</p>	
ENVIRONMENTAL OBJECTIVES	15) To protect and enhance existing features of biodiversity through green corridors and ensure links between new habitats within the Garden Community and those that exist over a wider area.	✓
	16) To ensure that recreational activity does not have negative effects on wildlife conservation and protection in the wider area.	✓
	17) To ensure the protection, enhancement and creation of features of a landscape value throughout the Garden Community.	✓
	18) To ensure that the Garden Community is integrated into the existing rural landscape.	✓
	19) To embrace sustainable forms of energy production and distribution.	?
	20) To ensure that there is no deterioration in water quality as a result of development.	?
	21) To ensure that there is no increase in fluvial or surface water flood risk as a result of development, with positive outcomes sought in regards to biodiversity gain and blue infrastructure networks through SuDS.	?
	22) To protect, and where possible, enhance designated and non-designated heritage assets and their settings both above and below ground.	?
Commentary	<p>Strong compatibility exists between the Vision's content surrounding landscape and existing communities and relevant Sustainability Objectives. The Plan's Vision includes that a new Country Park in the valley of the Salary Brook will be the centrepiece of an open space framework that will preserve important habitats – wetlands, woodlands, hedgerows, meadows, etc. - and give existing and new residents access to extensive green landscape areas for leisure and recreation. There will be a network of leisure routes to, through and around the Garden Suburb.' This will go some way to ensuring that recreational activity does not have negative effects on wildlife conservation and protection in the wider area.</p>	

Sustainability Objectives (SO)	Is the Vision compatible with the Sustainability Objectives?
	<p>Uncertainty surrounds the compatibility of the Vision and those Sustainability Objectives regarding renewable energy, water quality, flood risk and the historic environment. Although notionally these objectives can not be viewed as significant issues on site and more aspirational in nature, this is not a specific criticism of the Vision, which should not focus on site constraints at this high level.</p>

4.2.3 Alternatives Considered

The Vision can be seen as a general summary of the content of the Plan. The individual elements of the Vision are elaborated on in more detail within other elements of the document. Alternatives are discussed in more detail within the assessment of these elements, presented as ‘themes and principles’ later within this SA, commensurate to their individual context.

4.2.4 Proposed Mitigation Measures / Recommendations

The Plan’s Vision and the Sustainability Objectives are largely compatible. The Plan is not compatible with the objective to minimise the loss of the best and most versatile agricultural land, however this is no criticism of the Plan’s Vision and related to the nature of Greenfield development. Uncertainty surrounds the Vision where certain objectives are not specifically covered, such as ensuring a mix of housing types and tenures, Gypsy and Traveller accommodation provision, utility provision (including high-speed broadband) and it is recommended that these are included within future iterations of the Vision.

4.3 Planning Themes and Principles of the Garden Community

4.3.1 Context / Justification

Section 4 of the Tendring Colchester Borders Garden Community Plan contains a number of 'themes' related to Garden Community Charter Principles. Within this SA the content of these 'themes', as outlined in the Plan, are appraised.

The Plan includes a narrative of how each Charter Principle can be met within the Garden Community, physically and in terms of how development can be shaped within the mechanisms of the Plan itself. These narratives form the basis for each thematic appraisal.

4.3.2 Theme 1: Place and Integration

This Section of the Plan relates to issues such as making good places, high quality design, planning for a healthy economy, mobility and access within and around the development, and landscape and biodiversity objectives.

The principles that form the content of this theme are as follows:

THEME 1: PLACE AND INTEGRATION

PRINCIPLE 1: GREEN INFRASTRUCTURE

The Garden Communities will provide a generous amount of green space. They will be set within a multi-functional and integrated natural environment; providing space for nature, making the communities more resilient to climate change; promoting healthy lifestyles, and creating beautiful places to live and work.

PRINCIPLE 2: INTEGRATED AND SUSTAINABLE TRANSPORT

The Garden Communities will be planned around a step change in integrated and sustainable transport system for the north Essex area, which will put walking, cycling and public transit systems at the heart of the development, and be delivered in a timely way to support the communities as they grow.

PRINCIPLE 3: EMPLOYMENT OPPORTUNITY

The Garden Communities will seek to provide access to one job per household within the new community or within a short distance by public transport. The employment function will be a key component of creating character and identity and sustainable communities.

PRINCIPLE 4: LIVING ENVIRONMENT

Community inclusiveness and walkable, sociable and vibrant neighbourhoods will be a defining characteristic of the garden communities. A diverse mix of homes responding to existing and future local needs will be provided alongside a range of community services,

including health, education, leisure and recreation, culture and shopping.

PRINCIPLE 5: SMART AND SUSTAINABLE LIVING

Planned for the 21st century, the Garden Communities will secure a smart and sustainable approach that fosters resilient environments and communities; able to respond positively to changing circumstances. Innovation and technology will be embraced to achieve resource efficiency, higher quality of life and healthier lifestyles; creating the conditions for sustainable living.

PRINCIPLE 6: GOOD DESIGN

Through all stages of the planning, design and development of the Garden Communities the highest quality of design and management of the built and public realm will be promoted. Existing local assets will be capitalised to help create distinctive places.

4.3.2.1 Significant, Secondary and Temporal Effects

Table 6: Impact on Sustainability Objectives: Theme 1 – Place and Integration

Sustainability Objectives (SO)		Impacts		
		Short Term	Medium Term	Long Term
ECONOMIC OBJECTIVES	1	++	++	++
	2	++	++	++
	3	++	++	++
	4	-	-	-
	Commentary	<p>Significant positive impacts are highlighted for Sustainability Objective 1 and 3, where the Plan identifies that new employment space at TCBGC could be provided to accommodate employment space related to commercialising the research and innovation strengths of the University of Essex, renewable and offshore energy, smart technology, port-related activities, health and care, tourism and leisure and logistics.</p> <p>Positive impacts have been highlighted regarding Sustainability Objective 2 and a need for convenience retail provision to support the new community. The Plan acknowledges that the Garden Community will need to establish neighbourhoods where everything is within easy walking distance, planned around connected centres, which provide a mix of homes, jobs and services set within attractive and green environments. The formulation of a District Centre and a number of local centres will ensure that impacts on the retail and comparison shopping offer of Colchester Town Centre are not compromised and significantly boosted, particularly in the east Colchester Town regeneration area.</p> <p>Negative impacts have been highlighted for the loss of Grade 1 Agricultural Land, which</p>		

Sustainability Objectives (SO)		Impacts		
		Short Term	Medium Term	Long Term
		represents the highest grade soils within the Districts of both Tendring and Colchester. Despite this, impacts can not be highlighted as significant on the balance of sustainability implications and benefits of a Garden Community in this location and the additional economic benefits of its location in close proximity to Colchester Town Centre, the University of Essex and strategic ports to the east.		
SOCIAL OBJECTIVES	5	++	++	++
	6	++	++	++
	7	++	++	++
	8	++	++	++
	9	?	?	?
	10	++	++	++
	11	++	++	++
	12	++	++	++
	13	?	?	?
	14	+	+	+
	Commentary	<p>There will be significant positive impacts regarding accessible natural green space through requirements for open space to be integrated throughout the Garden Community and also the integration of major new Country Park. Additionally, the Plan successfully seeks to ensure sports pitches, recreation and play areas and informal space for free play and recreation for all ages. As a result, additional positive impacts have been identified for Sustainability Objective 7 regarding accessibility to facilities in so far as is relevant to this specific theme.</p> <p>There will be significant positive impacts on Sustainability Objective 6 regarding coalescence in response to the new community, through Theme 1, addressing the relationship with existing communities close to and within its boundaries, stating that care will be needed in new development to mitigate potential adverse impacts on adjacent settlements and on the wider landscape.</p> <p>There will be significant positive impacts on Sustainability Objective 8, regarding the provision of a mix of house types and tenures. The Plan states that, 'TCBGC will provide for a mix of dwelling sizes, tenures and types including provision for self-build and custom-built homes, lifetime homes and affordable and starter homes, driven by local needs, including how this may change over time. This strategy will help to achieve lively, sociable and diverse neighbourhoods, giving single people, couples, families, retirees and elderly people the chance</p>		

