

University of East Anglia Landscape Strategy

January 2010





### QUALITY ASSURANCE

- Site name: University of East Anglia, Norwich
- Client name: University of East Anglia
- Type of report: Landscape Strategy
- Prepared by: Luke Broom-Lynne BA DipLA CMLI MRTPI
  - Colin Coupland BA (Hons) DipLA ALI

Signed

LUME BOOM-Lynn

Date

05 January 2010

University of East Anglia Landscape Strategy

TABLE OF CONTENTS

PREFACE	v
INTRODUCTION	1
The Campus: Key landscape features and habitat areas The Campus: Buildings	6 8
EXECUTIVE SUMMARY	11
PART 1: STRATEGY	15
Introduction	17
UNDERSTANDING	
Topography Landscape Evolution Colvin and Lasdun's Vision Conservation Development Strategy University Development Strategy Plan Landscape Planning Policy UNDERSTANDING: SUMMARY	18 20 26 27 29 30 35
ISSUES	
Post Colvin and Lasdun – Loss of Significance? The Broad Vistas The Hay Meadows Trees Transitional Spaces Legibility and Circulation Lighting Opportunities and Constraints ISSUES: SUMMARY	38 40 42 50 52 56 56 58 59
STRATEGIC POLICIES	61
Principles SP1: Conserve and reinforce significant	63
vistas	64

SP2: Conserve the landscape and architectural significance of UEA SP3: Conserve the landscape setting of University Broad SP4: Provide a safe and welcoming environment for all SP5: Access SP6: Protect and enhance biodiversity SP7: Create a legible hierarchy of circulation SP8: Tree management	66 67 68 69 70 71
PART 2: CHARACTER AREAS	73
Landscape and Visual Analysis Conservation and wildlife The Campus: key landscape features and	75 77
habitat areas	78
<ol> <li>University Broad</li> <li>River Yare</li> <li>University Fen</li> <li>Institute Fields</li> <li>University Butterfly Meadow</li> <li>The Heronry and Violet Grove</li> <li>Bluebell Marsh</li> <li>Lusty Hills</li> <li>New Plantations</li> <li>Sports Fields</li> <li>Blackdale Plantation</li> <li>The Hay Meadows</li> <li>University Drive (North)</li> <li>Chancellors Drive</li> <li>Constable Terrace (West)</li> <li>Constable Terrace (South)</li> </ol>	81 85 89 93 97 101 105 109 113 117 121 125 129 133 137 141

17.	School of Biological Sciences	145		
18.	Elizabeth Fry Building (Car Park)	149		
19.	Courtyard 1: Chancellors Walk	153		
20.	School of Biological Sciences			
	(North)	157		
21.	Courtyard 2: East of School of			
	Education and Lifelong Learning	161		
22.	Founders Green	166		
23.	Spanish Copse	169		
24.	The Square and the Street	173		
25.	LCR Car Park	177		
26.	Formal Gardens	181		
27.	East-West Link	185		
28.	Eastern Hall of Residence	189		
29.	North of Nelson Court and Broady	view		
	Lodge	193		
30.	South of Nelson Court and Broad	view		
	Lodge	197		
31.	Eastern Campus/The Prospect	201		
32.	Courtyard 3: South of Library	205		
33.	Courtyard 4: Harbour Pines	209		
34.	Norfolk and Suffolk Roads	213		
35.	The Prospect	217		
36.	Strawberry Fields	221		
37.	Car Park and Biomass Centre	225		
38.	INTO and Medical Centre	229		
PART 3: ACTION PLAN 2				
PART 4: APPENDICES				
Appendix 1: Landscape Assessment - Field Survey Sheet Appendix 2: Local Plan Policies Appendix 3: Bibliography / photo credits Appendix 4: Glossary of terms INDEX				

"Part of the joy of (the University of) East Anglia is to walk between the buildings, experiencing the rich silhouettes and towers shifting against one another under the vast Norfolk sky with the grass hummocks rolling away slowly down the edge banks and reeds to the River Yare. But the landscape romanticism is clearly more than a question of siting. The residences themselves are like so many artificial hills, complete with valleys, contours, pathways, stopping points, changes of level, cliff faces and rocky indents"

William J.R. Curtis, Denys Lasdun: Architecture, City, Landscape (London: Phaedon Press Limited, 1994) p.95.



# Background

Few other universities can boast an estate quite like the University of East Anglia.

It is a source of inspiration and joy for all those who work here – and indeed for the wider public who have access to much of its grounds. Nevertheless, despite valuing its remarkable campus, the University has had virtually no strategic statement in place to guide the development and husbandry of the landscape since the University was founded almost 50 years ago. Accordingly, in 2003 it committed itself to addressing this omission, the outcome of which is this Landscape Strategy. It is part of a suite of documents which includes the Conservation Development Strategy, the Estate Development Strategy and the Travel Plan that provide collectively a real estate perspective on the goals expressed in the University's Corporate Plan. In due course they will be joined by the Environment Policy and the Biodiversity Strategy. Like the Corporate Plan, the Landscape Strategy is to be reviewable every five years so that it remains relevant and reflects the prevailing aspirations of the University. And, like the Conservation Development Strategy, it balances the need for on-going growth with appropriate stewardship of the environment.

In the same year the University committed itself to developing a Landscape Strategy (2003), the Department of Culture Media and Sport conferred Listed Building status on most of the University's early buildings by Sir Denys Lasdun. This set back development of the Landscape Strategy by several years whilst the University, at the invitation of English Heritage, developed the Conservation Development Strategy. Fortunately, recognising the importance of the landscape setting to these important buildings, the Conservation Development Strategy devoted some of its pages to a broad assessment of the campus, thus laying the foundations for this comprehensive evaluation.

Given the lack of a coherent strategy until now, it is remarkable the original intentions of the Landscape Architect Brenda Colvin, whose designs for the campus were so skilfully woven into Lasdun's master plan, have survived and continue to inform development decisions today. Nevertheless, time moves on. The University community is more than double the size originally conceived and the campus no longer stands beyond the fringes of greater Norwich; it is almost surrounded by development of one sort or another. It is under pressure from within and beyond its boundaries. The maintenance plans and planting regimes that evolve from this strategy will have to address the issue of over-use and the damage it causes.

#### **Study Team and Consultations**

Like the Conservation Development Strategy, preparation of the Landscape Strategy was carried out by consultants commissioned by the University. Luke Broom-Lynne and Colin Coupland of the Landscape Architecture and Urban Design Team from Bidwells carried out the work in three stages. The Research stage involved studies of the site and landscape on an area by area basis, including an overall historical assessment. The Drafting Stage involved collating and assembling the material into the first draft to test the structure and accessibility of the document. With the benefit of commentary from a panel consisting of Catherine Bickmore (Catherine Bickmore Associates), Dr Iain Barr (School of Biological Sciences, UEA), and Joseph Saunders (Estate Development Director, UEA) the first draft was refined ahead of wider exposure. The Consultation stage was carried out in two parts - internally and externally of the University community. A broad church of opinion from within the University brought about the second draft before it was shared with the wider community including English Heritage, Norfolk Wildlife Trust, The Twentieth Century Society, Norwich City Council, South Norfolk Council, The Norwich Society, The Yare Valley Society, and representatives of the local community. This saw the development of the third and final draft.

Notwithstanding the fundamentals of the Landscape Strategy, as a consequence of the Consultation stage, a majority view is reflected in the document. There are too many to acknowledge individually, but all are thanked for their contribution. However, Brenda Colvin's associate and partner Hal Moggridge provided a fascinating insight into the early days of the University - and the development of ideas that are played out in the landscape today. In this regard it is important to note that his commentary has brought particular authority to the Landscape Strategy.

## **Objectives**

The Landscape Strategy is a reference document not a practice manual – they will come later and use the Landscape Strategy as their informative. Accordingly, for those within the University who have responsibility for maintaining the estate, its purpose is to provide a framework within which to generate good husbandry protocols and maintenance practices, targeted management and appropriate planting regimes. For those commissioned from outside the University - to continue the development of the campus - it provides a fundamental understanding of the environment in which recommendations are to be made and Strategic Policies to guide and underpin proposals and recommendations. To bring this agenda forward an Action Plan is included in Part 3.

### Additional Future Action

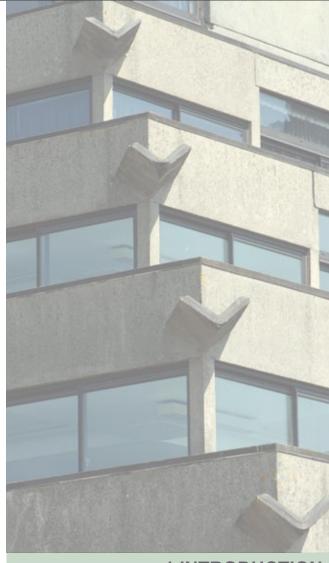
As a consequence of developing the Landscape Strategy the need for a Biodiversity Strategy has emerged. There is a remarkably wide range of habitats across the estate – some of which are under threat from over exposure to human activity and others are suffering, regrettably, from neglect or lack of understanding. All need assessing and regimes put in place to protect their character and wildlife.

Joseph Saunders Estate Development Director

University of East Anglia 2009

University of East Anglia Landscape Strategy

# **NTRODUCTION**



**1 INTRODUCTION** 



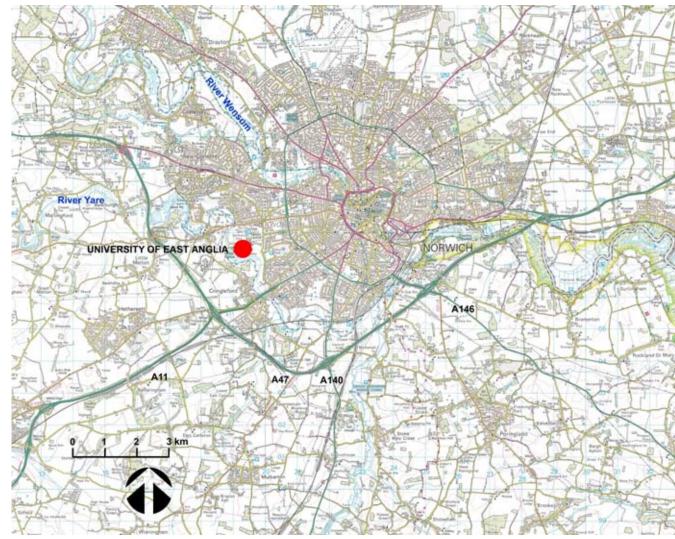
View north towards 'The Harbour'

This Landscape Strategy covers the grounds of the main campus of the University of East Anglia in the ownership of the University.

It is a strategy that addresses the everchanging environment of a dynamic institution in the context of urban encroachment. In due course, the University campus may become something of an oasis. Accordingly, the opportunities afforded by the University's continuing metamorphosis must be used to develop the landscape to its full potential and maintain the significance of the unique setting it has already established.

Notwithstanding it maintains its grounds carefully, since the University began development 45 years ago, very little strategic thought and planning of the landscape beyond that provided by the landscape architect Brenda Colvin in 1967 has been undertaken.

The aim of the landscape strategy is therefore to provide a number of distinct principles and policies which can be used to continue the development of the landscape and Campus to ensure that it provides a setting which will reflect the importance and stature of the University and its buildings, both now and into the future. It is intended to form a companion document to the Conservation Development Strategy, to guide the future development of the University.



Location of the University of East Anglia

The Strategy is divided into three sections:

# Part 1: The Strategy

This gives a summary of the evolution of the landscape at UEA, the issues that have been identified as a consequence of the analysis of the landscape and its history and a series of Strategic Policies which form the framework of the Strategy together with the methods for their implementation.

# Part 2: Detailed Landscape Character Areas

This section provides a detailed analysis of the different landscape and habitat character areas across the entire Campus that underpin the Strategy.

# **Part 3: Appendices**

This section gives details of the methodology adopted during the preparation of the Strategy.

- 2. River Yare
- 3. University Fen
- 4. Institute Fields
- 5. Butterfly Meadow
- 6. The Heronry and Violet Grove
- 7. Bluebell Marsh
- 8. Lusty Hills
- 9. New Plantations
- 10. Sports Fields
- 11. Blackdale Plantation
- 12. The Hay Meadows
- 13. University Drive (North)
- 14. Chancellors Drive
- 15. Constable Terrace (West)
- 16. Constable Terrace (South)
- 17. School of Biological Sciences (South)
- 18. Elizabeth Fry Building (Car Park)

- 19. Courtyard 1: Chancellors Walk 20. School of Biological Sciences (North) 21. Courtyard 2: East of School of Education and Lifelong Learning 22. Founders Green 23. Spanish Copse 24. The Square and The Street 25. LCR Car Park 26. Formal Gardens 27. East-West Link 28. Eastern Hall of Residence 29. North of Nelson Court and Broadview Lodge 30. South of Nelson Court and Broadview Lodge 31. Eastern Campus 32. Courtyard 3: South of Library 33. Courtyard 4: Harbour Pines 34. Norfolk and Suffolk (Service) Roads
  - 35. The Prospect

### 36. Strawberry Fields

- 37. Main Car Park and Biomass Energy Centre
- 38. INTO and Health & Community Centre



Location plan for the habitats and landscape character areas of the University of East Anglia

KEY BUILDINGS ON THE CAMPUS (numbering refers to the Conservation Development Strategy, except where recent additions have added numbers 127 to 134).)

- 1 The Lodge
- 2.1 Council House
- 2.2 Registry
- 3.1 Teaching Wall: Arts II
- 3.2 Teaching Wall: Arts I
- 4 Teaching Wall: Chemical Sciences and Pharmacology
- 4.1 Biophysical Chemistry
- 5 Teaching Wall: Environmental Sciences
- 6 Teaching Wall: Biological Sciences
- 7.1 Sainsbury Centre for the Visual Arts
- 7.2 Crescent Wing
- 8 Climatic Research Unit
- 9 Education and Computing Sciences
- 10 The Queen's Building
- 11 Elizabeth Fry Building
- 12 Computing Centre
- 13 Lecture Theatres
- 14 Library
- 15 Chaplaincy
- 16 Restaurant

- Union House 17 18 Shops with offices above (Street) Music Centre 21 Careers Centre 22 Congregation Hall (old sports hall) 23 24 Drama Studio 25 Boiler House, etc. Health Centre (former) - now Academic Building 28 East SportsPark 33 School of Medicine, Health Policy and Practice 43 44 Zukerman Institute for Connective Environmental Research (ZICER) Orwell Close 101 Wolfson Close 102 103 Nelson Court 104 Suffolk Walk Suffolk Terrace 105 Norfolk Terrace 106 107 **Constable Terrace** 125/126 Colman House 127 Brown House 128 Kett House
  - 129 Victory House

- 130 Paston House
- 131 Britten House
- 132 Health and Community Centre
- 133 INTO >> UEA
- 134 Biomass Energy Centre

# The Campus: Buildings



Location plan for the buildings of the University of East Anglia

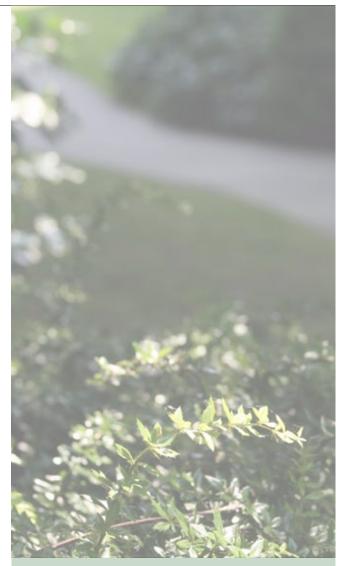


**EXECUTIVE SUMMARY** 

An assessment of the landscape, including visual and built form elements, underpins each of the strategic policies listed below. They are designed to ensure that the significance of the landscape and the architectural heritage is conserved in the context of continuing future development.

The ways of achieving these goals are defined later in this document.

Strategic Policy 1: Conserve and enhance significant vistas Strategic Policy 2: Conserve the landscape and architectural significance of UEA Strategic Policy 3: Conserve the landscape setting of University Broad Strategic Policy 4: Provide a safe and welcoming environment for all Strategic Policy 5: Encourage access to wildlife Strategic Policy 6: Protect and enhance biodiversity Strategic Policy 7: Conserve a legible hierarchy of circulation Strategic Policy 8: Management of Trees



**PART 1: STRATEGY** 

This part of the Strategy provides an insight into the UEA landscape and a framework for its future wellbeing. It is divided into three sections:

i) UNDERSTANDING: the background to the UEA Campus and the factors which have influenced the development of its landscape;

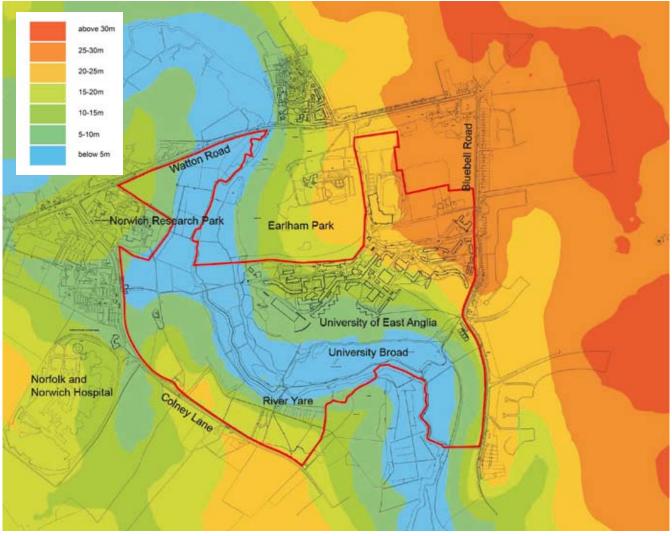
ii) ISSUES: the issues which have emerged as a result of survey and assessment work, and;

iii) STRATEGIC POLICY: a set of guidance 'directives' designed to conserve and protect the future wellbeing of the UEA landscape in the context of its continuing development. This section of the Strategy document provides a background to the UEA Campus and the factors that have influenced the development of its landscape.

The dramatic buildings of UEA owe much to their setting within a parkland landscape of the relatively deeply incised (by Norfolk standards) valley of the River Yare.

The River Yare in this intensely meandering part of its course flows in a range of directions from south-west right round to nearly north-east, with a corresponding range in the form and orientation of the valley side.

The University itself occupies the south-facing side of what is effectively a promontory jutting westwards into the river valley, with the result that it faces south. The neighbouring Earlham Park generally faces west. This creates a diversity of visual experience through moving diurnal light patterns and changing vistas, despite the relatively subtle changes in elevation.



Topographical map. Levels above Ordnance Datum range from over 30 metres (orange) to below 10 metres (blue) in 5 metre steps



Levels range from around 32 metres above Ordnance Datum (aOD) around the main car park in the north east corner of the campus, to around 9 metres aOD near the Broad. The land then rises up on the opposite side of the valley to around 25m aOD at Colney Lane to the South. To the west, as small tributary valley extends to the Norfolk and Norwich Hospital which is situated at around 12m aOD.

The diversity in the river valley results in a corresponding diversity in geology. The dominant geological formation in Norfolk is chalk, a marine deposit of the Senonian-Cretaceous age. The chalk is of a variable depth around the county, but a deep bore hole near Norwich in 1961 passed through approximately 350 metres of chalk, overlain by 4 metres of superficial deposits.

In areas where the underlying chalk is relatively close to the surface, such as Earlham Park, a calcareous soil has developed. This supports a number of characteristic chalk-loving plants. However, just 700 metres on the south side of the valley, sand and gravels predominate creating a more acidic soil and associated flora. The valley floor has a range of wetter soil types known as ground water gleys.

Exaggerated topographical model of the UEA environs

A study of historic maps was undertaken to analyse and understand the evolution of the campus landscape before the University was established. It is apparent that much of the historic landscape structure is still evident in today's landscape despite the significant changes in the latter part of the 20<sup>th</sup> Century. The Tithe Maps of the 1830s and 1840s show a more pastoral landscape than today, before the urban spread of the City of Norwich had spread much beyond the historic city walls.

Much of the existing site of the University is located within the historic estate parkland of Earlham Hall, which were much more expansive than now. Records of the Manor of Earlham go back at least to the 12<sup>th</sup> century, when it was owned by the de Heauville family who took the name of de Earlham. Most of the existing Hall dates from around 1642 when various additions to the original building were made by the Houghton family. Later it was the home of the Gurney family from 1786 to 1912, including the prison reformer Elizabeth Fry.

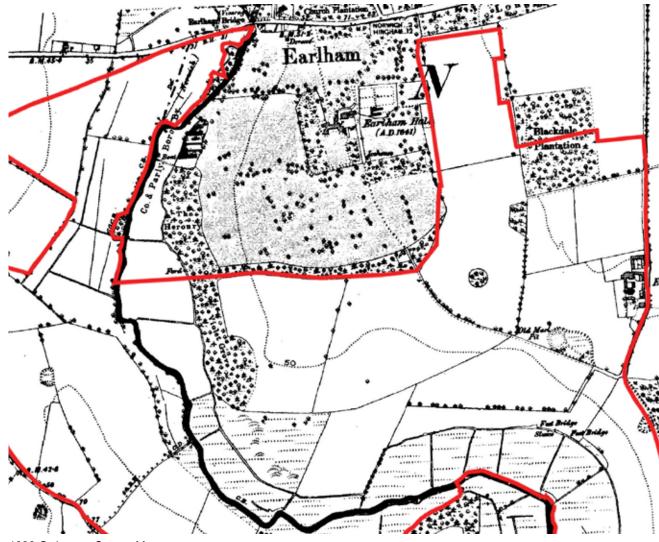
After the purchase of the Hall by Norwich Corporation in 1925 the estate became a public park and the Hall was used as a school and welfare centre. Early in the



Earlham Hall



1830 Tithe Map



1890 Ordnance Survey Map

1960's the University of East Anglia became part of the estate.

The 1830s tithe map shows the field boundaries encircling the hall, following the contours, with a few blocks of woodland around the perimeter, suggesting the landscape was laid out as parkland. Blackdale Plantation, to the west of the Hall, despite being a 'plantation, was clearly already a well-established area of semi-natural woodland by this time, which has probably been in existence for at least two hundred years.

Similarly, 'The Heronry' and 'Violet Grove', on the edge of the marshes by the river, were also already present. These are areas of the most significant woodland around the University, and include many veteran Oak trees indicating the significant area of the woodland. Although not indicated on the Tithe map, the existing individual specimen trees of the parkland are clearly of great age and it is likely that they were present in the 1830s.

Towards the end of the nineteenth century, Earlham Park had become more restricted to approximately its current boundaries, as evidenced on the 1890s Ordnance Survey maps. A new strip of plantation woodland had become established to the south of the Hall, separating it from the valley landscape. This woodland is still present as a belt of significant mature trees forming an important backdrop on the north side of the buildings of the UEA's Estates Division and the West Car Park.

Around the 1890s, the land between the river and

Colney Lane to the south appears to have been under arable cultivation, with some individual trees apparent on the field boundaries. As such, it would have allowed expansive views northwards over the river towards the opposite side of the valley.

That situation remained until at least the 1940s, when the post-war aerial photographs show that this was still a generally pastoral landscape of small to medium sized fields and strong hedgerows. Most of the individual trees shown on the early OS maps are still present, and the general landscape form remains as it was. However, to the south of the main park the municipal golf course had appeared by this time, laid out as an unemployment relief measures during the 1930s.

Compared with the current aerial views, the landscape of the 1940s had considerably fewer trees than at present, and the 'wilder' areas appeared to be more managed than at present. This reflects the reduction in the importance of the rural landscape to the economy, and the fewer people engaged in working on the land. Up until the Second World War, the marshes would have been managed for grazing or reed harvesting, but this activity has now ceased within this area and trees and willow scrub are beginning to invade from neighbouring woodland. This is clearly visible on the current satellite photograph, where this effect is particularly noticeable along the river banks and the edge of the University Broad. White and cricket-bat Willows which were young trees in the 1940s are now large mature and veteran specimens lining the riverbank.

The only area where tree cover appears to have substantially reduced is near the sports pitches off



1946 Aerial Photograph



2006/7 Aerial Photograph

Colney Lane (the 'Institute Fields'), where much of the land has been remodelled and old field boundaries removed.

The open views to the north over the valley from Colney Lane which were possible during the 1940s, have been substantially affected by extensive woodland plantation on the south-west side of the valley which was implemented during the 1980s. This has substantially altered the character of the area, transforming this part of Colney Lane from an open country lane with some expansive views to a much more confined environment with corridor views providing limited views of UEA. A great deal has already been written about the evolution of UEA (for example, 'Concrete and Skies' by Peter Dormer and Stephan Muthesius). However, it is appropriate to give a brief history in order to understand all the issues relating to the UEA Campus and its landscape.

One of Frank Thistlethwaite's first tasks when he took up the post of Vice-Chancellor of the new University of East Anglia on 1 October 1961 was to make arrangements for the University's permanent buildings.

In keeping with the spirit of the times, Thistlethwaite aimed high, seeking 'the best contemporary architecture of its time: distinguished buildings which would make a positive presence felt and provide a sense of place and an aesthetic experience for generations of students' (Thistlethwaite, 2000).

Over a period of months in the summer of 1962 the UEA architectural project team in Lasdun's office drew and redrew the site with different ideas for the University masterplan. Their ideas were strongly influenced by the topography of the site, with the buildings being concentrated on the higher ground towards the north boundary. In the first design studies the central group of buildings was located towards the west of this builtup zone, looking down the steep hillside to the bend in the River Yare, with the remaining accommodation extending towards the east. Denys Lasdun himself saw the opportunity for moving the main focus to a central position, with east and west patterns of growth divided by a 'harbour'. This was the generating idea that led to the masterplan. Lasdun greatly admired the Greek theatre Epidauros, with its architectural forms layered into the

slope of the landscape. The integration of building and landscape is evident at UEA where the "buildings are conceived as architectural hills and valleys, from the air they are like an outcrop of stone." It was important that the buildings should appear to 'cascade' down the slope, with the buildings dispersed around a sequence of central spaces cascading down the slope and leading to a large re-entrant rough grass area, a 'land-locked harbour'.

Lasdun's vision had clear parallels with an eighteenth century landscaped park, like those designed by Capability Brown, where an architectural centrepiece is set in a seemingly natural and limitless landscape. Boundaries and signs of the outside world are hidden.



Lasdun and Colvin



Theatre of Epidauros - one of Lasdun's inspirations for the UEA buildings

The landscape is configured to create a variety of eventful and picturesque views, in which water frequently plays a crucial role. Lasdun was conscious that the University Plain was 'an exceptionally fine landscape of which the University is custodian', and appreciated that a specialist Landscape Architect was required, and thus in early 1966, called in Brenda Colvin (Past President of the Institute of Landscape Architects, now the Landscape Institute).

