



SOUTH CAMBRIDGESHIRE DISTRICT COUNCIL

**SOUTH CAMBRIDGESHIRE
VILLAGE CAPACITY STUDY**

Technical Report

May 1998

CHRIS BLANDFORD ASSOCIATES

Environment Landscape Planning

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Approved By:

G. SMITH

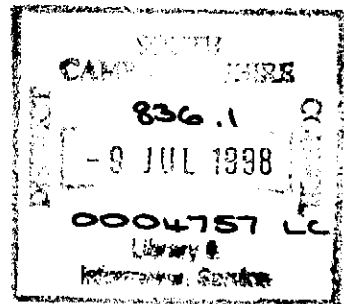
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DIRECTOR

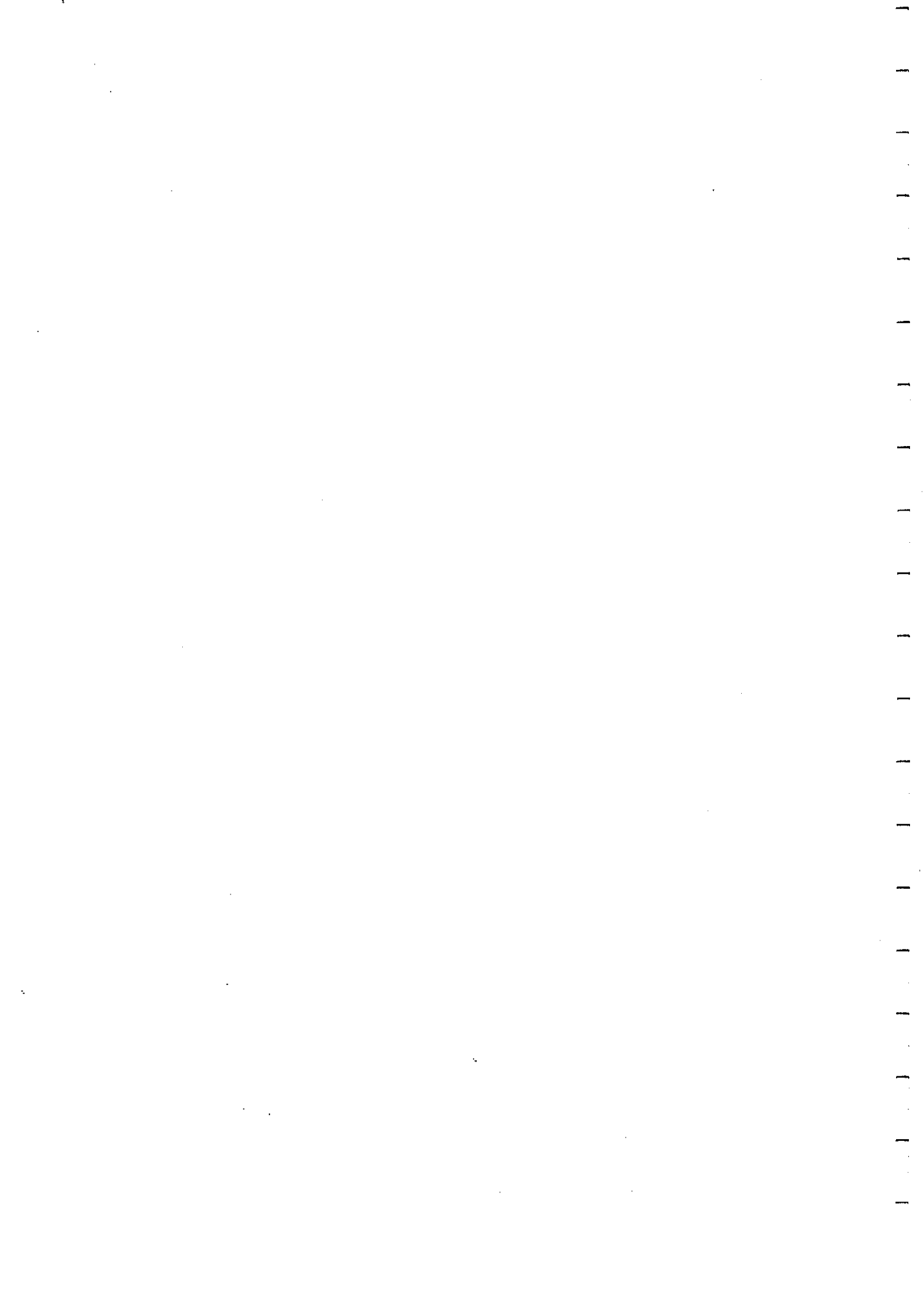
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Environment Landscape Planning



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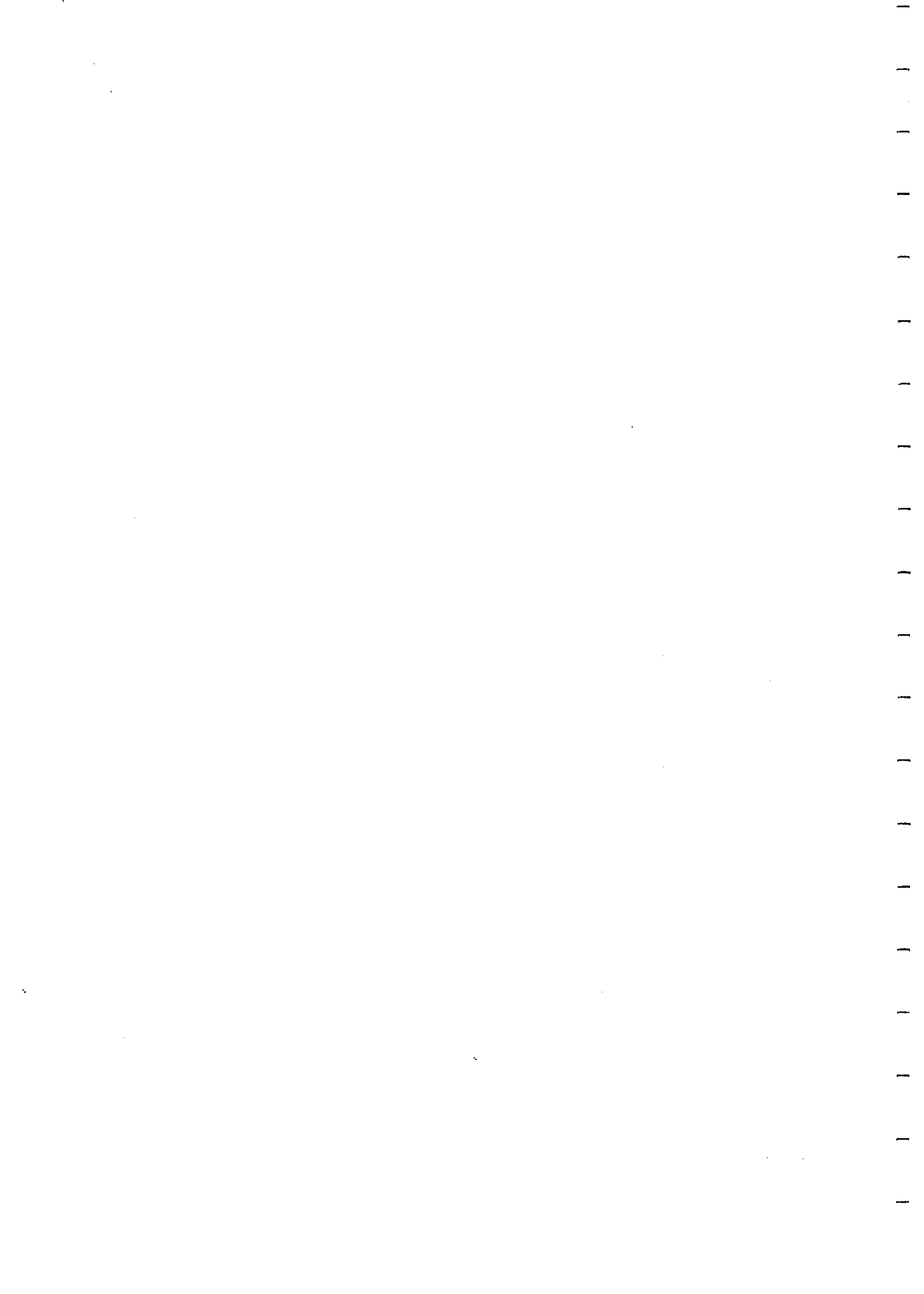
Table 1 Criteria For Identifying Environmental Capacity of Villages

