

GI Analysis



4 Application of the Accessible Natural Green Space Standard to Colchester Borough

CURRENT PROVISION

- 4.1 In order to understand how well Colchester Borough is provided for in terms of accessible green infrastructure for informal recreation and access, an analysis of current provision was undertaken in 2009 by the Essex Wildlife Trust on behalf of Natural England. The analysis used Natural England's Accessible Natural Greenspace Standard (ANGSt) as a benchmark for the whole of Essex.
- 4.2 The quality of accessible green infrastructure is also very important in ensuring local communities feel they are adequately provided for. It should be noted that it was not within the scope of this study to undertake a detailed audit of the quality of open spaces; this being the role of the PPG17 Open Spaces Assessments. Importantly, ANG does **not take account of Rights of Way** and only refers to open space and so some areas that are very accessible via. rights of way may be highlighted as being deficient.

Accessible Natural Greenspace Standard (ANGSt)

- Natural England's ANGSt Model¹⁴ is based on distance thresholds, and defines the maximum distance that any resident should have to travel from their home to reach accessible natural or semi-natural greenspace. It is important to remember when using ANGSt that open countryside and the public rights of way network are not included in the model and therefore care needs to be taken when interpreting it. The four tiers which have been defined are as follows:

Table 4.1: Green infrastructure distance thresholds

Sub-regional provision	Sites or habitats over 500ha	Within 10 km
County scale provision	Sites or habitats over 100ha	Within 5 km
District scale provision	Sites or habitats over 20ha	Within 2 km

¹⁴ English Nature (2003) English Nature Report 526 'Accessible Natural Green Space Standards in Towns and Cities: A Review and Toolkit for Implementation'.

Neighbourhood scale sites	Sites or habitats over 2ha	Within 300 m
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- 4.3 Application of these thresholds to the Borough allows an understanding of the extent to which the population is currently served by green infrastructure at a range of scales.
- 4.4 The ANGSt study undertaken by Essex Wildlife Trust only looked at sites over 2 hectares in size and used data from the following datasets: *Countryside Parks; Countryside & Rights of Way Act access land; Doorstep and Millennium Greens; Forestry Commission Land; Forestry Commission ‘Walkers Welcome’ English woodland grant scheme; Local Authority PPG17 datasets; Local Nature Reserves (excluding those with limited accessibility); National Trust sites; Natural England agri-environment grant schemes providing access; RSPB reserves; Thames Gateway Accessible Natural Greenspace Study; Utility Company land; Wildlife Trust sites; Woods for People*. As described in **section 3** above, the minimum 2ha threshold is appropriate for a high level study such as this GI Strategy.
- 4.5 Spaces with known access restrictions (e.g. entrance fee, restricted opening hours) or no right of access were excluded from the analysis.
- 4.6 Colchester Borough covers 33,400 ha of land, 2,028ha of which is accessible natural greenspace (6% of the total area). The Borough is above the County average in the provision of greenspace for all of Natural England’s ANGSt categories (19% of households against a county average of 7%) and has only 1% of households that meet none of the ANGSt criteria.
- 4.7 **Figure 4.1** shows the four green infrastructure distance thresholds (neighbourhood to sub-regional) as applied to the accessible natural and semi-natural green space around the Borough. In each figure, the distance threshold (i.e. the area served by the accessible green spaces) is shown in yellow. **The figures indicate that the Borough has inadequate provision of neighbourhood level sites throughout the Borough and sub-regional level sites in the north of the Borough, but has largely adequate provision of district and county level sites.** The detailed findings are discussed below. Note that this standard and associated maps does not incorporate areas accessible via the Rights of Way network and any identified deficits should be viewed in this context.

Sub-regional scale (sites over 500 ha)

- 4.8 Sub-regional green infrastructure is defined in Natural England's ANGSt guidance as sites over 500 hectares in size with a distance threshold of 10km. County scale green infrastructure is defined in Natural England's ANGSt guidance as sites over 100 hectares in size with a distance threshold of 5km. The southern part of the Borough has no deficiency in Sub-Regional level sites however, the northern part of the Borough above Colchester Town has no access to sites over 500ha in size within 10km.

County scale (sites over 100 ha)

- 4.9 The majority of the Borough has adequate provision to County level sites. However, the eastern end of Mersea Island, the south western edge of the Borough around Tiptree and the north eastern edge of the Borough around Dedham all are deficient in access to sites over 100ha within 5km. The area around Dedham in the north east of the Borough therefore has a significant deficit in larger scale publicly accessible open space, although this area has good access to the Public Rights of Way (PROW) network and to the Dedham Vale and Stour Valley countryside.

District scale (sites over 20 ha)

- 4.10 The main centres of population in the Borough have good access to District level green infrastructure sites although the central area of Mersea Island, and a large part of the central-eastern part of the Borough and a swathe across the northern part of the Borough all have a deficiency in access to sites over 20 hectares in size within 2km. Dedham again has a deficit in access to open space which is somewhat mitigated by good access to the PROW network, but the settlements of Marks Tey, Copford, the western edge of Colchester Town, and Great Horkesley also would benefit from an increase in access to District level GI resources.

Neighbourhood scale (sites over 2ha)

- 4.11 In addition to larger scale sites, people need access to sites close to where they live for more localised recreation. The ANGSt standards consider that people should have access to a site of at least 2 ha within 300m of their home. It can be seen from **Figure 4.2** that there are significant deficiencies in neighbourhood provision throughout the Borough. The majority of settlements in the Borough are either wholly or partially affected by this deficiency.

- 4.12 Therefore there is a significant need to provide small local level sites throughout the Borough. The northern and eastern areas of the Borough require new GI resources at all scales to help alleviate their deficiency as can be seen from **Figure 4.2**.

FUTURE GREEN INFRASTRUCTURE ACCESSIBILITY NEEDS

- 4.13 Data from the 2001 Census put the borough population at approximately 158,900 people. However, 2008 mid-year estimates from the Office for National Statistics (ONS) indicate that Colchester’s population has seen a growth of 13.5% since mid-2001 to 177,100 in mid-2009. As the largest district in Essex, Colchester accounts for 12.7% of the County population. Colchester’s population is predicted to continue to grow faster than the county, the region and England rates. It is estimated to grow to approximately 215,900 people in 2021 an increase of 21.9% (38,800 people) over a 12 year period. The largest growth will be in the older age groups (60+), whilst growth levels are expected to decline in the younger ages groups (aged 19 or younger). Average household size in 2026 is projected to be 2.11 persons per household according to the 2008 ONS estimates. 19,000 new homes will be provided between 2001 and 2023 in the Borough alongside new employment, community facilities and transport infrastructure.
- 4.14 The needs of these additional households in terms of access to green space and other green infrastructure needs will have to be met. The Core Strategy sets out the five new Growth Areas and the number of houses to be provided in each, 90% of future housing growth will be centred within and on the edge of Colchester Town.

Table 4.2: Future accessible greenspace needs

New Growth Area	Current level of GI deficiency in area	Future potential GI deficiency in area
Colchester Town Centre (2000 homes)	Large parts of the Town centre suffer from deficiency of access to small scale neighbourhood sites (2ha within 300m), but have adequate access to	Increased infilling of the town centre will put further pressure on any existing small scale greenspace as well as opportunities to create new green space. In

New Growth Area	Current level of GI deficiency in area	Future potential GI deficiency in area
	all other size assets.	addition extra demand will be created for the greenspaces that do exist. Emphasis should be put on creating new greenspaces over 2ha to satisfy current and future demand.
<p>North Growth Area (6,200 homes, including 2200 greenfield allocations, as well as employment, transport and community infrastructure)</p>	<p>Apart from a small section on the eastern side of the Growth Area, there is a deficiency in neighbourhood scale sites and also across the whole Growth Area there is a deficiency in access to sub-regional sites.</p>	<p>Small neighbourhood level greenspaces are needed throughout the Northern Growth Area. A new sub-regional accessible green space resource is needed in the north of the Borough to serve both this Growth Area and the rest of the northern part of the Borough.</p>
<p>East Growth Area (2,600 homes in former harbour area)</p>	<p>There is a deficiency in neighbourhood scales sites through much of the Growth Area particularly in the southern and central areas. The north eastern edge of the Growth Area also has a deficiency of access to sub-regional level sites.</p>	<p>Small neighbourhood level greenspaces are needed throughout the southern and central areas of the Borough to meet current deficiencies as well as the needs of the new population. The new 1ha urban park that is planned as part of this Growth Area may address this deficiency.</p>

New Growth Area	Current level of GI deficiency in area	Future potential GI deficiency in area
South Growth Area (3000 homes)	The southern section of the Growth Area has a deficiency in neighbourhood level sites.	Small neighbourhood level greenspaces should be focused on the southern section of the Growth Area.
Stanway Growth Area (1800 homes, including 800 greenfield allocations).	The northern and eastern part of the Growth Area has a deficiency in neighbourhood level sites and the northern and central parts of the Growth Area also have a deficiency in district level sites.	New greenspaces should be focussed in the northern part of the Growth Area, as this currently experiences the most significant deficiencies.

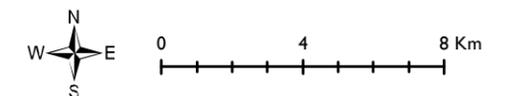
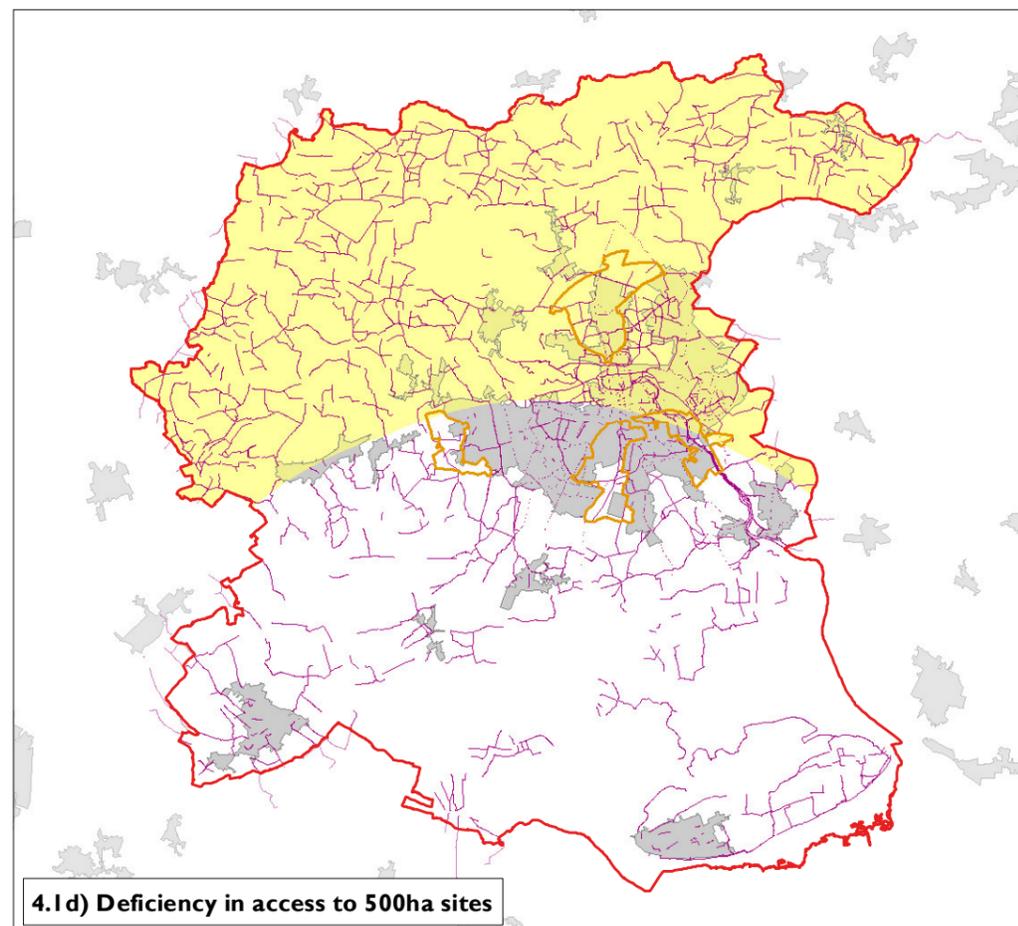
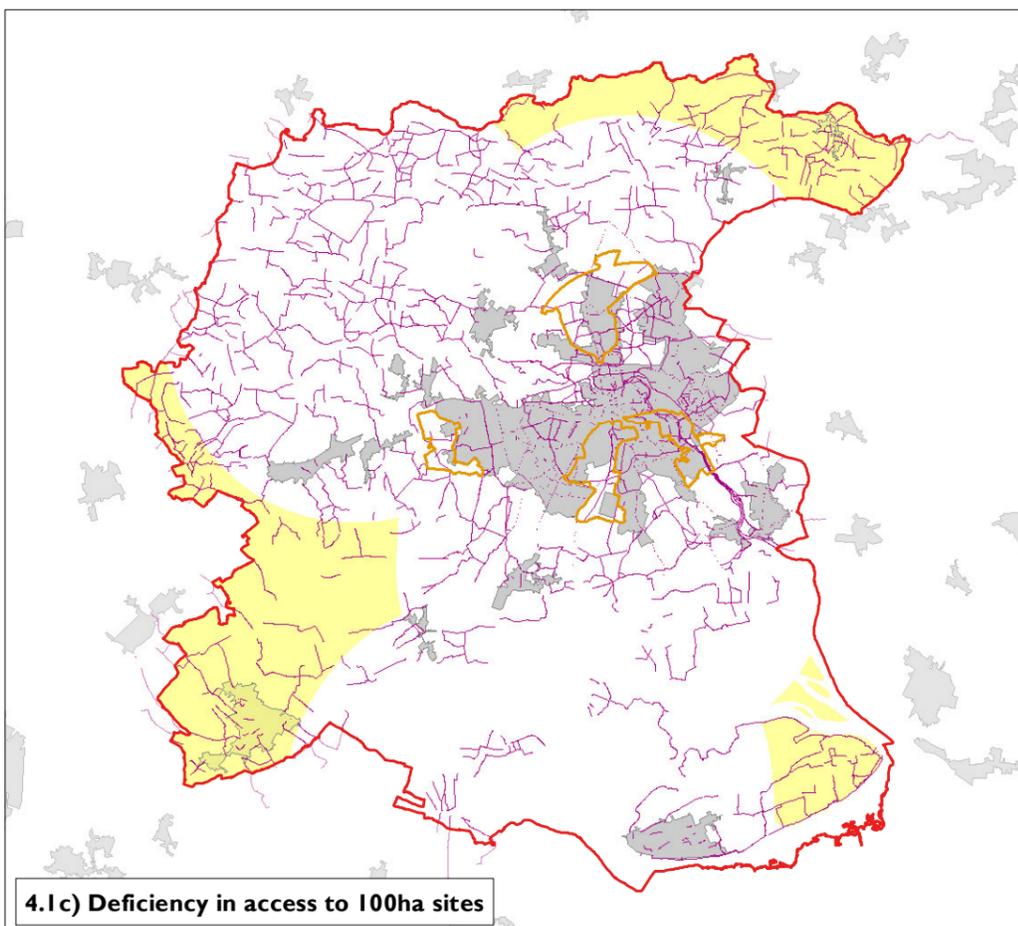
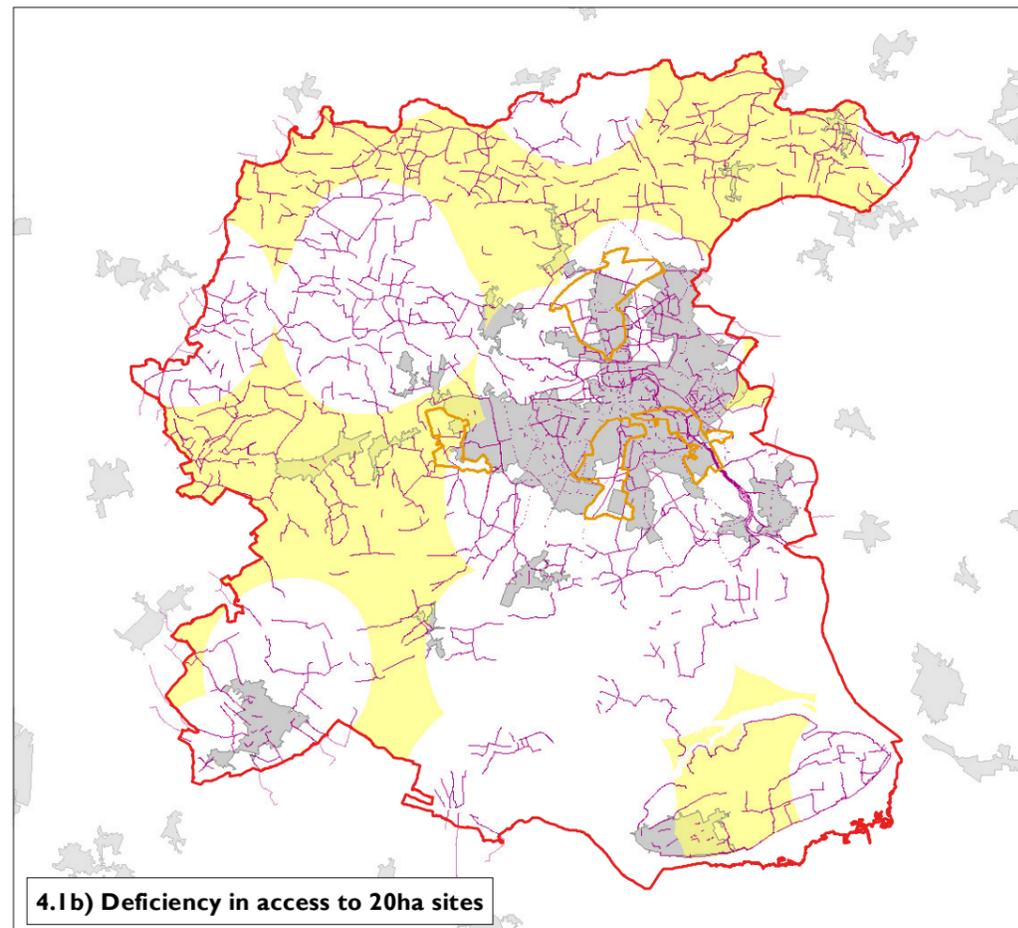
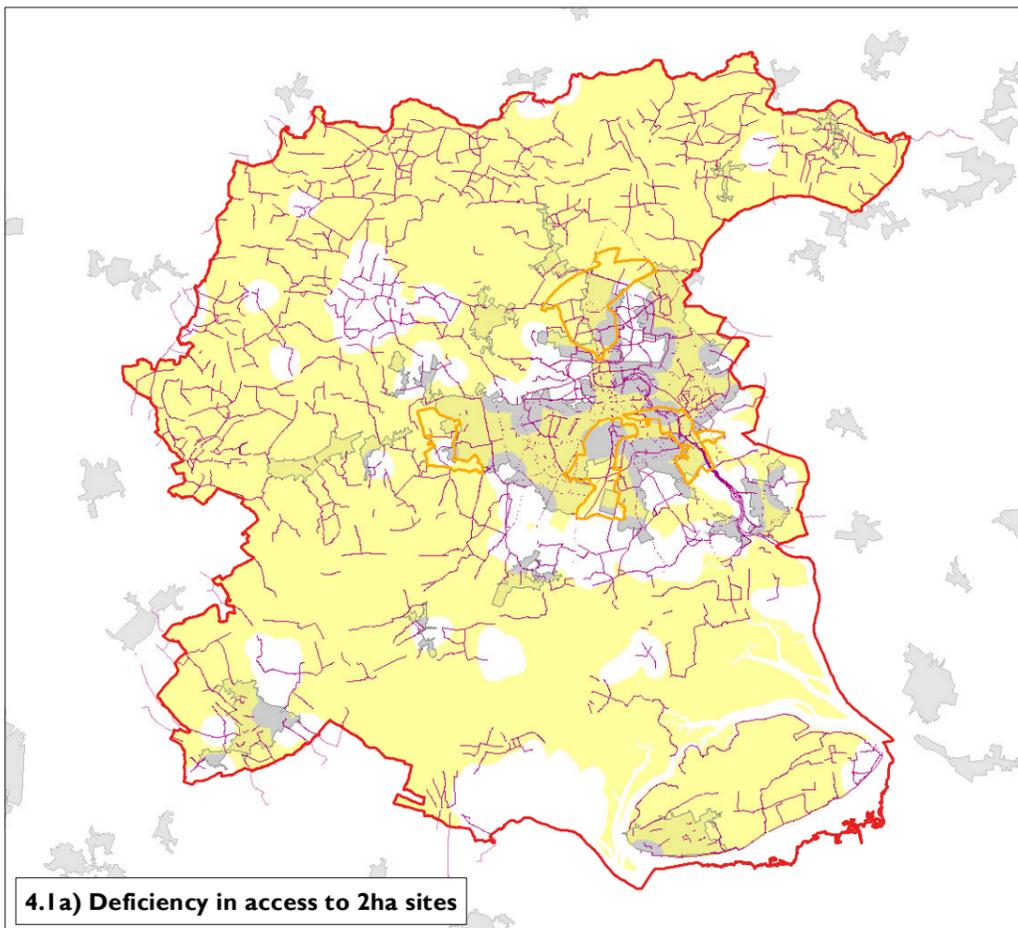
4.15 In addition, in light of future growth, it is likely that enhanced green access routes/links will be required for sustainable access to the town centres, employment and opportunities for recreation and access to nature. More specific needs are identified in relation to green infrastructure functions and locality areas, in the next chapter.

Colchester Borough Green Infrastructure Strategy

Figure 4.1: Access to Natural GreenSpace

Key

-  Borough boundary
-  Growth Areas
-  Access links
-  Settlements
-  Deficiency to natural greenspace



Source: EWT, Natural England

Date: 20/04/2011
Revision:



Colchester Borough Green Infrastructure Strategy

Figure 4.2: Access to Natural Greenspace - All Standards

Key

 Borough boundary

 Growth Areas

 Access links

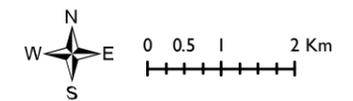
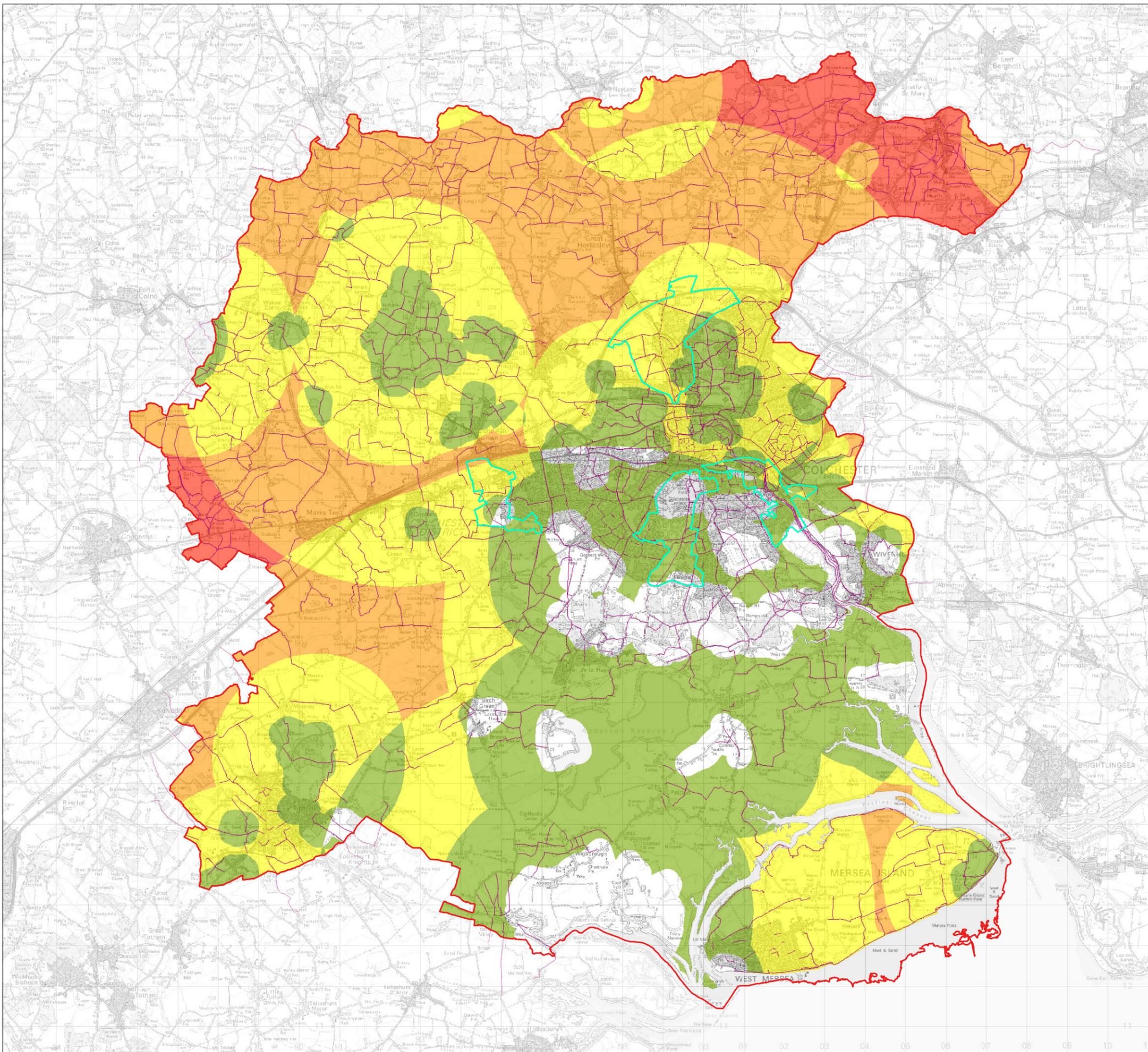
Deficiency to categories of greenspace

 1 category

 2 categories

 3 categories

 4 categories



Source: EWT
Colchester Borough Council

Date: 20/04/2011
Revision:



5 Analysis of Deficiencies and Needs

5.1 Seven GI Action Zones have been identified based on the assessment of common characteristics and GIS assets. The zones are as follows:

- Dedham Vale Area of Outstanding Natural Beauty and Stour Valley
- Northern Farmland
- Colne River Valley
- Greater Colchester
- Roman River Valley (including Abberton Reservoir)
- Southern Farmland (includes plateau between Colne and Roman River valleys)
- Coastal Zone

5.2 The key functional needs and deficiencies for each Zone is examined under the following functions:

- Habitat provision and access to nature
- Sustainable resource management and climate change adaptation
- Landscape setting and context
- Cultural heritage
- Locally productive landscapes (with a connection to the community)
- Access, recreation and movement

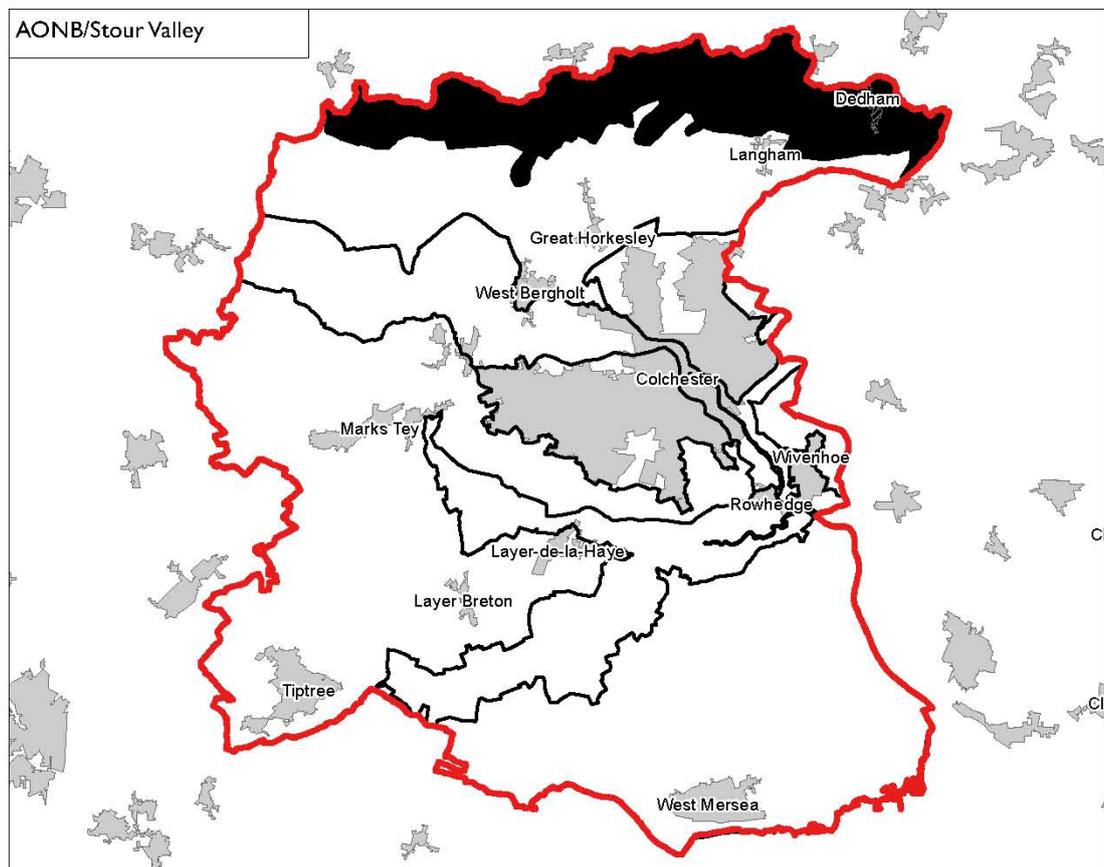
5.3 Functions are an essential ‘building block’ of green infrastructure planning. They are closely linked to other concepts such as ecosystem services (goods, resources and processes provided by natural systems, which benefit communities). It should be noted that there is often considerable overlap between the green infrastructure functions. For example, habitat provision and access to nature and landscape setting and context are closely related. For reasons of clarity, current functional provision and the proposed green infrastructure network are evaluated in terms of these separate functions, although this is not to say that because a site performs one function it does not perform several others. Corridors which function in terms of access and recreation are often also valuable wildlife corridors and therefore also fulfil a function in relation to habitat provision and access to nature.

