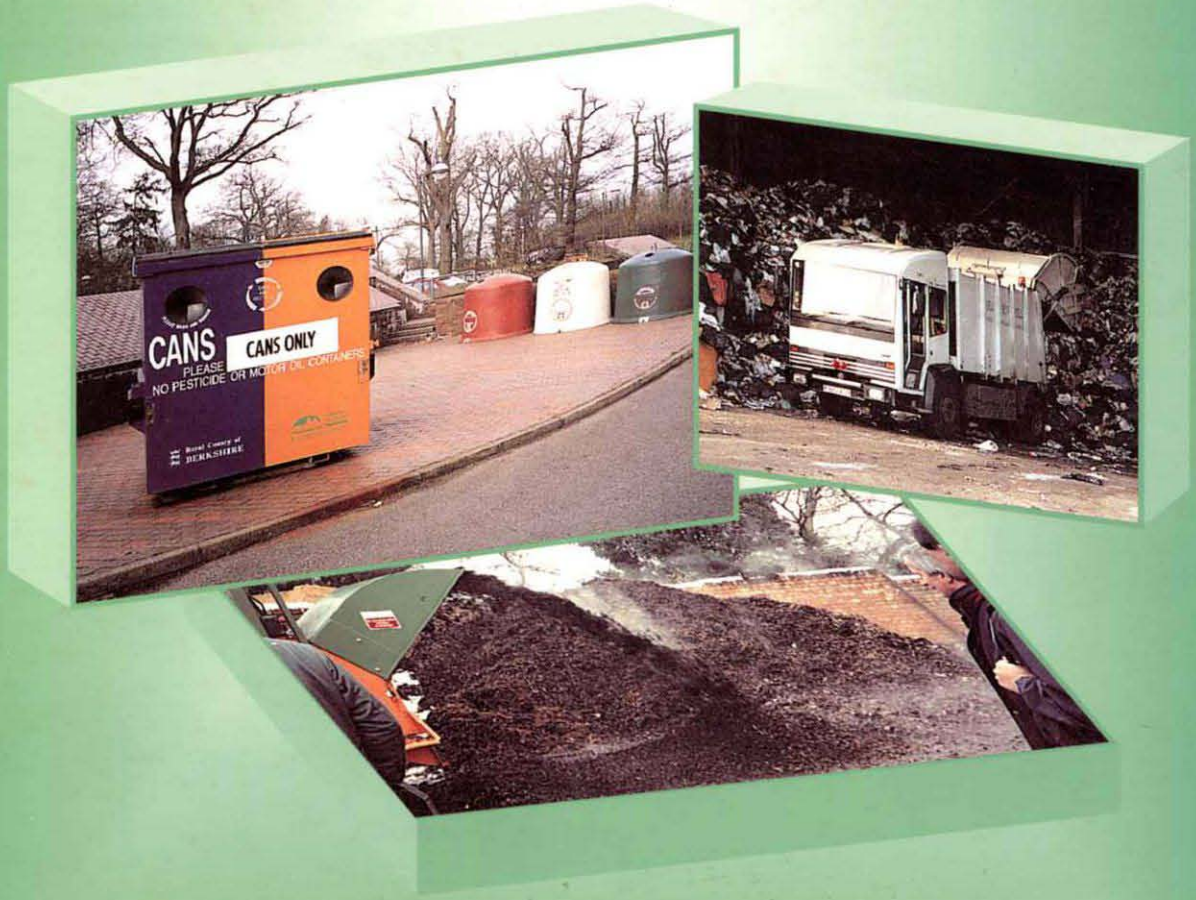
Joint Strategic
Planning Unit

WASTE LOCAL PLAN FOR BERKSHIRE



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INTRODUCTION

1.1 The local authorities in the area of Berkshire are responsible for planning the safe disposal of your household waste, and of most other waste created for example by offices, factories, shops, and the construction industry. The amount of waste arising in the county area is large, and unless positive steps are taken to reverse the trend, it is likely to grow in future.

1.2 To date, the waste produced in the county area has been disposed of by landfill - that is, by tipping it into suitable holes in the ground. Most of this landfill has taken place within the county area, but some of our waste is exported to other counties for landfilling there.

1.3 For many reasons - including a likely future shortage of suitable landfill sites; public concerns about adverse local and global environmental impacts of waste management facilities; improving standards of operation at facilities; growing public and business awareness of the need for waste reduction and recycling; the development of alternative waste treatment technologies; and a rapidly changing financial context - the former County Council decided to review its waste management policies early in the 1990s.

1.4 In drafting its new approach, the County Council gave a lot of thought and study to these issues. It concluded that for Berkshire to continue to dispose of its putrescible waste by an approach based on landfilling would cause an unacceptable level of harm to the environment and to people's quality of life. The County's new waste management strategy, as adopted in 1995, is therefore very firmly based on waste minimisation, re-use and recycling; the treatment of waste both to produce useful products and to reduce the volume requiring final disposal; and the phasing out of the landfilling of putrescible waste.

1.5 The new waste management strategy was prepared alongside this 'Waste Local Plan'. A Waste Local Plan is a land-use Plan setting out policies and proposals to help decide where the new waste facilities required to achieve the aims of the waste management strategy should be located, and to minimise the harm to the environment and the public from these developments. Preparing the waste management strategy and the Waste Local Plan alongside each other helped to ensure that their respective proposals were both realistic and feasible in environmental terms.

1.6 In preparing the Waste Local Plan, the former County Council believed that the best way of striking the fairest balance between the need to deal with waste, the need to minimise its impacts, and the need to ensure the best possible environmental benefits, was to identify in advance areas (called 'Preferred Areas') where future waste management facilities will be permitted. This approach allows the prior selection of the least damaging areas through detailed study of the possibilities county-wide, and enables the planning authorities to lay down in advance the basis on which waste management facilities will be acceptable in each of the Preferred Areas. It also allows the authorities to make it clear where waste management facilities will not be permitted, because of the environmental conflicts which would arise. Such an approach provides greater certainty to both local people and the waste management industry about what will be acceptable and what will not. It will also help to ensure that waste management causes the least possible damage to the environment, and is used wherever possible as a means of maintaining a high quality environment in the future.

1.7 This Waste Local Plan represents the development of the work carried out by the former County Council. Public consultation on the Plan took place in early 1993 and in 1994, and a draft version of the Plan was published by the County Council in December 1994. A public inquiry into the draft plan was held in 1995-96, and the report of the Inspector who held the inquiry was received early in 1998. On 1 April 1998 Berkshire County Council was abolished, and responsibility for preparing the Plan passed to the six unitary authorities in the county area. Working together through a 'Joint Strategic Planning Committee', the unitary authorities have accepted the approach to waste planning proposed by the former County Council, and have taken on the general and the detailed provisions of the Plan as their own. The Plan as now adopted incorporates the authorities' responses to the recommendations of the inquiry Inspector.

1.8 References in this Plan to 'the local authorities' or 'the unitary Councils' should be taken as meaning the six unitary authorities in the geographical area of Berkshire, separately and together. References to 'the county area' mean the area formerly administered by Berkshire County Council. Such references, and other references to 'Berkshire', should be taken as including the area of Colnbrook and Poyle which transferred into Berkshire in April 1995, except where it is clear that the Plan is drawing on historic information or data which was not collected on the present geographical basis.

1.9 This Waste Local Plan was adopted as a statutory local plan by the Joint Strategic Planning Committee with effect from 9 December 1998.

2 THE BACKGROUND TO THE LOCAL PLAN

Waste management in Berkshire: the need for a sustainable approach

2.1 Whilst waste is everyone's problem, the local authorities have several statutory responsibilities in addressing the problem. They are the planning authorities for all waste matters. They are also responsible for ensuring the safe disposal of waste, which they collect in their role as waste collection authorities. We all produce waste and we all contribute (directly or indirectly) to the cost of collecting and disposing of it, and so we should all take an interest in its management and disposal. Whether we are producers in a domestic, industrial or commercial sense, we create waste simply by carrying out our respective roles in society. Manufacturing a product, retailing it and then consuming it - all create waste.

2.2 We are all familiar with the household rubbish we put in our dustbins (which is collected regularly) or the rubbish we take to 'the tip' (Civic Amenity Site[1]). But anyone who works in an office, shop, factory, hospital or school will know that they produce a lot of waste as well, e.g. paper, cardboard, plastic, metal etc (known as commercial and industrial wastes). Even decorating, improving or extending our own homes can produce a skip-full of waste, whilst big demolition or building contracts produce very large quantities of concrete, soil and rubble.

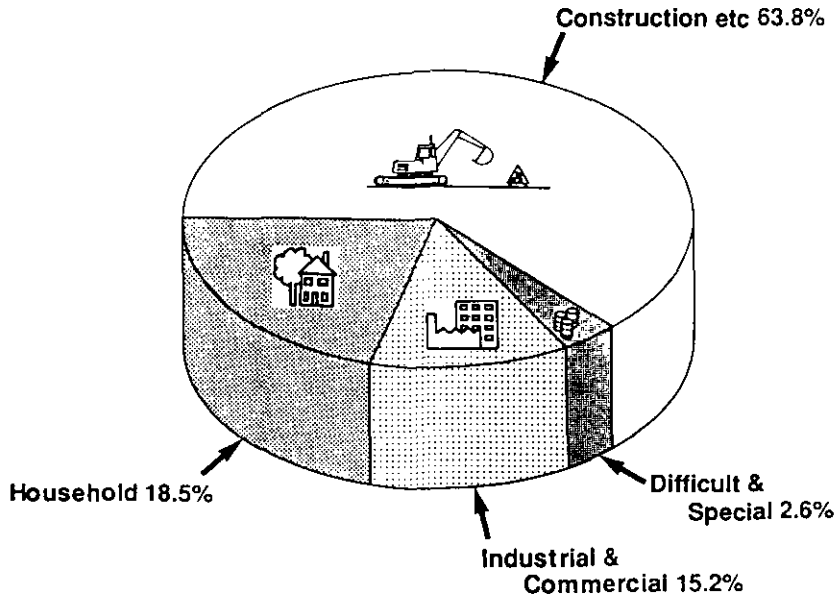

Figure 1: Types of waste arising in Berkshire (by weight)

[1]See Appendix 1 "Glossary of Terms"

2.3 In the area of Berkshire we produced over 296,000 tonnes of waste from households in 1993/94 - equivalent to just under 0.4 tonnes per person. Waste from industry and commerce accounted for a further 291,000 tonnes, with inert waste from the construction and demolition industry reaching well over 1 million tonnes in that year.

2.4 A lot of this waste is potentially polluting and some is actually hazardous. However, some is avoidable and much can be recycled. The way in which waste is generated and disposed of is therefore central to putting into practice a sustainable approach to development - the concept of not damaging the environment and making sure that activities do not compromise the ability of nature's systems to absorb and 'recycle' society's wastes. It is of particular importance in terms of the sustainable development issues of conserving natural resources and minimising the risk of pollution. Developing such a sustainable approach to development is at the front of the Government's environmental policy, the local authorities' strategic planning policies, and the authorities' waste management and planning policies as set out in this and related Plans.

The Councils' role in waste management and planning

2.5 The unitary Councils are responsible, as waste planning authorities in succession to the former County Council, for planning the safe management of wastes in the county area. They are also responsible for the collection of household waste (as waste collection authorities); for waste recycling (as waste recycling authorities); and for the treatment and/or disposal of household waste (as waste disposal authorities). Until 1 April 1996 the former County Council was also responsible for the regulation of waste management, but that responsibility has now been taken over by the Environment Agency.

2.6 In its former role as ***waste regulation authority***, the County Council had a duty under the Environmental Protection Act 1990 to make sure that there are adequate policies and facilities for handling, treating and disposing of most types of waste produced in Berkshire, and for encouraging waste minimisation and recycling. To do this it had to produce a Plan known as the 'Waste Management Plan', which sets out the future strategy for waste management in the county area. This Plan was prepared in the early 1990s alongside the present Plan. It was adopted by the County Council (following necessary approvals from the Secretary of State for the Environment) in July 1995. It remains in force over the county area until such time as it is replaced by any new Plan prepared by the Environment Agency. The principal aims of the Waste Management Plan are

- to provide a framework within which the public, businesses and the waste industry of Berkshire can contribute towards a sustainable strategy for dealing with waste;
- to reduce the amount of waste requiring disposal (by reducing the amount of waste we produce and re-using and recycling as much as possible); and
- to ensure that the handling, treatment and disposal of the remaining waste is carried out with the minimum effect upon the environment.

2.7 The Unitary Councils as ***waste planning authorities*** (in succession to Berkshire County Council) have also been given a new responsibility in the Town and Country Planning Act 1990 (as amended by the Planning and Compensation Act 1991) to produce a separate land use plan known as the 'Waste Local Plan' - this document - which among other things decides where new waste facilities should go. The Waste Local Plan therefore effectively sets out the land use implications of the strategy contained in the Waste Management Plan. In summary the principal aims of the Waste Local Plan are:

- to provide a policy framework for the development and use of land for waste management facilities consistent with the objectives and policies of the Waste Management Plan and planning policies in national and regional guidance and strategic and local plans;

- to ensure that there are sufficient sites available within the Plan period to accommodate the new waste management facilities required to put the Waste Management Plan into effect;

- to provide a detailed policy framework against which to judge specific proposals for waste facilities; and

- to minimise the adverse impacts resulting from the development and operation of waste management facilities.

2.8 These closely related responsibilities (past and present) put the local authorities in a central position to influence and mould the way in which waste management issues are addressed in the county area, and to contribute to the development of a new waste management strategy to take us into the 21st century. The unitary Councils consider that the policies in the Waste Management Plan and this Waste Local Plan provide a solid foundation for waste management in the future.

Local government reorganisation

2.9 Following the reorganisation of local government in Berkshire on 1 April 1998, the six unitary authorities in the former county area have set up formal arrangements for working together on various 'strategic' topics, including the development and monitoring of planning policies for waste.

Context for the Waste Local Plan

2.10 Development of land is controlled in most cases by the need to apply for planning permission. The local planning authorities are responsible for deciding whether to grant planning permission or not. In the case of development involving the storage, treatment or disposal of waste, the former County Council used to be the responsible authority. Following local government reorganisation in 1998, the new unitary Councils are now responsible for dealing with all planning applications for waste-related development.

2.11 To help make decisions about how much development is needed, where it should go and which areas need to be protected from development, a number of land use plans are prepared by the local planning authorities. Together these are known as the 'Development Plan'. This is made up of three main elements:

(i) the Structure Plan prepared by the former County Council which covers the whole of Berkshire and sets out broad strategic land use policies for the county area;

(ii) Local Plans prepared by the Borough and District Councils setting out detailed policies for the development of land for particular areas, in future intended to be District-wide; and

(iii) Local Plans prepared by the former County Council for particular matters which are county-wide in impact, in particular the Waste Local Plan and the Minerals Local Plan but also including the Green Belt Local Plan and Countryside Recreation Local Plan.

2.12 The following Chapters (3 to 11) set out the matters covered by the Waste Local Plan. Its purpose is to set out detailed land use policies for the treatment and disposal of waste.

2.13 The starting points are the strategic policies contained in the Berkshire Structure Plan and in the detailed proposals in the Waste Management Plan (see paragraph 2.6 above and Chapter 3). The main task is to make adequate provision for the combination of facilities necessary to implement the objectives and policies of the Waste Management Plan, consistent with the Structure Plan and other relevant planning policies. In practice, the process of preparing all three plans has been closely linked to ensure a consistency of approach and harmony between them.

2.14 The Waste Local Plan covers the whole of Berkshire, including the area of Colnbrook and Poyle that transferred to the county in 1995. Its policies cover the period to the end of 2006. This is consistent with the timescale of the latest review of the Structure Plan, which is entitled 'Berkshire Structure Plan 1991-2006', and was adopted in November 1995.

2.15 Thus the text and policies of this Plan should not be read in isolation. Proposals for waste management development will be judged in relation both to the Waste Local Plan and to all other relevant policies in the 'Development Plan' including the policies of the Berkshire Structure Plan which is the parent document from which the policies of the Waste Local Plan derive. Turning to the relationship of the Waste Local Plan to the Unitary Councils' Local Plans, there is no overlap between these and the Waste Plan since the former are precluded from including policies on waste land use matters. However, Planning Policy Guidance Note 12 'Development Plans and Regional Planning Guidance' indicates that where there is a conflict between a Local Plan and a Waste Local Plan the more recently adopted or approved provisions prevail.

The purpose, scope and content of the Waste Local Plan

2.16 Before preparing this Waste Local Plan and the Waste Management Plan, the former County Council carried out two rounds of public consultation (in November 1992-February 1993 and February-May 1994) to seek the views of interested parties - the public, local organisations, relevant statutory bodies, the waste industry - on the matters which the Plans consider. The very considerable public response was taken into account by the Council in the preparation of both Plans.

2.17 A draft version of this Local Plan was published late in 1994, and a Supplement covering Colnbrook and Poyle was published in 1995. These documents were the subject of a public inquiry between September 1995 and April 1996. The Inspector who presided over the inquiry reported to the former County Council in March 1998. The content of the present document has been agreed by the Joint Strategic Planning Committee on behalf of all the Unitary Authorities in the county area, following careful consideration of the Inspector's recommendations. It also takes account of new national and regional guidance issued since the Plan was first drafted, and of the changes to local government in Berkshire that took effect on 1 April 1998. The Plan was adopted as a statutory Local Plan by resolution of the Joint Strategic Planning Committee with effect from 9 December 1998.

2.18 The Waste Local Plan consists of a set of **written policies** with explanatory text and a Proposals Map. The Proposals Map and accompanying larger scale inset maps identify sites and areas which are subject to specific proposals for waste management development in the Plan. The relevant site specific policies are set out in Chapters 6, 7, 8 and 9 and more detailed consideration of the individual sites is given in Appendix 7. Policies related to the assessment of planning applications for waste management are set out in Chapter 10.