Sustainability Objectives (SO)	Impacts		
	Short Term	Medium Term	Long Term
	<p>play a full part in the life of TCBGC.' This can be seen to go beyond what the market can be expected to provide, however the Plan could elaborate in future iterations how these different types of housing (including Gypsy and Traveller accommodation provision) could be integrated within the wider design of the Garden Community, in addition to affordable units, to ensure social inclusivity.</p> <p>Significant positive impacts have been highlighted regarding Sustainability Objectives 10 and 7 regarding the provision of schools and other supporting infrastructure, services and facilities. Charter Principle 4 of the Plan states that, 'Tendring Colchester Borders Garden Community will have a District Centre that will be the heart of the Garden Community. It will likely contain the highest development density with a mix of employment, shopping, secondary school, cultural and amenity facilities, together with the main public transport interchange. These uses will be interspersed with new homes, typically of higher density than elsewhere in the Garden Communities. Local centres will contain a smaller range of local services including primary schools, nurseries, health services, day-to-day convenience shopping and cafés.'</p> <p>The Plan's Principle 2 recognises the importance of ensuring the highest level of strategic connectivity with the wider transport system. The Plan includes that the new Garden Community should make full provision for active travel (walking and cycling) and sustainable travel (public transport) so that each accounts for 70% of all trips. The Plan identifies that this could represent a Rapid Transit service to Colchester on dedicated routes with new park & ride, a new link road from the A133 to a new junction on the A120, with the potential to also connect to the B1027 and B1028 to provide a new connection to the strategic road network without the need to go through Colchester, good connections to the University of Essex a key node for new transport infrastructure, and enhanced cycle links to central Colchester and to other nearby communities. This will ensure significant positive impacts regarding Sustainability Objectives 11 and 12.</p> <p>Charter Principle 5 identifies that the use of Smart Vehicles would make full provision for electric vehicle charging infrastructure linked to renewable energy generation while Smart Car-Sharing would use technology to make cars available for occasional use and would help manage Smart Parking. It is unsure whether this element of the Plan is suitable in response to the baseline data of car ownership in the wider area and the need for the development of 'specific garden community parking approaches and standards that help promote the use of sustainable transport and make efficient use of land' as identified in the emerging Colchester and Braintree Local Plan Policy SP7 - Development and Delivery of New Garden Communities in North Essex. As such, uncertain impacts are identified at this stage.</p> <p>Charter Principle 5 will ensure minor positive impacts on Sustainability Objective 14, regarding innovative utility provision. This Principle includes 'Smart Infrastructure' requirements, which include cutting edge digital communications, Smart Energy systems to deliver sustainable energy and capacity and adaptability for technological change. Despite this, future iterations of the Plan could include specific mention of the requirements of day to day utility provision on site, aside from those related to energy efficiency, power and digital communications.</p>		

Sustainability Objectives (SO)		Impacts		
		Short Term	Medium Term	Long Term
ENVIRONMENTAL OBJECTIVES	15	++	++	++
	16	+	+	+
	17	++	++	++
	18	++	++	++
	19	++	++	++
	20	?	?	?
	21	+	+	+
	22	?	?	?
	Commentary	<p>Significant positive impacts have been identified for Sustainability Objective 16, where the Plan states that, 'Habitats along the valleys and corridors of the Salary Brook and Sixpenny Brook include woodland, including Ancient Woodland, species-rich grassland and wetland habitats and should be retained and enhanced. The same should apply to the Nationally Important Bullock Wood.' Additionally, land to the southwest of the site creates a separation between Colchester and Wivenhoe that should be retained. Reference is similarly made to sustainable drainage systems, affording positive impacts. Regarding a desire to ensure that recreational activity does not affect wildlife conservation minor positive impacts are highlighted at this stage. Although the issue is not specifically identified in the Plan, Principle 1 alludes to the need for separate and more 'purpose designed' open spaces within the Garden Community. This will need to be carefully managed however to ensure no possible compromise of the status of habitats through recreational activity. Minor positive impacts have been identified at this stage, where the issue can be viewed as more a management criterion.</p> <p>Significant positive impacts are also identified for all landscape and coalescence based objectives. The Plan states that, 'The concept of Garden Communities places great emphasis on the landscape framework and the availability of high-quality, accessible green space near to homes and community facilities. The strategy for these new Garden Communities is to draw upon natural assets and features within the site to generate high standards of design. It requires an approach that sets development within a strong framework of internal green space and surrounding buffer areas that separate the new development from existing communities.'</p> <p>There will be positive impacts associated with renewable energy and energy efficiency (Sustainability Objective 19) though Principle 5, in particular the Smart Infrastructure principles that state that future work will endeavour ensure that the Garden Community makes space for heat and power energy generation centres and hubs, maximises efficiency at the household and business level, with on-site generation, and a mixed portfolio of energy technologies to</p>		

Sustainability Objectives (SO)	Impacts		
	Short Term	Medium Term	Long Term
	<p>avoid dependence on any one energy solution.</p> <p>Uncertain impacts have been identified regarding Sustainability Objective 20, ensuring that there is no deterioration in water quality as a result of development, in the absence of direct mention of the potential effects of development on existing water courses of the Salary Brook in Theme 1. Nevertheless, indirect positive implications can be expected through the enhancement and active management of the area as a Country Park.</p> <p>Although only minimal Listed Buildings are present within the site, the Plan does not include notions of enhancing the historic environment. Uncertain impacts have been highlighted for Sustainability Objective 22 at this stage and it is recommended that the relationship between new built development and these assets and their settings is recognised and elaborated on in future iterations of the Plan, with enhancement sought.</p>		

4.3.2.2 Alternatives Considered

The Theme at this stage relates to practical ways in which the Garden Community could meet the requirements of related Garden Community Charter principles. As such, it would be premature to indicate which measures should and would be more suitable for integration on site at this early stage in the plan-making process and prior to any formal public consultation. In the absence of any firm details within the Plan, no alternative approaches can be identified for appraisal at this stage.

4.3.2.3 Proposed Mitigation Measures / Recommendations

- The Plan could elaborate in future iterations how these different types of housing (including Gypsy and Traveller accommodation provision) could be integrated within the wider design of the Garden Community, in addition to affordable units, to ensure social inclusivity.
- Charter Principle 5 identifies that the use of Smart Vehicles would make full provision for electric vehicle charging infrastructure linked to renewable energy generation while Smart Car-Sharing would use technology to make cars available for occasional use and would help manage Smart Parking. It is unsure whether this element of the Plan is suitable in response to the baseline data of car ownership in the wider area and the need for the development of 'specific garden community parking approaches and standards that help promote the use of sustainable transport and make efficient use of land' as identified in the emerging Colchester and Braintree Local Plan Policy SP7 - Development and Delivery of New Garden Communities in North Essex. It is recommended that this be included within future iterations of the Plan.
- Future iterations of the Plan could include specific mention of the requirements of day to day utility provision on site, aside from those related to energy efficiency, power and digital communications.
- Although the issue is not specifically identified in the Plan, Principle 1 alludes to the need for separate and more 'purpose designed' open spaces within the Garden Community. This will need to be carefully managed however to ensure no possible compromise of the status of habitats through recreational activity.

- Regarding ensuring that there is no deterioration in water quality as a result of development, there is no direct mention of the potential effects of development on existing water courses of the Salary Brook. It is recommended that this is elaborated on in future iterations of the Plan.
- Although only minimal Listed Buildings are present within the site, the Plan does not include notions of enhancing the historic environment. It is recommended that the relationship between new built development and these assets and their settings is recognised and elaborated on in future iterations of the Plan, with enhancement sought where possible.

4.3.3 Theme 2: Community

This Section of the Plan relates to issues such as creating identity in a new community, engaging with future residents and businesses, existing and surrounding communities and local and public bodies and ownership and maintenance of community assets.