Figure 1 South Cambridgeshire Character Areas

Figure 2 Study Methodology



EXECUTIVE SUMMARY

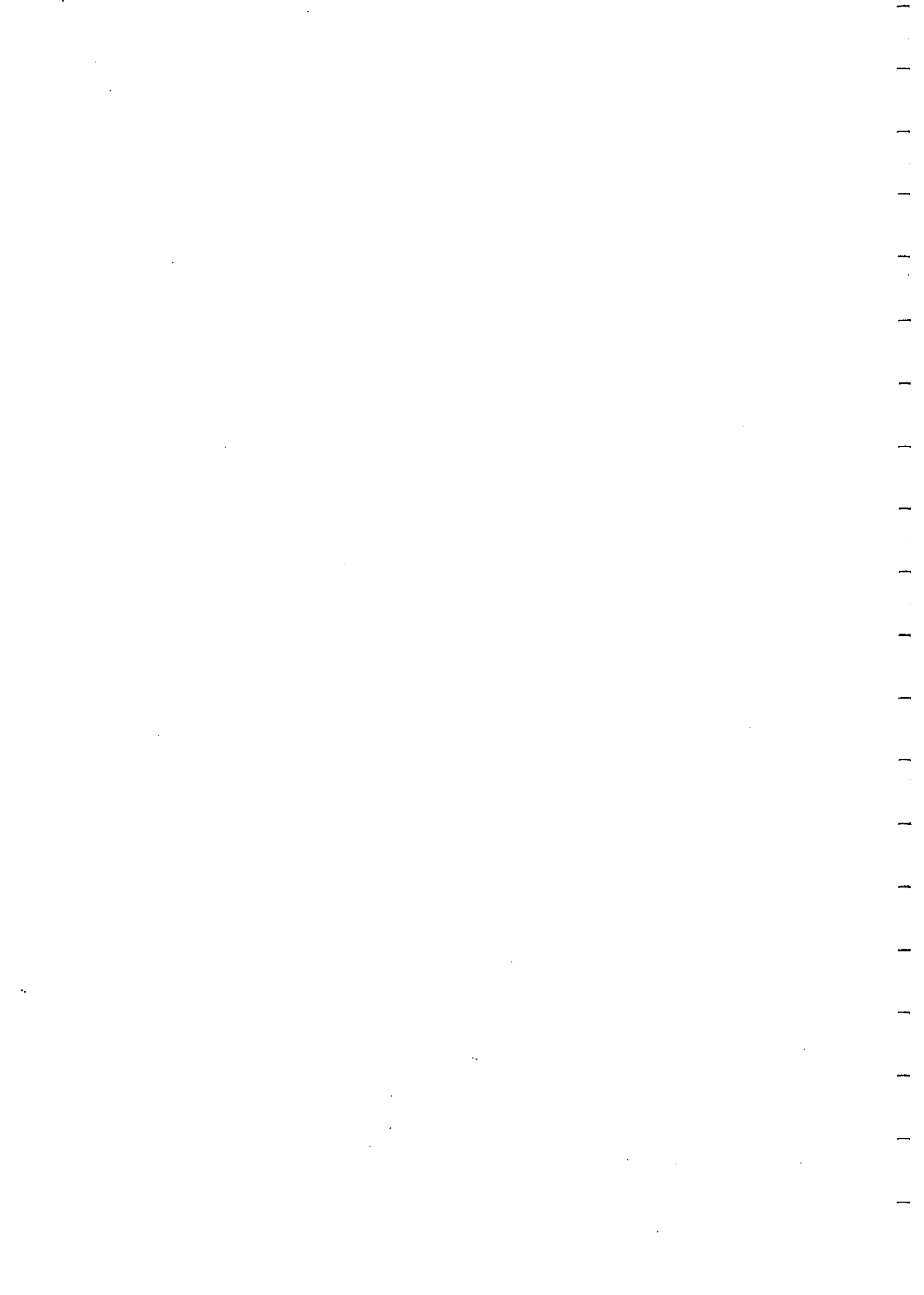


EXECUTIVE SUMMARY

- This Study has investigated the environmental capacity of South Cambridgeshire villages to accommodate development whilst maintaining their individual character and the rural character of the District.
- In carrying out this study, key capacity issues have been identified. These include the historic character of the villages, the pattern of development, the countryside setting, including the importance of gaps between villages, and the village context.
- Coupled with the identification of critical environmental characteristics, or key attributes, the Study has addressed planning and sustainability issues. These have included relevant planning constraints and designations, together with the provision for employment, community services, transportation characteristics and utility service provision.
- All South Cambridgeshire villages have been assessed. The Study focused in detail on the larger villages, and those with local plan allocations for development. These were each subject of a Detailed Village Character Study, comprising both desk studies and field work.
- The remaining 68 villages were assessed through an Overview, which resulted in the identification of their attributes, both in a summary form and in a 'matrix'.
- The key findings of the Study are that none of the villages are considered to have a high capacity to absorb change. Indeed, only a very few even have environmental capacity to absorb moderate change, the vast majority only having limited capacity. All the villages subject to the Overview were considered to only have very limited capacity for change, in the order of small infill only.
- These findings indicate that the environmental impact of any new development in the South Cambridgeshire villages is of critical concern.

- This Study provides a strong and sustainable basis for ensuring that the villages in South Cambridgeshire retain their special and individual character in the decades to come. It stresses that the level of development in or on the edges of the villages should be limited. This conclusion should therefore be incorporated into all planning policies which affect the District, from Regional Guidance through to the review of local plan policies and proposals, and the production of planning and development briefs and village design statements.

1.0 INTRODUCTION



1.0 INTRODUCTION

1.1 General

1.1.1 This study has been commissioned by South Cambridgeshire District Council. It gives an assessment of the 100 villages within South Cambridgeshire in relation to their capacity for further development.

1.1.2 The assessment methods used have been developed from the consultant's own experience of applying similar techniques of assessment to individual villages and small towns elsewhere in the country. Current national guidance on methods for assessing landscape character (Countryside Commission CCP 423, 1993) have been amended for use within this study to confirm the character of the landscape surrounding the villages. Section 3.0 sets out further details concerning the study methodology.

1.1.3 The detailed analysis of village design issues was outside of the current study brief. The important issue of appropriate design quality in relation to potential development or redevelopment of sites within the villages has therefore not been addressed in this study. In addition, this study has not attempted to identify proposed site-specific housing allocations. It does, however, where appropriate, identify broad locations both on the edge of and within villages that are considered to have capacity for development. This study will therefore be relevant to future reviews of the Local Plan, by providing guidance to the District Council in its consideration of new housing allocations. It is also of value to the current Local Plan review process, providing assistance in the assessment of objections, where additional development land is being sought by third parties.

1.2 Purpose of the Study

1.2.1 The purpose of the study is to investigate the environmental capacity of South Cambridgeshire's villages, including service and other infrastructure capacities, to accommodate development whilst maintaining their individual character and the rural character of the District.

1.2.2 As set out in the *Brief to Consultants* the key objectives of the study are to:

- provide an assessment of the form and character of the villages in South Cambridgeshire together with the physical implications for development;
- identify and detail the key environmental, service and infrastructure constraints and any threshold limits to continued high levels of development in rural South Cambridgeshire;
- assess the extent to which the scale of housing, shopping, employment and other services and facilities in each village provide for a balanced community;
- estimate the levels of capacity of areas within and adjacent to existing villages for additional housing development which would be in scale and character in villages. The identified levels would provide the basis for any housing allocations and development briefs in subsequent local plan reviews. Also, any proposed development would need to be compatible with the principles of 'sustainable development'.

1.2.3 In order to undertake an assessment of village capacities, it has been necessary to identify:

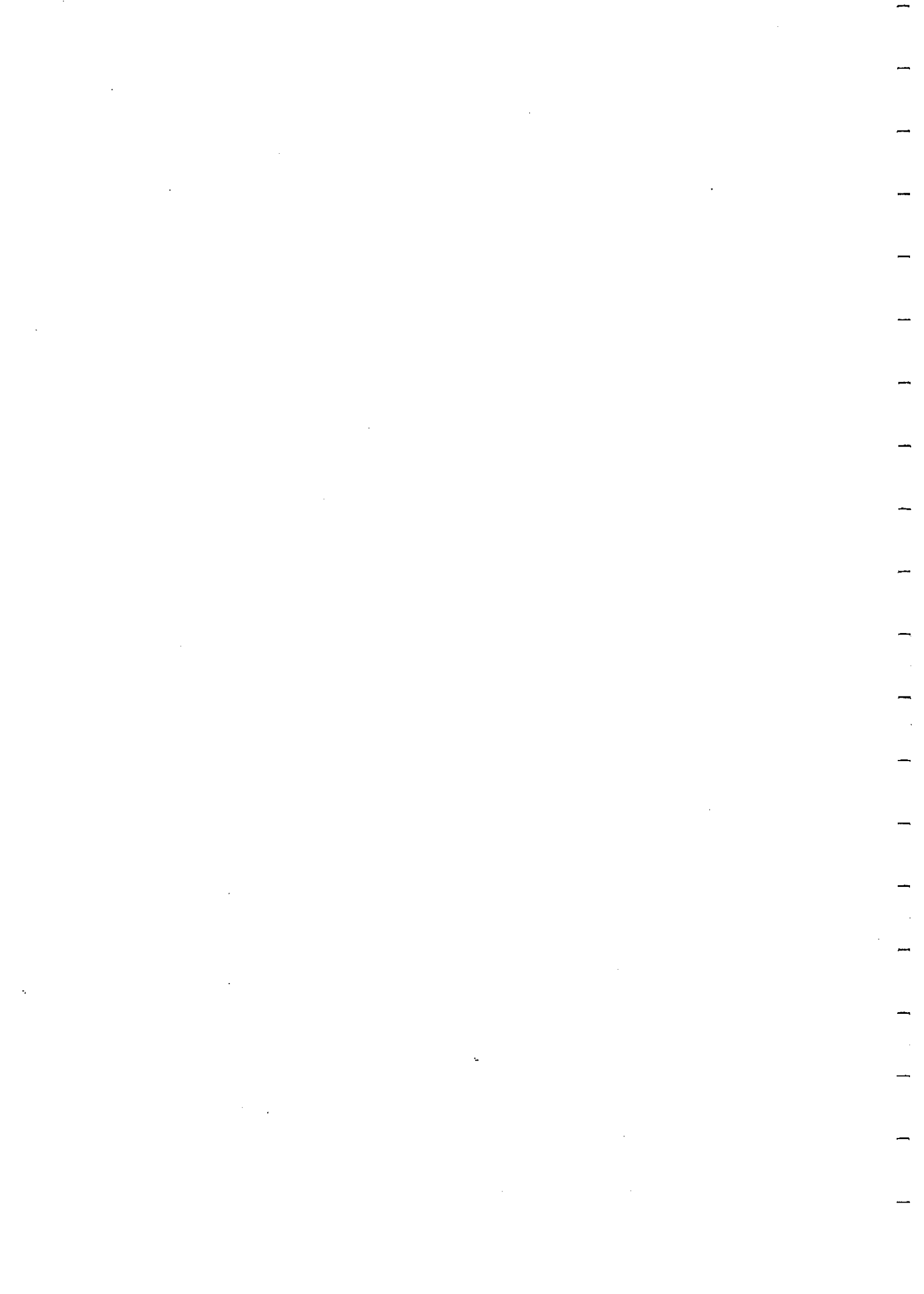
- those environmental assets or attributes which give South Cambridgeshire and its villages their particular character, and the degree to which these should be maintained intact.

1.3 Format of the Report

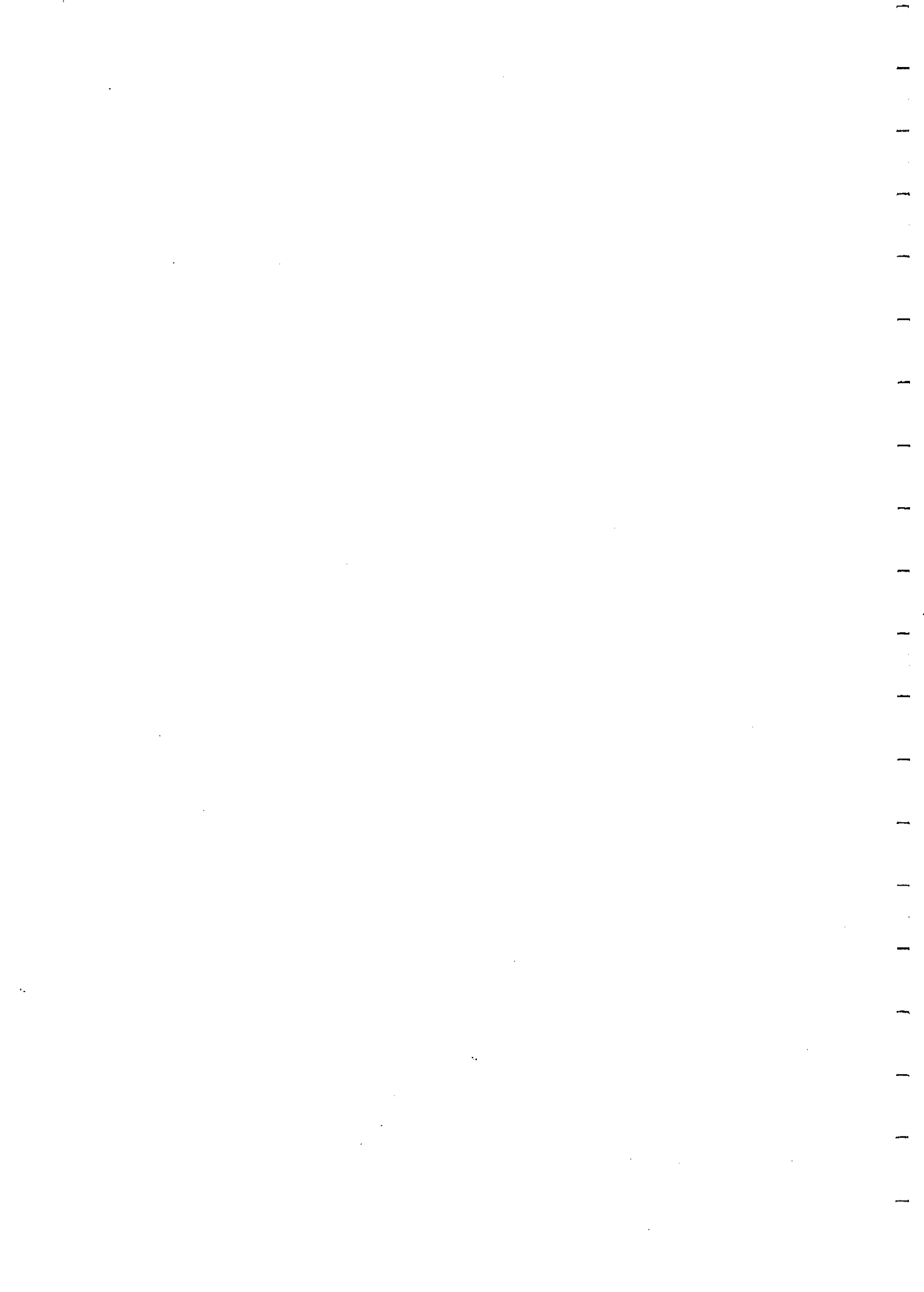
1.3.1 General capacity issues for South Cambridgeshire's villages are discussed in the following section, while Section 3.0 sets out the methodology used for the study. Section 4.0 describes the key findings of the village capacity assessments, based on the following structure:

- Overview of District;
- Fen Edge village capacities;
- Western Clayland village capacities;
- Chalkland village capacities;
- South-East Clay Hills village capacities.