Brenda Colvin was one of the pioneers of the modern landscape profession in Britain and a founder member of Institute of Landscape Architects, now the Landscape Institute. In 1957 she became the first woman to be president of any of the design professions.

Colvin's report of December 1967 brought together

### **UNDERSTANDING: COLVIN AND LASDUN'S VISION**

her advice about the landscape of University Plain. Colvin was heavily involved in the design for modelling the landscape to help the new buildings blend into the landscape. She was under no illusion about the human role in creating landscape:

> The English landscape is very largely a man made work of art, but I doubt if the general public realise that its quality depends on constant care ... our generation benefits from their [earlier landowners] forethought and generosity. We accept the privileges, too often with little thought of the related responsibilities to the future ... I feel that any landowner, more especially a University has the responsibilities of ensuring the future, the benefits, inherited from the past.

She was therefore cautionary, but generally positive, about building a new University on the attractive Yare valley site:

"...Introducing massive architectural elements and a vastly increased community creates a new landscape. While it is hoped to preserve much of the character of the existing valley scenery, the requirements for access, circulation and traffic flow, recreation ... involve overwhelming changes which if accepted, foreseen and correctly planned in advance will enrich the landscape."

She also conceded that 'The spaces between the buildings, and the confined area to their north will present a completely new urban scene in contrast with the valley and river.'



Colvin's Landscape Proposals Plan - 1967

On the wider landscape setting, Colvin suggested retaining the marsh by the river for biological interest, with occasional winter cutting of reeds to preserve its character. As such, she was a pioneer of the need to incorporate biodiversity into new development.

She also envisaged a new Broad fed from the river. To absorb change and maintain the landscape character, Colvin proposed the following key points:

- existing housing/buildings overlooking the site should be screened
- space between buildings requires carefully detailed hard landscape
- the grassy slope between the buildings and river to be dotted with tree and shrub groups, but avoiding colour in flowers
- climbing shrubs on wall surfaces and ground cover on banks.

She argued that 'The tendency towards suburban character ... should be resisted, the broad park-like landscape should be emphasised throughout.'

A key element of Colvin's early landscape designs was an artificial lake at the south-eastern edge of the campus, with Lasdun's ziggurats flowing down the valley side to meet the lake, or rather appear as though they were rising up from the water's edge. Her original plans (shown on the previous page) clearly illustrate a whole series of ziggurats to the east and west of the existing ones with landscaped open space between each tier of buildings. With the proposed broad intended at the eastern part of the site, Colvin's vision for the area to the south of the main building complex was for a parkland of rough grass and plantations flowing down to the river, with areas of marsh land to east and west. Across the river to the west, she shows large areas of sports pitches, extending considerably further than their current extent. The proposals also included a stadium, athletics tracks and associated car parking just off Colney Lane which never materialised.

Landscape construction and planting started in 1968, after approval of Colvin's landscape report by the University. Colvin took the opportunity of this approval to contact the Vice-Chancellor, Frank Thistlethwaite, with whom she became a personal friend, staying with him when making site visits. Together they tried to increase investment in the landscape.

Regrettably, funding issues meant that the second phase of ziggurats was never commenced, and a selffunded landscape design-led lake was not feasible. Instead, University Broad was created further to the west between 1973 and 1978 through a gravel extraction contract. Although University Broad does not follow the earliest design principles, it still became a significant element in the character of the Campus.

Only stage 1 of Lasdun's Development Plan was completed, and Lasdun's involvement ceased soon after the completion of the first phases. In January 1969 Bernard Fielden of Fielden and Mawson was appointed consultant architect to the University. Colvin remained appointed and although the design and layout changed, she later considered that the overall philosophy of her design was adhered to. After 1970 Colvin and Moggridge's role was gradually reduced (Fielden and Mawson employing their own landscape Architect, Rosamunde Reich). By the end of 1971 the practice felt excluded from key strategic landscape considerations and disappointed by the meagre investment in landscape and in 1972 resigned the commission.

Nevertheless, the primary objective was achieved: a compact and dramatic mass of buildings on the hillside above the Yare, apparently set in open countryside.

### The Conservation Development Strategy

The future success, in relation to the Landscape Strategy, of UEA relies on continuing growth in academic activities and student numbers, and this in turn relies on constant adaptation and expansion of the University's buildings, combined with recognition of the need to remain sympathetic to the architectural and landscape significance of its buildings and site. Indeed, a recent survey (2004) demonstrates the value the University community puts upon the campus.

In 2006, the University in conjunction with Cambridge Architectural Research Limited, published its Conservation Development Strategy (hereafter referred to as the CDS) in order to identify ways of developing the estate which will maintain its significance. This

CAMBRIDGE ARCHITECTURAL RESEARCH ETD

### CONSERVATION DEVELOPMENT STRATEGY FOR THE UNIVERSITY OF EAST ANGLIA



ISSUE 1 April 2006 (112): 42

Cambridge Architectural Research 132 25 Geophr Street 46 Cambridge CB1 21G tel 01223 460475 fas 01223 464142 infe@cambrid.com www.cambrid.com was based on a thorough assessment of the existing buildings and has many aspects including:

- retaining the character and quality of the significant architectural and landscape elements;
- considering adaptations and compatible new elements which will make the University more effective in its fundamental purpose;
- identifying opportunities for growth and change;
- identifying elements which adversely affect the University and which are in need of modification or removal;
- providing an approach to maintenance and the replacement of deteriorated elements;
- drawing attention to the need for co-ordination and continuity of conservation decisions.

The CDS sets out principles and policies for the care of the University estate, and identifies opportunities for development, but does not present fully workedout plans for refurbishment or new development. Any proposed action should be developed and evaluated with reference to this Strategy.

The CDS covers conservation issues in relation to the Listed Building status, but accepts that conservation is only one factor that must be taken into account when the University is planning or carrying out work to the estate; other factors would include academic priorities, funding, traffic, environmental impact, etc, within the University's over-arching Corporate Plan. The CDS, therefore, does not constitute an overall development plan for the University, but provides guidance on how it should be approached.

The CDS identifies opportunities for change at UEA, and in this respect it is more ambitious than a typical conservation plan. A conservation plan restricts itself to reviewing the present situation, and is then referred to when proposals for change are brought forward as a separate exercise. The Landscape Strategy fulfils a similar role, but by recognising opportunities for change it mitigates the uncertainty faced by UEA due to the significance of its landscape. It is important to note that the Landscape Strategy gathers together principles of good practice. The proposals are not all novel and many are already part of current practice at UEA. In these cases the Landscape Strategy aims to reinforce the present situation and ensure it continues in a recognisable framework.

It is most important that the Landscape Strategy should be a practical guide for action. It reflects a range of present-day informed opinion on conservation-related issues at UEA and, subject to resource and timescale constraints, its proposals are practical and realisable.

The CDS undertook a broad assessment of the landscape setting of the campus, but at a relatively high over arching level. It addressed just three main landscape character areas:

- Landscape between the Yare and the UEA buildings
- Landscape in developed area of campus
- South and west of the River Yare

It is important to note that these three areas underpin and characterise the Colvin vision for the landscape at UEA - the seamless transition from urban to parkland to rural.

A key point made in the CDS is that there has never been an effective landscape response to the Broad and ongoing building construction work at UEA. Lasdun's vision of a parkland landscape in the Yare valley is still valid, but, as Colvin pointed out, the vision can only be sustained by creative intervention in the landscape.

### It further notes that

"since Colvin left in 1972 there has not been a single, coherent document or plan which sets out the landscape vision and practical ways of implementing it....Without such a vision there is a risk of progressive degradation of the inherited landscape, and the loss of landscape opportunities. The landscape is not static: if nothing is done it will degenerate. The challenge is to accept the need for change and ensure that it is change for the better."

The Landscape Strategy addresses the requirement for a single coherent thesis setting out the landscape vision and practical ways of conserving, protecting and implementing it.



Plan indicating the landscape character areas in the Conservation Development Strategy. Orange: Landscape between the River Yare and UEA buildings, Red: Landscape in developed area of campus, Yellow: South and West of River Yare. © Google

# UNDERSTANDING: DEVELOPMENT STRATEGY PLAN



Estate Development Strategy Plan



### Grey: Existing buildings



Pale Blue: Proposed buildings with planning permission

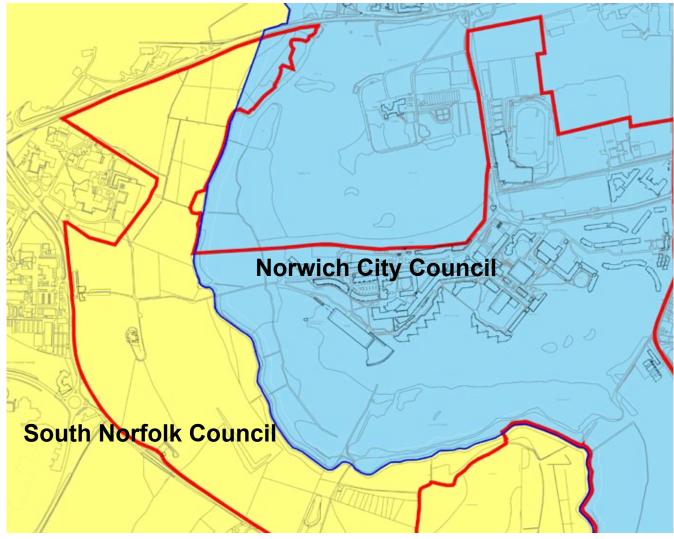


Dark Blue: Aspirational buildings



Khaki: Landscape and Masterplanned development Areas

# UNDERSTANDING: LANDSCAPE PLANNING POLICY



Plan indicating the District Council boundaries

# Landscape Character and Planning Policy Designations

The University Campus is situated within two District Councils, South Norfolk and Norwich City, the boundaries of which are defined by the River Yare, with implications in terms of planning policies.

South Norfolk District Council has undertaken a Landscape Character Assessment to provide a clear understanding of the character of the landscape within the Rural Policy Area. It describes the distinctive features or characteristics that are important to the landscape and provides guidance on those aspects of the landscape that are most sensitive to change.

Whilst only part of the UEA campus lies within South Norfolk, the assessment provides a useful broad appraisal of the overall landscape characteristics.

The assessment demonstrates that the land to the south of the river (and, presumably, some of the land to the north of the river if it had been included in the study) lies within the area noted as the 'Yare Valley Urban Fringe'. Key characteristics of this character area include:

- distinctive broad meandering valley form with broad flat flood plain and enclosing valley sides opening up where joined by tributary valleys;
- large river flanked by characteristic wetland vegetation often with well-wooded valley sides;
- presence of gravel workings and remnant flooded gravel workings on the valley floor;

- visibility of Norwich urban fringe along parts of the upper valley sides;
- visibility of large institutional buildings within or adjacent to valley, such as the University of East Anglia.

The assessment notes the special qualities of valley landscape of the river, and that the area is heavily influenced by the urban influence of Norwich, particularly the areas of suburban settlement and the University itself. It notes that the characteristics of particular importance are the distinctive valley form, the waterways visible within the landscape, the wooded appearance, and the important views which provide a sense of place. In addition, the value of this land is noted as forming a significant strategic break, separating the built-up area of Norwich from its rural hinterland.

It is recognised that this character area is particularly vulnerable to change due to its location at the periphery of East Anglia's premier city. Indeed, that change is evident all round the University - typically at Cringleford and the Norwich Research Park - to the extent that the campus may become something of a 'green' oasis. Despite these changes around the campus, it is not a Conservation Area. Neither are there naming policies in place to change its status. Instead, this Landscape Strategy will provide the protection, maintaining the quality and character of the campus in the context of the University's Listed Buildings and the continuing development of the University. Eventually, via a Development Framework Strategy, it will inform planning policy in the pending Local Development Framework. South Norfolk's proposed strategy for this area is to maintain an open and distinctive boundary to the City,

to provide a 'green buffer' between the city and its rural hinterland. Open views within the valley and, where possible, from the valley should be protected.

Norwich City Council similarly highlights the importance of the landscape of the river valleys. It notes that these river corridors help to link a continuous network of open spaces that contain and reach into the urban area. They offer many benefits; acting as a visual amenity and recreational resource for residents, providing valuable natural habitats, a floodplain to alleviate potential flooding in the developed area and a pollution filter. They are, therefore, one of the most significant natural environmental features in the setting and character of Norwich.

For these reasons the City Council considers that it is vital that these important 'green lungs' within and around the City are protected for their own sake. In co-operation with adjoining Districts, and part funded by public and government agencies, the City Council has prepared a Norwich River Valleys Strategy and will prepare associated supplementary planning guidance to provide consistency and co-ordination in the management and enhancement of this important resource. Any development proposed within or adjoining the river valleys and which may alter their character or environmental quality, including those set out in policy NE1, will need to be accompanied by an environmental impact assessment of the consequences of the scheme and the mitigating measures that make the proposal acceptable.

A full list of the relevant Local Plan Policies is included in the appendix.

### **Green Infrastructure**

In 2008, Natural England and the Forestry Commission published 'Green Infrastructure Strategies' to raise awareness amongst local authorities and their partners.

The report defines 'Green infrastructure' as the network of green spaces and natural elements that intersperse and connect our cities, towns and villages. It is the open spaces, waterways, gardens, woodlands, green corridors, wildlife habitats, street trees, natural heritage and open countryside. Green infrastructure provides multiple benefits for the economy, the environment and people.

Individual spaces may have many functions such as:

- providing recreational space for healthy exercise and a relatively tranquil environment;
- providing a place for wildlife to live;
- contributing an attractive green element to the image of an area;
- raising the quality of people's every day living and working environments;
- providing flood storage space in times of flood;
- providing a transport corridor for walkers and cyclists;
- helping areas cope with the impacts of climate change; or
- providing areas for local food production.

By almost all of these standards, the UEA Campus qualifies as 'green infrastructure'. The Landscape Strategy is designed to help protect and enhance its significance

### Norwich Green Infrastructure Strategy (2007)

The University Campus lies within the study area of the Norwich Green Infrastructure Strategy, which was commissioned by the Greater Norwich Development Partnership, the body responsible for planning and coordinating sustainable growth and related infrastructure in and around Norwich. It is intended that the emerging UEA Landscape Strategy will complement the Green Infrastructure Strategy.

At the heart of the Green Infrastructure Concept is the provision of 'multi-functional green infrastructure' that can meet a wide range of social, economic and environmental needs. For example, a green space can function as a public open space, water retention/storage facility and wildlife corridor.

The proposed **vision** for Green Infrastructure is to create a multi-functional network of green spaces and green links, providing an environmental life support system for communities and wildlife in the Greater Norwich Area. This network is intended to:

- Be high quality, biodiverse and accessible
- Be widely valued by local residents, businesses and visitors
- Inspire local communities to adopt low carbon and healthy lifestyles

- Connect Norwich, other settlements and the countryside via green corridors and along rivers
- Provide opportunities for sustainable access, enjoyment and appreciation of greenspaces
- Connect a diverse range of habitats and provide corridors for wildlife
- Be a long-term framework for sustainable development
- Protect the natural and historic environment
- Enhance the distinctive qualities that give the Greater Norwich Area its special character
- Be delivered, protected and managed through the commitment and involvement of the public, private and voluntary sectors working in partnership.

Some of the main **benefits** of investing in a well-planned and managed Green Infrastructure Network for Greater Norwich include:

- Providing more accessible green space near where people live
- Better health and well-being
- Greater opportunities to access, enjoy and understand our heritage
- Sustaining and enhancing landscapes and local distinctiveness
- Making more space for wildlife and linking habitats

# UNDERSTANDING: LANDSCAPE PLANNING POLICY

- Reducing flood risk and better air and water quality
- Improving employment and educational opportunities

The Norwich Green Infrastructure Strategy recommends that these **benefits can be secured by investment** in multi-functional strategic corridors and other locations defined by the proposed **Green Infrastructure Network**:

**Sub-Regional Green Infrastructure Corridors** - comprising a mosaic of land uses, natural and built heritage resources and settlements, the Sub-Regional Corridors are intended to become fully multi-functional zones with the ability or potential to deliver a wide range of functions.

The valley of the River Yare where it passes UEA is within one of these corridors, and is also defined as an 'Existing Core Area' of high wildlife value and Priority Wetland Habitat Enhancement and Creation Area.

**Local Green Infrastructure Corridors** - these provide access from the doorstep to the wider countryside, and are essential in delivering Green Infrastructure functions at the local level.

**Norwich Urban Green Grid** - the Green Grid comprises a network of urban green and blue spaces and links, designed and managed to provide a range of functions for the City.

### Green Infrastructure in the wider Countryside

- in the wider countryside, Green Infrastructure investment priorities include:

- conservation and enhancement of landscape, townscape and riverscape character
- enhanced management, accessibility and interpretation of heritage and geodiversity sites
- enhancement, linkage and creation of farmland wildlife habitats
- enhanced connectivity of local rights of way with strategic access routes and greenspaces

The Vision of the Green Infrastructure Strategy is supported by six core green infrastructure planning and management principles:

- Safeguard and protect valuable green infrastructure resources;
- Integrate green infrastructure into development schemes and existing developments;
- Secure new and enhanced green infrastructure before development proceeds where there is a clear need for provision;
- Enhance green infrastructure where of low quality, in decline or requiring investment to realise its potential to meet future demands;

- Mitigate potential adverse effects of development, new land uses and climate change;
- Create new green infrastructure where there is an identified deficit, or growth is planned and
- additional provision or compensatory measures where needed.

The Green Infrastructure Strategy is intended to be used to identify potential projects for implementation, and the University lies within areas which would be eligible for funding under the criteria. The proposed criteria for selecting projects to go forward for green infrastructure funding are based on identifying the level of potential multi-functional public and environmental benefits that would be delivered.

# SUMMARY: UNDERSTANDING

The assessment has identified the factors that have shaped, and continue to shape, the development of the landscape at UEA. They include:

- Diversity of topography and landscape features;
- Historical landscape and sociological interest;
- Ongoing prestigious development of the University since the 1960s; 40 years of diverse development reflecting changing trends in design and architecture;
- Constantly changing planning and development policy framework at national and local level.

The following section defines the Issues currently affecting the UEA landscape. They are dealt with as Observations and Recommendations.

**ISSUES** 

**PART 1: ISSUES** 

This part of the strategy document addresses the Issues which have arisen out of the ongoing survey and assessment work, and which have helped to formulate the policies (through the Observations and Recommendations) that will support the sustainable future development of the UEA Campus.

The University Campus is a well-used and justifiably popular area of varied open space.

The combination of raised walkways, incidental sculpture and tall modernist concrete blocks result in elements of surprise and delight. New vistas open up between the blocks as one traverses different parts of the campus. Despite the density and mass of the building development, the overriding impression is of a mature parkland campus, with expansive views and blocks of mature trees framing views and softening the hard concrete. Indeed, a vision of 'Concrete and Open Skies'.

It is this combination of hard, Brutalist concrete enclosure juxtaposed with regular views framed by trees or buildings toward a mature landscape which makes the University Campus unique and special. It is justifiably an area valued by the University community, visitors and local people.



UEA in morning mist © Roger Humphrey 2008

# **ISSUES: POST COLVIN AND LASDUN - LOSS OF SIGNIFICANCE?**



Aerial view over the Campus, looking west, 2007

In many ways the original romantic vision for the UEA Campus, 'virtually an outcrop of stone on the side of a hill leading down to a river' (Lasdun 1966), remains despite a range of subsequent development which has resulted in a divergence from Lasdun and Colvin's original vision. Subsequent and intense development has remained largely loyal to this original concept - even if the architectural form and language has moved on. The University has become the modern version of the English Country Home, with substantial buildings set within a parkland landscape sweeping down to large ornamental lake.

The buildings can also be seen as forming a modern interpretation of the romantic 'hillside village', emphasising the landform and creating significance in



John Sell Cotman, The Norwich School, Dinant

what might otherwise have been an undistinguished and indifferent landscape setting. The effect is illustrated by some of the painters of the 'Norwich School' during the Nineteenth Century, such as John Sell Cotman, reproduced here. This juxtaposition of buildings and landscape has been handled exceptionally well at UEA. Indeed the significance of the area is in large part due to the setting created by the University buildings.

Nevertheless, a significant element of Colvin and Lasdun's vision has not materialised. This is the meadow to the south-east of Suffolk Terrace, Suffolk Walk and the Music Centre. Lasdun's Development Plan Draft II of 1963 proposed well-spaced tiers of ziggurats in this area, which were never built. They were also part of Colvin's landscape plan. As a consequence the full drama of the composition remains frustratingly unfulfilled.

Without the intended eastern extension of Suffolk Terrace the developments in the north-east part of the Campus are visible from the Yare: Nelson Court (1991-93), Colman House (2003-04). This detached view of distant buildings conflicts with Lasdun and Colvin's fundamental landscape principle, which envisaged a sharp contrast between a compact group of buildings and the open Yare landscape. The boundary between buildings and open space was to be formed by a sinuous line of ziggurats, seen in all versions of the Development Plan. The line of ziggurats began at the new lake towards the east of the site and, following the curve of the River Yare, gradually rose towards the north-west. Only part of this boundary was built, and there is now no question of adding more ziggurats. In many ways, therefore, Colvin's fears of 'unforeseeable types of growth... within which many different units will be developed' have become a reality, with many different spaces and styles of architecture now present. Nevertheless, the landscape remains as a structuring element which holds the architectural form together. It is vital that the simplicity of the built form is not jeopardized by over-detailed and fussy planting. PART 1: ISSUES

#### RECOMMENDATIONS

The crucial consideration is therefore the potential impact of development, with the predicted expansion of the University, to the east of Suffolk Terrace on the architectural and landscape significance of the campus. An appropriate form of new development in place of the unbuilt eastern ziggurats offers the prospect of enhancing significance, by recovering Lasdun and Colvin's landscape vision. The Sainsbury Centre demonstrates that the original vision of expressive buildings looking onto open landscape can reinterpret the Lasdun panorama successfully in new ways. Exciting though the prospect is of completing the vision, it must be approached with great care - and only with a coherent development plan for new buildings of the highest quality set in an appropriate landscape contiguous with the existing - if detracting from the Lasdun buildings that are now listed and dilution of the landscape significance is to be avoided.

# **ISSUES: THE BROAD**



View from the west end of the Broad

University Broad was key to both Lasdun and Colvin's vision for the campus, and remains an integral part of the landscape. Lasdun saw the eastern line of ziggurats touching and rising away from the body of water. The conjunction of buildings and water would have provided a visual closure to the eastern end of the Yare valley landscape, at the fringe of the suburban development of Norwich.

Despite the fact that for various reasons University Broad was not constructed in precisely its intended location, it is a key element of the landscape, and provides a focus for the UEA buildings on the valley side. Early photographs of the Campus, particularly after the opening of the Sainsbury Centre in 1978, show the parkland sweeping down to the water's edge with University Broad becoming an extension to the parkland. Since this time, woody and reedy vegetation has developed or been planted along the edge of University Broad. Views of the water are becoming severely reduced.

Whilst some of this is an inevitable product of habitat succession, and provides a welcome habitat for a variety of species, the Broad is becoming visually separated from the parkland by the dense vegetation. Furthermore, it is resulting in a reduction of habitat for more specialized species such as Common Terns and Little Ringed Plovers, which require more open and gravelly beaches on which to breed.

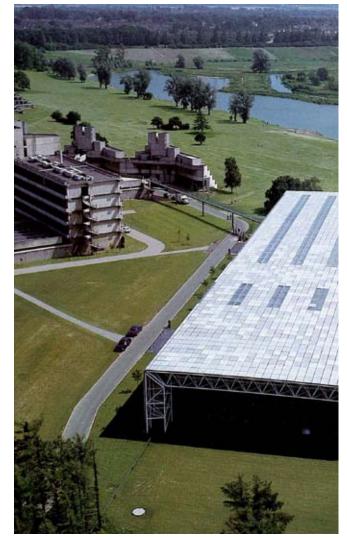
### RECOMMENDATIONS

It is recommended that a phased programme of vegetation management to the water's edge is implemented, primarily along the northern edge of the Broad but also along parts of the southern side to restore views towards the University for users of the riverside footpath.

Recovery of this important relationship will require the relocation of some of the fishing platforms away from the central 'core' edge of the Broad, and these proposals should be prepared in consultation with the UEA Staff Association Angling Club, which plays a valuable role managing the use of the broad for angling. An additional issue is the use of private cars by anglers, which creates visual intrusion and disturbance into the landscape. Whilst it is entirely appropriate to allow vehicle access for disabled anglers, consideration should be made to locate the cars more discretely into the landscape.

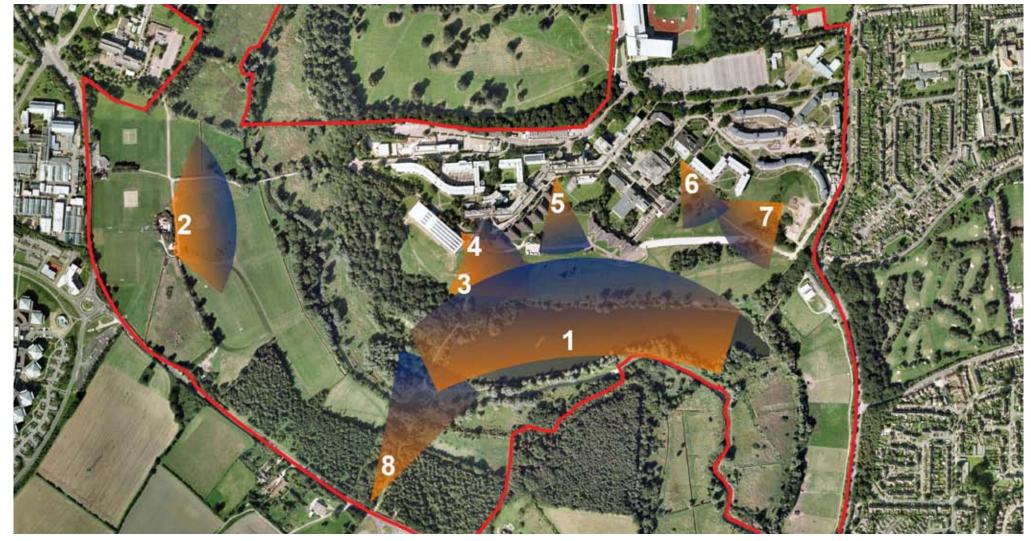


University Broad is very popular with anglers



Late-1970s photograph of the Sainsbury Centre and the University Broad, before the bankside vegetation began to become established (from 'Concrete and Open Skies')

**ISSUES: VISTAS** 



Location of Key Vistas

A unique combination of topography, landscape features and built form has created a variety of views and spatial quality throughout the campus. The result is that there are a number of outstanding vistas that interplay with one another within the campus.