5.4 At the end of the section of each zone there is a boxed section covering the key GI assets and opportunities for each zone which directly link to the

objectives for each zone listed in Chapter 6.

ZONE 1: DEDHAM VALE AREA OF OUTSTANDING NATURAL BEAUTY (AONB) AND STOUR VALLEY

5.5 The Zone covers much of the northern edge of Colchester Borough, and includes the AONB. The AONB boundary extends north into Babergh, Suffolk and to the East into Tendring. The Stour Valley extends to the West and North into Braintree and St Edmundsbury. The Dedham Vale AONB and Stour Valley Management Plan 2010-15 meets the statutory obligations placed on AONB local authorities and were produced by the Joint Advisory Committee under delegated powers from those authorities. Management of the AONB is guided by the Dedham Vale AONB & Stour Valley Project who produce a detailed Management Plan for the area. The Action Zone includes all of the AONB and the Stour Valley. The Action Zone also links to Essex Living Landscape project 65: Stour Valley.



Key Needs/deficiencies

Habitat Provision and Access to Nature

5.6 There are a number of Local Wildlife Sites and areas of ancient woodland along the Stour Valley and tributaries including;

- Accessible community managed sites at Langham and Dedham.

- Dedham Vale Area of Outstanding Natural Beauty and Stour Valley
- Wormingford Mere – A natural water filled feature which is designated as a County Wildlife Site.
- Lodge Hills Local Wildlife Site.
- Ancient Woodland (e.g. at Creaks Grove, Boxted Hall, Cophedge Farm Wood and Ash Wood).
- Two large areas of former heathland at Boxted and Dedham Heath.

5.7 Fragmentation of biodiversity habitats, particularly woodland, has occurred along the Stour Valley and tributaries. Much has been done to address this. The area's landscape and biodiversity has benefitted from agri-environment schemes, being a target area for Higher Level Stewardship and the classic schemes. There is further potential to increase biodiversity connectivity along the valley which would also benefit sustainable water resource management.

Sustainable Resource Management and Climate Change Adaptation

5.8 The Stour Valley bounds the northern edge of this Zone and the Borough and is categorised as flood risk zone 2 and 3, with a high probability of fluvial flooding. Whilst this area is unlikely to come under significant development pressure, land uses and management that promote sustainable water resource management should be promoted along the valley.

Landscape Character, Setting and Context

5.9 The Dedham Vale Area of Outstanding Natural Beauty was designated in 1970, recognising its lowland river valley landscape of national importance and associations with the paintings of John Constable. There is a need to conserve the generally undeveloped nature of the floodplain along the River Stour and the AONB to reduce the use of narrow and minor lanes, particularly during the peak tourist season. Many parts of the river are lined by closely planted cricket bat willows that form an important income source to landowners but can have adverse effects on the landscape character. New willow plantations need to be restricted to help conserve the valley landscape whilst marginal riverside habitats such as marshland and pasture, reed-bed and off-stream wetlands need to be conserved and restored.

Cultural Heritage

5.10 The Dedham Vale Stour Valley has a significant amount of cultural heritage and also has particular associations with Gainsborough, Munnings and others

as well as Constable which is a draw for many visitors. Numerous cultural heritage features which form part of the landscape, including:

- Archaeological sites (e.g. prehistoric cropmark complexes) and historic landscape features (e.g. routeways running north-south down the valley sides to ancient river crossings).
- Historic settlements (e.g. Dedham – Conservation Area).
- Historic manors and parkland.

5.11 Four villages throughout the northern zone are Conservation Areas (Wormingford, Little Horkesley, Boxted and the largest area Dedham which also has a significant cluster of Listed Buildings). The proximity to the AONB provides significant potential to interpret and enhance cultural heritage in the area.

5.12 The following Historic Environment Character Areas (HECAs) fall within Zone 1: 1. River Stour Valley, 2. Bures and West Fordham and 3. Great Horkesley and West Bergholt. In respect of historic environment, the River Stour Valley provides several green infrastructure opportunities, including conservation and enhancement of ancient field pattern and landscape structure, the riparian environment of the Stour (pollard willows and areas of historic pastures), and ancient woodlands on the valley sides, and protection of important prehistoric cropmark complexes. Only a small part of the Bures and West Fordham and Great Horkesley and West Bergholt HECAs fall within this zone, so main opportunities in relation to these are discussed under Zone 2.

Locally Productive Landscapes

5.13 The AONB/Stour Valley Zone has a significant number of small orchards throughout (but particularly to the east) and a significant area of orchards at Boxted Lodge. There are no allotments or community gardens in the Zone; whilst this is not surprising given the lack of large centres of population, the presence of areas of high quality Grade 2 agricultural land in much of the Zone means that there is significant potential to increase the amount of productive land that is linked to nearby communities and is accessible, potentially using the AONB as a vehicle for this. The National Trust is currently developing some community allotments at Dedham. The AONB/Stour Valley Zone has one of the most significant clusters of small woodland in the Borough which again through linking to the AONB has the potential to provide woodfuel to the local area.

Access, Recreation and Movement

- 5.14 The AONB/Stour Valley Zone has some of the most significant deficits in terms of accessible green space in the whole Borough. Yet the River Stour and its valley provide a range of recreational opportunities, including the Stour Valley Path, a sixty mile regional route. Part of the Essex Way (a strategic route linking Epping and Harwich) also runs through the Zone from north to south, and down into the Northern Farmland Zone. There is also a circular walk between Wormingford and Bures. The AONB is a popular area for recreational boating and boats are available for private hire at Dedham and Flatford. Organised boats trips are also available along the River Stour and there are also plans to introduce a river taxi between Dedham and Flatford. There is however a relative lack of bridleways in the AONB and Stour Valley, and in particular there is a lack of cycle routes between Manningtree north into the Dedham Vale. The AONB/Stour Valley Zone has one of the densest concentrations of footpaths in the Borough, however there is poor connectivity especially to the north to other areas of the AONB and south to Colchester Town, resulting in most visits to the AONB being by car. This is despite the close proximity to Colchester Town and the excellent rail links between Colchester and Manningtree stations from where visitors can pick up the AONB Hopper Bus.

Key GI Assets / opportunities in the AONB/Stour Valley Zone

- There is a significant opportunity to improve the biodiversity connectivity along the Stour Valley at the same time as improving the sustainable management of water along the floodrisk zone in the valley.
- There is an opportunity to strengthen the link between the productive landscape (orchards, woodfuel and other local produce), the AONB and the local community (largely in Colchester Town).
- Cultural Heritage is a significant draw for the area and creating recreational spaces in the north east of the Zone that enhance the visitor offer of the area as well as provide much needed recreational space for the local population of Dedham will be of significant benefit to the area.
- There is a need to improve the long distance connectivity through the Zone between the AONB and Colchester Town.

Existing GI projects in the AONB & Stour Valley Zone

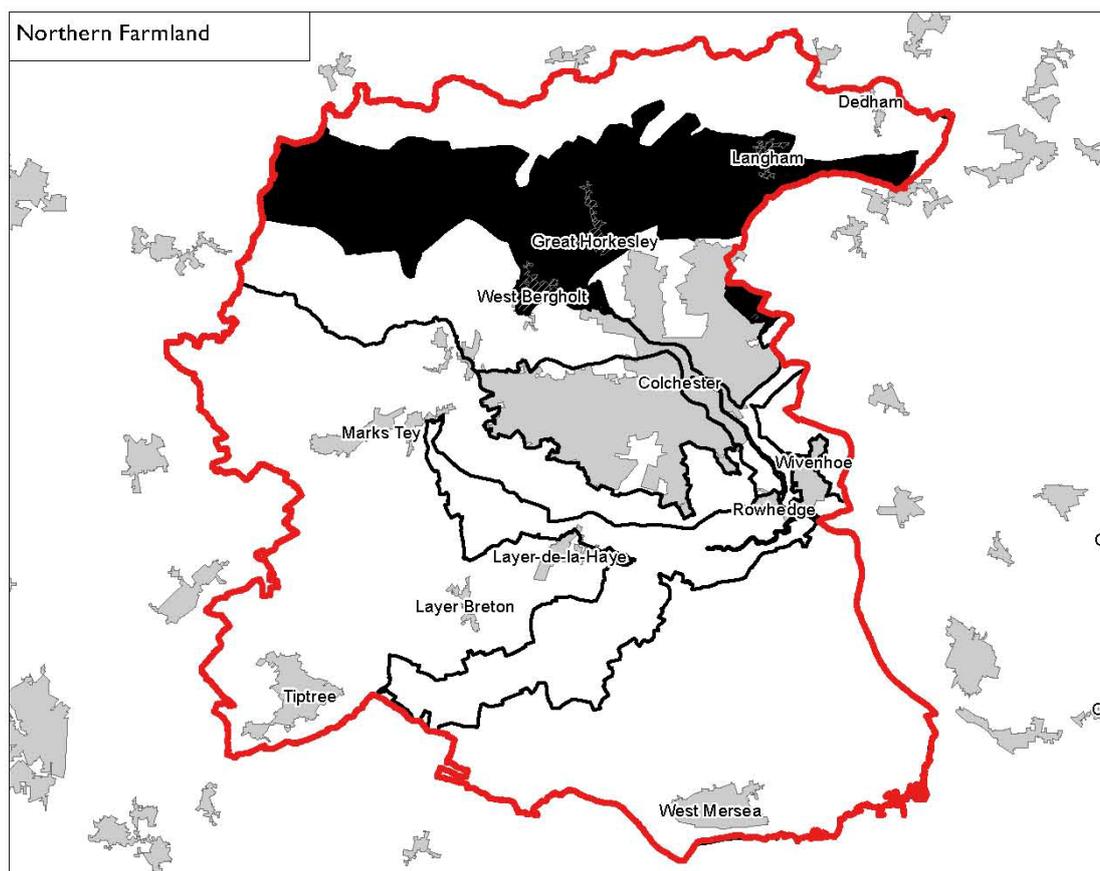
- 5.15 Existing projects and initiatives in the zone which we have taken account of when identifying projects are listed below:

Project	Web	Description
Stour Valley 'Managing a masterpiece' project	http://www.managingamasterpiece.org/	Managing a Masterpiece is a £1m three year scheme to understand, conserve and celebrate the historic landscape and features of the Stour Valley. It is funded through the Heritage Lottery Fund's Landscape Partnership Scheme, seven local authorities, English Heritage and Natural England. The Scheme is divided into three programmes covering biodiversity; landscape; archaeology; conservation of built and natural features; art; recreation and transport. Managing a Masterpiece will focus on clusters of heritage hotspots around Clare, Sudbury, Bures, Stoke by Nayland and Dedham. Some of the projects already implemented since June 2010 include public archaeological projects, re-introduction of the Dedham Vale hopper bus, the restoration of a Stour lighter (a barge), tree and hedgerow planting, exhibitions, traditional building workshops, 360 degree panoramic photographs from church towers, and walking and cycling guides.
Living Landscapes	http://www.essexbiodiversity.org.uk/livinglandscapes.aspx	The Essex Wildlife Trusts are spearheading an initiative called 'Living Landscapes'. Living Landscapes are large landscape scale areas of the countryside which are ecologically stable and 'bursting with life'. Essex Wildlife Trust has produced a Living Landscapes Map of Essex with partners to identify 80 Living Landscape areas, based upon their existing ecological value and their potential to become even more vibrant. A key target is to have management plans in place for all of these areas. 12 of these Living Landscapes fall wholly or partially within the

Project	Web	Description
		<p>Borough of Colchester, and include wetland, coastal and estuarine, woodland and 'mosaic and grassland' areas, as well as 'corridors' between these. One of these areas is the Stour Valley. A Living Landscape management plan for this area has not yet been developed.</p>

Zone 2: Northern Farmland Zone

- 5.16 The Northern Farmland Zone is the broad band of farmland plateau to the north of Colchester Town between the Colne and Stour Valleys. It is essentially a medium to large scale arable landscape, with some areas of woodland and orchards.



Key Needs/deficiencies

Habitat Provision and Access to Nature

- 5.17 The Northern Farmland Zone is well-wooded in southern areas including a number of orchards (e.g. Sergeant's Orchard) and areas of ancient woodland (e.g. at Pitchbury, Stitching and Slough Grove). However, there is fragmentation of woodland habitats which is partially being addressed by several projects which are already underway to make the woodland network more extensive (such as the Woodland Trust community woodland at Fordham), which extends into the Colne Valley Zone. Although not many significant areas for nature conservation exist in the zone there are a number of small sites including Black Brook Local Wildlife Site.

Sustainable Resource Management and Climate Change Adaptation

- 5.18 Although there is no significant potential to improve sustainable resource management in the Zone, localised improvements to sustainable water resource management could be made along the tributaries to the River Colne. Reducing diffuse pollution from runoff would be particularly beneficial given the largely arable nature of much of the farmland.

Landscape Character, Setting and Context

- 5.19 Changes in agricultural practices and farmland management threaten the landscape character of this Zone for example the loss of hedgerows and small scale rectilinear field patterns due to further intensification and the expansion of pony paddocks. The A12 road corridor and increased pressure on more minor roads also increase disturbance and intrusion in this zone.

Cultural Heritage

- 5.20 Significant cultural heritage features in this zone include:
- Remains of the Colne Valley railway line.
 - A Norman Motte and Bailey castle (Mount Bures) which is a Scheduled Monument. Several moats are recorded within this Zone.
 - An Iron Age hill-fort exists at Pitchbury Ramparts (a Scheduled Monument) which survives as a substantial bank and ditch within an area of ancient woodland, the remainder is visible as a cropmark.
 - Fordham and Chappel are also Conservation Areas.
- 5.21 Although the proposed Growth Areas do not lie within this Zone, edge effects from the growth of Colchester Town may start to have a negative impact on the landscape and cultural heritage of the area. For example, urban features such as tarmac pavements and street lighting may start to appear on country lanes.
- 5.22 The following HECAs fall within Zone 2: 2. Bures and West Fordham and 3. Great Horkesley and West Bergholt. The Bures and West Fordham HECA presents the following key historic environment opportunities for green infrastructure: Potential for interpretation of feature such as the Motte and Bailey Castle at Bures, and of Second World War defences and industrial archaeology/relics associated with the railway line from Marks Tey to Sudbury. Great Horkesley and West Bergholt HECA presents the following opportunities: Potential for heathland restoration and heathland creation to

link remnant areas of heathland (and also for orchard creation, to reinstate aspects of historic landscape character) through take up of agri environment schemes. Also interpretation of other, significant aspects of the historic environment accessible from the green infrastructure network, such as the hillfort at Pitchbury Ramparts.

Locally Productive Landscapes

- 5.23 West Bergholt has a significant allotment / community gardens but given the high quality of agricultural land in the area including an area of Grade I agricultural land, south of Boxted, there is significant potential to link communities to high quality produce. This area south of Boxted also contains a cluster of small orchards.

Access, Recreation and Movement

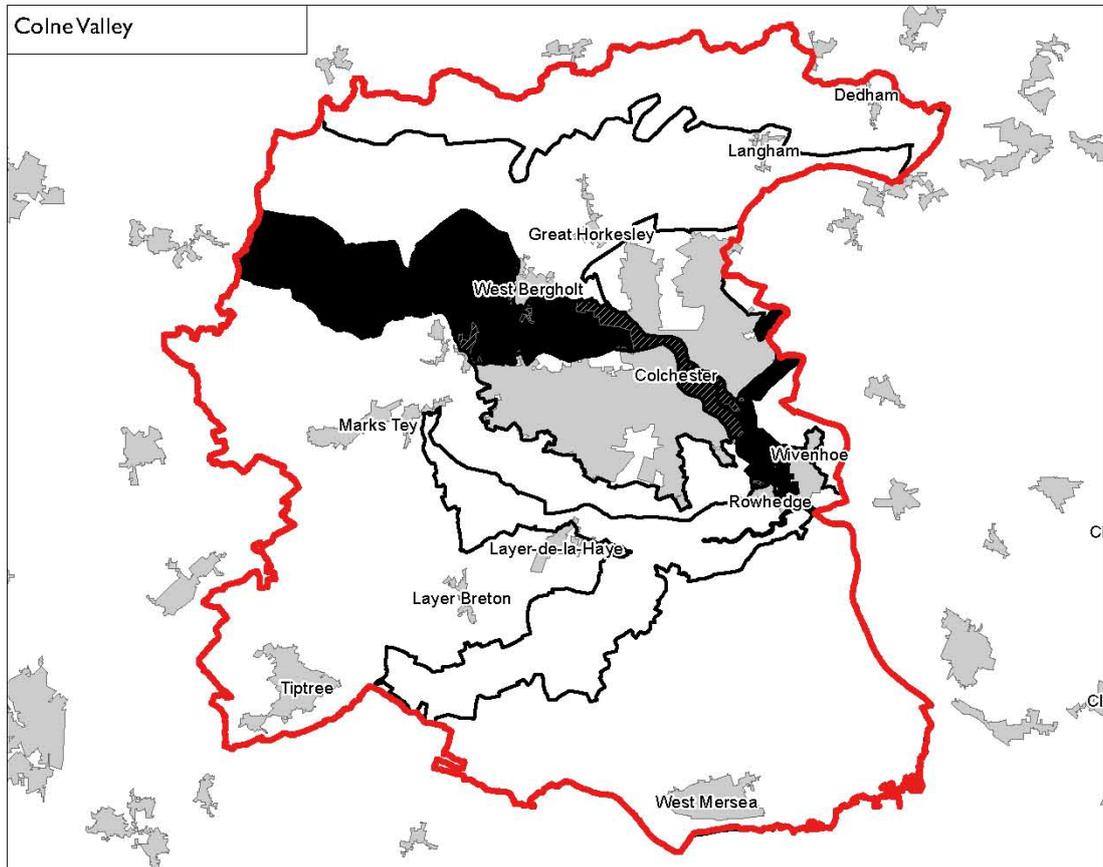
- 5.24 The zone has two county scale sites of accessible greenspace and significant areas of outdoor sports facilities with the Golf Course (although not publically accessible, other than rights of way) and the recreation ground at Mile End both near Colchester Town in the east of the Zone. There remains a need for smaller scale sites to serve local communities in this area. The Essex Way (strategic route) runs diagonally through the Zone from the north east to the south west, as well as a National Cycle Route, and extensive network of rural lanes. However, there is a notable gap in the Rights of Way network (between the north of Colchester Town and the southern edge of the AONB Zone). – plus severance from Colchester Town by the A12. Increasing and enhancing crossing points across the A12 would significantly benefit connectivity to the surrounding countryside.

Key GI Assets /Opportunities in the Northern Farmland Zone

- Continue the work to reduce woodland fragmentation such as the Woodland Trust's community woodland at Fordham.
- Creation of new community gardens and allotments in the east of and south of the Zone to cater for people in Colchester Town (there is a need for allotments in Boxted and Great Horkeley).
- Remove both physical and visual barriers to crossing the A12 for example creating and improving bridges and underpasses.

ZONE 3: COLNE RIVER VALLEY ZONE

- 5.25 The Colne River Valley Zone follows the valley extending from the Borough boundary in the west, through the urban area of Colchester Town to Wivenhoe and along Colne Estuary. This Action Zone links to the Essex Living Landscape project 63: Colne Valley and project 70: Colne Estuary.



Key Needs/deficiencies

Habitat Provision and Access to Nature

- 5.26 The Colne River Valley Zone has a significant number of wildlife sites within it, particularly south of West Bergholt. There are a number of ancient woodlands to the east of West Bergholt and small broadleaved woodlands sites to the north-west and east of Wakes Colne. Fordham community woodland has also been established by the Woodland Trust site around Fordham Hall.
- 5.27 There is a loss of species-rich riverside grassland and marshland in this zone due to intensive grazing management. More should be done to link these floodplain habitats to create wildlife corridors and help address more sustainable water resource management. The east of the Zone is very rich in wildlife sites including:

- Hythe Lagoons.
- Bull Meadow Local Nature Reserve.
- Upper Colne Marshes - Grazing marshes with associated ditch and open water habitats (SSSI).
- Wivenhoe Woods and Wivenhoe Ferry Marsh.
- The Moors (also in Colchester Town Zone) – An important wildlife habitat in an area known locally as the Moors between the River Colne and Hythe Hill.
- Coastal floodplain and grazing marsh (Colne Estuary Ramsar/SPA/SAC)
- Reed bed in East Colchester (BAP habitat).

Sustainable Resource Management and Climate Change Adaptation

- 5.28 There is significant potential to improve sustainable water resource management and adaptation to climate change in this zone. The Colne river valley is classified as Flood Risk Zone 3 and areas of East Colchester and Wivenhoe are potentially at risk given their built up nature and the planned development in these areas. New development should not occur in the functional river valley flood plain and land use and management practices should be employed to maximise the flood attenuation potential of areas particularly in the west (upstream) of the Zone.

Landscape Character, Setting and Context

- 5.29 There is a need to conserve the open character of the floodplain and maintain cross valley views. Development on the edge of Fordham, Wivenhoe, West Bergholt and Colchester Town all needs to be of appropriate scale, form and design to ensure that it does not have a detrimental impact on the landscape character of this area. The wet meadows, marshland and pasture all need conserving and managing as well as the wooded valley sides to help ensure landscape character is maintained.

Cultural Heritage

- 5.30 Areas of cultural heritage interest in the Zone are primarily associated with Colchester Town e.g. Area of Archaeological Interest at Cymbeline Meadows, Castle Park and Colchester's Historic Core, the industrial maritime heritage associated with the Hythe/East Colchester Growth Area.

However, to the west of the Zone there are a number of important sites including;

- Chapel Viaduct – one of the ‘finest and largest brick railway viaducts in the East of England’ – this is protected as a Conservation Area along with the historic core of Chapel.
- Crop marks and other archaeological remains – also WW2 pill boxes associated with Marks Tey to Sudbury railway branch line
- Representation of industrial production from mill with surviving mill race at Ford Street, Newbridge and Cook’s Mill.

5.31 This Zone contains some of the most significant cultural heritage assets in the Borough and sites should be enhanced and integrated into recreational and open spaces provision that provide a range of functions.

5.32 The following HECAs fall within Zone 3: Small parts of HECAs 2. Bures and West Fordham and 3. Great Horkesley and West Bergholt (both discussed in relation to Zone 2 above). Also HECA 4. Colne Valley, 5. Modern Colchester and 14. Colne Estuary. Key historic environment opportunities in relation to the Colne Valley HECA are interpretation of Iron Age archaeology associated with the formative evolution of Colchester (dyke system and Cymbeline meadows) and of modern era relics such as the Second World War Eastern Command line of defence and associated structures. Zone 3 covers only a small part of the Modern Colchester and Colne Estuary HECAs, and these are discussed in relation to Zones 4 and 7 respectively.