1.3.2 The detailed analysis of capacity for individual villages are bound separately as a technical appendix to this report. The text is supported by black and white figures which set out analysis and appraisal of the landscape context and settlement character of each village assessed within this study. Also provided under separate cover is a detailed village by village appraisal of Sustainability Issues undertaken as background to the main study.



2.0 CAPACITY ISSUES FOR SOUTH CAMBRIDGESHIRE'S VILLAGES



2.0 CAPACITY ISSUES FOR SOUTH CAMBRIDGESHIRE'S VILLAGES

2.1 General

2.1.1 Focused around the historic city of Cambridge, South Cambridgeshire's villages lie within four distinctive landscape areas which give rise to variations in settlement pattern and village character (Figure 1). They include:

- the large 'Fen-Edge' villages to the north of Cambridge set within the exposed, bleak and remote character of the Cambridgeshire fenlands. The villages are typically seen against the backdrop of expansive views and horizons over large arable fields subdivided by drains and ditches with only a few scattered trees as notable features.
- the villages situated along gentle river valleys within the gently undulating and well-wooded plateau landscapes of the 'Western Clayland';
- the villages of the rolling 'Chalklands' to the south of the District with large arable fields and small but distinctive beech copses;
- the small villages and hamlets along the shallow valleys within the undulating 'South East Clay Hills' in the extreme south east of the District.

2.1.2 The size and form of the villages range from small relatively compact settlements with only 20-25 dwellings such as Papworth St Agnes, to the large sprawling 'satellite villages' of Cambridge with populations in excess of 5-6,000 such as Sawston, Histon and Impington, or Great Shelford and Stapleford.

2.1.3 The villages have largely developed from historic cores established by the 11th Century and dating from Saxon, Roman or Iron Age origins. Prior to 1945, the historical integrity of most villages in South Cambridgeshire was mainly intact. These villages reflect a long and continuous settlement of the District, later dominated by the associated growth of Cambridge.

2.1.4 Post-war Green Belt policies have constrained development in Cambridge. The emphasis has been on the continued development of the villages within South Cambridgeshire, initially the 'necklace villages' within the Green Belt and during the last twenty years the

villages beyond the Green Belt. Between 1951 and 1996, the population of South Cambridgeshire more than doubled from 62,300 to 126,600 people (103%), during the same time the population of the United Kingdom grew by only 12%. Many of the South Cambridgeshire's larger villages have seen a two-fold or more increase in their size as demand for housing has grown.

2.2 Historic Character

- 2.2.1 The existing character of the South Cambridgeshire landscape reflects many centuries of countryside change, influenced strongly by the ways in which land has been utilised and inhabited in the past. An understanding of landscape change over time is fundamental to understanding the character of the District, and in informing the assessment of the capacity of the assessment to absorb further change.
- 2.2.2 South Cambridgeshire's settlements developed in response to a wide variety of factors. Many settlements developed alongside long distance trackways and other lines of communication such as watercourses, often at crossing points of rivers or streams, or where two or more tracks crossed optimising the market for goods and services. Many of the villages in the Chalklands are situated on the line of the Icknield Way, at crossing points of streams or near to springs. At the Fen-edge, the older villages were located on 'islands' of low mounds of sand, gravel or clay within the damp fenland, such as Swavesey which is built on three raised areas. Villages are typically located at crossing points on the 'Clayland' river valleys to the south and west. The form of most villages has been influenced by the two, three or four open field system, which encouraged the central grouping of farm buildings.
- 2.2.3 Surviving features, from different eras, are part of the historic character of the landscape. Some visible archaeological features are obvious remains, such as Swavesey Castle, Fleam Dyke and Bartlow Hills, or the many moated sites that scatter the district. Designed parklands are also evident in the landscape at Wimpole Hill and elsewhere. However, the historic landscape also comprises less obvious features such as hedges and walls which are often survivors of an earlier field pattern. In the late enclosure landscape of Cambridgeshire, differences in the shape of fields reflect changing priorities of agricultural land use over time.

2.2.4 Within the villages themselves the subtle variations in vernacular village buildings are a strong influence on their character. For example, the distinctive materials used in the buildings of the Fen-edge and the Chalklands help to create a link between the settlements and their landscape context, giving the villages a strong sense of place. The relationship of the villages to the surrounding countryside is also of great importance. The layout and density of the housing is often related to agricultural land use and patterns of trade. Small trackways connected the farmsteads to the surrounding pastures which were often laid out to give a ragged edge to the village. Remains of past ditches, or 'lodes', represent the former links with the wider canal and river network for trade. The quality of the views to the local church from the countryside, which are important in a flat landscape and distinctive in a rolling one, echo the call to prayer. Some features have important historic and cultural associations, such as Chapel Hill at Haslingfield or the field held for annual fairs in Bassingbourn. Village greens were the focus of much varied activity, for tending livestock, common pasture, markets and meetings and recreation. Existing views into the heart of the villages are a visible and obvious link with the historic landscape.

2.2.5 The historic character of South Cambridgeshire's villages is a mix of different elements that combine to create a locally distinctive sense of place. Often there is a recognisable settlement structure with a scale of building that was appropriate to the appearance of the wider landscape and integrated with the natural surroundings. Building was a gradual process, with each successive layer of history leaving its imprint on the settlement structure.

2.3 Pattern of Development

2.3.1 The pattern of village development in South Cambridgeshire varies for a wide variety of reasons. The basic patterns usually occur in a complex mixture and include: nucleated; agglomerated; linear; planned or dispersed patterns. Many Cambridgeshire villages are apparently 'nucleated', however, in South Cambridgeshire a surprising number are formed from an amalgamation of initially separate and ancient hamlets. Often these are identifiable through place-name evidence, such as the West End and Green End of Comberton. In this case, the amalgamation would have taken place largely in the population expansion of the 14th century.

- 2.3.2 Villages that grew up along important communication links are often linear, with an area of green in front of buildings, as at Comberton, or at each end, as at Harston. While there were no new medieval planned villages in South Cambridgeshire, there are planned elements that survive in villages such as Swavesey, where the shifting fortunes of waterborne trade influenced the prosperity of the manorial landlord.
- 2.3.3 Development is also affected by phases in population growth or decline. While there are few actual lost villages in South Cambridgeshire, there are many where there has been a considerable past reduction in population and therefore loss of houses. In Comberton and Bassingbourn, for example, there are whole areas of house plots now under grass. Villages such as Haslingfield have a different pattern where the population decline of the 15th century led to piecemeal abandonment of plots.
- 2.3.4 Village pattern is often affected by the location and extent of open space within the settlement. The key areas of open space are usually the village green, common land used for grazing and any fields historically used for markets or fairs, such as at Bassingbourn.
- 2.3.5 Key characteristics of settlement pattern and vernacular building styles within the District include.
- Fen-edge villages such as Over, Willingham and Waterbeach are large to medium sized villages, often with fine medieval churches. Much of the local character derives from local building materials - light coloured stock bricks derived from local gault clays. Some of the red brick was brought over from Holland as ballast. Building materials are varied, often a mix of brick, thatch, render and stone has been used, depending on local pockets of materials. The larger villages have some substantial Georgian town houses. Waterborne-trade routes up and down the Great Ouse linked the area with the fenland proper to the north and were the source of village wealth. The pattern of north to south drove roads contributed to the strung out and linear character of Cottenham and Swavesey. As agricultural technology improved villages continued to grow, and then to decline as prosperity wavered. There are several shrunken villages and many moated medieval manors. The low lying nature of the terrain made small areas of higher ground important in order to avoid the dangers of flooding.

- Gamlingay sits on the Greensand Ridge, on a plateau above the undulating Western Claylands below. Unlike Gamlingay the majority of the Claylands has a dispersed settlement pattern, but the strong influence of the estate owners is very apparent. The traditional building materials include red Bedfordshire brick, and sandstone, with some ironstone. This pattern is repeated again in the South Clay Hills villages such as Linton and Balsham, although buildings tend to be more frequently of timber and brick.
- On the chalk, the topographic variety is unusual due to the glacial scouring of the Quaternary. Much of the Chalklands area is low lying and blends seamlessly with the claylands. The differences are marked in settlement structure and the value given to water. Settlement has arisen due to the use of the drier land for transport routes, especially the Icknield Way. Houses have been built using the local materials of pale 'white' brick and building chalk (clunch), under thatched roofs. A great proportion of the larger villages are the result of the amalgamation of older hamlets.

2.4 Countryside Gaps

- 2.4.1 In some instances there is the concern that further development in South Cambridgeshire may lead to coalescence of settlement. The immediate countryside gap between Cambridge and its surrounding satellite villages is of particular concern with the growing threat of villages such as Great Shelford and Milton becoming extensions of Cambridge's suburbs. The gaps between the Chalkland villages focused along the A1301 and A10(T) roads to the south of Cambridge are also of concern. Countryside gaps may or may not be of strong visual character but they are important in every case as buffers to, or strategic gaps between, development and help to maintain the distinctive pattern and separate character and identity of villages within the landscape.

2.5 Landscape Setting and Context

- 2.5.1 The presence and character of villages in South Cambridgeshire generally make a significant contribution to landscape character. Some of the larger villages have, in part, turned their backs on their landscape setting and appear separate from it; other smaller villages are more integrated into the landscape and comprise characteristic elements which often combine in specific areas to create 'rural village landscapes' as a distinct landscape type.

2.5.2 The relationship of individual villages to their landscape setting is typically influenced by the character of the built environment (building styles, local materials, extent and nature of open spaces and elements such as trees, walls, gardens, lanes and hard landscape details), and how these characteristics integrate the village into its local landscape context. In general, the distinctive character of South Cambridgeshire's villages as features in the landscape which is part of the wider critical capital which should be maintained for future generations, is given by:

- * villages comprising small groups of attractive/historic buildings along quiet rural roads;
- * a strong visual relationship between houses, village green/common land open space and the countryside beyond;
- * a strong sense of arrival at gateways to villages framed by views of attractive buildings, roadside trees and hedges, with glimpsed views of the historic village core;
- * a well-tree'd character with large mature trees around village greens and ponds, along streets and set within gardens;
- * the small-scale character of the built environment with the church as the dominant building seen in framed views from footpaths and roads within the surrounding countryside.