2.19 The Waste Local Plan aims to provide a planning policy framework which provides for the development of a network of waste management facilities which safely treat the waste generated in the county area, and which reconciles economic, social and environmental priorities in the public interest. This involves:

- **policies which control the types of waste management development** which can take place. This closely reflects the strategy of the Waste Management Plan in giving greater encouragement to waste minimisation and recycling followed by resource recovery through waste treatment, with landfill as a last resort. It also involves a flexible and responsive land use strategy, reflecting the Waste Management Plan approach of defining clear policy priorities but not seeking to be too prescriptive about the precise combination and configuration of waste management methods and facilities. The Plan cannot therefore always be too precise about the future use of individual sites identified, but provides, where appropriate, details of the range of potential uses proposed;

- **policies which restrict the amount of and control the nature of the development** which can take place. This reflects the Structure Plan priority to limit the impact of new development and ensure that it is sustainable. It also takes account of the desirability of the county area being as self-sufficient as possible in meeting its waste management needs (see paragraph 4.25). The Waste Management Plan includes forecasts of the amount of waste to be minimised, recycled, treated and disposed of during the Plan period. The Waste Local Plan uses this as a basis for judging the number and location of sites required;

- **policies which ensure that necessary development takes place in locations which cause least environmental impact**. The Plan identifies specific sites considered by the local authorities to be potentially least subject to environmental damage, and also capable of being developed and operated without causing excessive environmental impacts. There are also policies which restrict similar development in areas where environmental and other interests would be harmed;

- **policies which minimise the environmental impacts of necessary development** and provide a standard of protection for those affected by the development. This involves applying (and enforcing) appropriate high standards of development and operation of waste management facilities; and

- **policies which seek to secure waste minimisation and recycling objectives through the control of new development**. This can be achieved by ensuring that proposals for developing new housing, shops, factories, etc are required to demonstrate appropriate measures to minimise and recycle waste.

2.20 The local authorities believe that this approach, and the specific policies and proposals set out in the Plan, will provide an effective framework to achieve the aim set out above. As such, the Councils believe that this Plan will have a vital role in securing a sustainable approach to the future development of Berkshire.

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FUTURE WASTE MANAGEMENT IN BERKSHIRE - A NEW STRATEGY AND AN ENVIRONMENTAL APPRAISAL

Berkshire's Waste Problem

3.1 As noted in Chapter 2, Berkshire's growing population and prosperity have contributed to the production of an increasing amount of waste. Most of the waste produced is 'inert'[1] (it does not pollute the environment). However, a lot of wastes are 'polluting'[1] (contaminated soils and some industrial residues) and others are 'putrescible'[1] (they rot down and are potentially polluting). These wastes need to be disposed of under special conditions to ensure they do not cause pollution or nuisance to people living nearby.

3.2 The main method of waste disposal used up to now in Berkshire has been and continues to be landfill, a process of land restoration by filling holes in the ground created by mineral extraction.

3.3 The landfilling of waste in old mineral workings can, in appropriate circumstances, form an essential part of schemes for restoring such sites to beneficial after-uses. The disposal of inert waste in this way poses fewer environmental problems than putrescible/ polluting waste. The local authorities have a number of concerns about the long-term environmental effects of putrescible/polluting waste landfill.

3.4 In essence these concerns reflect the fact that this disposal method is not considered to be environmentally 'sustainable'. Landfilling of such wastes involves discarding material much of which is made up of non-renewable resources which could be recovered for re-use or recycling or used beneficially as an energy source. Furthermore, the decomposition of putrescible waste in a landfill site generates leachate which has the potential to pollute groundwater and surface water. Whilst modern landfill methods are designed to prevent leakages outside the site by sealing the fill areas, these techniques themselves tend to retard the decomposition process which prolongs the pollution potential of the site by many years. Waste decomposition also produces landfill gas (largely methane) which is a significant contributor to greenhouse gas production in the UK. Whilst it is possible to abstract landfill gas to flare it or use it positively for energy production (and there is one example of this in Berkshire, linked to production of roof tiles at a factory adjacent to a landfill site), this process only recovers a proportion of the gas with much of the gas still escaping to the atmosphere.

3.5 Furthermore, in terms of continued reliance on landfill as a means of waste disposal, there is a shortage in Berkshire of holes in the ground suitable for putrescible/polluting waste. As existing holes get filled up and rules and regulations governing how waste is disposed of are made tougher, this shortage will get worse.

3.6 Berkshire's waste problem may therefore be summarised as follows: the need to develop a future waste management strategy which reflects the objectives of cutting down the waste we create and recycling as much waste as we can, whilst finding enough suitable ways of safely disposing of the waste still remaining without causing excessive harm to Berkshire's environment or to people living and land uses located near waste facilities.

[1] See Appendix 1

A Changing Context for Waste Management

The concept of 'sustainable development'

3.7 Waste is an issue outside as well as inside Berkshire's boundaries, of concern to the European Union (EU), UK Government and the regional waste regulation and planning bodies as well as local authorities. In this respect, a major shift in outlook and policy has taken place over the past ten years or so. The key change is the much wider awareness of environmental issues, in a much more fundamental 'green' sense than the narrower 'amenity' sense which informed plan preparation in the late 1980s. This much wider approach to environmental concerns is reflected in the concept of **'sustainable development'**.

3.8 Sustainable development is the concept of 'meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs' *(The World Commission on Environment and Development [the 'Brundtland Commission'] 1987)*. The Government expresses sustainable development as a 'moral duty to look after our planet and to hand it on in good order to future generations' *('This Common Inheritance - Britain's Environmental Strategy', 1990)*.

3.9 Meeting the imperatives of sustainable development is now firmly set by Government as a key objective for all local planning authorities, as the guidance in *'This Common Inheritance - Britain's Environmental Strategy'*, Planning Policy Guidance Note 1 *'General Policies and Principles'*, Planning Policy Guidance Note 12 *'Development Plans and Regional Planning'* and other planning policy guidance makes clear. Whilst they are applicable to all planning practice, however, they have a particular significance for waste management. Waste management practices are at the heart of key elements of a sustainable approach to development such as reducing the use of non-renewable resources and minimising (or better, avoiding) environmental pollution.

3.10 European Union, UK Government and Regional policies and guidance in respect of waste management are now firmly based on the principles of sustainable development.

European Union legislation and policies

3.11 EU legislation and policies in particular put these principles into practice by emphasising preservation, protection and (where possible) enhancement of the quality of the environment; protecting human health; and ensuring prudent use of natural resources. To put these principles into effect the EU has produced (in the EU Waste Framework Directive) a hierarchy approach for waste management practice. In order of priority this starts with clean production technologies, and progresses through waste reduction and minimisation at source, re-use and recycling, and maximum recovery of secondary materials or energy, with landfill as a last resort. The policies also emphasise a high level of environmental protection.

United Kingdom policies

3.12 UK Government's environmental strategy seeks to minimise waste at source and contains many proposals for waste recycling (in particular, it sets a target of recycling 25% of household waste by the year 2000), higher standards of waste disposal, and alternative methods to landfill.

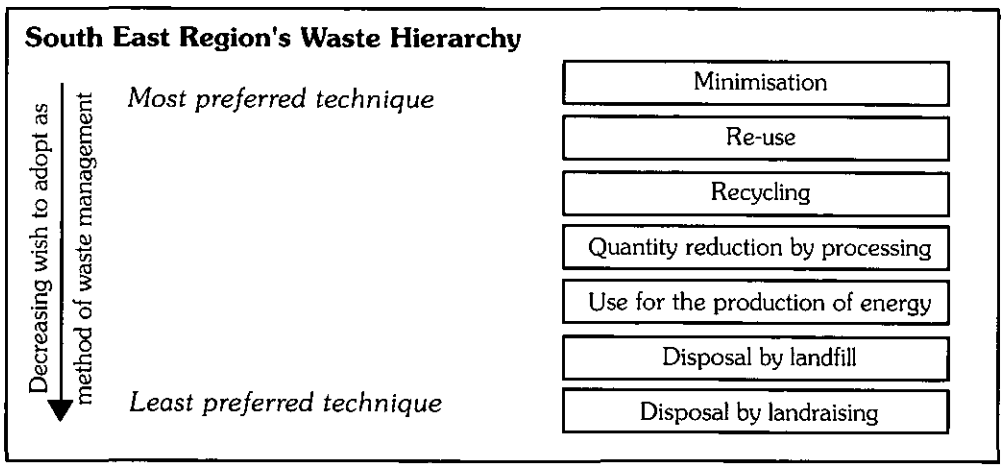
3.13 In its recent policy document *'Sustainable Development - UK Strategy'* and in the White Paper *'Making Waste Work'* (December 1995), the Government sets out its own hierarchy: reduction; re-use; recovery (including recycling and energy recovery); and disposal by incineration without energy recovery or landfill. This hierarchy is reflected in Department of the Environment Circular 11/94 and Waste Management Paper 28 *'Recycling'*. It is the Government's policy that future methods of waste management should be based on principles and approaches which are higher rather than lower in the hierarchy, i.e. to move more of our waste management up the hierarchy. However, the choice between the options should, in any particular case, be governed by the principle of best practicable environmental option. (This requires that all the relevant environmental, economic and other costs and benefits are taken into account in deciding which is the best waste management option in a particular case).

3.14 Government has also introduced, or is considering introducing, a range of legislative and fiscal measures in support of this approach. Their purpose is to shift the responsibility for waste management such that the waste producer should bear the true cost of treatment and/or disposal; to encourage recycling; and to encourage the use of suitable waste as renewable sources of energy[2].

3.15 The Department of the Environment's *'Regional Planning Guidance for the South East'* (RPG9) and SERPLAN's[3] *'Sustainable waste planning strategy for the South East 1996-2010'* (SERP 160) reflect EU and Government policy in placing emphasis on the protection and enhancement of the environment.

3.16 This guidance aims to achieve development which is compatible with the objectives of sustainable development, requiring an approach to providing for development which avoids damage to the global, regional or local environment or helps to improve that environment. Other objectives set out in the guidance document are to secure enhanced economic performance and to facilitate opportunity and choice, and the overall guidance seeks to achieve an appropriate balance between these objectives and that of securing sustainable development. The regional guidance therefore does not seek to resist all waste management-related development. Nevertheless, its approach to this subject is based above all on the need to reflect the waste management priorities set out in the UK sustainable development strategy.

3.17 The regional guidance regarding recycling of materials and resources and developing the use of renewable sources of energy is an important aspect of sustainable development. Regional priorities for dealing with waste, illustrated in the following 'conceptual' diagram, closely reflect the EU and Government approach. However, in considering all this guidance, the local authorities have recognised the importance of education to change attitudes and behaviour relating to waste and places this at the top of the hierarchy below; without such changes, waste minimisation will simply not happen.



[2] For further details, see paragraphs 2.15-2.17 of the Waste Management Plan
[3] SERPLAN is the planning body for the South East Region - see Appendix 1

3.18 The Waste Management Plan sets out the current policies for changing attitudes and behaviour towards waste, in partnership between the local authorities and other agencies (see WMP Chapter 6).

3.19 Regional advice says that the South East Region should be self-sufficient in waste management, which reflects Government's views. The guidance also proposes that each county or county area should aim to deal with an amount equivalent to its own waste. However, the advice recognises this may not always be possible because of the fact that some counties in the region do not have enough sites whilst others have many more than they need. Therefore, counties should also make an appropriate contribution to meeting regional needs.

Strategic planning policies

3.20 The 'parent' strategic planning policies for this Local Plan are set out in the Berkshire Structure Plan (BSP), and are firmly based on the principle of sustainable development. The Structure Plan therefore includes policies encouraging waste minimisation and recycling (BSP Policy W2); the phasing out of disposal of putrescible waste by landfill (Policy W3); the reasonable provision of alternative waste management facilities (without being specific about methods to be adopted) (Policy W4); confining landfill facilities to mineral workings needing restoration (thus preventing waste disposal happening on 'greenfield' sites) (Policy W5); and restricting land raising (Policy W6).

3.21 Parallel initiatives such as the *'State of Berkshire's Environment'* report (1993) are complementary means of providing an overview of environmental matters in the county area. That report identifies 'baseline' indicators for environmental monitoring, and key issues for further action and study.

The quantities of waste arising in Berkshire

The different types of waste

3.22 The Environmental Protection Act, 1990 divides waste into ***controlled waste*** (to which the Waste Management Plan and Waste Local Plan are directed) and non-controlled waste. In turn, controlled waste is split into three fractions: ***household, industrial and commercial***. However, in order to enable the provision required to deal with the different types of waste to be assessed, these three categories have been reclassified in the Waste Management Plan as follows:

- **inert waste** - industrial and commercial waste arising from demolition and construction works.
  [In practice it includes some putrescible wastes e.g. paper and wood].

- **household waste** - waste collected from domestic premises, residential homes and nursing homes etc., including civic amenity waste, trade waste (collected by District Councils or delivered to Civic Amenity Sites) and other wastes arising from litter clearing.
  [Mostly putrescible wastes, but in practice includes some inert wastes e.g. demolition rubble, soils].

- **industrial/commercial wastes** - wastes arising at factories and workshops etc., and trade or business premises etc., but excluding waste from demolition and construction.
  [Mostly putrescible wastes, but in practice includes some inert waste fraction].

difficult/Special wastes - wastes arising from household, industrial and commercial sources which require special attention or techniques to avoid disposal problems and waste which is deemed injurious to human health. [All polluting, and a substantial proportion putrescible].

These terms (and others) are defined in more detail in Appendix 1.

Future waste arising in Berkshire

3.23 The Waste Management Plan assesses the amounts of the different types of waste arising[4] in Berkshire as reliably as available data and statistics allow, and also assesses the effects of strategy elements such as recycling and waste treatment on the different types of waste.

3.24 In considering future waste arising for planning purposes, it is important to remove the potentially misleading peaks and troughs of individual years, and also to allow for the effects of any specific known changes in waste likely to occur (e.g. the 1992 change in the definition of waste arising from litter clearing).

3.25 Table 1 shows the tonnages by type of waste arising in Berkshire over the three year period 1991-94.

TABLE 1: TYPES OF WASTE ARISING IN BERKSHIRE
(thousands of tonnes)

	1991/92	**1992/93**	**1993/94**
Inert	1539	1219	1154
Household	359	381	376
Industrial/Commercial	351	289	291
Difficult/Special	26	49	67

Inert waste figure excludes an estimated 250,000 tonnes/annum illegally disposed of.
Difficult/Special wastes figures make no allowance for clinical wastes collected with household wastes (e.g. disposable nappies).

3.26 The Waste Management Plan also assesses likely patterns for waste arisings if no steps were taken to secure reduction before treatment and/or disposal; and then the likely impact of reduction measures (i.e. minimisation, re-use and recycling) to thereby quantify the amount requiring treatment and/or disposal. In both cases, the Plan takes account of SERPLAN's *'Sustainable waste planning strategy for the South East 1996-2010'* but having regard to the Berkshire context. In summary, this advises that inert (from demolition and construction works) and industrial/commercial wastes are subject to trends in economic activity and should be regarded as "unquantifiable" (in terms of this Plan, the same argument would apply to the difficult/Special category), but that growth in household waste should be related to population. The results of such projections are set out in Table 2.

[4] Waste which is generated in the county area.

TABLE 2: ANNUAL AVERAGE AMOUNTS OF WASTE ARISING IN BERKSHIRE
(thousands of tonnes)

Inert	1304
Household	378
Industrial/Commercial	310
Difficult/Special	53

TAKEN TOGETHER, THESE GIVE AN ANNUAL TOTAL OF 2,045,000 TONNES

These annual average tonnages include adjustments for 'one-off' occurrences in the period 1991/94 (e.g. redefinition of street cleaning as household waste).
The current information on scrap yards etc indicates that they handle an estimated 150,000 tonnes/ annum. As this material does not enter the above waste streams, it has been excluded for waste planning purposes.

3.27 The Table shows the average annual quantities of the main types of waste arising for which the Waste Management and Waste Local Plans need to make provision. These amounts provide the starting point for assessing the waste planning needs of Berkshire.

The impact of waste minimisation, re-use and recycling

3.28 This estimate of waste arising in Berkshire is, however, affected by a number of factors over the Plan period: how will the amount of waste change into the next century? and in particular, what will be the effects of waste minimisation, re-use and recycling?

3.29 With regard to these issues, the SERPLAN guidance current when this Plan was first prepared recommended that all waste types be subject to 25% reduction by 2000. The local authorities see such an assumption about waste minimisation and re-use as representing the *minimum* acceptable target, and is of the view that (with a more positive approach to education, information and encouragement) there is justification for a more optimistic approach; this is discussed in Chapter 6 of the Waste Management Plan. As a result, it has come to the conclusion that the effect of waste minimisation and re-use could exceed the other non-population related growth factors by 1% per year. Reflecting the developing nature of such initiatives, the Waste Management Plan applies this target to all the waste types (except difficult/Special) in Table 2.

3.30 The local authorities also consider that a similarly ambitious approach is appropriate with regard to the potential for recycling. A major element of Berkshire's new waste management strategy is the recycling of most types of waste. The role recycling has to play is set out in Chapter 7 of the Waste Management Plan. The figures in Table 3 reflect the Authorities' assessment of what could be achieved and the need to make such targets 'challenging' in order to ensure that meaningful progress is made over the Plan period[5].

[5] Since these figures were first endorsed for inclusion in this Plan, SERPLAN has published new regional guidance (SERP 160) which sets similar targets for recycling over the region as a whole. It proposes that inert waste be subject to 30% reduction by 2000, 40% by 2005, and 50% by 2010. For non-inert waste the figures are 15% by 2000, 20-25% by 2005 (depending on the precise type of waste), and 30-35% by 2010.

TABLE 3: RECYCLING TARGETS

	by 2000/01	by 2005/06
Inert	30%	40%
Household	25%	35%
Industrial/Commercial	15%	25%
Difficult/Special	not considered susceptible to further recycling	

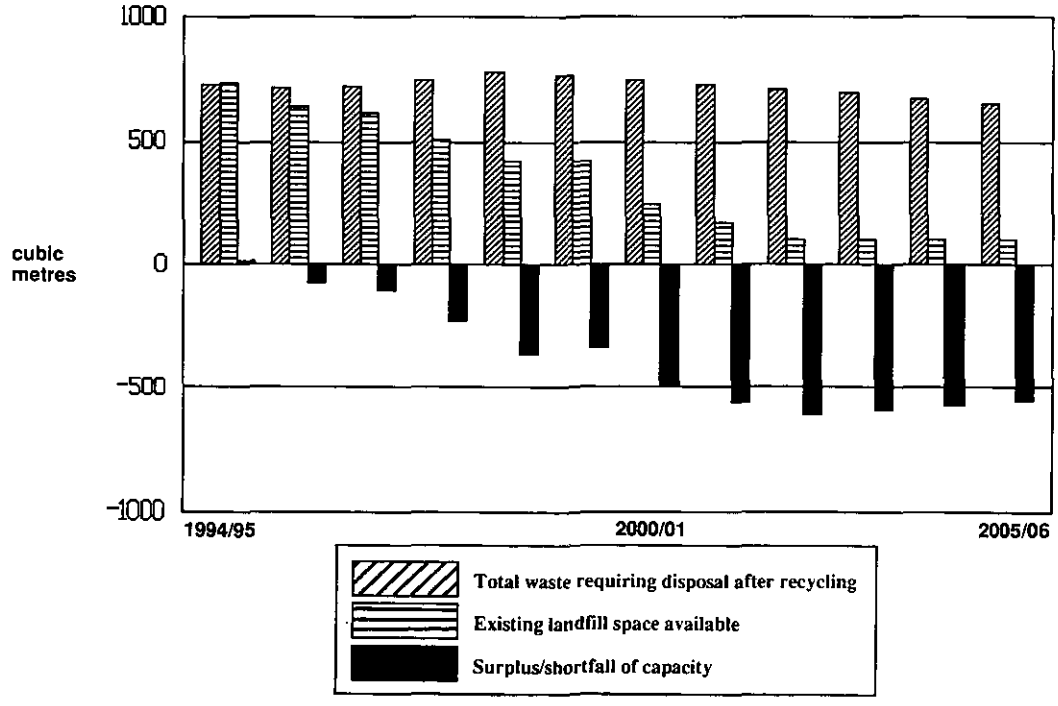
These targets include the current level of waste recycling being achieved for each waste type.