The principles that form the content of this theme are as follows:

THEME 2: COMMUNITY

PRINCIPLE 7: COMMUNITY ENGAGEMENT

The Garden Communities are a locally-led initiative, and their development will be shaped through engaging existing communities and emerging new communities; residents will be empowered to contribute to shaping the future of North Essex.

PRINCIPLE 8: ACTIVE LOCAL STEWARDSHIP

The Garden Communities will be developed and managed in perpetuity with the direct involvement of their residents and businesses; residents will be directly engaged in the long term management and stewardship, fostering a shared sense of ownership and identity.

4.3.3.1 Significant, Secondary and Temporal Effects

Table 7: Impact on Sustainability Objectives: Theme 2 - Community

Sustainability Objectives (SO)		Impacts		
		Short Term	Medium Term	Long Term
ECONOMIC OBJECTIVES	1	0	0	0
	2	0	0	0
	3	0	0	0
	4	0	0	0
	Commentary	There will be no impacts on the economic Sustainability Objectives as a direct result of this Theme.		
SOCIAL OBJECTIVES	5	+	+	+
	6	0	0	0
	7	+	+	+
	8	0	0	0

Sustainability Objectives (SO)	Impacts		
	Short Term	Medium Term	Long Term
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
Commentary	There will be positive implications regarding those Sustainability Objectives related to open space management and ensuring an appropriate and desirable level of services and facilities, through effective community engagement and active stewardship once the Garden Community has been delivered.		
ENVIRONMENTAL OBJECTIVES	15	+	+
	16	+	+
	17	+	+
	18	0	0
	19	0	0
	20	0	0
	21	+	+
	22	0	0
	Commentary	The Plan asks a consultation question within Charter Principle 8 that asks consideration of the best way to manage community assets such as parks, sports pitches, allotments, community buildings and schools. This can also ensure positive impacts related to the maintenance of habitats, green and blue infrastructure (including indirectly those created through SuDS) and ensuring these are protected alongside recreational areas, and landscape features.	

4.3.3.2 Alternatives Considered

The Theme at this stage relates to practical ways in which the Garden Community could meet the requirements of related Garden Community Charter principles. As such, it would be premature to indicate which measures should and would be more suitable for integration on site at this early stage in the plan-making process and prior to any formal public consultation. In the absence of any firm details within the Plan, no alternative approaches can be identified for appraisal at this stage.

4.3.3.3 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

4.3.4 Theme 3: Delivery

This Section of the Plan relates to issues such as leadership, partnership and phasing and delivery of homes together with jobs; education, leisure and community facilities; and transport and utilities infrastructure.

The principles that form the content of this theme are as follows:

THEME 3: DELIVERY

PRINCIPLE 9: STRONG CORPORATE AND POLITICAL PUBLIC LEADERSHIP

The Councils of North Essex will collaborate to provide clear vision for the garden communities and commitment to their long term success. Central to this will be a commitment to high quality place-making, timely infrastructure provision, and achieving a steady pace of housing and employment delivery.

PRINCIPLE 10: INNOVATIVE DELIVERY STRUCTURE

The Garden Communities will be delivered through a genuine and pro-active partnership approach between the public and private sectors, where risk and reward is shared and community empowerment enabled.

4.3.4.1 Significant, Secondary and Temporal Effects

Table 8: Impact on Sustainability Objectives: Theme 3 - Delivery

Sustainability Objectives (SO)		Impacts		
		Short Term	Medium Term	Long Term
ECONOMIC OBJECTIVES	1	+	+	+
	2	+	+	+
	3	+	+	+
	4	0	0	0
	Commentary	Theme 3 will ensure, indirectly, that the majority of the economic Sustainability Objectives will be met with positive outcomes. The Plan states that there is a '...desire of the public sector, represented by the partnership of four local Councils and representing the interests of the wider North Essex communities, to play a full and active role in the development of the three Garden Communities, and to participate in both the risks and the rewards of development, securing benefits for the wider communities.' With a preference for the formation of local Development Corporations to prepare masterplans and other guidance, the Plan and Council's aspire to offer truly sustainable outcomes.		

Sustainability Objectives (SO)		Impacts		
		Short Term	Medium Term	Long Term
SOCIAL OBJECTIVES	5	+	+	+
	6	+	+	+
	7	+	+	+
	8	+	+	+
	9	?	?	?
	10	+	+	+
	11	+	+	+
	12	+	+	+
	13	+	+	+
	14	+	+	+
	Commentary	Theme 3 will ensure, indirectly, that the majority of the social Sustainability Objectives will be met with positive outcomes. The Plan states that there is a '...desire of the public sector, represented by the partnership of four local Councils and representing the interests of the wider North Essex communities, to play a full and active role in the development of the three Garden Communities, and to participate in both the risks and the rewards of development, securing benefits for the wider communities.' With a preference for the formation of local Development Corporations to prepare masterplans and other guidance, the Plan and Council's aspire to offer truly sustainable outcomes. Uncertain impacts are identified for Gypsy and Traveller accommodation provision, where mention of this requirement is currently absent from the Plan.		
ENVIRONMENTAL OBJECTIVES	15	+	+	+
	16	+	+	+
	17	+	+	+
	18	+	+	+
	19	+	+	+
	20	+	+	+

Sustainability Objectives (SO)	Impacts		
	Short Term	Medium Term	Long Term
21	+	+	+
22	+	+	+
Commentary	Theme 3 will ensure, indirectly, that the majority of the environmental Sustainability Objectives will be met with positive outcomes. The Plan states that there is a ‘...desire of the public sector, represented by the partnership of four local Councils and representing the interests of the wider North Essex communities, to play a full and active role in the development of the three Garden Communities, and to participate in both the risks and the rewards of development, securing benefits for the wider communities.’ With a preference for the formation of local Development Corporations to prepare masterplans and other guidance, the Plan and Council’s aspire to offer truly sustainable outcomes. Uncertain impacts regarding Sustainability Objective 9 reflect the absence of provision elsewhere in the Plan’s Themes.		

4.3.4.2 Alternatives Considered

The Theme at this stage relates to practical ways in which the Garden Community could meet the requirements of related Garden Community Charter principles. As such, it would be premature to indicate which measures should and would be more suitable for integration on site at this early stage in the plan-making process and prior to any formal public consultation. In the absence of any firm details within the Plan, no alternative approaches can be identified for appraisal at this stage.

It should be noted however that the Strategic Section One for Tendring and Colchester’s emerging Local Plans establishes and assesses alternatives relevant to the principle of the Garden Community delivery model in comparison to more traditional approaches to growth.

4.3.4.3 Proposed Mitigation Measures / Recommendations

No mitigation measures or recommendations are proposed at this stage.

5. The Plan's Development Concept Option

5.1 The Identification of Options for Assessment

The Plan states that, 'The area of land that could accommodate a new Garden Community at Tendring Colchester Borders has been refined from options presented in the "Options and Evaluation" work undertaken by AECOM in July 2016 and influenced by stakeholder consultation with local community representatives in November 2016 and April 2017, as well as an understanding of the issues and the interrelationship between them which include:

- identification of clear and defensible boundaries (water courses, roads, woodland belts);
- appreciation of distance and separation of communities – (physical, visual, perceived);
- relationship to existing settlements;
- nature of land that will perform the role of a "green buffer" which will define an envelope within which a new community can be accommodated that remains distinct from other existing settlements;
- planning policy protection (how might this land be protected "in perpetuity" from built development whilst allowing complementary activities that support both the new community and existing communities?).'

The capacity range of the Garden Community identified in the draft joint Strategic Section One Local Plan Policy SP8 is 7,000 - 9,000 homes. The Plan adds that 'the boundaries of development will be further refined in the Development Plan Document that follows the exploration of Issues and Options.' Additionally, the Plan states that, 'there are, of course, factors that could limit the number of homes that can be built and the locations where they can be built. Some development constraints are flexible and can be accommodated through appropriate design and some are fixed. But all options will include choices, choices that lead to compromises, often between important but competing objectives.'