2.5.3 Generic landscape setting and context issues of concern to this study include:

- * the inappropriate design, scale and location of new development at village edges has changed the character of the transition between settlement and landscape setting - some villages which appeared gradually in approaches by road now appear abruptly with little sense of arrival at village;
- * new highway schemes and improvements have in many instances eroded the rural character of the village landscapes;
- * the lack of vegetation as screening elements to development often results in an abrupt transition between open arable fields and the village edge;

- * pressures for in-fill development within important gaps in the village edge are eroding essential visual links between village and countryside;
- * the predominance of relatively high density, bland and featureless post-war housing estates make little contribution to village character and provide unattractive features at village edges;
- * a lack of diversity and distinctiveness in the local countryside surrounding villages as features such as mature hedgerows, trees and ponds are lost through poor management or through removal for arable conversion, the conservation of new farm buildings or for other non-agricultural development in the countryside.

2.6 Sustainability Issues

- 2.6.1 A central theme of the concept of sustainable development is that there are limits to the 'carrying capacity' of the environment to accommodate development, beyond which unacceptable change to the environment and quality of life for present and future communities may occur. Acceptance of this principle in the case of South Cambridgeshire's villages implies the need for an approach to development planning that takes full account of those environmental and other capacity issues which matter for sustainability.
- 2.6.2 This study takes the position that the protection and enhancement of environmental character in the round is the key to defining the environmental capacity of villages to accept change. It is acknowledged that the capacity of individual villages and the South Cambridgeshire landscape as a whole to accommodate further development is not fixed. Physical capacities such as topographical or infrastructure constraints to the expansion of villages are relatively easy to define: environmental constraints such as Sites of Special Scientific Interest or Scheduled Monuments, although identified as constraints to growth by current planning policies, could be subject to less restrictive policies in the future as society's environmental values and needs for development change. The key issue here is therefore not about establishing fixed limits or thresholds, although where information on these are readily available they are integrated into the study. Rather, it is concerned with making informed professional value judgements (reinforced by local 'focus group' consultation involving local Parish Councils, Amenity Groups and Village Societies) to

assess the acceptability of impacts of the rate, level and form of development on the essential character of South Cambridgeshire's villages and landscape.

- 2.6.3 The thorough understanding of village character of villages at the local level is fundamental to the management of change through the District Local Plan. The key test is whether development in terms of its location, form and scale would compromise village characteristics which matter for sustainability, as identified through detailed character assessments. In order to make such judgements it is necessary to evaluate the relative importance of various levels of environmental capital. Those attributes which are identified as essential or 'critical' to the maintenance of village character are considered to be environmental constraints and limiting factors to further development. They do not represent fixed thresholds: the desirability or otherwise of protecting such attributes depends on the weight given to other sustainable development objectives.
- 2.6.4 Moving towards more sustainable forms of land use planning requires that the findings of the village capacity study (both environmental and infrastructure/service capacities) should be tested against the following sustainability objectives. These have been developed from the principles of sustainable development set out in the Planning Policy Guidance Notes and Cambridgeshire Structure Plan Policy SP1:

Visual and Environmental Character Objectives

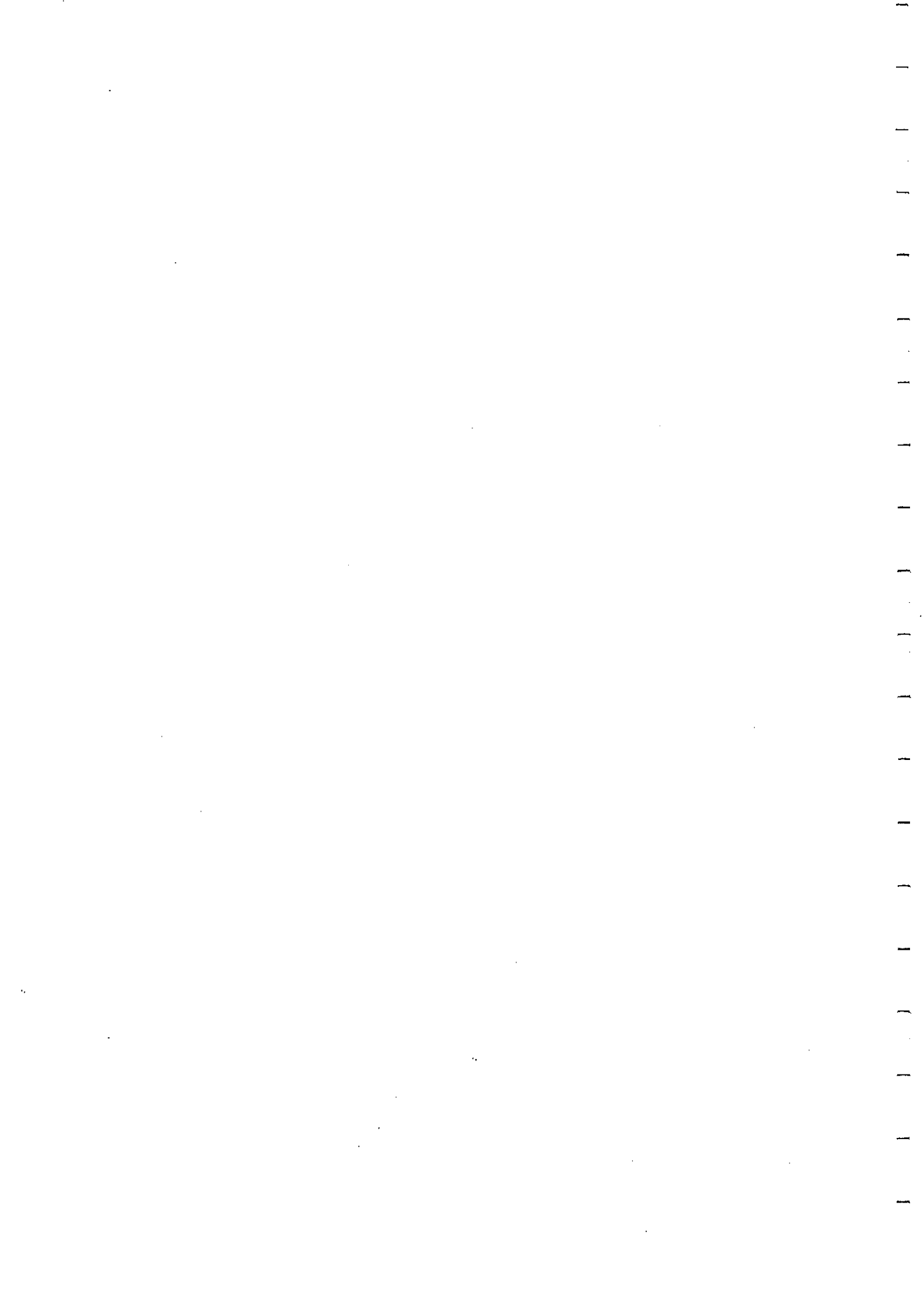
- * to encourage development that maintains and, wherever possible, strengthens the character of countryside around villages;
- * to promote new development which aims to enhance the environmental qualities and local distinctiveness of settlements;
- * to focus on developing sites which make full advantage of utilising existing developed land and buildings within villages;
- * to protect the countryside from unnecessary development where alternatives exist;
- * to promote investment in development sites which are likely to help secure environmental improvements in villages, including improvements to existing eye-sores such as derelict land or redundant and neglected buildings.

Socio-Economic and Environmental Resources Sustainability Objectives

- * to help reduce the need to travel by private car, promote forms of development in locations which minimise travel distance and encourage the use of alternative modes of transport such as walking, cycling and public transport;
- * to help reduce consumption of (and promote the efficient use of) natural resources such as minerals, energy and water;
- * to help to meet the local social and economic needs of rural villages by discouraging commuting out of the village for employment, shopping and education;



3.0 METHODOLOGY



3.0 METHODOLOGY

3.1 General

3.1.1 The village capacity methodology adopted for this study involves two levels of assessment. These are:

- a detailed assessment of 31 villages selected by South Cambridgeshire District Council on the basis of Local Plan policy intentions;
- and a broad-brush appraisal or overview of the remaining 68 villages within the District.

As shown on Figure 2, the study methodology comprised a three stage process. This is set out in the following sections.

3.2 Stage 1 - Village Character and Capacity Assessments

3.2.1 Stage 1 involves an assessment of the environmental capacity of existing settlements and their landscape settings to absorb further development.

3.2.2 Thirty-one detailed *village character studies* were undertaken to identify and analyse the character of each of the villages and define, most importantly, those critical or constant assets which contribute to this character and the capacity of the village for change. This characterisation process was a critical component of establishing the environmental capacity of each of the villages. This method fitted comfortably with the Countryside Commission's methodology for assessing landscape character (as set out in their guidance CCP 423), and also the emerging new methodology for evaluating environmental capital currently in preparation by the Countryside Commission, English Heritage, English Nature and the Environment Agency.

3.2.3 The village character studies included both desk studies and field work. The results of these studies are provided in Technical Appendix Volume 1. A visual survey of each village was undertaken by two assessors using a structured survey approach to record the visual character from particular viewpoints, summarised on a village character map. The village context was surveyed to assess the character of the village as a component of the different landscape types, i.e. the Western Claylands, Chalklands, and Fenland. Areas where the countryside 'enters' the village form were also recorded. The survey also

highlighted historic patterns, features and other evidence that influence existing character. This assisted in identifying the strength and historic integrity (in character terms) of the village core which greatly affects the attractiveness and distinctiveness of different villages.

3.2.4 The assessment of each village was summarised on two 1:10,000 maps. 'Village Context' maps display the key characteristics of the immediate setting and environs of each village. The physical and visual characteristics within the settlements are also identified as appropriate on 'Village Character' maps. A written summary description of village character was prepared for each village, structured as follows:

- * *Context*
- * *History*
- * *Landscape Setting of the Village*
- * *Settlement Pattern of the Village*
- * *Buildings and Spaces in the Village*
- * *Roads and Routes*
- * *Change in Village Character*
- * *Key Attributes*

3.2.5 The identification of key attributes or critical environmental characteristics in the field formed the basis for a public consultation exercise. Invited delegates were given presentations on:

- the explanation of the concept of environmental capital, and its role in assessing environmental capacity for a village;
- description of the process of assessing the character of individual villages in the District;

The delegates were then divided into focus groups, which reflected the three main character areas in the District: Fen-edge settlements; Western Clayland Villages and Chalkland Villages. These groups gave their views on what they saw as those attributes of village character which were of value and are important to retain, and those characteristics which were considered less critical and might be traded for development in the future. The broad conclusions reinforced the importance of a wide range of critical or constant assets which contribute to the character of the District's villages. These conclusions have been incorporated in the individual village assessments.

3.2.6 Finally, the environmental assessment indicates a broad definition of environmental capacity for the village, based on the components which are defined in terms of character as critical capital. Capacity is defined as 'limited', 'moderate' or 'high' based on the criteria provided in Table 1. This table shows how the different levels of environmental capacity to absorb change in villages should be translated into the appropriate scale of development. Where relevant, preliminary development opportunities or areas were identified which reflect the findings of the character assessment. Where opportunities were identified, these were further 'tested' in terms of their sustainability in Stage 2. Villages that are identified as having no further capacity for development on character grounds are sifted out at this stage to avoid unnecessary community and infrastructure assessment. Further details on the socio-economic aspects of sustainability issues for other villages not assessed in detail in Stage 2 are provided in the separate Technical Appendix Volume 2 to this report.