Locally Productive Landscapes

5.33 This Zone contains a couple of small allotments and community gardens, but given the eastern part of the Zone’s proximity to the edge of Colchester Town there is significant potential to create new allotments and community gardens in these urban fringe areas. Given the agricultural nature of the area there are also opportunities for increasing the connection between the farming community and the wider community.

Access, Recreation and Movement

5.34 There is a deficiency in sub-regional scale accessible natural green space in the west of this Zone and throughout the Zone there is a deficiency in neighbourhood scale sites. There is a lack of a coherent system of rights of way from Cymbeline Meadows westwards through and along the Valley to the west with the A12 forming a significant barrier. Links to West Bergholt

from Colchester Town are also limited and need to be improved to encourage modal shift and reduce congestion in Colchester Town. There is also a need to improve access connectivity through the Zone linking Colchester Town to Fingringhoe, Brightlingsea and the coast. The Wivenhoe Trail and the improvements that have taken place as part of the 'town to sea trail' and the Cycle Colchester programmes have improved the routes through the town and towards Wivenhoe (particularly to the east of the River Colne) but further work is needed beyond Wivenhoe out to the coast. There is also a proposed link to the National Cycle Network between Colchester Town and Sudbury to the northwest, and Wivenhoe and the coast, along the Colne. Colchester's Local Development Framework proposes the creation of a new riverside walk between East Colchester and Rowhedge.

Key GI Assets / opportunities in the Colne River Valley Zone

- There is significant functional potential to improve sustainable water resource management and adapt to climate change in this Zone.
- This Zone contains some of the most significant cultural heritage assets in the Borough and sites should be enhanced and integrated into recreational and open spaces provision that provide a range of functions.
- Create new allotments and community gardens in these urban fringe areas to the east of the Zone.
- Create new rights of way from Cymbeline Meadows westwards through and along the Valley.
- Seek the creation of new accessible greenspaces of at least 2 ha throughout the zone to address the deficiency in neighbourhood scales sites close to where people live.
- Establish a green corridor along the Colne westwards from the urban centre to deliver multiple benefits
- Establish a new riverside path between East Colchester and Rowhedge Village.

Existing GI projects in the Colne Valley Zone

5.35 Existing projects and initiatives in the zone which we have taken account of

when identifying projects are listed below:

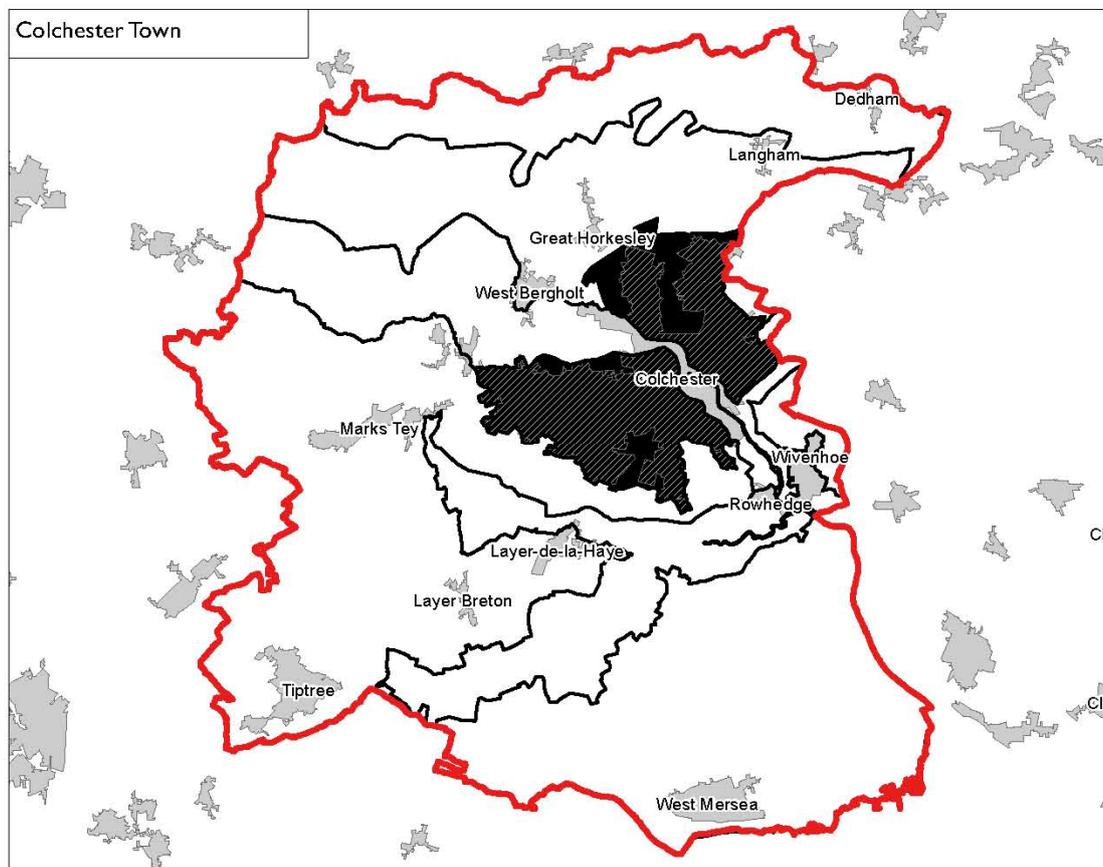
Project	Web	Description
<p>The Colne Valley Path</p>	<p>http://www.colnevalley.com/</p>	<p>The Colne Valley Path was opened in May 2006 as part of the River Colne Countryside Project. The Colne Valley Path links Great Yeldham to Colchester. The route allows walkers to enjoy the Colne Valley from the rivers edge to high on the valley side that opens up long views of this wonderful valley. Starting at the Great Oak in Yeldham the path takes in the historic villages of Castle Heddingham, the great viaduct at Chappel and Lexden Dyke near Colchester before finishing at Balkerne Gate in Colchester.</p> <p>The route includes a range of wildlife habitats including grazing marsh, woodland and past ancient hedgerows. In addition the route crosses the Woodland Trust's new estate at Fordham as well as passing by a number of County Wildlife Sites that are in private ownership. The route follows existing public rights of way and open space and is waymarked with yellow discs to guide walkers. In addition a route guide is available from the Project that describes the route as it crosses meadows, woodlands and flits from the river bank to high up on the valley sides. The walk is 22½ miles in length. The River Colne Countryside Project was a partnership project between Braintree and Colchester Councils and was completed in 2009.</p>
<p>Living Landscapes</p>	<p>http://www.essexbiodiversity.org.uk/livinglandscapes.aspx</p>	<p>The Essex Wildlife Trusts are spearheading an initiative called 'Living Landscapes'. Living Landscapes are large landscape scale areas of the countryside which are ecologically stable and 'bursting with life'. Essex Wildlife Trust has produced a Living Landscapes Map of Essex with partners to identify 80 Living Landscape areas, based upon their existing ecological value and</p>

Project	Web	Description
		<p>their potential to become even more vibrant. A key target is to have management plans in place for all of these areas. 12 of these Living Landscapes fall wholly or partially within the Borough of Colchester, and include wetland, coastal and estuarine, woodland and 'mosaic and grassland' areas, as well as 'corridors' between these. One of the Living Landscapes is the Colne Valley, and another 'Hythe-Wivenhoe'. A Living Landscape management plan for these areas has not yet been developed.</p>
The Moors	<p>The current website is not operational .</p>	<p>The Moors Movement is a local group of volunteers who look after the important wildlife habitat in an area known locally as the Moors. The Moors is a hilly green area between the River Colne and Hythe Hill.</p>
The View Finder Trail	<p>http://www.visitcolchester.com/Colchester-The-View-Finder-Trail/details/?dms=13&venue=0273328</p>	<p>The view finder trail is a 28km cycle trail which explores Colchester Town and runs along the east bank of the Colne to Wivenhoe, with a number of key views and vistas identified. At ten of these locations, a sign has been erected depicting the view. These look like road signs but are handmade paintings by artist Michael Goodey.</p>
The Colchester Town to Sea Trail	<p>http://mediafiles.thedms.co.uk/Publication/CE/cms/pdf/towntosea.pdf</p>	<p>A 3.2km art trail designed for walkers and cyclists which follows the tidal River Colne from the Visitor Centre in Colchester town down to the Hythe, through some of the lesser known areas of Colchester.</p>
Walk Colchester	<p>http://www.walkcolchester.com</p>	<p>Walk Colchester is a green community mapping initiative, new in 2010. Its main aims are 'to</p>

Project	Web	Description
	ter.org.uk/	<p>record and protect Colchester's paths, parks, woodland and open spaces, and to promote enjoyable, accessible, informed pedestrianism for walkers of all ages and abilities'. It currently includes an interactive website which includes several themes walks in and around Colchester town and the wider Borough. Some of the routes run alongside the River Colne.</p>
Cycle Colchester	http://www.cyclecolchester.org.uk/cycle_index_det.asp?article_id=8453&sec_id=2163	<p>'Cycle Colchester', a partnership between Essex County Council, Colchester Borough Council, local cycling groups and a number of other organisations (including Sustrans), are delivering £4 million of improvements to Colchester's cycle paths and signs, and offering cycle training. The organisation's website promotes a number of cycle routes through Colchester Town. Some of the routes run alongside the River Colne.</p>

ZONE 4: COLCHESTER TOWN

- 5.36 This zone includes the existing urban area and its future urban Growth areas including Town Centre, North Growth Area, East Growth Area, South Growth Area, Stanway Growth Area. Colchester Town contains two thirds of the Borough's population (which is due to expand significantly) and provides the primary source of Green Infrastructure 'users', both in terms of residents and visitors. Growth proposed in the Zone presents important opportunities for investment in Green Infrastructure. The Colne River Valley runs right through this Zone and is integral to it. There is a potential contribution/links in this Action Zone to the Stanway Complex Living Landscape project.



Key Needs/deficiencies

Habitat Provision and Access to Nature

- 5.37 Given the urbanised nature of this Zone there are a large number of Local Wildlife Sites (nature reserves and wetland areas) close to the town centre and readily accessible by large numbers of people. These include Cymbeline Meadows to the west of the town and Local Nature Reserves at Bull Meadow, Colne, Hilly Fields, Lexden Park, Salary Brook, Spring Lane

Meadows and Welsh Wood). High Woods Country Park provides a large area of ancient woodland close to the town centre to the north although it is poorly used by adjacent communities. A new community garden is under development at Highwoods Country Park and there is also an area of 'natural and semi-natural' area to the south east at Middlewick. Another important wildlife habitat in the area is known locally as the Moors between the River Colne and Hythe Hill, looked after by a local group of volunteers called The Moors Movement.

- 5.38 The Zone has a number of existing wildlife corridors including Bourne Valley in East Colchester to Gryme's Dyke near Stanway. These corridors and the other wildlife sites in this zone will come under particular pressure from development in the Growth Areas, and need not only to be protected from encroachment but also to be enhanced and additional sites found. New green corridors and strategic areas of open space should also be created within and from the Growth Areas to the town centre and out to the surrounding countryside. The River Colne forms a significant wildlife corridor through this zone.

Sustainable Resource Management and Climate Change Adaptation

- 5.39 Flood risk (from fluvial and surface water flooding) is an issue throughout this Zone. Use of sustainable drainage systems (SuDs) and GI to manage flood risk are good, cost effective solutions as they also deliver wider benefits. The town must adapt to the impacts of climate change and green infrastructure and urban greening measures can make a significant contribution to this, for example, through flood alleviation; local food production; street trees, green roofs and walls providing urban cooling and improving air quality.

Landscape Character, Setting and Context

- 5.40 The central core of Colchester Town is designated as a Conservation Area, and the town's situation on a hill allows views out to the open countryside which cements the relationship between the town and the rest of the Borough and should be retained as a key part of the town's character. Housing growth on the periphery of the existing town has the potential to extend the urban character of these areas into the farmed landscape, with a loss of tranquillity and a negative effect on landscape character as noise and light pollution and the visual impact of development starts to encroach on the surrounding countryside. Environmental quality in the East Colchester Growth Area is identified as being particularly poor and will need significant

restoration.

Cultural Heritage

5.41 Colchester Town – ‘the oldest recorded town in England’, contains a vast number of important cultural heritage features, plus the possibility for undiscovered cultural heritage and the creation of new cultural heritage. There is a concentration of these in the historic core but they are also spread throughout the urban area. Those of particular relevance for GI include:

- Registered parkland associated with Severall’s hospital.
- The Castle and Castle Park – A Grade II listed Victorian Park in Colchester’s historic core which encompasses much of Colchester’s rich heritage within its boundaries and boasts over 1 million visitors a year¹⁵.
- Colchester Roman Circus.
- System of Iron and Roman dykes (e.g. Grymes Dyke) which provide valuable wildlife corridors and recreational links between this zone and the Roman River Valley (Zone 5) to the south
- Significant below ground archaeological remains and earthworks in areas of formalised Green Infrastructure such as Gosbecks Archaeological Park, which provides an important recreational area and wildlife resource on the urban fringe and links to the Roman River Valley (Zone 5).
- Ancient woodland in High Woods.
- Maritime Industrial heritage and The Hythe, Wivenhoe and West Mersea.
- Military heritage associated with the Garrison area.
- Gosbecks Archaeological Park (also associated with the Roman River Valley Zone).
- New cultural heritage such as the Visual Arts Facility in St Botolphs Quarter
- Colchester Town walls around the historic core which are a distinctive feature of the built environment and important refuge for wildlife

¹⁵ http://colchester.gov.uk/service_landing_level_3.asp?sec_id=3741

- Colchester Cemetery
- 5.42 Cultural Heritage is extremely important in defining the identity of Colchester Town as well as a significant economic implication through tourism and creating a desirable place where people want to live. It is therefore vital that cultural heritage in the town is conserved managed and enhanced and that the public realm enhances the setting for this important resource.
- 5.43 HECAs 5 (Modern Colchester) and 6 (Colchester Walled Town) fall within Zone 4. Key historic environment GI opportunities presented by HECA 5 are Severalls Hospital and grounds (Grade II Registered Park and Garden), located within the planned Colchester North Growth Area, but providing a strong landscape template for future development. There is also a network of Iron Age and Roman dykes, such as Lexden, Gryme's Dyke and Triple dyke, now within areas of open space in the urban area, which link with the countryside to the south and north and provide opportunities for enhanced management, including interpretation.
- 5.44 HECA 6 presents the following historic environment opportunities in relation to GI: Enhanced interpretation of the Roman archaeology such as the circus and town walls as part of future public realm improvements. Also interpretation of key urban sites such as Castle Park (Grade II Registered Park and Garden) as part of the green infrastructure network (e.g. forming nodes on a town to sea trail).

Locally Productive Landscapes

- 5.45 There are deficiencies in allotments/ community gardens in the south of Colchester Town as well as a high demand for allotments in this area. The northern edge of Colchester Town also has deficiencies in provision of allotments and community gardens. Although new allotments are being provided at Berholt Road and a new community garden is being developed in New Town, given the increases in population of this area there may still be a need for increased provision throughout the whole of this Zone.

Access, Recreation and Movement

- 5.46 There is a deficiency of sub-regional accessible natural greenspace in the north of the Zone and also a need to create more neighbourhood level spaces in the south and north-west and centre of the Zone. This need will become acute when development takes place in the Growth Areas and will need careful planning given the more limited options in this built up area. GI

opportunities will be identified through the masterplan being developed for this area but green corridors along the river corridors and floodplains are a key opportunity. High Woods Country Park – a large publicly accessible greenspace running northwards from the town centre to the fringe provides a valuable resource for this Zone and includes ancient woodland, grassland designated as SSSI and a number of cultural heritage assets. It will be important to protect, manage existing and create new accessible links to this key asset from its surrounding residential areas. The rights of way network is extensive in this Zone but there is a need for better promotion and maintenance of routes. The Indices of Multiple Deprivation data shows that the Garrison and East Colchester Growth Areas have poorer health than the rest of the town, so walking and cycling routes into the centre and out to the surrounding countryside will be particularly important in these areas, as will more recreation/activity facilities needed for all, particularly children and young people. As part of recent development at the Garrison significant new walking and cycling routes are being established to address this need to a certain extent. There is good provision of outdoor sport facilities surrounding the town centre.

Key GI Assets /Opportunities in the Colchester Town Zone

- High level of access to nature opportunities close to large numbers of people. However, notable deficiencies in nearby accessible natural greenspace for much of the Zones' population which need addressing by the creation of new high quality greenspace and enhanced links to existing spaces such as High Woods Country Park.
- Create new green corridors through the flood risk zones to enable sustainable water resource management, create wildlife corridors and encourage increased movement by walking and cycling through the Zone.
- Highlight the significance of cultural heritage assets in the Zone protecting and enhancing assets and increasing public access and understanding of them.
- Increase locally productive landscapes throughout greenspaces in the town both informally and through more formal community gardens and allotments.
- Help the town adapt to climate change through measures to help urban cooling and reduce surface flooding.
- Enhanced interpretation of the town's Roman legacy including the Circus and town walls as part of future public realm improvements.
- Enhanced interpretation of key urban sites such as Castle Park, St Botolphs Priory and other historic graveyards as part of the GI network (e.g. forming nodes on a town to sea trail), as well as interpretation of and links to sites such as Gosbecks Archaeological Park (transition with Zone 5).
- Creation of recreational routes and improved wildlife corridors from urban areas to the countryside through enhancements to and promotion of existing GI assets and creation of new GI e.g. historic waterfront and regeneration area of the Hythe to the Roman River Valley (Zone 5) via the historic mills and associated mill ponds of the Bourne Valley, Colchester's Victorian Cemetery, allotments south of the Crematorium, Middlewick Ranges, Thomas Lord Audley school playing fields and Berechurch Dyke, and King George Playing Field Stanway to

Roman River Valley (Zone 5) via Gryme's Dyke and Stanway Green.

Existing GI projects in Colchester Town Zone

5.47 Existing projects and initiatives in the zone which we have taken account of when identifying projects are listed below:

Project	Web	Description
Walk Colchester	http://www.walkcolchester.org.uk/	Walk Colchester is a green community mapping initiative, new in 2010. Its main aims are 'to record and protect Colchester's paths, parks, woodland and open spaces, and to promote enjoyable, accessible, informed pedestrianism for walkers of all ages and abilities'. It currently includes an interactive website which includes several themes walks in and around Colchester town and the wider Borough.
Cycle Colchester	http://www.cyclecolchester.org.uk/cycle_index_det.asp?article_id=8453&section_id=2163	'Cycle Colchester', a partnership between Essex County Council, Colchester Borough Council, local cycling groups and a number of other organisations (including Sustrans), are delivering £4 million of improvements to Colchester's cycle paths and signs, and offering cycle training. The organisation's website promotes a number of cycle routes through Colchester Town.
The BIG Garden Project	http://www.colchester.gov.uk/news_det.asp?article_id=8950&section_id=3313	This organic fruit and vegetable community garden is a short walk from High Woods Country Park Visitor Centre off Turner Rd and has been running for over 3 years. The garden has received a Green Flag award for its innovation in Conservation and Heritage. The project aims to 'promote health and well being by producing local food in a sustainable way and to encourage community involvement'. People of all ages and abilities are encouraged to volunteer and have a share in the harvests. Public events such as 'apple day' and smaller

Project	Web	Description
		'horticultural therapy sessions' are run at the site, as well as sessions for school visits.
Myland Community Garden	http://www.colnehousing.co.uk/corporate/communities/cam-project.php	In 2007 a community garden was developed at Myland through the Community Action Mile End (CAM) project, which was part funded by Colne Housing. The Community Action in Mile End (CAM) project was set up in June 2006.
Community Garden at Old Heath Road Recreational Ground	http://www.newtowngardens.org/	<p>Residents in Old Heath and New Town have been working with Colchester Borough Council to realise ideas for a community garden at Old Heath Road Recreational Ground, supported by the Safer Colchester Partnership. The New Town Community Group initially suggested the idea of a community garden to Colchester Borough Council's Community Projects team, in order to improve the facilities at Old Heath Road Recreational Ground. Interest from residents was high and the project took off. The community garden will be an open community space for residents of New Town, Old Heath and the Hythe to access, see and experience. Colchester Borough Council will be on hand to offer ongoing support. Following consultation with Colchester Borough Council and other partners, including the British Trust for Conservation Volunteers (BTCV), the garden design has been completed by a group of local residents, with the emphasis on bringing more wildlife to the park and meeting the needs of local people, including children and families and older residents. Key features include:</p> <ul style="list-style-type: none"> • Fruit and nut orchards • Wildlife areas, including long grasses, edible hedges, pond and 'bug hotel' • Sensory plants • Child-centred spaces – e.g. nature play

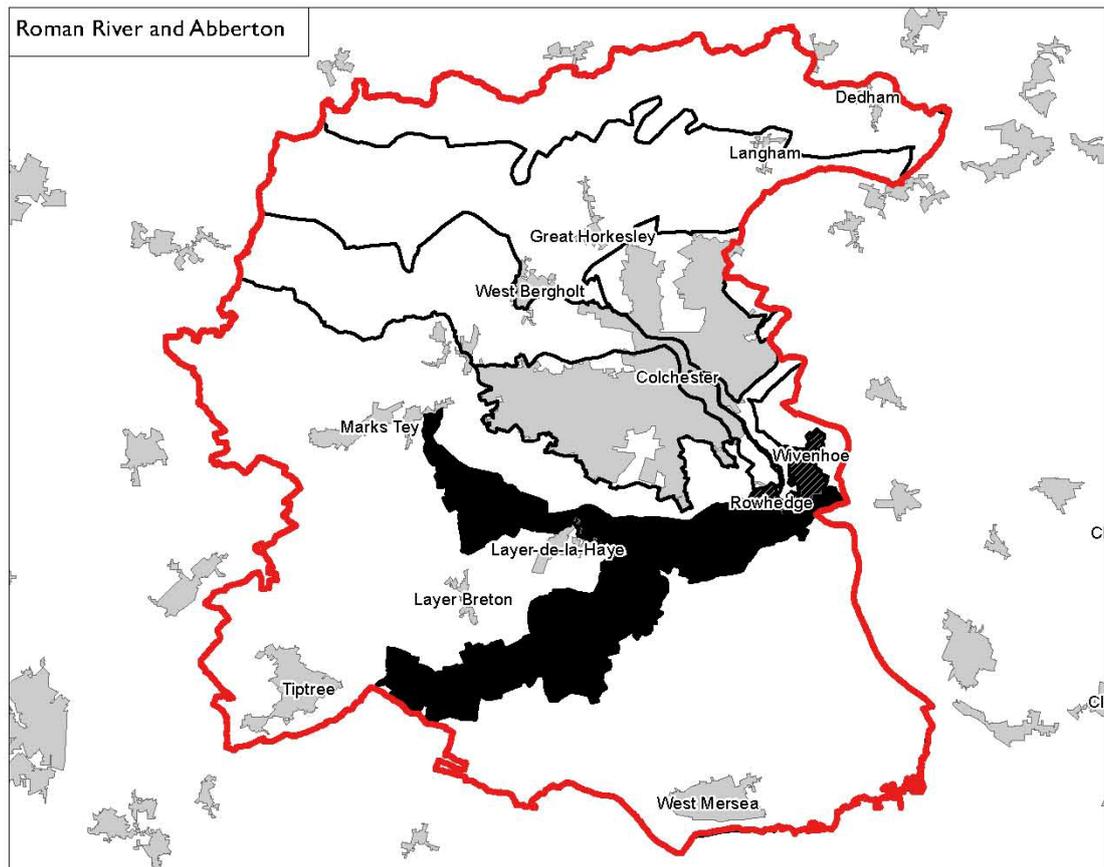
Project	Web	Description
		<p>areas</p> <ul style="list-style-type: none"> • Vegetable growing • Social spaces • Food preparation area.
The Moors	The current website is not operational.	The Moors Movement is a local group of volunteers who look after the important wildlife habitat in an area known locally as the Moors. The Moors is a hilly green area between the River Colne and Hythe Hill.
North Station Masterplan SPD (note that this is draft and subject to change)	http://www.colchester.gov.uk/Info_page_two_picture_det.asp?article_id=10615&sec_id=2226	<p>Key features of relevance:</p> <ul style="list-style-type: none"> • ‘priority green link’ linking High Woods with Castle Park • Pedestrian, cycles and public transport priority movement corridor between the station and along North Station Road. <p>Station Gateway (character area):</p> <ul style="list-style-type: none"> • Cycle storage/better pedestrian routes/public realm improvements/widened footpaths • New cycle and footpath connection to and from Station and Turner Rise/High Woods Country Park <p>North station Road Urban Village:</p> <ul style="list-style-type: none"> • Widen footpaths by reducing carriageway to minimum widths to improve pedestrian mobility and provide temporary space for cafe tables, florists etc, to attract passing trade. • Complete the riverside footpath on the north side of the bridge. • Introduce street trees to help disguise poor buildings, emphasise good spaces and provide a link to the passing of the seasons. • Pocket parks and pedestrian links. <p>Cowdray Centre:</p>

Project	Web	Description
		<ul style="list-style-type: none"> • Cowdray Green acting as a linking green space between Castle Park and High Woods Country Park, including provision of a direct approach to an enhanced pedestrian subway • Relocated junction with signal controlled access to aid access to and from the Leisure Centre and Castle Park • Clarendon Boulevard creates a new linking street between Essex Hall and Cowdray Avenue providing a high quality and accessible business address. • Redevelopment provides the opportunity to recreate a strong street tree line along this section of Cowdray Avenue.
The Stadium Green Way Project	http://transitioncolchester.blogspot.com/	The Stadium Green Way project will see the creation of a tree lined link between High Woods and the new Weston Homes Community Stadium. Volunteers have already planted 1250 of the 10,000 trees, one for every seat at the new Stadium, which will be planted along the route. More in the Colne Valley Countryside Project folder.
AbbeyField Community Project	http://abbeyfieldcommunity.com/	The 'AbbeyField Community Project' is a group of local churches working together with the residents of AbbeyField to establish and maintain a thriving community where everyone has a sense of belonging and value.
The View Finder Trail	http://www.visitcolchester.com/Colchester-The-View-Finder-Trail/details/?dms=13&venue=027332	The view finder trail is a 28km cycle trail which explores Colchester Town and runs along the east bank of the Colne to Wivenhoe, with a number of key views and vistas identified. At ten of these locations, a sign has been erected depicting the view. These look like road signs but are handmade paintings by artist Michael Goodey.