Broad boundary options relevant to the Garden Community were explored within the SA of the Section One of Tendring and Colchester's Local Plans. Development Concept options have not been developed within the Plan relevant to these or any additional different boundary options and as such, alternative options do not exist to the same level of detail as the current Development Concept. For this reason, reasonable alternatives are not identifiable at this stage.

Nevertheless, this does not limit the exploration of different alternatives relevant to the Plan's content at future stages of the plan-making process. A second Regulation 18 consultation on 'Preferred Options' allows the Councils to develop or explore other options that emerge as a result of this Issues and Options consultation. Should any reasonable alternatives be identified in this manner, these will be assessed as they emerge with findings fed back to the plan-makers. The appraisal of any alternative approaches will be presented in the second Regulation 18 consultation on 'Preferred Options' Sustainability Appraisal in line with the requirements of national policy and the SEA Directive.

5.2 What has Sustainability Appraisals involved at this point?

Sustainability Appraisal work undertaken on the emerging Local Plans of Colchester and Tendring Councils forms a good starting point to base the assessment of the Garden Community within the Plan. The SA of the Strategic Section One of the Local Plans of Braintree District, Colchester Borough and Tendring District Councils, appraises the Tendring Colchester Borders Garden Community. The Section One SA assessed a number of options relevant to the Garden Community. These included options related to:

- A Southern Land Focus
- Land between the A133 to Colchester – Ipswich rail line
- A North to South wrap

That SA also explored a number of alternative Garden Community options across a wider strategic area. Therefore the scope of that appraisal was broader and sustainability objectives were devised to be relevant to assess options across the strategic area on a level playing field. Also, the boundaries for the options were only broadly identified, and further work has been undertaken to determine 'red line' boundaries for the options.

The appraisal of the Garden Community within the Local Plan had a different context. Within the Section One Local Plan, broad areas were assessed within the Local Plan context, using broad sustainability criteria relevant to Garden City principles where relevant and in consideration of broad constraints relevant to sustainability. This approach would consider the sustainability of Garden Communities as broad locations and ensure that the most sustainable locations are progressed to the benefit of the area's specific needs.

Garden Communities are by nature large Greenfield sites that can maximise sustainability benefits over a wide area. The Local Plan SAs used assumptions that their scale can seek effective mitigation and enhancements where smaller sites can not. To that extent, 'constraints' were actually considered 'benefits' for many sustainability factors and a pragmatic approach was taken to ensure both a fair appraisal and also in order to identify different impacts between options for comparison purposes.

5.3 The Appraisal of the Garden Community Development Concept Option

5.3.1 Introduction

Site specific issues at the Tendring Colchester Borders Garden Community need to be re-addressed commensurate to the level of detail and focus of the Plan for Tendring Colchester Borders. The scoping requirements of the SA are set out in earlier sections of this report, and have been devised to explore the sustainability issues that are relevant to the Garden Community only.

5.3.2 The Appraisal of the Development Concept Option

This sub-section assesses the Garden Community Development Concept content and boundary that has been explored within the Plan against the Sustainability Objectives identified earlier this report. The assessment focuses on quantitative impacts where possible, with a limit on the use of qualitative judgements and assumptions in order to provide a snapshot of the sustainability of the Option 'on the ground'. Nevertheless, some qualitative conclusions / professional judgements are suitable to include to aid the appraisal of some of the more aspirational Sustainability Objectives at this early stage. The appraisal explores the form of the completed Development Concept as it is included within the Plan at this early stage in the plan-making process.

A more qualitative assumption based appraisal, filling in the gaps of those unaddressed Sustainability Objectives at this stage, is likely to follow in future iterations of this SA. At this stage, the conclusions section of this SA provides a 'whole plan' overview regarding adherence to the Sustainability Objectives, exploring whether these gaps are adequately covered or addressed through the Plan's thematic content and consideration of Garden Community Charter Principles.

5.3.2.1 Sustainability Objective 1) To ensure that new employment and complimentary uses are suitably provided and located within the Garden Community.

The SA explores the following issues on the site in regard to new employment uses:

- Broad distance / access to strategic road and rail network
- Distribution / access in regard to new residential areas

	The Current Development Concept
Impacts	++
Commentary	The Development Concept has been assessed as having significant positive impacts on this Sustainability Objective. The employment areas included within the Development Concept can be seen to be in close proximity to residential development, and all have good strategic access to strategic road links. Aside from those concentrated areas of employment in the north west of the site and the south east, a number of mixed use areas are distributed throughout the site commensurate to spinal routes through the site.

5.3.2.2 Sustainability Objective 2) To ensure that new retail space is suitably provided and located within the Garden Community, with no subsequent harm to the retail function of Colchester town centre.

The SA explores the following issues on the site in regard to existing employment links:

- Broad distance to Colchester town centre

	The Current Development Concept
Impacts	++
Commentary	The Development Option has been assessed as having significant positive impacts due to the inclusion of a number of mixed use locations, which can be expected to include convenience shopping services within the Garden Community. In addition, the Development Concept presents good links to the wider town of Colchester, including regeneration areas in the east of the town and at the Hythe. Despite these positive impacts, the Development Concept could highlight a possible location of the District Centre discussed within the wider Plan.

5.3.2.3 Sustainability Objective 3) To maximise existing linkages and strengths in the local economy.

The SA explores the following issues on the site in regard to existing employment links:

- Broad distances to employment centres

	The Current Development Concept
Impacts	++
Commentary	The Garden Community is in close proximity to employment in the town of Colchester and the University of Essex and is accessible to regionally important employment hubs and London Stansted Airport wider afield via strategic road links. In addition, the location of employment land in the south east of the Garden Community adheres to maximising the potential links between these existing employment hubs in the local area. The proximity of existing, and suitable integration, of public transport opportunities is explored in the assessment of options against Sustainability Objective 10. The Development Concept has been assessed as having significantly positive impacts at this stage.

5.3.2.4 Sustainability Objective 4) To minimise the loss of the best and most versatile agricultural land.

The SA explores the following issues on the site in regard to soil quality:

- Agricultural Land Classification
- Potential contamination issues

	The Current Development Concept
Impacts	-
Commentary	The Garden Community is within Grade 1 Agricultural Land which is classified as excellent and as such, negative impacts have been identified. Negative impacts are not significant however due to balance of employment benefits in the local area and the impacts associated with the Development Concept in maximising these strengths. In addition, the built form of the Garden Community as presented seeks a concentration of development in central areas, ensuring that large areas of land remain undeveloped, which minimises the loss of agricultural land. The negative impacts highlighted in this assessment are not a criticism of the plan or the principle of the Garden Community and is more associated with the nature and notion of development of this scale within the two districts. At this early stage, contamination issues have not been identified specifically for parcels of land associated with former land uses; however it should be noted that there are not any identified land uses on site that have been identified as being identified as potential contaminants. In any eventuality, the scale of the Garden Community can ensure that remediation is ensured and that contaminated land is brought back into use with positive outcomes.

5.3.2.5 Sustainability Objective 5) To ensure sufficient accessible natural green space throughout the Garden Community to benefit the new community and the surrounding rural areas.

The SA explores the following issues on the site in regard to the provision of accessible natural green space:

- The extent of open space within the Options
- The location of open space within the Options and accessibility to residential areas

	The Current Development Concept
Impacts	+
Commentary	The Development Concept has been identified as having positive impacts on the provision and location of new accessible natural green space within the Garden Community. The Development Concept includes significant networks of green space commensurate to the requirements and notion of Garden Communities. At this early stage, impacts are not significant where only broad layouts are required to be identified. It is considered that the identification of accessible natural green space, in the form of identified areas for specific functions and the relationship between such areas is not necessary to be identified at this stage and will be better integrated into the Garden Community following public consultation and compliance with Charter Principles 7 (community engagement) and 8 (active local stewardship). A re-assessment within the SA process, and any possible sub-options should they be

	The Current Development Concept
	identified through consultation / engagement, will likely be required to accompany future iterations of the Plan.

5.3.2.6 Sustainability Objective 6) To improve areas between existing settlements and new development and to ensure that there is no coalescence with existing settlements.