The views north from the River Yare are fundamental to understanding the importance and significance that Lasdun brought to and bestowed on this part of the Yare valley - it is what makes it unique amongst the beautiful river valleys in England and why the panorama should be completed.

### RECOMMENDATIONS

All future development and landscape management must respect the significance of these vistas.

There is scope for the re-creation of views northwards from Colney Lane across the valley which have been lost due to the establishment of plantation woodland during the 1970s and 80s.

An opportunity exists to complete the vista and deliver the significance to the valley that Lasdun had planned from the outset.















1. The view north-east from the west end of the UEA Broad. This is just one of the views north towards the University from the river valley which encapsulate Lasdun's vision.

2. The view east towards the University from the ridge near Lusty Hills

3. The view east from the west end of the parkland, south of the Sainsbury Centre

4. The view south-east from the Sainsbury Centre, looking towards the Broad

5. The view south towards the Broad from the elevated position of the South Walk

6. The view south towards the Broad from near the Drama Studio

7. The view south and west from the elevated position of 'The Prospect'



Vista 1:The view north-east from the Western end of University Broad



Vista 2: The view east towards the University from the ridge near Lusty Hills

44

# **ISSUES: VISTAS**



Vista 3: View east from the Western end of the parkland



Vista 4:. The view south-east from the Sainsbury Centre, looking towards the Broad

### **ISSUES: VISTAS**



Vista 5: The view south towards the Broad from the elevated position of the South Walk



Vista 6: View from the Drama Studio south towards The Broad



Vista 7: View west from The Prospect



Potential vista 8: Views north across the valley from Colney Lane towards the University

University of East Anglia Landscape Strategy

### **ISSUES: THE HAY MEADOWS**

### **OBSERVATIONS**

The hay meadows between the University buildings and the edge of the Broad provide a range of functions including simple open space for informal recreation, a setting for the 'palette' for the vistas to the University buildings, providing a valuable grassland habitat, and providing the landscape link between the Broad and the University buildings.

Currently the meadows appear to be managed in a relatively unplanned way, and cuttings are left to compost in-situ. This is not only somewhat unsightly through the decaying patches of grass cuttings, but it also reduces the biodiversity value and visual interest through a loss of plant species. A more sensitive management regime would encourage a greater range of wildflowers which in turn would attract a wider range of insects and other wildlife.

#### RECOMMENDATIONS

It is entirely appropriate that those parts of the meadows close to the buildings and alongside footpaths are maintained as close-cropped formal grass, and mown on a weekly basis throughout the growing season. Away from the buildings and footpaths, a more infrequent mowing regime is more appropriate - to create a longer grass sward and encourage to growth of wildflowers. The mowing of these areas needs to be carefully timed, and the cuttings be removed to prevent the build-up of fertility and, as a consequence, reduction in diversity. It is therefore recommended that areas are selected to provide a variety of seasonal meadow habitats. Some areas can be left uncut each year and this can be extended into a long-term project, monitoring the diversity of the flora and fauna in a series of experimental plots. For example plots could be cut every year, every other year, never, or have various heights of grass within a plot.

Paths can be regularly mown through the meadows, along the existing routes, weekly or as necessary during the growing season. Such differential mowing creates visual interest and adds a three-dimensional element to an otherwise flat feature.

Discreet signage would assist in increasing awareness and understanding of the management intentions of the grassland.



The mature trees within the campus are an essential element in framing views and adding stature and maturity to the landscape.

In the past, opportunistic Tree Protection Orders (TPOs) have been served on some trees, offering formal protection for a small number of trees. Those TPOs which are in force are out-of-date, often covering trees of relatively little landscape significance, and have been overtaken by planning permission for new development, which has overridden TPO designation and resulted in the loss of some trees and the planting of others.

Indeed the most significant trees in landscape terms are not even afforded any formal protection. However, the lack of formal protection reflects the fact that the Estates Divisions takes great care in its arboricultural husbandry and understands the importance of their protection.

Despite the importance which the Estates Division gives to its trees, a full arboricultural assessment has not yet been undertaken. A partial assessment was undertaken during the 1990s and survey work has been undertaken in connection with new development projects, although much of the estate remains to be surveyed and there is no formal mechanism in place to review and monitor the protection and condition of the trees.

Those trees, and groups of trees, considered to be of most significance are listed below:



Above: The Spanish Copse now

Below: The Spanish Copse (91) and Blackdale Plantation (97) on the 19th century Tithe Map



### Spanish Copse

This is particularly interesting group of trees from an historical, as well as landscape and visual, perspective. It is a group of mature English Oaks (Quercus robur) and Sweet Chestnut (Castanea sativa), with a grassy understorey and a scattering of other trees such as Silver Birch (Betula pendula). Analysis of the historical maps and aerial photographs show that it was present as a small circular copse even on the Tithe Maps, indicating that it was already an established feature at that time. This is an outstanding remnant feature of local historic significance, and deserves greater recognition.

### **Blackdale Plantation**

Like the Spanish Copse, this is a feature of some historic and landscape interest. It was already present in the 1830s, and although probably not technically 'ancient



View south towards the 'Harbour' Pines

**ISSUES: TREES** 

woodland' (particularly with the word 'plantation' in the name) it is a feature of some significant wildlife and biodiversity interest. Part of the plantation is now under the ownership of the University, and there is an opportunity to enhance its biodiversity through sensitive management.

### 'Harbour' Pines

These pines form a remnant of the municipal golf course which was created during the 1930s, and form



Turkish Hazel Avenue

a particularly important function in framing the view towards the ziggurats when seen from University Broad, as well as adding interest for outward views from the University buildings.

### **Chancellor's Drive**

Chancellor's Drive has seen a significant amount of development over the past ten years, and is programmed to continue. One landscape theme which has been developed is the line of Turkish Hazel (Corylus colurna) on the north side of the road, which is now developing into a particularly striking and unifying element to the built environment. This theme is continuing in further development toward Bluebell Road The integrity of this feature should be protected and encouraged, notwithstanding the requirement to thin the trees to allow them to develop to their optimum size.

### **Cow Drive/The Heronry**

Cow Drive is a surfaced path and cycleway extending from Bluebell Road to University Drive. The trees along Cow Drive help to form a continuous green link connecting Blackdale Plantation with The Heronry and the marshes to the west. Although the east limb of The Heronry is a significant belt of mature trees, and protected by a TPO, it was not shown at all in the 1830s Tithe Maps, and is therefore of 19<sup>th</sup> Century origin. There has been some debate about the history of Cow Drive, given that its name suggests an ancient landscape feature. However, it does not appear at all on the tithe maps, as might be expected. It simply appears in the 1888 Ordnance Survey maps as a farm track running from Bluebell Road to the end of Blackdale Plantation and, importantly, no further. Its creation as a road from the Blackdale Plantation to Bluebell Road is therefore a recent development.

### RECOMMENDATIONS

Generally, the tree cover throughout the estate has increased over the past 100 years, and the detailed assessment in Part 2 of this document notes that it is considered appropriate to remove selected groups and specimens to enhance views which are becoming lost. It is also recommended that a programme of tree inspection is undertaken, particularly of the specimen trees in the immediate vicinity of the buildings themselves.



Cow Drive

The juxtaposition of the buildings throughout the campus creates a dynamic network of spaces and vistas.

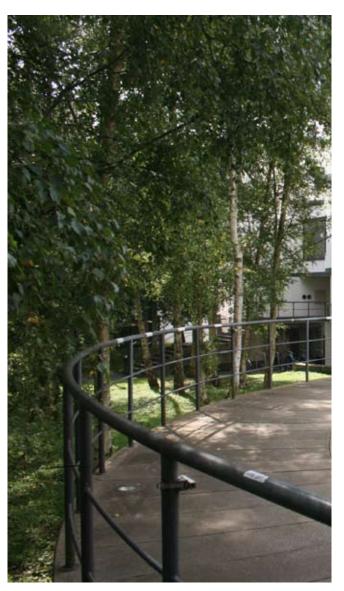
Within the more developed parts of the Campus the character is of a series of 'open-air rooms', each one with its own character. They vary from an almost wooded character (Queen's Building - buildings 9 and 10) to a hard urban character (parking area behind Constable Terrace - building 107).

These two areas perform very different functions in that the former is an area solely for pedestrians and with a high landscape quality, whilst the latter is primarily cardominated and has several detracting features which are detailed in Part 3 of this document.

The design of public space has a direct impact on user's perceptions of safety and their willingness to use a space. The physical characteristics which users associate with high-risk environments include:

- Poor lighting
- Confusing layout
- Physical and aural isolation
- Poor visibility

Right: The Queen's Building Below: Elizabeth Fry / Constable Terrace Courtyard





- No access to help
- Areas of concealment
- Poor maintenance
- Vandalism
- Presence of "undesirables"

Generally the campus provides a safe environment based on what is generally considered to be good design:

- it meets the needs of its users;
- it is diverse and interesting;
- it connects people with place;
- and it provides people with a positive image and experience.

Whilst good design will not necessarily eliminate perceptions of fear or opportunities for crime to occur, it can create conditions for effective control.

Visibility is an important factor in enhancing users' feelings of comfort and security. Perceptions of safety increase markedly if people can see ahead and around them, and if other people are visible. Clear sightlines allow users the ability to verify the presence of persons which they might find threatening.

### RECOMMENDATIONS

The presence of shrubbery, fences, walls, sharp corners, storage sheds or buildings can hinder visibility and thus reduce perceived and actual safety. The degree of visibility that is appropriate has to be evaluated on the basis of the scale, function, context and user group of the space.

In smaller and more intimate areas people usually feel more comfortable if a considerable degree of openness is provided. In larger, more expansive parkland, clear sightlines along the frequently used pedestrian routes, between activity areas and along park edges are also important.

Where desire lines have developed through unforeseen pedestrian activity, this not only creates an eyesore, but is also an indication that the design of existing walkways is not tuned to the needs of pedestrians. A review of all paths should therefore be carried out.

Any rationalisation of the surfacing and spaces will need to take into account potential use by skateboarders, with measures introduced to ensure that the safety of pedestrians or the overall peace and tranquility is not compromised.

Legibility refers to the clarity of the environment. It has been described as the degree to which a space is understandable; the ease with which its parts can be recognized and organized into a coherent pattern (Lynch, 1960).

When a space is legible, users are able to form clear, accurate images of it. An ability to find one's way with ease, contributes to a sense of security and comfort. Conversely, feelings of being unsafe increase as chances for getting oriented are reduced or if familiar landmarks or points of reference are absent. Legibility is also vital for efficient pedestrian circulation as legible pathways convey a sense of easy access, of clear direction and of well-defined boundaries.

The assessment has determined, through the broad landscape survey and through informal discussion with users of the campus, that the University does suffer from a poor sense of legibility using the criteria outlined above.

There is little sense of arrival from any direction, with no immediate impression of landmark buildings, and new visitors are easily confused. Signage is over complex and cluttered, and orientation is difficult. There is also considerable evidence of erosion of soft landscape areas through the establishment of desire lines, and needs to be addressed, either by installing new paving in these areas or by encouraging pedestrians to use existing routes through sensitive and innovative design solutions.



Generally, there is a lack of coherence in signage throughout the campus. Whilst there is some unity of signs, and some examples of good design, within parts of the built-up areas there is also a wide range of discordant signage. In some locations, such as beside the Broad, there are some particularly obtrusive and insensitive signs which may not be essential.

Beyond the close confines of the buildings footprint, there is a similar lack of legibility in the footpath circulation across the wider campus. There is a particular intensity of activity around the Broad and along the River Yare, by nearby residents and anglers as well as by UEA residents. This intensity of use is likely to increase considerably as the student population grows and new residents of substantial new development near the University (particularly near Roundhouse Park at Cringleford) use the area for general informal recreation.

This increased and unrestrained usage of the grounds is expected to have detrimental effects, including:

- Reduced breeding success of nesting birds (particularly ground-nesting species) through disturbance by walkers and dogs;
- Loss of plant diversity through general habitat damage
- Erosion of footpaths through trampling;
- Riverbank damage and erosion;
- Increased dog fouling
- Increased litter

- Increased vandalism
- Increased risk to personal security due to antisocial behaviour, particularly at night

Deterioration from these factors is already causing some concern. Anecdotal and evidence based data from ongoing habitat surveys demonstrate that groundnesting birds have been particularly heavily affected through disturbance by dogs. Areas particularly affected by this type of disturbance are the 'Butterfly Meadow' and Violet Grove, where the understorey has become eroded which allows free access throughout all parts of the woodland for people and dogs.

Below: Erosion caused by the trampling on a desire line



Some areas, however, still have a relatively dense thickets of shrubs, such as areas of Blackthorn around Butterfly Meadow, which helps limit access into these areas. This demonstrates that it is possible to direct activity away from sensitive areas in a discrete manner, without resorting to unsightly fencing or signage.

### RECOMMENDATIONS

The University campus is undoubtedly an important environment with iconic campus buildings in an equally impressive setting, and there is an opportunity to develop a signage strategy which reflects that status. Perhaps something along the lines of the classic London Underground map could be developed. This is not only a design classic, but is also remarkably clear and informative.

In assessing overall legibility, circulation and signage, points to be considered include:

- The site layout should be easily understood for the first-time user;
- entrances and exits should be easy to locate from both inside and outside the Campus;
- Pathways should connect with destinations
- signage should direct users to key points of interest;
- focal points should be clearly visible;
- established official routes should be apparent and their use encouraged in preference to short cuts through 'barrier' planting etc;



# **ISSUES: LEGIBILITY AND CIRCULATION**

- there should be no obstructed sightlines preventing users from moving comfortably into and around the park;
- lighting should be located and designed to help direct movement between destinations at night.

Location of Signage

- Maps should be located at entry points, activity areas and intersections of paths;
- Signage should be visible from the street to encourage use by passersby and familiarize users with the Campus layout and interior facilities;
- Places should be designated at the Campus entrance for special events signage.

Design of Signage

- Signage should be designed as a group of coordinated elements;
- It should be visible but sensitively located;
- Directional signage should be visible from at least twenty metres;
- Standard graphic symbols should be used to supplement text descriptions to assist people who are functionally illiterate or map illiterate;
- signage should be accessible to people in wheelchairs.

Around the Broad there are areas where the footpath surfacing is in poor condition, making access difficult for

all users. It is recommended that a phased programme of resurfacing and monitoring is undertaken to improve the quality of the experience for users of these paths.

The single most requested physical design modification to improve safety is usually an increase in lighting. Lighting is a key factor because it can clarify the layout of a park by emphasizing walkways, focal points, gathering places and building entrances. When planned as a coordinated system, lighting improves the night time legibility, use and enjoyment of a site.

Lighting, like signage, is best developed as a hierarchy. The top of the hierarchy includes lighting activity areas and primary walkways so that they become the focus of pedestrian activity after dark. At the bottom of this hierarchy is the decision not to light some areas at all because their use at night would be unsafe or inappropriate.

While lighting has been shown to reduce people's fear of crime (Middlesex, 1989), lighting alone is not the sole solution to safety-related issues. If increased park use does not result following lighting upgrades, people may feel safe in areas which are potentially unsafe.

### RECOMMENDATIONS

A detailed lighting assessment should be undertaken at UEA; when developing future lighting proposals they should include:

Hierarchy of Lighting Types and Intensities

• A hierarchy of lighting types and intensities should be used to highlight activity areas and primary pedestrian routes so that they become areas of concentrated use after dark

Enhancing Edge Activities

• Pedestrian lighting should be considered at the perimeters of the Campus to enhance its

character, encourage use and to build on the existing street lighting.

Placement of Lighting

- New lights should be positioned to respond to problems of surveillance created by vegetation and topography rather than on the basis of arbitrary light pole placement.
- Consideration should be made to redirect lighting so that it extends beyond the edge of paths to illuminate potential concealment areas and hiding places.

Consistency of Lighting

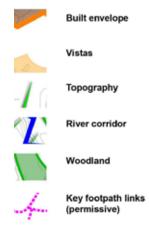
• Lights that cause excessive glare or generate dark shadows should be avoided

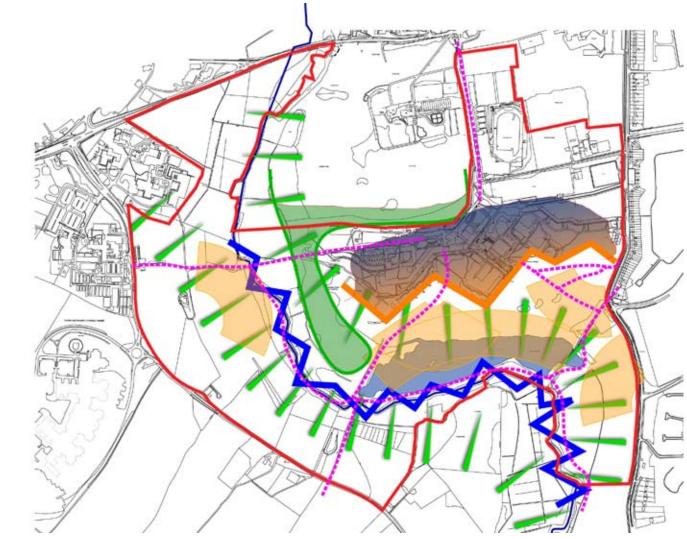
Inappropriate Lighting

- Avoid creating a false sense of security by lighting areas that are potentially inappropriate for nighttime use.
- The installation of low ground-level lights should be avoided where higher-level lighting is already provided.
- Lighting should be positioned to coordinate with informational and directional signage.

# **ISSUES: OPPORTUNITIES AND CONSTRAINTS**

PART 1: ISSUES





Plan summarising the Opportunities and Constraints which have been determined through the landscape assessment process.

# SUMMARY: ISSUES

The assessment has identified a number of issues which influence the current landscape. The Recommendations arising from the Observations include:

- The need to manage increasing public access.
- The need to conserve and enhance the significant vistas throughout the campus and avoid the fragmentation or erosion of the parkland character;
- The need to continue to balance the diversity of the landscape with the built environment and ongoing development of the campus;
- The need to ensure a safe public environment;
- The need to rationalise the uncoordinated and erratic management of the landscape and ecological resource, and celebrate the green infrastructure which the Campus provides.

The following section describes the strategic policies that address the recommendations identified in the Issues.

# **STRATEGIC POLICIES**

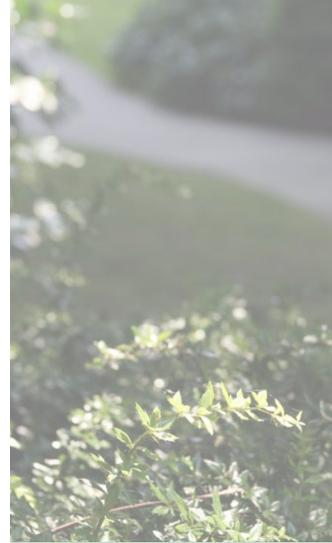
## **STRATEGIC POLICIES**

This section takes the recommendations forward and develops them as a series of strategic policies for conserving the Campus landscape.

It explains and refines the Landscape Strategy in the context of the continuing development of the University.

Principles are developed, the purpose of which is to provide a guide to the development and care of the landscape, and thereby address the Recommendations.

The Strategic Policies give specific measures which should implemented. Each Strategic Policy is followed by functional elements of the solution and as a consequence, the qualitative change that can be expected.



**STRATEGIC POLICIES** 

## **STRATEGIC POLICIES**

POLICY

PART 1:

#### The Landscape Strategy should be applied whenever work to the landscape is being planned or carried out

- The Landscape Strategy should be formally adopted by UEA.
- The Landscape Strategy should be approved and adopted by the outside bodies that have roles affecting UEA.
- Copies of the Landscape Strategy should be passed to all consultants involved in work to the buildings and landscape. It should be made available to all contractors.
- UEA should refer to the Landscape Strategy and follow the Principles in it whenever work to the landscape is planned, commissioned or carried out.
- The Landscape Strategy should be regularly reviewed and updated in line with other strategic estate documents to ensure its continued relevance and use.

## Work to the landscape should be planned by reference to this Strategy.

- Documents about the design, construction and alteration of the landscape should be recorded and catalogued to provide a complete historical record, in a form that is easily accessible.
- Whenever capital works are carried out to the landscape, the structure and materials of both the existing and new work should be recorded, and the information added to the catalogue. This information should be used to inform revisions to the Landscape Strategy.
- Whenever possible, knowledge about the landscape held by individuals should be recorded in suitable documentary forms, and the information added to the catalogue.
- Work to the landscape should be planned by individuals and organisations who have made themselves familiar with the history, construction and significance of campus.

## New development should respect the significance of the existing landscape

- New development that enhances the significance of the landscape should be carried out whenever there is a practical and affordable opportunity.
- All new development in settings of very high or high significance in the Conservation Development Strategy should be designed to the highest standards in order to maintain and reinforce the significance of the landscape setting. It follows, therefore, that the landscape design should also be of the highest standard.
- New development that would detract from key vistas or significant landscape features should only be considered for the most compelling and exceptional reasons and any such development should be carried out so as to minimise any detrimental impact on the setting.

## STRATEGIC POLICY 1 CONSERVE AND REINFORCE SIGNIFICANT VISTAS

### OBJECTIVES

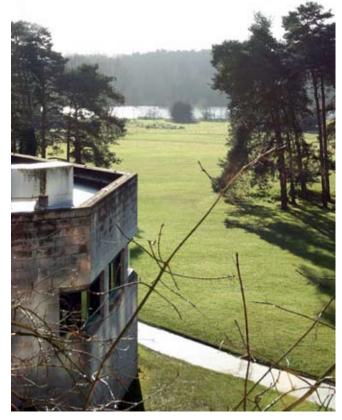
• Protection and retrieval of the significant vistas identified in the assessment.

## FUNCTIONAL ELEMENTS

- **1.1** Match new development with the importance of the relevant vista(s) in order to reinforce their significance.
- **1.2** Undertake tree planting in a co-ordinated way to protect and reinforce vistas. Remove the trees where the integrity of the vista(s) is compromised.
- **1.3** Maintain grassland and manage related landscape appropriately, having due regard to biodiversity.

## QUALITATIVE IMPROVEMENTS

• Retention and retrieval of the unique qualities of the UEA landscape



STRATEGIC POLICIES



## **STRATEGIC POLICY 2**

# CONSERVE THE LANDSCAPE AND ARCHITECTURAL SIGNIFICANCE OF UEA

OBJECTIVES

- Conservation of Lasdun and Colvin's vision, resisting 'the tendency towards suburban character' in the 'broad park-like landscape'.
- An understanding of the complementary significance of the University buildings and landscape.

## FUNCTIONAL ELEMENTS:

- **2.1** Undertake new development in line with the Conservation Development Strategy and the Estate Development Strategy, having due regard for the Principles of the Landscape Strategy.
- **2.2** Undertake new planting in accordance with a design code complementary with the simplicity of the built form.
- **2.3** Prohibit shrub planting south of the ziggurats to retain the character of the open landscape.
- **2.4** Reinforce the spaces and courtyards between the buildings and (where appropriate) redesign and reconfigure these spaces.

## QUALITATIVE IMPROVEMENTS

• The retrieval of a synergistic environment originally intended for the Campus in areas where it has become challenged over time and where development can reinforce its retention

## STRATEGIC POLICY 3 CONSERVE THE LANDSCAPE SETTING OF UNIVERSITY BROAD

OBJECTIVES

• Restoration and conservation of landscape and visual link between University Broad and its associated parkland landscape.

### FUNCTIONAL ELEMENTS

- **3.1** Selectively remove areas of tree and shrub vegetation from the Broad's edge along its northern bank, allowing the grassland to flow to the edge of the Broad.
- **3.2** Review the location of fishing platforms and disabled car parking, to ensure that they are not in visually intrusive locations, whilst respecting the need for access for all to the platforms.
- **3.3** At a time complementary with the Corporate Plan implement new development of the highest standard of design quality (see Strategic Policy 2) so that it reinforces the setting of the Broad and secures the significance of the relevant vistas for all time.

## QUALITATIVE IMPROVEMENTS

• Restoration of the significance of the relationship of University Broad with its parkland setting together with the realisation of the masterplan concept that will make this part of the river valley unique amongst others.





## STRATEGIC POLICY 4 PROVIDE A SAFE AND WELCOMING ENVIRONMENT FOR ALL

OBJECTIVES

• Personal safety of all users of the University campus through a well-planned landscape

### FUNCTIONAL ELEMENTS

- **4.1** Subject all new landscape proposals to a full safety audit, covering such issues as proximity of trees and dense shrubs to pathways, lighting and signage.
- **4.2** Develop and implement a strategy for the regular removal of litter, dog fouling, and management of pathside vegetation.

### QUALITATIVE IMPROVEMENTS

• A feeling of security and well-being for all users of the campus

## STRATEGIC POLICY 5 ACCESS

### OBJECTIVES

• The promotion of healthy living and an understanding of the environment

## FUNCTIONAL ELEMENTS

- **5.1** Develop and implement a programme of improvements and repairs to the footpaths throughout the campus particularly, boardwalks and bridges along South side of Broad.
- **5.2** Cut back selectively, woody vegetation on a regular basis as part of the management plan, to promote security and diversity of vegetation.
- **5.3** Regularly inspect paths which have public access, and carry out maintenance issues within specified time frames.

## QUALITATIVE IMPROVEMENTS

• The provision of an enjoyable and secure environment for users of the Campus.



STRATEGIC POLICIES



## STRATEGIC POLICY 6 PROTECT AND ENHANCE BIODIVERSITY

### OBJECTIVES

• Maximisation of biodiversity throughout the Campus and at all levels and raising awareness of the significance of the wildlife resource across the entire estate.

## FUNCTIONAL ELEMENTS

- **6.1** Undertake monitored management of the County Wildlife sites, to a management plan prepared by or for the University, to enable quantitative assessment of the success of the management plans
- **6.3** Create no-go areas within sensitive areas of particularly high wildlife value, such as the County Wildlife sites, where access is discouraged by discreet and non-visually intrusive measures a Biodiversity Strategy.
- **6.4** Encourage nesting and roosting sites for birds, bats and other wildlife on Campus, through the introduction of nest boxes or incorporation of habitat features.

## QUALITATIVE IMPROVEMENTS

- Planned management of existing natural resources.
- Creation of an awareness by the public of the need for, and benefits of, appropriate ecological management, through interpretation of features of interest and utilisation of the Campus as an educational resource.