Table 1 Criteria For Identifying Environmental Capacity of Villages

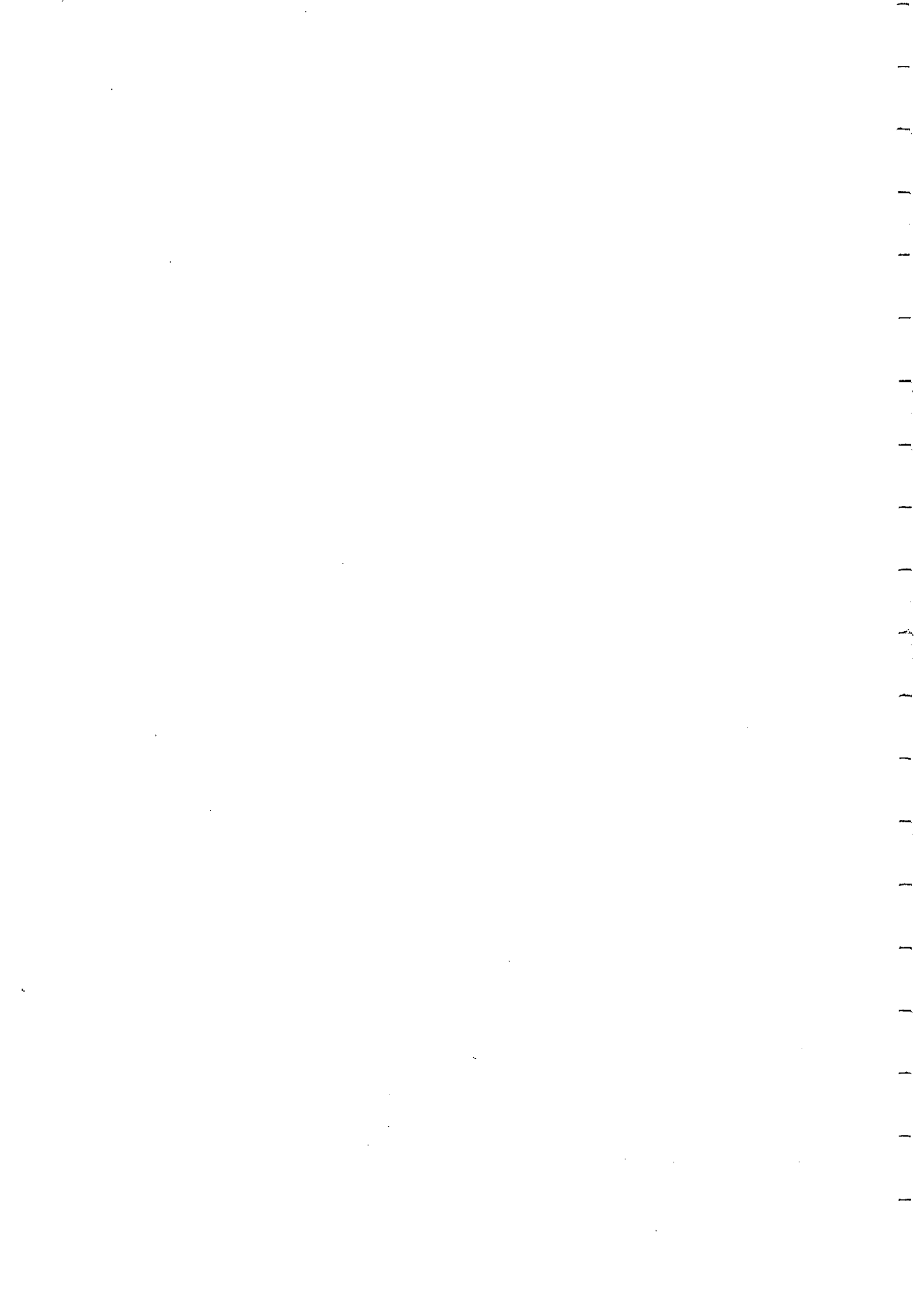
Environmental Capacity to Absorb Change in Villages	Environmental Capacity Criteria	Village Development Capacity	Environmental Capital Category
LIMITED	Only capable of absorbing very low levels of change and of limited type. Any development to conserve character. Environmental impact is a critical concern.	PROTECTIVE - ONLY VERY SMALL SCALE SYMPATHETIC DEVELOPMENT	Critical environmental capital which is largely irreplaceable and should be protected to maintain character.
MODERATE	Capable of absorbing selective change in some parts of the village. Environmental impact considerations are key concern. Development should integrate into the area sympathetically.	SYMPATHETIC DEVELOPMENT IN KEEPING WITH VILLAGE CHARACTER	Critical environmental capital, and some less critical environmental capital which, although replaceable in principle, should be protected and enhanced wherever possible.
HIGH	Capable of absorbing major change which can include major housing or employment development and associated infrastructure.	CREATIVE DEVELOPMENT IN KEEPING WITH VILLAGE CHARACTER	Non-critical or 'constant' environmental capital which can be traded for socio-economic benefits and replaced by environmental improvements in other parts of the village.

3.3 Stage 2 - Village Planning Policy and Sustainability Assessments

3.3.1 Stage 2 includes the consideration of planning designations and socio-economic issues which matter for sustainability. The sustainability issues are addressed in detail in the separate Technical Appendix to this report.

- 3.3.2 Relevant environmental and planning constraints and designations were identified, and these were reviewed in relation to the character assessment findings.
- 3.3.3 An assessment of current and planned provision of employment and community services in or close to each village (both public and private sector), was undertaken and key thresholds identified where applicable. Current transportation characteristics by travel mode were reviewed and set alongside current and planned transport infrastructure and service provision. The assessment identified those villages that had potential to be developed in a sustainable manner, reducing dependence on private cars and trip length and encouraging use of other modes.
- 3.3.4 Existing village utility services were assessed to identify the key thresholds which either add to or detract from a settlement's ability to support additional development. The assessment process identified those villages with future development potential based on sustainability objectives.
- 3.4 **Stage 3 - Overall Capacity Assessment**
- 3.4.1 Stage 3 focused on the broad points at which expansion would have major impacts on 'critical capital', especially in relation to village character. It specifically addresses the linkages between key issues in villages where there is an especially significant level either of adaptability, potential or sensitivity to even small amounts of additional change.
- 3.4.2 A 'cascade' format in which a series of decisions are made in sequence was used to assess the overall capacity of South Cambridgeshire's villages. The outputs from the character assessments were reviewed and villages identified as being adaptable to further change were then assessed as to the extent to which they can also meet successive tests of sustainability.
- 3.4.3 Stage 3 concludes with recommendations for broad development areas (if any) which are confirmed as being realistic in principle within the environmental character and capital constraints already established. An overview of the capacity for future development within South Cambridgeshire's villages is also provided.

4.0 VILLAGE CAPACITY ASSESSMENT



4.0 VILLAGE CAPACITY ASSESSMENT

4.1 Village Capacity Within South Cambridgeshire - An Overview

4.1.1 In carrying out the village capacity assessments in all four of the distinctive landscape character areas, the key issues of historic character, pattern of development, countryside gaps and landscape setting and context were paramount.

4.1.2 From the outset of the assessments, it was clear that the considerable development of many of the villages post 1945 had already changed, not only the size, but also the village pattern. The assessments therefore focused particularly on whether these developments had caused such a fundamental change so as to have lost some or all of the original characteristics of the village, or whether a number of key attributes remained. If many of these attributes were found to have remained intact, maintaining the character of the village and those characteristics intact was considered to be fundamental through a careful assessment of the potential for development.

4.1.3 The Village Capacity Assessments were carried out at two levels for each of the four character areas. As explained in Section 3.0, 31 of the villages were considered in detail to assess whether there was either a limited, moderate or high capacity for additional development, either within the settlement or on the village edges. These assessments are provided in full as a Technical Appendix to this report.

4.1.4 The remaining 68 villages were the subject of a broad appraisal and overview to assess whether any of them could be considered as having any potential for development other than strictly limited infill. This overview comprised:

- site visit;
- aerial photograph assessment;
- ordnance survey assessment;
- literature review.

These findings are also contained in the Technical Appendix, as summary text for each village, together with a key attributes matrix, subdivided into those critical environmental characteristics which were identified on the village edge or its setting, and those identified within the village itself.

4.1.5 In the following paragraphs, the findings of the assessments are summarised and organised under the four character areas as follows:

- Fen Edge
- Western Claylands
- Chalklands
- South East Clay Hills

4.2 Fen Edge Villages

4.2.1 This landscape character area contains fifteen villages, eleven of which are the subject of Detailed Village Character Assessments,. These were:

- | | |
|------------------------|--------------------------|
| • Cottenham | • Oakington and Westwick |
| • Fen Drayton | • Over |
| • Girton | • Swavesey |
| • Histon and Impington | • Waterbeach |
| • Longstanton | • Willingham |
| • Milton | |

4.2.2 As a result of the Stage 1 Environmental Capacity Assessment, five of the eleven were considered to only have limited environmental capacity, based on character assessment. These were:

- | | |
|--------------------------|--------------|
| • Fen Drayton | • Over |
| • Milton | • Willingham |
| • Oakington and Westwick | |

4.2.3 The conclusion that there is limited capacity to absorb further change in these villages was based on the numerous key attributes which were considered to be critical to the maintenance of village character. These key attributes are identified in the individual village capacity studies (Technical Appendix Volume 1). The following are some of the most frequently identified:

- Retain important open spaces within village
- Keep existing densities of development
- Retain linear form of development
- Protect setting of historic cores
- Well defined village edges
- Areas of transition, such as small fields/paddocks
- Tranquil areas within villages
- Parkland landscapes
- Open views across fen-edge landscape
- Separation between villages

4.2.4 The remaining six villages were considered to have moderate environmental capacity, based on character assessment, and only in selected parts of the village.

4.2.5 Stage 2 assessments, considering planning and sustainability issues, were carried out on these remaining villages. These assessments concluded that the following villages had only limited overall capacity:

- Cottenham
- Histon and Impington

The following were considered to have moderate overall capacity, but only selected parts of the village:

- Girton
- Longstanton
- Swavesey
- Waterbeach

4.2.6 None of these Fen-Edge villages were considered to have a high environmental capacity to absorb further development.

4.2.7 Of the four remaining Fen-Edge villages which were not the subject of Detailed Village Character Assessments, the Overview Appraisal found that all of these villages had retained the majority of their key attributes. The detailed findings are contained in the Technical

Appendix Volume 1. In order to ensure that these villages retain the key attributes as identified, only very limited infill would be appropriate. These villages are:

- Fen Ditton
- Horningsea
- Landbeach
- Rampton

4.3 Western Clayland Villages

4.3.1 This landscape character area contains thirty three villages, six of which were the subject of Detailed Village Character Assessments. These were:

- | | |
|-------------|------------------------|
| • Bar Hill | • Hardwick |
| • Comberton | • Highfields Caldecote |
| • Gamlingay | • Papworth Everard |

4.3.2 As a result of the Stage 1 Environmental Capacity Assessment, four of the six were considered to only have limited environmental capacity, based on character assessment. These were:

- | | |
|-------------|------------------------|
| • Bar Hill | • Hardwick |
| • Comberton | • Highfields Caldecote |

4.3.3 There were numerous key attributes which led to the conclusion that there is only limited environmental capacity for development. These key attributes are identified in the individual village capacity studies (Technical Appendix Volume 1). The following are some of the most frequently identified:

- Well defined boundaries
- Large open fields abut village edge
- Separation between villages
- Retain linear form of development
- Protect setting of historic ore
- Enclosed fields and long gardens forming transition at edges

- Important woodlands
- Areas of particular character within village

4.3.4 The remaining two villages were considered to have moderate environmental capacity, based on character assessment, and only in selected parts of the village.