The SA explores the following issues on the site in regard to landscape:

- Landscape Character Areas – sensitivity to change
- Possible coalescence with neighbouring settlements
- Presence of existing dwellings on site

	The Current Development Concept
Impacts	++
Commentary	Regarding coalescence, the Development Concept does not result in urban encroachment on existing settlements. In this regard, there is adherence to the Garden City Principle of ensuring a surrounding belt of countryside to prevent sprawl. Regarding with existing buildings on site, the primary loss is to those few far buildings associated with Blossomwood Farm and Allen's Farm, which are included within the Concept's developed area. Overall, significantly positive impacts are identified.

5.3.2.7 Sustainability Objective 7) To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social inclusivity and to ensure sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities

The SA explores the following issues on the site in regard to new services and facilities and accessibility between jobs, homes, services and facilities:

- Distribution / access of neighbourhood / local centres and employment areas in regard to new residential areas.

	The Current Development Concept
Impacts	++
Commentary	The Development Concept has been assessed as having significant positive impacts on this Sustainability Objective. The employment areas, new mixed use areas and schools included within the Development Concept can be seen to be in close proximity to areas of residential development, and all have good internal access to road links and green infrastructure / active modes of transportation. Additionally, Key Rapid Transit nodes complemented by a series of local transport interchanges supporting the integration of public transport with cycling / walking. This network would promote the principles of walkable community catchments, and serve key community facilities.

5.3.2.8 Sustainability Objective 8) To ensure a mix of housing types and tenures with as high a proportion of affordable units as possible.

No assessment of the Development Concept options has been made regarding this Sustainability Objective. In addition to being considered a more 'policy based' requirement of any proposal, any impacts associated with opportunities would be indistinguishable between the options.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.9 Sustainability Objective 9) To ensure that provision for Gypsy and Traveller accommodation is appropriately located within the Garden Community with regard to access to services and social integration.

No assessment of the Development Concept options has been made regarding this Sustainability Objective. In addition to being considered a more 'policy based' requirement of any proposal, any impacts associated with opportunities would be indistinguishable between the options.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.10 Sustainability Objective 10) To ensure the delivery of new schools and other infrastructure to support the Garden Community.

No assessment of the Development Concept options has been made regarding this Sustainability Objective. In addition to being considered a more 'policy based' requirement of any proposal, any impacts associated with opportunities would be indistinguishable between the options.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.11 Sustainability Objective 11) To ensure suitable public transport improvements and maximise sustainable transport modes on site, minimise vehicle emissions, and to ensure effective links to existing off-site public transport services and interchanges.

The SA explores the following issues on the site in regard to public transport modes:

- Distribution / access of MRT and public transport routes / stops in regard to new residential areas and rail links.

	The Current Development Concept
Impacts	++
Commentary	The distribution and accessibility of MRT and public transport routes / stops in regard to new residential areas and rail links can be seen to ensure significant positive impacts. The Development Concept includes the integration of a mass rapid transit system as a principal route through Garden Community, providing a service connecting the employment areas in the north (co-located with Park-and-Ride provision) and the mixed-use centres. Outside the site it could connect Colchester Town and its stations with the University and Knowledge Gateway providing opportunities for rail-based services to deliver frequent and reliable journeys to rail stations, which, over time, could be expanded as part of a wider Rapid Transit network that extends across the urban area of Colchester. There will also be public transport corridors to include enhanced bus connections beyond the development site, to the University, and to Colchester and its railway stations.

5.3.2.12 Sustainability Objective 12) To ensure suitable and permeable access to and within the site, minimising the impacts of separation associated with the Great Eastern Main Line and A-roads on site and to ensure appropriate linkages to the existing road network.

The SA explores the following issues on the site in regard to access within the site:

- Permeability on site
- Severance due to the A12 and rail line

	The Current Development Concept
Impacts	++
Commentary	The direct access of the Garden Community to the A133 can be considered advantageous in terms of connectivity in the wider context. The Development Concept states that 'a new junction on the A120 will provide a highway link to the A133 and access to TCBGC. The link road would form a development edge.' It adds that 'junctions at either end of the new link road would allow traffic travelling into Colchester access to new Park-and-Ride facilities at the northern and southern ends of the link road'. The Development Concept otherwise provides numerous primary road linkages to ensure accessibility within the Garden Community (including to existing roads) and includes a Rapid Transit Route that is well located in regard to the indicative residential areas.

5.3.2.13 Sustainability Objective 13) To ensure an appropriate level of car parking.

No assessment of the Development Concept options has been made regarding this Sustainability Objective. In addition to being considered a more 'policy based' requirement of any proposal, any impacts associated with opportunities would be indistinguishable between the options.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.14 Sustainability Objective 14) To ensure suitable and innovative utility provision, including high-speed and broadband and to ensure the design of new development is capable of maximising innovative forms of emerging utility-related technologies.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.15 Sustainability Objective 15) To protect and enhance existing features of biodiversity through green corridors and ensure links between new habitats within the Garden Community and those that exist over a wider area.

The SA explores the following issues on the site in regard to biodiversity:

- Direct impact on Natura 2000 sites
- The presence of SSSIs
- Presence of Local Wildlife Sites
- Presence of priority habitats on site

	The Current Development Concept
Impacts	+
Commentary	The Garden Community area contains a SSSI (Bullock Wood) and the Local Nature Reserves of Salary Brook and Welsh Wood are in close proximity to / within the site. There are additionally existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches. The Development Concept seeks to integrate these into the Garden Community as part of the wider green infrastructure network.

5.3.2.16 Sustainability Objective 16) To ensure that recreational activity does not have negative effects on wildlife conservation and protection in the wider area.

The SA explores the following issues on the site in regard to ensuring that recreational activity does not have negative effects on wildlife conservation and protection in the wider area:

- Wider potential impacts on Natura 2000 sites and measures to mitigate Section One HRA / AA findings

	The Current Development Concept
Impacts	?
Commentary	Habitat creation may be a requirement of the Garden Community in light of the HRA of the emerging Local Plans of Colchester and Tendring, which indicates that the site is within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence. A subsequent AA further highlighted the possibility that impacts on wintering birds could lead to the requirement for mitigation in the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere. It is possible that the Development Concept will need to be amended to factor in this mitigation once suitable measures are known pending the publication of Recreation Avoidance and Mitigation Strategies (RAMS). As such, uncertain impacts are highlighted at this stage.

5.3.2.17 Sustainability Objective 17) To ensure the protection, enhancement and creation of features of a landscape value throughout the Garden Community.

The SA explores the following issues on the site in regard to landscape features:

- Presence of priority habitats and known features of landscape value on site.

	The Current Development Concept
Impacts	++
Commentary	Natural England's National Character Area Profile: Northern Thames Basin, in which this area lies, indicates that the rural urban fringe should be conserved and enhanced through the spatial planning process and through good design in development. There are additionally existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches. Despite this, the topography of the land indicates benefits to the proposals in the form of integrating development into a natural context. The Salary Brook is identified as coastal and floodplain grazing marsh and the area to the immediate east along this river stretch is identified as Ancient & Semi-Natural / Replanted Woodland (predominantly associated with Churn Wood). These landscape features are all within undeveloped areas within the Development Concept. As such, significant positive impacts are highlighted.

5.3.2.18 Sustainability Objective 18) To ensure that the Garden Community is integrated into the existing rural landscape.

No assessment of the Development Concept options has been made regarding this Sustainability Objective at this stage and pending further detail. In addition to being considered a more 'policy based' requirement of any proposal through newly created and compatible on-site features, any impacts associated with opportunities would be indistinguishable between the options.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.19 Sustainability Objective 19) To embrace sustainable forms of energy production and distribution.

No assessment of the Development Concept options has been made regarding this Sustainability Objective. In addition to being considered a more 'policy based' requirement of any proposal through newly created and compatible on-site features, any impacts associated with opportunities would be indistinguishable between the options.

	The Current Development Concept
Impacts	0
Commentary	No assessment of the options has been made regarding this Sustainability Objective.

5.3.2.20 Sustainability Objective 20) To ensure that there is no deterioration in water quality as a result of development.