## STRATEGIC POLICY 7 CREATE A LEGIBLE HIERARCHY OF CIRCULATION

OBJECTIVES

Improved campus legibility through consistent signage, lighting and landscape standards

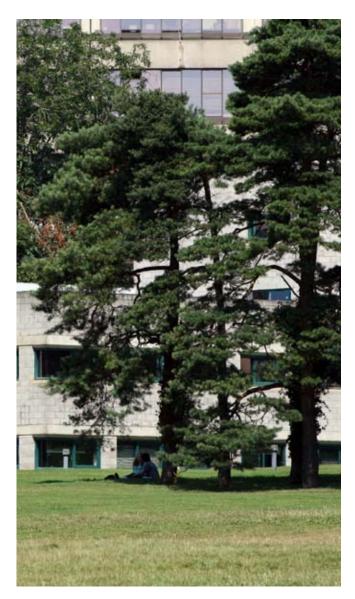
## FUNCTIONAL ELEMENTS:

- **7.1** Clarify vehicular & pedestrian access through and around the campus with strategic reconfigurations of pathways by developing a well-signed and legible hierarchy of circulation within the Campus. Path widths should be adjusted to take into account the volume of pedestrian traffic and the location of bus stops.
- **7.2** Facilitate legibility and wayfinding through a clear network of primary and secondary pedestrian routes. These pedestrian paths would allow direct accessibility to all parts of the campus, and connect a diversity of key public spaces (Type 1 circulation).
- **7.3** Generate exploratory meandering paths for contemplation of the wide campus and celebration of the architectural, landscape and ecological heritage of the area (Type 2 circulation).
- **7.4** Respond to desire line footpaths either establishing or preventing emergant routes

## QUALITATIVE IMPROVEMENTS

- Minimise visitor disorientation
- Improved community identity
- Improved 'first impression'





## STRATEGIC POLICY 8 MANAGEMENT OF TREES

### OBJECTIVES

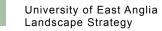
- Creation of an awareness of the need for, and benefits of, appropriate arboricultural management.
- Creation of a healthy and appropriate tree stock that contributes to the visual amenity of the Campus.

## FUNCTIONAL ELEMENTS

- **8.1** Prior to the design of any new building proposals, conduct a full feasibility assessment of the potential impact on existing trees.
- **8.2** When works near trees are to be undertaken, following guidance from BS5837:2005 Trees in Relation to Construction.
- **8.3** Undertake an arboricultural assessment every 5 years of all trees over 150mm girth, including assessment in relation to Health and Safety obligations of the University.
- 8.4 Instigate a protocol for the assessment, sustainable management and protection of all trees, hedgerows and wooded areas within the campus

## QUALITATIVE IMPROVEMENTS

- Potential damage to trees will be avoided, and the quality of the UEA environment will be protected.
- Potential risk of damage or injury to persons or property will be minimised.



This section is provides a detailed appraisal of the specific landscape character areas.

It gives an appraisal of the positive and negative characteristics of each area. It underpins the Strategic Policies for a unified approach to the landscape in the context of the continuing development on the Campus.



## LANDSCAPE AND VISUAL ANALYSIS

#### LANDSCAPE ANALYSIS

#### **Baseline Study**

- To establish a clear and defined landscape strategy for the UEA, and to develop policies to guide the future proposals for the University landscape, a baseline study of the existing landscape quality was undertaken in four parts:
- Initially a field survey to determine the condition of the landscape and to establish distinctive character areas.
- A description of the character areas, including; perception, for example types of views from within the space, sense of enclosure and scale of the space; positive and detracting features; landscape condition and landscape strategy for the character area.
- An assessment of the key landscape elements within the Campus, covering features such as the campus signage and street furniture, looking at their quality and condition, and developing policies within the landscape strategy to reflect this.
- Determining the requirements and needs of the University through consultation with the relevant stakeholders and a thorough analysis of the responses.

#### **Character areas**

The field survey determined a range of different character areas within the Campus. Although, some of these character areas appear to be similar, they each have distinct elements that distinguish them from one another. These areas are defined in the following section.



## CONSERVATION AND WILDLIFE

#### CONSERVATION AND WILDLIFE

- Given the availability of extensive ecological data arising from a number of surveys carried out by students from the School of Environmental Sciences and the School of Biological Sciences, a detailed ecological assessment does not form part of the Landscape Strategy. Rather, a general appraisal of the key areas is given to help guide the Strategy.
- Following the adoption and implementation of the Landscape Strategy, the University should commit to drawing together the ecological information it holds and filling any gaps it finds in the information. This information can then form the basis of a Biodiversity Strategy.
- One of the most comprehensive compilations of the ecological resource at the University was 'A Natural History of the University of East Anglia, Norwich' compiled by Chris Gibson in May 1987, updated in February 1989. It provides a detailed schedule of all species of plants, invertebrates and vertebrates recorded within the Campus, including historical and more recent records. The report also identifies and describes key habitats within the Campus, with a narrative on their status and condition. Dr Gibson revisited the area in 1995 and gave his comments on physical changes to the areas identified in his original assessment, offering suggestions as to the most appropriate methods of management to benefit wildlife.
- The report notes that, despite early concerns over the potential ecological damage caused by the new University buildings, the biological diversity

remains high and something to be cherished. The contrast with other universities of this era is marked: York, Essex, Sussex and Lancaster are little more than collections of buildings amidst close-mown lawns and 'lollipop' trees. UEA is indeed fortunate in having such a valuable biological and visual resource on its own doorstep.

The conservation value of parts of the University campus is recognised by the fact that six County Wildlife Sites (CWS) have been designated within the grounds of the University. County Wildlife Sites are non-statutory designations used to identify high quality wildlife habitats in a county context. Although they do not hold the same protection benefits of Sites of Special Scientific Interest (SSSIs), they are afforded some protection in the respective Local Plans which preclude any development which is likely to cause unacceptable damage to them unless there is an overriding need. The County Wildlife Sites are listed first in the following analysis.



## The Campus: Key landscape features and habitat area

1. University Broad 19. Courtyard 1: Chancellors Walk 20. School of Biological Sciences (North) University Fen 21. Courtyard 2: East of School of Education and Lifelong Learning Institute Fields 22. Founders Green 5. Butterfly Meadow 23. Spanish Copse 6. The Heronry and Violet Grove 24. The Square and The Street 7. Bluebell Marsh 25. LCR Car Park 26. Formal Gardens 9. New Plantations 27. East-West Link 10. Sports Fields 28. Eastern Hall of Residence 11. Blackdale Plantation 29. North of Nelson Court and Broadview Lodge 12. The Hay Meadows 30. South of Nelson Court and Broadview Lodge 13. University Drive (North) 31. Eastern Campus 14. Chancellors Drive 32. Courtyard 3: South of Library 15. Constable Terrace (West) 33. Courtyard 4: Harbour Pines 16. Constable Terrace (South) 34. Norfolk and Suffolk (Service) Roads 17. School of Biological Sciences (South) 35. The Prospect 18. Elizabeth Fry Building (Car Park) 36. Strawberry Fields

2. River Yare

8. Lusty Hills

3.

4.

- 37. Main Car Park and Biomass Energy Centre
- 38. INTO and Health & Community Centre

## 1. University Broad - County Wildlife Site 1449

## 1. University Broad - County Wildlife Site 1447



The relationship between the UEA buildings, the University Broad and the River Yare was fundamental to Lasdun and Colvin's vision for the new University in the 1960s. Over time, that relationship has declined through unsympathetic landscape management and the growth of woody vegetation which is obscuring once-open vistas

The Broad covers an area of approximately 7.8 hectares, and is described in the CWS notification as a 'large mesotrophic lake with limited aquatic vegetation but which has a moderately species-rich marginal vegetation'.

Dr Gibson's report notes that in character with most other gravel extraction sites, the lake is far from ideal for wildlife.

The major constraint on the area as wildlife habitat is the sides of the lake which slope very steeply down to a maximum depth of 6 metres. The slope is steepest at the east end where the maximum depth is reached as little as 5 metres from the riverbank. The lack of shallow water in which reeds and other emergent plants could grow is exacerbated by the lack of indentation in the outline of the Broad and the very small number of islands which were retained, resulting in a relatively small length of edge.

Since Dr Gibson's report, there has also been an apparent increase in the growth of marginal trees and shrubs which are reducing the habitat available for lower-growing plant species, and also the areas of open ground which benefit certain species. One area of concern is the sandy, south-facing bank to the north and east side of the larger island. Previously, the open sandy patches supported a number of bare groundloving insects, especially solitary wasps. An immediate benefit would be a light scraping of the bank, repeated on a rotational basis as necessary, to create and maintain suitable warm bare-ground habitats.

Furthermore, it has been noted that, since the late 1980s, there has been continued erosion of the small gravel island in the centre of the Broad which was once a significant feeding and roosting site for water birds, and for breeding Common Terns. The banks of the Broad are noted as being rather species-poor, largely due to their steep sides. They would benefit from the creation of shallow bays through selective excavation and filling to create a greater diversity of habitat.



#### Perception:

Views	Intermittent / panoramic
Scale	large
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Colourful
Movement	Peaceful
Unity	Unified

#### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Footpaths	Variable quality of footpaths detracts from accessibility
Signage	Inappropriate and intrusive signage detracts from visual amenity
Vegetation	Excessive growth of shrubby vegetation along mainly the north Broad edge is detracting from its wildlife value and is beginning to separate the Broad visually from the rest of the Campus

#### Landscape Condition:

In general the condition of the landscape within this area is good, but would benefit from understanding and management.

It is an area which requires attention to footpath surfacing to improve access and vegetation management to retain the significant views across the landscape and the link with the buildings which are so fundamental to the original concept for the University.

#### **Positive Features of Significance:**

Feature	Reason for Significance
	The footpaths along the Broad provide important views towards the University.

Conserve	Existing hedgerow and trees as these are important features with a high amenity value in this location.
Enhance	Remove selected vegetation from edge of riverbank, on the northern side of the Broad.
	Instigate routine management of bankside vegetation.
Develop	Introduce a signing strategy to rationalise the variety of signage, including some interpretative signs

## 2. River Yare

University of East Anglia Landscape Strategy

**PART 2: CHARACTER AREAS** 

The River Yare passes through the campus, forming a distinctive linear character of its own, as well as creating a physical division between the east and west parts of the campus. It can only be traversed at two points within the campus, by the footbridge on the bend near the south-west corner of University Broad and via the causeway at the western end of Chancellors Drive. There is no general navigable assess, although the river is informally used by canoeists.

The river is relatively deep and slow-moving with a good growth of aquatic plants, although there are areas of gravel where the bottom is scoured on bends. These areas are often popular for informal bathing during the summer. Dr Gibson's ecology report noted that the water quality here is better than further down the river, where it is affected by effluent rich in heavy metals. The water is generally relatively clear, although turbidity is locally increased in the vicinity of areas used for bathing, especially near the Earlham Bridge and the causeway.

The river has a rich biodiversity, with diverse emergent bank-side vegetation and a diverse invertebrate community. The floral diversity is reflected in the diverse invertebrate community, including at least eight species of dragonflies and damselflies (Odonata). Freshwater Crayfish are also present and fish stocks are believed to be healthy.

The 1946 aerial photographs show that at that time the river was located within a much more open landscape than at present, with much fewer trees obscuring the open views. However, a regular row of new Willow (White or Cricket-bat Willow) tree planting is visible on the northern bank of the river in these photographs, and currently most of the river is fringed with tree planting, creating more enclosed and corridor views.

Whilst the Environment Agency is responsible for the management of the river, its banks and its immediate surroundings, the University has an impact on its setting through its management of the wider campus landscape.





Above: Vehicular bridge at the causeway Below: Footbridge near south-west end of the Broad



#### Perception:

Views	Corridor / Intermittent
Scale	large
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

#### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Footpaths & bridges	Variable quality of footpaths and bridges detracts from accessibility and visual quality
Loss of views	Increasing growth and encroachment of woody vegetation is causing a loss of the landscape link between the UEA campus and its wider valley setting

#### Landscape Condition:

The unique setting of the University on the northern side the valley of the River Yare, with its landscape rolling down to the Broad and the River was fundamental to the original masterplan vision, and remains equally important today.

However, the link between buildings, landscape and river has become eroded through poor habitat management and unplanned new tree planting. The Strategy should address this issue through developing, adopting and implementing a comprehensive management strategy.

#### **Positive Features of Significance:**

Feature	Reason for Significance
Biodiversity	Rich flora and fauna add to biodiversity resource, as well as adding to the visitor experience.
Tranquillity	Riverside footpaths through relatively 'unspoilt' landscape.
Visual diversity	Changes in vegetation cover, neighbouring topography and river/footpath orientation create visual diversity for visitors

Conserve	Existing hedgerow and trees as these are important features with a high amenity value in this location.
Enhance	Remove selected vegetation from edge of riverbank to retain the significance of the relationship between the University buildings and the river valley
	Encourage routine management of bankside vegetation.
Develop	Encourage the replacement of unsightly bridges, such as causeway link

## 3. University Fen - County Wildlife Site 1447

## 3. University Fen - County Wildlife Site 1447



The University Fen is a remnant of a much larger area of fenland and reedbed which existed here before the creation of University Broad.

Management of the fen has been minimal, with the result that it is suffering from encroachment of scrub and woodland, a build-up of excess vegetation matter, and general drying-out due to reduced water levels. The effect is to reduce the area of open reedbed with a corresponding increase in tree area. Fenland is a scarce and declining habitat and ecological survey work has demonstrated that management action is required here to restore its biodiversity.

The area is an important part of the valley landscape which should be retained and enhanced.







#### Perception:

Views	Intermittent / panoramic
Scale	Medium
Enclosure	Open
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

Landscape Strategy:

Feature	Comment
Footpaths	Variable quality of footpaths detracts from accessibility
Vegetation	Excessive growth of shrubby vegetation along the river edge detracts from its wildlife value.

#### Landscape Condition:

In general the condition of the landscape within this area is good. However, it is an area which requires attention to footpath surfacing to improve access and habitat enhancement, such as management of the reedbed and attention to water levels, to restore its wildlife value

#### **Positive Features of Significance:**

Feature	Reason for Significance
Vistas	The footpaths along the river allow access to valuable area of green infrastructure.

Conserve	Existing fenland as it is an important feature with a high amenity value in this location.
Enhance	Instigate routine management of bankside vegetation, combined with management of water levels to improve reedbed.
Develop	New ponds or scrapes within reedbeds to provide diversity of habitat. The proposed Colney Lane Bus Link is proposed to be located along the existing causeway. Through its detail design it offers an opportunity for reviving the continuing viability of this important habitat.

## 4. Institute Fields



4. Institute Fields

The area known as the Institute Fields consists of a series of grazing pastures running along the west side of the River Yare, opposite Earlham Park. They form a remnant of the pre-20th century landscape, with field boundaries which are relatively unchanged since the 1880 Ordnance Survey maps. Some significant veteran trees are present, providing valuable wildlife habitat.

The grassland is typical of heavily grazed lowland grassland, with a relatively sparse flora but with adjacent dykes providing a significant ecological resource.

Despite the intrusive element of the overhead power lines and pylons, these meadows form an important landscape buffer zone on the valley floor between the main University complex to the east and the Hospital and research facilities to the west.





#### Perception:

Views	Panoramic
Scale	Medium
Enclosure	Open
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

#### **Detracting Features:**

Feature	Comment
Overhead power lines	High voltage overhead power lines and pylons detract from open vistas
Traffic noise	Traffic noise from Colney Lane and Earlham Road is intrusive

#### Landscape Condition:

The condition of the landscape within this area is good.

Management should have the aim of conserving the historic field boundaries and maintaining the meadow through appropriate grazing or mowing.

#### **Positive Features of Significance:**

Feature	Reason for Significance
	The footpaths along the river allow access to valuable area of green infrastructure.

Conserve	Existing grazing meadow as it is an important feature with a high amenity value in this location. Maintain drainage ditches to ensure satisfactory drainage and biodiversity.
Enhance	Ensure quality of meadows is maintained through satisfactory management of water levels and grazing.
	Ensure satisfactory management of boundary hedgerows, with replanting where necessary, to protect the historic landscape features.
Develop	N/A

#### Landscape Strategy:



### **Butterfly Meadow**

The area known as the Butterfly Meadow is a small area of grassland enclosed by Hawthorn and Blackthorn, which has developed on chalky soil which was deposited here for activities related to gravel extraction.

In its earlier years it developed a diverse calcareous flora and associated fauna, including thirteen species of breeding butterfly, hence the name. Most significant was the Green Hairstreak butterfly, a locally-scarce species dependent on Gorse, which has now been lost. The area also provided nesting habitat for many summer migrant bird species, and also species of orchids, but these have also become reduced, probably as a result of increased disturbance by dogs, general visitors and the usage of the area for student barbecues.



# 5. University Butterfly Meadow - County Wildlife Site 1448

### Perception:

Views	Framed
Scale	Small
Enclosure	Enclosed
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

### **Detracting Features:**

Feature	Comment
Footpaths	Variable quality of footpaths detracts from accessibility
Vegetation	Excessive growth of shrubby vegetation at the edge is detracting from the value of the grassland

### Landscape Condition:

The landscape condition in the area is considered to be fair, and is a popular area for casual recreation which is causing its own problems. Sensitive habitat and visitor management is required here.

### **Positive Features of Significance:**

Feature	Reason for Significance

### Landscape Strategy:

Conserve	Existing trees as these are important features with a high amenity value in this location.	
Enhance	Introduce grassland management regime to improve the biodiversity quality of the grassland.	
	Provide measures to prevent dogs and people gaining access to some areas of scrub/woodland to encourage ground- nesting birds.	
Develop	N/A	

# 6. The Heronry and Violet Grove - County Wildlife Site 1446



These conjoined blocks of woodland form a significant and valuable landscape feature. In particular, the east limb of The Heronry forms an important backdrop to the buildings on the north side of the main campus. This part, outside the ownership of the University, is of more recent origin than the remainder as it was not shown on the 1830s Tithe map. At that time, Earlham Hall would have enjoyed a panoramic views southward but for whatever reason a plantation was well established by the time of the 1880s Ordnance Survey maps.

According to Chris Gibson's 1987 study, Violet Grove provides an excellent example of the influence of geology on plant communities. The western edge of the wood occupies the floodplain of the river, and the predominant trees are Alder and Willows. Eastwards the ground rises progressively on to a plateau of acid sand and gravel, where the trees are largely Silver Birch with scattered English Oak, Holly, Crab Apple and Wild Cherry. Some regeneration of Small-leaved Elm is present in blocks, a remnant of the trees which were here before the onset of Dutch Elm Disease. The ground flora of the woodland indicates that it is a relatively old woodland.

On the plateau, the ground flora is less diverse, as one would expect on sandy soils, but it is highly characteristic of acid Oak-Birch woodland. Here, it is dominated by Bracken, Bramble and Bluebells, the latter providing a dramatic blaze of colour in late spring.

The Heronry forms a continuation of Violet Grove, which it resembles in its vegetation patterns, although there is no sandy plateau. The eastward extension of the Heronry is rather different to the rest of the wood. The tree canopy consists primarily of English Oak and Sycamore.

Parts of these woodlands are outside the ownership and control of the University, but collectively they form a significant element on the green infrastructure of the Yare Valley.

The appropriate authority should be advised prior to any management in areas which overlap, or are adjacent to, Earlham Park.

# 6. The Heronry and Violet Grove - County Wildlife Site 1446

### **Perception:**

Views	Intermittent
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

[	Feature	Comment

### Landscape Condition:

The condition of the landscape within this area is good and these woodlands remain a significant landscape element and backdrop to the University buildings..

Feature	Reason for Significance
	Significant landscape feature and an important element of the green infrastructure

Landscape Strategy:	

Conserve	Existing trees as these are important features with a high amenity value in this location.	
Enhance	Review woodland management to enhance biodiversity	
Develop	N/A	

# 7. Bluebell Marsh - County Wildlife Site 1445

# 7. Bluebell Marsh - County Wildlife Site 1445



Bluebell Marsh is a remnant of a much larger area of fenland and reedbed which existed here before the creation of University Broad, when it joined with University Fen to create a continuous belt of reedbeds along the floodplain.

Management of the fen has been minimal, with the result that it is suffering from encroachment of scrub and woodland, a build-up of excess vegetation matter, and general drying-out due to reduced water levels. The effect is to reduce the area of open reedbed with a corresponding increase in tree area. Fenland is a scarce and declining habitat and ecological survey work has demonstrated that management action is required here to restore its biodiversity.

The area is an important part of the valley landscape which should be retained and enhanced.

Views	Intermittent / panoramic
Scale	Medium
Enclosure	Open
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

Landscape Strategy:

Feature	Comment	
	Variable quality of footpaths detracts from accessibility	

### Landscape Condition:

In general the condition of the landscape within this area is good although, in common with other fenland areas within the campus, is in need of management and control of water levels to restore its wildlife and biodiversity value.

Feature	Reason for Significance
Fenland	A valuable area of open space and semi-natural habitat with good access for the public.

Conserve	Existing trees as these are important features with a high amenity value in
	features with a high amenity value in
	this location.

	this location.		
	Instigate routine management of fen habitat to enhance biodiversity.		
Develop	N/A		

8. Lusty Hills

8. Lusty Hills



## 8. Lusty Hills

### Lusty Hills

The shape of the field known as Lusty Hills remains much as is did on the Tithe Maps of the 1830s, when is was shown as an area of scrubland or heath.

Since the scrub was grubbed out in the 1970s, the field has been maintained as a predominately grass sward by grazing. The underlying soil is composed largely of sand and gravel, which is reflected in the heath-type flora.

The field is located on a ridge of higher land which screens the rest of the river valley for viewers on Colney Lane. The original hedgerow is somewhat fragmented, but there are some significant veteran oaks on the boundary which should be protected from damage.







Views	Intermittent / panoramic	
Scale	Medium	
Enclosure	Open	
Variety	Simple	
Texture	Textured	
Colour	Muted	
Movement	Peaceful	
Unity	Interrupted	

**Detracting Features:** 

Landscape Strategy:

Feature	Comment					
Traffic	Traffic	along	Colney	Lane	is	an
noise	intrusion					

### Landscape Condition:

In general the condition of the landscape within this area is good. The site contributes to the open character and semi-rural nature of this part of the campus.

Feature	Reason for Significance
Vistas	The elevated position provides important views towards the University and other areas.
Veteran trees	The veteran trees along the boundaries of the field provide an important visual feature on the skyline as well as a valuable habitat and a link to the past.

Conserve	Existing hedgerow and trees as these are important features with a high amenity value in this location.
Enhance	N/A
Develop	N/A

# 9. New Plantations

# PART 2: CHARACTER AREAS



### **New Plantations**

The New Plantations on the southern slopes of the Yare valley were grassy fields which were planted during the 1980s, under a Forestry Commission grant, with various tree species, especially Pedunculate Oak, Beech, Silver Birch, Scots Pine, and occasional Wild Cherry and Rowan *Sorbus aucuparia*. The conifers were intended as a nurse crop for the broad-leaved species, and in Dr. Gibson's report he hoped that they would be removed before they start to dominate the area. Some thinning has taken place, but the conifers have become dominant in places. The effect is to create some dark and enclosed spaces with deteriorating wildlife value and a potentially threatening feelings of personal security.

The plantations have radically altered the character of the area, creating enclosure where there was once openness and obscuring the views over the valley towards the University.



Views	Corridor
Scale	Small
Enclosure	Confined
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Footpaths	Variable quality of footpaths detracts from accessibility
Density of the woodland	Dense tree growth is reducing wildlife value and affecting the quality of the footpaths.

### Landscape Condition:

In general the condition of the landscape within this area is good, but the woodland would benefit from some sensitive management and selective felling to create diversity and open up views across the valley.

Not all the woodland (the eastern-most area), however, is in the University's ownership.

Feature	Reason for Significance
Spatial variety	The woodlands create spatial variety, contrasting with the open views of the neighbouring landscape.

Conserve	Existing hedgerow and trees as these are important features with a high amenity value in this location.
Enhance	Create glades within the woodland to enhance biodiversity and visual interest and diversity.
	Selectively fell some areas of coniferous plantation.
Develop	Remove carefully selected belts of trees to create new vistas towards the University.

# 10. Sports Fields



PART 2: CHARACTER AREAS

The sports fields situated between the River Yare and Colney Lane provide a valuable area of open space, used by local residents and University occupiers alike.

The landform has been heavily modified and levelled to accommodate the sports fields, although the underlying topography is still noticeable with significant views over the wider countryside being available on the higher land. There is also evidence of historic landscape features, in the form of veteran Oak trees along Colney Lane and along some of the old field boundaries. The pit now used for grounds keeping storage, is a probably an old marl or chalk pit which was present even in the 1880s. Attractive though the area is, it bears little resemblance to a natural river valley.

New tree planting includes the new plantations backing on to the fields to the south and new specimen tree planting along the footpath near the pavilion adjacent to Colney Lane.



Views	Panoramic
Scale	Large
Enclosure	Exposed
Variety	Simple
Texture	Smooth
Colour	Muted
Movement	Active
Unity	Unified

**Detracting Features:** 

Feature	Comment	
Colney	Traffic noise from Colney Lane is a	
Lane	intrusive element.	

### Landscape Condition:

In general the condition of the landscape within this area is good. It is a largely functional space and highlymanicured, but benefits from the fringing mature landscape and undulating topography.

The wide open vistas contrast with the enclosure of the neighbouring woodland, creating visual diversity and interest.

### **Positive Features of Significance:**

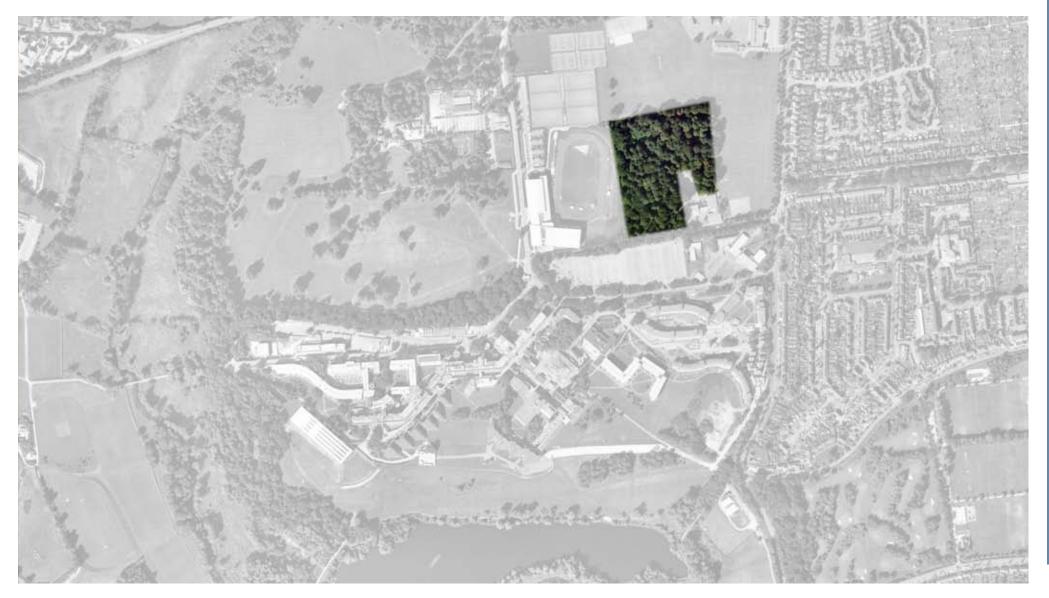
Feature	Reason for Significance
landscape	Established trees and woodland surrounding the site enhance the setting of the distant buildings of the Hospital and Research Park

Landscape Strategy:

Conserve	Conserve the mature hedgerows and veteran trees on the fringes of the fields and along Colney Lane
Enhance	N/A
Develop	The design of the proposed Colney Lane Bus Link should be used as an opportunity to protect and reinforce significant views and the ecological resource.