3.31 The analysis of the effect of the above minimisation, re-use and recycling targets on the waste expected to arise in Berkshire over the period of the Plan is shown in Table 4.

TABLE 4: WASTE ARISING OVER THE PLAN PERIOD ALLOWING FOR MINIMISATION, RE-USE AND RECYCLING (thousands of tonnes)

	2000/01		2005/06	
	Total	After minimisation re-use & recycling	Total	After minimisation re-use & recycling
Inert	1034	904	1304	775
Household	393	292	403	259
Industrial/Commercial	310	261	310	230
Difficult/Special	53	52	53	52

GRAPH A **COMPARISON OF PUTRESCIBLE/ POLLUTING WASTE DEMAND AND EXISTING ENGINEERED LANDFILL (ALLOWING FOR RECYCLING)**



The treatment and disposal of waste

Putrescible/polluting waste

(a) The need for an alternative to landfilling of putrescible waste

3.32 Even allowing for the success of effective minimisation, re-use and recycling of waste, the figures in Table 4 demonstrate a very significant amount of putrescible and polluting wastes still requires treatment and/or disposal. A key issue to be addressed is therefore how these wastes are to be dealt with. Graph A on the previous page demonstrates the putrescible/polluting waste expected to require disposal over the period of the Plan compared with the existing engineering landfill in the county area. As can be seen, an imbalance between supply and demand begins to occur in 1995/96.

3.33 This shortage implies one of three options - to identify and release a lot more engineered landfill sites for putrescible/polluting waste disposal; to start exporting a lot more of such wastes for disposal in other counties than is currently the case; or to develop suitable alternatives to landfill. With regard to the first option, after an extensive assessment it has been concluded that it is not possible to identify sufficient suitable sites for engineered landfill to enable a continued reliance on that technology as the basis of its future waste management strategy for putrescible/polluting wastes. In other words, such a strategy is simply not feasible in planning terms. But whether it is or not, it is not appropriate because in their strategic planning policies, the local authorities are seeking to phase out the use of landfill (and landraising) in Berkshire as a method of disposal of putrescible waste (BSP Policy W3). With regard to the second option, increased export of the county's waste to other parts of the South East would run counter to regional policy, which requires counties to make provision for the disposal of an amount equivalent to their own arisings. In any event, the local authorities have accepted as a matter of principle that Berkshire should aim to become self-sufficient in waste management. The long term dependence on exporting waste would also be incompatible with national and regional objectives which seek to manage waste in a more sustainable manner. Accordingly, the third option - developing suitable alternatives to replace or supplement engineered landfill - needs to be implemented.

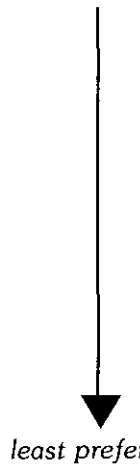
3.34 In this context, it has been decided that the strategy for treating and/or disposing of waste remaining after minimisation, re-use and recycling must meet a number of key criteria. They must:

- be 'tried and tested' technology;
- be as risk-free as possible in terms of effects on humans and the wider environment;
- be as green as possible in terms of minimising environmental impacts and saving resources;
- have minimum noise and traffic impact; and
- be feasible and practicable in Berkshire.

The local authorities furthermore consider that these criteria should be applied to both landfill and any alternative adopted. As such they should ensure that waste disposal by landfill or any alternative implemented, either by the local authorities or others, will not have material impacts on nearby land uses, people's living conditions, and the environment in general.

3.35 In 1992, as part of its work to develop the Waste Management Plan and this Plan, the former County Council carried out a thorough investigation of a number of the alternatives, applying the criteria set out in paragraph 3.34 and an assessment of their technical, environmental, planning and financial implications. The technologies considered are set out in Appendix 2.

3.36 The assessment was followed by a number of studies which concentrated on a narrower range of technologies for the treatment and/or disposal of waste. As a result of this further work and taking account of the need for flexibility and the EU, UK and regional waste hierarchy (see paragraph 3.15), the local authorities have decided to follow a new treatment strategy for putrescible/ polluting wastes based on the following 'mini hierarchy' of technologies:



industrial reprocessing	(with composting or anaerobic digestion);
composting	(standing alone; could include green waste);
anaerobic digestion	(stand alone);
waste derived fuel	(for industrial and commercial wastes);
waste to energy	(as a contingency in the case of industrial reprocessing and waste derived fuel not performing to expected capacity).

The mini-hierarchy, set out in the Waste Management Plan, is applicable to household, industrial and commercial wastes. It fits within the more general waste hierarchy discussed in 3.16 to 3.19; this relationship is set out in paragraph 3.49.

3.37 In practice, the Waste Management Plan recognises that whilst it is highly desirable to give greater emphasis to technologies at the top of this mini-hierarchy (as with the waste hierarchy generally), the implementation of the new waste strategy needs to pay regard to a number of factors of considerable practical significance and to the need for flexibility of approach. A key example is recognition that, whilst providing opportunities, industrial reprocessing (including composting and anaerobic digestion) and waste to energy also pose a problem for waste management, in particular the need to minimise contaminants in the waste stream and thus the need to ensure the provision of suitable associated sorting and storage facilities.

3.38 In the light of all these issues, the local authorities consider that future arrangements for the treatment and/or disposal of putrescible/polluting wastes could in practice involve a number of approaches:

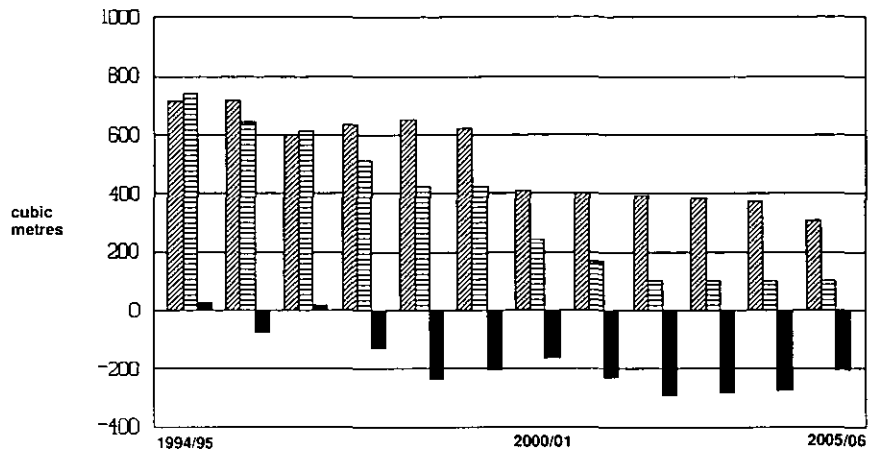
- Recycling, industrial reprocessing, waste derived fuel and landfill;
- Recycling, a mix of industrial reprocessing, waste derived fuel and waste to energy, and landfill;
- Recycling, waste derived fuel, waste to energy and landfill.

PUTRESCIBLE/POLLUTING WASTE

COMPARISON OF LANDFILL CAPACITY REQUIRED AFTER RECYCLING AND TREATMENT FOR EACH STRATEGY OPTION

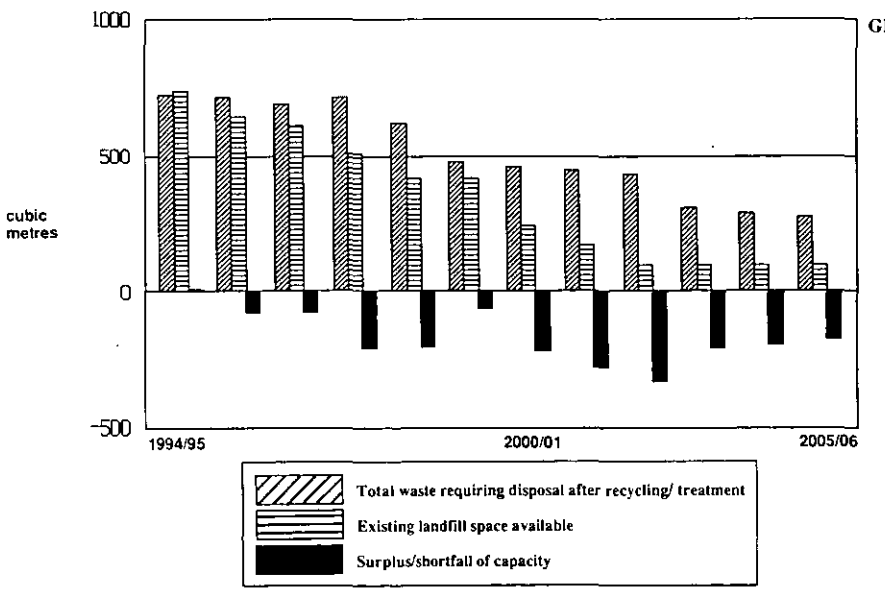
OPTION A INDUSTRIAL REPROCESSING (see Table 5)

GRAPH B



OPTION B WASTE TO ENERGY (see Table 6)

GRAPH C



Inclusion of landfill in each option recognises that, even with the maximum practicable treatment capacity being implemented by 2005/06, there will still be a need for engineered landfill at that time and beyond. This will be required for the disposal of wastes not susceptible to recycling or treatment, and the disposal of residues which arise from treatment (e.g. ash from waste to energy). This is discussed below.

3.39 The implications of the industrial reprocessing (IR), waste derived fuel (WDF) and waste to energy (WTE) options, in terms of the amount of capacity which will be needed, are shown in Tables 5 and 6. These provide forecasts for the years 2000/01 and 2005/06, and demonstrate the contribution that the introduction of treatment technologies can make to dealing with putrescible/ polluting waste. WDF is included to make allowance for Slough Power Station (see paragraph 8.12). The landfill component of the tables represents the waste which is left after recycling and treatment (assumed to require disposal to engineered landfill). Graphs B and C show how much landfill space is expected to be required each year of the Plan period after recycling and treatment.

3.40 The Tables, and the associated graphs, show that there will be sufficient putrescible/ polluting waste produced in Berkshire to support a flexible strategy combining industrial reprocessing and waste to energy as the main treatments (and also strategies focused on either of these). However, it may be necessary to import suitable waste into a waste to energy plant to meet its likely minimum annual throughput where a mixed strategy has an emphasis on industrial reprocessing.

Note: IR = industrial reprocessing, WDF = waste derived fuel, WTE =Waste to energy, L/F = landfill.

TABLE 5 (see Graph B)

RECYCLING, INDUSTRIAL REPROCESSING, WASTE DERIVED FUEL AND LANDFILL
IR, WDF & WTE: thousand tonnes/year L/F thousand cu. m/year

	2000/01				2005/06			
	IR	WDF	WTE	L/F	IR	WDF	WTE	L/F
Capacity	330	70	-	410	400	70	-	310

An industrial reprocessing plant is assumed operating by 1996/97 and a second by 2000/01 (with some industrial and commercial waste input). A small additional income is shown at 2005/06. Waste derived fuel at Slough is assumed operating before 2000/01.

TABLE 6 (see Graph C)

RECYCLING, INDUSTRIAL REPROCESSING, WASTE DERIVED FUEL AND LANDFILL (thousands)

	2000/01				2005/06			
	IR	WDF	WTE	L/F	IR	WDF	WTE	L/F
Capacity	-	70	200	470	-	70	310	270

A waste to energy plant is assumed operating by 2000/01 and a second by 2005/06 (additional waste may be imported for 'economic capacity' reasons, raising this to 400.) Waste derived fuel (at Slough) is assumed operating before 2000/01.

Tables 5 and 6 both reflect the Plan targets for recycling set out in Table 3, the effects of which are shown in Table 4. However, Table 5 assumes a lower level of recycling before reprocessing, as the Industrial reprocessing technology incorporates additional recycling. Table 6 assumes the Plan targets for recycling being met before Waste to Energy is applied.

(b) The continuing need for landfill for putrescible & polluting wastes

3.41 Even with alternatives, the tables and graphs in paragraph 3.40 demonstrate that the need for putrescible/polluting landfill will continue because:

- arrangements for household waste disposal will have to be made until the alternatives are operational;
- residues and rejects from the alternatives will require disposal to landfill;
- putrescible industrial and commercial waste will require disposal to landfill until an alternative can be arranged; and
- polluting wastes which are not susceptible to recycling or treatment will require landfilling (e.g. asbestos, contaminated soil).

3.42 However, the aim of the prevailing strategic planning policies, and of this Plan, to phase out the landfilling of putrescible wastes by the year 2006 should be achieved. However, two points are stressed to avoid misunderstanding. The first is that it is simply not possible to stop such landfilling without a transitional period to bring in alternatives, hence the policy to 'phase out'. The second is that the landfilling to be phased out is of 'putrescible' wastes; there will, however, remain a continued need for landfill sites suitable for a range of polluting wastes as well as small amounts of putrescible wastes not treated by other processes.

3.43 A key task of the Waste Local Plan, therefore, is not only to identify sufficient sites for the range of new types of facility needed to implement the new waste management strategy, but also to identify sufficient engineered landfill sites suitable for putrescible/polluting wastes in the short-term and polluting wastes in the longer term. Graph D illustrates the effect of a combination of existing and potential new engineered landfill and waste treatment (using Option A of industrial reprocessing) upon putrescible/polluting waste demand over the period of the Plan. As can be seen there is a reasonable balance, with cumulative capacity never being in shortfall (although there are annual shortfalls). The effect of the new strategy, in terms of putrescible/polluting waste, is to provide adequate facilities for the treatment and/or disposal of this waste to the year 2006.

Inert waste

3.44 Inert waste forms the largest amount of waste arising in Berkshire. Even after considerable recycling (and allowing for the removal of the non-inert waste fraction requiring disposal to engineered landfill), just over 600,000 cu m will require landfilling by 2000/01 (and just over 530,000 cu m/annum by 2005/06).

3.45 Table 7 (and Graph E) show the landfill capacity required for inert waste at the same years as the earlier tables. As can be seen from the graph, there is a cumulative surplus of mineral void capacity available to receive this waste. In waste planning terms, the disposal by landfill of inert waste arising in Berkshire does not therefore provide a problem. Rather, it provides an opportunity to contribute to the overall waste disposal needs of the South East. Graph E demonstrates that over the Plan period, some 1.3 million cu m of inert waste could be disposed of from elsewhere in the region. Furthermore, such importation will help ensure the timely restoration of former mineral workings, in accordance with the provision of the Replacement Minerals Local Plan.

TABLE 7 (see Graph E)

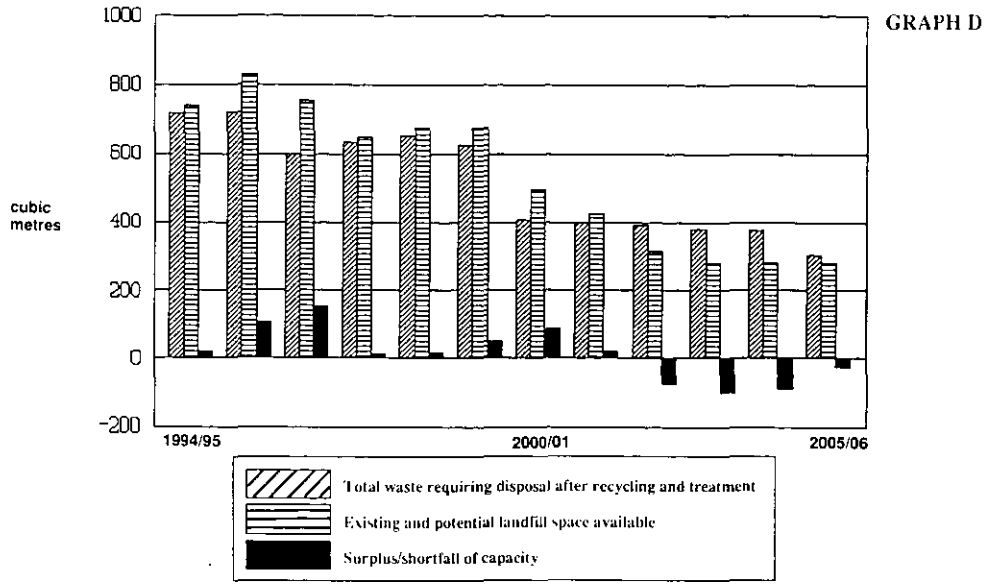
INERT WASTE TO LANDFILL (thousands of cubic metres)

	2000/01	2005/06
Requirement*	670	590
Capacity available	1,010	760
Excess capacity (contribution to regional needs)	340	170

*includes an allowance of 83,000 cu m each year for inert waste deposited on illegal sites (see Table 1)

COMPARISON OF PUTRESCIBLE/ POLLUTING WASTE LANDFILL DEMAND AND EXISTING AND POTENTIAL ENGINEERED LANDFILL (ALLOWING FOR RECYCLING AND TREATMENT)

GRAPH D

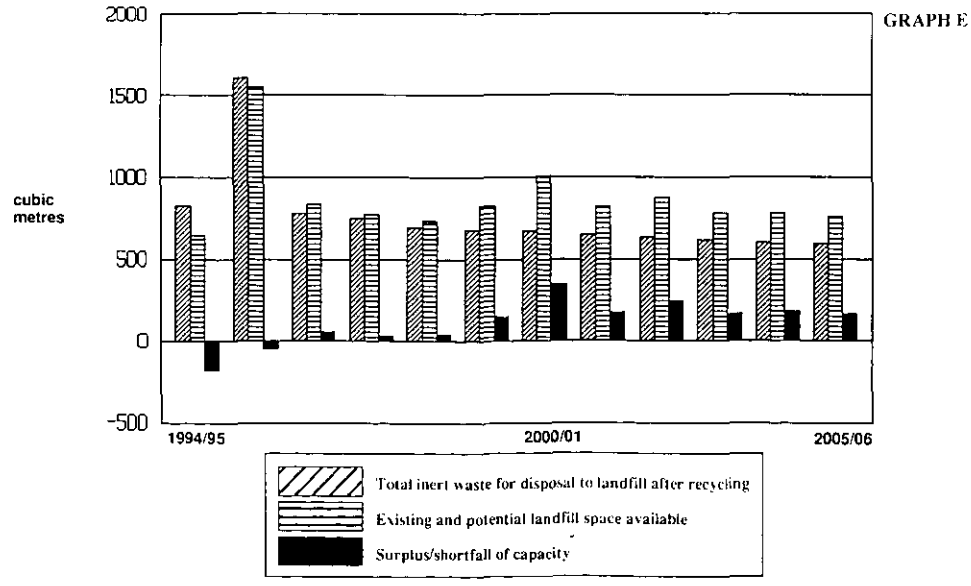


INERT WASTE

VOID SPACE AVAILABLE FOR DISPOSAL OF INERT WASTE COMPARED TO VOLUME OF INERT WASTE REQUIRING DISPOSAL

(see Table 7)

GRAPH E



The effect of adding Colnbrook and Poyle to Berkshire

3.46 The above discussion of waste arisings and treatment capacity in Berkshire relates to the county on its pre-April 1995 boundaries, that is, excluding Colnbrook and Poyle. The addition of this small area to the county is not considered to affect the general conclusions reached above. The total amounts of waste generated at present in Colnbrook and Poyle are estimated at under 10,000 tonnes (or nearly 12,000 cubic metres) a year of putrescible and polluting waste, and less than 20,000 tonnes (around 12,500 cubic metres) of inert waste. These figures are increases of only about 1.6% and 1.5% respectively in the volumes of these wastes produced in the county area as a whole. Such small increases are not considered significant in the context of the above overall discussion of waste arisings in the county area.