Project	Web	Description
	g	
Transition Towns Colchester	http://transitioncolchester.blogspot.com/	This Transition Towns group is relatively new. It already runs numerous events and has a blog on its website which is currently under development.
The Colchester Town to Sea Trail	http://mediafiles.thedms.co.uk/Publication/CE/cms/pdf/townto sea.pdf	A 3.2km art trail designed for walkers and cyclists which follows the tidal River Colne from the Visitor Centre in Colchester town down to the Hythe, through some of the lesser known areas of Colchester.

ZONE 5: ROMAN RIVER VALLEY (INCLUDING ABBERTON RESERVOIR)

- 5.48 The Roman River Valley Zone is a well wooded valley following the course of the Roman River as it runs laterally west to east across the Borough. The Zone extends south to include the Abberton Reservoir. This Action Zone links to Essex Living Landscape project 68: Roman River Complex.



Key Needs/deficiencies

Habitat Provision and Access to Nature

- 5.49 The Roman River Valley contains a rich and complex mosaic of woodland, scrub, heath, grassland and fen as well as some floodplain and grazing marsh. It has been described as 'one of the best preserved river valleys in Essex'¹⁶. The northern part of the Zone has the most significant amount of woodland (ancient and deciduous) in it for the whole Borough and whilst the southern part supports a number of nationally threatened habitats including heathland and deciduous woodland some of which are designated as SSSI,

¹⁶ Roman River Complex (Living Landscape 68), A Visioning document prepared by Essex Wildlife Trust, 04/05/10.

SPAs, Ramsar and Local Wildlife Sites. Notable GI woodland sites within the valley include Friday Woods, Donyland Woods and the Roman River Valley Nature Reserve (a 44 acre reserve which contains a fragment of traditional river valley landscape maintained by the Essex Wildlife Trust). The unimproved acid grassland is one of the few sizeable areas remaining in Essex, which together with the other habitats supports a diverse breeding bird population and over a thousand species of moths and butterflies.

- 5.50 Abberton Reservoir is the largest freshwater body in Essex and one of the most important wetlands for wildfowl in the UK. It includes a visitor centre and nature reserve managed by Essex Wildlife Trust. The extension of the reservoir, which is currently taking place, includes the relocation and expansion of the existing visitor centre, and the expansion of the network of permissive paths, cycle routes and bridleways near the reservoir, providing increased opportunities for access to nature.
- 5.51 Stanway Growth Area is adjacent to the Roman River. Without careful planning, this growth could threaten the habitats in the zone however, it also provides an opportunity to reduce fragmentation of habitats and create new access to nature opportunities.

Sustainable Resource Management and Climate Change Adaptation

- 5.52 The Roman River has a high probability of flooding (categorised as flood risk zone 3 as land is assessed as having a 1 in 100 or greater annual probability of river flooding (>1%). Creation of new GI and management of existing habitats within the zone by reinstating a more natural functioning floodplain will help to minimise the impact of flood risk, for example through the creation and management of wet grassland and wet woodland habitats which are allowed to flood. The extension of Abberton Reservoir may alter the hydrology of the area and will have been taken in to account in water resource planning for the area.

Landscape Character, Setting and Context

- 5.53 Where accessible there are panoramic and diverse views along the Roman River Valley as it widens towards the confluence with the Colne and up the heavily wooded sides of the valley. Poorly sited development and loss of the existing woodland areas on the valley sides could lead to the loss of the undeveloped character and setting of the flood plain. There is also a need to seek opportunities to restore habitats along the floodplain and manage and control potential fertiliser run-off from nearby farmland.

Cultural Heritage

- 5.54 The Roman River Valley includes important Iron Age dykes and earth works and other associated iron age and roman settlements at Gosbecks area. The Gosbecks archaeological park lies between the Roman River Zone and Colchester urban area, and is the most significant cultural heritage asset in the Zone.
- 5.55 HECAs within Zone 5 are HECA 12: Roman River Valley, 13. Abberton Area and a small part of HECA 14: Colne Estuary (this HECA is discussed in relation to Zone 7). Key historic environment GI opportunities in relation to HECA 12 are the opportunities for enhanced interpretation of Iron Age and Roman heritage such as at Gosbecks, as well as conservation and enhancement of historic valley floor fieldscapes and pastoral landscape features.
- 5.56 In relation to HECA 13. Abberton Area, principal GI opportunities are to enhance landscape links to the more intact historic landscapes within HECA 12, e.g. to conserve and enhance relict historic field boundary structures. The 1930s Abberton Reservoir presents opportunities for interpretation as part of enhanced perimeter access.

Locally Productive Landscapes

- 5.57 This Zone has very mixed quality of agricultural land. The highest quality land is to the east of Abberton, and there is also a significant cluster of traditional orchards around this settlement. There is potential to increase the number of orchards in this area.

Access, Recreation and Movement

- 5.58 The stretch of the Roman River Valley between Colne Marshes and Gosbecks is notable in its good provision of accessible natural greenspace. However, there is a lack of small scale neighbourhood sites that should be addressed especially given the large amount of growth that is planned to the north of the Zone. There is currently a limited access network to the south-west of Colchester Town and this provides a significant opportunity to improve access for pedestrians and cyclists from Colchester Town out to the Roman River valley and to certain parts of Abberton Reservoir (where access provision is good). There is an opportunity for multifunctional green corridors to be established along the historic dykes running between the Roman River and south Colchester. Some of the dykes already have access along them but there is great potential for enhanced access and better

management of these important archaeological features as well as enhancing their potential as corridors enhanced for biodiversity and landscape character. Abberton Reservoir has the potential to be a significant destination for visitors, and detailed consideration has been given to agree improved access provision and the creation of visitor facilities as part of the ongoing expansion of the reservoir. Some areas of the reservoir support internationally important bird populations and are particularly sensitive to recreational disturbance; provision has been designed to ensure balance between people and wildlife at this important location. East – west access is poor through the Zone although the planned provision of new walking cycling routes could go some way to address this. The GI assets in this zone will be further enhanced by the provision of a new area of strategic open spaces that is to be provided as part of Growth Area proposals.

Key GI Assets / Opportunities in the Roman River Valley

- The northern part of the Zone has the most significant amount of woodland in it for the whole Borough and there are opportunities to better manage and link these sites for multiple benefits through the development of a ‘woodland necklace’ in this part of the zone.
- There is a need for better access from the south of Colchester Town to the Roman River and to link in with the improved access at Abberton Reservoir. Opportunities include the establishment of multifunctional green corridors along the historic dykes running between the Roman River and south Colchester;
- Create new multifunctional green corridors through the flood risk zones to enable sustainable water resource management;
- Gosbeck Archaeological Park is in need of enhancement as part of wider opportunities to enhance the nationally important archaeological resource of this Zone.

Existing GI projects in Roman River Valley and Abberton Zone

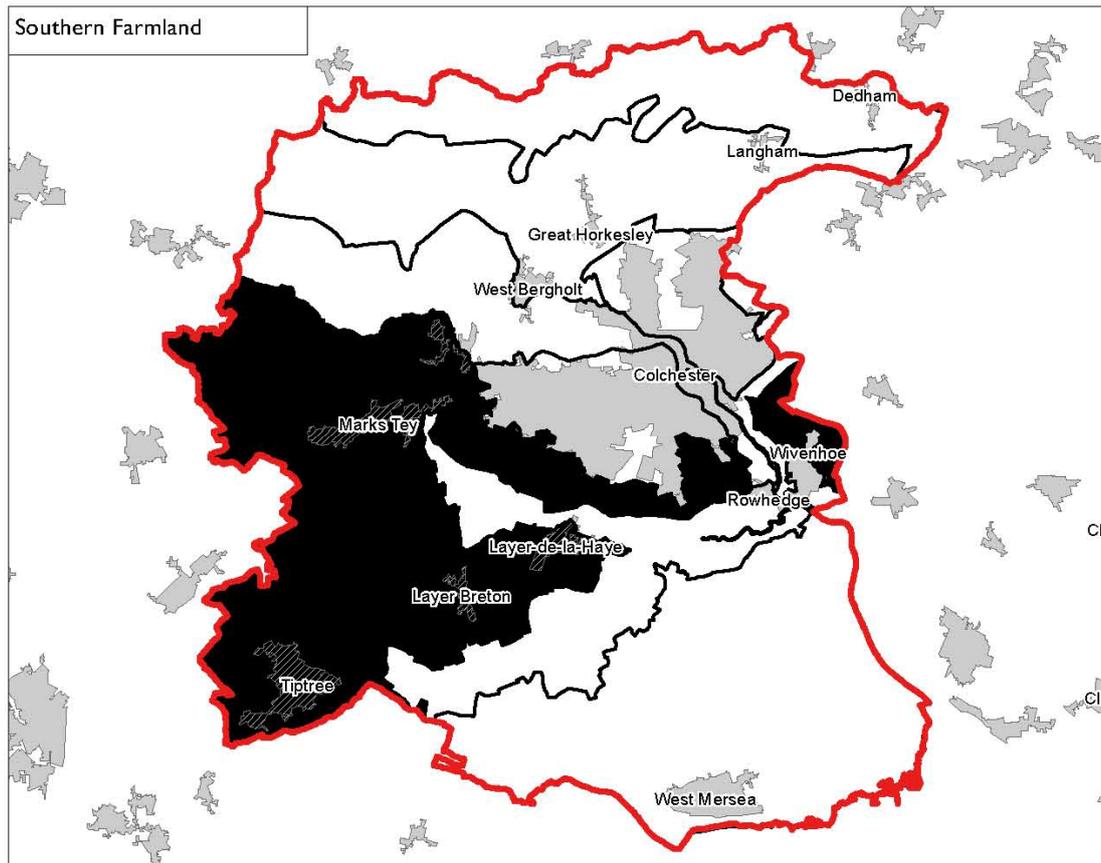
5.59 Existing projects and initiatives in the zone which we have taken account of when identifying projects are listed below:

Project	Web	Description
<p>Living Landscapes</p>	<p>http://www.essexbiodiversity.org.uk/livinglandscapes.aspx</p>	<p>The Essex Wildlife Trusts are spearheading an initiative called 'Living Landscapes'. Living Landscapes are large landscape scale areas of the countryside which are ecologically stable and 'bursting with life'. Essex Wildlife Trust has produced a Living Landscapes Map of Essex with partners to identify 80 Living Landscape areas, based upon their existing ecological value and their potential to become even more vibrant. A key target is to have management plans in place for all of these areas. 12 of these Living Landscapes fall wholly or partially within the Borough of Colchester, and include wetland, coastal and estuarine, woodland and 'mosaic and grassland' areas, as well as 'corridors' between these. Several of these areas already have management plans or are beginning the process with a visioning document. In Colchester these include the Roman River Complex, Aylesford Quarry, and Tiptree Heath. The plans include detailed targets and costed actions for the sites. In this zone Living Landscapes identified include the Roman River Complex, and Abberton Reservoir. A management plan for the Roman River Complex was prepared in 2010. A living landscape management plan for Abberton Reservoir has not yet been developed.</p>
<p>Expansion of Abberton Reservoir</p>	<p>http://www.eswater.co.uk/whatotherssay2007_5473.aspx</p>	<p>Abberton Reservoir is to be expanded and the works have already commenced. Essex & Suffolk Water (ESW) will be increasing the network of permissive footpaths, cycle routes and bridleways near the reservoir, increasing the network from 4km to 16km. The new routes include a circular walk around the central section of the reservoir. In addition, ESW has made funds available towards the provision of new rights of way in the proximity of the reservoir. The existing Essex Wildlife Trust</p>

Project	Web	Description
		Visitors Centre will be relocated as part of the proposals.

ZONE 6: SOUTHERN FARMLAND ZONE

- 5.60 The Southern Farmland Zone includes the band of farmland plateau between the Colne River Valley and Colchester Town in the North, to the Roman River Valley in the South. It includes the town of Tiptree and an area to the east of the Colne Estuary, around Wivenhoe. This Action Zone links to Essex Living Landscape project 67: Birch Complex.



Key Needs/deficiencies

Habitat Provision and Access to Nature

- 5.61 Although many are small in size the Southern Farmland Zone contains a significant number of the Borough's important wildlife sites. A number of these are found around the town of Tiptree:
- Layer Wood ancient woodland.
 - Pods Wood ancient woodland.
 - Tiptree Heath - the largest area of lowland heathland remaining in Essex (SSSI).
 - Birch Wood ancient woodland.

- 5.62 Creating broad ecological restoration zones connecting these sites would be particularly beneficial. Marks Tey Brick Pit SSSI and part of Tiptree Heath SSSI to the south of Colchester Town also lie within the Zone. Tiptree Heath SSSI is the largest surviving fragment of heathland in the County and shows the complete succession from acidic grassland and dwarf shrub heath through gorse and birch scrub to secondary woodland. It supports a number of plants rare in Essex.
- 5.63 The Southern Farmland Zone contains a significant amount of woodland (including ancient and semi-natural woodland) which starts to form a 'necklace' around the southern edge of Colchester Town. This woodland is still quite fragmented, but there is significant potential to create one of the most substantial wildlife corridors in the Borough in this area. A large part of this zone falls within the Living Landscapes 68 – Roman River Complex.

Sustainable Resource Management and Climate Change Adaptation

- 5.64 There is significant potential to improve sustainable water resource management in the zone as the Rivers Colne & Roman and Domsey Brook are all categorised as Flood Zone 3. Improvements to catchment management to reduce runoff and diffuse pollution could help to improve the quality of all of these watercourses and as well as improved river and floodplain management could help to alleviate flood risk downstream in the more heavily built up areas around Colchester Town.

Landscape Character, Setting and Context

- 5.65 The mostly rural character of the area should be conserved and is under pressure from further expansion of the linear communications and settlement corridor and visually intrusive expansion of Marks Tey and Tiptree settlements. There is also a need to strengthen and enhance landscape features such as hedgerows with hawthorn that have become gappy and depleted, historic lanes and unimproved roadside verges.

Cultural Heritage

- 5.66 There are a number of important cultural heritage assets throughout the Zone including significant areas of archaeological potential on the southern fringes of Colchester Town and Gosbecks Archaeological Park, Layer Marney Tower Registered Park and Garden, WWII heritage associated with the airfield, Marks Tey branch Line and numerous Conservation Areas covering villages throughout the Zone. The Gosbecks Archaeological Park is in need of

improvements however the Stanway Growth Area provides an opportunity to deliver new GI.

- 5.67 HECA 9. Great Tey Area, HECA 10. Messing and Marks Tey Area and HECA 11: Village of Tiptree. In addition, smaller parts of HECA 12 and 13 also fall within this zone, however these are discussed in relation to Zone 5 above.
- 5.68 With regard to HECA 9. Great Tey Area principal GI opportunities relating to the historic environment are conservation and enhancement of historic pastoral landscapes associated with the Roman River, which could also include opportunities for protection and interpretation of prehistoric and Roman below ground archaeology (e.g. burial mounds and Barrows).
- 5.69 HECA 10. Messing and Marks Tey Area presents the following opportunities for green infrastructure. Conservation and enhancement of remnant heathlands such as at Tiptree Heath, seeking opportunities to create enhanced heathland linkage through agri environment schemes. Also conservation, enhancement and re linking of areas of ancient woodland.
- 5.70 Key GI opportunities in relation to HECA 11: Village of Tiptree are presented by potential interpretation of aspects of historic urban character associated with the growth of the settlement in the 19th and 20th centuries. Notable examples in this context are the Wilkins Jam Factory and the disused railway line (Crab and Winkle Line). Also links to aspects of historic landscape character, relics of which survive in adjacent HECA 10 (e.g. remnants of the heathlands of Tiptree Heath, within HECA 10).

Locally Productive Landscapes

- 5.71 There is a functional deficiency of locally productive landscapes caused by a lack of allotments and community gardens in this Zone (and the adjoining southern part of Colchester Town) which, given the significant populations in Tiptree and fringe areas of Colchester Town, needs to be addressed, especially given the increases in population around the Stanway Growth Area. There are a number of orchards in the Zone, particularly around the southern edge of Tiptree linked to its fruit growing and jam making businesses, with opportunities to develop more orchards.

Access, Recreation and Movement

- 5.72 Significant gaps in the rights of way network exist between Tiptree and Colchester Town and the Growth Areas on the southern edge of Colchester will increase the population pressure in this Zone, putting further pressure on

Rights of Way and designated and non-designated recreation and nature Conservation Areas. There are already several large areas of the Zone that experience deficiencies in accessible natural greenspace that need addressing, with recreation and amenity spaces for the villages of Marks Tey and town of Tiptree being a priority. There are a number of sand and gravel extraction sites which are currently in use in the Zone but are allocated as informal recreation areas after restoration. Opportunities to liaise with minerals companies should be sought to ensure this restoration is planned for in a coherent way to deliver multiple benefits from these sites and to ensure they are well integrated in a coherent GI network.

Key GI Assets/ Opportunities in the Southern Farmland Zone

- Increase the connectivity of the ‘necklace’ of woodland to the south of Colchester Town for both biodiversity, recreational and other benefits.
- Improve Gosbecks Archaeological Park to help ensure the protection of some of the Borough’s most significant archaeological assets in the face of the future growth of Colchester Town.
- There is a need to create community gardens and allotments around Tiptree and the southern fringe of Colchester Town to help increase the provision of locally productive landscapes in the Zone.
- Prioritise the creation of recreation and amenity spaces associated with the villages of Marks Tey and Tiptree. Sand and gravel extraction sites which are currently in use but are allocated as informal recreation areas after restoration should be incorporated now into forward planning for the green infrastructure network.

Existing GI projects in the Southern Farmland Zone

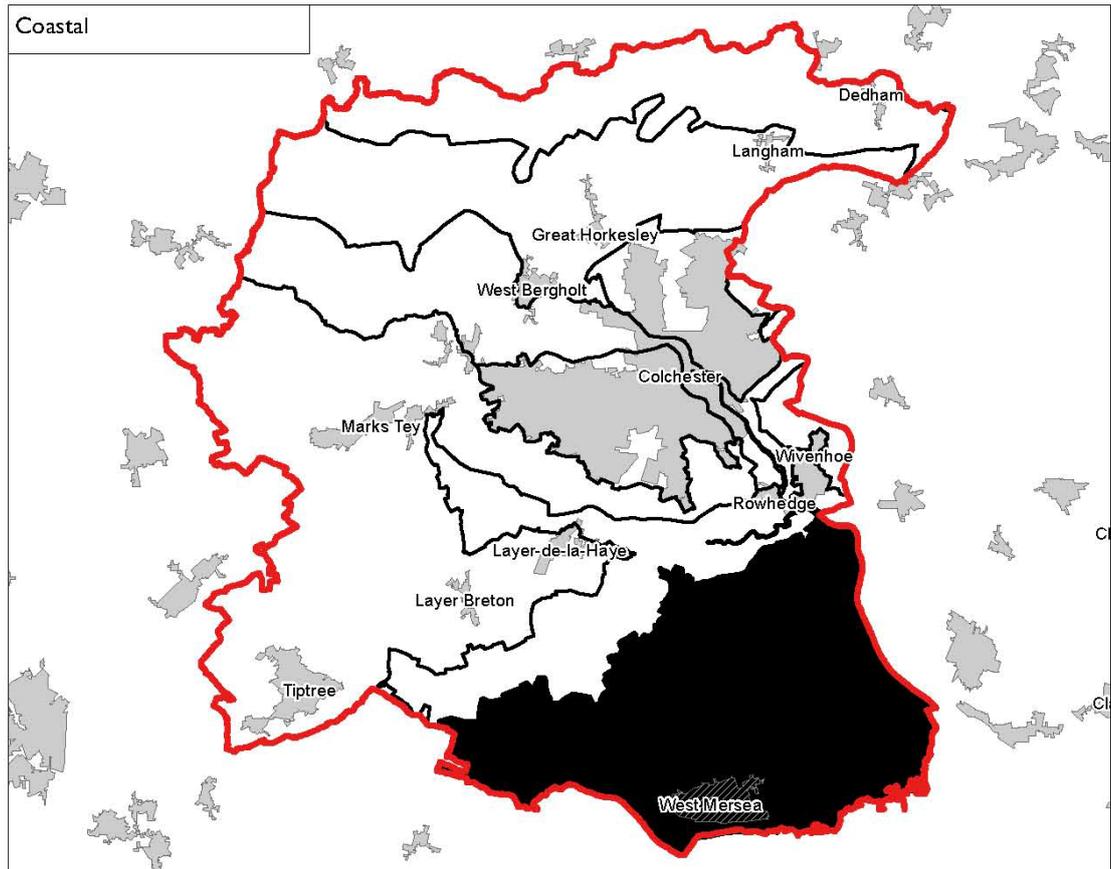
5.73 Existing projects and initiatives in the zone which we have taken account of when identifying projects are listed below:

Project	Web	Description
Living	http://w	The Essex Wildlife Trusts are spearheading an

Project	Web	Description
Landscapes	www.essexwildlife.org.uk/livinglandscapes.aspx	<p>initiative called ‘Living Landscapes’. Living Landscapes are large landscape scale areas of the countryside which are ecologically stable and ‘bursting with life’. Essex Wildlife Trust has produced a Living Landscapes Map of Essex with partners to identify 80 Living Landscape areas, based upon their existing ecological value and their potential to become even more vibrant. A key target is to have management plans in place for all of these areas. 12 of these Living Landscapes fall wholly or partially within the Borough of Colchester, and include wetland, coastal and estuarine, woodland and ‘mosaic and grassland’ areas, as well as ‘corridors’ between these. In this zone Living Landscapes identified include the ‘Stanway Complex’, the ‘Birch Complex’, and the ‘Tiptree Heath complex’. A Living Landscape management plan for the Tiptree Heath Complex has been adopted. Management plans for the other Living Landscape areas in this zone have not yet been developed.</p>

ZONE 7: COASTAL ZONE

- 5.74 The Coastal Zone is the area to the south of the Roman River Valley and Abberton Reservoir and runs along the coastal and estuarine areas of the Colne and Blackwater rivers and includes Mersea. It contains a wealth of significant coastal habitats, of national and international importance. This Action Zone links to Essex Living Landscape project 70: Colne Estuary.



Key Needs/deficiencies

Habitat Provision and Access to Nature

- 5.75 The Coastal Zone has some of the most significant nature conservation provision in the whole Borough, with extensive areas of the coastline covered by SAC, SPA, Ramsar and SSSI designations. There are several significant local wildlife sites in addition to these internationally/ nationally designated areas.
- 5.76 Whilst Mersea Island has good green links around its beaches, the large coastal marsh areas around the coast, estuary and Fingringhoe Firing Ranges creates a significant continuous swathe of largely undisturbed wildlife corridor, links to the west and north – west are currently less developed

(note much of this is not publicly accessible).

Sustainable Resource Management and Climate Change Adaptation

- 5.77 The majority of the coast line of Mersea Island (particularly in the north) and along the coastline of the Zone is identified as Flood Zone 2 and 3. The potential for managed realignment has been identified south of Wivenhoe, at Ballast Quay on the Colne Estuary and along the south and west of Mersea Island. There is significant opportunity to increase the function of the area for sustainable water management and adaptation to climate change.

Landscape Character, Setting and Context

- 5.78 West Mersea Waterside Area of Special Character is a local designation, recognising the unique character of this part of Mersea which has been strongly influenced by maritime, fishing and boating uses. Development proposals are expected to enhance the existing traditional maritime character of the West Mersea Waterside Area of Special Character, and its role as a major yachting, fishing and boating centre. The open countryside surrounding West Mersea also forms part of the Coastal Protection Belt. However, sea level rise threatens to change the landscape and seascape of the coastal marsh areas significantly both around Mersea Island and on the mainland. The use of Fingringhoe Ranges for military uses also means that whilst the landscape is left undisturbed for much of the time, intensive use for Military exercises can have quite a detrimental impact on the landscape at a relatively localised scale. Changes to the use or frequency of the use of the firing ranges could have a significant landscape impact.

Cultural Heritage

- 5.79 Mersea Island has some significant areas of cultural heritage with maritime heritage along the coast, a Conservation Area covering the western shoreline of West Mersea and an area of high archaeological potential in the settlement. There are also three scheduled monuments and a number of listed buildings spread throughout the Island. There are limited cultural heritage assets on the mainland area of the coastal zone. Although not designated as a future area for growth, the popularity of West Mersea as a place to retire to and its importance within the local economy (tourist destination) may mean, that there could be an increase in development pressure which may negatively impact on the cultural heritage of the settlement.

- 5.80 This zone is covered by three HECAs: HECA 13. Abberton Area, discussed in Zone 5 above, HECA 14. Colne Estuary and HECA 15. Mersea Island. Principal GI opportunities in relation to HECA 14. Colne Estuary are as follows: opportunities for interpretation of remnants of Saxon and medieval marine industry and archaeology to the shoreline, and which have shaped much of the present day landscape character.
- 5.81 Several opportunities apply to both HECA 14 and HECA 15: Mersea Island. These are notably access to and interpretation and management of historic coastal grazing marshes (a historic landscape type of considerable wildlife importance). Interpretation of coastal defences from the Second World War may present opportunities for GI and access proposals. Opportunities specific to HECA 15 are conservation and enhancement of remaining ancient field patterns.

Locally Productive Landscapes

- 5.82 There are some traditional orchards throughout the Coastal Zone and there are opportunities for these to be less intensively managed and to improve their functionality by increasing community access. This would help to address the deficit of accessible locally productive landscapes which is present throughout the rest of the Zone particularly in West Mersea. Whilst much of the Zone is marshland or poorer quality grade 3, 4 or 5 agricultural land with saline conditions, the pocket of grade 2 agricultural land to the north of West Mersea may have significant potential for use for food growing. The Coastal Zone has very little existing woodland however, the potential for woodfuel is likely to be very localised and demand led.

Access, Recreation and Movement

- 5.83 The Coastal Action Zone has a deficiency in neighbourhood scale sites within 300m of households, although the area is well catered for in terms of larger scale accessible natural greenspace. Mersea Island would benefit from more medium sized accessible natural greenspace as well. Mersea Island has a good variety of different types of greenspace, whilst the mainland part of the Coastal Action Zone has a more limited range of spaces, reflecting its less densely populated nature.
- 5.84 The rights of way network is fragmented especially in the west and north of the Coastal Zone, however there are some substantial footpaths that cover long distances including around almost the entire coast of Mersea Island. Walking and cycling links from the Coastal Zone north to Colchester Town and west to Tiptree are also poor and fragmented. The Fingringhoe Firing

Ranges form a barrier in terms of publicly accessible greenspace between Colchester Town and the coastal areas. Grass headland paths behind the marshes give access to the sea wall, although access is restricted on some paths in winter. The Marine and Coastal Access Act 2009 places a duty on Natural England to improve access to the English coast through creation of a continuous long-distance walking route around the coast and a margin of accessible land along it and this will provide an important access opportunity within Mersea.