4.3.5 Stage 2 assessments, considering planning and sustainability issues, were carried out on these remaining villages. These assessments concluded that both had moderate overall capacity, but only in selected parts of the village. These villages are:

- Gamlingay
- Papworth Everard

4.3.6 None of the Western Clayland Villages were considered to have a high environmental capacity to absorb change.

4.3.7 Of the twenty seven remaining Western Clayland Villages which were not the subject of Detailed Village Character Assessments, the Overview Appraisal found that all of these villages had retained the majority of their key attributes. The detailed findings are contained in the Technical Appendix. In order to ensure that these villages retain the key attributes as identified, only very limited infill would be appropriate. These villages are:

- | | |
|----------------|-----------------------------|
| • Arrington | • Great and Little Eversden |
| • Barton | • Hatley |
| • Bourn | • Kingston |
| • Boxworth | • Knapwell |
| • Caxton | • Little Gransden |
| • Conington | • Lolworth |
| • Coton | • Longstowe |
| • Croxton | • Madingley |
| • Croydon | • Papworth St Agnes |
| • Dry Drayton | • Shingay-cum-Wendy |
| • Elsworth | • Tadlow |
| • Eltisley | • Toft |
| • Grantchester | • Wimpole |
| • Graveley | |

4.4 Chalklands Villages

4.4.1 This landscape character area contains forty one villages, fourteen of which were the subject of Detailed Village Character Assessments. These were:

- Balsham
- Bassingbourn-cum-Kneesworth
- Duxford
- Fowlmere
- Foxton
- Fulbourn
- Great and Little Abington
- Great Shelford and Stapleford
- Harston
- Haslingfield
- Linton
- Melbourn
- Meldreth
- Sawston

4.4.2 As a result of the Stage 1 Environmental Capacity Assessment, all fourteen were considered only to have limited environmental capacity, based on character assessment. The key attributes which led to these findings are identified in the individual village capacity studies (Technical Appendix Volume 1). The following are some of the most frequently identified:

- Wooded setting for village
- River valleys and water meadows
- Historic village cores and village greens
- Strong linear form
- Retain important open spaces
- Parkland setting on village edge
- Retention of village scale
- Areas of tranquillity
- Enclosed pasture forming transition areas on edge
- Long distanced views from village

4.4.3 None of the Chalklands Villages were considered to have a high environmental capacity to absorb change.

4.4.4 Of the twenty seven remaining Chalkland Villages which were not the subject of Detailed Village Character Assessments, the Overview Appraisal found that all of these villages had retained the majority of their key attributes. The detailed findings are contained in the

Technical Appendix. In order to ensure that these villages retain the key attributes as identified, only very limited infill would be appropriate. These villages are:

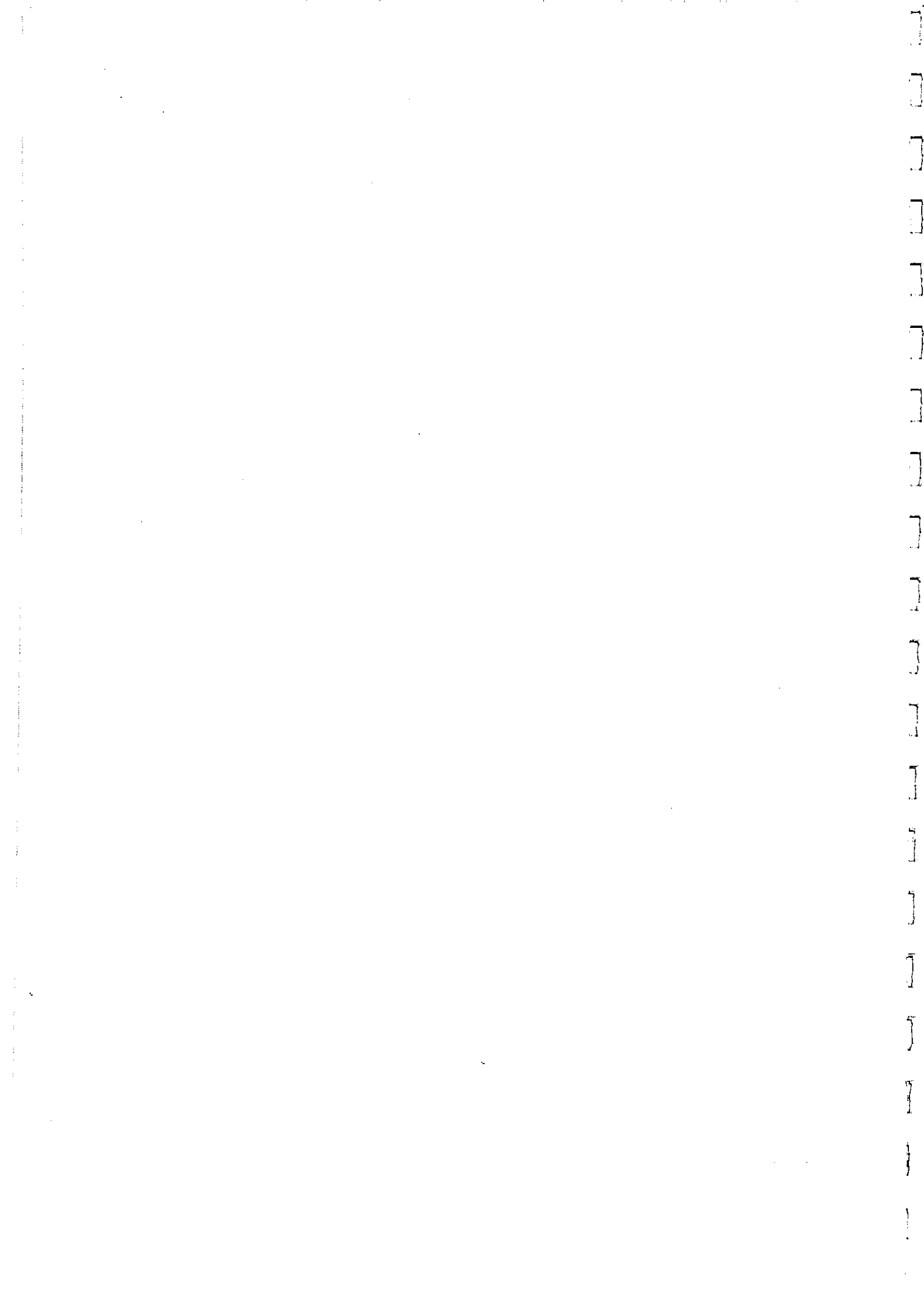
- Abington Pigotts
- Babraham
- Barrington
- Great and Little Chishill
- Great Wilbraham
- Guilden Morden
- Harlton
- Heathfield
- Heydon
- Hildersham
- Hauxton
- Hinxtton
- Ickleton
- Litlington
- Little Shelford
- Little Wilbraham
- Newton
- Orwell
- Pampisford
- Shepreth
- Six Mile Bottom
- Steeple Morden
- Stow-cum-Quy
- Teversham
- Thriplow
- Whaddon
- Whittlesford

4.5 South East Clay Hills Villages

4.5.1 This landscape character area contains ten villages. None of these were the subject of Detailed Village Character Assessments.

4.5.2 The Overview Appraisal of these villages found that all of them had retained the majority of their key attributes. The detailed findings are contained in the Technical Appendix. In order to ensure that these villages retain the key attributes as identified, only very limited infill would be appropriate. These villages are:

- Bartlow
- Carlton
- Castle Camps
- Horseheath
- Streetly End
- Shudy Camps
- West Wickham
- West Wratting
- Weston Colville
- Weston Green



5.0 STUDY CONCLUSIONS



5.0 STUDY CONCLUSIONS

- 5.1 This Village Capacity Study has assessed the form and character of all the villages in South Cambridgeshire District. It concludes that it is essential to retain the broad character of the villages and their landscape settings and that their key or critical attributes should be protected from inappropriate development in terms of location, scale and form. It also concludes that the villages should maintain their sustainability by preserving the best of the past and present environment for future generations to enjoy.
- 5.2 Many villages are only capable of absorbing a limited number of very small-scale and sympathetic developments due to their critical environmental attributes which are largely irreplaceable and require protection if village character is to be maintained. Through assessing all the villages and focusing on thirty one with Detailed Character Assessments, this Study confirms that there is only limited capacity for further development in the vast majority. Of the remaining sixty eight, these are assessed as being especially sensitive to any additional development, and in order to retain their critical environmental characteristics only very limited infill should be permitted.
- 5.3 As a result of these findings, it is clear that the current rate of housebuilding in the South Cambridgeshire Villages cannot continue to be accommodated. It is hardly surprising that the District Council has twice had to resort to developing new villages to accommodate the very high historic rates of growth resulting from high levels of net in-migration into South Cambridgeshire. These conclusions clearly have very important implications for the future planning of the District, ranging from the level of housebuilding proposed in the review of regional guidance, to the policies and site specific proposals in the subsequent reviews of the South Cambridgeshire Local Plan.
- 5.4 By recommending that there is only a limited environmental capacity in the majority of the selected villages to absorb change, and only very limited capacity in the remaining 68 villages, the study places the emphasis on the need for any new development to be appropriate in scale and location to the character of the village. Because of this critical concern over environmental impact, any such development should be very well designed, and be in keeping with the particular village character as defined by this study.