3.47 In respect of waste treatment capacity, Colnbrook and Poyle contain two large landfill sites with a combined void space of around 1.5 million cubic metres. This represents an increase of some 10% in the total landfill capacity of the county area. Neither of the sites is licensed to take collected household waste, and both are expected (by their operators, and/or under the terms of existing planning permissions) to be filled before the end of 1999. The effect of adding them to Berkshire's overall waste management capacity is therefore to increase the amount of landfill void space available in the early years of the Plan, but at best this only serves to postpone by a small number of years the shortage of landfill capacity identified in Graphs A and E for the later years of the Plan period. Thus even with the addition of Colnbrook and Poyle to the county area, the local authorities still have to face the three options referred to in paragraph 3.33 above; and there is nothing intrinsic to that area which suggests that the former County Council's decision to choose the third option ' developing methods of waste treatment other than engineered landfill ' is not soundly based.

The Councils' new waste strategy

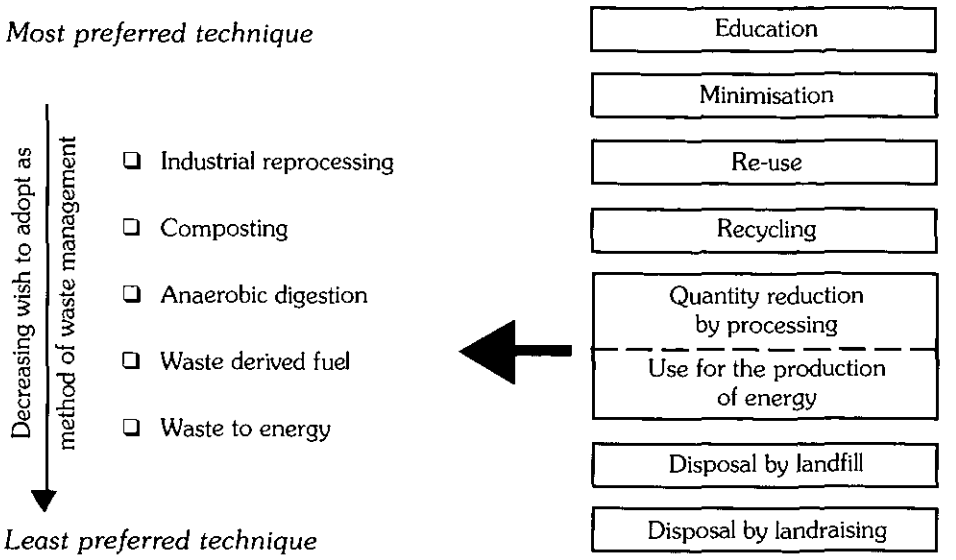
3.48 It was in the above context that the former County Council developed its new waste strategy, in order to best reflect the principles and the broad 'hierarchy approach' set out in EU, Government and regional guidance. It thus differs from the current situation in a number of key ways. In particular, the new strategy seeks to achieve a sustainable approach to waste related development; educate the community that all of us have a responsibility for helping to reduce the amount of waste society creates and for contributing to safer disposal practices; reduce the amount of waste for treatment and/ or disposal; phase out putrescible landfill; adopt a flexible approach to practical and feasible alternative technologies; and minimise the environmental impacts of waste.

3.49 This strategy approach may be summarised by the Waste Management Plan's presentation of the waste hierarchy in so far as it is appropriate to Berkshire (see p. 25).

The facilities needed to implement the new waste strategy

3.50 A key factor in implementing the Waste Management Plan's new waste strategy is the close relationship between the choice of strategy and the selection of sites in the Waste Local Plan. The choice of strategy defines the number, nature and broad spatial distribution of sites needed in the Waste Local Plan, but the suitability or unacceptability of potential sites is critical in defining which possible strategies are in fact feasible. Without sufficient suitable sites (i.e. sites both available and likely to secure planning permission) the strategy would be unworkable. There are a number of authorised sites in the county area where waste management activities already take place (see Appendix 5), but more - and more diverse - facilities will be needed to implement the new waste strategy.

THE BERKSHIRE WASTE HIERARCHY



3.51 A complex range of factors influences the choice of strategy and sites. These include the view taken on the merits of alternative types of strategy in principle (for example, in terms of the relationship to key planning policy objectives; issues such as pollution and 'green-ness'; technical and financial feasibility); the acceptability of possible sites "on their own merits"; and the implications of wider 'Environmental Appraisal' issues such as spatial distribution of sites across the county area or adoption of different criteria for the site selection. These issues were explored in considerable detail by the former County Council in preparing both Plans, in an approach which was essentially and inevitably iterative. They are discussed more fully in Chapter 6.

3.52 The preferred strategy finally chosen by the former County Council, and endorsed by the Unitary Authorities through the adoption of this Plan, therefore reflects these concerns and choices as much as it reflected wider waste management objectives, to ensure that the chosen strategy could be achieved in planning terms.

3.53 The strategy (as summarised in paragraphs 3.48 to 3.49 above) requires a wide range of different waste management facilities to make it work. Guidance Notes relevant to some of these facilities are set out in Appendix 3; and the indicative number, types of facilities and spatial distribution required to make it feasible and to incorporate the necessary flexibility are set out in Appendix 4. These facilities are additional to Berkshire's existing waste management facilities, which are set out in Appendix 5. It should be noted that no provision is made in this list for facilities for landfill (inert waste) since it is considered that adequate landfill capacity will be provided by existing permissions, Section 106 sites, and Minerals Local Plan Preferred Areas with restoration objectives requiring inert fill material.

3.54 Chapter 6 discusses the planning (i.e. locational and land use) implications of these requirements, and sets out the proposals for 'Preferred Areas' to meet them.

Relationship of the Waste Local Plan to the Minerals Local Plan

3.55 As stressed in paragraph 3.42, there will be a continuing need for some engineered landfill sites throughout the Plan period. Furthermore, the Replacement Minerals Local Plan for Berkshire (RMLP) is reliant upon waste material to achieve the satisfactory implementation of the restoration requirements set out in the Plan. In identifying sites for engineered landfill in the Waste Local Plan, the County Council has therefore had regard to the proposals of the RMLP.

3.56 In addition, the increased emphasis in the Council's waste strategy on maximising re-use and recycling of materials complements the RMLP by making the sustainable approach to aggregates production set out in that Plan more practical and feasible.

Environmental Appraisal of Chapter 3

3.57 As noted in paragraph 3.10, the Government's environmental policy is founded on the principle of moving towards a sustainable approach to development. The White Paper 'This Common Inheritance' and PPG12 make clear that Government considers that local planning authorities have a key part to play in helping to achieve this objective, including through the preparation of Development (i.e. Structure and Local) Plans. PPG12 specifically states, in considering the relationship of development plans and environmental policy, that:

> *'One major responsibility [of local planning authorities] is to ensure that development plans are drawn up in such a way as to take environmental considerations comprehensively and consistently into account. In this way environmental improvement can be plan-led, and individual development decisions taken against an overall strategic framework that reflects environmental priorities'.*

3.58 This requirement is referred to as the "environmental appraisal of development plans". It is intended to be a means of demonstrating that environmental concerns (including newer "green" concerns) have been fully integrated into the plan-making process.

3.59 PPG12 sets out the broad concept and scope of environmental appraisal, and guidance on "how to do it" is set out in a *'Good Practice Guide'*. The guide is intended to provide 'a framework and methodology which can be easily used now and adapted to an authority's particular circumstances and requirements'. It makes clear that it is possible to start environmental appraisal at any stage in plan making. The guide identifies three key tasks for environmental appraisal:

- to 'characterise' the environment, i.e. identifying key assets, threats and opportunities to provide a baseline and context for considering the environmental effects of policies;
- to ensure the scope of the Plan covers the appropriate range of environmental concerns, and considers relevant policy options;
- to appraise policies to establish their environmental effects.

The guide sets out some techniques and procedures for defining 'environmental stock'; assessing the impact of policies on the different aspects of this; defining the environmental scope of the Plan; and assessing the consistency and compatibility of policies in terms of their environmental impacts.

3.60 The former County Council undertook very substantial work to ensure that environmental concerns, in the wider-ranging senses of sustainability and natural resource management issues as well as the more local environmental quality issues, have been fully integrated into the plan-making process. This has in fact been the starting point for the whole programme of the former Council's work to prepare the Waste Management Plan and Waste Local Plan, which considerably pre-dated the new guide. However, in documenting this work, the Council followed, as far as possible, the approaches suggested by the guide - for example using an 'environmental checklist' procedure to scope the Plans; and to appraise the Local Plan in terms of 'Strategic Consistency Analysis'; 'Compatibility Matrices', 'Policy Impact Matrices' and 'Proposals Impact Matrices'.

3.61 The former County Council published an Environmental Appraisal of the Draft Local Plan in a separate Background Paper. However, 'the essential products of the appraisal' are summarised in the Plan itself. This is presented at the end of each Chapter in respect of the topics covered in those sections. The following section presents an overview of the Environmental Appraisal in respect of 'Future Waste Management in Berkshire - A New Strategy' as a whole. Its conclusions may be summarised as follows:

3.62 Local Plans set out detailed policies and specific proposals for the development and use of land, and thereby act as a guide for most day-to-day planning decisions. Waste Planning Authorities, which in Berkshire now means the six unitary authorities established in 1998, are required to prepare a Local Plan (known as a 'Waste Local Plan') for development involving the depositing of refuse or waste materials (other than mineral waste).

3.63 Planning Policy Guidance (particularly PPGs 1, 12 and 23) indicate that Waste Local Plans are required to be prepared by the Waste Planning Authority, guided by National and Regional guidance, the Structure Plan, the Waste Disposal (or Management) Plan and the current pattern of waste disposal, and having regard to the relevant objectives of the EU Waste Framework Directive.

3.64 The Waste Management Plan considers the types and quantities of waste arising in the area, the availability of treatment/disposal facilities and the need for further provision, taking account of pollution control needs and appropriate methods of disposal in the future. The Waste Local Plan addresses, in the words of PPG12, "the land-use implications of authorities' waste policies; it must consider the need for sites and facilities in particular areas, suitable locations, and the planning criteria likely to apply including geological, hydrological and other considerations .... Authorities must have regard to the relevant [Waste Management] Plans. In this way, adequate provision can be made for waste disposal facilities ....".

3.65 Detailed application of the role of Waste Local Plans is provided in other guidance, particularly PPG23. They should include detailed land-use policies and proposals which - for different kinds of waste - take account of the need for : regional self-sufficiency in waste management facilities; the need to minimise the impact of transport requirements; relevant policies for waste minimisation and recycling; the land-use and transport requirements of different waste management facilities; opportunities for energy recovery; and the existence of relevant waste management and pollution control systems. The Plans should identify: existing disposal storage and treatment sites with spare capacity; where appropriate, new sites (or areas of search) for waste management facilities; and areas which are judged inappropriate for such sites having regard to environmental, geological, hydrogeological and access considerations. Finally, they should include criteria against which applications for waste management developments will be considered and by which the environmental acceptability of recycling and other waste management facilities might be improved. A wide range of other guidance - for example the Government's "Our Common Inheritance" and "Sustainable Development" Strategy, and the White Paper 'Making Waste Work'; PPGs 7, 9, 12, 16 and 22; RPG9 ("Regional Guidance for the South East"); MPGs 1 and 6; WMP28; and SERPLAN's waste planning guidance RPC2266 and SERP 160) - adds further detail and interpretation to these principles.

3.66 The overall objective of the policies and proposals which flow from such considerations is summarised in PPGs 1 and 12 as the need to ensure that "the preparation of development plans contributes to the objectives of ensuring that development and growth are sustainable". So far as waste planning is concerned, this objective is more precisely specified in PPG23 as follows: "Planning policies should encourage methods of waste management that have the least overall environmental impact, taking into account the potential for energy or materials recovery".

3.67 The approach adopted in developing this Waste Local Plan has paid close regard to all these objectives and principles, and also to the relevant objectives of the EU Waste Framework Directive. A critical factor in its approach has been the principle that development of a waste management strategy must proceed 'hand in hand' with assessment of the planning implications. The former County Council has examined a complex range of factors which influence the choice of strategy and sites, and its consideration of these factors has been most helpfully informed by re-assessing its preliminary conclusion in the light of the many responses received from two rounds of public consultation.

3.68 Three key elements may be identified in the Environmental Appraisal of Berkshire's Waste Local Plan:

(i) The Importance of Waste Management in a Sustainable Approach to Development - the Move to a Strategy based on the 'Waste Hierarchy'.

3.69 The way in which waste is generated and disposed of is central to putting into practice a sustainable approach to development - the concept of not damaging the environment and making sure that activities do not compromise the ability of nature's systems to absorb and 'recycle' society's wastes.. For many reasons, it is important as part of a sustainable approach to waste management to minimise the amount and pollution potential of waste being generated and to seek to recover and re-use as much waste (including its energy content) as possible.

3.70 The main method of waste disposal used up to now in Berkshire has been and continues to be landfill, a process of land restoration by filling holes in the ground created by mineral extraction. Most of the waste produced is 'inert' (it does not pollute the environment) and using this to fill old mineral workings is a useful way of restoring these to a beneficial use.

3.71 However, some wastes are 'polluting' and others are 'putrescible'. The local authorities have concerns about the long term environmental effects of putrescible/ polluting waste landfill as a method of disposal. The process is not considered to be environmentally 'sustainable'. Moreover, it is becoming increasingly difficult, in land-use planning terms, to find acceptable sites. Looking to the future, continued reliance on a waste management strategy for putrescible waste based on landfill disposal is not only unsustainable. It is also not feasible.

3.72 Such concerns point to the need for a new approach to waste management which seeks to reduce the amount of waste generated, re-use and recycle as much waste as possible, and treat or process as much of what remains as possible to both reduce the quantity requiring final disposal and produce useful products. This concept of a 'waste hierarchy' directly mirrors European Union, Government and Regional guidance. At the broadest level of environmental appraisal, therefore, the new waste management strategy is considered to be greatly more sustainable than the previously adopted strategy. The Plan seeks to achieve this not just by policies which direct and control the nature and location of new facilities, but by a positive approach to development control policies to put "waste minimisation and recycling concerns" at the heart of future practice.

(ii) The Spatial Implications of the New Waste Strategy

3.73 Five key spatial issues arise from the environmental appraisal of the new strategy.

3.74 With regard to the issue of county self sufficiency, regional guidance acknowledges that commercial interests do not respect the boundaries of county areas but also urges that counties should aim to provide facilities sufficient to meet the equivalent of their own waste arisings. Even allowing for the limited ability of the planning system to control the origin of waste being treated or disposed of at a particular facility, in environmental appraisal terms - provided all of the Counties in the South East Region make provision for the equivalent of their own needs - this should result in there being sufficient facilities, reasonably geographically distributed to reduce transport impacts and to contribute to the overall self sufficiency of the region.

3.75 Turning to the ability of the county area to absorb waste related development, the site selection exercise tested the suitability of locations and sites for a variety of facilities against key locational constraints, such as the protection of the landscape and the natural environment, and detailed local factors, such as the impact on the amenity of those living or working nearby. One of the key conclusions of the exercise is that the county area cannot support a continued reliance on landfill as the main means of dealing with its non-inert waste without harming interests of acknowledged importance. However, the exercise also concludes that the county area is likely to be able to accommodate alternative means of dealing with waste.

3.76 Turning to the issue of the relative impact of a few landfill sites versus many waste management facilities, the local authorities have taken the view that putrescible waste landfill is no longer sustainable for a combination of technical and resource reasons. However, even without the move away from landfill, the Plan would need to make suitable provision for waste management facilities to cater for recycling and related uses. It is considered that the overall impact of these two strategies would not be significantly different. An important element of the site selection criteria is the use of environmental capacity to direct waste management development to where it can best be absorbed.

3.77 With regard to the issue of whether a few large facilities generates less impact than many small ones the apparent merits of both large and small scale facilities vary depending on the nature of the facility proposed. The hierarchy of local, central and strategic facilities proposed in the draft Plans (see Chapter 6) would appear in principle to be appropriate in environmental terms. However, there are also strong non-environmental factors influencing the distribution and scale of waste facilities which are sub optimal in terms of sustainability and environmental controls. It is concluded that the Waste Local Plan should continue to advocate a hierarchy of sites with smaller local facilities acting as feeders to larger more central facilities but that it needs to maintain sufficient flexibility and identify sufficient locations to be responsive to changing needs and the availability of sites.