## **11. Blackdale Plantation**

# PART 2: CHARACTER AREAS



# **11. Blackdale Plantation**

Blackdale Plantation is partly in the ownership of the University. Although a plantation, it was present on the 1830s Tithe maps and was clearly well-established at that time. Thus, although it is probably not 'ancient woodland', it has been in existence for at least 180 years and contains many veteran trees. It is of significant wildlife value.

It is also an important landscape feature and a link to the historic development of Earlham. Access to the woodland is limited, but local people benefit from its presence close to Cow Drive which is a well-used throughfare. It also forms a visual link with Violet Grove and The Heronry, forming a green corridor extending from close to Bluebell Road through the University and down to the river.



Views	Intermittent
Scale	Medium
Enclosure	Confined
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

Landscape Strategy:

Feature	Comment
	Some unsightly signage and fencing around the perimeter of the woodland.

### Landscape Condition:

The Plantation is a very important landscape feature, but has been somewhat neglected and requires extensive management to make it safe and in good health. Nevertheless, it provides a very valuable wildlife habitat and needs to be managed sensitively to maintain, for instance, sufficient deadwood as habitat.

Not all of the Plantation is in the ownership of the University.

Feature	Reason for Significance
Mature	The woodland adds an element
landscape	of history and maturity to the
	landscape setting of the new
	buildings of the University

Conserve:	The woodland as a significant landscape and ecological feature in its own right.
Enhance:	Instigate a some management to improve personal safety and diversity, whilst respected the need to retain areas of dead wood and 'wildness'
Develop:	The site has potential to be used as amenity space for engaging children with nature studies.

# **12. The Hay Meadows**

Grassland occupies a large proportion of the UEA Campus. Around the buildings, the grass in heavily maintained by regular mowing, rolling and fertilising, but away from these areas a more natural community has been allowed to develop.

The meadows between the University buildings and the Broad were taken out of the high maintenance regime in 1981. Since then, the first mow has been delayed until late June, when the hay crop is taken, with occasionally one subsequent cut later in the summer. Such a management regime approximates to that of a traditional hay meadow, although in strictly traditional meadows the aftermath is usually grazed in late summer. Hay meadows are noted for the very rich plant community they support, and they are considered to be a high priority for conservation on a national scale: a recent survey (Nature Conservancy Council 1984) suggests that 95% of lowland grassland now lacks significant wildlife interest. Although the UEA hay meadows are of recent origin, it is to be hoped that they will develop into a regionally important wildlife resource.

These meadows are crucial to the landscape setting of the University buildings and were key to Colvin and Lasdun's vision for the Campus.





Views	Panoramic
Scale	Large
Enclosure	Open
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Vacant
Unity	Unified

**Detracting Features:** 

Landscape Strategy:

Feature	Comment
Scrubby Tree Groups	There are three scrubby groups of trees within the Hay Meadow, which detract from the overall quality of the area
Broad Edge	The Broad edge is heavily planted along its edge, which screens large parts of the Broad from view.

### Landscape Condition:

The condition of the landscape overall is good. It is a successful space. There is room for improvement, with a need to enhance certain areas such as the Broad edge.

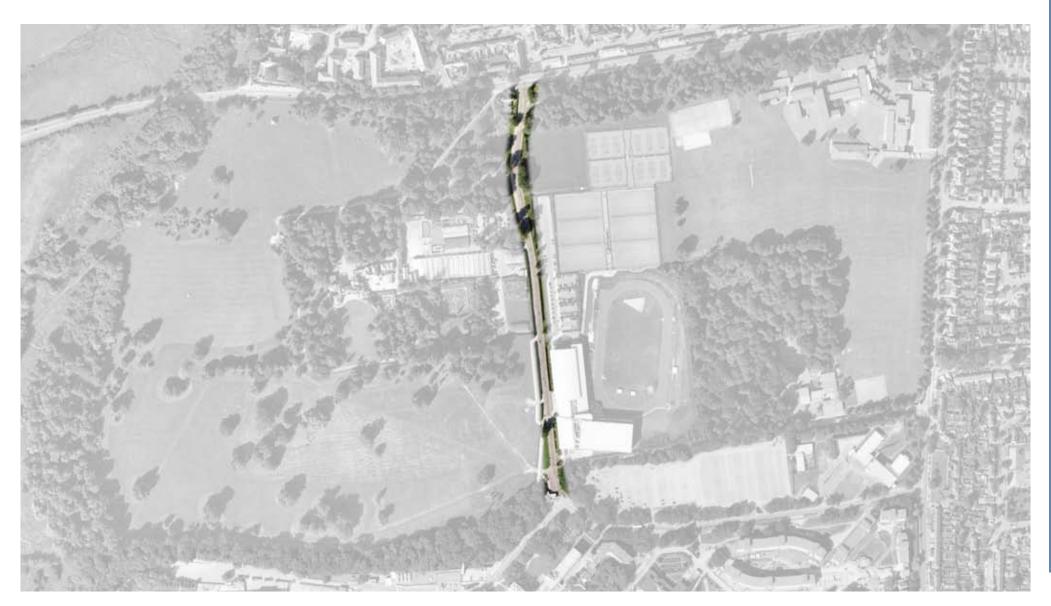
Feature	Reason for Significance
Openness	The most appealing part of this area is its landform and sense of openness, which is a good foil to the compact nature of the majority of the University campus
The Broad	A significant feature in its own right, it is important as a focal point and as an ecological sink

Conserve:	The open appearance of University Broad, particularly the area running south down from the Harbour to University Broad.
Enhance:	The edge of University Broad to open up views from the core of the University and the Sainsbury Centre down to University Broad.
Develop:	Re-establish the relationship of University Broad and the landscape.

# **13. University Drive (North)**

University of East Anglia Landscape Strategy





# **13. University Drive (North)**

Though strictly not in the ownership of the University, this is one of two principal vehicular and pedestrian routes into the University. This one, entering from Earlham Road caters for high volumes of traffic accessing both the University and the Sports Park.

The entrance to University Drive is enclosed by existing vegetation consisting mainly of large trees and tall hedgerows. It gives the area quite an untidy appearance and does not provide a notable entrance to the University. As one moves along University Drive the space opens up to the west temporarily, allowing views across into Earlham Park. However, further along the space closes in again, with a Beech hedgerow enclosing the space on both sides of the road and formalising the entrance route to the University. Continuing along University Drive, as the road passes the UEA SportsPark and approaches Chancellors Drive; the space widens slightly, with a grassed lawn area to the west of the SportsPark and footways linking to Chancellor's Drive and the main part of the Campus beyond.

As one of the principal vehicular and pedestrian access routes into the University it is a very active space, with the movement of vehicles and pedestrians a key influence on the character of the area. The vehicles can create a noisy and unpleasant atmosphere, particularly with the emissions released by buses moving along University Drive. However, the design of the road ensures that pedestrians needs are prioritised and that traffic moves slowly through the space.

The character of this area is of a transitional space, influenced by the movement of people and vehicles. It is not a space to linger, but it serves its purpose providing a safe and effective route into and out of the Campus.





Views	Corridor
Scale	Small
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Active
Unity	Interrupted

### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Unmaintained boundary treatment	A short length of hedgerow situated at the University entrance suffers from a lack of maintenance, with plants partially obstructing University signage. This is an important location and should be maintained to the highest standard to create a positive first impression.
Confusing and intrusive signage	Signage appears somewhat unco- ordinated, with the result that legibility is poor and navigation is difficult

### Landscape Condition:

In general the condition of the landscape within this area is good. However, as a key space in terms of presenting the image of the University, in particular to first-time visitors, it is important that this area is maintained to the highest standard at all times and sets the benchmark for the quality of the University landscape as a whole.

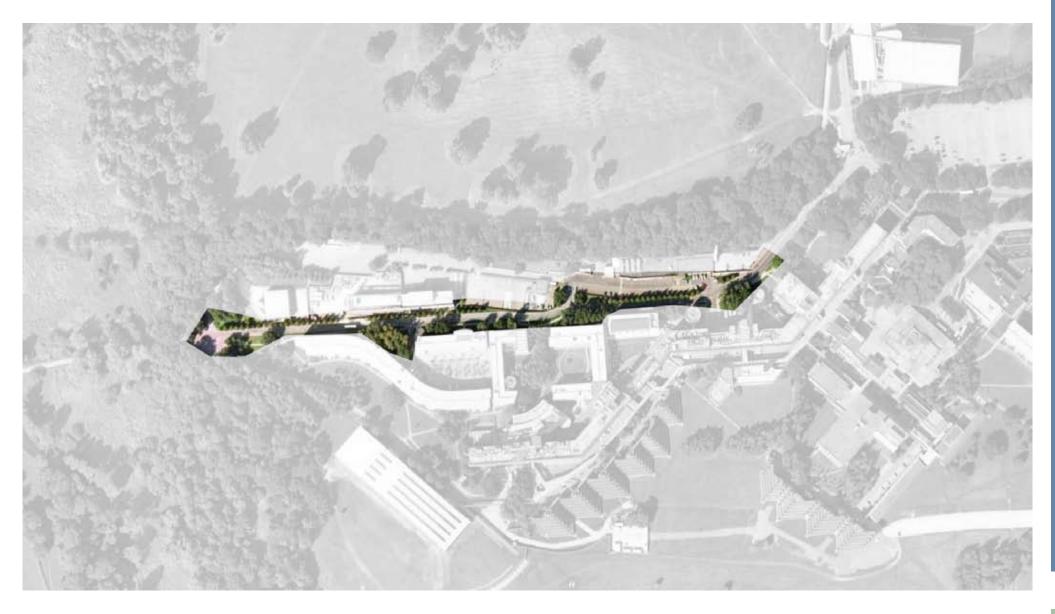
The legibility of this area is particularly poor, leading to confusion for new visitors to the University. It is recommended that the layout of the area around the security lodge and main car park entrance is reviewed.

Feature	Reason for Significance
Hedgerow	This adds formality to the entrance to the University and acts as a unifying element within the space.

Conserve	Existing hedgerow and trees as these are important features with a high amenity value in this location.
Enhance	The site entrance requires maintenance and management to create an appropriate visual experience and promote good health and condition of the plant material.
Develop	A more significant gateway into the University.

# 14. Chancellor's Drive

# 14. Chancellor's Drive



### **Description of Area**

Chancellor's Drive slopes down from east to west, and is parallel to the main side of the University grid established by Lasdun and respected by Mather. It provides one of the principal bus routes into the University and as such is a busy vehicular and pedestrian thoroughfare, with a number of pathways linking to adjacent buildings. These pathways are inadequate for the high volume of pedestrian traffic resulting in damage to existing grass verges, with many of them worn down to bare earth.

The majority of the route is edged with trees. At the upper east part of the route the vegetation consists of groups of semi-mature and mature trees, which provide a significant buffer between the road and the pathway. Between the pathway and buildings to the south the space opens up with a grassed area allowing views through this space. Further to the west and south of Chancellors Drive the road is edged with a number of groups of Pine and Birch trees. The north side of the road it is edged with a row of Turkish Hazels, set in a small grass verge.

The Turkish Hazels were introduced as a street tree at the University during the 1990s. Its introduction at the east end, more recently, was intended to develop a common language the full width and length of the campus.

With the exception of the maintenance building and stores - which detract from the space - the buildings either side of Chancellors Drive provide a sense of enclosure. The temporary buildings north of Chancellors Drive are to be replaced by a permanent building for which Full Planning Consent has been granted



(Academic Building West).

Towards its west end and on the north side of Chancellors Drive, the area is undergoing development. The Conservation Development Strategy requires the quality of the development to be at least equal with the existing. Full Planning Consents have been granted for the buildings anticipated, with the exception of that proposed in front of the maintenance building.

Overall, the character of this area is dominated by the



vehicular route and the pedestrian thoroughfare, giving the space a continuous sense of movement and activity, particularly during the day, it does not feel like a space to linger.

On the end of the Arts II building there is one of Lasdun's telltale signatures for an incomplete building - a spiral staircase. Reference to Lasdun's second Master Plan model shows it would have been the line of a parallel Teaching Wall. Whilst it is impossible to achieve anything like his original intent, it is possible to bring the Arts II building to a full stop - without challenging the landscape. A similar situation arises at the west end of the Teaching Wall at the School of Biological Sciences. If a consistent architectural language is to be maintained, it would seem entirely logical (and indeed appropriate) to apply the same solution to both situations. Page 146 describes a lightweight glazed pyramidal building - a metaphor for a buttress supporting an incomplete structure.

### Landscape Condition:

The landscape condition within this area is in need of improvement. The Stores and the Maintenance Area are negative elements in terms of their form and scale, although this influence is reduced by existing planting. The temporary buildings are a significant negative feature, which impacts upon the quality of this space. However, this is a short-term issue and will be resolved when they are replaced by Academic Building West. In addition, the results of heavy pedestrian traffic need to be addressed as this compromises the quality of this area. Perception:

Views	Corridor
Scale	Medium
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Active
Unity	Interrupted

**Positive Features of Significance:** 

Feature	Reason for Significance
Groups of Trees	The groups of Pine and Birch trees help to break up the visual impact of the neighbouring buildings and create a barrier between the road and the buildings.
Turkish Hazel Avenue	This is unifying element within the space, which helps to reduce the negative impact of the temporary buildings and maintenance building north of Chancellors Drive and creates a sense of rhythm to the space.

### **Detracting Features:**

Feature	Comment
Stores and Maintenance Area	These are functional buildings whose appearance detracts from the space. However, their impact is reduced by the influence of the existing trees (see above). In order to raise the visual experience to a level equal with the rest of the area redevelopment of this site should be considered (in line with the Conservation Development Strategy) so that the quality of the landscape for the entire length of Chancellor's Drive can be elevated.
Desire Lines	There are a number of desire lines through grassed areas that has resulted in muddy pathways.
Temporary Buildings	These buildings are similarly purely functional, and although temporary they are a significant element within this area, and detract from the overall character of the space. Fortunately, they are to be replaced by a permanent building of similar architectural language to the other buildings in the vicinity which will reinforce the unity of the space already provided by the Turkish Hazel avenue.

## Landscape Strategy:

Conserve:	Significant groups of trees. These are
	important elements and enhance the
	quality of this space.
Enhance:	Grass verges on the south side of Chancellors Drive are being damaged, consider replacement with amenity shrub planting or hard paving to enhance these areas.
Develop:	The desire lines through trees could be enhanced through the use of small scale paving e.g. Setts that could be paved closer to trunks, creating a hard surface between trees, rather than the existing muddy pathways. The West Development Masterplan covers this area and any new development will need to work alongside the Landscape Strategy. When pursuing Academic Building West, particular attention should be paid to protecting the mature and visually important trees in the vicinity and approach new planting proposals with equal insight.



# **15. Constable Terrace (West)**

PART 2: CHARACTER AREAS

### **Description of Area**

Situated to the west of Constable Terrace, this small area is partially enclosed by dense woodland (part of County Wildlife Site, number 1445) to the south of Norfolk Road. Norfolk Road forms a link from Chancellors Drive to the Sainsbury Centre for Visual Arts (SCVA) and for deliveries to the University. Parts of the woodland to the south of Norfolk Road are reducing the potential for views towards the SCVA.

Located within this area there are a small number of specimen trees set within lawn, one of which is set within a hollow in the lawn - possibly a remnant of a bunker left over from the days when the Campus was a golf course. The lawn flows round to the rear of Constable Terrace, with this area separated from the main lawn to the south of Constable Terrace by tree planting.

This is a transition area, where people generally simply walk through on there way to and from the Hospital and John Innes Centre to the West, across the river. It is anticipated that activity will increase here as development continues and the planned sculpture trail is introduced.







Views	Intermittent
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Vacant
Unity	Unified

**Detracting Features:** 

Landscape Strategy:

Feature	Comment
None	N/A

### Landscape Condition:

The general condition of the landscape is good. The area is well maintained and the low volume of pedestrian activity means that there is little 'wear and tear'. Maintaining the views through to the SCVA from Norfolk Road is important to the quality of this space.

### **Positive Features of Significance:**

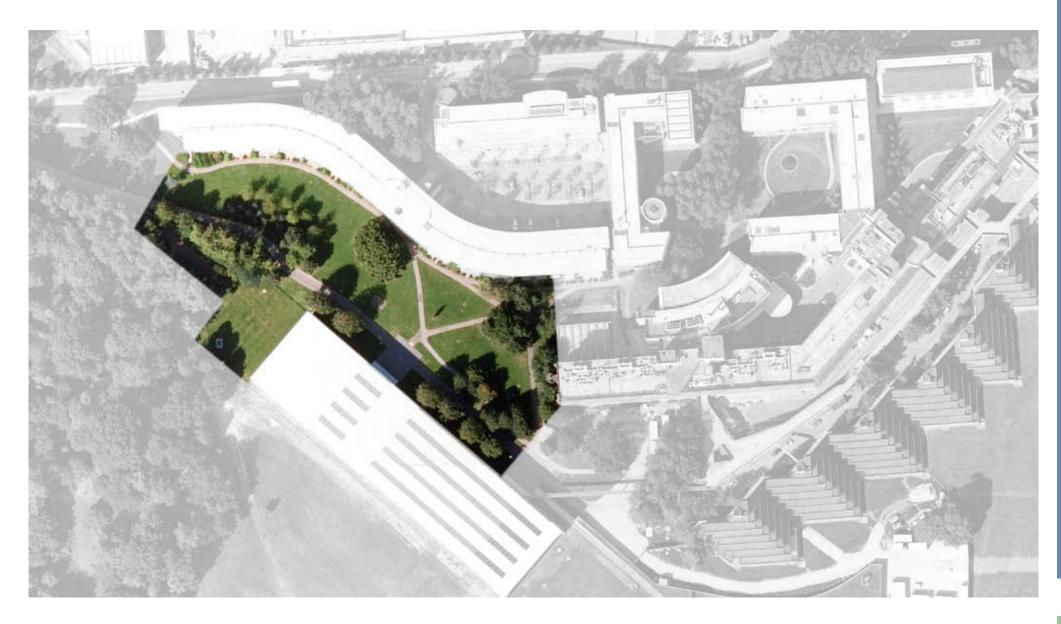
Reason for Significance
Elements within the landscape that enhances the local environment, and have significant amenity value.
2

Conserve:	Existing trees within this space, as these are key elements that enhance the character of this space.
Enhance:	The southern edge of Norfolk Road may require regular maintenance to ensure views through to the SCVA are maintained.
Develop:	Thinning of the existing trees needs to be considered in order to maintain / restore the view of the 'gable' end of the SCVA as originally intended for the landscape at this point.

# **16. Constable Terrace (South)**

University of East Anglia Landscape Strategy

# **16. Constable Terrace (South)**



Located to the south of Constable Terrace and to the north of the Sainsbury Centre, this area consists of a large expanse of lawn, which is visually divided by a mature Beech tree, situated opposite the corridor between the two halves of Constable Terrace. This is a key element within the space. To the west of the Beech tree the lawn is enclosed by a large group of trees, consisting of a mixture of Lime and Pine trees. To the east of the Beech tree the lawn is also enclosed by groups of trees, these screen the majority of views to the east creating a sense of enclosure within this area.

There is a good network of pedestrian routes linking the Sainsbury Centre to Constable Terrace and the wider landscape. The pathway that runs along the Constable Terrace is edged with amenity planting that partially encloses the small courtyards adjacent to Constable Terrace.

To the west of the Sainsbury Centre, overlooked by the Sainsbury Centre cafe, there is a grass courtyard with Henry Moore's sculpture, Draped Reclining Woman 1957-58, located in the south-west corner of this space. To the north-east of the Sainsbury Centre entrance there is another Henry Moore sculpture (name to be inserted). Not only are these important features, helping to link the interior of the Sainsbury Centre with the surrounding landscape, but they will also form part of a proposed sculpture trail. They are two sculptures that will in due course be joined by others strategically placed across the Campus to create a Sculpture Trail.









Views	Intermittent
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

**Positive Features of Significance:** 

### **Detracting Features:**

Feature	Comment
Lighting Bollards	Do not match with surrounding architecture and are in need of maintenance.
Amenity Planting	Planting enclosing the small courtyards adjacent to Constable Terrace is generally in a poor state of repair and requires management, maintenance and protection.

### Landscape Strategy:

Feature	Reason for Significance
Mature Beech Tree	Element within the landscape that enhances the local environment, and has significant amenity value.
Sculptures	These have value both to the University as a gift, and for their artistic importance, and also as a link between the Sainsbury Centre and the University landscape.
Sainsbury Centre	This is a substantial element within the landscape, in terms of its visual and sculptural influence on the locale.

Conserve:	Existing trees and general openness of this space, plus open setting for sculptures
Enhance:	Amenity planting enclosing courtyards requires improvement. Propose new planting to enhance existing, and temporary fencing to protect improvements.
Develop:	Consistent approach to street furniture with same style of bollard lighting across the campus.

### Landscape Condition:

The general condition of the landscape is good. There are, at present, areas that are being re-seeded with grass, which is temporarily impacting upon the landscape quality, along with elements that require improvement (see above). However, overall this is a well-maintained space that benefits from the influence of the Sainsbury Centre and Constable Terrace that enclose the space.

# **17. School of Biological Sciences (South)**

# **17. School of Biological Sciences (South)**



This area falls between Constable Terrace (south) character area and the Hay Meadow and acts almost as a transition space between these two areas. Located between the Sainsbury Centre and the School of Biology, this area opens up towards the south-east with views across the parkland towards the Broad. To the north-east part of this area it is guite heavily tree'd, with a group of semi-mature trees screening views of the School of Biological Sciences and the western edge of the Ziggurats. With respect to the 'gable' end of the School of Biological Sciences/The Teaching Wall, the spiral stair case is Lasdun's message for an incomplete building. The Conservation Development Strategy acknowledges this omission and identifies the space at the end of the Teaching Wall as a development site - an extension to the Teaching Wall - that will finally bring that building to a 'full stop'. Designed to the high standards in the vicinity, the landscape can both accommodate the extension and add greatly to the continuing success of the area. The current proposal for a lightweight glazed pyramidal building - a metaphor for a buttressed end to the unfinished Teaching Wall - is well placed to achieve discreet insertion, and subtle drama - the synthesis of building with landscape.

To the south of the School of Biology there is a relatively recent car park and picnic area that has been introduced to the area, which is enclosed by new planting that will form a hedgerow around it over time.

In addition, the elevated walkway that joins the Sainsbury Centre to the hub of the University crosses over this area, although this does not significantly impact upon the character of the landscape.









Views	Panoramic
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

### **Detracting Features:**

Feature	Comment
Bare earth/desire lines	There are areas of bare earth within this location as a result of desire lines and maintenance works.

# **Develop:** Framed views from the SCVA towards the Broad. 'Completion' of the Teaching Wall in line with the pyramidal building proposed means removal of the existing tree screen in the immediate vicinity. Replacement with new trees in this area should be considered but the lawn allowed to stretch to the very edge of new structures so that the new structure 'grows' out of the landscape.

### **Positive Features of Significance:**

Feature	Reason for Significance
Existing trees	The existing trees act as positive features within the landscape, partially screening the western edge of the School of Biology. Their function will come to an end when 'completion' of the Teaching Wall is accomplished
Sainsbury Centre for Visual Arts	This is a substantial element within the landscape, in terms of its visual and sculptural influence on the locale.

### Landscape Strategy:

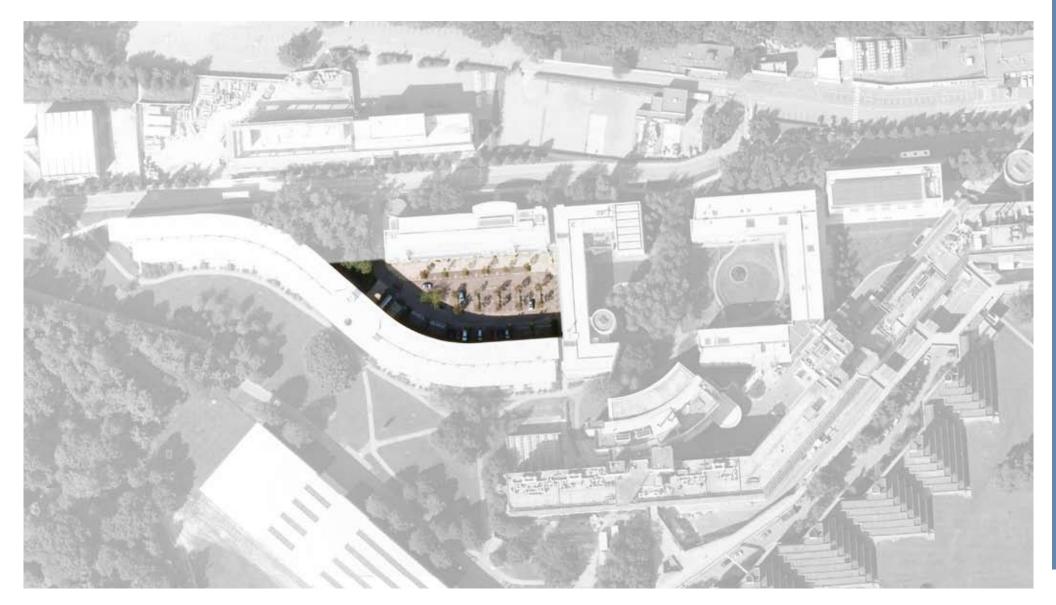
Conserve:	Existing trees, with the exception of those discussed below.
Enhance:	Although the landscape is in good condition there is room for improvement, views to the east towards the Broad are largely screened by existing trees. Consider the removal of some of the trees to open up views towards the Broad, and improve the backdrop to existing sculpture.
	The tree planting at the end of the Teaching Wall is there only to screen the 'temporary' gable end. Accordingly, the screen should be regarded as sacrificial in legitimate proposals to create a completion of Lasdun's building.

### Landscape Condition:

The general condition of the landscape is good. As a consequence of redirecting footpaths in the area - in readiness for 'completion' of the Teaching Wall - these are, at present, areas that are being re-seeded with grass. This is temporarily impacting upon the landscape quality, and there are elements that require improvement (see above). However, overall this is a well-maintained space that benefits from the influence of the Sainsbury Centre and Constable Terrace that enclose the space.