The SA explores the following issues on the site in regard to water quality:

- Impacts on flows
- The presence of water bodies on site
- Groundwater Protection Zones
- Water quality of water courses in and in proximity of the site

	The Current Development Concept
Impacts	?/+
Commentary	<p>The Development Concept has been identified as having the potential to impact on flows entering the Salary Brook. Water bodies altered by human activity may be classified as Heavily Modified (HMWB) or Artificial (AWB) and have an objective to achieve 'good potential'. The Salary Brook has a 'moderate' overall status. Pressures from development that could cause deterioration include:</p> <ol style="list-style-type: none"> 1. Alteration of river banks and river beds

	The Current Development Concept
	<p>2. Barriers that restrict movement of, for example, fish</p> <p>3. Cumulative impacts in a particular catchment</p> <p>4. Diffuse pollution from surface water</p> <p>5. Reduced flow in rivers</p> <p>In the case of the Salary Brook water course, the location of the Brook is located to the Garden Community's western boundary. The Development Concept identifies a significant belt of amenity open space within this area with no built development in close proximity. As a result, uncertain to positive impacts are highlighted at this stage.</p>

5.3.2.21 Sustainability Objective 21) To ensure that there is no increase in fluvial or surface water flood risk as a result of development, with positive outcomes sought in regards to biodiversity gain and blue infrastructure networks through SuDS.

The SA explores the following issues on the site in regard to fluvial flood risk:

- Presence of waterbodies and land within Flood Risk Zones 2 and 3

	The Current Development Concept
Impacts	+
Commentary	<p>Significant levels of flood risk have been identified along river stretches. The surrounding area of Salary Brook has land within Flood Risk Zones 2 and 3. No development is proposed for this specific area. A water body exists at the location of the former quarry at Allen's Farm. The Development Concept identifies residential development at this site; however potential exists to integrate this into the development as a landscape feature. Further assessment will be required regarding surface water flood risk once more detailed concepts are developed. Overall, positive impacts have been identified.</p>

5.3.2.22 Sustainability Objective 22) To protect, and where possible, enhance designated and non-designated heritage assets and their settings both above and below ground.

The SA explores the following issues on the site in regard to the historic environment:

- Presence of heritage assets
- Impact on heritage assets and their settings (subject to further investigation / assessment once more detailed proposals have been identified within the Plan)

	The Current Development Concept
Impacts	+
Commentary	Listed Buildings are present within the site, although these are predominantly located within areas identified for open space in the western part of the Garden Community. Additionally however, a Listed Building exists at Allen's Farm, however further assessment will be needed once more detailed proposals have been identified within the Plan and in consideration of the asset based on its individual sensitivities. Overall however, positive impacts are identified at this stage.

5.3.3 Mitigation Measures & Recommendations

No mitigation measures have been identified at this stage commensurate to the level of detail of the Plan and the acknowledgement that the Development Concepts presented are indicative and subject to public consultation and wider engagement. Nevertheless, a series of further recommendations are made for inclusion in future Plan iterations. These are:

- The Development Concept could highlight a possible location for the District Centre discussed within the wider Plan.
- It is considered that the identification of accessible natural green space and recreation and leisure, in the form of identified areas for specific functions is not necessary to be identified at this stage and will be better integrated into the Garden Community following public consultation and compliance with Charter Principles 7 (community engagement) and 8 (active local stewardship). Nevertheless, a re-assessment within the SA process, and any possible sub-options should they be identified through consultation / engagement, will likely be required to accompany future iterations of the Plan.
- Habitat creation may be a requirement of the Garden Community in light of the HRA of the emerging Local Plans of Colchester and Tendring, which indicates that the site is within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence. A subsequent AA further highlighted the possibility that impacts on wintering birds could lead to the requirement for mitigation in the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere. It is possible that the Development Concept will need to be amended to factor in this mitigation once suitable measures are known pending the publication of Recreation Avoidance and Mitigation Strategies (RAMS).
- The Development Concept has been identified as having the potential to impact on flows

entering the Salary Brook. Water bodies altered by human activity may be classified as Heavily Modified (HMWB) or Artificial (AWB) and have an objective to achieve 'good potential'. The Salary Brook has a 'moderate' overall status. Pressures from development that could cause deterioration include:

1. Alteration of river banks and river beds
 2. Barriers that restrict movement of, for example, fish
 3. Cumulative impacts in a particular catchment
 4. Diffuse pollution from surface water
 5. Reduced flow in rivers
- A water body exists at the location of the former quarry at Allen's Farm. The Development Concept identifies residential development at this site; however potential exists to integrate this into the development as a landscape feature. Further assessment will be required regarding surface water flood risk once more detailed concepts are developed.
 - Further assessment of impacts on Listed Buildings and their settings will be needed once more detailed proposals have been identified within the Plan and in consideration of the asset based on its individual sensitivities.

6. Non-Technical Summary, Conclusions and Recommendations

6.1 The Plan's Themes and Principles

6.1.1 Key Points from the Assessment of the Plan's Themes and Principles

The following table sets out the impacts identified through the appraisal of the Plan's Themes and Principles.

Table 9: Summary of Impacts of the Plan's Themes and Principles

Sustainability Objectives (SO)		Theme 1: Place and Integration	Theme 2: Community	Theme 3: Delivery
ECONOMIC OBJECTIVES	1	++	0	+
	2	++	0	+
	3	++	0	+
	4	-	0	0
SOCIAL OBJECTIVES	5	++	+	+
	6	++	0	+
	7	++	+	+
	8	++	0	+
	9	?	0	?
	10	++	0	+
	11	++	0	+
	12	++	0	+
	13	?	0	+

Sustainability Objectives (SO)		Theme 1: Place and Integration	Theme 2: Community	Theme 3: Delivery
ENVIRONMENTAL OBJECTIVES	14	+	0	+
	15	++	+	+
	16	+	+	+
	17	++	+	+
	18	++	0	+
	19	++	0	+
	20	?	0	+
	21	+	+	+
	22	?	0	+

The following key points can be made from the appraisal of the Plan's Themes and Principles:

- Significant positive impacts are highlighted for Sustainability Objective 1 and 3, where the Plan identifies that new employment space at TCBGC could be provided to accommodate employment space related to commercialising the research and innovation strengths of the University of Essex, renewable and offshore energy, smart technology, port-related activities, health and care, tourism and leisure and logistics.
- Positive impacts have been highlighted regarding Sustainability Objective 2 and a need for convenience retail provision to support the new community. The formulation of a District Centre and a number of local centres will ensure that impacts on the retail and comparison shopping offer of Colchester Town Centre are not compromised and significantly boosted, particularly in the east Colchester Town regeneration area.
- Negative impacts have been highlighted for the loss of Grade 1 Agricultural Land, which represents the highest grade soils within the Districts of both Tendring and Colchester. Despite this, impacts can not be highlighted as significant on the balance of sustainability implications and benefits of a Garden Community in this location and the additional economic benefits of its location in close proximity to Colchester Town Centre, the University of Essex and strategic ports to the east.
- There will be significant positive impacts regarding accessible natural green space through requirements for open space to be integrated throughout the Garden Community and also the integration of major new Country Park.
- There will be significant positive impacts on Sustainability Objective 6 regarding coalescence in

response to the new community, through Theme 1, addressing the relationship with existing communities close to and within its boundaries, stating that care will be needed in new development to mitigate potential adverse impacts on adjacent settlements and on the wider landscape.