3.78 Finally, with regard to the issue of locating facilities away from people, the approach adopted and the sites selected have been criticised by the public in particular who consider the selection process to be unduly biased in favour of "policies" for protecting the natural environment whereas respondents consider the protection of people should be the highest priority. The implication is that the policy principles should be relaxed to allow such development to take place in locations remote from people with motorway access. Such an approach conflicts with sustainability objectives because remote locations also mean longer haul routes; and with the advice of PPG12 which emphasises that Development Plans should use redundant, derelict or underused sites in preference to greenfield sites wherever possible and (in association with other PPGs) emphasises the need to protect environmental assets.

(iii) Local Environmental Impact Implications of Waste Management Facilities

3.79 This third key aspect of the Environmental Appraisal concerns the detailed implementation of the new strategy through the planning process, rather than the strategic principles. These are of most immediate concern to local people although in many respects not as 'fundamental' to the concept of sustainable development.

3.80 With regard to site selection, the former County Council adopted a 'sieving approach' which has aimed to identify potential sites from both a 'positive approach' of defining locational needs for key waste management facilities and a 'negative approach' of defining unsuitable areas affected by constraints of one sort or another (see Chapter 6). This has been a substantial exercise, iterative in nature, and reflecting a mix of policy judgements, technical assessments and consideration of the views of consultees, the public, landowners and the waste industry. The successor authorities consider that the final selection of sites as 'Preferred Areas' in this Plan represents the least unacceptable overall planning framework. Specifically they consider that the policies set out in Chapters 6 to 9 provide a framework which ensures that the necessary development can take place, but is located and operated so as to minimise adverse impacts on the locality. The local authorities further consider that the 'Preferred Areas approach' is the most effective means in environmental and planning control terms of ensuring the Councils are "in the driving seat" of future planning decisions which must balance local and strategic considerations against the need for the different facilities.

3.81 With regard to the control of future development, the Plan proposes a comprehensive range of policies, set out in Chapter 5, to ensure that future development proposals in general take full account of waste minimisation and recycling. It also aims to ensure that future waste management facilities take full account of all relevant considerations at both the planning application stage and (if permitted) during subsequent operation. The Council considers that such policies, set out in Chapter 10, represent a highly effective means of achieving one of the key roles of a Waste Local Plan - minimising the impacts which inevitably arise from the development of waste management facilities.

3.82 In summary, the local authorities have applied the principle of sustainable development - the concept of "meeting the needs and aspirations of the present generation without compromising the ability of future generations to meet their needs" - to their waste strategy. The result is a strategy which demonstrates the following key elements:

- greater sustainability in local and global terms than the alternatives
- providing, wherever practicable, adequate and appropriate waste management facilities in Berkshire to meet local needs
- forming partnerships with and between the public, businesses, and the Borough and District Councils in the county area.

3.83 The chosen strategy is considered to be the best balance of reliable methods of reducing the amounts of waste requiring disposal and of treating and disposing of the amounts remaining, causing least harm to the environment overall.

4 GUIDING POLICY PRINCIPLES

Sustainable development in Berkshire

4.1 The overall planning strategy for the county area lays great stress on protecting and enhancing the environment, seeking sustainable levels of development, maximising the quality of life in all parts of the county and conserving natural resources. Within this context it seeks to meet the county's social and economic needs and aspirations.

4.2 The Berkshire Structure Plan sets out the problems resulting from past growth and points to the various physical and policy limits on future development and the limitations on natural resources, land, water and energy which determine Berkshire's ability to accommodate future development. It points to the need for the scale of future growth to relate clearly to the ability to provide infrastructure services and amenities.

4.3 Consequently the Structure Plan includes policies which:

- restrain development to levels which can be accommodated within the environmental constraints applying in the county area (BSP Policies OS1, LD1, LD3 and LD7);
- protect and enhance the character and quality of Berkshire's landscape, environment, nature conservation interests and heritage (BSP Policies OS1, C9, EN1, EN4-10, R4 and R6);
- securing development which is sustainable in form and location, helps to conserve natural resources, including land, water and fossil fuels; and minimises the risk of pollution (BSP Policies LD1, LD7, C10, RE1, EN1, EN2, M2 and W2); and
- limit the environmental impact of development (BSP Policy LD3).

4.4 To secure these policy objectives, development is sought which accords with the following principles:

(i) making the best use of land resources by maximising the use for development of urban land (where this is compatible with conserving and enhancing the quality of the urban environment), especially where vacant or derelict, and by protecting the open countryside;

(ii) helping to conserve energy and water by means of layout, design, orientation and landscaping of buildings;

(iii) using renewable rather than non-renewable materials, and materials requiring a low energy input for their production;

(iv) minimising the risk of harm to human health and to the environment from noise, vibration, effluent, fumes and other pollution including gas arising from landfill sites;

(v) minimising waste generation through re-using building materials where economically viable and appropriate, and separating all re-usable waste arising through development from demolition and construction. In considering proposals for recycling material, including construction waste, it will be necessary to balance local concerns with the wider environmental benefits of recycling;

(vi) locating land uses so as to minimise the need for travel, particularly by private vehicles, and increase the opportunities for other less energy intensive forms of transport;

(vii) preventing development having an unacceptable impact on the environment including serious harm to the character and appearance of an area or to nature conservation interests, or the amenities of neighbouring land uses.

4.5 In addition, the Structure Plan contains policies which:

- require adequate on and off site access and transport arrangements and resist development likely to give rise to serious problems of access, parking, road safety or traffic congestion (BSP Policy LD5);

- require adequate infrastructure, services and amenities to be provided with new development (BSP Policy LD6).

4.6 The Structure Plan requires account to be taken of the extent to which development helps to conserve natural resources (including fossil fuels) and seeks development which uses materials that are renewable or require only a low energy input.

4.7 These themes provide the guiding principles for the more detailed policies of the Waste Local Plan. Accordingly, a basic policy for the Local Plan is to ensure that waste management development is limited to that which the environment, in the broadest sense, can accommodate without long term damage.

Policy WLP1 **In identifying land or considering proposals for waste management development the Local Planning Authorities will have regard to the extent to which the development is sustainable in form and location and helps to conserve natural resources and the human and natural environment, and minimises traffic congestion, travel distances, waste generation and pollution, and adverse impacts on humans and the natural environment.**

4.8 The prevailing waste management strategy for the county area (set out in the Waste Management Plan for Berkshire and summarised in Chapter 3 of this document) is based firmly on a sustainable approach. It adopts a hierarchy of waste management priorities with an emphasis on waste minimisation and recycling and a decisive move away from putrescible/polluting waste landfill towards treatment and/or disposal methods which are considered to be less environmentally damaging.

Environmental impact of waste management development

4.9 Whilst the new waste management strategy is considered to be more sustainable than the past approach, its implementation will require a range of new waste management facilities, which will inevitably have an impact on the environment and may be potentially polluting. However, PPG23 recognises the need for these types of facility.

4.10 The environmental impact of waste management development will be limited in the case of the smaller facilities (e.g. local recycling centres), but major new facilities for waste treatment raise important local and wider environmental issues. In this context, there is a difficult balance to be struck between on the one hand the needs of society to deal with the waste it produces and the wider environmental and community benefits resulting from the adoption of a sustainable waste management approach, and on the other the specific environmental impacts resulting from development. It may not always be possible to reconcile these issues, and wider benefits may outweigh local environmental concerns.

Accommodating development within environmental constraints

4.11 The ability of the county area to accommodate waste related development has been tested through a site selection exercise which assessed the suitability of locations and sites for different types of facilities against key locational constraints, such as the protection of the landscape and the natural environment, and detailed local factors such as the impact on the amenity of those living or working nearby[1]. One of the conclusions of the exercise is that the combination of sites and facilities identified in the Plan could be accommodated in the county area without adversely affecting an interest of acknowledged importance. In other words the sites identified in the Plan, if used to develop the facilities proposed, would not result in Berkshire's environment being materially damaged. The local environment, including the amenities of people living and working nearby, can also be safeguarded if these sites are developed and operated to appropriate environmental standards. Another key conclusion is that the county area cannot support a continued reliance on landfill as the main means of dealing with its non-inert wastes without harming interests of acknowledged importance. This conclusion is arrived at for a combination of technical reasons (insufficient existing and potential mineral voids technically suitable for engineered landfill bearing in mind Berkshire's geology and hydrogeology - see Appendix 6) and policy constraints (BSP Policy W6 - land raising is not acceptable except as a last resort, as well as wider environmental concerns).

Sustainable development - assessing individual proposals

4.12 However, specific proposals for waste management development will need to be judged against the parameters of Policy WLP1. Whilst the broad methods of waste management proposed in the Waste Management Plan are considered to be environmentally sound in principle, there is considerable variation in environmental performance between different plant designs within broad technologies. This is particularly important in relation to major waste management developments where environmental effects can be significant. Different types and locations of waste management development will also have greater or lesser benefits and impacts. In environmental terms, individual proposals will need to be carefully considered in relation to their place in the pattern of waste management provision. It will therefore be necessary to assess whether any proposal and its 'knock on' effects in the strategy as a whole contribute to or conflict with the objective of Policy WLP1.

4.13 Consequently individual proposals for new waste management development will be required to demonstrate the extent to which they comply with Policy WLP1 in principle and in detail. This will involve consideration of the following key environmental and locational issues:

- their place in relation to the waste management hierarchy;
- the extent to which they contribute to or conflict with the strategy as this is progressively implemented;

[1]See the Background Paper on 'The Selection of Preferred Areas', published separately.

- proximity to waste sources;

- the extent to which development minimises harm to human health and quality of life, and to the natural environment;

- the extent to which development minimises impacts on landscape, nature conservation and heritage interests.

4.14 In addition consideration will be given to the extent to which individual detailed proposals are sustainable in terms of minimising negative environmental impacts and maximising environmental benefits, conserving natural resources and minimising pollution and waste. This needs to be justified in relation to the total life-cycle of the development. These objectives can be achieved through optimising the choice of technologies, systems and processes and through the detailed design of the buildings and plant as well as the detailed operation of the facility, e.g. Quality Assurance and environmental audit systems. The local authorities will require proposals to give consideration to energy conservation and the use of renewable energy; the use of recycled, recyclable or renewable building materials; the minimisation, re-use and recycling of waste (including energy recovery from waste), and the minimisation of its pollution potential; and to minimising the discharge of pollution, emissions and nuisances to the environment.

4.15 The above assessment involves a process akin to Integrated Pollution Control (Environmental Protection Act 1990 Part 1), where the objective is to secure the 'best practicable environmental option' which involves the selection of the optimum among a range of available options and 'best available technique not entailing excessive costs relative to benefits' which is concerned with optimisation of the selected option itself. Proposals will therefore need to do more than demonstrate that they have no excessive impacts. The objectives must be to be as sustainable as possible by minimising all negative environmental impacts and maximising environmental benefits provided that this does not entail excessive costs relative to benefits.

The waste management hierarchy

4.16 The Waste Local Plan controls the release of sites for the development of waste management facilities. The Waste Management Plan identifies a clear hierarchy of priorities for waste management in Berkshire based on EU, national and regional policy guidance (see paragraph 3.48).

4.17 In order to reflect this hierarchy and encourage the development of the right combination of facilities to achieve the strategy, it is therefore appropriate for the Waste Local Plan to apply these priorities in developing the land use strategy and in considering specific proposals.

4.18 In addition, the flexible approach adopted by the waste management strategy means there is potential for a variety of facilities or different combinations of facilities being developed to meet the proposals and targets of the Waste Management Plan. This flexibility relates both to the range of potential waste treatment technologies adopted in the Plan's strategy, and to the particular uses to which the sites identified for waste development might be put (see Policy WLP11 in Chapter 6). However, not all proposals will be mutually compatible and individual proposals, whilst acceptable in principle, may prejudice the overall strategy objectives. It is therefore an important function of the Waste Local Plan to enable individual proposals to be assessed having regard to the 'larger picture'.

4.19 In practice, there will be a requirement for facilities to cater for all stages of the waste management hierarchy. However, in order to give maximum encouragement to the establishment of new initiatives higher up the hierarchy, there will be a declining presumption in favour of proposals lower in the hierarchy, and a requirement for proposals to demonstrate that they are contributing positively towards and not prejudicing the achievement of the waste management strategy.

Policy WLP2 **In considering all proposals for waste management development, including those within Preferred Areas, Account will be taken of the extent to which the development contributes positively to the achievement of the waste management strategy and its hierarchy of priorities. Proposals which conflict with or prejudice the strategy and priorities will be refused.**

4.20 This policy theme is developed further in more detailed policies in subsequent Chapters. By its nature, the waste management hierarchy is considered to be sufficiently flexible to allow necessary development in all sections of the hierarchy and to recognise that in some circumstances proposals lower in the hierarchy may represent the "best practicable environmental option".

Providing for the wider waste management needs of the county area

Phasing out putrescible/polluting waste

4.21 In this context, the local planning authorities consider that a key element of a more environmentally 'sustainable' approach is to reduce environmental pollution by phasing out the landfilling of putrescible waste by the end of the Plan period. Currently the majority of waste from the county area, including putrescible and polluting waste, is disposed of by landfill. The local authorities do not consider that this is a sustainable form of waste management development.

Policy WLP3 **The local authorities will seek to phase out the use of landfill and landraising in the county area as a means of disposal of putrescible waste by 2006.**

4.22 This policy reflects directly the objectives and policies of the Structure Plan (BSP Policy W3) and the approved Waste Management Plan for minimising the level of putrescible waste disposal by landfill and landraising in the county area, by minimising waste produced and maximising waste disposal by alternative methods.

4.23 This approach makes it necessary to develop environmentally acceptable alternative treatment and disposal methods. The waste strategy concentrates on a more sustainable approach of recycling unavoidable waste and treating the remaining waste to recover resources and reduce the volume which has to be landfilled.

Providing for the waste management needs of the county area and of the Region

4.24 Regional Waste Planning Guidance (RPC 2266 and SERP 160) requires individual counties and county areas in the South East Region to make provision for their own waste arisings other than those requiring specialised facilities of a sub-regional nature and to make an appropriate contribution to meeting wider regional needs.

4.25 The regional guidelines for waste define "county self sufficiency" in waste disposal as each county making provision for *a quantity of waste equivalent to the amount of waste it produces*. There is no attempt to influence the actual flows of waste which do not respect county boundaries and are outside the control of the planning authority.

Meeting Berkshire's own needs

4.27 The local planning authorities recognise the need for the county area of Berkshire to aim to be self sufficient in terms of its arrangements for waste disposal. This is part of an overall approach to achieving sustainability. The detailed policies and proposals of the Waste Management Plan and Waste Local Plan aim to provide sufficient capacity for the county to be self-sufficient in terms of the SERPLAN definition. However, this will be provided through a combination of methods and sites which are considered to be sustainable overall and within the ability of the county area to accommodate the required development without harming interests of acknowledged importance. Therefore, whilst being committed to aiming for self-sufficiency in the treatment and disposal of waste, the local planning authorities will resist proposals for achieving this which would conflict with the priorities of the Plan or would result in harm to interests of acknowledged importance.

4.28 Consistent with regional guidance, the former County Council carried out its own detailed assessment of waste arisings in Berkshire and forecast the contribution which will be made by waste minimisation and by existing and new recycling, waste treatment and landfill capacity (including the contributions of existing contractual commitments to out-county disposal).

Policy WLP4 **The local authorities will seek to make provision for meeting the waste management needs of the county area in ways which are consistent with the approved waste management priorities and the ability of the county area to accommodate waste related development without harming interests of acknowledged importance.**

4.29 Policy WLP4 echoes the principles and policies of the Structure Plan (BSP Policy W4)

4.30 The Waste Management Plan includes policies and targets for achieving maximum practicable recycling of putrescible/polluting and other wastes. The Plan includes policies which seek to treat as much non-recyclable putrescible waste as possible via alternative technologies to landfill within the overall priorities and 'mini-hierarchy' set out in paragraph 3.36. The Waste Local Plan makes provision, through policies and the identification of sites, for the development of new recycling and treatment facilities to achieve these objectives.

4.31 Separately, as the authority responsible for the disposal of household waste, the former County Council actively pursued the provision of a new waste treatment plant (industrial reprocessing) to dispose of some of Berkshire's household waste.

4.32 However, it is possible that new facilities with capacity in excess of local requirements may be developed outside the county in locations convenient to Berkshire. The strategy does not, therefore, completely rule out 'exporting' Berkshire's waste for treatment and disposal at suitable recycling and/or treatment facilities with spare capacity. It does recognise, however, that waste disposal does not respect county boundaries and that just as some of Berkshire's waste may be treated or disposed of outside the county, facilities developed in the county area might in practice equally serve a proportion of the needs of adjoining areas in addition to Berkshire's own requirements. This does not affect the local authorities' commitment to aiming for self sufficiency in waste disposal (paragraph 4.27).

4.33 The development of new technologies to deal with wastes from the industrial and commercial sector is beyond the local authorities' direct control and is dependent on other factors. Nevertheless, specific initiatives have been or are being pursued and the implementation of recycling and treatment capacity to deal with these wastes could be substantially in place before the end of the Plan period.

4.34 The local authorities recognise that there will be a continuing requirement for engineered landfill throughout the Plan period as alternative recycling and waste treatment capacity is being developed and also to dispose of the polluting residues of alternative methods and other polluting wastes not suitable for recycling or treatment.

4.35 This requirement will diminish significantly from current levels by the end of the period, as new recycling and treatment facilities are developed.

a) Non-inert waste

4.36 Currently putrescible/polluting waste is disposed of in landfills in the county area, whilst a proportion (household waste) is exported to landfill sites in other parts of the region which at present have a more plentiful supply of 'holes in the ground' created by mineral extraction which are suitable for the purpose. In the long term, a continuation of exporting Berkshire's waste would be contrary to regional guidance and sustainability objectives. Consequently, the Plan contains policies and specific proposals which seek to provide within the county area for Berkshire's forecast needs for engineered landfill. However, limitations on the availability of suitable sites may possibly result in a continuing requirement to export a proportion of waste to areas with a surplus of suitable void space in the short to medium term whilst new in-county recycling and treatment capacity is being developed, although it is intended that the export of putrescible household waste generated in the county area will be phased out completely by the end of the Plan period.

b) Inert waste

4.37 The approved strategy for inert waste is for maximum practicable recycling followed by disposal of the remainder in former mineral workings where this provides beneficial restoration. An assessment of existing and potential mineral voids (existing permissions, sites subject to a resolution to grant planning permission subject to completion of a legal agreement, and sites identified as preferred areas in the Replacement Minerals Local Plan for Berkshire which require infill material for restoration) indicates that there is likely to be a limited surplus of void space suitable for inert waste disposal during the Plan period (see Chapter 3). The unitary Councils as Waste Planning Authorities should therefore be able to make appropriate provision for the disposal of inert waste arising in the county area.