# **18. Elizabeth Fry Building (Car Park)**





Located to the rear of the Elizabeth Fry Building and enclosed by Constable Terrace to the south and Queen's Building to the east, this area consists largely of a car park. Bays of parking spaces are separated with narrow planting beds and trees. The planting beds have suffered from their close proximity to the parked cars, with a number of plants being trampled under foot that are in need of replacement.

To the north of the parking spaces there is a wide footpath/terrace. Whilst the southern edge of the car park is edged with a dense evergreen hedgerow separating the car parking from Constable Terrace. In addition, situated near the entrance to this area there is a small cycle park and a space for storing wheelie bins.







Views	Framed
Scale	Small
Enclosure	Enclosed
Variety	Simple
Texture	Textured
Colour	Colourful
Movement	Active
Unity	Interrupted

### **Detracting Features:**

Feature	Comment
Wheelie Bin Store	The existing Wheelie Bin store does not conceal the bins, which are considerable negative elements within the space.
Car Park Planting	The planting used to separate the bays of parking spaces has been severely trampled and requires replacement.

### Landscape Condition:

Overall the landscape condition is fair. This is a purely functional space and serves its purpose as such. However, functionality and quality are not mutually exclusive. Accordingly, there is room for improvement, with a large proportion of the planted areas within the car park requiring replacement or removal, and the storage facility for Wheelie Bins requiring enhancement. A re-design of the space would assist in creating a more valuable and usable area.

### **Positive Features of Significance:**

Feature	Reason for Significance
Existing Trees	With their autumnal colour the existing trees have the potential to be spectacular features within this space as they mature. Contrasting with the plain facade of Constable Terrace.
Evergreen Hedgerow	This hedgerow visually and physically separates the car park from Constable Terrace and adds an additional layer of colour and texture to the space.

## Landscape Strategy:

Conserve:	Existing trees, these are attractive features within the space and justify retention.
	Evergreen hedgerow, located alongside Constable Terrace, is in a good state of repair and should be retained
Enhance:	The Wheelie Bin store is a detracting feature within the space and should be more successfully screened.
Develop:	A review of the design of the space, particularly the parking element, to improve the functionality of the space by providing more parking spaces and enhancing the appearance through the removal of features such as the narrow planting bays, which are unlikely to be successful due to their shape and size.

# **19. Courtyard 1: Chancellors Walk**

This courtyard is enclosed by the Queen's Building to the west and the Education and Information Systems Building to the east. Rather than one single courtyard, this is in effect two separate courtyards. One serves the Education and Information Systems Building and the other the Queen's Building. They are separated by a large belt of Silver Birch that runs north to south through this space and into the western courtyard.

The western courtyard is partially elevated above the tree belt, with a curved footway linking the Queen's Building to the entrance of the space. The remainder of the space is grassed with some amenity planting adjacent to the building. By comparison with its neighbouring courtyard it is stark and uninviting, made the more so by a singularly unattractive playpen.

The eastern courtyard consists of a sloping grassed area, surrounded by a circular pathway, with a formal circular Lily pond set within the grass. In addition, there is a group of three Gingko biloba trees located in the south-east corner of the space.







Feature

Tree Belt

Curved Footway

Views	Framed
Scale	Small
Enclosure	Enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Fragmented

**Reason for Significance** 

of the buildings.

Building.

It is a mature feature that helps

to enclose the western courtyard and creates a wooded barrier that also helps to soften the influence

This is a significant feature within

the western courtyard that flows through the space like a stream quiding one into the Queen's

**Positive Features of Significance:** 

### **Detracting Features:**

Feature	Comment
Unused Play Area	Situated adjacent to the footpath through this space there is a concrete pipe partially buried in the ground, which has no apparent value and visually detracts from the space

### Landscape Strategy:

Conserve:	Existing trees, these are attractive features within the space and justify retention.
Enhance:	N/A
Develop:	The eastern courtyard requires a re- design to make it a more accessible space and to encourage its usage, and to help unite the two courtyards rather than viewing them as two distinct spaces. If the child behavioural research associated with the intrusive playpen is complete, the pipe and the playpen in which it sits should be removed and the area re-landscaped. The prospect of implementing the development of the courtyard, for which Full Planning Consent has been granted - is the perfect catalyst for the improvement of the east courtyard.

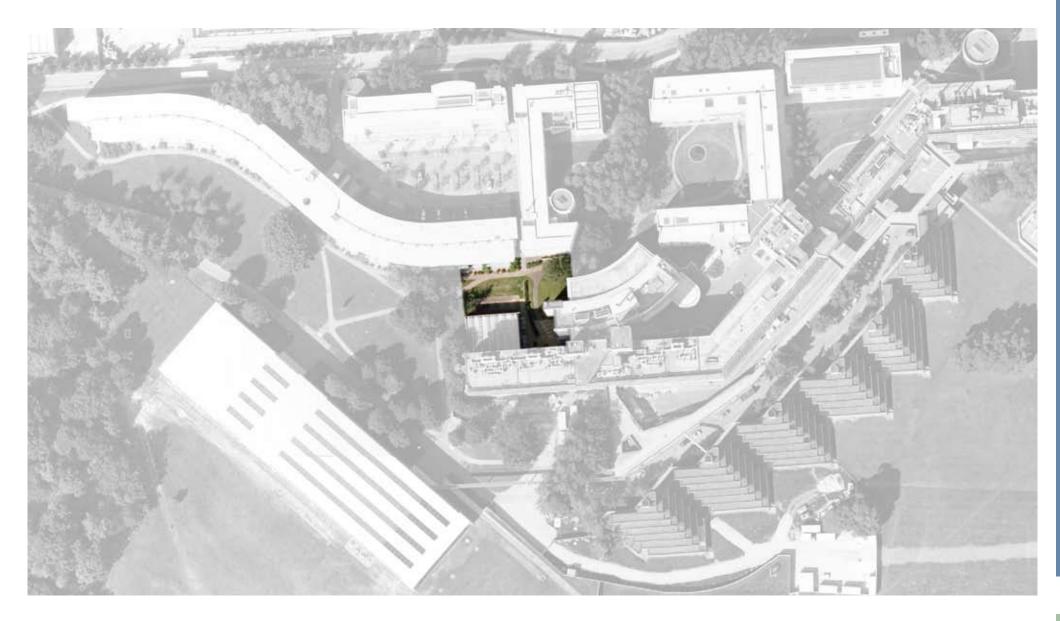
### Landscape Condition:

Overall the landscape condition is fair. The western courtyard is significantly more successful than the eastern courtyard and provides an attractive space in relation to the Queen's Building. In contrast, the eastern courtyard consists of a series of elements that appear to bear no relation to one another. Despite being a good space for residing within, in terms of microclimate and location, it feels separate and isolated, and is therefore under used.

Full planning consent has been granted for a new grass-roofed semi-basement building on the east side of the space, which will alter the character of the east courtyard and potentially bring it to life.

# 20. School of Biological Sciences (North)

# 20. School of Biological Sciences (North)



Located between the School of Biological Sciences and the Queen's Building, this small area is mainly a transition space and not somewhere to linger. The entrance space to the School of Biological Sciences has relatively recently been re-provided as a consequence of the recent Biomedical Research Centre with the addition of new hard landscaping and planting, and two cycle shelters. To the west of this space there is a large cycle park that is well used.

The recently renewed area gives the area a sense of rejuvenation, unfortunately this is not carried through to the rest of the space, which requires some enhancement to link it into the neighbouring areas.







Views	Framed
Scale	Small
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Interrupted

### **Detracting Features:**

Feature	Comment
Large Cycle Park	Located to the west of the space, this is a purely functional feature. However, it is lacking an access route for cycles to the space and there is no shelter for cycles. This could be better integrated into the space.
Amenity Planting	Some of the amenity planting to the north of the space, adjacent to the Queen's Building has been damaged and requires enhancement and protecting.

### Landscape Condition:

Overall the landscape condition is fair. This is a small space whose relevance is in the visual squeeze it provides between the area in front of Constable Terrace and Courtyard 1. The enhanced entrance to the School of Biology is of good quality. However, some features within the area do require enhancement to improve the space, but overall it performs the role it is designed to.

### **Positive Features of Significance:**

Feature	Reason for Significance
School of	The updated entrance to the
Biological	The updated entrance to the School of Biological Sciences
Sciences	enhances this part of the space
Entrance	and provides a high quality area
	of landscaping within the space.

Conserve:	The areas of lawn, these should be retained and protected from being trampled to maintain a sense of openness between the built form.
Enhance:	The amenity planting adjacent to the Queen's Building requires replacement and/or protection to ensure it flourishes.
Develop:	Improvement of the space around the cycle shelter and a general improvement of the space to unify it with the improved entrance to the School of Biological Sciences would also be beneficial. Including the provision of a cycle access route.

### Landscape Strategy:

21. Courtyard 2: East of School of Education and Lifelong Learning



21. Courtyard 2: East of School of Education and Lifelong Learning

This triangular courtyard is situated to the east of the School of Education and Lifelong Learning. It is level with the access point to this building but is raised above the parking and maintenance area to the south of the space, which is approximately 1 metre lower and is not accessible from this area.

Due to its location this is a relatively isolated space and although it is a sheltered and well-maintained space, it is under used.

The majority of the space is covered in close-mown lawn that slopes down to the south of the space. The western edge of the space has two cycle shelters located parallel to the footpath, and to the east of these there is a buffer of amenity planting, which includes some architectural species such as Phormiums and Grasses. Located within the lawn area there a small number of trees, which are also architectural in style and include Betula Jacquemontii (West Himalayan Birch).









Views	Intermittent
Scale	Medium
Enclosure	Enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Vacant
Unity	Interrupted

### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Maintenance area	Situated to the south of the space, these are a detracting feature within the space, both visually and through the noise created by vehicles and plant.

### Landscape Condition:

Overall the landscape condition is good, the space would benefit from some buffer planting to the south of the space to reduce the impact of the parking and maintenance areas. However, other than this it is a well-maintained pleasant space.

### **Positive Features of Significance:**

Feature	Reason for Significance
Lawn and Planting	These soften the impact of the buildings, screen the cycle shelters and make this a pleasant space to reside.

Conserve:	Existing planting, in particular planting along western edge of the space and the Betula Jacquemontii trees.
Enhance:	The southern edge of the grassed area, to minimise the impact of parked vehicles.
Develop:	A narrow buffer of planting to screen the parked vehicles, such as shrub or a hedgerow.

# 22. Founders Green



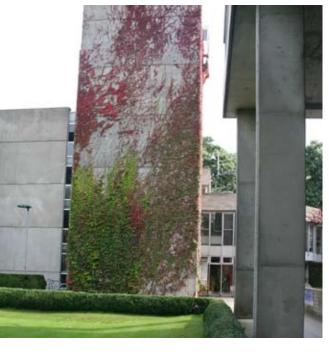
Situated at the main pedestrian entrance to the site this area is one of the most significant spaces within the campus. The space consists of two parts, to the northwest there is a large cycle shelter, which is largely hidden by planting.

The focal point of the space is Founders Green itself, which comprises a lawn enclosed by a Box hedgerow with footpaths around the space. The whole space is enclosed by mature planting and buildings, which is largely shelter the area from winds. To the north and west of Founders Green some benches are provided, which are separated by concrete planters along the northern edge of the Green. To the west of the Green the benches set within a planting bed.

A wide footpath separates the cycle shelters and the Green, with semi-mature trees running through and some additional cycle parking, which dominates this part of the space. Beyond this there is the cycle shelter, which is enclosed by mature planting that screens it from much of the surrounds.









Views	Framed	Fea
Scale	Small	Су
Enclosure	Semi-enclosed	
Variety	Varied	
Texture	Textured	
Colour	Colourful	
Movement	Active	
Unity	Unified	

### **Detracting Features:**

eature	Comment
/cle Parking	Although a large area is provided for cycle parking, there is still a significant amount of informal parking of cycles which is detrimental to the quality of the space.

### Landscape Condition:

The landscape condition of this space is generally good. The space is a formal, well-maintained space and provides a tranquil point for meeting and socialising.

The principal detracting element of the space is the informal cycle parking.

### **Positive Features of Significance:**

Feature	Reason for Significance
Mature Planting	The large volume of mature planting within and enclosing this area helps to create an intimate space.
The Green	This is the focal point of the space and provides a valuable 'Green' space to offset the austere buildings enclosing the space.

Conserve:	The mature planting and in particular the trees which help to enclose the space.
Enhance:	The concrete planters and wooden benches do not match the style or character of the space and could be replaced, which would enhance the space as a whole.
Develop:	Improved cycle parking or restrictions to prevent the informal parking of cycles which is detrimental to the appearance of this space. Pathways have been forced through the landscaping. Robust protection is needed and the planting re-established.

### Landscape Strategy:

# 23. Spanish Copse



The Spanish Copse is one of the oldest features within the whole University site. It consists of a small group of trees, which are remnants of a historic copse, that were first indicated on a Tithe map as early as the 1830's. Therefore, this is an extremely significant feature that should be retained and maintained in its current condition.

It consists of a number of deciduous trees, which are predominantly Sweet Chestnut (Castanea sativa) Oak (Quercus robur) and Beech (Fagus sylvatica), set within an area of grass.

Located within the heart of the University campus, it is situated to the north of the LCR, which is the main entertainment venue within the University, and to the north-east of the Square, which is the key node and meeting place for the whole University community.

The Spanish Copse is raised above the adjacent LCR car park by approximately two metres, which has resulted in a physical and visual separation between the Spanish Copse and LCR car park. To the north and west the Spanish Copse is enclosed by existing buildings (the Registry and the Council Chamber), which possess views into and across the copse.







170

### 23. Spanish Copse

#### Perception

Views	Framed
Scale	Small
Enclosure	Enclosed
Variety	Complex
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Interrupted

**Detracting Features:** 

Feature	Comment
None	N/A

#### Landscape Condition:

The landscape condition of this space is generally good and is a well-maintained space.

It provides a valuable mature landscape feature in scale with the adjacent buildings.

Recent refurbishment of the square and remodelling of the most southerly section of the area should enable greater attachment to the amenity.

#### **Positive Features of Significance**

Feature	Reason for Significance
Trees	These are historically significant features and are of considerable amenity value.

Landscape Strategy:

Conserve:	The existing mature trees should be conserved as important historic and amenity features. Although none are planned, they should be provided with suitable protection from damage (such as root compaction, severance and bark damage) during any building or ground excavation works.
Enhance:	The existing trees, through the removal of any dead, dying or diseased trees and replacing them with the same species.
Develop:	N/A

# 24. The Square and The Street

<sup>72</sup> University of East Anglia Landscape Strategy





These incorporate the spaces around University House. To the west of University House is the 'Amphitheatre' that leads one down into a concrete paved plaza - The Square - which is currently undergoing renovation. This is a key social space within the University, which the renovation will undoubtedly reinforce.

To the south of University House are the majority of the University's shopping and banking facilities. These open up on to a small concrete plaza that incorporates a group of 4 semi-mature trees enclosed by wooden benches.

To the eastern side of University House the character of the space is quite different. It is enclosed by mature tree and shrub planting and incorporates an area of formal planting, in a 1960's/1970's style that includes a mixture of heathers, conifers interspersed with rocks, which has created a series of small intimate spaces for people to reside and socialise.







Views	Intermittent
Scale	Small
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Active
Unity	Fragmented

#### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Paving	The concrete paving down the Street and at the south east end of the Street - in front of the school of music - is in poor condition and detracts from the spaces that are otherwise lively and well used. The contrast between the refurbished Square and the surrounding area's older paving is now particularly noticeable.

#### Landscape Condition:

The condition of the landscape surrounding University House is generally quite poor. Although, there are a series of interesting and diverse spaces, the quality of the materials and planting within these spaces fails to inspire and as a result these areas feel neglected and do not perform as well as they could.

The contrast between the renovated square and the Street is likely to emphasise the drabness of the latter, which should be prioritised for rejuvenation when funding permits.

#### **Positive Features of Significance:**

Feature	Reason for Significance
Structural Planting	This helps to soften what would otherwise be quite a bleak, cold and uninviting space.

Conserve:	The mature planting and in particular the trees which help to soften the impact of the surrounding buildings.
Enhance:	The Square. This is a popular and well- used space, although its appearance lets it down. However, it is at present being renovated, which will significantly improve this area.
Develop:	A re-design of the areas to the south and east of University House to match in with the renovation of The Square would be beneficial in revitalising the whole of this space and unifying it.

# -X.5

**PART 2: CHARACTER AREAS** 

This is largely a functional space. It comprises an area for vehicle parking, accommodating in the region of 25 cars, which is screened to the north by a group of Pine trees. To the south of the car park there is a paved area, which includes a large number of cycle stands and some benches. These are located below three rows of trees, which help to separate the vehicular and pedestrian spaces from one another.







Views	Framed
Scale	Small
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Muted
Movement	Active
Unity	Fragmented

#### **Detracting Features:**

Landscape Strategy:

Feature	Comment
Parking	This is quite a hard and cold space and the impact of the often, randomly parked vehicles detracts from the quality of the space. This is further influenced by the lack of planting.

#### Landscape Condition:

The condition of the landscape within this area is poor, it consists of disjointed areas that require attention to improve their appearance and to make them more usable spaces. In contrast, the south-eastern part of the space where the cycle parking is provided is in good condition and requires little attention, with the exception of regular maintenance to ensure it remains in good condition.

#### Positive Features of Significance:

Feature	Reason for Significance
Structural Planting	This helps to soften the impact of the parked vehicles within this area. The rows of trees south of the space help to create a division between pedestrian and vehicular areas.

Conserve:	The mature planting. In particular the Pine trees and the rows of trees to south-east, which help to soften the impact of the surrounding buildings and separate these areas.
Enhance:	The car park and vehicular access route, with the introduction of more organised parking bays and consider the introduction of planting to separate parking areas.
Develop:	Reconfiguration of the car park where funding allows.

# 26. Formal Gardens

# 26. Formal Gardens



Located to the east of the Drama Studio there is a Formal Garden with an access route bisecting it. The garden links the Council House/Registry with the Halls of Residence to the east.

This area is enclosed by a medium high hedgerow, and contains amenity shrub planting around the edge of the space, with benches overlooking planting beds that are set in a small area of lawn. The planting beds contain a mixture of perennial plants.

This is the only garden of its type on the entire Campus and, pleasant though it is, it does not sit comfortably with the landscape and open spaces of the rest of the Campus. The area is within the site boundary of the proposed convention / conference centre development that will replace the old sports hall that is currently used as Congregation Hall. The footprint of the proposed redevelopment allows for the re-location of the garden as a formal court (much in character with Founders Green). Accordingly it offers the opportunity for replacement of an alien landscape with something more appropriate.



Views	Framed
Scale	Intimate
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Colourful
Movement	Peaceful
Unity	Unified

#### **Detracting Features:**

Feature	Comment
Gardens	The gardens, although pleasant enough, are an incongruous and fussy element in the landscape, contrasting with the rest of the Campus

#### Landscape Condition:

The landscape condition of this space is generally good, and is a pleasant place to meet and to socialise.

#### **Positive Features of Significance:**

Landscape St	trategy:
--------------	----------

Feature	Reason for Significance
Mature Planting	The large volume of mature planting within and enclosing this area helps to create an intimate space.
The Green	This is the focal point of the space and provides a valuable 'Green' space to offset the stark buildings enclosing the space.

Conserve:	Maintain until replacement.
Enhance:	N/A
Develop:	Consider re-design of the whole area to relate it into the overall landscape form of the rest of the Campus. When redevelopment of Congregation Hall is undertaken, replacement of the Garden with a new and appropriate landscaped square.

# 27. East-West Link

# **PART 2: CHARACTER AREAS**



This space forms a link between the new Halls of Residence to the east of the University and the existing University campus. This area consists largely of lawn, which is bisected by footpaths linking the Halls of Residence to the main part of the University Campus.

To the north of the space there are some existing mature trees create a buffer between University Drive and the space, and to the south and east there are some existing trees that help to enclose the space.







Views	Framed
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Active
Unity	Unified

**Detracting Features:** 

Landscape Strategy:

Feature	Comment
Footpaths	Overuse of inadequate footpaths

#### Landscape Condition:

The condition of this space is considered to be good. It is a well-maintained space, but receives a healthy volume of pedestrian traffic. If retaining the quality and appearance of the area is to be achieved, the capacity of the footpaths should be increased, bollards incorporated to prevent abuse by non-authorised vehicles and barrier planting introduced to protect the landscape.

#### **Positive Features of Significance:**

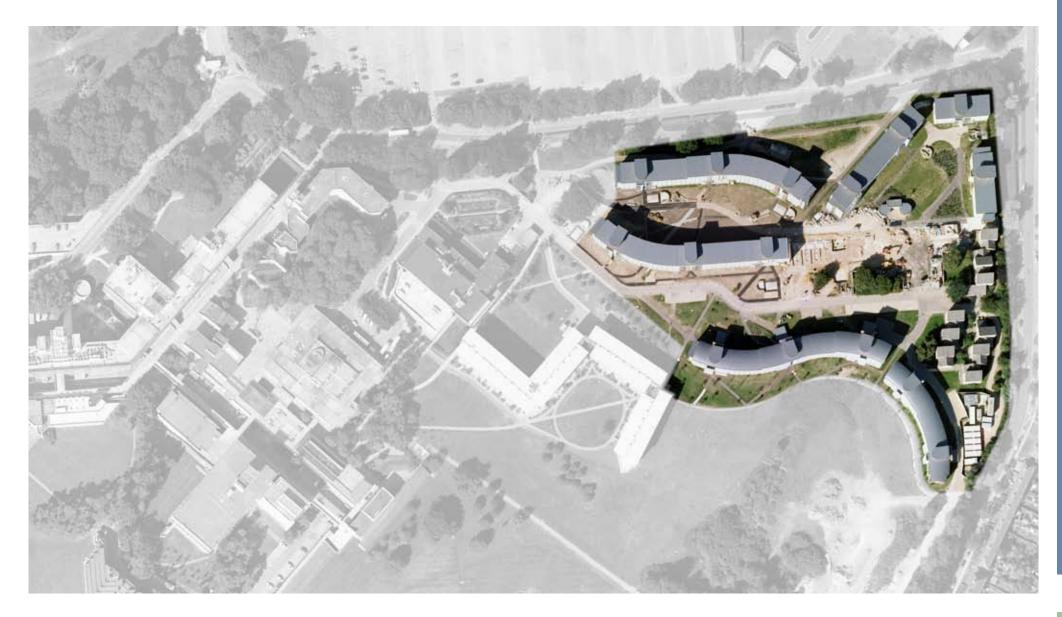
Feature	Reason for Significance
Mature Planting	The large volume of mature planting to the edges of this area helps to soften the impact of the new buildings and partially enclose the space.
The Green	This space provides an area of open space, which acts as a foil to the new Halls of Residence, east of this area.

Conserve:The openness of this space and the<br/>existing trees along the edge of the<br/>space.Enhance:N/ADevelop:Consider re-configuring the footpaths to<br/>respond more closely to the needs of its<br/>users.

# 28. Eastern Halls of Residence

University of East Anglia Landscape Strategy

# 28. Eastern Halls of Residence



This is a large character area that incorporates the spaces between and around the new Halls of Residence to the north-east of the Campus, which have only recently been completed.

These have a distinct character, which is a result of the style of the buildings that make up this part of the campus and the landscape in which they are located.

The landscape is characterised by areas of grass, which are bisected by a network of pathways linking the Halls to one another and the surrounding area. Within the spaces created by the buildings there are blocks of tree planting, the majority of which are either saplings or feathered trees. When matured these trees will add another dimension to this area, softening the built form and providing habitat for wildlife.

Also located within these spaces there are bicycle shelters and wheelie bin enclosures, which are constructed from gabions.







Views	Framed
Scale	Small
Enclosure	Semi-enclosed
Variety	Varied
Texture	Textured
Colour	Colourful
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

Feature	Comment

#### Landscape Condition:

Overall the landscape condition of this area is very good. The contemporary architecture is well-balanced with the simple landscape design of the space, and the inclusion of bold features such as the large belts of tree planting and gabion bin stores help to create a interesting and unified space.

#### **Positive Features of Significance:**

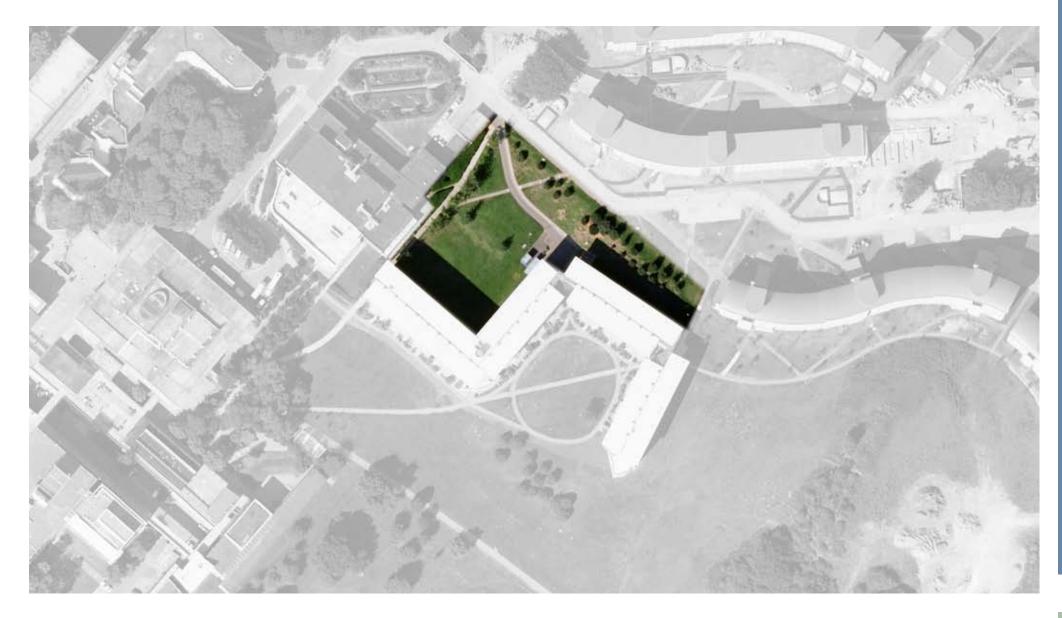
Feature	Reason for Significance
Tree Planting	As the tree planting matures this will become a significant positive element within the character area.
Gabion Bin Shelters	These offer a more contemporary approach to the storage of Wheelie Bins, not only hiding them but increasing colour and diversity within the locale.