Key GI Assets / Opportunities in the Coastal Zone

- The most significant biodiversity potential in the Borough with a range of internationally and nationally protected sites including SPA, SAC, Ramsar, SSSI, providing a wide variety of habitats and landscape features which provide habitats for a range of species.
- There is a need to provide more accessible locally productive landscapes around West Mersea, although saline influences may limit opportunities. Conserving, managing and enhancing orchards in the wider zone and creation of community gardens in West Mersea is an opportunity.
- Need to increase the adaptability of the coastal areas to climate change and provide sustainable water management. Working with the Regional Habitat Creation Programme to deliver new multi-functional fresh water and intertidal habitats that deliver the objectives of the Shoreline Management Plan, by allowing for provision of this habitat elsewhere as well as providing high quality GI.
- Need to improve the connectivity of walking / cycling routes from the coast to the west (Tiptree) and north to Colchester.
- West Mersea maritime heritage is important in terms of the landscape and cultural heritage setting of the southern part of the Borough. This heritage needs to be protected along with raising awareness of its importance.
- Historic Coastal grazing marshes.

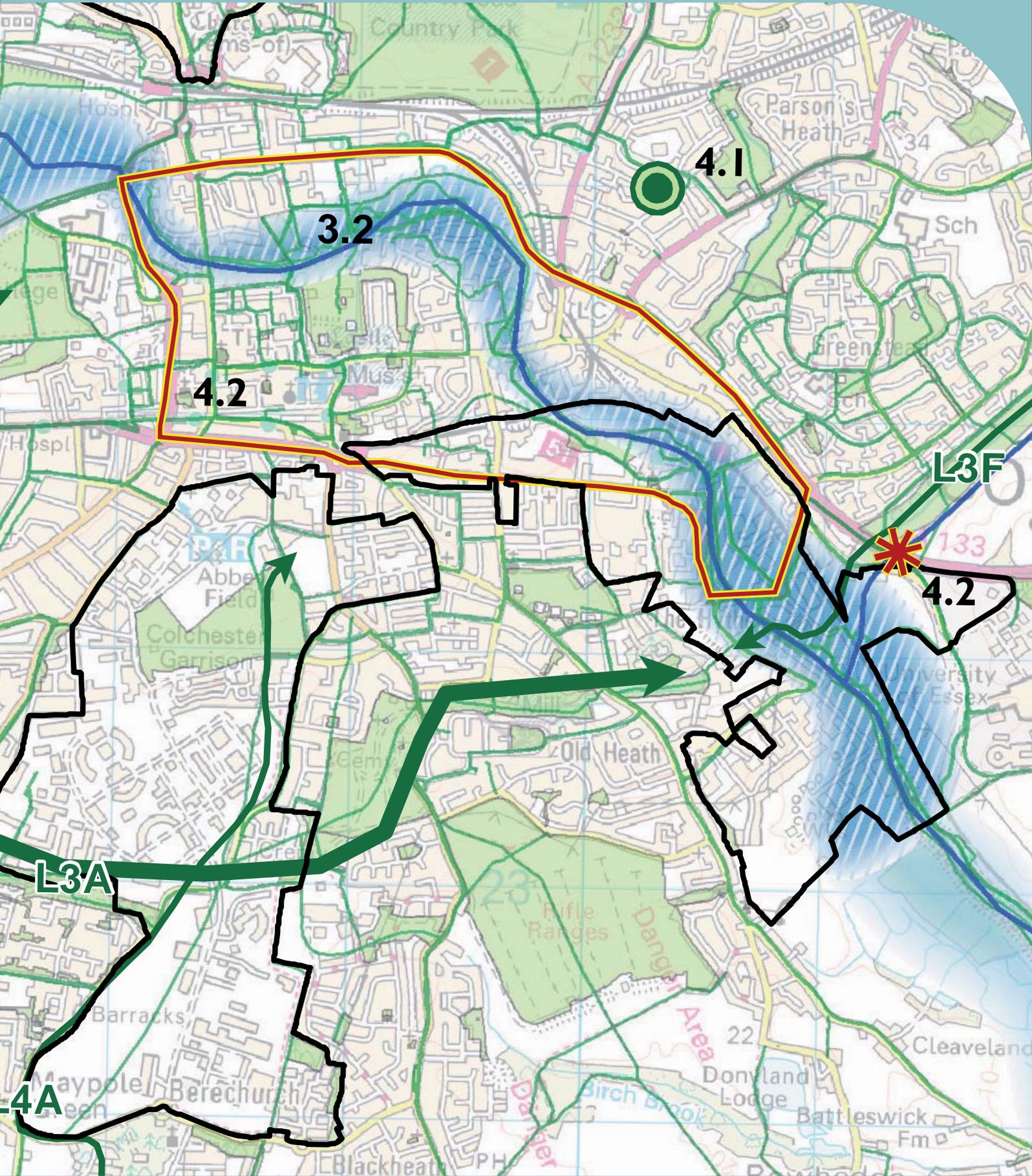
Existing GI projects in the Coastal Zone

5.85 Existing projects and initiatives in the zone which we have taken account of when identifying projects are listed below:

Project	Web	Description
Natural England Coastal	http://www.naturalengland.org.uk/our-work/enjoyin	Part 9 of the Marine and Coastal Access Act 2009 places a duty on Natural England to improve access to the English coast through creation of a continuous long-distance walking

Project	Web	Description
Access	g/places/coastalaccess/default.aspx	<p>route around the coast and a margin of accessible land along it. Natural England has published a scheme setting out how this will be implemented. For the first time people will have the right of access around England's entire open coast, including – where appropriate – 'spreading room' along the way where they can rest, relax or admire the view.</p>
Living Landscapes	http://www.essexbiodiversity.org.uk/livinglandscape.aspx	<p>The Essex Wildlife Trusts are spearheading an initiative called 'Living Landscapes'. Living Landscapes are large landscape scale areas of the countryside which are ecologically stable and 'bursting with life'. Essex Wildlife Trust has produced a Living Landscapes Map of Essex with partners to identify 80 Living Landscape areas, based upon their existing ecological value and their potential to become even more vibrant. A key target is to have management plans in place for all of these areas. 12 of these Living Landscapes fall wholly or partially within the Borough of Colchester, and include wetland, coastal and estuarine, woodland and 'mosaic and grassland' areas, as well as 'corridors' between these. One of the Living Landscapes is the Colne Valley, and another 'Hythe-Wivenhoe'. A Living Landscape management plan for these areas has not yet been developed.</p>

GI Network



6 Green infrastructure vision and proposed green infrastructure network

- 6.1 This section sets out the vision for green infrastructure in Colchester Borough, and within Colchester town. It introduces the proposed green infrastructure network which has been designed in response to the needs and deficiencies and policy drivers and sets out the component green infrastructure projects (**table 6.1**).

GREEN INFRASTRUCTURE VISION

- 6.2 The vision for green infrastructure in Colchester is aspirational and long term considering GI needs beyond the plan period. The vision provides the context for the GI network and projects set out in this chapter. It has been derived through stakeholder consultation (two workshops – see **Appendix**) and responds to the deficiencies and needs highlighted in the functional analysis and the policy drivers and opportunities derived through desk study.
- 6.3 The vision is divided into two parts – a short vision for the Borough as a whole, and a more detailed one for Colchester town. The visions take account of the GI functions identified in **section 5**.
- 6.4 This is followed by objectives for each of the GI action zones.

Green infrastructure vision for Colchester Borough

- 6.5 In 2025 Colchester is a Borough that conserves, enhances and celebrates its rich Green Infrastructure assets including the connected GI network along and between the river valleys of the Colne, Stour and Roman, the coastline and the heathland and woodland resources. The distinctive cultural heritage and sense of place associated with and derived from its rich historic environment, including its Roman and later maritime history, is protected, understood and promoted providing a focus for Green Infrastructure and a catalyst for renewal and regeneration. The discovery and creation of new cultural heritage extends the resource.
- 6.6 The integrated Green Infrastructure network contributes to quality of life. New and existing GI assets (both large and small local sites) are linked through multifunctional corridors, which are accessible to all. This includes approximately 345 miles of public rights of way within Colchester District. The integrated GI network enables: access to nature; sustainable travel, connected habitats; a setting for the cultural resource; thriving and healthy

communities; and adaptation to climate change.

Green infrastructure vision for Colchester town

- 6.7 The natural environment and rich cultural heritage of Colchester town are recognised and celebrated as part of a well designed, accessible urban green infrastructure network including the Colne River Valley and key green corridors that infiltrate the town and link it to the wider countryside as at High Woods, North Colchester and The Garrison. Provision is made for climate change adaptation as an integral part of the approach, to create comfortable, attractive environments for people and contribute to enhanced quality of life.
- 6.8 Key points of the vision for urban green infrastructure are:

To conserve and enhance

- Heritage assets such as Roman archaeological remains like the circus and town walls are understood, protected and interpreted as part of the cultural GI network. The connection and promotion of the cultural heritage along the Colne Valley is central to the identity of the town.
- Existing quality townscape and vernacular, using these to provide cues for the design of the public realm and for new sustainable development, in a contemporary style which incorporates urban greening;
- Urban GI assets and biodiversity opportunities, notably the sites and meadows along the River Colne, creating landscape links to the wider riverine environment e.g. Roman River and the important green corridors that infiltrate the town as at High Woods.

To improve and create

- Greater opportunities for interpretation of cultural heritage and historic legacy, seeking to reference these to inform the design of new greenspace and associated with the Growth Areas;
- Inclusive access for all, creating better connectivity and movement across the town, and in relation to existing barriers (railway, A12), providing enhanced access within the town and from the town to the countryside and the river valley network, for health, recreation, sustainable access and enjoyment of nature;

- Opportunities for urban greening and for adapting the urban environment to climate change, through street trees, green roofs, walls and enhanced greenspace management;
- High quality, multi functional greenspace, through new development and delivered through enhanced landscape management to deliver biodiversity benefits, and which alleviates pressures on existing sites such as High Woods;
- Opportunities for Green Infrastructure to contribute to enhanced public realm within Colchester and public open space to connect into a linked and continuous GI network.

To recognise and value

- The importance of the historic environment and of Colchester's evolution from an Iron Age tribal centre and then Roman Town to medieval market town and Victorian military garrison, seeking to promote the historic environment as part of the GI network and an educational resource;
- The importance of the urban riverine environment of the Colne as part of the accessible urban green infrastructure network;
- The importance of the landscape setting of the town (river valleys), considering the design of enhanced visual and physical connections as part of new development;
- The importance of different approaches to landscape management e.g. small scale urban greening, in helping address greenspace provision issues;
- The importance of joined up, partnership working to deliver urban GI, and encourage and appropriately support the involvement of local community, voluntary groups to create and manage GI to meet their needs as part of the wider network.

PROPOSED GREEN INFRASTRUCTURE NETWORK

6.9 The proposed Green Infrastructure Network for the Borough is shown on **Figure 6.1**, with consideration of urban green infrastructure for Colchester Town in **Figure 6.2**.

6.10 The proposed Green Infrastructure Network has been designed to:

- respond to the existing sense of place of Colchester Borough

(landscape, cultural heritage and habitats;

- conserve and enhance existing green infrastructure assets;
- identify opportunities for enhanced and new green infrastructure to increase the functional 'offer' of green infrastructure in the Borough.

- 6.11 The GI network has been developed using the datasets reviewed as part of the characterisation and responds to the green infrastructure needs identified both spatially and functionally. Targeted fieldwork was used to develop and refine the proposals. It has been the focus of stakeholder consultation and review by an Advisory Steering Group.
- 6.12 The green infrastructure proposals have been developed with other relevant projects and initiatives in mind, and to tie in where appropriate with adjacent strategic Green Infrastructure Strategies. The proposals are complementary to a range of strategic scale landscape and spatial planning initiatives.
- 6.13 The proposed green infrastructure network includes the 'action zones' identified in the functional analysis. The action zone objectives set the framework for the spatial proposals shown on **Figures 6.1 and 6.2**, and which are introduced in **table 6.1**. **Table 6.1** also includes a summary evaluation of the project proposals in terms of the functions, and policy drivers that they meet (e.g. plans, programmes and policies which they complement). Functions are an essential 'building block' of green infrastructure planning. They are closely linked to other concepts such as ecosystem services (goods, resources and processes provided by natural systems, which benefit communities).
- 6.14 The proposed green infrastructure network has identified opportunities for the enhancement of existing green infrastructure in the Borough. It has also set out proposals for new green infrastructure (some of which is linked to the growth agenda and urban regeneration proposals) to help deliver the required functionality identified in the needs analysis at **section 5**. The network also identifies opportunities for enhanced access links – linear routes (proposed strategic linear routes, to secure cross Borough and cross authority connections, and local linear routes, providing intermediate level connections within the strategic network). Whilst the primary function of the linear routes is for access (whether recreation, health or commuting), they often fall within and can be complementary to the action zones and associated wider objectives in terms of habitat creation, landscape restoration or wetland management. As such the intention of the linear

routes proposed on **Figures 6.1** and **6.2** is one of multi functionality. The precise degree of multi functionality and balance of uses will be determined through future feasibility studies and more detailed design development.

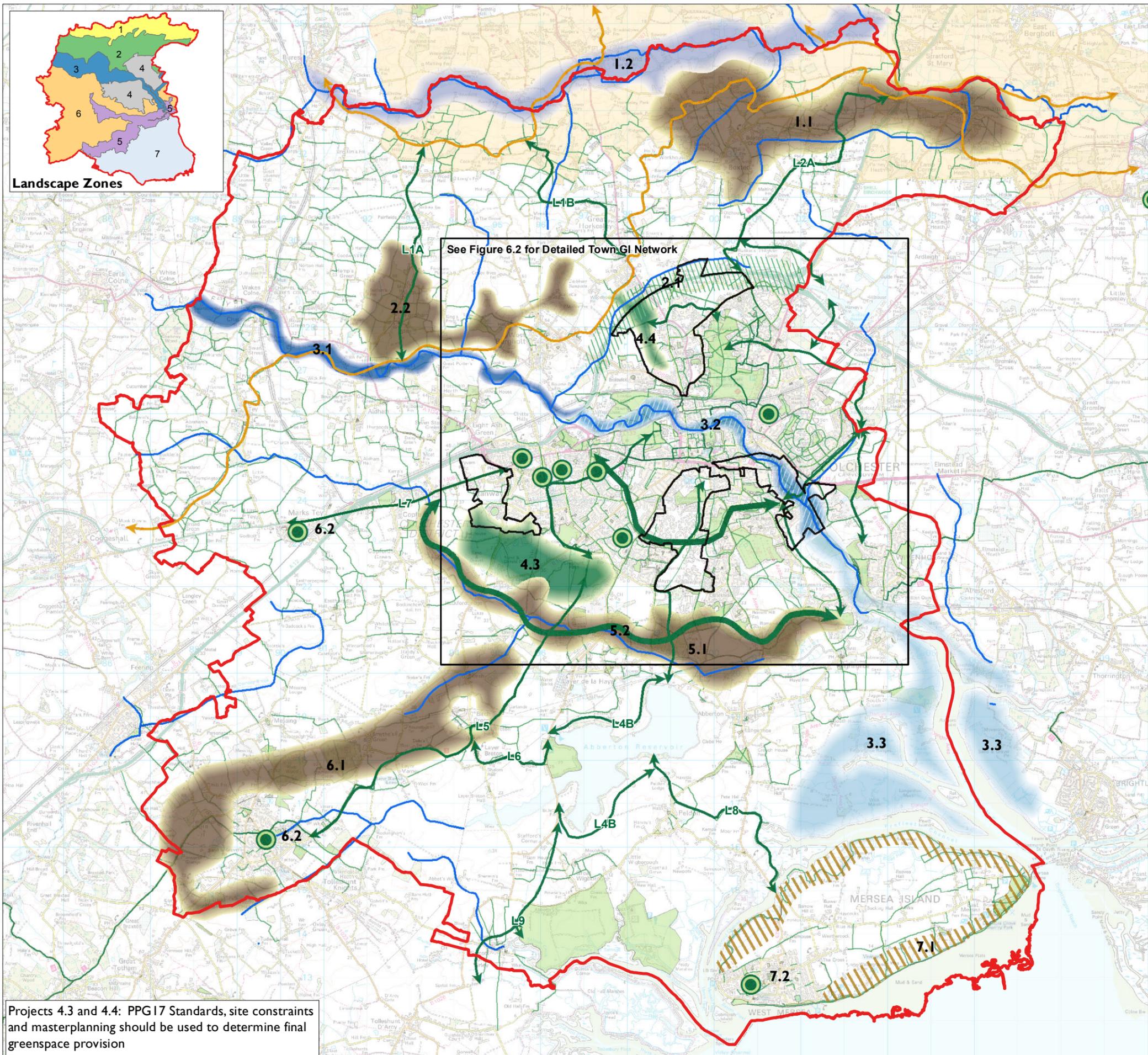
- 6.15 A detailed consideration of projects proposed in the GI Network, in terms of issues associated with delivery, and prioritisation for future implementation, is provided in **section 7**. Note: There is no reason why a project listed as of medium or low priority should not be bought forward if there is an opportunity to do so.

‘Futureproofing’ GI proposals in the network

- 6.16 The proposed Green Infrastructure Network sets out first principles to develop an integrated green infrastructure for Colchester Borough. It is recognised that more specific aspects of detail may necessarily change over time, as other complementary proposals come forward and as feasibility studies and investigations are undertaken on specific sites. The fact that green corridors and linear routes may not follow precise routes indicated by areas of search for these on **Figures 6.1** and **6.2** is immaterial; what is most important is the principle of establishing the connection between given points or areas of focus on the map. The key message is for future change and development to complement the principles set out in this GI Strategy.
- 6.17 Land owner liaison will be key to realising aspects of the network in future. Some landowners such as the Ministry of Defence (MOD) have significant land holdings in the Borough which may increase in future for them to be able to carry out their operations. Therefore access rights on MOD land are permissive and may change or be diverted in future.

Colchester Green Infrastructure

Figure 6.1: Proposed Borough Green Infrastructure Network



Key

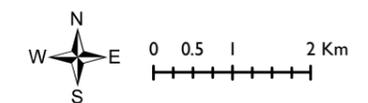
- Borough boundary
- Growth areas
- Area of Outstanding Natural Beauty (AONB)
- Accessible open space
- Rivers
- National Trails
- Sustrans routes (National/Regional)
- Existing access links (PRoW/Cycle routes)

Linear Routes

- Strategic linear route
- Local linear route

Projects

- 1.1 - Dedham Gateway Enhancement
- 1.2 - Stour Valley Project
- 2.1 - A12 Greening Project
- 2.2 - Woodland Enhancement Zone
- 3.1 - Upper Colne Valley Living Landscape / Heritage Project
- 3.2 - Urban Colne Valley Project
- 3.3 - Colne Estuary Project
- 4.1, 6.2 & 7.2 - Communal Greening Project
- 4.3 - Gosbecks – Stanway Green Buffer
- 4.4 - North Colchester Growth Area (Area of search for greenspace)
- 5.1 - Woodland Necklace
- 5.2 - River and Floodplain Project
- 6.1 - Heathland and Grassland Enhancement Project
- 7.1 - Mersea green link



Date: 18/08/2011

Revision:



Projects 4.3 and 4.4: PPG 17 Standards, site constraints and masterplanning should be used to determine final greenspace provision

Colchester Green Infrastructure

Figure 6.2: Proposed Town Green Infrastructure Network

Key

- Borough boundary
- Growth areas
- Accessible open space
- Rivers
- National Trails
- Sustrans routes (National/Regional)
- Existing access links (PRoW/Cycle routes)

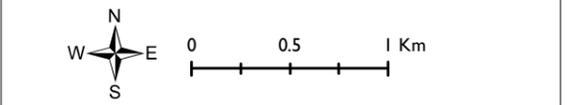
Linear Routes

- Strategic linear route
- Local linear route

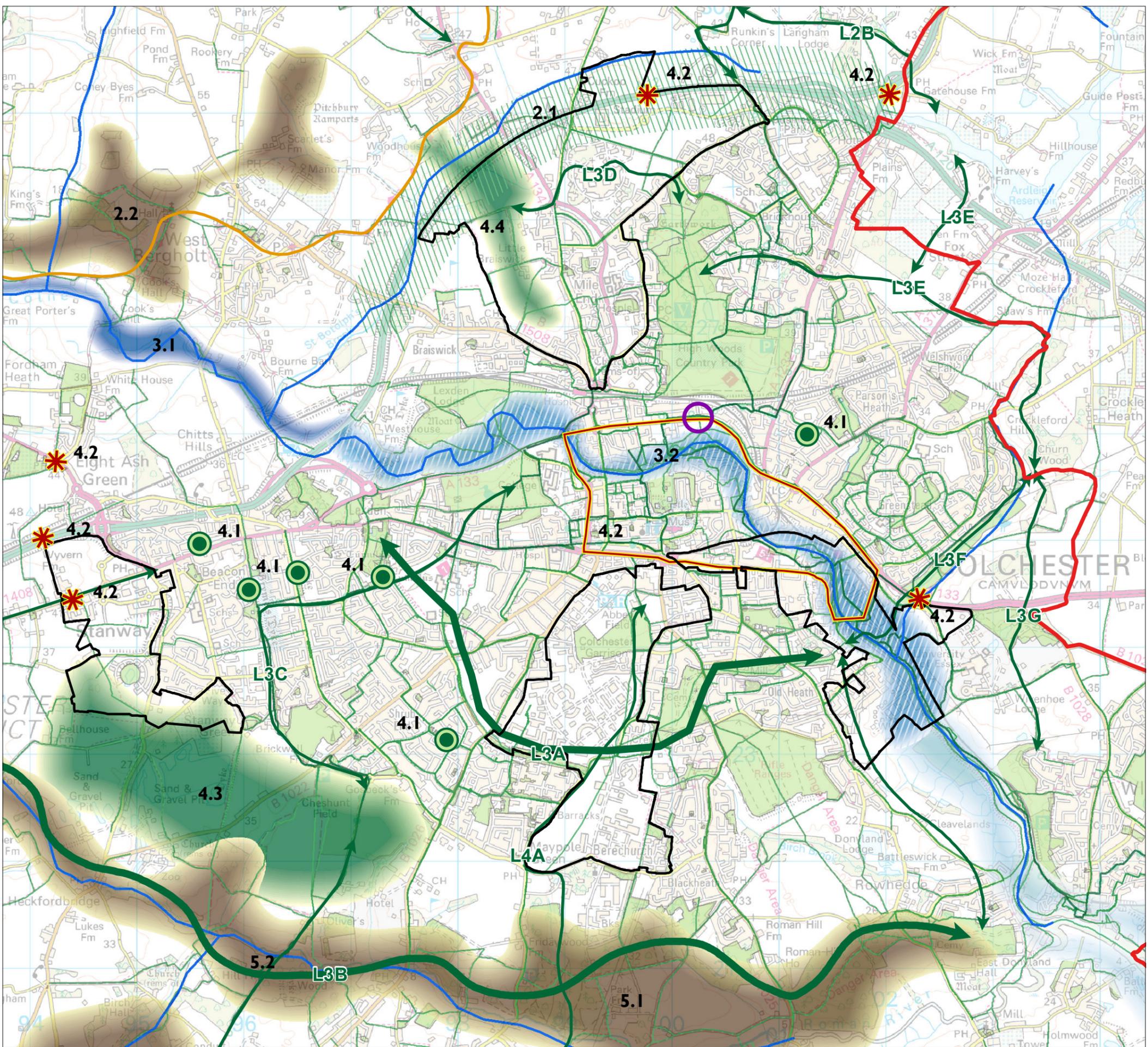
Projects

- 2.1 - A12 Greening Project
- 2.2 - Woodland Enhancement Zone
- 3.1 - Upper Colne Valley Living Landscape / Heritage Project
- 3.2 - Urban Colne Valley Project
- 3.3 - Colne Estuary Project
- 4.1 - Communal Greening Project
- 4.2 - Enhancing Gateways to Colchester
- 4.3 - Gosbecks – Stanway Green Buffer
- 4.4 - North Colchester Growth Area (Area of search for greenspace)
- 5.1 - Woodland Necklace
- 5.2 - River and Floodplain Project

Projects 4.3 and 4.4: PPG17 Standards, site constraints and masterplanning should be used to determine final greenspace provision



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TABLE 6.1: COLCHESTER GI PROJECTS

Table 6.1a: Spatial projects

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
Zone 1: AONB/Stour Valley								
I.1) Dedham Gateway	Access to the surrounding countryside from Dedham village will be improved as well as enhancing	This project aims to disperse visitor pressure which is currently centred on a small area of Dedham village, which is	✓		✓		✓	✓

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
Enhancement	key parts of the surrounding countryside. For example, restoring heathland at Boxted and Dedham Heaths and linking the ancient woodland from Dedham to Boxted, plus riverside enhancement along flood meadows for landscape and species. Local woodland will be managed for woodfuel to supply local markets and new orchards will be created around Dedham Village, not only to provide local produce but also to improve the setting of the village.	likely to be exacerbated as the population in Colchester Town increases. It also aims to enhance the setting of the village and ensure its status is retained as an important gateway to the AONB. The connectivity to the AONB is poor and the village's role as a gateway to the AONB is vital in terms of helping to redress this. There is also a significant opportunity to strengthen the link between the productive landscape the AONB and the local community.	Project Drivers <ul style="list-style-type: none"> • PPS1, PPS7, PPS9. • East of England Apples & Orchards Project¹⁷. • Dedham Vale AONB and Stour Valley Management Plan 2010-2015¹⁸ (Objectives OB2, OB3, OB8, OB10 & Policies LFB3, LFB6, LFB7, EtA1, EtA5). • Colchester Core Strategy (Policy ENVI). • Regional Woodland Strategy for the East of England¹⁹ • HLS • Dedham Village Design Statement²⁰. 					

¹⁷ http://www.applesandorchards.org.uk/index.php?option=com_content&view=article&id=74&Itemid=182

¹⁸ http://www.dedhamvalestourvalley.org/uploads/DV%20AONB_7996_Management_Strategy_Plan.pdf

¹⁹ <http://www.woodlandforlife.net/wfl/default.html>.