Meeting regional needs

4.38 Regional planning guidance (RPC 2266 and SERP 160) requires individual counties to make an appropriate contribution to regional waste disposal needs. The principal regional waste management issue is the disposal of London's waste. The current regional guidance (SERP 160) presents an indicative 'apportionment' of London's waste for disposal between those counties and county areas which it predicts to have a surplus of void space over and above their own waste disposal needs.

4.39 In relation to ***non-inert waste***, since the guidance predicts that Berkshire will have a shortfall of void space relative to its own needs over the period 1994 to 2010 (3.9 million cubic metres, or Mm^3) the SERPLAN document indicates that Berkshire will not be expected to contribute to regional needs for non-inert waste.

4.40 These findings are consistent with the former County Council's own detailed assessment that there will be insufficient existing and new landfill void space suitable for non inert waste available to meet Berkshire's own needs (a predicted shortfall of $2.3Mm^3$ by 2005). Consequently this Plan does not include any landfill void space provision for non inert waste to meet regional needs.

4.41 Similarly, given the context of regional guidance and the various physical and policy constraints on development in the county area, it is considered appropriate in the first instance to seek to limit the development of waste recycling and treatment capacity to reflect Berkshire's own needs. However, individual proposals will be considered in relation to the contribution they make to the waste management strategy. In this context, proposals which serve a larger catchment area than Berkshire, but make a significant contribution to Berkshire's needs, may be acceptable (cf paragraph 4.32).

4.42 With respect to ***inert waste***, the guidance predicts a significant surplus of existing and potential void space relative to the volume of Berkshire's waste requiring disposal (2.9Mm^3 over the period to 2010). Consequently, the guidance indicates that Berkshire might make a contribution to regional needs which it quantifies as 2.0Mm^3.

4.43 The former County Council's detailed assessment predicted a surplus of void space available after Berkshire's needs are met of 1.3Mm^3 over the period to 2005. Although a somewhat smaller surplus than predicted by SERPLAN, this is close to the regional guidance figure for Berkshire's contribution. In addition, some further "windfall" permissions may arise as a result of other policies in the Replacement Minerals Local Plan and the Waste Local Plan. Consequently the local authorities consider that they can meet the recommended contribution to regional needs for inert waste disposal.

Policy WLP5 **The local authorities will seek to make an appropriate contribution to meeting regional waste management needs in ways which are consistent with the approved waste management priorities and the ability of the county area to accommodate waste related development without harming interests of acknowledged importance.**

The contribution of the county area to meeting the landfill needs of the region will in general be confined to the disposal of non-recyclable inert waste in former mineral workings which require filling for restoration purposes.

4.44 Policy WLP5 is consistent with the Structure Plan (BSP Policy W4) and with the findings and recommendations of the regional guidance which proposes that Berkshire should make a limited contribution to meeting wider regional needs for inert waste landfill only.

Environmental Appraisal of Chapter 4

4.45 This Chapter has focused on the guiding policies which are an essential precursor to developing the more detailed policy framework in the rest of the Plan. The policies focus on the need to secure sustainable forms of waste management development to ensure that all proposals contribute positively and do not prejudice strategy objectives. The conclusions of the Environmental Appraisal in respect of the Waste Local Plan's 'Guiding Policy Principles' may be summarised as follows:

4.46 A sustainable approach to development is a cornerstone of EU, government, regional and Structure Plan waste management, environmental and planning policies. Policy WLP1 provides the guiding policy principles for more sustainable forms of waste management development in the county area in future upon which the more detailed policies of the Plan are based.

4.47 Ensuring that development can be accommodated within the limits set by environmental constraints is a key issue in assessing the sustainability of the waste strategy and the resulting land use strategy. The Plan recognises that there will inevitably be environmental impacts resulting from new waste management development and therefore seeks to focus necessary development into locations which do not compromise the county's environmental constraints. However, in seeking to accommodate such necessary development it is recognised that there are tensions between different policy objectives, in particular between policies for protecting the natural environment and those which are intended to protect people and their local environment. This issue is considered further in Chapter 6.

4.48 The 'Waste Management Hierarchy' is the practical consequence of devising a more sustainable approach to waste management and is the key principle of the Waste Management Plan. Support for this policy through the land use policies set out in the Waste Local Plan is essential to ensure that development proposals contribute to and do not compromise the strategy objectives.

4.49 County area self-sufficiency in waste treatment and disposal contributes to the sustainable objectives of regional self-sufficiency. However, new treatment capacity will take time to develop and landfill sites identified may not be available when needed. Retaining the option of limited short to medium term out-county disposal to suitable sites in areas of surplus is considered to be more environmentally sustainable than releasing unsuitable landfill sites in Berkshire and thereby perpetuating this less sustainable disposal method.

4.50 The environmental advantages of cross-boundary flows of waste, particularly where sites and facilities are well placed to serve waste sources in and out of the county area, will be balanced if all counties provide for their own needs. However, this is only true if the treatment and disposal methods adopted are themselves sustainable and there are sufficient suitable sites available without compromising the environmental constraints applying in the county area. Policy WLP4 therefore represents a firm commitment to self-sufficiency but by sustainable means. The Plan seeks to reduce dependence on out-county disposal by developing recycling and treatment capacity and identifying potential sites for engineered landfill of wastes which cannot be recycled/treated.

4.51 The county area cannot support a continued reliance on landfill as the main means of the main means of dealing with its non-inert wastes without harming important environmental interests. The local authorities also have concerns about the environmental sustainability of this method for putrescible/polluting waste, particularly in respect of the waste of resources it perpetuates, and global and local pollution implications. The policy of phasing out putrescible landfill provides the essential policy "focus" for the development of alternative more sustainable disposal methods.

4.52 The Plan recognises the need to contribute to wider regional needs. Policy WLP5 reflects this intention but by sustainable means.

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5 SECURING WASTE MINIMISATION AND RECYCLING THROUGH THE CONTROL OF DEVELOPMENT

Waste as a consideration in new development

5.1 New development offers an important opportunity to secure environmental objectives such as the conservation of energy and natural resources. The Berkshire Structure Plan requires local planning authorities, when considering proposals for development, to take account of the extent to which the development conserves natural resources including land, water and fossil fuels (Policy LD1). This policy is to be applied through such measures as using renewable rather than non-renewable materials, and materials requiring a low energy input; minimising pollution risk; and minimising waste generation through re-using building materials and wastes from demolition and construction. The careful husbanding of waste material created by the development process can contribute positively to these policy objectives.

5.2 A primary objective of this Plan is to ensure that waste issues are a consideration in all development decisions and in the determination by local planning authorities of planning applications. In particular it seeks to ensure that proposals for new development embrace the principles and practice of waste minimisation and recycling.

5.3 The waste generation implications of development need to be considered in relation to all stages of the development process, including site preparation works, the construction phases and the subsequent use of the buildings or land. A further consideration should be the opportunities for the construction industry to utilise materials recycled from waste. In summary, all development should aim to re-use building materials, separate all reusable waste arising through development from demolition and construction, and use renewable rather than non-renewable material.

5.4 In this context ***developers*** need to consider the following issues in relation to both the development and subsequent use of the site/buildings:

- does the proposal relate to a site with a history of contamination and do the proposals adequately address the water and pollution implications of dealing with this contamination?
- does the design, layout, planning and construction of the development reduce waste to a minimum?
- what sort of waste will be generated (during site preparation works, construction and operation)?
- are there alternative arrangements/methods/practices which will avoid the generation of waste which cannot be treated or reclaimed being generated, or secure its re-use in situ?
- in relation to unavoidable wastes, are appropriate measures being taken to avoid mixing wastes, and is the waste being produced as non-polluting as possible? Will further treatment/separation reduce its polluting potential and minimise demand on disposal sites for polluting waste?
- can it be used in its existing state for another purpose?

- can the waste be recovered/recycled/treated? Does this require pre-sorting and are facilities included for this? and

- for unavoidable waste, is the method of disposal environmentally friendly in terms of seeking to recover and re-use waste and minimise landfill?

5.5 The ***Borough and District Councils*** have a role to play in ensuring that new development contributes to the waste strategy objectives.

5.6 The local planning authorities should include the waste generation and disposal implications of new development as a consideration in their decision-making on planning applications. The generation and disposal of waste has an environmental impact. The types and volumes generated, and the applicant's ability to demonstrate that it will be dealt with in an environmentally friendly manner, is a legitimate planning consideration. In relation to development requiring an environmental statement, the statement should include a detailed evaluation of the environmental impact of the proposals in terms of waste generation.

5.7 Applications for development should, therefore, contain a statement of the waste generation and disposal implications of the proposals (including any necessary site preparation works) and the arrangement for minimising, re-use, recycling, processing and disposal.

Policy WLP6 **Proposals for development should include provision for, and provide the submission of details in respect of the waste generation and disposal implications of the development, measures, to:**

(i) minimise, re-use and recycle waste;

(ii) minimise the pollution potential of unavoidable waste; and

(iii) dispose of unavoidable waste in an environmentally acceptable manner.

The Local Planning Authorities will not permit applications which do not adequately address these requirements.

The above requirements relate to the life cycle of the development including all stages of the development process (planning, design, site preparation works and construction) and to its operation, maintenance, decommissioning, demolition, clearance and site restoration.

5.8 The policy is not intended to discriminate against processes which unavoidably produce waste. Rather it is intended to ensure that waste issues are addressed at the planning application stage and a positive approach is taken by both the developer and the planning authority towards realising waste management priorities and minimising pollution.

5.9 The policy has significant implications for both developers and local planning authorities. It will be necessary for developers to consider the waste implications of proposals at an early stage in the design of the scheme. The level of information required to be submitted with an application for planning permission will vary according to the nature and scale of the development proposed and whether 'full' or 'outline' permission is sought. Larger development proposals will be expected to furnish more detailed submissions. The former County Council, in consultation with the District Councils (now the unitary authorities), prepared supplementary guidance for applicants to show that due consideration has been given to the requirements of Policy WLP6[1], and also prepared model conditions for use by the District Councils.

[1]'Waste Minimisation, Re-use and Recycling ' A Code of Guidance for the Development Industry' (1996).

Development required for waste minimisation and re-use

5.10 Minimising and re-using the waste we produce also involves organisations and individuals making changes in their current processes and practices to reduce the creation of waste. This appears, on the face of it, to have limited specific land use implications. However, it may create the need to modify or add to existing facilities or lead to changes in the layout and design of new development. In such cases, planning authorities should take a positive and sympathetic approach to such development.

Policy WLP7 **The Local Planning Authorities will seek to encourage and support appropriate action and initiatives to reduce the creation of waste and will give favourable consideration to appropriate development proposals which are required for the purpose of minimising and re-using waste or which incorporate waste minimisation and re-use measures.**

This policy encourages organisations and individuals making changes in their current processes and policies to reduce the creation of waste.

5.11 Another element of the waste strategy is to seek beneficial uses for recyclable materials. Without adequate markets for the substantial volumes which could be generated by recycling, the strategy would be jeopardised. This partly depends upon creating and marketing new and innovative products derived from recycled waste and breaking into existing markets by demonstrating that these recycled materials can meet the standards and specifications currently achieved by established materials. However, it also depends upon changed attitudes towards the use of recycled materials. It involves an element of 'positive discrimination' on the part of producers and consumers (from large corporations to individuals) in favour of recycled products. In the case of companies and organisations, this will contribute positively to their 'green' credentials and image which can be good for business.

5.12 In a land use planning context, developers should be encouraged, in appropriate circumstances, to use recycled materials where these represent a realistic alternative to other non-renewable materials. It is particularly incumbent on public bodies (Government departments, statutory undertakers, local authorities) and major companies to take a lead in this area in considering the opportunities for utilising recycled materials and, where practicable, specifying their use in contracts for new construction projects. For example, recycled construction industry waste (crushed concrete, etc) can be utilised as substitute materials for aggregates in road construction projects. In this respect, the establishment by Government and others of realistic minimum targets for the use of recycled materials would be a considerable step forward.

5.13 The Local Planning Authorities should therefore consider the opportunities for utilising recycled materials when assessing individual proposals for development. Applications should contain a statement of the consideration given to the use of recycled products.

Policy WLP8 **In considering proposals for development, the Local Planning Authorities will seek to ensure that the development provides for the use of recycled materials where appropriate.**

5.14 The national recycling body 'Waste Watch' produces and periodically updates details of recycled products and their producers. This information should assist applicants and the local planning authorities in considering the potential for using recycled material in particular circumstances. To facilitate the implementation of this policy, the local planning authorities will expect developers to demonstrate that they have considered the options for using products derived from recycled materials.

Recycling facilities in new development

5.15 The Berkshire Structure Plan (Policy LD2) requires major developments and developments which attract a significant number of people to make provision for appropriate recycling facilities. This may best be achieved by providing facilities as an integral part of the development or by contributing to provision elsewhere.

5.16 Developers need to consider the implications of this requirement when preparing the detailed layout and design of new development. They should liaise with the Local Planning Authority, Waste Regulation Authority and Highway Authority on the practical and design implications of providing and servicing recycling facilities.

5.17 It is not possible to be prescriptive about the nature and type of facilities required. This will depend on the type of development and the waste management systems being used. However, the facilities should include two separate elements:

- local recycling facilities for the public to deposit different types of recyclable material (large developments may need to provide a network of several local facilities); and

- facilities for source separation and storage of different types of waste where individual or groups of householders or businesses separate and deposit their waste into different fractions for collection.

This involves consideration of the design and layout of individual buildings or groups of buildings to provide individual or shared source separation facilities. In the case of commercial/industrial buildings this system may involve providing appropriate areas for siting several large bins for different wastes.

Policy WLP9 **The Local Planning Authorities will require major development proposals and proposals attracting a significant number of people to provide as an integral part of the development:**

(i) facilities for the public to recycle waste ('bring systems'); and

(ii) facilities within individual or groups of properties or premises for the source separation and storage of different types of waste for collection.

Applications for such facilities will normally be permitted provided that the requirements of Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan are satisfied.

5.18 In accordance with the Berkshire Structure Plan this policy will normally apply to the following developments:

- housing proposals for 100 or more dwellings;

- new development, redevelopment or refurbishment of shopping centres or facilities where the floorspace of existing and new development amounts to 500 sq m or more;

- business, industrial, distribution or storage development involving a net increase in floorspace of 500 sq m or more;

- major transport, leisure, recreation, tourist or community facilities;

- car parks for the public including 'park and ride' with over 200 spaces; and

- appropriate smaller developments, for example community or shopping schemes which frequently attract a significant number of people, or development in locations poorly served by existing facilities.

5.19 In order to secure a consistent approach to implementing this policy, the former County Council, in consultation with the Borough and District Councils, produced detailed design guidance to show how new developments could be 'designed for recycling'.[2]

5.20 All other developments not expressly required to provide recycling facilities under Policy WLP9 should nevertheless include consideration of the implications of waste recycling as part of the design process. In particular, the need to provide for the convenient source separation of waste should be taken into account where this is appropriate. This could include, for example, taking account of the need for extra space to enable separation of recyclable materials in individual or groups of dwellings. For their part, the Local Planning Authorities should have regard to the desirability of maximising recycling in considering the detailed development proposals.

Policy WLP10 **In considering proposals for development not covered by Policy WLP9, the Local Planning Authorities will seek to ensure that the development makes appropriate provision for the recycling of waste.**

5.21 The detailed design guidance referred to in paragraph 5.19 also assists with the effective implementation of this policy.

5.22 It is considered that the extra work associated with the practical and design implications of Policies WLP6 to WLP10 would not add significantly to the amount of time taken in preparing and determining planning applications. Consideration of waste issues at the planning stage should save time and resources overall in the development process.

Impact of recycling facilities for the public

5.23 Recycling facilities for the public can give rise to adverse local impacts if inappropriately located including noise, litter and traffic. In the case of small scale facilities provided by local authorities planning permission is not normally required. To assist in proper planning and management and to avoid adverse impacts the former Berkshire Councils have produced a Code of Guidance for new local recycling facilities (reproduced at Appendix 3).

5.24 Proposals for recycling facilities which require planning permission must comply with relevant policies in the Plan including those for the protection of local amenity etc.

Environmental Appraisal of Chapter 5

5.25 There is a need for a new and positive approach on the part of developers and local planning authorities in considering the waste management issues and opportunities raised by new development. The Plan therefore puts forward positive policies which encourage development for minimisation and recycling and includes these requirements as part of the design, construction and operation of new development. The conclusions of the Environmental Appraisal in respect of 'Securing Waste Minimisation and Recycling through the Control of Development' may be summarised as follows:

[2]'Designing for Recycling ' a good practice guide' (1998).

5.26 Waste minimisation, recycling and the use of recycled materials in new development is an essential part of the waste strategy for the county area. It contributes to the husbanding of resources, both in terms of landfill capacity and mineral resources, within the environmental constraints applying in the county area, and reflects general Government policy guidance on sustainable development. The policies in this Chapter are recognised to be innovative, but are considered to form an essential component of land use planning for waste management.

5.27 Although local recycling facilities (necessary to achieve the above) may themselves give rise to some limited environmental impact, appropriate site specific mitigation measures can be employed. Furthermore, any such limited impacts are outweighed by the need to minimise the environmental impact arising from the generation and disposal of waste from new developments and the overall environmental advantages of husbanding resources in the wider interests of sustainability and the safeguarding of environmental interests in the county area.

5.28 The Plan places a responsibility on both the developer and local planning authority to take a positive approach towards realising waste management priorities and minimising pollution by taking account of the waste generation and disposal implications of new development proposals. The need for markets and a change in attitudes towards the use of recycled materials in order to secure the waste strategy objective is also recognised and to this end education is an important element of the strategy.