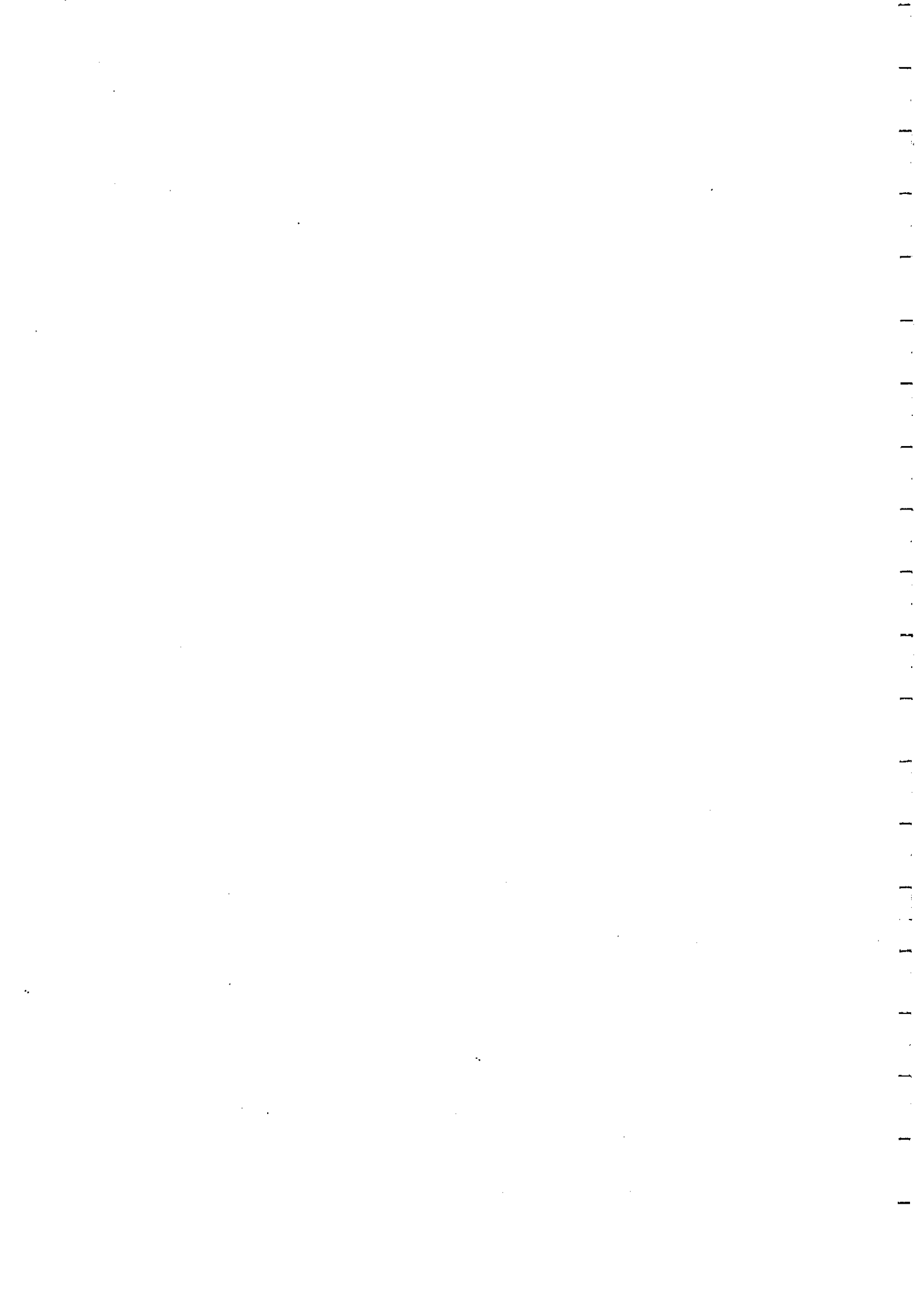
- 5.5 This approach to any new building is already supported by policies in the South Cambridgeshire Local Plan, and in the production of the Cottenham Village Design Statement. Some parish councils, local groups and societies are also considering making positive contributions to this approach, by preparing their own village statements.
- 5.6 In parallel with the identification of the critical environmental characteristics, this study has carried out planning and sustainability assessments. These have addressed all the possible planning and infrastructure constraints to development, with a particular focus on the need to achieve sustainable development. Key issues included the minimising of car use; the level of employment balance within villages; the level of commuting; the scale of village facilities such as shops; the space capacity (if any) for local schools; the availability of public transport; and the spare capacity of infrastructure and services.
- 5.7 Having considered all these issues, a view has been taken on the level of sustainability of individual villages with particular regard to the need to protect village character to pass on to future generations to enjoy. Only those villages with more than limited environmental capacity based on character assessment have been tested further against this criteria.
- 5.8 This Study identifies broad areas for possible future development, as well as areas for a more limited approach. This provides a basis for the development of local planning policies and the identification of relatively few site specific housing allocations in the successive reviews of the local plan. These in turn should lead to the preparation of general design guidance, planning and development briefs, and village statements. In addition, the importance of the relationship between a village and its place in the landscape setting as identified by this study, emphasises the requirement for a District-wide Countryside Design Summary (CDS) to be prepared. A CDS for South Cambridgeshire District would encourage new development to be responsive to the distinctive and diverse qualities of the traditional settlement pattern, village buildings and landscape character of the District. In addition, Village Design Statements could also be prepared within this context for individual villages, such as that prepared for Cottenham.
- 5.9 This Study recognises that this is a critical stage in the development of most of the villages in South Cambridgeshire. By taking the approach of assessing the critical environmental characteristics of these villages, and their environmental capacity to absorb change, we consider that the Study provides a strong and sustainable basis for ensuring that these villages retain their distinctive and individual characteristics for the future.

ACKNOWLEDGEMENTS

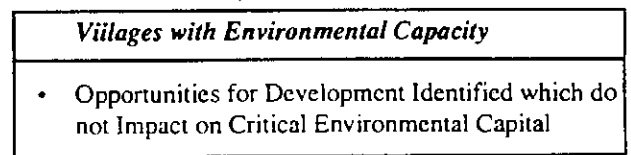
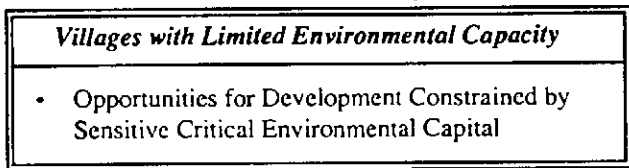
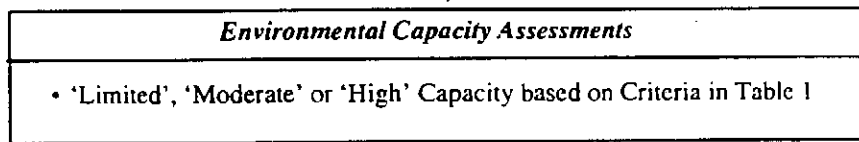
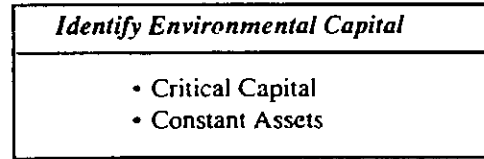
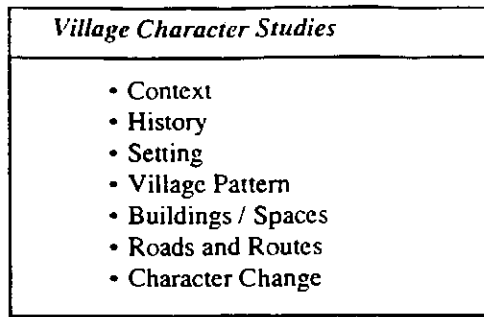


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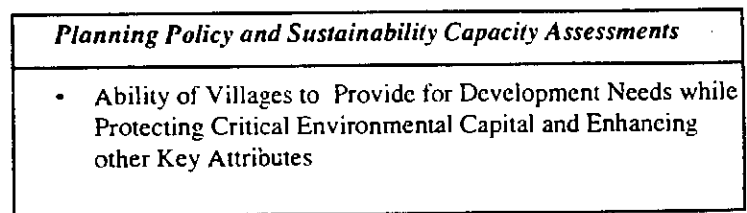
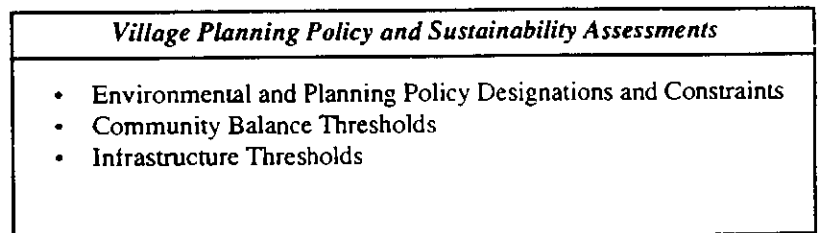
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Stage 1 - Village Character and Capacity Assessments