²⁰ http://www.colchester.gov.uk/Info_page_two_pic_2_det.asp?art_id=1758&sec_id=1185

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
1.2) Stour Valley Project	Continue work by the Dedham Vale AONB and Stour Valley project to implement the AONB and Stour Valley Management Plan 2010-15 to understand, conserve and celebrate the AONB and Stour Valley.	There is a need to improve the connectivity of biodiversity along the Stour Valley and for improved sustainable water resource management.	✓	✓	✓	✓		
<p>Project Drivers</p> <ul style="list-style-type: none"> • PPS1, PPS7, PPS9, PPS25. • Dedham Vale AONB and Stour Valley Management Plan 2010-2015 (Policy EtA4). • Colchester Core Strategy (Policy ENVI). • Stour Valley Partnership 'Managing a Masterpiece' project²¹. 								
Zone 2: Northern Farmland Zone								
2.1) A12 Greening Project	A landscape buffer zone will be created to improve the visual setting, reduce noise and air pollution, create a wildlife corridor and also provide a walking and cycling route	The A12 forms a significant barrier between Colchester Town and the surrounding countryside for both people and wildlife and has a detrimental impact on the landscape	✓		✓		✓	✓

²¹ <http://www.managingamasterpiece.org/>

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
	around the north of the Town. The existing bridges and underpasses crossing the A12 will be improved and new green bridge is a long term aspiration to improve the movement of people and wildlife across the road.	setting of the area.	Project Drivers <ul style="list-style-type: none"> • PPS1, PPS9. • Colchester Core Strategy (Policy ENVI). • Colchester Site Allocations DPD (Policies SA NGA1 & SA NGA2). • Haven Gateway Green Infrastructure Strategy. • Essex LAA2 2008-2011²² (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020²³. • Regional Woodland Strategy for the East of England. • Myland Design Statement²⁴. 					

²² <http://www.essexpartnershipportal.org/pages/uploads/LAA/LAA%20Refresh%20and%20Results%20June%202010.pdf>

²³ <http://www.colchester2020.com/downloads/strategy.pdf>

²⁴ http://www.colchester.gov.uk/Info_page_two_pic_2_det.asp?art_id=1758&sec_id=1185

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
2.2) Woodland enhancement zone	Existing woodlands will be enhanced and new woodlands created throughout the zone and access improved to them. Particular attention will be paid to extending the Fordham Community Woodland through to West Bergholt (which is partially in the River Colne Zone).	The zone is well wooded, but fragmentation is an issue which is being addressed in part by several existing projects.	✓		✓			✓
			<p>Project drivers</p> <ul style="list-style-type: none"> • PPS1, PPS7, PPS9. • Regional Woodland Strategy for the East of England. • Haven Gateway Green Infrastructure Strategy. • Essex LAA2 2008-2011²⁵ (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020²⁶ • Colchester Core Strategy (Policy ENVI). • Langham Village Design Statement²⁷ 					

²⁵ <http://www.essexpartnershipportal.org/pages/uploads/LAA/LAA%20Refresh%20and%20Results%20June%202010.pdf>

²⁶ <http://www.colchester2020.com/downloads/strategy.pdf>

²⁷ www.colchester.gov.uk/servedoc.asp?filename=Langham_VDS_final.pdf

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
			(Future Development – farmland, woodland & habitat creation). • Dedham Village Design Statement.					
Zone 3: Colne River Valley								
3.1) Upper Colne Valley Living Landscape / Heritage Project	The setting, links to and information about, the living and working heritage of the Upper Colne Valley will be improved, particularly around the Viaduct and Mills. New and improved spurs off the Essex Way will ensure that access is improved along the whole river valley. Better land management will improve flood attenuation and benefit biodiversity.	This zone contains some of the most significant cultural heritage assets in the Borough and sites should be enhanced and integrated into recreational and open spaces provision that provide a range of functions. There is also significant functional potential to improve sustainable water resource management and adapt to climate change in this Zone.	✓	✓	✓	✓		✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS5, PPS7, PPS9, PPS25. • Essex Rights of Way Improvement Plan. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Colchester Core Strategy (Policy ENVI). 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
			<ul style="list-style-type: none"> Essex Wildlife Trust 'Living Landscapes' Project²⁸. 					
3.2) Urban Colne Valley Project	<p>Access will be improved along the river with the cultural heritage in the valley forming an integral part of the setting of the river valley. SUDS will be integrated into the valley, particularly into new developments, where possible.</p>	<p>This zone contains some of the most significant cultural heritage assets in the Borough and sites should be enhanced and integrated into recreational and open spaces provision that provide a range of functions. There is also significant functional potential to improve sustainable water resource management and adapt to climate change in this Zone.</p>		✓	✓	✓		✓
			<p>Project Drivers</p> <ul style="list-style-type: none"> PPS1, PPS5, PPS9, PPS25. Haven Gateway Green Infrastructure Strategy. Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). Sustainable Community Strategy 2020. Colchester Core Strategy (Policies ENVI, SD1, PRI, TA2). 					

²⁸ <http://www.essexbiodiversity.org.uk/livinglandscapes.aspx>

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
			<ul style="list-style-type: none"> Site Allocations DPD (Policies SA TCI, SA EC2, SA EC3, SA EC4, SA EC8). 					
3.3) Colne Estuary Project	<p>Access out of the town will be further improved continuing the Town to Sea Trail out to Brightlingsea and creating new access across the marshes to Fingringhoe nature reserve (noting that any new access will need to recognise and protect the sensitive habitats of the marshes). Existing habitats will be protected, managed and enhanced at Fingringhoe Marshes and north along the estuary and new habitat created at the sand and gravel works south of Alresford.</p>	<p>The Estuary contains some of the most important habitats in the Borough as well as the one of the most accessible parts of the coastline for the people of Colchester Town.</p>	✓	✓	✓			✓
			<p>Project Drivers</p> <ul style="list-style-type: none"> PPS1, PPS5, PPS9, PPS25. Haven Gateway Green Infrastructure Strategy. Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). Sustainable Community Strategy 2020. Colchester Core Strategy (Policies ENVI, PRI, TA2). 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
Zone 4: Colchester Town								
4.1) Communal Greening	Pocket parks and community gardens will be created throughout the Town, with existing greenspaces and verges being enhanced visually and for biodiversity. Including opportunity for a new urban park to serve East Colchester. Also provision of street trees and other urban greening such as green roofs and walls.	Whilst there is a high level of access to nature opportunities close to large numbers of people, there are still deficiencies in small scale open spaces and also deficiencies in productive landscapes.	✓		✓		✓	✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS9. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Colchester Core Strategy (Policy ENVI, PR1, PR2). • Success of community garden projects in the town (e.g. The BIG Garden Project, Myland Community Garden, Old Heath Road). • Stanway Parish Plan²⁹ (Recommendation 22). 					

²⁹ http://tmf.colchester.gov.uk/servedoc.asp?filename=LDF_15MAR11_Stanway_Parish_Plan_and_Design_Statement.pdf

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
4.2) Enhancing gateways into Colchester	The setting of key approaches to the town and the inner ring road will be improved to restore landscape character and create a naturalistic feel enhancing the setting of and approaches to the historic town.	The cultural heritage of the town is very important but its setting is threatened by congestion and urban development.	✓		✓	✓		✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS5, PPS9. • Colchester Core Strategy (Policies ENVI, UR1, UR2, PR2). • Sustainable Community Strategy 2020. • Stanway Parish Plan (Recommendation 22). 					
4.3) Gosbecks – Stanway green buffer	The setting, interpretation and visitor experience of Gosbecks Park will be enhanced and open spaces will be enhanced and regenerated to create attractive semi-natural spaces for the benefit of people and wildlife. The sand and gravel pits will be restored, creating wetland and grassland habitats within them.	New development will put pressure on the existing greenspaces in the town, Gosbecks Park is in need of restoration and the former sand and gravel pits are in need of restoration.	✓		✓	✓		✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS5, PPS9. • Haven Gateway Green Infrastructure Strategy. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
			<ul style="list-style-type: none"> Colchester Core Strategy (Policies ENVI, PRI). Colchester Site Allocations DPD (SA STAI, SA STA5). Stanway Parish Plan (Recommendations 20, 22 & 26). 					
4.4) North Colchester Growth Area	Conserve the landscape and historic character setting in the area. Create attractive semi-natural spaces for the benefit of people and wildlife.	New development will put pressure on the existing greenspaces in the town.	✓	✓	✓	✓		✓
			Project Drivers <ul style="list-style-type: none"> PPS1, PPS5, PPS9. Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). Colchester Core Strategy (Policies ENVI, PRI). Colchester Site Allocations DPD (Policies SA NGA1, SA NGA2). 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
Zone 5: Roman River Valley								
5.1) Woodland Necklace	New woodland will be created to help reduce woodland fragmentation to the south and east of Colchester. Biodiversity will also be enhanced in this woodland as well as the accessibility of these woodland areas to people.	The northern part of the zone has the most significant amount of woodland in it for the whole Borough. There is a need for better access between the south of Colchester Town and Abberton Reservoir as well as east to west across the Borough.	✓		✓			✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS9. • Regional Woodland Strategy for the East of England. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Essex Wildlife Trust 'Living Landscapes' Project. • Colchester Core Strategy (Policy ENVI). 					
5.2)	Wet woodland, wetland	Creates additional space for water as	✓	✓	✓	✓		✓

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
River and floodplain project	conservation and enhancement and further habitat creation – ‘space for water’, linking to woodland necklace proposed in project 5.1 – a mosaic of habitats.	well as habitat linkage (wet woodlands) and potential for landscape enhancement to deliver Living Landscapes objectives.						
<p>Project Drivers</p> <ul style="list-style-type: none"> • PPS1, PPS9, PPS25. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Essex Wildlife Trust ‘Living Landscapes’ Project. • Colchester Core Strategy (Policies ENVI, PR2). 								
Zone 6: Southern Farmland Zone								
6.1) Heathland and grassland	Existing heathland will be extended and restored to reduce fragmentation and improve	Tiptree is deficient in accessible green space and there are a number of sites including a Quarry and sand and gravel	✓		✓			✓

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
enhancement project	condition. Birch Quarry will be restored on completion of quarrying and publicly accessible semi-natural greenspace will be created on the sand and gravel pits to the west of Tiptree.	pits that will need restoration. There are also important areas of heathland in this zone that are currently fragmented.	Project Drivers <ul style="list-style-type: none"> • PPS9. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Essex Wildlife Trust ‘Living Landscapes’ Project. • Essex Biodiversity Action Plan. • Colchester Core Strategy (Policies ENVI, PRI). • 					
6.2) Communal greening project	Pocket parks and community gardens will be created in Tiptree and Marks Tey, with existing greenspaces and verges being enhanced visually and for biodiversity. Also orchard planting in Tiptree.	There are deficiencies in small scale open spaces and also deficiencies in productive landscapes throughout Tiptree and Marks Tey.	✓		✓		✓	✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS9. • East of England Apples & Orchards project. 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
			<ul style="list-style-type: none"> • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Essex Wildlife Trust ‘Living Landscapes’ Project. • Colchester Core Strategy (Policies ENVI, PRI). 					
Zone 7: Coastal Zone								
7.1) Mersea Island Green Chain	A buffer will be created adjacent to the shoreline around Mersea Island to provide flood alleviation, habitat provision, and create pockets of accessible greenspace which are linked together by an access route.	There is a need to increase the functional potential of the coastal areas to adapt to climate change and provide sustainable water management, potentially helping to mitigate the loss of freshwater habitat which may result from managed realignment proposed in the Shoreline Management Plan, by	✓	✓	✓			✓
			Project Drivers <ul style="list-style-type: none"> • PPS1, PPS9. • Natural England Coastal Access Programme³⁰. 					

³⁰ <http://www.naturalengland.org.uk/ourwork/enjoying/places/coastalaccess/default.aspx>

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
		allowing for provision of this habit elsewhere.	<ul style="list-style-type: none"> • Essex and South Suffolk Shoreline Management Plan. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Colchester Core Strategy (Policies ENVI, ENV2, PRI, TA2). 					
7.2) West Mersea communal greening project	Pocket parks and community gardens will be created in West Mersea, with productive landscapes and community food growing embedded in to amenity greenspace with existing greenspaces and verges being enhanced visually and for biodiversity. Street tree planting in West Mersea.	There are deficiencies in small scale open spaces and also a deficiency in productive landscapes in West Mersea.	✓	✓	✓	✓		
			<p>Project Drivers</p> <ul style="list-style-type: none"> • PPS1, PPS7, PPS9. • East of England Apples & Orchards Project. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Sustainable Community Strategy 2020. • Colchester Core Strategy (Policies 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
			ENVI, ENV2, PRI).					

Table 6.1b: Linear Routes

Project Number	Description	Project Drivers
Long Distance Walking & Cycling Routes		
<p>L1) Long distance multiuser route from the Stour Valley Path to the Essex Way linking in to the Fordham Wood (creating circular routes when combined with existing National Trails)</p>	<p>a) Multi-user route linking Stour Valley Path north of Wormingford (N) with Essex way east of Fordstreet. Also linking with Fordham Woods. [predominantly existing road and short section of off road PROW].</p>	<ul style="list-style-type: none"> • PPS1, PPS7, PPS9. • Essex Wildlife Trust ‘Living Landscapes’ Project. • Essex Rights of Way Improvement Plan. • Colchester Core Strategy (Policies ENVI, TAI, TA2). • Dedham Vale AONB and Stour Valley Management Plan 2010-2015.
	<p>b) Multi-user route linking Stour Valley Path north of Little Horkesley to the Essex Way south of Great Horkesley [combination of road and off road PROW].</p>	
<p>L2) Dedham – Colchester Town – Ardleigh Reservoir multi-user routes</p>	<p>a) Multi-user route linking Stour Valley Path at Dalethorpe (NW) with Colchester town south of Runkins Corner.</p>	<ul style="list-style-type: none"> • PPS1, PPS9. • Haven Gateway Green Infrastructure Strategy. • Essex Rights of Way Improvement Plan. • Colchester Core Strategy (Policies ENVI, TAI, TA2). • Dedham Vale AONB and Stour Valley Management Plan 2010-2015.
	<p>b) Multi-user route linking Runkins Corner with Ardleigh Reservoir.</p>	

Project Number	Description	Project Drivers
		<ul style="list-style-type: none"> • Langham Village Design Statement (Future Development - Footpaths & Bridleways). • Dedham Village Design Statement
L3) Colchester Town Inner and Outer Greenways	a) Inner multi-user greenway linking Lexden (W) with The Hythe (E) [Enhancement of existing tracks and creation of new paths to form comprehensive route linking existing green assets including open space south of the Garrison, Cemetery and Bourne Mill].	<ul style="list-style-type: none"> • PPS1, PPS9. • Haven Gateway Green Infrastructure Strategy. • Essex Rights of Way Improvement Plan. • Colchester Core Strategy (Policies ENVI, UR1, UR2, PRI, TAI, TA2). • Colchester Site Allocations DPD (Policies SA NGA1, SA NGA2, STAI, SA STA4, SA STA5, SAEC2, EC8, GARI). • ‘Walk Colchester’ and ‘Cycle Colchester’ Initiatives.
	b) Outer multi-user greenway linking Stanway (E) with Rowhedge (W) [Enhancement of existing prowl tracks and creation of new paths to form comprehensive route linking the necklace of woodlands south of the town]	
	c) Multi-user route linking Gosbecks Park (SW) with Colchester Institute College [crosses inner greenway].	
	d) Multi-user route linking Little Braiswick (NW) with north end of High Woods Country Park (N).	
	e) Multi-user route linking High Woods Country Park (N) with Churn Wood (E) including a link north to Ardleigh Reservoir.	

Project Number	Description	Project Drivers
	f) Multi-user route linking Churn Wood (E) with The Hythe.	
	g) Multi-user route linking Churn Wood (E) with Wivenhoe (SE).	
L4) Garrison to Abberton Reservoir	a) Multi-user route linking the Garrison to Abberton Reservoir (S) [Follows existing footpaths and some PROW will require additional paths to link up fully].	<ul style="list-style-type: none"> • PPS1, PPS5, PPS7, PPS9. • Natural England Coastal Access Programme. • Essex Rights of Way Improvement Plan. • Essex LAA2 2008-2011 (Indicators NI 186, NI 188, NI 197, LI 10.1). • Colchester Core Strategy (Policies ENVI, PRI, TA1, TA2). • Colchester Site Allocations DPD (Policies SA NGA1, SA NGA2, STA1, SA STA4, SA STA5, SAEC2, EC8, GAR1, SA TIP2). • ‘Walk Colchester’ and ‘Cycle Colchester’ Initiatives.
	b) Additional sections of multi-user path required to join up with proposed routes after reservoir expansion – to create a full loop around the Reservoir. [Off-road path required – no existing route].	
L5) Tiptree to Colchester Town	a) Multi-user route linking Tiptree (SW) with Colchester [mainly follows locally designated access route along the road with a short section of off-road through the woods from Conduit Farm to the south of Gosbecks Park].	
L6) Tiptree to Abberton Reservoir	a) Multi-user route linking Tiptree (SW) via Layer Breton with Abberton Reservoir [follows a combination of existing roads and offroad prowl].	
L7) Marks Tey to Colchester Town	a) Multi-user route linking Marks Tey to Colchester Town [follows existing road route – requirements for designated cycle path and some additional footpath].	

Project Number	Description	Project Drivers
L8) Abberton – Mersea Island	a) Off-road multi-user route [follows existing PROW which may require enhancement].	
L9) Abberton to Blackwater	a) Multi-user route.	
L10) Colchester - Rowhedge	a) Multi users route for walkers and cyclists	

Table 6.1c: Non spatial projects

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
Non spatial projects								
NSI) Mobile Explorer Project	An interactive mapping project, to provide information on the GI Network, particularly green travel routes for recreation and commuting, and links to heritage GI assets (educational resource: interpretation/enjoyment/understanding/access), to mobile phone users. The project could link to relevant programmes such as Walk Colchester/Cycle Colchester and to Transition Colchester (e.g. information on community events in greenspace setting, places to buy local produce, location of	Responds to need and aspirations raised in related projects such as Walk Colchester – a need for accessible and informative mapping on green travel routes for leisure, recreation, education and commuting.				✓		✓
			<p>Project Drivers</p> <ul style="list-style-type: none"> • Walk Colchester initiative • Cycle Colchester project • Work of Transition Colchester • Langham Village Design Statement (Footpath Protection - publicity & maintenance) 					

Project Number	Description	Meeting deficiencies and needs	Habitat Provision	Sustainable Resources	Landscape	Cultural Heritage	Productive Landscapes	Access & Recreation
	community gardens/allotments etc).							

GI Delivery Plan



7 Green infrastructure delivery

- 7.1 This section provides advice on practical delivery and in spatial planning terms. It covers:
- Practical delivery and priorities setting out the evaluation and prioritisation of the projects identified in the proposed Green Infrastructure Network at **section 6**.
 - High level recommendations to link green infrastructure to future spatial planning and development management in the Borough.
 - Next steps for the Borough to consider in taking green infrastructure forward in the longer term.

PRACTICAL DELIVERY AND PRIORITIES

- 7.2 **Table 7.1** identifies prioritisation of projects. To inform the prioritisation process, reference has been made to high level practical constraints or issues which need to be considered in relation to project implementation (e.g. land ownership and access negotiation, physical/site constraints or need for further studies and investigations). Consideration has also been given to phasing and capital cost bands in broad terms. The ‘long list of projects on **table 7.1** is prioritised in broad terms based on the functional offer of projects as set out in **section 6**, costs, phasing and whether the projects are dependent projects (e.g. linked to wider or long term infrastructure proposals, such as highway upgrades), or whether they are linked to the growth agenda/Growth Areas.
- 7.3 Highest priority projects are those which perform well in terms of providing enhanced green infrastructure functionality³¹, are of relatively low cost and which can be delivered in the short term, with relatively few significant constraints. These projects are fed into a ‘shortlist’ at **table 7.2**, which gives some more specific consideration to delivery associated with these high priority projects.
- 7.4 Abbreviations used in **tables 7.1 and 7.2**: **HLS** – Higher Level Stewardship; **EWGS** – Woodlands Grant Scheme; **CIL** – Community Infrastructure Levy; **NE** – Natural England; **EA** – Environment Agency; **EWT** – Essex Wildlife

³¹ Note that no weighting has been assigned to the individual green infrastructure functions. They are all equally important in achieving a multi functional green infrastructure network.

Trust; **EH** – English Heritage

- 7.5 It is recognised that project priorities may later be refined as the spatial options for the Core Strategy evolve. There may be the potential for smaller components of the proposed GI projects to be delivered through development, and this may adjust priorities in future. In a similar spirit, if projects are ‘grouped’ in a specific location, and start to come forward at the same time (delivery of a coherent ‘micro’ network), this may also elevate priority.

TABLE 7.1: COLCHESTER GI PROJECTS – LONG LIST

Short Term = 0 – 5 years, Medium Term = 5 – 10 years, Long Term 15+ years

Cost bands: 1: >£100,000; 2: £100,000 - 500,000; 3: £500,000 – 1.5million; 4: £1.5 million plus

Although a priority is given for ‘clusters’ of projects overall, in some cases component/sub projects may be of higher priority such that they are included in the shortlisted projects at **table 7.2**. Where this is the case projects are highlighted and justified appropriately, below.

In all cases, for capital projects, land, ecology and archaeological surveys will be required to inform the development of site specific proposals. For large scale land management changes, e.g. woodland creation projects, such surveys will be key and are referenced more explicitly. In addition more detailed ecological advice is likely to be required in relation to site specific habitat creation, to ensure that high level nature conservation objectives are met (e.g. that specific projects deliver appropriately in relation to Living Landscape objectives). All new woodland management schemes proposed should be managed to the UK Forestry Standard³². The Forestry Commission should be consulted on all woodland creation schemes.

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
Zone 1: AONB/Stour Valley (links to Essex Living Landscape 65: Stour Valley)					
I.1) Dedham	a) Consider opportunities	Access issues;	1	Medium – long	High Priority

³² [http://www.forestry.gov.uk/pdf/fcfc001.pdf/\\$FILE/fcfc001.pdf](http://www.forestry.gov.uk/pdf/fcfc001.pdf/$FILE/fcfc001.pdf)

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
Gateway Enhancement	to create new community orchards around the Village	Land ownership; Uptake of relevant grant schemes (HLS) Ongoing management needs/'revenue activity' – need for liaison with local green groups to take forward sustainably/in a managed way		term (medium priority)	
	b) Link ancient woodland from Dedham to Boxted	Need for ecology and archaeology surveys to determine areas of search; Land ownership negotiation/liaison; Project depends on uptake of relevant grant schemes e.g. HLS/EWGS. Large scale woodland planting (over 2ha in the AONB, over 5ha everywhere else) will require EIA. Need for management plan. Also liaise with EWT to ensure that Living Landscape objectives are delivered	2	Medium term (High priority)	
	c) Enhance existing footpaths and upgrade to bridle ways where possible, access routes from	Access/wayleave issues. Need for consultation and user survey, feasibility study. Capital costs associated with surface upgrade/new	1	Short term (High priority)	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	Dedham to the surrounding countryside	signage etc			
	d) Restoration of Heathland at Boxted and Dedham Heaths< and restoration/enhancement and management of riverside to deliver landscape and biodiversity objectives	Land ownership and economics (viability) – likely to be a need for enhanced uptake of grant schemes such as HLS); Need for detailed ecological surveys/advice. Liaison with EWT to ensure that habitat creation contributes to Living Landscape objectives	1	Short – medium term (Medium-high priority)	
	e) Create new fully accessible walking and cycling/riding access routes from Dedham out to Boxted and Dedham Heaths.	Access/wayleave issues. Need for consultation and user survey, feasibility study. Potential significant capital costs associated with surfacing for shared use/cycle routes	2	Short term (High priority)	
	f) Manage local woodland for woodfuel to supply local markets	Need for take up of appropriate woodland management grants (EWGS) and associated land owner liaison;	1	Short term (High priority)	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
		Potential need to monitor re: delivery of wood fuel targets			
1.2) Stour Valley Project	a) Continue work of Dedham Vale AONB and Stour Valley Project to implement the AONB and Stour Valley Management Plan 2010-15 to understand, conserve and celebrate the AONB and Stour Valley.	Need for ongoing liaison with the Partnership and with the Essex Wildlife Trust re. Living Landscapes objectives.	3	Short term	Low Priority
Zone 2: Northern Farmland Zone					
2.1) A12 Greening Project, covering the area between north	a) Creation of a Green bridge (Land Bridge) crossing the A12	Land take and land ownership negotiations and very significant capital costs associated with delivery. Would be a dependent project, linked to potential future highway upgrades.	3	Long term (Low priority – dependent project, linked to future Highway	High Priority (except project 2.1a)