6 FACILITIES REQUIRED FOR MANAGING WASTE

The types of facility required to implement the Waste Management Plan

6.1 The Waste Management Plan seeks to achieve high levels of recycling and treatment of waste by the end of the Plan period. Table 8 below shows how much waste must be recycled and treated annually by 2005/06 to achieve the targets set in the Waste Management Plan:

TABLE 8

WASTE TO BE RECYCLED AND TREATED BY 2005/06 (thousands of tonnes)

(1)	Recycling targets:	35% of household waste	140
		25% industrial/commercial waste	77
		40% inert waste	516
(2)	Waste treatment (non-recycled putrescible household and industrial/commercial)		380 to 470

6.2 In order to achieve these estimates the Waste Management Plan requires the following things to happen:

(i) separation of the largely putrescible/polluting waste fraction from the truly inert fraction to ensure:

- the maximum volume of putrescible/polluting waste is available for treatment, thereby minimising putrescible/ polluting waste landfill;
- waste is not disposed of unnecessarily to engineered landfill sites;
- compliance with new stricter site licence requirements; and

(ii) all suitable waste passes through the stages of sorting (to remove recyclable materials) and treatment (to reduce volume and generate products/energy) before its disposal.

6.3 To achieve this it will in practice be necessary to make provision for a range of facilities capable of handling, sorting, separating and recycling a high proportion of the waste being generated in all waste categories.

6.4 The facilities required divide into three categories in locational terms:

- **local facilities** for minimising the waste generated and for the initial collection and sorting of waste; these should be as close to the waste source as possible and include:
  - facilities for the source separation of waste for collection - within individual buildings or groups of buildings;

- facilities for the public to deposit separate recyclable wastes - local recycling centres (bottle banks, can banks, etc);

- facilities (temporary) for the recovery, separation and processing of inert waste on construction and demolition sites;

- **central facilities** located centrally in relation to waste sources and consisting of:

  - civic amenity sites for the receipt, sorting, recycling and distribution of bulky waste and also providing recycling facilities for the public;

  - sites for sorting, recycling and transfer of household, commercial and industrial waste;

  - sites for metal waste recycling;

  - green waste composting facilities for garden waste and other green waste;

  - drop off points for the collection of recyclable trade wastes;

  - sites for sorting and recycling of inert waste;

  - facilities for the storage, transfer, composting and disposal of river and canal dredgings;

- **strategic facilities** - to carry out final sorting and recycling before treating/ disposing of waste which is not susceptible to recycling. They include:

  - major recycling facilities for the collection, sorting, recycling, transfer and distribution of source separated (or mixed) household and other wastes;

  - facilities at waste treatment plants to separate and recover material not dealt with at local or central locations;

  - industries which reprocess the recycled material into materials and goods;

  - industrial reprocessing plants for the separation and reprocessing of mixed household waste to produce a range of materials and goods;

  - composting plants for large scale composting of mixed household waste;

  - anaerobic digestion plants for the large scale treatment of mixed household waste to produce soil conditioner and 'biogas';

  - waste derived fuel plant(s) for the conversion of waste into fuel for combustion, which could include plants to combust the fuel to generate energy (heat and electricity);

  - waste to energy plant(s) for burning suitable waste to reduce waste volume and generate heat and power (electricity);

  - engineered landfill sites for the disposal of putrescible/ polluting wastes (by the end of the Plan period this will consist largely of waste which is not susceptible to recycling or treatment and the residues from waste treatment processes);

- landfill sites for disposal of non-recyclable inert wastes; and

- sites for recycling, transfer and treatment of difficult and Special waste, including contaminated soils.

6.5 The number and distribution of sites required to satisfy these requirements is influenced by several factors. Particularly important, in accordance with the principles of sustainable development, is the need to locate waste management facilities as close as possible to the point where waste arises (the 'proximity principle'). In land use planning terms this implies providing a spread of facilities across the county area close to the major centres of population. Major processing plants have a minimum optimum size which limits the number of plants that could operate in the county area. Similarly, there are specific technical, planning and environmental constraints and requirements relating to some waste management facilities. For example, the distribution of landfill facilities for putrescible/polluting waste is largely dictated by geology and hydrogeology (see Appendix 6).

6.6 The number and distribution of sites is also influenced by the need to develop a flexible plan which can respond to future uncertainties. Whilst a key planning objective is to restrain development to the necessary minimum, the need to give encouragement to the development of new facilities to achieve the recycling and treatment targets points to a reasonably generous allocation of potential sites. In this context, it is desirable in principle to provide opportunities for waste to be sorted and recycled at each stage from its point of creation to its point of disposal, but there should be greatest encouragement to facilities close to waste sources. A further consideration is the practical availability of suitable sites which influences the ultimate distribution of facilities. Clearly the existing facilities and waste management arrangements will have an influence on the pattern of future waste disposal provision. Since many waste management operations can be combined, it may well be desirable in planning terms to seek suitable sites where such combined facilities can be located.

6.7 As noted in paragraph 3.53, Appendix 4 provides details of the facilities needed to implement the Waste Management Strategy and their appropriate spatial distribution, together with their site characteristics and traffic generation implications. It is stressed that this is no more than an indication of the possible number of facilities. It in no way commits the local authorities to releasing this number of sites. In practice, with facilities being combined in many cases, the number of individual sites required may be substantially smaller.

Finding suitable sites

6.8 There are no ideal sites for waste management facilities. All such facilities will have some environmental impact, and major new facilities such as waste to energy plants or composting plants could raise major environmental issues (both local and wider issues).

6.9 Waste management facilities tend to be unpopular due to a combination of factors (actual and perceived) including their bad neighbour characteristics. There is a growing awareness of planning and environmental issues in general, and the issues raised by waste in particular. Local opposition is invariably aroused by new proposals for waste management facilities. One consequence of this is a difficulty in securing planning permissions for the new waste management facilities required to deal with the waste which we all produce.

6.10 Public attitudes to waste handling, treatment and disposal are partly a response to the lack of a coherent, detailed planning policy framework which tends to result in ad hoc proposals. They also arise from a lack of knowledge of modern methods, safeguards and controls, and are a response to the past record of the industry.

6.11 A further consequence of an inadequate planning framework for waste management is that some operations have tended to be 'pushed' on to what could be regarded as inappropriate sites. Several such operations are currently the subject of action by the Planning Authorities and Waste Regulation Authority to secure their cessation and removal.

6.12 A further problem to date reflects the fact that the market for recycled and reclaimed materials has been erratic. In such circumstances there has been little incentive for operators to invest in the operational improvements which would help to improve the image of the industry. Low standards of operation on some sites have reinforced public concerns, which naturally encourages adverse reaction to proposals for new facilities.

6.13 The location of waste facilities has also raised conflicting issues in terms of planning policies. In urban areas, land identified for industrial use at first sight appears appropriate in terms of a location for some types of waste management facilities. However, such activities may not be considered acceptable as neighbours to occupiers of other premises, especially within areas of high quality business development. The need in some cases for buffer zones between waste management facilities and sensitive development such as houses, schools, etc., suggests a need to look at locations outside the built up area. However, in rural areas planning policies have hitherto sought to prevent this kind of development which is regarded as inappropriate by reason of its intrusiveness and inappropriateness in a countryside setting.

6.14 All of these issues make the process of identifying sites for waste management difficult and controversial. It is these considerations which prompted the Government to legislate to require waste planning authorities to prepare Waste Local Plans to make adequate provision for waste management development. If the Waste Local Plan is to be an effective framework for securing the new facilities needed to implement the Waste Management Plan, it must face up to these problems.

The 'Preferred Areas' approach

6.15 In order to secure sufficient suitable sites, the local authorities consider that there is a need to identify and safeguard specific locations for waste management uses. It proposes to identify such sites in the Plan as "Preferred Areas". This means that, subject to various detailed matters, there will be support in principle for allowing appropriate waste management development in the preferred areas.

6.16 Furthermore, since the areas identified are considered to be the least damaging potential sites, and are believed to be capable of meeting the required levels of provision, it follows that (with certain significant exceptions) there will be a general presumption against planning permission being granted for waste management facilities outside these areas. The local authorities consider that there are a number of benefits from this approach:

- it provides greater certainty that the waste strategy can be delivered in land use terms;
- it provides for the identification of the "least unacceptable" sites in planning terms, which should serve to minimise the adverse environmental impacts of the development required to implement the waste strategy;
- it enables the Planning Authorities to lay down in advance a site specific development brief identifying the constraints which must be addressed and overcome and setting out requirements for development and operation, for landscaping, and, where applicable, for restoration and after-use, etc. This approach, therefore, secures the greatest degree of control over the scale, location and impacts of development and should result in higher standards;

- since the Local Plan provides clear guidance on acceptable sites this should help to reduce the number of unsatisfactory applications, which lead to refusals of permission and possible appeals; and

- Government guidance also indicates the appropriateness of a site specific approach in local plans.

6.17 The former County Council carried out a major exercise to identify possible future sites for waste management purposes[1]. These have been assessed to identify the sites or areas which, on the balance of all the issues, appear to be capable of accommodating the waste management facilities required with least harm to environmental and other interests.

Principles of selection of 'Preferred Areas'

The approach to site selection

6.18 Site selection is an important key issue for the Waste Local Plan. It is critical that sites finally selected as preferred areas can be operated with the minimum of adverse impacts on local communities (including both local residents and the business community) as well as being suitable in terms of characteristics, location and distribution for the proposed uses.

6.19 The criteria used for site selection are explained fully in a Background Paper published for the Local Plan Inquiry, but are summarised in the following paragraphs. The principles underlying selection are sustainable objectives including proximity to waste sources; established planning policies protecting environmental interests; compatibility with adjoining land uses; and protection of living conditions (and working conditions, where appropriate) by buffer zones and environmental controls over operations. However, a key consequence of this sustainable approach is that many of the resulting "preferred areas" are relatively close to communities.

6.20 The first stage of the process involved identification of the locational and site planning requirements (size of site, scale of buildings, traffic generation etc., and potential environmental impacts) of particular waste management uses - see Appendix 4. Each type of waste disposal facility has its own particular problems, e.g. for large waste to energy plants visual and landscape impact are critical issues.

6.21 The next stage involved a sieving process for selecting sites. Sites must pass through a series of sieves where each sieve represents a list of constraints. If one or more of these constraints were found to apply to a particular area or site it did not progress to the next sieve. The first sieve consisted of the most important and wide ranging constraints whilst the next sieves become progressively more detailed. The intention of this was to rule out sites or areas which were unsuitable for some crucial reason at an early stage of the exercise and then look in more detail at the sites or areas remaining. By the end of the exercise, those sites or areas left should be the ones which are acceptable in principle.

6.22 Key assessment criteria included the adequacy of the transport network to cope with the extra lorry traffic a new waste disposal site (especially a major facility) could generate; major planning policy constraints protecting certain environmentally important areas and sites in Berkshire from being developed or disturbed; pollution issues including constraints affecting the location of landfill sites for putrescible waste, and also including the effect of waste management development on ground and surface water regimes; and the effect of waste disposal operations on people's living conditions.

Facilities Required

[1]See 'Deposit Draft Waste Local Plan Background Paper: The Selection of Preferred Areas'

6.23 Some waste disposal uses could be considered as 'bad neighbours' e.g. putrescible landfill (possible nuisance), waste to energy (due to the large building and stack), and inert waste recycling (due to noisy machinery or the potential for dust and visual intrusion). 'Buffer Zones' are required reflecting the minimum acceptable distance between these facilities and the nearest dwelling for each type of use. Buffer zones may also be required to help mitigate impacts on other sensitive uses (e.g. schools, hospitals) or interests (e.g. watercourses). A key question in assessing the need for and extent of buffer zones is therefore the extent to which potential adverse effects can be 'mitigated' (reduced to an acceptable level) by such factors as detailed siting, design and orientation of buildings and measures such as the covering or enclosure of processes which might cause nuisance, noise attenuation measures such as fences or bunds, screening by artificial mounding and/or landscape planting; limiting traffic impacts by ensuring accessibility to the strategic highway network etc. In addition, limits on the scale of operations at particular locations, high standards of operation and strict limits on discharges and emissions can all be effective in reducing adverse impacts and influencing locational requirements.

6.24 The assessment also concentrated on more local factors such as the characteristics of the areas or site, the adjoining uses, the local landscape, ecology and archaeology etc. This was followed by a detailed look at the remaining sites and areas to see if there were practical problems in accommodating particular facilities e.g. site capacity for waste disposal; and detailed effects on living conditions and landscape (visual intrusion, noise impacts etc).

6.25 Having established the acceptability of sites "on their own merits" the final exercise was to consider the number, distribution and characteristics of the sites against the land use needs of the strategy and to select those sites which best fit the needs of the strategy.

6.26 The above exercise focused the search for sites for recycling, transfer, sorting and treatment facilities on areas with ready access to the strategic transport network, within or adjacent to existing waste management facilities, or within or adjacent to other 'compatible' uses: mixed industrial areas, mineral processing plants etc as well as despoiled land and land subject to redevelopment ('brownfield' sites). However, due to limitations on the availability of suitable sites in built up areas in some parts of the county area it has been necessary to identify some sites in non-urban locations. The location of landfill sites is dictated by the availability of mineral voids and, in the case of landfill sites for putrescible/polluting wastes by geological and water resource constraints.

The response to public concerns

6.27 The former County Council's approach to site selection attracted public concern during consultation on the draft Plans. The emphasis on site selection was considered to pay insufficient attention to adverse impacts on nearby residents. It was suggested that planning policies to 'protect the countryside' should be relaxed, since people are more important and sites should be located on remote green field locations close to motorways where impacts on people could be reduced to a minimum.

6.28 This alternative approach arises from concerns about the adverse local impacts of developing some of the preferred areas both in terms of the physical impacts of proximity and the wider, less measurable, effects on the character of an area, quality of life and the economic effects. This arises in part from public perceptions of the harmful effects of waste and waste facilities in terms of nuisances such as smell, dust, vermin, flies, heavy traffic etc. There was, in addition, particular concern in this context with regard to waste to energy (WTE) due to the substantial physical presence of WTE plants and the public perception of the harmful effects of emission from this technology.

6.29 So far as the alternative approach of remote greenfield locations is concerned, the Structure Plan (BSP Policy C2) seeks to strictly control development outside built-up areas and settlement boundaries with certain exceptions, which do not include waste recycling and treatment. However, in policy terms, landfilling of mineral voids may, in appropriate cases, be an acceptable use in the countryside. In theory, a countryside location could result in less amenity impacts. However, the population pattern of the county means there are, in reality, few areas 'away from people', except in areas such as the North Wessex Downs Area of Outstanding Natural Beauty (AONB) where the strongest policy objections apply to major development due to adverse impact on a nationally important landscape asset.

6.30 In addition, remoteness means longer haul routes (higher costs, and much higher fuel use could conflict with objectives for reducing transportation movements). The road network is often poor in rural areas, except for M4/A34 and the Department of Transport raises the strongest possible objection to direct access from the M4/A34. The approach could also conflict with a key sustainability objective of the Structure Plan of making the best use for development of urban land (where this is compatible with securing and enhancing the quality of the urban environment) especially where vacant or derelict, and by protecting open countryside (BSP paragraph 4.5).

6.31 So far as public concern about the physical and emission impacts of WTE plants is concerned, the former County Council recognised this concern in relegating this technology to a lower priority in the hierarchy of potential treatment methods and limiting the potential locations for such a facility. In doing so, however, the Council was primarily concerned about the land-use planning implications of such plants in a Berkshire context (especially scale and physical and traffic impacts) and the inflexibility which an over-reliance on this technology could introduce into the overall waste strategy.

6.32 The former County Council's research into the alternative treatment technologies (e.g. composting, anaerobic digestion) has indicated that such plants, which occupy a more conventional industrial building and are subject to full process control, should not give rise to material adverse local environmental effects. Similarly, certain recycling facilities operating with appropriate enclosure screening and environmental controls can be carried out so as to minimise local impacts. A further key impact, that of lorry traffic, can be mitigated to some degree by locating facilities close to the strategic highway network.

Future patterns of waste management provision

6.33 Therefore, whilst the very real concerns of the public are recognised, the County Council and its successors have decided not to alter the fundamental approach to site selection, although the protection of the amenities of adjacent users and occupiers is a key objective.

6.34 As indicated earlier, there is scope for combining a number of related waste management operations. The local authorities consider there are significant resource management and planning advantages in this approach provided the sites identified are in locations where any increased impacts resulting from the concentration of facilities would be acceptable. The main advantages of this approach include: larger scale recycling and resource recovery; reduced spread of environmental impact by limiting the need for other sites; comprehensive planning and landscaping; higher standard of development and infrastructure; integration of processes and products; and the potential overall reduction in transport due to reduced need for double handling. The key constraints on this approach are the need for an adequate size of site; adequacy of adjacent highway network, traffic generation and impacts; and the need for an adequate buffer zone to housing and other sensitive development, such as schools, hospitals etc.

Facilities Required

Proposed Preferred Areas for the future waste management uses

6.35 Having regard to all the above considerations in respect of site selection and the needs of the waste strategy of the Waste Management Plan for a range of different waste management facilities, and also to the recommendations of the Inspector who held an inquiry into the draft proposals of this Plan, the local authorities have identified 27 sites or 'Preferred Areas' for future waste management use.

Policy WLP11 **The sites listed in Table: Policy WLP11 are identified as Preferred Areas and Preferred Areas of Search for waste management uses. These Preferred Areas are identified on the Proposals Map and shown in more detail in Appendix 7.**

On sites identified as Preferred Areas in this Policy, applications for waste management development of the types indicated in this policy will normally be permitted provided that:

(i) the requirements of policies WLP27 and WLP29 to 33 and all other relevant policies of the Plan are satisfied;

(ii) for engineered landfill proposals, the requirements of policies WLP14 and WLP15 are also satisfied;

(iii) the application proposals have full regard to the requirements and address the issues and constraints which are specified for each site in Appendix 7.

6.36 Although the designation of Preferred Areas implies support in principle for waste management uses on these sites, this does not mean that every planning application within them will inevitably be approved regardless of circumstances. The support in principle for development will only apply in such areas where the applicant can demonstrate compliance with other relevant detailed policies of the Plan and with the detailed site specific requirements, issues and constraints set out in Appendix 7.

6.37 The statements for each Preferred Area in Appendix 7 are intended to set out clear positive requirements and a minimum level of benefits in respect of the development and operation of each site. They are based on current knowledge and the current situation. The relevant local authority may be prepared to consider some departure from these requirements provided that the resultant scheme deals with all the issues and principles contained in the Appendix, and that it would at least maintain the quality of development which the Appendix seeks to secure.

6.38 To assist in an understanding of the proposed sites and uses, the information in Policy WLP11 is presented in a different form in the introduction to Appendix 7 which lists the potential uses by preferred area, and the preferred areas by potential uses.