Conserve:	Ensure the maintenance of the new planting is regularly and appropriately carried out so that it can grow to its original intended form.
Enhance:	N/A
Develop:	N/A

#### Landscape Strategy:

# 29. North of Nelson Court and Broadview Lodge

# **29. North of Nelson Court and Broadview Lodge**



This space incorporates the courtyard and the steep bank that runs to the north of Nelson Court. The bank is planted with young Holm Oaks trees that are at present still young and shrubby in nature, there is evidence of damage to the bank due to water run-off.

Situated to the rear of Nelson Court is a courtyard which is enclosed by the rear of Broadview Lodge to the south and east, and Congregation Hall to the west. It consists of a large area of lawn and its associated playing fields that is planted with two specimen trees. The lawn dates from the time when Congregation Hall was the University's sports hall and the lawn playing fields. It is located approximately 4 metres below Britten House, which is to the north of the space. Along the western edge of the space a footpath link runs through to the Congregation Hall, this footpath is edged with trees softening the impact of the Congregation Hall to the west.

In addition, to the east of the space there is a vehicle turn-around area and a metal wheelie bin store.







194

Feature

Views	Intermittent
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Remote
Unity	Unified

**Reason for Significance** 

**Positive Features of Significance:** 

#### **Detracting Features:**

Feature	Comment
Northern Bank	Due to the angle of this bank and the water run-off this is becoming degraded and is likely to require reinforcement, perhaps with planting and/or reinforced geotextile to prevent further degradation, and any health and safety related incidents arising.
Car Park and Wheelie Bin Shelter	The location of these features impinges upon the appearance and style of this space

#### Landscape Strategy:

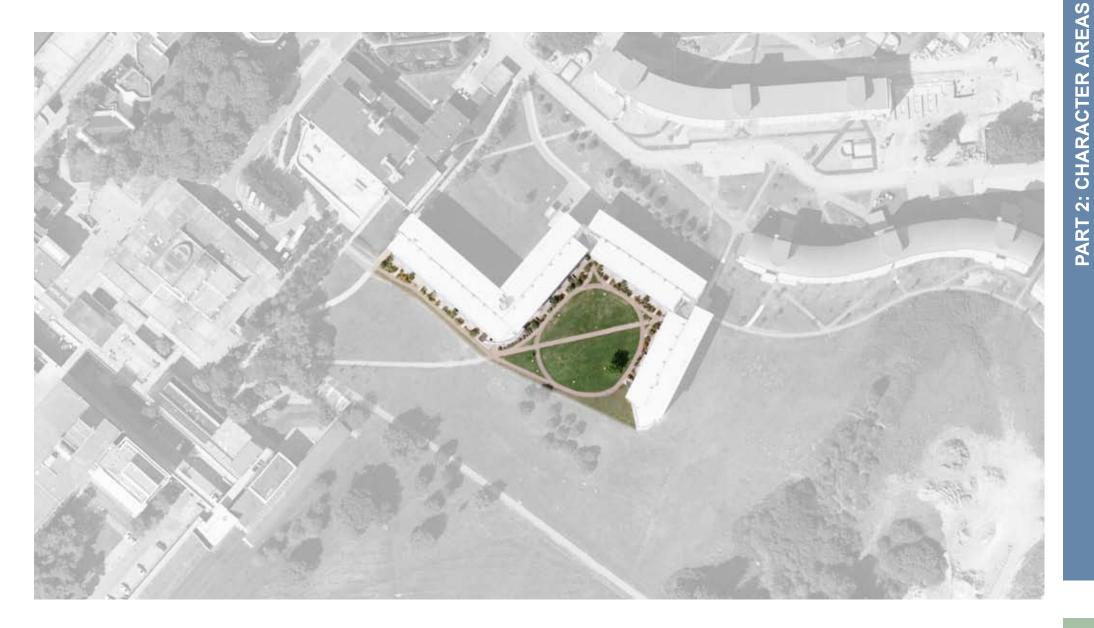
Conserve:	The tree planting along the northern bank should be retained as this will mature to become a strong element within the landscape.
Enhance:	The northern bank to ensure it does not degrade and become hazardous
Develop:	An improved and less intrusive bin store area would be beneficial and would help to unify the space, as originally intended by Mather.

#### Landscape Condition:

The landscape condition of this area is fair. The space is quite a simple and unimposing area that is in need of improvement, in particular the bank to the north of the space requires attention. The vehicle pick-up and turnaround and bin store could be better located to help create a more unified space.

# **30. South of Nelson Court and Broadview Lodge**

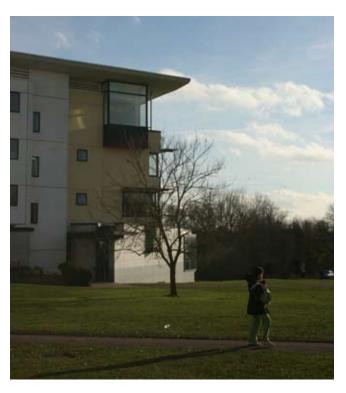
## **30. South of Nelson Court and Broadview Lodge**



This character area incorporates the area to the front of Nelson Court, which includes the planting and footpath directly to the front of the building.

This courtyard consists of a lawn with a pathway circulating it, and one pathway bisecting it. To the southeast of the space there is a single specimen tree. Whilst there is amenity shrub planting along the building edge, and a group of Sorbus trees south of the courtyard which screen some views to the south.







Views	Panoramic
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Unified

#### **Detracting Features:**

Feature	Comment
Amenity Planting	Although, the amenity planting along the building edge adds colour and interest to the space, much of it has been damaged and requires replacement and robust protection to help it flourish.

Landscape Strategy:

#### Landscape Condition:

In general, the space works well and the courtyard is a pleasant place to reside. Changes to the planting scheme would help unify the space. The decision to plant a group of Sorbus trees to the south of Broadview Lodge is unusual on a campus where planting for the most part is well considered, despite the need for some husbandry. It obscures much of the view of the Broad from ground level. However, they do add seasonal interest with the autumnal leaf colour contrasting well with the white of the building.

#### **Positive Features of Significance:**

Feature	Reason for Significance
Circulation Routes	A cohesive and effective series of footpaths has been provided that do not dominate the space, in contrast to much of the campus, but make the space accessible and link it to the rest of the campus.

Conserve:	The circulation routes as they are.
Enhance:	The amenity planting along the building edge to provide a better maintained and more unified planting scheme.
Develop:	Consider the removal of the Sorbus trees south of the courtyard to open up the vista.

# 31. Eastern Campus

**PART 2: CHARACTER AREAS** 

31. Eastern Campus

This character area covers the area to the south of Nelson Court east of Suffolk Walk and south-west of The Prospect, (a man-made spoil heap). It includes a defunct chalk pit at its base.

The area around the base of the Prospect is heavily vegetated with a mixture of scrub and young trees. To the immediate west of this area are three groups of trees. However, apart from this the space is a largely open plain of grass, which is maintained as close-mown lawn giving the space a 'Parkland' type character.

Considerable falls from the 'hilltop' of high land in the north down to the Broad in the south provide views across the valley towards the woodland beyond, which are framed by the Ziggurats to the west and some large blocks of trees to the east. Particularly spectacular views can be obtained from the top of The Prospect. There is a strong sense of 'visual flow' along the valley here, between the strong built form on the hillside and the broads edge. Any new development must respect this important landscape element.



Above: Views West (above left) and East (above right) from the eastern end of the haymeadows. See also the panoramic view from The Prospect on page 47.

Below: Wide panoramic view from the Hay Meadows toward the Ziggurats to the West and The Prospect to the East .

Below right: The rear of the Music School.



Views	Panoramic
Scale	Large
Enclosure	Open
Variety	Simple
Texture	Textured
Colour	Colourful
Movement	Peaceful
Unity	Unified

#### **Detracting Features:**

Feature	Comment
Built form	The visual dislocation of the distant residential buildings from the closer panorama when viewed from the Broad

#### Landscape Condition:

Generally this is an area in good condition.

#### **Positive Features of Significance:**

Feature	Reason for Significance
	Significant views over the surrounding landscape from the vicinity



Conserve:	The parkland character is fundamental to the relationship between development and the siting of the buildings.
Enhance:	N/A
Develop:	In accordance with the Conservation Development Strategy (which requires design to be of the highest standard), prior to countenancing any new development in this area, produce a set of design principles and establish a masterplan so that the landscape remains central to the proposals and reinforces the setting, using the existing panorama as the bench-mark for quality.

#### Landscape Strategy:

# **32. Courtyard 3: South of Library**

# **32. Courtyard 3: South of Library**



This is a particularly well-maintained part of the University campus. It consists predominantly of large grassed areas, planted with groups of trees. The space also includes some small areas of car parking, footpaths crossing the space and sculptures set within the grass lawn. Despite being located relatively centrally within the University, the area is quiet and is quite isolated with little thoroughfare passing through the space.







# Perception:

Views	Intermittent
Scale	Medium
Enclosure	Enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Peaceful
Unity	Interrupted

**Detracting Features:** 

Landscape Strategy:

Feature	Comment
None	

# Landscape Condition:

Overall, the landscape condition of this space is very good. It is well-maintained and probably benefits from being isolated from the general thoroughfare of staff and students. The addition of additional artistic features within the space would be beneficial.

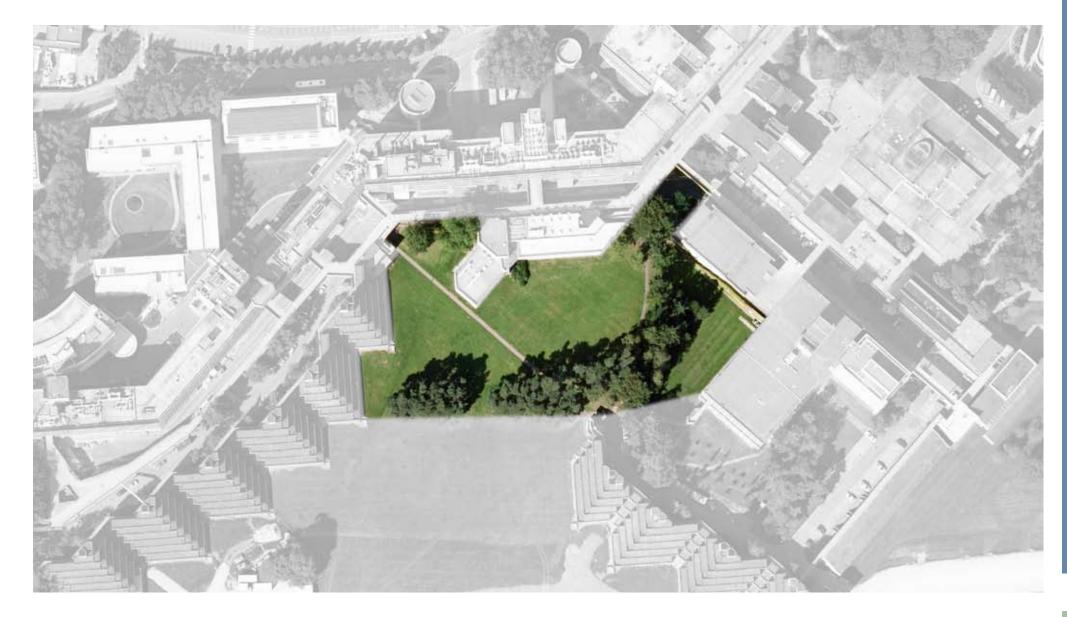
#### **Positive Features of Significance:**

Feature	Reason for Significance
Trees	These are in a good state of repair and help to screen views both into and out of the space
Lawn	This is well-maintained and provides a strong setting for the buildings and landscape features.
Sculptures	These are attractive elements within the space that help to give it a sense of place.

Conserve:	Retain the existing trees and lawn as they are integral to the character of the space
Enhance:	Through the introduction of additional sculptures into the area.
Develop:	This area is earmarked for completion of the Central Library to a footprint originally set by Lasdun in his masterplan. Young trees were planted in 2004/05 along the south edge of the library in preparation for the final phase of the Library, for which Planning and Listed Building consent is already granted.

# **33. Courtyard 4: Harbour Pines**

# **33. Courtyard 4: Harbour Pines**



This space leads into the area known as the Harbour and is located to the south of the Computing Centre.

It incorporates an area of lawn that is enclosed by a belt of Pine trees directly to the south, which blend into some Birch and Larch to the east, creating a strong landscape buffer between this space and the Lecture Theatres and Library. Directly to the south there is an opening in the Pine belt that frames the view of a single Larch tree, although this view is partially interrupted by an unmanaged group of trees and scrub to the east of the Larch.

Within the space there are also some specimen trees in the north-west corner of the site, a group of amenity shrubs adjacent to the Computing Centre. A pathway running from the north-west towards the Ziggurats south-east of the lawn, bisects this space.









# Perception:

Views	Framed
Scale	Medium
Enclosure	Semi-enclosed
Variety	Simple
Texture	Textured
Colour	Muted
Movement	Vacant
Unity	Unified

**Detracting Features:** 

[	Feature	Comment
	None	

# Landscape Condition:

The landscape condition of this area is good.

It is a relatively simple space regularly used in the summer by picnicking students, as well as a space to pass through and is well-maintained. The framed view of the Larch is a positive feature, it is should be protected and enhanced.

#### **Positive Features of Significance:**

Feature	Reason for Significance
Pine Belt	The pine tree belt creates a sense of enclosure within the space and also frame views towards the Broad.

Conserve:	The views towards University Broad through maintaining the space between the Pine belt, which frames views towards the Broad. Enhance views towards University Broad by managing bankside vegetation and consider relocation of some of the fishing platforms.	
Enhance:		
Develop:	N/A	

# 34. Norfolk and Suffolk (Service) Roads

# 34. Norfolk and Suffolk (Service) Roads



This consists of series of areas within the Campus that include the main working areas of the University. These are used for a combination of purposes including; the delivery of goods, staff parking, refuse storage etc. Due to the variety of uses within these areas they tend to be more fragmented and dominated by roads and vehicles - much as Lasdun had intended and expected.

In addition, these spaces are located within the core of the University and are therefore generally enclosed by high buildings, causing them to be quite dark and shady areas with little or no planting. Any planting within these areas tends to consist predominantly of evergreen amenity shrubs with little variety in colour or form - a source of some disagreement between Lasdun and Colvin - Lasdun on the one hand not wanting planting, Colvin, on the other, wanting precisely that to soften the very hard space.









# Perception:

Views	Corridor
Scale	Medium
Enclosure	Confined
Variety	Varied
Texture	Coarse
Colour	Muted
Movement	Active
Unity	Interrupted

# **Detracting Features:**

Feature	Comment
features	Primarily a functional service area with little concession to visual amenity. Highly visible for users of the raised walkways, but little scope for enhancement.

# Landscape Condition:

This is primarily a functional hard urban space with a coarse grain, vehicle-dominated and a hostile environment for pedestrians. The modest planting beds provide some relief for the hard forms and occasional specimen trees add a softer vertical element.

#### **Positive Features of Significance:**

Landscape Strategy:

Feature	Reason for Significance
Evergreen Planting beds	Simple evergreen form provides some relief from the hard materials, whilst complementing the concrete with its simple palette of colour and species

Conserve:	Retain existing planting beds and specimen trees	
Enhance:	Enhance biodiversity by providing, for example, roosting sites for birds	
Develop:	Better legibility of the area by improved husbandry and robust protection of vegetation.	

# **35. The Prospect**

16 University of East Anglia Landscape Strategy

**PART 2: CHARACTER AREAS** 

The Prospect is a striking grassy man-made mound which rises up to 12 metres above the surrounding campus parkland, with gradients of up to 1:2. Its visual and landscape significance is reflected in its inclusion in The Norwich City Council Local Plan Policy on development at the University, which specifically requires any development to respect the visual setting of The Prospect when viewed from the south. It is a popular spot for students to relax and enjoy the view, or for other recreational activities such as tobogganing on rare snowy days.

It also contains a range of wildflowers, including such species as Hedgerow Cranesbill, which is not found anywhere else on the campus apart from within a hedgebank near the site of the old observatory off Colney Lane. The western side has become established with a variety of native tree and shrub species, including Gorse, Hawthorn and Oak.

The Prospect has been subject to some remodelling in recent years to accommodate excavated material arising from recent construction projects at the University. It has been reseeded with grass and the aims of future management should be to encourage meadowland flowers and grass species whilst protecting the existing native trees and shrubs.

At the southern base of The Prospect is an old marl pit, colloquially known as Devil's Drop or The Dell, which was present on the 1890s Ordnance Survey maps. As an area of exposed chalk, it provides potential habitat for calcareous grassland. However, it has been subject to some infilling which has reduced its biodiversity value. Future management should have the aim of restoring this feature.







218

# Perception:

Views	Panoramic
Scale	Large
Enclosure	Exposed
Variety	Varied
Texture	Coarse
Colour	Muted
Movement	Peaceful
Unity	Unified

# **Detracting Features:**

Landscape Strategy:

Feature	Comment
Infilling of the Dell	This detracts from its ecological and historical value.
Construction works	Recent construction activity has resulted in erosion and rutting of the grassland. This should cease as activity here diminishes, but the aim should be to restore the grassland to its original quality,

# Landscape Condition:

The condition of the area is improving as construction activity decreases.

# **Positive Features of Significance:**

Feature	Reason for Significance
Vistas	Significant views over the surrounding valley landscape to the south and the University buildings to the west and north.
Tranquillity	A restful place away from the activity of the rest of the campus where One can enjoy the tranquil landscape from an elevated position.

Conserve:	Maintain the Prospect as an elevated open grassy area accessible by all. Protect and maintain the existing native trees and shrubs on the western side, but ensure that the open vistas are maintained by appropriate vegetation management.	
Enhance:	Restore the meadow grassland damaged by recent construction activity.	
Develop:		

# **36. Strawberry Fields**

0 University of East Anglia Landscape Strategy

# **PART 2: CHARACTER AREAS**

**36. Strawberry Fields** 



The area identified as Strawberry Fields covers the grazing meadows located at the southern end of the Campus, between Bluebell Lane and the River Yare. The fields are situated on the west-facing bank of the river, fairly steeply rising from an elevation of around 10 metres on the western side to around 20 metres at Bluebell Lane. Views over the paddocks from Bluebell Lane are limited by the well established Hawthorn hedge along the road, but views towards the marshes with the main University buildings behind are visible where there are gaps in the hedges.

The fields are subdivided by post and rail or wire fencing and generally used for horse grazing. The area is well-maintained, with stabling, fences and hedgerows maintained in good condition.





# 36. Strawberry Fields

# Perception:

Views	Panoramic
Scale	Large
Enclosure	Exposed
Variety	Simple
Texture	Smooth
Colour	Muted
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

Feature	Comment

# Landscape Condition:

This area is considered to be in good condition, with attractive vistas, well-maintained horse paddocks and established hedgerows.

#### **Positive Features of Significance:**

Feature	Reason for Significance
Hedgerows	A well-established hedgerow along Bluebell Lane enhances the character or the Lane and provide a valuable green corridor.
Vistas	Gaps in the hedgerow at access points allow views over the valley to the University buildings in the distance.

Landscape Strategy:	

Conserve:	Maintain the strong hedgerow boundary along Bluebell Road by layering if possible to maintain its density and infilling with native species in any gaps.	
Enhance:	N/A	
Develop:	N/A	

# **37. Main Car Park and Biomass Centre**

# **37. Main Car Park and Biomass Centre**



Situated to the south of the Sportspark and to the north of the majority of the university buildings, the Main Car Park serves a large proportion of the university staff, students and visitors, and is a substantial size providing in the region of 850 car park spaces. Due to the necessity to maximise the available parking provision the car park, there is no designated pedestrian footways, which does present occasional conflicts.

The car park is enclosed by a substantial area of structural landscape planting that largely screens the car park from view and reduces its impact upon the wider context.

In the fullness of time, the University can implement the full planning consent it enjoys for the 'Biomass Car Park', the first phase of which has already been carried out - the Biomass Energy Centre. Development will open up the opportunity of creating more academic space in an 'extension' of the Teaching Wall - as Lasdun and Thistethwaite had always intended.







#### Perception:

Views	Panoramic
Scale	Large
Enclosure	Semi-exposed
Variety	Uniform
Texture	Smooth
Colour	Muted
Movement	Active
Unity	Interrupted

# **Detracting Features:**

Feature	Comment
Large expanse of hard surface and parked cars.	Car parks are by their nature detracting features. However, the existing structural planting helps to mitigate against this.

# Landscape Condition:

Overall the landscape condition is considered to be fair, as a functional space it serves its purpose and is relatively successful in this respect. However, there is the potential for improving the space, reducing the impact of parked cars and the conflict between vehicles and pedestrians, and improving the overall appearance of the space.

#### **Positive Features of Significance:**

Landscape Strategy:

Feature	Reason for Significance
Strong Landscape Structure	The well-established structural planting partially encloses this space and separates the car park from the surrounding area reducing the impact of the car park locally.

Conserve:	Maintain the strong landscape structure along the edges of the Main Car Park.
Enhance:	Planting below trees, consider replacing grass with groundcover species such as Ivy. Potential to provide designated pedestrian areas within the car park.
Develop:	Redevelopment of the site in the long term in line with existing full planning consent.

# **38. INTO and Medical Centre**

8 University of East Anglia Landscape Strategy

# **38. INTO and Medical Centre**

**PART 2: CHARACTER AREAS** 

This area is located to the far east of the site close to the Bluebell Road access point. It has only recently been completed and as such it provides a well-maintained and attractive part of the university.

It consists of a central green that is bisected by the University Drive access road, with trees framing the green and some car parking located to the edge of the green. Eventually this will become an amenity space (Jubilee Plain) for those resident in the area.





# 38. INTO and Medical Centre

# Perception:

Views	Panoramic
Scale	Medium
Enclosure	Open
Variety	Simple
Texture	Smooth
Colour	Muted
Movement	Peaceful
Unity	Unified

**Detracting Features:** 

Feature	Comment

# Landscape Condition:

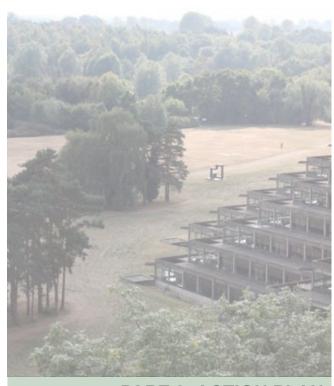
Although this area is still maturing it is considered to be in good condition, with a strong design concept and a good balance of hard and soft landscaping.

# **Positive Features of Significance:**

Feature	Reason for Significance	
New Tree Planting	The maturation of new tree planting will soften the impact of built form and help to create a green space at this significant location.	
Vistas	Gaps in the hedgerow at access points allow views over the valley to the University buildings in the distance.	

Conserve:	Ensure that existing planting and hard landscaping is well-maintained to provide an area that matures into an attractive space that contributes to the character of the University.
Enhance:	
Develop:	Complete landscaping/Jubilee Plain.

# Landscape Strategy:



**PART 3: ACTION PLAN** 



Above: View to the South West from the Library

Below: View to the East from the Library, towards Colman House and The Prospect



#### **ACTION POINTS**

This Landscape Strategy has identified a number of key areas for co-ordinated action, which have led to the development of the eight Strategic Policies.

In order to fulfil these Strategic Policies, an Action Plan is proposed aand desribed on the following pages. The Strategywill require the expenditure of resources by UEA, and this expenditure must form part of the University's over-arching Corporate Plan. The Corporate Plan has a five year life span with a biennial review. It represents a balance between many competing demands for priority and resources. As in every publicly-funded institution affordability is a key issue for UEA, and accordingly, the practical implementation of this Strategy will be achieved within affordability constraints imposed by the Corporate Plan. As funds are made available, UEA will carry out maintenance, refurbishment, renewal, development and master planning in line with the Landscape Strategy.

It is intended that the Landscape Strategy will have a five year life before review and renewal. Thus, whilst some matters will be addressed during the life of a prevailing Strategy, others may remain aspirational. Nevertheless, it will be possible to incorporate them into future revisions of the Landscape Strategy for later implementation.

The dynamics of UEA's Corporate Plan will therefore affect the rate at which the Strategy is implemented, but should not detract from UEA's commitment to the Strategy.