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
Colchester growth and Severalls. Includes proposals for new structural green infrastructure for attenuation, and access enhancements		Aspiration for the project should be written into long term planning for Highways Authority/Highways Agency		upgrades)	
	b) Undertake access improvements to the A134 underpass, B1508 - overpass, and the overpass at Cuckoo Farm and Runkins Corner to benefit people (through provision of shared access including cycling, biodiversity and landscape setting)	Need for consultation/user survey and for feasibility study. Potential capital cost implications of surface upgrades/re surfacing	2	Short - medium – term (High priority)	
	c) Create buffering by tree planting along the A12 to improve the visual setting, reduce noise and air pollution and to help create a wildlife corridor	Need to factor requirements into planning conditions for development schemes and associated developer contributions/CILs for the northern Growth Area. Potentially also need for additional funding through EWGS grants for creation and ongoing management. Large scale woodland planting (5ha+) will require EIA.	3	Short - medium term (High priority – linked to potential growth – advance mitigation, could be implemented in phases)	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
		Need for management plan as part of scheme			
	d) Manage the screening belt for woodfuel	Need for take up of appropriate woodland management grants (EWGS) and associated land owner liaison; Potential need to monitor re: delivery of wood fuel targets	Not a capital cost	Short - medium term (High priority, when planting established)	
	e) Include provision for walking / cycling where possible along the screening belt. Ensure they are fully accessible for all users.	Significant capital cost of delivering hard surfaced shared use route. Need for land/archaeology survey	2	Short - medium term (High priority)	
2.2) Woodland Enhancement Zone	a) Extension of Fordham Community Woodland to West Bergholt (partially in the River Colne Zone – note also potential links to the Colne Valley Living Landscape and GI project 3.1) . Woodland	Need for archaeological and ecology surveys to determine appropriate locations (need also to refer to LCA and HLC). Is dependent on landowner liaison/land availability and take up of relevant grant schemes such as EWGS. Large scale woodland planting projects (over 5ha) will	2	Short - medium Term (High priority)	High Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	enhancement projects also include enhancement of related landscape features such as copses, hedgerows and grassland – a landscape mosaic	require EIA. Need for management plan			
	b) Creation of new woodlands throughout the zone where opportunities arise	Need for archaeological and ecology surveys to determine appropriate locations (need also to refer to LCA and HLC). Is dependent on landowner liaison/land availability and take up of relevant grant schemes such as EWGS. Large scale woodland planting projects (over 5ha) will require EIA. Need for management plan	2	Medium – long term (Medium-high priority in view of low capital cost and the functional benefits)	
	c) Connecting and enhancing existing woodland throughout the zone	Need for archaeological and ecology surveys to determine appropriate locations (need also to refer to LCA and HLC). Is dependent on landowner liaison/land availability and	2	Medium term (Medium-high priority in view of low capital cost and the functional	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
		take up of relevant grant schemes such as EWGS. Large scale woodland planting projects (over 5ha) will require EIA. Need for management plan		benefits)	
	d) Creation of low key signed walking routes through the woodlands, which are fully accessible for all users.	Access and wayleave issues. Need for user survey and consultation, signage strategy	1	Medium term (Medium-high priority in view of low capital cost and the functional benefits)	
Zone 3: Colne River Valley (links to Essex Living Landscape 63: Colne Valley)					
3.1) Upper Colne Valley Living Landscape / Heritage	a) Improve setting, links to and information about, the living and working heritage along the Valley, particularly the Viaduct and	Need for communication strategy/consultation with local groups/local history and archaeological societies. Depending on how the project is developed,	2	Short – medium term	Medium Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
Project	Mills along the Valley	whether through branding/coordinated interpretation/web or smartphone based or related oral histories project and art installations, capital costs could be significant, depending on scope. Need to communicate Living Landscape objectives and aspirations to widest audience as part of proposed interpretation (liaison with EWT)			
	b) Improve flood attenuation through better land management – creation of 'space for water' upstream of settlement pinch points to alleviate flooding, through enhanced wetlands and more naturalistic management of the riverine environment – scrapes/ponds etc, which	Need for liaison with EA to ensure that project delivers their objectives with regard to River Basin and Catchment Management Plans and re: Water Framework Directive. Likely to be linked to need for more detailed flood modelling for Growth Areas as schemes come forward. Need for land, ecology and archaeology surveys and for appropriate long term management plan in relation to habitat creation	2	Short – medium term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	could also deliver enhanced biodiversity and landscape character				
	c) Upgrade the footpaths along the river valley to walking and cycling routes linking in with the Essex Way, ensuring that they are fully accessible for all users.	Significant capital cost of delivering hard surfaced shared use route. Need for land/ecology/archaeology surveys. Need for liaison with the EA re: works in the floodplain	2	Short term	
	d) Enhance biodiversity along the river valley	Need for detailed ecological surveys/advice to ensure that habitat creation proposals are appropriate	2	Short term	
3.2) Urban Colne Valley Project	a) Create and enhance the setting for cultural heritage along the Valley. Landscape conservation and management to enhance setting. Provide greater understanding and	Need for communication strategy/consultation with local groups/local history and archaeological societies. Could link to project 3.1a above/be delivered by the same means	2	Medium term (High priority)	High Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	<p>interpretation of the heritage assets in the valley and associated public realm, including industrial heritage such as mills and wharves, plus the site at Hythe Lagoons. Also way marking, street furniture. Potential for delivery through CIL in relation to Growth Areas. The developments along the river have potential to improve their river frontages by encouraging mixed-use activities and both day and night economies (particularly the new developments on the eastern river bank north and south of the Colne Causeway which are</p>				

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	<p>accessible from the Town to Sea Trail). Links to the Town to Sea Trail would also improve connections to other strategically important sites in the urban stretches of the Colne, such as The Moors, a valued site for biodiversity and recreation, and also links to other urban GI sites such as Castle Park</p>				
	<p>b) Integrate SuDS into new developments to the east of the area and retrofit SuDS where possible amongst the existing development in the valley</p>	<p>Need for local level flood risk assessments (FRAs) to determine optimum locations for SuDS. Depending on approach adopted, whether new ponds/lagoons/swales/filter strips or permeable paving, capital costs may be significant. Need for land, ecology and archaeology surveys. Also</p>	<p>Not able to cost at this stage</p>	<p>Short – medium term (High priority, linked to development projects)</p>	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	<p data-bbox="443 584 763 671">c) Improve access along the river</p>	<p data-bbox="831 344 1337 523">management plans to ensure that landscape and nature conservation objectives are met – delivery of multi functional SuDS</p> <p data-bbox="831 584 1337 959">Need for feasibility study and land owner liaison/negotiation re: access/wayleaves. Project would need land and archaeology surveys as part of the feasibility study process. Need for user group consultation and signage strategy. Potentially significant capital costs associated with delivery</p>	2	Short – medium term (High priority, if linked to growth)	
<p data-bbox="192 1046 421 1326">3.3) Colne Estuary Project (links to Essex Living Landscape 70: Colne Estuary)</p>	<p data-bbox="443 975 786 1206">a) Protect, manage and enhance biodiversity at Fingringhoe Marshes and north along the estuary as far as Wivenhoe</p>	<p data-bbox="831 975 1337 1391">Need for land ownership liaison and negotiation (including with the MOD). Solutions need to be sensitive to designated nature conservation interests (SSSI), and for liaison with the Essex Wildlife Trust re: objectives of the Colne Estuary Living Landscape/need for detailed ecological advice/survey work in relation to any</p>	2	Short term (Low priority in view of issues identified)	<p data-bbox="1821 1166 2011 1206">Low Priority</p>

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
		new habitat creation			
	b) Undertake habitat restoration at sand and gravel works close to Alresford (within CBC)	Need for land ownership liaison and for uptake of relevant grant schemes such as Aggregates Levy Sustainability Fund (ALSF). Need for land and ecology surveys	3	Long term (Low priority)	
	c) Creation of new board walk access route from Ballast Quay to Fingringhoe reserve	Need for feasibility study and survey. Need for land ownership and access/wayleave negotiation	2	Medium term (Low priority, linked to project 3.3a above)	
	d) Continuation of the Town to Sea Trail walking and cycling route from Wivenhoe to Brightlingsea, ensuring that it is fully accessible for all users.	Need for feasibility study and user group survey. Project requires land ownership negotiation. Need for signage strategy.	3	Medium term (Low priority)	
	e) Creation of linear route from East Colchester to Rowhedge	Need for feasibility study, user survey and land ownership negotiation	3	Short - medium term (Medium priority)	Medium Priority, although recognise that this could be brought forward

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	<p>f) POS/Sports and Recreation facilities in Wivenhoe</p>	<p>Need for developer contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys</p>	<p>POS: 2 Children’s Play Areas: 1 Sports and Recreation Facilities: 2 Allotments: 1</p>	<p>Short – medium term</p>	<p>High Priority</p>
	<p>g) POS/Sports and Recreation facilities in Rowhedge</p>	<p>Need for developer contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys</p>	<p>POS: 2 Children’s Play Areas: 2 Sports and Recreation Facilities: 3 Allotments: 1</p>	<p>Short –medium term</p>	<p>High Priority</p>

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
Zone 4: Colchester Town					
4.1) Communal Greening	a) Creation of pocket parks and community gardens throughout the Town	Need for identification of appropriate sites – liaise with developers in relation to growth/regeneration areas, and for liaison with community/local green groups for delivery, adoption and management. Provision of interpretation of aspects of the rich cultural heritage of Colchester – option for sites and spaces to form part of a heritage route. Where appropriate, should be factored into developer schemes and section 106/CIL contributions	3 - 4	Short – medium term (Medium priority)	Medium Priority
	b) Enhancement of greenspaces including verges, visually and for biodiversity, including enhancement of historic dyke features as part of the	Need for liaison with landscape/parks department re: enhanced approaches to landscape management. Also liaison with Highways Authority/Highways Agency.	1	Short term (High priority – relatively easily effected changes in greenspace management)	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	local green access network				
	c) Urban greening for community benefit and urban shading/cooling throughout Colchester – street trees, green roofs/walls, and also pocket/short term greenspaces (community gardens/allotments) in regeneration areas	Need for liaison with Highways re: operational requirements in relation to street trees. Need for land surveys in relation to underground services and utilities. Potentially high capital cost associated with mature grade street trees which are fit for the urban environment	2	Short term (High priority, although potentially high capital costs are realised)	
	d) POS/Sports and Recreation facilities in East Colchester – including a new urban park	Need for developer contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys	POS: 3 Children’s Play Areas: 2 Sports and Recreation Facilities: 4	Short – medium term	High priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
			Allotments: 1		
	e) POS/Sports and Recreation facilities in Colchester Town	Need for developer contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys	POS: 4 Children's Play Areas: 3 Sports and Recreation Facilities: 4 Allotments: 1	Short-medium term	
	f) POS/Sports and Recreation facilities in Stanway Growth Area	Need for developer contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys	POS: 3 Children's Play Areas: 3 Sports and Recreation Facilities: 4	Short – medium term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
			Allotments: 1		
4.2) Enhancing Gateways to Colchester	a) Restore landscape character, creating a naturalistic feel including planting of flower rich grassland, along key approaches into the town	Need for liaison with landscape/parks department re: enhanced approaches to landscape management. Also liaison with Highways Authority/Highways Agency. Need to communicate reasons for changes to landscape management to wider community (education/awareness raising). Potential for interpretation of aspects of cultural heritage as part of the project	3	Short term (High priority - linked to wider growth and integrated package of environmental improvements)	High Priority
	b) Green the inner ring road with improvements to verges, tree planting etc to enhance the setting of and approaches to the historic town, improve the public	Need for liaison with landscape/parks department re: enhanced approaches to landscape management. Also liaison with Highways Authority/Highways Agency. Need to communicate reasons for changes to	2	Short term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	<p>realm and boost the economic potential of the town.</p> <p>Westway, Balkerne Hill and Southway provide opportunities to introduce new planting and enhanced existing planting in the central reservation.</p> <p>The roundabout at Colne Bank Ave / Westway would benefit from some landmark trees.</p> <p>Magdalen St. and the west end of Barrack St. would be greatly enhanced by some small scale greening and street trees where there is space. Maudlyn Rd, and Hythe Quay might accommodate some street trees. St Andrew's Ave east side would benefit</p>	<p>landscape management to wider community (education/awareness raising). Need for land surveys re: underground services in relation to any new tree planting. Depending on scope, capital cost of landscape works could be significant</p>			

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	from shrub planting to create a buffer between the footpath and vehicular traffic				
	c) Roman Walls & Town Centre Public Realm improvements	Potential need for further archaeological survey and interpretation. Consultation with county archaeologist and English Heritage. Works likely to need Scheduled Monument Consent. Need for feasibility study and site surveys in relation to design of associated public realm improvements. Project could also link to other proposals for conserving, enhancing and interpreting re discovered Roman heritage (e.g. the Circus site)	4	Short-medium term	
4.3) Gosbecks – Stanway Green Buffer (potential	a) Enhance the setting, interpretation and visitor experience of Gosbecks Park	Need for feasibility study and user groups survey. Probably also need for branding and signage strategy. Potential links to a web	3	Short – medium term	Medium Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
contribution/links to Stanway Complex Living Landscape)		based/smartphone explorer project			
	b) Regenerate and enhance open spaces to create attractive semi-natural spaces for the benefit of people and wildlife	Need for liaison with landscape/parks department re: enhanced approaches to landscape management. Also liaison with Highways Authority/Highways Agency. Need to communicate reasons for changes to landscape management to wider community (education/awareness raising) – need to work with local green groups	2	Short - medium term	
	c) Restore the sand and gravel pits (and landfill) and create wetland and grassland habitats within them	Need for continued liaison between county, Borough council and landowners/site operators to ensure that site restorations contribute to GI objectives. Potential case for applications to the Aggregates Levy Sustainability Fund (ALSF) for grant aid.	3	Long term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
4.4) North Colchester Growth Area	<p>a) Conserve and enhance the landscape and historic character setting of Mile End, and landscape framework, as well as creating a new landscape setting for future development, including woodland belts, new SuDS, wetland elements and semi natural greenspace</p>	<p>The proposed GI network shows a broad area of search for the green wedge. Location and size needs to be determined by a combination of applicable provision standards, site survey/feasibility, development layout/density/capacity, e.g. project is likely to be an interlinked series of small scale spaces, connecting existing woodlands and linking to A12 buffer and Severalls, linking into High Woods. Need for land, archaeology and ecology surveys</p>	4	Short - medium term (Linked to growth – high priority)	High Priority
	<p>b) Create a linked network of semi-natural spaces for the benefit of people and wildlife, which are fully accessible to all users.</p>	<p>Need for liaison with EVT as a delivery partner (potential link to Living Landscape Area to other parts of the Colchester Fringe). Need for land, ecology and archaeology surveys</p>	Included in 4.4 a above	Short - medium term (Linked to growth – high priority)	
	<p>c) Provision of POS/Sports and Recreation facilities in North Growth Area</p>	<p>Need for developer contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys</p>	<p>POS: 4 Children’s Play Areas:</p>	Short –medium term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
			3 Sports and Recreation Facilities: 4 Allotments: 1		
	d) Maximise opportunities for SUDS – linking into the Colne Valley (create new balancing ponds and wetlands of say 2-4ha area)	Need for local level flood risk assessments (FRAs) to determine optimum locations for SuDS. Depending on approach adopted whether new ponds/lagoons/swales/filter strips or permeable paving, capital costs may be significant. Need for land, ecology and archaeology surveys. Also management plans to ensure that landscape and nature conservation objectives are met – delivery of multi functional SuDS	3	Medium term, linked to Growth Area/development (High priority)	
	e) Access project –	Need for user group survey and	3	Medium term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	Accessible walking/cycling routes into Colchester (outline project requiring more detailed consideration as part of the masterplanning of North Colchester Growth Area)	feasibility studies, as well as land ownership/access negotiation. Capital cost of shared use routes is likely to be significant			
Zone 5: Roman River Valley (links to Essex Living Landscape 68 – Roman River Complex)					
5.1) Woodland Necklace	a) Create new woodland to help reduce woodland fragmentation to the south	Need for land, archaeology and ecology surveys to determine locations, plus detailed ecological	2	Medium – long term (High priority,	High Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	and east of Colchester	advice/liaison with EWT re: Living Landscape aspirations. Land ownership negotiation and grant scheme take up (EWGS). Large scale woodland planting (over 5ha) will require EIA		implemented on a phased basis)	
	b) Enhance biodiversity throughout the woodland areas	Need to liaise with EWT and create appropriate, resourced/staffed management plans	Consider the appointment of a ranger who would carry out management work and act as a volunteer co-ordinator. Assume cost of £60k per annum to include on costs,	Short – medium term (High priority)	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
			small works budget and materials allowance. Capitalise over 10 years - say £600,000 – cost band 3		
	c) Explore opportunities to increase access and accessibility to woodland (permissive paths)	Access and wayleave issues/negotiation required. Need for user survey and consultation, signage strategy	Included in L3B below	Medium – long term (High priority, delivered on phased basis with new woodland planting)	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
<p>5.2) River and Floodplain Project. Wet woodland, wetland conservation and enhancement and further habitat creation – ‘space for water’, linking to woodland necklace proposed in project 5.1 – a mosaic of habitats</p>		<p>Need for land, ecology and archaeology surveys, and for liaison with EWT to ensure that delivery of Living Landscapes aspirations are met by the project. Need for management plan and positive ongoing management – could be realised through conditions of relevant grant aid agreements such as HLS</p>	3	Medium term	Medium

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
Zone 6: Southern Farmland Zone (link to Essex Living Landscape 67: Birch Complex)					
6.1) Heathland and Grassland Enhancement Project	a) Extend and restore existing heathland which is currently fragmented and in poor condition, including links to future quarry restoration south west of Tiptree	Need for liaison with EWT re priority locations and to ensure that habitat creation complements Living Landscapes aspirations. Also liaison with local groups such as Tiptree Heath Group	2	Medium term	Medium Priority
	b) Habitat restoration of Birch Quarry (on completion of quarrying)	Need to liaise with landowner/quarry operator re: restoration scheme for the site, and for liaison with the EWT	3	Long term	
	c) Formalise and create publicly accessible semi-	Need for feasibility study and land and ecology surveys. Need to ensure that	3	Medium term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	natural greenspace on the former sand and gravel pits to the west of Tiptree	remediation works are completed to an appropriate standard to meet health and safety requirements as part of future accessible greenspace. Need for interpretation, signage strategy			
6.2) Communal Greening Project	a) Creation of pocket parks and community gardens/orchards/informal open space/pocket parks in Tiptree and Marks Tey	Need for liaison with local community/green groups. Potentially also need to liaise with Natural England re: available grant aid schemes for non developer led projects (e.g. Access to Nature grant aid). Need for legal registration/dedication of new commons and or access land	3 - 4	Short - medium term (Medium priority)	Medium Priority
	b) Enhancement of greenspaces including verges – visually and for biodiversity in Tiptree, and, Marks Tey. Recreate ‘commons’ character	Need for liaison with Highways re: verge management. Need to communicate reasons for changes to landscape management to wider community (education/awareness raising)	3 - 4	Short term (Medium priority)	
	c) POS/Sports and	Need for developer	POS: 2	Short- medium	High Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	Recreation facilities in Tiptree	contributions/CILs to deliver as capital costs are significant. Need for land, archaeology and ecology surveys	Children’s Play Areas: 1 Sports and Recreation Facilities: 2 Allotments: 1	term	
Zone 7: Coastal Zone (links to Essex Living Landscape 70: Colne Estuary)					
7.1) Mersea Island Green Chain	a) Creation of a buffer adjacent to the shoreline around Mersea Island to provide flood alleviation,	Need to liaise with EA to ensure that managed realignment delivers GI functions for access, habitats, flood alleviation etc. Project will be	3	Medium - long term, linked to proposals pursued in the SMP	High Priority

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	habitat provision, and create pockets of accessible greenspace which are linked together by an access route. Habitat creation should be part of and complementary to the wider Shoreline Management Plan proposals (managed realignment) being pursued by the Environment Agency	delivered through the Regional Habitat Creation project – the delivery body of the Shoreline Management Plan .			
7.2) West Mersea Communal Greening Project	a) Embedding productive landscapes and community food growth in to amenity greenspace throughout West Mersea	Need for additional microclimate creation e.g. buffers and shelterbelts to protect from the elements/maritime environment which may limit the viability of the project in cost and character terms	2	Short term	Low Priority
	b) Enhancement of greenspaces including verges – visually and for biodiversity – restoring	Need to communicate reasons for changes to landscape management to wider community (education/awareness raising)	2	Short term	

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L – overall priority for project clusters)
	marine character				
	c) Street tree planting in West Mersea	Need for liaison with Highways and also for surveys in relation to sub surface infrastructure for tree siting. Capital cost associated with need for trees of an appropriately mature and robust grade	2	Short term	

Linear Routes

Issues to be taken into account regarding project delivery: In all cases, existing route improvement projects will require a signage strategy and need for additional signage and street furniture (capital cost implication) and potentially land ownership liaison re: establishing new links to join routes (and particularly in relation to locations such as Abberton Reservoir, where there are operational and health and safety requirements). For new off road routes and shared use off road routes, surveys will be required (land, archaeology, ecology) as well as feasibility studies and user surveys/consultation to determine appropriate routes, in addition to signage strategies. Capital costs associated with delivery of new shared use routes are significant.

The description of each project proposal identifies the percentage of the route which is on **existing roads or tracks** and that which is **new**.

Project Number	Description	Cost Band	Timescale	Priority (H,M,L)
Long Distance Walking Cycling Routes				
LI) Long distance multi-user route from the Stour Valley Path to the Essex Way linking in to the Fordham Wood (creating circular routes when combined with existing National Trails)	a). Multi-user route linking Stour Valley Path north of Wormingford (N) with Essex Way east of Fordstreet. Also linking with Fordham Woods. [100% on road]	2	Short term	Medium Priority (links to Fordham Woods project proposals)
	b). Multi-user route linking Stour Valley Path north of Little Horkesley to the Essex Way south of Great	2	Medium term	

Project Number	Description	Cost Band	Timescale	Priority (H,M,L)
	Horkesley [combination of on 39% road and 61% off road]			
L2) Dedham – Colchester Town – Ardleigh Reservoir multi-user routes	a). Multi-user route linking Stour Valley Path at Dalethorpe (NW) with Colchester town south of Runkins Corner. [100% on road]	I	Short term	High Priority
	b) Multi-user route linking Runkins Corner with Ardleigh Reservoir. [combination of 66% on road and 34% off road]	I	Medium term	
L3) Colchester Town Inner and Outer Greenways	a) Inner multi-user greenway linking Lexden (W) with The Hythe (E) [Conservation and enhancement of existing tracks and creation of new paths to form comprehensive route linking existing green assets including open space south of the Garrison, Cemetery and Bourne Mill - combination of approx. 30%	3	Medium term	Medium Priority

Project Number	Description	Cost Band	Timescale	Priority (H,M,L)
	on road and 70% off road]			
	b). Outer multi-user greenway linking Stanway (E) with Rowhedge (W) [Enhancement of existing PROW and tracks and creation of new paths to form comprehensive route linking the necklace of woodlands south of the town - combination of 2% on road and 98% off road of which 70% is through woodland]	3	Long term	
	c). Multi-user route linking Gosbecks Park (SW) with Colchester Institute College [crosses inner greenway - town - combination of combination of 73% on road and 27% off road]	2	Medium term	
	d). Multi-user route linking Little Braiswick (NW) with north end of High Woods Country Park (N) [combination of 67% on road and	2	Medium term	

Project Number	Description	Cost Band	Timescale	Priority (H,M,L)
	33% off road]			
	e). Multi-user route linking High Woods Country Park (N) with Churn Wood (E) including a link north to Ardleigh Reservoir. [combination of 38% on road and 62% off road including 15% woodland]	3	Medium term	
	f). Multi-user route linking Churn Wood (E) with The Hythe [combination of 19% on road and 81% off road]	2	Medium term	
	g). Multi-user route linking Churn Wood (E) with Wivenhoe (SE) [combination of 60% on road and 40% off road, including 8% in woodland]	2	Medium term	
L4) Garrison to Abberton Reservoir	a) Multi-user route linking the Garrison to Abberton Reservoir (S) [Follows existing footpaths and some PROW will	2	Short term	High Priority

Project Number	Description	Cost Band	Timescale	Priority (H,M,L)
	require additional paths to link up fully - combination of 36% on road and 64% off road, including 17% in woodland]			
	b) Additional sections of multi-user path required to join up with proposed routes after reservoir expansion [combination of 14% on road and 86% off road] – to create a full loop around the Reservoir. [Off-road path required – no existing route]	3	Short term	
L5) Tiptree to Colchester Town	a) Multi-user route linking Tiptree (SW) with Colchester [mainly follows locally designated access route along the road with a very short section of off-road through the woods from Conduit Farm to the south of Gosbecks Park]	1	Medium term	Low Priority
L6) Tiptree to Abberton	a) Multi-user route linking	1	Medium term	Medium Priority

Project Number	Description	Cost Band	Timescale	Priority (H,M,L)
Reservoir	Tiptree (SW) via Layer Breton with Abberton Reservoir [follows a combination of existing roads and offroad PROW - combination of 70% on road and 30% off road]			
L7) Marks Tey to Colchester Town	a) Multi-user route linking Marks Tey to Colchester Town [follows existing road route – requirements for designated cycle path and some additional footpath. 100% on road]	1	Medium term	Low Priority
L8) Abberton – Mersea Island	a) Off-road multi-user route [follows existing PROW which may require enhancement - combination of 24% on road and 76% off road]	2	Long term	Medium Priority
L9) Abberton to Blackwater	a) Multi-user route [100% off road]	2	Long term	Low Priority
L10) Rowhedge - Colchester	a) Multi user walking/cycling route [50% off road]	2	Short term	Medium Priority

Non spatial projects

Promotion and awareness raising is a key part of the green infrastructure approach, to embed more sustainable modes of travel/living and to link the green infrastructure network to other relevant initiatives, such as ‘Walk Colchester’. The following sets out a proposal for an interactive mapping/smartphone explorer/app project which could deliver these aims.

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L)
Non spatial projects					
NSI) Mobile Explorer Project	An interactive mapping project, to provide information on the GI Network, particularly green travel routes for recreation and commuting, and links to heritage GI assets (educational resource: interpretation/enjoyment/understanding/access), to mobile phone users. The project could link to relevant programmes such as Walk Colchester/Cycle	Development costs associated with design, hosting and updating/maintaining a comprehensive, usable, relevant and visually engaging online/app based resource. Need for specialist ICT, GIS and graphics skills. Package would also need to be compatible with main Smartphone platforms and operating systems (e.g. iPhone/BlackBerry/Android). Need for user group survey and consultation to determine user groups to target, and also for a Communications Strategy to launch the project, and to help gain local ownership. Needs joined up working with ‘Walk Colchester’ and ‘Cycle Colchester’ initiatives as many of the aspirations of the	I	Medium term	Medium

Project Number	Description	Issues to consider	Cost Band	Timescale	Priority (H,M,L)
	Colchester and to Transition Colchester (e.g. use of the mapping to provide information on community events in a greenspace setting, places to buy local produce, location of community gardens/allotments etc).	projects are linked. Need for links with other relevant interest groups, such as Transition Colchester.			

A shortlist of GI projects in Colchester Borough

7.6 **Table 7.2** overleaf sets out the shortlisted projects which are the result of the prioritisation exercise in **table 7.1**. The high priority projects identified in **table 7.2** also include broad consideration of appropriate funding mechanisms and potential delivery partners. Outline capital and revenue costs are also set out for specific projects within the 'high priority' project clusters. Possible actions for Colchester Borough Council to consider in achieving aspects of the green infrastructure network are set out under 'Next steps', at the end of this section. Note that this list is not intended to be set in stone. If opportunities arise to bring forward projects identified as lower priority then they should be implemented. The value of having a GI strategy in place is to allow individual projects to fit into a bigger overall GI network.

TABLE 7.2: GI PROJECTS SHORTLIST

This table sets out information in relation to potential delivery partners and funding streams for projects which scored the highest priority rating in **table 7.1** (e.g. projects which could be delivered in the short term, or were of relatively low cost and or provided the widest range of functions).

Note that where the project cluster is considered to be high priority, then the project cluster as a whole is considered in the relevant entry in the table below. Where a component project in the cluster is of a higher priority (e.g. high priority) than the cluster as a whole, it is considered individually. Note that this list is not intended to be set in stone. If opportunities arise to bring forward projects identified as lower priority then they should be implemented. The value of having a GI strategy in place is to allow individual projects to fit into and contribute to a bigger overall GI network.