- There will be significant positive impacts on Sustainability Objective 8, regarding the provision of a mix of house types and tenures.
- Significant positive impacts have been highlighted regarding Sustainability Objectives 10 and 7 regarding the provision of schools and other supporting infrastructure, services and facilities.
- The Plan's Principle 2 recognises the importance of ensuring the highest level of strategic connectivity with the wider transport system. The Plan includes that the new Garden Community should make full provision for active travel (walking and cycling) and sustainable travel (public transport) so that each accounts for 70% of all trips.
- Significant positive impacts have been identified for Sustainability Objective 16, where the Plan states that, 'Habitats along the valleys and corridors of the Salary Brook and Sixpenny Brook include woodland, including Ancient Woodland, species-rich grassland and wetland habitats and should be retained and enhanced. The same should apply to the Nationally Important Bullock Wood.'
- Significant positive impacts are also identified for all landscape and coalescence based objectives. The Plan states that, 'The concept of Garden Communities... requires an approach that sets development within a strong framework of internal green space and surrounding buffer areas that separate the new development from existing communities.'
- There will be positive impacts associated with renewable energy and energy efficiency (Sustainability Objective 19) though Principle 5, in particular the Smart Infrastructure principles.
- There will be positive implications regarding those Sustainability Objectives related to open space management and ensuring an appropriate and desirable level of services and facilities, through effective community engagement and active stewardship once the Garden Community has been delivered.
- The Plan asks a consultation question within Charter Principle 8 that asks consideration of the best way to manage community assets such as parks, sports pitches, allotments, community buildings and schools. This can also ensure positive impacts related to the maintenance of habitats, green and blue infrastructure (including indirectly those created through SuDS) and ensuring these are protected alongside recreational areas, and landscape features.
- Theme 3 will ensure, indirectly, that the majority of the Sustainability Objectives will be met with positive outcomes. The Plan states that there is a '...desire of the public sector, represented by the partnership of four local Councils and representing the interests of the wider North Essex communities, to play a full and active role in the development of the three Garden Communities, and to participate in both the risks and the rewards of development, securing benefits for the wider communities.' With a preference for the formation of local Development Corporations to prepare masterplans and other guidance, the Plan and Council's aspire to offer truly sustainable outcomes.

6.1.2 Mitigation Measures and Recommendations regarding the Plan's Vision, Themes and Principles

The following key points can be made from the appraisal of the Plan's Vision, Themes and Principles:

- Uncertainty surrounds the Vision where certain objectives are not specifically covered, such as ensuring a mix of housing types and tenures, Gypsy and Traveller accommodation provision, utility provision (including high-speed broadband) and it is recommended that these are included within future iterations of the Vision. It is recommended that these are included.
- The Plan could elaborate in future iterations how these different types of housing (including Gypsy and Traveller accommodation provision) could be integrated within the wider design of the Garden Community, in addition to affordable units, to ensure social inclusivity.
- Charter Principle 5 identifies that the use of Smart Vehicles would make full provision for electric vehicle charging infrastructure linked to renewable energy generation while Smart Car-Sharing would use technology to make cars available for occasional use and would help manage Smart Parking. It is unsure whether this element of the Plan is suitable in response to the baseline data of car ownership in the wider area and the need for the development of 'specific garden community parking approaches and standards that help promote the use of sustainable transport and make efficient use of land' as identified in the emerging Colchester and Braintree Local Plan Policy SP7 - Development and Delivery of New Garden Communities in North Essex. It is recommended that this be included within future iterations of the Plan.
- Future iterations of the Plan could include specific mention of the requirements of day to day utility provision on site, aside from those related to energy efficiency, power and digital communications.
- Although the issue is not specifically identified in the Plan, Principle 1 alludes to the need for separate and more 'purpose designed' open spaces within the Garden Community. This will need to be carefully managed however to ensure no possible compromise of the status of habitats through recreational activity.
- Regarding ensuring that there is no deterioration in water quality as a result of development, there is no direct mention of the potential effects of development on existing water courses of the Salary Brook. It is recommended that this is elaborated on in future iterations of the Plan.
- Although only minimal Listed Buildings are present within the site, the Plan does not include notions of enhancing the historic environment. It is recommended that the relationship between new built development and these assets and their settings is recognised and elaborated on in future iterations of the Plan, with enhancement sought where possible.

6.2 The Plan's Development Concept Option

6.2.1 Key Points from the Assessment of the Plan's Development Concept Option

The following table sets out the impacts identified through the appraisal of the Plan's Development Concept option.

Table 10: Summary of Impacts of the Plan's Development Concept Option

Sustainability Objectives (SO)		The Current Development Concept
ECONOMIC OBJECTIVES	1) To ensure that new employment and complimentary uses are suitably provided and located within the Garden Community.	++
	2) To ensure that new retail space is suitably provided and located within the Garden Community, with no subsequent harm to the retail function of Colchester town centre.	++
	3) To maximise existing linkages and strengths in the local economy.	++
	4) To minimise the loss of the best and most versatile agricultural land.	-
SOCIAL OBJECTIVES	5) To ensure sufficient accessible natural green space throughout the Garden Community to benefit the new community and the surrounding rural areas.	+
	6) To improve areas between existing settlements and new development and to ensure that there is no coalescence with existing settlements.	++
	7) To ensure that a range of services and facilities are included and suitably located within the Garden Community to maximise social inclusivity and to ensure sustainable land use patterns that maximise accessibility between jobs, homes, services and facilities	++
	8) To ensure a mix of housing types and tenures with as high a proportion of affordable units as possible.	0
	9) To ensure that provision for Gypsy and Traveller accommodation is appropriately located within the Garden Community with regard to access to services and social integration.	0
	10) To ensure the delivery of new schools and other infrastructure to support the Garden Community.	0

Sustainability Objectives (SO)		The Current Development Concept
	11) To ensure suitable public transport improvements and maximise sustainable transport modes on site, minimise vehicle emissions, and to ensure effective links to existing off-site public transport services and interchanges.	++
	12) To ensure suitable and permeable access to and within the site and to ensure appropriate linkages to the existing road network.	++
	13) To ensure an appropriate level of car parking.	0
	14) To ensure suitable and innovative utility provision, including high-speed and broadband and to ensure the design of new development is capable of maximising innovative forms of emerging utility-related technologies.	0
ENVIRONMENTAL OBJECTIVES	15) To protect and enhance existing features of biodiversity through green corridors and ensure links between new habitats within the Garden Community and those that exist over a wider area.	+
	16) To ensure that recreational activity does not have negative effects on wildlife conservation and protection in the wider area.	?
	17) To ensure the protection, enhancement and creation of features of a landscape value throughout the Garden Community.	++
	18) To ensure that the Garden Community is integrated into the existing rural landscape.	0
	19) To embrace sustainable forms of energy production and distribution.	0
	20) To ensure that there is no deterioration in water quality as a result of development.	?/+
	21) To ensure that there is no increase in fluvial or surface water flood risk as a result of development, with positive outcomes sought in regards to biodiversity gain and blue infrastructure networks through SuDS.	+
	22) To protect, and where possible, enhance designated and non-designated heritage assets and their settings both above and below ground.	+

The following key points can be made from the appraisal of the Plan's Development Concept Option:

- The employment areas included within the Development Concept can be seen to be in close proximity to residential development, and all have good strategic access to strategic road links. Aside from those concentrated areas of employment in the north west of the site and the south east, a number of mixed use areas are distributed throughout the site commensurate to spinal

routes through the site.