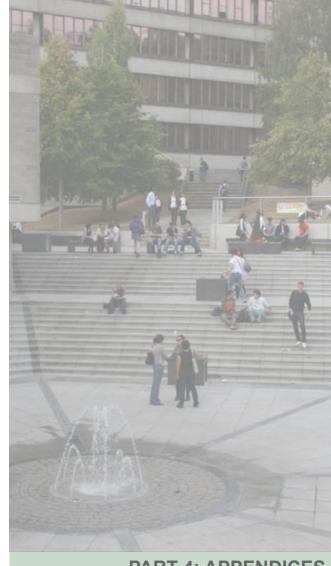
Action Point	Action	Relevant Strategic Policy*
1	Identify an individual to take responsibility for overseeing, implementing and updating the Landscape Strategy following the Action Points in a co-ordinated and structured manner	1, 2, 3, 4, 5, 6, 7, 8
2	Continue to cross refer the Landscape Strategy to the Conservation Development Strategy and the Estate Development Strategy in line with the University's Corporate Plan so that it remains complementary with these strategies and relevant to the declared intent of the University.	1, 2, 3, 4, 5, 6, 7, 8
3	In common with the Conservation Development Strategy, the Estate Development Strategy, and University's Corporate Plan inform the pending Development Framework Strategy.	1, 2, 3, 4, 5, 6, 7, 8
4	Prepare and implement strategic management plans for landscape areas, for example the parkland grassland and the University Broad edge, based on consultation with relevant parties and detailed survey with the aim of retrieving special features (typically vistas and visual links) and maintaining the character and quality of the landscape.	1, 3, 6
5	Prepare and implement management regimes for the day to day good husbandry of the estate and landscape to recognised practice standards.	2
6	Commission a tree and woodland survey to build upon existing information, drawing the whole together into a single resource for the purposes of identifying important trees and groups of trees in terms of their place in the landscape, both collectively and individually and for informing maintenance, management and future development of the Campus.	1, 6, 8

		AN
r circulation) d key access points) s legibility and a	2, 4, 5, 7	ACTION PLAN
fouling and path- provements and	3, 4, 5, 6	PART 3: /
mplement measures o developing a	6	
v and Estate	6	

7	Undertake a phased review of the landscape infrastructure (circulation, street furniture and pedestrian and vehicular circulation) throughout the Campus and particularly in areas of intense activity (typically in and around the built environment and key access points) with a view to undertaking design and reconfiguration works where deemed necessary to achieve improved Campus legibility and a common and coordinated corporate approach to signage and lighting.	2, 4, 5, 7
8	Develop and implement a management regime (including monitoring measures) for the regular removal of litter, dog fouling and path- side husbandry. As a consequence of the monitoring measures, develop and implement a phased programme of improvements and repairs to all footpaths across the Campus (typically but not exclusively boardwalks, bridges and rural paths).	3, 4, 5, 6
9	Review access to ecologically sensitive areas, identifying threats to biodiversity and as a consequence devise and implement measures to combat ecological decline (typically determining ways to discreetly manage visitor circulation) all as a preamble to developing a comprehensive Biodiversity Strategy.	6
10	Commission a Biodiversity Strategy, complimentary to the Conservation Development Strategy, Landscape Strategy and Estate Development Strategy including detailed ecological surveys of the University's County Wildlife Sites to inform a programme of management works aimed at restoring and enhancing the quality of these sites.	6
11	Create a Landscape Development Framework to provide contextual guidance to design teams (typically but not exclusively landscape architects) for future and ongoing development of the Campus.	1, 2, 3, 4, 5, 6, 7, 8
12	With the assistance of the Norwich Society and the Yare Valley Society, develop briefing principles for the East Master Plan Development Area, typically but not exclusively in recognition of the parkland character, biodiversity, visual flow, public and pedestrian access and the vistas and views of the area.	1, 2, 3, 4, 5, 6, 7, 8

\*Strategic Policies:

Strategic Policy 1: Conserve and enhance significant vistas Strategic Policy 5: Encourage access to wildlife Strategic Policy 2: Conserve the landscape and architectural significance of UEA Strategic Policy 6: Protect and enhance biodiversity Strategic Policy 3: Conserve the landscape setting of University Broad Strategic Policy 7: Conserve a legible hierarchy of circulation Strategic Policy 4: Provide a safe and welcoming environment for all Strategic Policy 8: Management of Trees



PART 4: APPENDICES



Landscape Assessment - Field Survey Sheet

Site Description:

## Principal Land Use and/or Building Type

(Circle as appropriate)

Additional Notes:

## Perception

(Circle as appropriate)

VIEWS	Corridor	Framed	Intermittent	Panoramic	Distant
SCALE	Intimate	Small	Medium	Large	
ENCLOSURE	Confined	Enclosed	Semi-enclosed	Open	Exposed
VARIETY	Uniform	Simple	Varied	Diverse	Complex
TEXTURE	Smooth	Textured	Coarse	Rough	
COLOUR	Monochrome	Muted	Colourful	Garish	
MOVEMENT	Remote	Vacant	Peaceful	Active	Frantic
UNITY	Unified	Interrupted	Fragmented	Chaotic	

## **Positive Features of Significance**

Feature and Description	Reason for Significance		

## **Detracting Features**

Feature

	Additional Notes:

## Landscape Condition:

(Consider the function, amenity, visual and ecological aspects of the landscape)

## Landscape Strategy

Conserve:	
Enhance:	
Develop:	

Description

# **APPENDIX 2**

Local Plan Policies

## Appendix 2: Local Plan Policies

### NORWICH CITY COUNCIL POLICIES

#### NE1

Within

(i) the valleys of the rivers Yare and Wensum;

(ii) Mousehold Heath; and,

(iii) areas providing green wedges into the City from the surrounding countryside including parklands and woodland:

development proposals will only be permitted where they are for the purpose of

agriculture and forestry;

• essential facilities for outdoor sport and recreation, cemeteries, or other uses appropriate to the purpose of this policy; or

• the limited extension, alteration or replacement of existing dwellings

and they would not damage the environmental quality or landscape character of the city, or of the areas in which they fall.

Development which is outside these areas but is likely to harm their visual amenity or ecological value will not be permitted.

#### NE2

Planning permission will not be granted for development that would result in the loss or damage of existing woodland as defined on the Proposals Map.

## NE7 [County Wildlife Sites]

Development which would be detrimental to designated and proposed sites of regional and local importance for nature conservation and geological interest, including local nature reserves and county wildlife sites, will only be permitted where it can be demonstrated that there are reasons for the proposals, which outweigh the need to safeguard the nature conservation interest of the site. In such cases the proposal will include an assessment of the impact and appropriate mitigating measures that will be undertaken.

EP11

Development will not be permitted in the functional flood plain except in wholly exceptional circumstances where it is:

(i) for a suitable amenity, conservation, sport or recreation use;

(ii) for essential transport and utilities infrastructure

Such infrastructure should be designed and constructed so as to remain operational at all times and result in:

 no net loss of floodplain storage or impedance of flood flows;

• no increase in flood risk elsewhere.

#### SR3

Development leading to the loss of existing sports pitches, sporting or recreational facilities or children's play areas will not be permitted unless

(i) An alternative facility of equivalent sporting or recreational value is provided and

(ii) There is no overriding amenity or biodiversity interest that would be lost or damaged.

Proposals for development within other areas of publicly accessible recreational open space or urban greenspace (as shown on the Proposals Map) will not be permitted if there is an overriding amenity or biodiversity interest in retaining the site in its existing open form.

Where there is no overriding amenity or biodiversity interest, proposals for development on publicly accessible recreational open space or urban greenspace (whether on sports pitches, children's' play areas or not) will be evaluated for their contribution to the amenity of the local community, to biodiversity, to a qualitative improvement to any remaining open space and (if involving the loss of open space) their contribution to the standards in policies SR1 and SR2. Such proposals will also be permitted where they involve an indoor leisure use, for which a demand has been identified, if that use cannot be located within a more sustainable location and development would not result in a significant detrimental impact on existing or proposed leisure facilities that are in a more

sustainable location.

## SR11

Where redevelopment or other changes are proposed along the river frontage, the completion of the Wensum Riverside and Yare Valley Walks will be sought by safeguarding land for the riverside walks and (as appropriate) cycle paths as defined on the Proposals Map.

The Council will seek agreement with the developer, or where appropriate, landowner, to secure the implementation of the appropriate stretch of Riverside Walk and public access to it.

## TRA15

The quality of the cycling environment will be enhanced by the completion of the strategic cycle network throughout the urban area through area wide strategies, other transport programmes, and development proposals. Measures will include in appropriate locations:

(i) cycle routes which enhance direct access to local facilities;

(ii) traffic calming where strategic cycle routes share the carriageway with vehicles on minor roads;

(iii) the inclusion of cycle priority measures at junctions where the cycle network coincides with major vehicular routes;

(iv) the installation of 'toucan' pedestrian/ cycle crossing facilities where strategic cycle routes cross major roads;

(v) designated on and off road cycle lanes designed and constructed to minimise conflict with other road users and to be coherent, direct, attractive and safe;

(vi) signing of the strategic cycle network.

Addressing the University specifically, the Norwich Local Plan states the following:

5.5 The University of East Anglia is a premier research and teaching University and, as such, a very important contributor to the economy of the area, not only in terms of provision of jobs directly, but also in the spin off benefits to a range of other sectors and research activities and its contribution to the health and social development of the City. Among other benefits are the community's and visitors' use of the Sainsbury Centre, the SportsPark and the Students' Union Venue. Recent government advice in Planning Policy Guidance Note PPG11 refers to "Innovative Cluster Areas" being developed, based on networks of locations with a central research and development base. Such a cluster area is established at Norwich Research Park and around the University of East Anglia together with the Norwich Research Park and Norfolk and Norwich University Hospital (both in South Norfolk District) and is expected to grow significantly over the next ten years. The University itself is experiencing rapid growth at present, having been relatively slow-growing during the 1980's and 1990's. The new School of Medicine is particularly important for establishing the links with the Research Park and new Hospital. The Local Plan provides for

complementary development within the City, in locations which can benefit from proximity to the University and other educational establishments and for the University itself for growth planned up to about 2008/9

#### EMP18

Development of high technology industries and research facilities will be accepted in association with the city's education establishments and permitted at locations in proximity to the University or City College, subject to environmental criteria and the criteria at EMP16 (b), (c) and (d). Development for high technology or research and development uses outside defined centres will be limited to those which can demonstrate a need to locate in proximity to both the University and Norwich Research Park or alternatively City College and controlled to uses in the Use Class B1 (b).

5.67 Policy EMP20 deals with the University's own development within its campus. It remains broadly similar to policy E10 in the adopted (1995) Local Plan but the City Council acknowledges that important decisions will need to be made before the end of this Local Plan period to establish the direction for the future expansion of the University. The University currently accommodates 13,270 students and employs 2,350 staff. This is expected to rise by 2008 to around 16,000 students and 2,700 staff. At these rates of growth, the University may outgrow the limits of the campus by around this date and future growth options will need to be considered before that stage is reached. However a number of options are at present outside this Plan's control and will have to be addressed in the near future. These would include potential development in the area of the Research Park in South Norfolk. Mechanisms to address these issues with South Norfolk District Council and other interested parties will need to be established and a 'Masterplan' (or Area Action *Plan) for the wider area crossing the boundary* into South Norfolk is expected to be developed in the near future. The City Council would support a partnership approach to such considerations and would bring forward proposals at the appropriate time as alterations to this plan (or part of a future review or Local Development Framework), as appropriate.

5.68 The University of East Anglia was designed in the 1960's by Denis Lasdun to fit within its river valley setting (a former golf course). The value of this setting and the architectural quality of the Lasdun buildings is now recognised in a proposed Conservation Management Agreement between the UEA and the Council. There is scope for expansion within the defined campus and the UEA are still working within the broad concepts of Lasdun's Master Plan. Developments in the short term up to 2008 are likely to be capable of being accommodated within the presently defined campus. The issue of the future growth of the University was extensively debated at the last Local Plan Inquiry (1993). The policy has been amended to seek a new Masterplan as context for the further significant expansion which is planned within the campus

5.69 This new Masterplan is envisaged to provide a context for the future developments within the campus up to around 2008 to include:

- Its physical form and relationship to the Lasdun plan and to more recent buildings in relation to their character and quality;
- Its relationship to the surrounding environment, in order to satisfy the element of policy EMP19 concerning environmental impact;
- Circulation arrangements within the campus and landscaping space around the buildings;
- The external impact of development including the further development of the Travel Plan (recently approved by the City Council under policy TRA12) and future public transport improvements including improved direct links to the Research Park and Hospital as well as to the City Centre and means to remove traffic from residential streets around the University.

It is envisaged that the Masterplan thus created would be regularly updated as the University develops and when new issues, both within and outside the campus, need to be addressed.

#### EMP20

Within the University campus at Bluebell Road, development for the University will be permitted in accordance with an overall masterplan for the campus, provided that: (i) the visual amenity of the parkland setting of the University is safeguarded within the development area, especially views north from Constable Terrace towards Violet Grove and views south from the Norfolk and Suffolk Terraces and from Union Square;
(ii) the visual setting of the southern elevations of 'The Prospect' are protected when viewed from the river valley and Bluebell Road;
(iii) an appropriate amount of new accommodation is provided for any additional student numbers attracted to Norwich in association with the development.

## Appendix 2: Local Plan Policies

### SOUTH NORFOLK COUNCIL

#### Policy ENV 1: Protection of landscape

Development will not be permitted where it would significantly harm the identified assets important to the character of the landscape.

#### **Policy ENV 3: River valleys**

The distinctive local landscape character of the river valleys identified on the Proposals Map will be protected and enhanced. "Inappropriate development" will not be permitted within the river valleys in the Norwich area, and special regard will be paid to protecting all parts of these valleys which contribute positively to the historic setting of Norwich.

## Policy ENV 8: Development in the open countryside

Permission for development in the open countryside, outside the Development Limits and Village Boundaries of existing settlements and areas identified for development in the Plan, will only be granted if it:

(i) Is requisite for agriculture or forestry; or

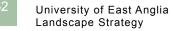
(ii) Is justified to sustain economic and social activity in rural communities, and demands a rural location; or

(iii) Is for the suitable adaptation and re-use of an existing rural building.

All such development must:

(iv) Respect the intrinsic beauty, the diversity of landscape, the wealth of natural resources, and the ecological, agricultural and recreational value of the countryside; and

(v) Be sensitively integrated into its rural surroundings in terms of siting, scale and design, while avoiding creating ribbon development or an unduly fragmented pattern of development



Bibliography

### **BIBLIOGRAPHY**

Photo credits:

Cambridge Architectural Research Ltd, (2006) Conservation Development Strategy for the University of East Anglia, Cambridge

City of Norwich Local Plan, (Adopted 2004)

South Norfolk District Council Local Plan, (Adopted 2003)

LSI Architects, (2003) East Development Master Plan, Norwich

Dormer, P. and Muthesius, S. (2001) Concrete and Open Skies: Architecture at the University of East Anglia 1962-2000, London: Unicorn Press.

Gibson, C. (1987), A natural History of the University of East Anglia, Nature Conservancy Council.

Hovey, J. (1994) Landscape Management Plan, Premises Division, University of East Anglia

Rick Mather Architects, (1989) Development Plan for the University of East Anglia, London

Colvin, B. (1967) University of East Anglia Interim Landscape Report and Approximate Estimate of Cost

Land Use Consultants for South Norfolk Council, (2001) South Norfolk Landscape Assessment Volume 2 - Landscape Character Areas of the Norwich Policy Area

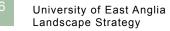
The Estate Development Strategy - University of East Anglia

The Corporate Plan 2008-2015

The West Development Route Plan.

All site photographs © Luke Broom-Lynne / Colin Coupland / Bidwells, apart from:

Front cover & p.37:	Roger Humphrey
v:	H. V. Adcock
38:	UEA





Glossary of terms

### **GLOSSARY OF TERMS**

**Analysis (landscape) -** The process of breaking the landscape down into its component parts to understand how it is made up.

**Assessment (landscape) -** An umbrella term for description, classification and analysis of landscape.

**Biodiversity** - The concept of variety in all species of plants and animals through which nature finds its balance.

**Classification** - A process of sorting the landscape into different types using selected criteria but without attaching relative values to the different kinds of landscape.

**Compensation -** The measures taken to offset or compensate for residual adverse effects that cannot be mitigated, or for which mitigation cannot entirely eliminate adverse effects.

**Constraints Map** - Map showing the location of important resources and receptors that may form constraints to development.

**Countryside** - The rural environment and its associated communities (including the coast).

**Cumulative effects** - The summation of effects that result from changes caused by a development in conjunction with other past, present or reasonably foreseeable actions.

**Diversity -** Where a variety of qualities or characteristics occurs.

**'Do Nothing' Situation** Continued change/ evolution of landscape or of the environment in the absence of the proposed development.

**Element** - A component part of the landscape (for example, roads, hedges, woods).

**Enhancement** - Landscape improvement through restoration, reconstruction or creation.

**Environment** - Our physical surroundings including air, water and land.

**Environmental appraisal -** A generic term for the evaluation of the environmental implications of proposals (used by the UK Government in respect of policies and plans).

**Environmental Fit** - The relationship of a development to identified environmental opportunities and constraints in its setting.

**Environmental Impact Assessment** - The evaluation of the effect on the environment of a particular development proposal.

**Field Pattern -** The pattern of hedges and walls that define fields in farmed landscapes.

**Geographical Information System** - Computerised database of geographical information that can easily be updated and manipulated.

**Heritage** - Historic or cultural associations.

**Indirect Impacts** - Impacts on the environment, which are not a direct result of the development but are often produced away from it or as a result of a complex pathway. Sometimes referred to as secondary impacts.

**Landcover** - Combinations of land use and vegetation that cover the land surface.

**Landform -** Combinations of slope and elevation that produce the shape and form of the land.

**Landscape** - Human perception of the land conditioned by knowledge and identity with a place.

Landscape Capacity - The degree to which a particular landscape character type or area is able to accommodate change without unacceptable adverse effects on its character. Capacity is likely to vary according to the type and nature of change being proposed.

259

Landscape Character - The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape, and how this is perceived by people. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement. It creates the particular sense of place of different areas of the landscape.

Landscape Character Type - A landscape type will have broadly similar patterns of geology, landform, soils, vegetation, land use, settlement and field pattern discernible in maps and field survey records.

Landscape Effects - Change in the elements, characteristics, character and qualities of the landscape as a result of development. These effects can be positive or negative.

**Landscape Evaluation** - The process of attaching value (non-monetary) to a particular landscape, usually by the application of previously agreed criteria, including consultation and third party documents, for a particular purpose (for example, designation or in the context of the assessment).

Landscape Factor - A circumstance or influence contributing to the impression of a landscape (for example, scale, enclosure, elevation).

Landscape Feature - A prominent eye-catching element, for example, wooded hilltop or church spire.

Landscape Quality (or condition) is based on judgements about the physical state of the landscape, and about its intactness, from visual, functional, and ecological perspectives. It also reflects the state of repair of individual features and elements which make up the character in any one place.

**Landscape Resource** - The combination of elements that contribute to landscape context, character and value.

Landscape Sensitivity - The extent to which a landscape can accept change of a particular type and scale without unacceptable adverse effects on its character.

**Land Use -** The primary use of the land, including both rural and urban activities.

Landscape Value - The relative value or importance attached to a landscape (often as a basis for designation or recognition), which expresses national or local consensus, because of its quality, special qualities including perceptual aspects such as scenic beauty, tranquillity or wildness, cultural associations or other conservation issues.

**Magnitude** - A combination of the scale, extent and duration of an effect.

**Methodology** - The specific approach and techniques used for a given study.

**Mitigation -** Measures, including any process, activity or design to avoid, reduce, remedy or compensate for adverse landscape and visual effects of a development project.

**Perception (of landscape) -** The psychology of seeing and possibly attaching value and/or meaning (to landscape).

**Precautionary principle** - Principle applied to err on the side of caution where significant environmental damage may occur, but where knowledge on the matter is incomplete, or when the prediction of environmental effects is uncertain.

**Preference -** The liking by people for one particular landscape element, characteristic or feature over another.

**Quality -** See landscape quality.

**Receptor -** Physical landscape resource, special interest or viewer group that will experience an effect.

**Regulatory Authority -** The planning or other authority responsible for planning consents or project authorisation (synonymous with determining authority or competent authority).

**Scenario -** A picture of a possible future.

**Scoping** - The process of identifying the likely significant effects of a development on the environment.

**Sense of Place** *(genius loci)* - The essential character and spirit of an area: *genius loci* literally means 'spirit of the place'.

Sensitive/sensitivity - See landscape sensitivity.

**Sieve mapping** - Technique for mapping environmental constraints, working from a series of overlays, sieving out less important factors.

**Sustainability** - The principle that the environment should be protected in such a condition and to such a degree that ensures new development meets the needs of the present without compromising the ability of future generations to meet their own needs.

Technique - Specific working process.

**Threshold -** A specified level in grading effects, for example, of magnitude, sensitivity or significance.

**Visual amenity -** The value of a particular area or view in terms of what is seen.

**Visual effect -** Change in the appearance of the landscape as a result of development. This can be positive (i.e. beneficial or an improvement) or negative (i.e. adverse or a detraction).

**Visual envelope -** Extent of potential visibility to or from a specific area or feature.

**Visualisation** - Computer simulation, photomontage or other technique to illustrate the appearance of a development.

**Worst-case situation -** Principle applied where the environmental effects may vary, for example, seasonally to ensure the most severe potential effect is assessed.

**Zone of Visual Influence -** Area within which a proposed development may have an influence or effect on visual amenity.

**Zone of Visual Significance –** Area within which proposed development may have a significant influence or effect on visual amenity.

Angling	41	Landscape character	5, 7, 26, 27, 28, 31, 32, 73, 223, 227,	Spanish Copse	6, <b>7</b> , <b>50</b> , 51, <b>78</b> , 79, <b>169</b> , <b>170</b> , 171	
Biodiversity	13, 26, 49, 51, 64, 69, 77, 86, 87, 90, 95, 99, 103, 106, 107, 115, 215, 223, 235, 239, 251	Landscape Institute	231, 235, 236 24	Square, The Strawberry Fields	6, <b>7</b> , <b>78</b> , 79, 170, <b>173</b> , <b>174</b> , 175 6, <b>7</b> , <b>78</b> , 79, <b>221</b> , <b>222,</b> 223	
Blackdale Plantation	6, <b>7</b> , 21, <b>50</b> , <b>51</b> , <b>78</b> , 79, 81, <b>121</b> , <b>122</b>	Lasdun, Denys	<b>24</b> , 25, 26, 28, 38, 39, 41, 43, 65, 82, 126, 134, 135, 146, 147, 207, 214, 226, 241	Suffolk Terrace	241	
Bluebell Marsh	6, <b>7</b> , <b>78</b> , 79, <b>105</b> , 108, 109	LOD Car Dark	,	Teaching Wall	6, <b>7</b> , 8, 135, <b>146</b> , 147, 226	
Bluebell Road	51, 123, 225	LCR Car Park	6, <b>7</b> , <b>78</b> , 79, 170, <b>177</b> , <b>178</b> , 179	Thistlethwaite, Frank	24, 26	
Broadview Lodge	6, <b>7</b> , <b>78</b> , 79, <b>193</b> , 194, <b>197</b> , 198	Legibility	54, 55, 56, 57, 70, 131	Tithe map	<b>20</b> , 21, <b>50</b> , 51, 102, 110, 122, 170	
Chancellors Drive	6, <b>7</b> , 51, <b>78</b> , 79, 86, <b>133</b> , 134	Library	6, 8, 79, 204, 205, 206, 207, 210	Trees	13, 21, 22, 32, 37, 50, 51, 64, 67, 71, 77, 82, 83, 86, 87, 94, 99, 102,	
Chancellors Walk	6, <b>7</b> , <i>153</i> , 154	Lighting	52, 56, 57, 67, 70, 143		103,107, 111, 115, 118, 119, 122,	
Circulation	25, 54, 70	Lusty Hills	6, <b>7</b> , <b>43</b> , <b>44</b> , <b>78</b> , 79, <b>109</b> , <b>110</b> , 111		127, 130, 131, 134, 135, 138, 139, 142, 143, 146, 147, 150, 151, 154,	
Colney Lane	19, 22, 23, 26, 43, 47, 91, 95, 110,	Moore, Henry	142		155, 162, 163, 166, 167, 170, 171,	
Colvin, Brenda	111, 118 vi, vii, 3, <b>24</b> , <b>25</b> , 28, 38, 41, 65, 82,	Nelson Court	6, <b>7</b> , 8, 39, 79, <b>193</b> , <b>194</b> , 195, 196, <b>197</b> , <b>198</b> , 199, 202		174, 175, 178, 179, 186, 187, 190, 194, 162, 163, 166, 167, 170, 171, 174, 175, 178, 179, 186, 187, 190,	
oorrin, Brenau	126, 214, 247	New Plantations	6, <b>7</b> , <b>78</b> , 79, <b>113</b> , <b>114</b> , 115, 118		194,198, 199, 202, 206, 207, 210,	
Concrete and Open Skies	39, 43, 233	Norfolk and Suffolk Roads	6, 79, 213, 214, 215		211	
Conservation Developmen Strategy	t 3, 8, <b>27</b> , <b>28</b> , <b>29</b> , 63, 65,	Norwich	vi, 19, 20, 31, 32, 33, 39, 41, 77, 138, 224, 225, 227, 231, 243	University Broad	6, <b>7</b> , 19, 22, 26, 28, <b>40</b> , <b>41</b> , <b>43</b> , <b>44</b> , <b>46</b> , 49, 51, 54, 56, <b>66</b> , 68, <b>78</b> , 79, <b>81</b> , <b>82</b> , 83, <b>86</b> , 87, 90, 106, <b>126</b> , 127,	
	134, 135, 146, 203, 247	Norwich City Council	30, 31, 32, 33, 218, 239, 240, 241		146, 147, 202, 211	
Constable Terrace	8, <b>9</b> , 52, <b>78</b> , 79, <b>137</b> , 138, 139, 140, <b>141</b> , <b>142</b> , 143, <b>145</b> , <b>146</b> , 147, 150, 151, 159, 241	Norwich Green Infrastructure		University Butterfly Meadow 6, 7, 55, 78, 79, 97, 98, 99		
		Strategy	32,33	University Drive	6, <b>7</b> , 51, <b>78</b> , 79, <b>129</b> , <b>130</b> , 131, 186, 230	
Cow Drive	<b>1</b> , 122	Norwich Research Park	119, 240, 241	University Fee		
Earlham Park	<b>8</b> , 19, 20, <b>21</b> , 94, 102, 130	Ordnance Survey	21, 51, 94, 102	University Fen	6, <b>7</b> , <b>78</b> , 79, <b>89</b> , <b>90</b> , 91, 106	
Eastern Hall of Residence	6, <b>7</b> , 79, <b>189</b> , <b>190</b> , 191	Prospect, The	6, <b>7</b> , <b>43</b> , <b>47</b> , <b>78</b> , 79, <b>217</b> , <b>218</b> , 219, 241	Violet Grove	6, <b>7</b> , 21, 55, <b>78</b> , 79, <b>101</b> , 102, 103, 122, 225, 241	
Elizabeth Fry Building	6, <b>7</b> , <b>9</b> , <b>52</b> , <b>78</b> , 79, <b>149</b> , <b>150</b> , 151	Coinchum: Contro		Vistas	13, 18, 37, <b>42</b> , <b>43</b> , <b>44</b> , <b>45</b> , <b>46</b> , <b>47</b> , 48,	
Footpaths	9, 54, 68, 83, 87, 91, 95, 99, 107, 115, 166, 186, 187, 199, 206	Sainsbury Centre	<b>7</b> , 8, 39, <b>41</b> , <b>43</b> , <b>45</b> , 127, 138, 142, 143, 146, 147, 240		49, 52, 59, 63, <b>64,</b> 66, 82, 91, 95, 111, 115, 119, 199, 219, 223, 231	
Founders Green	6, <b>7</b> , <b>78</b> , 79, <b>165</b> , <b>166</b> , 167, 182	School of Biological		Yare, River	iii, 6, <b>7</b> , 18, 25, 26, 28, 31, 32, 39, 41, 43, 54, <b>78</b> , 79, 82, <b>85</b> , <b>86</b> , 87, 94,	
Green Infrastructure	2, 33, 59, 91, 95, 102, 103	Sciences	6, <b>7</b> , <b>78</b> , 79, 135, <b>145</b> , <b>146</b> , 147, <b>157</b> , <b>158</b> , 159		102,118	
Harbour, The	6, <b>7</b> , 24, <b>50</b> , 51, <b>78</b> , 79, 127, <b>209</b> , <b>210</b> , 211	School of Education and		Ziggurats	26, 39, 41, 51, 65, 146, 202, 210	
Hay Meadows	6, <b>7</b> , <b>49</b> , <b>78</b> , 79, <b>125</b> , <b>126</b>	Lifelong Learning Signs	6, <b>7</b> , 79, <b>161</b> , <b>162</b> , 163 24, 54, 83			
Heronry	6, <b>7</b> , 21, 51, <b>78</b> , 79, <b><i>101</i>, 102, 103,</b> 122	South Norfolk Council	30, 227, 231	References in <b>Bold</b> refer to	illustrations or photographs	
Institute Fields	6 <b>7</b> , 23, <b>78</b> , 79, <b>93</b> , <b>94</b> , 95	South Walk	<i>43</i> , <i>4</i> 6			