Broad capital and revenue costs are also identified in relation to the individual sub projects in the table below (cross referenced with those in **table 7.1**). Note that the costings used in the GI strategy have been drawn up based on nationally accepted standards and guidance (SPONS and PSA³³). In addition to the Green Infrastructure Strategy, Colchester Borough Council has prepared a draft Community Infrastructure Levy (CIL) Schedule which has been based on local evaluations. CIL sets out in detail the range of infrastructure needed including green infrastructure within the Borough along with the costs of providing it. The CIL Schedule will form the key evidence document regarding infrastructure needs and costs for Colchester Borough.

Potential next steps in relation to bringing green infrastructure projects forward are considered at the end of this section.

³³ Spons External Works and Landscape Price Book 2012, Davis Langdon. Spon Press, PSA Schedule of Rates for Landscape Management Third Edition 2005, Carillion, TSO

Project		Overview: Potential delivery partners	Potential funding streams
Spatial projects			
1.1 Dedham Gateway Enhancement		Dedham Vale AONB and Stour Valley Project as the delivery body for 'Managing a Masterpiece'. Natural England (agri environment schemes) Forestry Commission (English Woodland Grant Schemes), landowners, Essex Wildlife Trust (Living Landscapes). Many of the landscape scale projects could be delivered by skilled volunteers e.g. BTCV, and those with a community focus by local green groups, the Green Light Trust or local schools groups, Colchester Borough Council in an enabling and facilitating role.	For landscape and access/interpretative capital works: Higher Level Stewardship (HLS) schemes administered by Natural England (landscape restoration, interpretative and access projects which fall outside HLS target areas will be encouraged). English Woodland Grant Schemes (EWGS) for new woodland creation, enhanced management and reinstating positive, sustainable management regimes. CBC should liaise with landowners to encourage the uptake of such schemes. For project delivered by charities in the Dedham Vale (e.g. BTCV/volunteer organisations/local green groups) grants may be available (up to £20,000) from the Charles Hayward Foundation. www.charleshaywardfoundation.org.uk
Sub projects and capital/revenue costs			
Indicative capital cost	Indicative revenue cost		
a: £33,000	£5,500		
b: £160,000	£6,500		
c: £30,000	£500		
d: £56,000	£2,000		
e: £400,000	£5,000		
2.1 A12 Greening Project		Developers, landowners and Highways	Funding is likely to be through developer CIL

Project		Overview: Potential delivery partners	Potential funding streams
Indicative capital cost	Indicative revenue cost	<p>Agency/Highways Authority; Sustrans in relation to provision of enhanced shared use access. Forestry Commission in relation to woodland planting and management (grant schemes), Essex Wildlife Trust.</p> <p>There is an opportunity to bring forward crossing improvements of the A12 (over and underpasses/ multiuse routes) which would be a short term high priority in the absence of a green bridge.</p>	<p>contributions for strategic woodland planting. Also potentially through Woodland Grant Schemes (grants for woodland creation and woodland management), and through the National Tree Planting Campaign. There may be an opportunity to bring forward enhanced crossings of the A12 (bridges/underpasses) as part of existing Highways Agency Plans</p>
a: Green bridge not costed as not high priority project as per table 7.1	Green bridge not costed as not high priority project as per table 7.1		
b: £170,000	£2,800		
c: £1,200,000	£21,000		
d: N/A	No additional cost as assumed works covered above		
e: £335,000	£4,500		
2.2 Woodland Enhancement Zone		Landowners and Forestry Commission (through English Woodland Grant Schemes).	English Woodland Grant Schemes (EWGS) for new woodland creation, enhanced

Project		Overview: Potential delivery partners	Potential funding streams
Indicative capital cost	Indicative revenue cost	Also Natural England through agri environment schemes. CBC in an enabling/facilitating role. Also EWT in advisory role (linking to Living Landscapes).	management and reinstating positive, sustainable management regimes. CBC should liaise with landowners to encourage the uptake of such schemes.
a: £282,000	£8,000		
b: £120,000	£5,000		
c: £146,000	£5,500		
d: £96,000	£1,500		
3.2 Urban Colne Valley Project		CBC, developers in relation to Growth Areas and creation of SuDS. Local history groups/societies (small scale funding/delivery). Environment Agency (advisory/regulatory role).	Heritage Lottery Fund, if CBC were to make a coordinated bid to the HLF in relation to potential community, commercial and regeneration and access benefits the project can bring. Also CIL/section 106 contributions. Also links to and liaison with local community/volunteers groups such as The Moors Movement in relation to The Moors site, near The Hythe
Indicative capital cost	Indicative revenue cost		
a: £190,000	£2,500		
b: Outline project only	Outline project only		
c: £415,000	£6,000		
3.3f Public Open Space, Sport and Recreational Facilities in Wivenhoe		CBC, developers	Developer contributions through CIL tariffs

Project		Overview: Potential delivery partners	Potential funding streams
Indicative capital cost	Indicative revenue cost		
£820,000	Outline project only		
3.3g Public Open Space, Sport and Recreational Facilities in Rowhedge		CBC, developers	Developer contributions through CIL tariffs
Indicative capital cost	Indicative revenue cost		
£1,200,000	Outline project only		
4.1d Public Open space, Sport and Recreational Facilities in East Colchester		CBC, developers	Developer contributions through CIL tariffs/section 106
Indicative capital cost	Indicative revenue cost		
£4,000,000	Outline project only		

Project		Overview: Potential delivery partners	Potential funding streams
4.1e Public Open Space, Sport and Recreational Facilities in Colchester Town		CBC, developer(s)	Developer contributions through CIL tariffs/section 106
<i>Indicative capital cost</i>	<i>Indicative revenue cost</i>		
£12,000,000	Outline project only		
4.1f Public Open Space, Sport and Recreational Facilities in Stanway Growth Area		CBC, developer(s)	Developer contributions through CIL tariffs/section 106
<i>Indicative capital cost</i>	<i>Indicative revenue cost</i>		
£5,300,000	Outline project only		
4.2 Enhancing Gateways into Colchester		CBC including parks and greenspace department, developers, local history groups and societies. Essex Wildlife Trust (advisory role e.g. potential landscape links into Colne	Potential Heritage Lottery Funding (could be combined as part of a co-ordinated bid to the HLF with project cluster 3.2 above, also in view of sub project 4.2c: Roman Walls &
<i>Indicative capital cost</i>	<i>Indicative revenue cost</i>		

Project		Overview: Potential delivery partners	Potential funding streams
a: £700,000	£14,000	Valley and associated Living Landscapes)	Town Centre Public Realm improvements). Also through CIL/section 106 contributions. Potential link to application for EU funding for town centre improvements submitted by CBC.
b: £125,000	£9,000		
c: £2,600,000	Outline project only		
4.4 North Colchester Growth Area		CBC, developer(s)	Developer contributions through CIL tariffs/section 106. Note links to large scale woodland buffer project (2.1: A12 Greening Project) and associated funding streams for that, as large scale structural landscape works could also be part funded by English Woodland Grant Schemes/National Tree Planting Campaign grant aid.
Indicative capital cost	Indicative revenue cost		
a: £2,100,000	£40,000		
b: N/A	Included in 4.4 a above		
c: £10,00,000	Outline project only		
d: £1,300,000	Outline project only		

Project		Overview: Potential delivery partners	Potential funding streams
e: Outline project only	Outline project only		
5.1 Woodland Necklace in the Roman River Valley		Essex Wildlife Trust (advisory/partnership role in relation to habitat creation and Living Landscapes areas). Essex and Suffolk Water. Natural England (through HLS). CBC in enabling/facilitating role. Also voluntary landscape management and works e.g. through organisations such as the BTCV. Environment Agency (advisory/regulatory role). Potential scope for a Roman River Valley Partnership of interested organisations, linked to one for Colne Valley.	HLS, Natural England Access to Nature Grants. Potential HLF funding if considered as part of the wider package of projects in the Roman River Valley.
<i>Indicative capital cost</i>	<i>Indicative revenue cost</i>		
a: £320,000	£8,000		
b: £600,000	Included in capital costs		
c: £618,000	£2,500		
6.2c Public Open Space, Sport and Recreational facilities in Tiptree		CBC, developer(s)	Developer contributions through CIL tariffs/section 106
<i>Indicative capital cost</i>	<i>Indicative revenue cost</i>		

Project		Overview: Potential delivery partners	Potential funding streams
£745,000	Outline project only		
7.1 Mersea Island Green Chain		Environment Agency through implementation of the Shoreline Management Plan and through their advisory and regulatory function. Potential to work with EWT and Natural England in relation to habitat creation, and with landowners. CBC in an enabling and facilitating role.	
Indicative capital cost	Indicative revenue cost		
a: £735,000	£8,000		
Linear routes			
L2 Dedham – Colchester Town – Ardleigh Reservoir Multi User Routes		CBC, developers, utilities providers/undertakers (Ardleigh Reservoir), Sustrans, Essex Rights of Way and Access team. Natural England in relation to potential HLS capital payments for access scheme.	Developer contributions through CIL/section 106. Natural England through HLS (although note that, as at April 2011, revenue payments for access schemes in HLS are no longer supported).
Indicative capital cost	Indicative revenue cost		
a: £8,000	£200		
b: £100,000	£2,000		

Project		Overview: Potential delivery partners	Potential funding streams
L4 Garrison to Abberton Reservoir		CBC, landowners, developers, utilities providers/undertakers (Abberton Reservoir), Sustrans, Essex Rights of Way and Access team. Natural England in relation to potential HLS capital payments for access scheme.	Developer contributions through CIL/section 106. Natural England through HLS (although note that, as at April 2011, revenue payments for access schemes in HLS are no longer supported).
<i>Indicative capital cost</i>	<i>Indicative revenue cost</i>		
a: £445,000	£3,000		
b: £615,000	£10,000		

EMBEDDING GREEN INFRASTRUCTURE IN SPATIAL PLANNING AND DEVELOPMENT MANAGEMENT

Linking green infrastructure to spatial planning

- 7.7 To ensure that green infrastructure is implemented effectively in Colchester Borough, it will be vital that planning policy takes account of the findings and recommendations of this Green Infrastructure Strategy. Below are set out the key points from this Green Infrastructure Strategy that Planning Policy can take into consideration in future. We have focused on points to inform future iterations of the Sustainable Community Strategy (SCS) and the Local Development Framework (LDF) in this section, as well as noting briefly the relationship of the Green Infrastructure Strategy to infrastructure delivery planning in general.

Sustainable Community Strategy

- 7.8 The Sustainable Community Strategy³⁴ (SCS) for Colchester Borough has recently been prepared (2009). It acts as an umbrella for all other strategies devised for the local area including the Local Development Framework, which forms a spatial representation of the SCS.
- 7.9 The SCS pre dates this Green Infrastructure Strategy, key messages in the Green Infrastructure Strategy should be taken into account in future iterations of the SCS, with appropriate stakeholders/members of the Local Strategic Partnership identified to help take GI forward. This will help the SCS continue to contribute to the objectives of sustainable development in the long term.

Local Development Framework

- 7.10 The Colchester Borough Core Strategy was adopted in December 2008. The advice in this section contains recommendations for consideration of green infrastructure in future iterations of the LDF, as well as to aid Area Action Plans (AAPs), Development Plan Documents (DPDs), and Development Briefs.
- 7.11 This Green Infrastructure Strategy forms part of the evidence base for the Local Development Framework. In order for any future policies that deal with green infrastructure to be found to be 'sound' when going through

³⁴ Colchester 2020 **Sustainable Community Strategy 2009**

public examination they will have to comply with the three tests:

- **To be Consistent with National Policy**; a green infrastructure approach is clearly advocated by national policy (see **section 2**).
- **To be Justified**; evidence needs to be provided to justify the need for a green infrastructure policy (why something is being proposed and that there is a problem or a need³⁵ - see characterisation at **section 3** and analysis of deficiencies and needs at **section 5**).
- **To be Effective**; where a policy proposes tackling a green infrastructure issue there is a need to ensure that the mechanism for tackling the issue will be effective and deliverable, and that there is some basis for taking this course of action.

7.12 The tests of soundness indicate the need for a clear link between policy formulation and evidence gathered. PPS12: *Creating Strong, Safe and Prosperous Communities through Local Spatial Planning* states that, to be justified a Development Plan Document (DPD) should be founded on a robust, credible evidence base which has involved evidence of community and stakeholder participation, and research/fact finding to back up choices made in the plan. The process undertaken in preparing this Green Infrastructure Strategy means that the requirements for research and participation have been met and the problems, needs and barriers to delivery with regard to green infrastructure identified.

7.13 PPS12, the Planning Inspectorate³⁶ and the Planning Advisory Service (PAS)³⁵ all give more detail on what is meant by effectiveness and this Green Infrastructure Strategy has sought to address all these aspects during its development. Key aspects of this GI Strategy in this context have been the undertaking of the following:

- A policy review (**Section 2**) to ensure that there are no regulatory or national planning barriers to delivery for any proposed recommendations;
- A review of the Green Infrastructure Strategies and Plans of neighbouring authorities to ensure cross boundary consistency;

³⁵ Planning Advisory Service 2008 **Local Development Frameworks: Evidence Base**

³⁶ The Planning Inspectorate 2008 **Local Development Frameworks: Examining Development Plan Documents – Soundness Guidance**

- Development and use of a robust, transparent methodology to ensure that proposed solutions are clearly linked to addressing issues and needs identified in the evidence base;
- A series of workshops and consultations with delivery partners and stakeholders to ensure that proposed solutions (see **Section 6**) are deliverable and flexible, and that potential delivery partners are identified. Findings from the two stakeholder consultation are set out in **Appendix 2**.

7.14 Some of the key aspects of the Green Infrastructure Strategy that are relevant to planning policy, and which will help inform future iterations of the spatial plan, are signposted below. There may be benefits to including or referring to parts of the characterisation work undertaken for this strategy in other LDF supporting documents such as Sustainability Appraisal baselines. The following may be useful:

- An overall justification for following a Green Infrastructure approach is provided in **Section 1**.
- The policy review provided in **Section 2** may provide useful information for future Sustainability Appraisals, plan, policy or programme reviews.
- Information on baseline, environmental and social character can be found in **Section 3** of this GI Strategy;
- Key green infrastructure issues are set out in **Sections 3, 4 and 5**. These issues should be used by plan makers, SA practitioners and consultees to identify what the broad green infrastructure (and environmental) issues are in the Borough.
- The assessment of need for accessible green space (ANGSt) in the Borough is given in **Section 4**.
- The functional Green Infrastructure needs of the Borough are set out in **Section 5**.
- **Section 6** sets out the proposed green infrastructure network and supporting projects. This may help plan makers in future in developing policies, and SA practitioners and Consultees when reviewing future policies. It will help ensure that options take full advantage of potential opportunities and are likely to help solve current and future problems.

Links to infrastructure delivery planning

- 7.15 Key aspects of infrastructure planning and delivery are to ensure that the required infrastructure proposals are 'sound', that is that they are justified (there is a requirement for them and there is a basis for taking the course of action proposed) and that they are effective (they address a particular need/issue, and that they are deliverable). As such the tests of soundness and the need for well evidenced proposals, as described above apply to infrastructure planning more widely, and this Green Infrastructure Strategy provides a key part of the evidence baseline for infrastructure planning and delivery. Colchester Borough Council are currently developing their Community Infrastructure Levy and this along with Section 106 represents opportunities for securing contributions towards the delivery of Green Infrastructure in the Borough.

Linking green infrastructure to Development Management

- 7.16 The green infrastructure zones, component projects and the key messages identified in **Chapter 6** form a basis for evaluating future development proposals against the proposed green infrastructure network, and to ensure that they contribute to the desired environmental outcomes and functions. A model process for ensuring that green infrastructure is embedded in development management, and that appropriate account is taken of green infrastructure recommendations, is set out in **Figure 7.1**. A standardised approach to the design and implementation of a generic green infrastructure development project is shown in the central column of this Figure, with respective responsibilities of the applicant and the Borough Council, as they relate to GI, shown to the left and right hand sides respectively.
- 7.17 **Figure 7.1** is designed to assist Development Management officers and planning applicants ensure that green infrastructure is embedded in the scheme design from the outset, as part of the development process. The diagram can be applicable to any scale of proposed development. The starting point is to identify the green infrastructure action zone in which a specific site lies and whether it relates to, can contribute to or affects any proposed GI projects. Reference should be made to the key messages for the relevant projects e.g. the important green infrastructure assets and links to conserve and enhance, and this should be used as a starting point for site planning and design – a 'greenprint' or a green infrastructure led basis for masterplanning, to ensure that green infrastructure assets are considered and protected from the first.

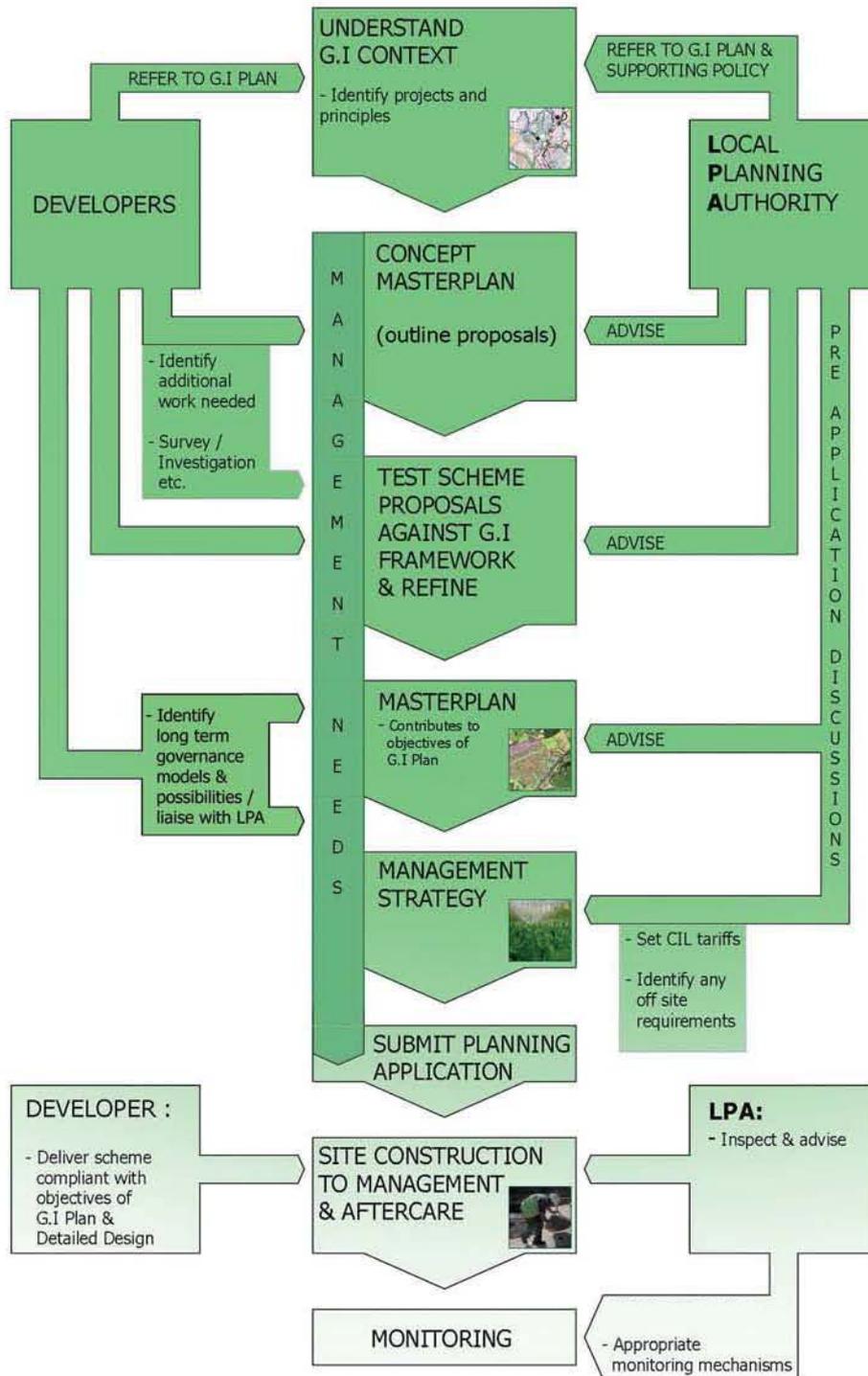


Figure 7.1: Embedding green infrastructure in Development Management

NEXT STEPS

7.18 The following alternatives are recommended in order to take forward green infrastructure delivery within the Borough:

- Creation of a dedicated Green Infrastructure Delivery Officer role (subject to resources – this may be a desirable longer term aspiration);
- Taking GI delivery forward through existing mechanisms, also working with the council's countryside, ecological and arboricultural officers, or;
- Convene a Green Infrastructure Advisory and Delivery Panel, consisting of officers from the Borough and County councils and key stakeholders such as the AONB Partnership, the Green Light Trust, Natural England, the Essex Wildlife Trust, the Environment Agency and relevant local groups such as Parish Councils and local green groups, such as Transition Colchester.

7.19 Whichever approaches are selected, clearly there will be a need for close working with other organisations with parallel interests and objectives. By doing this and through intelligent use of existing mechanisms and processes, a SMART approach could be achieved to GI delivery in the Borough, as described below. Possible responsibilities in relation to green infrastructure delivery in the Borough are as follows (whether through delivery officer or a delivery panel):

- Actively promote green infrastructure, liaising with key members of the Local Strategic Partnership (such as those who represent environmental and recreational interests), to ensure that green infrastructure contributes to the objectives of the Sustainable Community Strategy and the Local Development Framework;
- Preparation and implementation of a Communications Strategy for green infrastructure in the Borough, to raise public awareness and avoid any internal conflicts with any other Council spatial planning objectives. As part of this, identify appropriate opportunities to promote, advertise and brand key GI projects or those with an important community and regeneration focus, to engender greater public support and ownership, as well as embedding positive informal management/stewardship, in addition to any more formal management structures identified;
- In this context, advise and assist a nominated green infrastructure

‘champion’, who should ideally be a Council member, to ensure greater potential for ‘buy in’ from members;

- Provide constructive advice to the Council as it seeks to deliver green infrastructure. The points below relate to this aim in particular:
- Develop a checklist by which proposals can be evaluated in relation to green infrastructure. Possible components of such a checklist are set out under ‘Potential future work’, at the end of this section;
- Consider potential for further work to bring GI forward/additional studies, as highlighted at the end of this section;
- Evaluate development proposals as they relate to green infrastructure against green infrastructure zones and component projects in the Green Infrastructure Strategy;
- Identification of constraints, challenges and potential conflicts of interest in relation to practical delivery, making early links with appropriate bodies (e.g. in relation to ecological advice and flood risk etc);
- As a consultee, comment on relevant planning applications through the pre application and application processes, using the proposed GI Network (**Figures 6.1 and 6.2**) and supporting key messages at **section 6** of this GI Strategy, and with reference to **Figure 7.1**;
- Ensure that developers and others bringing forward green infrastructure not only take account of the key messages in relation to the green infrastructure zones and component projects, but that they also identify sustainable, resourced mechanisms for long term governance to deliver design intentions and desired environmental outcomes;
- Make appropriate links with future funding partners identified within the short listed projects in **table 7.2**, in relation to co ordination of funding bids, and also in making links with adjacent authorities for projects on the authority boundary, or that share common objectives with those in adjacent GI Strategies;
- Liaise with the relevant Local Strategic Partners, noting and using where appropriate existing processes that may be of relevance to GI delivery, for reasons of efficiency and avoiding duplication of work;
- Seek to promote links between proposed GI projects and other

appropriate agendas in the Borough, such as Health Walks programmes (e.g. those in High Woods Country Park);

- Positively linking GI to the Localism Agenda: Liaison with appropriate community representatives e.g. local green groups, allotment societies, 'Friends of' Groups and Parish Councils. Also with local schools groups and in making links to the Green Light Trust (for environmental education projects and those with a community focus);
- Develop appropriate consultancy briefs for masterplanning and detailed design services in relation to the projects within the shortlist at **table 7.2**;
- Create an audit trail of appropriate monitoring mechanisms in relation to green infrastructure delivery, making use of existing tools such as site inspections to adoption, and visitor surveys. The purpose should be to monitor performance of the green infrastructure proposals in relation to the environmental functions, to inform and refine future iterations of the spatial plan for the Borough;
- Within the Council, convene regular updates, meetings and opportunities for progress reporting during the life of the GI Plan and wider spatial plan, to disseminate results, good practice and lessons learned.

Potential future work

GI checklist in relation to Development Management and planning applications

7.20 In addition to the general pointers shown on **Figure 7.1**, this could cover the following subject areas:

- Sense of place: Landscape and historic character, setting and landscape management;
- Biodiversity, geodiversity, habitat protection and access to nature;
- Sustainable resource management and climate change adaptation (including water and flood management and opportunities for microclimate creation);
- Healthy and cohesive communities (Access for all, provision of activities for varied ages and interest/user groups);

- Choices for responsible travel;
- Sustainable design and project specifications (construction techniques, locally sourced materials and plant material).

GI Design Guide/Advice Note

- 7.21 This could take the form of accessible, concise, written and illustrated design principles aimed at developers and to inform Development Management Officers in evaluating planning applications in terms of green infrastructure. The aim with such a document should be to ensure that the most positive consideration is given to GI planning, design and management, from the outset of the development process.

Supplementary Planning Document (SPD)

- 7.22 It may be desirable for the Borough (possibly with adjacent authorities at the 'sub regional' level) to consider production of a green infrastructure SPD, although this must not detract from the wider need to embed green infrastructure more generally within spatial planning. It may be more useful to include aspects of the Green Infrastructure Plan within other SPDs if commissioned, such as one in respect of Planning Obligations/Developer Contributions, or a Design SPD (to which the proposed Green Infrastructure Network and a possible future GI Design Guide/Advice Note could usefully contribute).

Local level green infrastructure planning

- 7.23 This GI Strategy sets out a useful starting point or 'greenprint' for more detailed consideration of green infrastructure in future site masterplanning, through Area Action Plans and Development Plan Documents, and to help positively guide developer proposals and provide an indication of the level of GI investment likely to be required in terms of developer contributions.
- 7.24 The GI Strategy can also be used to inform other aspects of local level green infrastructure planning. For example, neighbourhood and parish plans (such as Stanway) may inform part of the local level GI planning process. There may also be scope for local level or Parish GI plans in future, subject to resources, and considering more site specific information. This would also help ensure conformance of future neighbourhood and parish plans with strategic policies in the Core Strategy, and with proposals in this GI Strategy. Consideration of future green infrastructure could also help inform future

Village Design Statements in the Borough.



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