- The Development Concept has been assessed as having significant positive impacts due to the inclusion of a number of mixed use locations, which can be expected to include convenience shopping services within the Garden Community. In addition, the Development Concept presents good links to the wider town of Colchester, including regeneration areas in the east of the town and at the Hythe. Despite these positive impacts, the Development Concept could highlight a possible location of the District Centre discussed within the wider Plan.
- The Garden Community is in close proximity to employment in the town of Colchester and the University of Essex and is accessible to regionally important employment hubs and London Stansted Airport wider afield via strategic road links. In addition, the location of employment land in the south east of the Garden Community adheres to maximising the potential links between these existing employment hubs in the local area.
- The Garden Community is within Grade 1 Agricultural Land which is classified as excellent and as such, negative impacts have been identified. Negative impacts are not significant however due to balance of employment benefits in the local area and the impacts associated with the Development Concept in maximising these strengths.
- The Development Concept has been identified as having positive impacts on the provision and location of new accessible natural green space within the Garden Community. The Development Concept includes significant networks of green space commensurate to the requirements and notion of Garden Communities.
- The Development Concept does not result in urban encroachment on existing settlements. In this regard, there is adherence to the Garden City Principle of ensuring a surrounding belt of countryside to prevent sprawl.
- Employment areas, new mixed use areas and schools included within the Development Concept can be seen to be in close proximity to areas of residential development, and all have good internal access to road links and green infrastructure / active modes of transportation.
- The Development Concept includes the integration of a mass rapid transit system as a principal route through Garden Community, providing a service connecting the employment areas in the north (co-located with Park-and-Ride provision) and the mixed-use centres. Outside the site it could connect Colchester Town and its stations with the University and Knowledge Gateway providing opportunities for rail-based services to deliver frequent and reliable journeys to rail stations.
- The direct access of the Garden Community to the A133 can be considered advantageous in terms of connectivity in the wider context.
- The Garden Community area contains a SSSI (Bullock Wood) and the Local Nature Reserves of Salary Brook and Welsh Wood are in close proximity to / within the site. There are additionally existing natural landscape and ecological features within the site such as Salary Brook, Welsh Wood, woodland, ancient woodland and a network of intact hedgerows and associated veteran trees, land drains and ditches. The Development Concept seeks to integrate these into the Garden Community as part of the wider green infrastructure network.
- The topography of the land indicates benefits to the proposals in the form of integrating

development into a natural context. The Salary Brook is identified as coastal and floodplain grazing marsh and the area to the immediate east along this river stretch is identified as Ancient & Semi-Natural / Replanted Woodland (predominantly associated with Churn Wood). These landscape features are all within undeveloped areas within the Development Concept.

- Significant levels of flood risk have been identified along river stretches. The surrounding area of the Salary Brook has land which is in Flood Risk Zones 2 and 3. No development is proposed for this specific area.

6.2.2 Mitigation Measures and Recommendations regarding the Plan's Development Concept Option

No mitigation measures have been identified at this stage commensurate to the level of detail of the Plan and the acknowledgement that the Development Concepts presented are indicative and subject to public consultation and wider engagement. Nevertheless, a series of further recommendations are made for inclusion in future Plan iterations. These are:

- The Development Concept could highlight a possible location for the District Centre discussed within the wider Plan.
- It is considered that the identification of accessible natural green space and recreation and leisure, in the form of identified areas for specific functions is not necessary to be identified at this stage and will be better integrated into the Garden Community following public consultation and compliance with Charter Principles 7 (community engagement) and 8 (active local stewardship). Nevertheless, a re-assessment within the SA process, and any possible sub-options should they be identified through consultation / engagement, will likely be required to accompany future iterations of the Plan.
- Habitat creation may be a requirement of the Garden Community in light of the HRA of the emerging Local Plans of Colchester and Tendring, which indicates that the site is within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence. A subsequent AA further highlighted the possibility that impacts on wintering birds could lead to the requirement for mitigation in the form of habitat creation and management in perpetuity, either on-site or through provision of strategic sites for these species elsewhere. It is possible that the Development Concept will need to be amended to factor in this mitigation once suitable measures are known pending the publication of Recreation Avoidance and Mitigation Strategies (RAMS).
- The Development Concept has been identified as having the potential to impact on flows entering the Salary Brook. Water bodies altered by human activity may be classified as Heavily Modified (HMWB) or Artificial (AWB) and have an objective to achieve 'good potential'. The Salary Brook has a 'moderate' overall status. Pressures from development that could cause deterioration include:
 1. Alteration of river banks and river beds
 2. Barriers that restrict movement of, for example, fish
 3. Cumulative impacts in a particular catchment
 4. Diffuse pollution from surface water

5. Reduced flow in rivers

- A water body exists at the location of the former quarry at Allen's Farm. The Development Concept identifies residential development at this site; however potential exists to integrate this into the development as a landscape feature. Further assessment will be required regarding surface water flood risk once more detailed concepts are developed.
- Further assessment of impacts on Listed Buildings and their settings will be needed once more detailed proposals have been identified within the Plan and in consideration of the asset based on its individual sensitivities.

6.3 Key Impacts of the Plan as a Whole

The Plan includes a series of Themes and Principles that can negate or seek to mitigate some of those on-site impacts that have been identified in the appraisal of the Garden Community Development Concept option.

The assessment of the Plan's Development Concept has been undertaken from a 'policy off' point of view; impacts are identified without any consideration of the Plan's thematic content or principles at present. This section explores those instances where impacts can be negated or mitigated through the Plan as a whole at this stage.

It should be acknowledged however that the Plan is reflective of work undertaken to date, and some elements of site specifics will be more appropriately addressed within future stages of the Plan.

Issue identified in the appraisal of the Garden Community Development Concept	Is the issue addressed in the Plan's Themes and Principles?
Accessible natural green space, in the form of identified areas for specific functions (such as parkland, recreation etc.) and the relationship between such areas and general wildlife conservation.	The impacts regarding the relationship between different areas of open space, specifically between newly created habitats and recreation are partly considered within the Plan. The Plan states that, 'The provision of recreation facilities within the new Garden Community, including generous amounts of open space will help reduce the potential impact that additional residential uses will have on protected habitats in the area.'
Habitat creation may be a requirement of the Garden Community in light of the HRA of the emerging Local Plans of Colchester and Tendring, which indicates that the site is within the Essex Estuaries SAC and Colne Estuary SPA / Ramsar zones of influence.	These impacts are considered within the Plan. the Plan states that, 'The provision of recreation facilities within the new Garden Community, including generous amounts of open space and a dedicated County Park, will help reduce the potential impact that additional residential uses will have on protected habitats in the

Issue identified in the appraisal of the Garden Community Development Concept	Is the issue addressed in the Plan's Themes and Principles?
	area.
The Garden Community has been identified as having the potential to impact on flows entering the Salary Brook and water quality.	The specific considerations of the Garden Community and the water quality of existing river channels on site are not specifically considered within the Plan.
The potential for surface water flooding	The Plan states that, 'The green spaces in the landscape framework can accommodate the following functions: SUDS/ drainage and watercourses.'
Further assessment of impacts on Listed Buildings and their settings will be needed once more detailed proposals have been identified within the Plan and in consideration of the asset based on its individual sensitivities.	The importance of the historic environment is partly considered within the Plan although perhaps not in consideration of the protection and enhancement of assets as an irreplaceable resource. The Plan states, that, 'the design and layout should respond positively to the historic environment which creates opportunities for developing distinctiveness and interesting places.'

7. Next Steps

7.1 Consultation

This Scoping and Environmental Report will be subject to consultation alongside the Plan for Tendring Colchester Borders. There are three statutory consultees or ‘environmental authorities’ that are required to be consulted for all Sustainability Appraisal and Strategic Environmental Assessment documents. These are:

- The Environment Agency;
- Natural England; and
- Historic England.

In addition to these, consultation will seek to engage the wider community in order to encompass comprehensive public engagement. Tendring District Council and Colchester Borough Council may additionally wish to invite comments from focussed groups, relevant stakeholders and interested parties. The detailed arrangements for consultation are to be determined by the two Local Planning Essex Authorities. The environmental authorities and public are to be given ‘an early and effective opportunity’ within appropriate time-frames to express their opinion. This includes the specific notification of the consultation documents and timeframes to those persons or bodies on the ‘consultation databases’ of the two Local Planning Authorities.

PLEASE NOTE:

All comments on the content of this Scoping & Environmental Report should be sent to each authority’s online portal in line with the consultation arrangements of each Local Planning Authority. Where consultation periods differ between each authority, the following links may need to be checked once consultation periods are live.

Comments should be focused on the detail of this SA that pertains to land use implications or issues relevant to each local authority area.

Please check the following links for more information, and direction to relevant consultation portals:

Regarding Tendring District Council:

<http://www.tendringdc.gov.uk/consultation>

Regarding Colchester Borough Council:

<http://www.colchester.gov.uk/planningconsult>



Place Services

Essex County Council

County Hall, Chelmsford, Essex CM1 1QH

T: +44 (0)333 013 6840

E: enquiries@placeservices.co.uk

www.placeservices.co.uk

November 2017



Essex County Council