Stage 2 - Village Planning Policy and Sustainability Assessments



Stage 3 - Overall Capacity Assessment

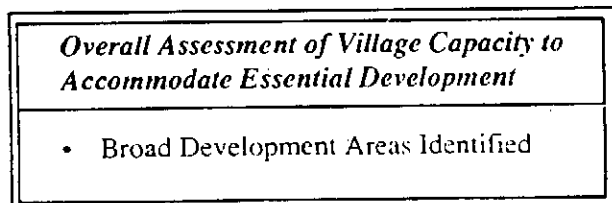


Figure 2 Study Methodology

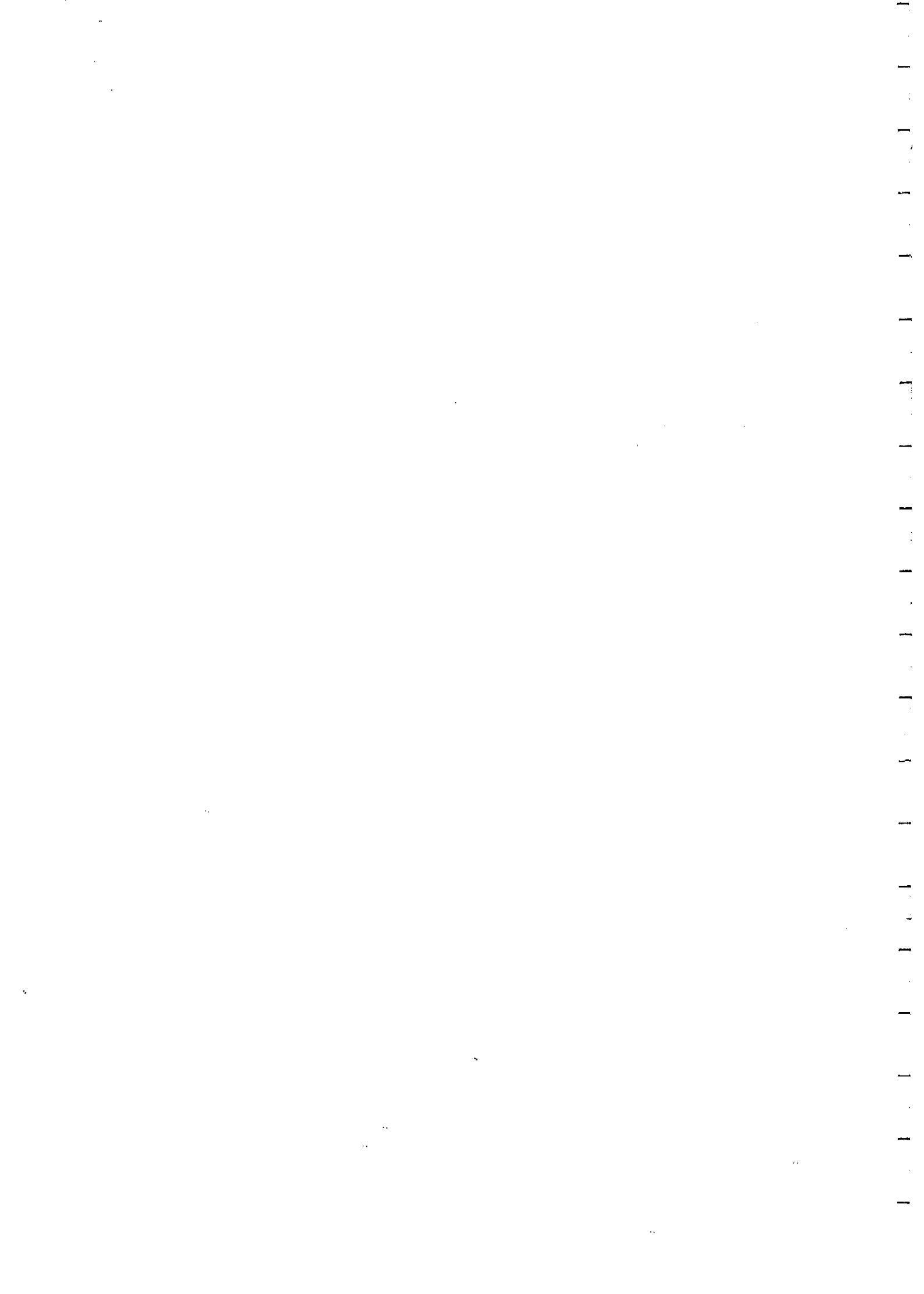
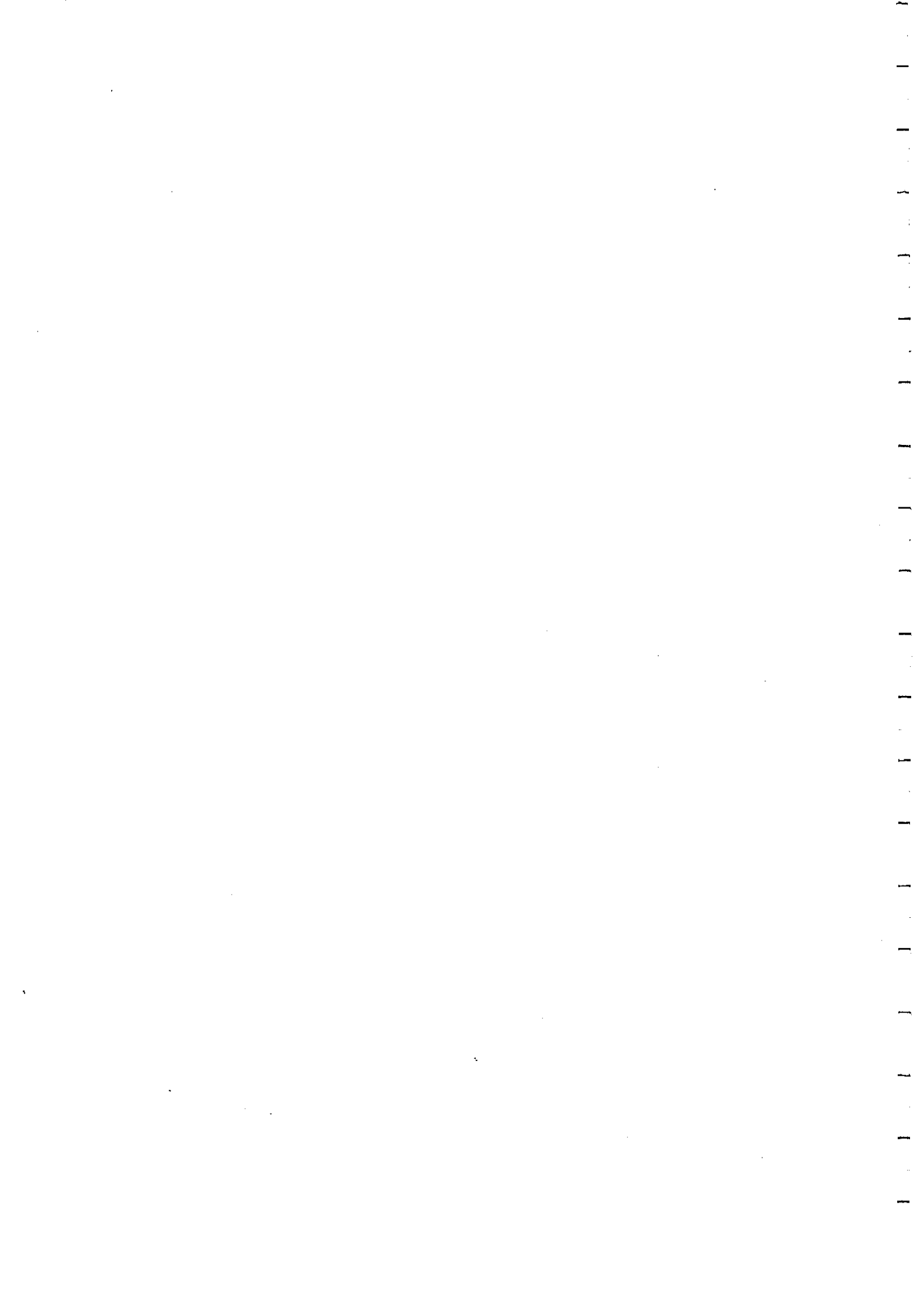
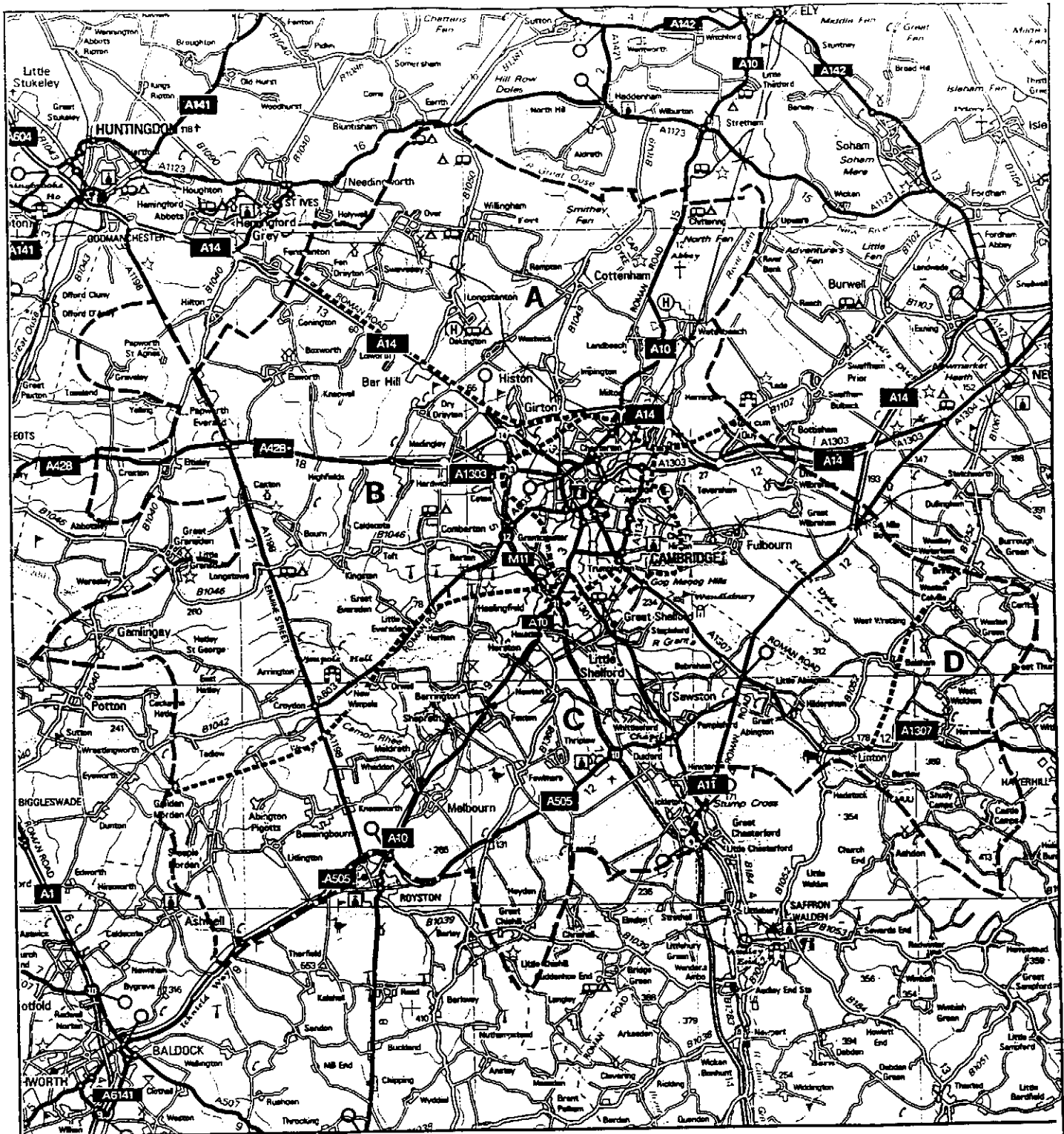


FIGURE 2





Key

--- District boundary

District Character Areas

- A** Fen Edge
- B** Western Claylands
- C** Chalklands
- D** South East Clay Hills

Scale 1:250,000



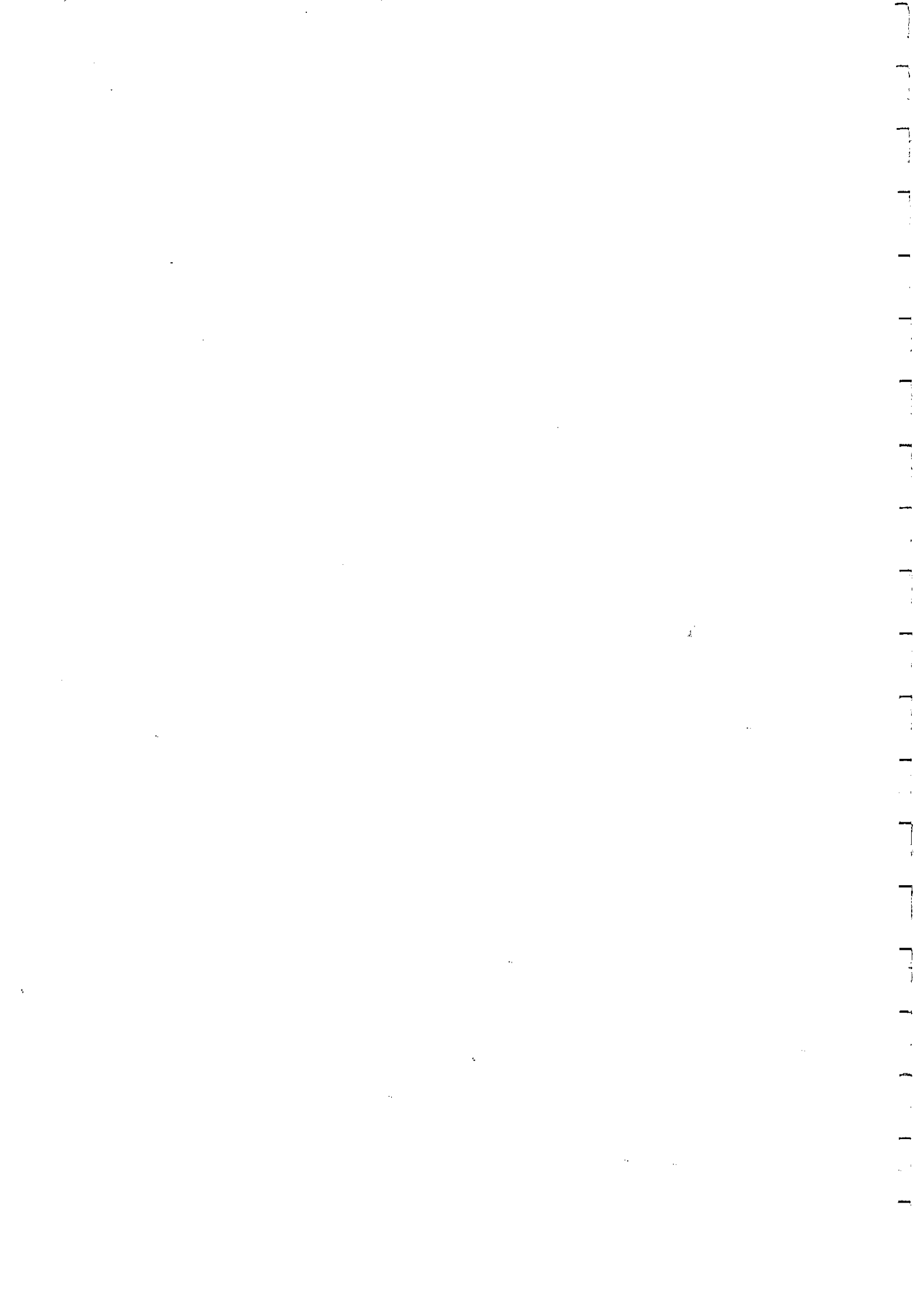
Figure 1

South Cambridgeshire Character Areas





FIGURE 1



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