TABLE: Policy WLP 11 - Preferred Areas and Preferred Areas of Search

Inset Map	Site	Potential Uses: Waste Treatment (WT)	Green Waste Composting (GR)	Waste Derived Fuedl (WDF)	Waste to Energy (WTE)	Engineered Landfill (LF)	Treansfer Station (TR)	Road to Rail Transfer (RTR)	Major Recycling (MRF)	Recycling - Non Inert (RNI)	Recycling - Inert (RI)	Difficult/Special Waste Recycling Treatment or Transfer (SP)	Metal Recycling (ME)	Civic Amenity Site (CAS)
1	Membury Airfield	*	*							*	*	*	*	
2	Pinchington Lane Greenham									*		*		*
3	Greenham Common, Airbase	*	*						*	*	*	*	*	
4	Colthrop	*		*	*		*		*	*	*	*	*	
5	Knott Lane, Beenham									*		*	*	
6	Padworth Sidings	*						*	*	*		*	*	
7	Whitehouse Farm, Aldermaston									*	*	*		
8	Blue Circle, Theale							*	*			*	*	
9	The Hangar, Sheffield Bottom									*				
10	ARC Plant Site, Sheffield Bottom		*							*	*		*	
11	Smallmead, Reading	*			*	*			*		*	*	*	*
12	Star Works, Knowl Hill					*				*		*	*	
13	Longshot Lane, Bracknell						*		*	*		*	*	*
14	Hindhay Quarry, Pinkneys Green										*			
15	Braywick, Maidenhead									*		*	*	*
16	Timber Yard, Englemere, North Ascot									*				
17	Plant Site, Monkey Island Lane, Bray									*				
18	Manor Farm, Slough					*					*			
19	Manor Farm Sewage Works, Slough											*		
20	Slough Trading Estate	*		*					*	*		*	*	
21	Fairleigh Road, Slough			*						*				
22	Chalvey Waste Transfer Station	*					*		*			*	*	*
23	Slough Goods Yard							*		*		*	*	
24	Riding Court Farm, Datchet	*[1]	*			*								
25	North of Horton					*								
26	Rosary Farm, Poyle									*	*			
27	Colnbrook Proposed Rail Depot Site		*							*	*			

[1]Final maturing and storage of compost/digestate only.

Note: Waste Treatment includes the three preferred methods, ie industrial reprocessing, mixed waste composting and anaerobic digestion.

Facilities Required

6.39 To maintain flexibility in implementing the waste strategy and in recognition that not all sites identified in the Plan may in practice be made available for development, the Plan includes a larger number of sites than is likely to be required to implement the strategy and includes some 'areas of search' which in some cases are broken down into a number of component sites.

Potential uses in Preferred Areas

6.40 In considering the precise use for the waste management sites identified in the Waste Local Plan, account has been taken of the underlying principle of flexibility in the waste management strategy. Therefore, although the Plan adopts a site specific approach, it is not possible in all cases to be definitive about the type of operations or combination of operations which may ultimately secure planning approval on individual sites, since they have potential for a variety of such operations.

6.41 The identification of several uses for a particular site is not intended to indicate that all of these uses will necessarily secure planning permission; it is an indication of the range of potential uses which might be acceptable in planning terms. In practical and environmental terms it may only be possible for some sites to accommodate one or two of the uses. In addition, in many cases by no means all of the sites identified for a particular use will be developed for that use. Each proposal will be judged against all other relevant policies in the Plan including the need for the facility. In this regard, some sites represent alternative locations for a particular use and provision of the facility on one site will remove the need to release a further site for this purpose; that site may then be developed for another of the potential uses specified.

6.42 Appendix 4 provides a general indication of the number, spatial distribution, and site planning requirements for each category of potential use referred to in Table: Policy WLP11. Appendix 7 provides additional guidance, where appropriate, on the detailed nature and scale of the potential uses envisaged for each site. For some sites which are particularly suited to specific uses, a clear priority is indicated in favour of those uses. Alternative uses will only be acceptable if the waste strategy's need for the 'priority use' has been satisfied. In some cases the list of uses includes ancillary uses which would only be acceptable if the site were developed for the primary purpose.

6.43 The range of potential uses specified is not intended to be definitive. In a rapidly changing field during the lifetime of the Plan, other waste management functions may arise which may not fall neatly within any of the categories. Such proposals will be judged on their merits.

Policies outside Preferred Areas

General approach

6.44 Chapter 7 (Policies WLP12 and 13), Chapter 8 (Policies WLP16 to WLP21), Chapter 9 (Policies WLP23 to WLP25) and Chapter 10 (Policy WLP34) define specific circumstances where waste management development may be acceptable outside the preferred areas identified in the Plan. Chapter 10 (Policy WLP30) provides the basis for assessing proposals in all other circumstances.

Safeguarded sites

6.45 The Plan seeks to 'safeguard' a number of other sites for waste management purposes. This is a mechanism for ensuring that the sites which may be needed for waste management facilities are not generally released for other purposes unless the Planning Authority is satisfied that they are no longer required for waste management purposes. These are sites currently accommodating waste management facilities. Continued use of these sites for this purpose could be critical to ensuring adequate facilities to meet Berkshire's waste management needs.

Sites subject to other planning commitments

6.46 Some of the sites identified are clearly earmarked in existing Borough or District Local Plans for employment or other uses. In cases where there is a conflict between the Waste Local Plan and a District Local Plan the more recently adopted (or approved) provisions will prevail. If this results in due course in the displacement of land allocated for employment purposes the Borough and District Councils concerned may need to consider whether the employment use should be replaced elsewhere, having regard to the provisions of Policy BU3 of the Berkshire Structure Plan.

6.47 Finally, it is recognised that certain of the sites identified in the Waste Local Plan are already the subject of planning permission for other development which has not yet been implemented. These sites would clearly be ruled out for waste related development if the existing permissions are implemented. However, the Plan proposes an alternative development option.

Environmental Appraisal of Chapter 6

6.48 Making the Waste Management Plan work will require new and expanded waste management facilities. This Plan aims to categorise and quantify these facilities as a basis for selecting suitable sites, having regard to the problems of finding suitable sites and the need to balance local environmental concerns with wider public benefits. The conclusions of the Environmental Appraisal in respect of 'Facilities Required for Managing Waste' may be summarised as follows:

6.49 The suitability of sites for inclusion in the Plan to accommodate necessary waste management development is a key element in the success of the waste strategy for the county area. This chapter considers the range of facilities required to implement the strategy as the basis for selecting suitable sites. The wider/strategic environmental issues are considered in the environmental appraisal summary to Chapter 3.

6.50 Waste will be generated throughout the county area and facilities need to be provided across Berkshire to cater for it. In having regard to PPG23 and the relevant objectives of the EU Waste Framework Directive, the Plan seeks to establish an integrated network of waste management installations which will enable self-sufficiency and treatment and disposal by suitable means in accordance with the proximity principle. To this end a range of facilities are proposed at local, central and strategic locations to cater for the full implementation of the prevailing waste strategy.

6.51 However, a balance has to be struck between locating facilities close to the waste source and the need to protect the amenity of adjacent uses and occupiers. The Plan recognises that there are no ideal sites for waste management facilities and that all facilities will have some environmental impact resulting in difficult decisions having to be made. Much consideration has therefore been given to the site selection process and the spatial distribution of sites to ensure that the final choice is robust in environmental terms. However, it is recognised that, in order to strike the right balance between the 'proximity principle' and the need to protect local amenity, the resulting spatial distribution of sites is not perfect.

6.52 The Preferred Area approach seeks to ensure that waste management development is directed to 'sustainable locations' taking into account the environmental constraints applying in the county area. It also allows for a more meaningful judgement to be made about the overall environmental implications of the Plan and its spatial strategy. The merits of the Preferred Area approach are set out in paragraph 6.16 of this Chapter. The prime reason for the approach is the difficulty in assessing planning applications for proposals which, because of their very nature, are controversial and inevitably give rise to certain environmental impacts. The Preferred Area approach sets a land-use planning framework to achieve the implementation of the Waste Management Plan in an environmentally acceptable manner, providing a degree of certainty and clear guidance to all sections of the community.

6.53 A crucial aspect of the Waste Local Plan is reconciling the conflict of interests which inevitably arise in waste planning matters, by striking the right balance between the need to make appropriate provision for waste management facilities and the need to protect the environment and people's quality of life. A fundamental issue of the Plan is, therefore, the selection of sites where appropriate and necessary waste management development is to be permitted through the Plan period.

6.54 The local authorities have made this judgement by means of a four-stage process: a 'sieving' exercise to identify where waste management facilities would, for a variety of reasons, be unacceptable; a process of 'strategic choice' relating to the most acceptable pattern and distribution of Preferred Areas required to deliver the waste strategy; an assessment of the implications of the information and responses received from two rounds of public consultation; and finally an assessment of the recommendations made by the Inspector who presided over the public inquiry into objections to the Draft Plan. In this regard, the site selection process is comprehensive in scope, thus ensuring a sustainable approach.

6.55 To ensure a degree of flexibility, the ability to obtain planning permission outside Preferred Areas is not ruled out in certain circumstances. However, potential developers would be required to fully justify such proposals in environmental terms having regard to both site specific issues and the wider issues of sustainability.

6.56 An assessment of the potential capacity and distribution of existing waste management sites and the Preferred Areas for future waste management development listed in Policy WLP11 shows that sufficient sites are proposed to deliver the waste strategy, whilst ensuring a degree of flexibility in recognition that not all sites identified may in practice be made available for development.

SITES FOR RECYCLING, SORTING AND TRANSFER OF NON-INERT WASTE

The need for waste recycling, sorting and transfer

7.1 Waste recycling is a key element of the waste management strategy, helping to conserve resources and reduce the quantity of waste requiring disposal. It is important for the Waste Local Plan to support the development of appropriate recycling facilities to achieve this objective and realise the recycling targets sought in this strategy.

Policy WLP12 **The Local Authorities will seek to ensure the maximum practicable re-use, recovery and recycling of Berkshire's waste by granting permission for waste management facilities in appropriate circumstances and locations.**

7.2 This Chapter considers the need for smaller waste management facilities and identifies potentially suitable sites for accommodating these uses. They are distinguished from the major facilities dealt with in Chapter 8 by being generally smaller in scale and serving a more limited catchment or market. The facilities described range from very small local recycling centres to more substantial recycling facilities and transfer stations. Appendix 4 provides further details of the different types of facilities and their site requirements.

Local facilities

7.3 The first stage in the reuse and recycling of waste is the recovery of materials through collection, sorting and separation. This requires facilities for recovery close to source.

Policy WLP13 **The Local Planning Authorities will normally permit, in appropriate circumstances and locations, proposals for establishing source separation and storage facilities for waste generated in dwellings and groups of dwellings and industrial and commercial premises provided that the requirements of Policies WLP27 and WLP29 to 33 and all other relevant policies of the Plan are satisfied.**

7.4 In the case of **household waste** there is already a network of local recycling sites in Berkshire and new sites are being established. There are also more extensive recycling facilities at Civic Amenity Sites. However, a higher density of local recycling sites is required to secure maximum recovery of materials by this method. Local recycling centres for the public do not generally require a specific grant of planning permission. Decisions on the number, distribution and siting of facilities rest with the District Councils as Waste Collection Authorities. The local authorities support the extension of the existing network of local recycling centres and the Waste Management Plan contains details of existing and proposed County Council initiatives, as they stood in 1995. To assist in the provision of suitable sites and in order to minimise any adverse local impacts, a Guidance Note for siting and operating local recycling sites is included at Appendix 3.

7.5 Chapter 5 seeks to include waste recycling as a consideration in the planning, design and operation of new development.

7.6 In the case of **industrial/commercial waste** there is substantial scope for increased recycling. Collection and disposal of these wastes is largely carried out by the private companies, some of which have introduced systems for collecting source separated wastes. The Waste Management Plan supports the need for businesses to carry out source separation of waste into different components at their premises. This may involve modifications to existing premises or groups of premises to accommodate more sorting areas or bins, and the Local Planning Authorities should be supportive of proposals where planning permission is required.

7.7 Another element of industrial and commercial waste is waste collected in skips from domestic, commercial and industrial premises, and generally associated with small building operations and clearances. This waste consists of mixed inert and putrescible/polluting wastes. It may not be practical to sort it at source, although policies in Chapter 5 look to developers to minimise and re-use wastes in situ.

Central facilities

Waste separation and transfer

7.8 As indicated in Chapter 6, facilities are required in central locations to carry out sorting, separation and onward transport of mixed wastes and pre-sorted wastes in order to recover recyclable materials and separate non-recyclable wastes for further treatment and/or disposal and to deal with particular waste streams. There may also be a need for separate locations to collect usable quantities of waste for recycling and treatment and to bulk up wastes for onward transport for recycling, treatment and/or disposal elsewhere in the county area and beyond. These are known as waste transfer stations. Bulk haulage of waste may well reduce substantially total vehicle movements and wastes may be hauled greater distances efficiently and with overall environmental advantage.

7.9 At present, facilities for **household waste** tend to be organised and located separately from those handling **industrial and commercial waste**. Both operations deal with similar wastes and could be combined in appropriate locations to maximise sorting and recovery.

7.10 The existing household waste transfer operations are in industrial locations and involve the deposit and loading of waste in a covered tipping hall. There is no practical reason why new recycling and transfer facilities should not be fully enclosed in industrial style buildings although, dependent upon location, they may require treatment of air to remove odours.

7.11 Some **skip waste** is now being sorted and separated, but there is scope for a further substantial increase in recovery and separation.

7.12 In Berkshire, the sorting and separation of skip waste is generally being carried out on small sites, at temporary locations, some of which are on landfill sites. The operations are in the open and involve the use of machinery and hand sorting to separate waste. They can therefore be noisy and generate dust. In addition, the stockpiling of sorted and unsorted waste can be visually intrusive. To counter these problems, locations are favoured for these facilities where there is adequate separation from sensitive uses and where there are opportunities to effectively screen the development. Although enclosing operations, including any machinery, would be costly, it may be necessary to do so in those locations where noise and dust are likely to adversely affect other uses in the locality or where it will be necessary to remove significant amounts of putrescible or potentially polluting waste.

7.13 It is considered that there are advantages in concentrating this type of operation on permanent sites in locations close to the major centres of population. This would enable a higher standard of operation to be secured. However, it may not remove completely the need for temporary facilities on landfill sites to maximise recovery and separation prior to final disposal.

7.14 In the light of the above, 19 Preferred Areas have been identified as suitable for recycling non-inert waste. These Preferred Areas are listed in Policy WLP11.

Civic Amenity Sites

7.15 Civic Amenity Sites receive bulky household and garden waste and trade waste. They also provide a wide range of facilities for the householder to recycle waste.

7.16 Some bulky waste is recycled (mostly scrap metal). The Waste Management Plan includes proposals for developing green waste composting in Berkshire. This would require separation of garden waste at Civic Amenity Sites. There is also a need to separate the inert fractions of waste from the remainder for recycling and/or disposal.

7.17 The Waste Management Plan does not propose any additional facilities except where need is demonstrated (other than a replacement for the existing Smallmead Farm site). However, the demands of increased recycling and separation may involve some extension of existing facilities. In addition new and improved facilities could be provided as part of the development of major new waste developments and other locations if the need is demonstrated. Four locations have been identified where existing facilities could be upgraded. One site is identified as a replacement for the Smallmead, Reading site which will be displaced by development, plus one further 'contingency' site if that replacement does not become available. These preferred areas are listed in Policy WLP11.

7.18 The local authorities take the view that this level of existing and proposed provision is necessary in the foreseeable future but may be a minimum level of provision. There are indications already that some parts of the county area are not well-served by the existing distribution of Civic Amenity Sites. Furthermore, assuming the new waste strategy is successful in its objective of changing people's attitude and behaviour, it is quite possible that in future there will be a demand for such facilities to be available on a much more frequent and convenient basis than at present. The Councils will therefore carefully monitor this aspect of implementing the strategy (see Waste Management Plan Policies WM7 and WM32), and will carry out a review of the locational needs for future Civic Amenity Sites if appropriate.

Metal Recycling

7.19 There are currently some 40 scrap metal transfer stations in the county area handling an estimated 150,000 tonnes/annum of metal waste. These sites range from large operations to small businesses, located in both rural and residential areas. Many of these uses have become established over a number of years without planning permission. However, under recent legislation most have acquired or are in the process of acquiring formal planning permission in the form of a 'Certificate of Lawful Use' issued by the former County Planning Authority or its successors. There is also a large scrap metal fragmentation plant just outside Berkshire (at Yateley, Hampshire) which can deal with all the scrap generated in the county area.

7.20 Whilst there appears to be sufficient scrap metal transfer capacity in Berkshire at present, the current position in Berkshire with a number of small sites, is far from ideal in planning terms.

7.21 It is anticipated that some rationalisation and redevelopment of existing scrap yards for other uses will result in a reduction in the number of operational sites during the Plan period.

7.22 With regard to scrap vehicles, the move by major vehicle manufacturers towards recyclable vehicles and to a system where the manufacturer 'takes back' the scrap car through the dealership network is likely to increase the trend towards larger strategic facilities. This operation is akin to a general industrial process.

7.23 Metal recovery should form an integral part of new major mixed waste treatment plants and MRFs. At these locations there may be scope for recycling scrap metal from other sources. Where new or improved CAS facilities are provided, then facilities for recycling scrap metal should be included. As a result, metal recycling is identified as one of the ancillary services provided at sites earmarked in the Plan for major waste management facilities.

7.24 Whilst it is expected that the existing scrap metal industry in Berkshire will adjust to accommodate the changing circumstances relating to the need for larger strategic facilities this may not prove practical given planning constraints. The Waste Local Plan therefore identifies 14 Preferred Areas which are considered suitable for metal recycling. These are listed in Policy WLP11.

Green Waste Composting

7.25 Green waste composting involves converting garden and other green waste into usable compost by the natural aeration process. A typical composting site with a throughput of 10,000 tonnes of green waste per year could be 2 ha. in area and comprise an area of concrete hardstanding where the green waste is shredded and then heaped in long rows and regularly turned (windrows), and a small storage building. There is potential for nuisances although these can be effectively controlled by good site management. Locations away from residential and other development are considered appropriate.

7.26 Using the above criteria, five Preferred Areas listed in Policy WLP11 have been identified which are considered suitable for green waste composting. Chapter 8 considers other circumstances where proposals for green waste composting may be acceptable. Green waste may also be processed at waste treatment plants (as part of the waste stream in mixed waste composting or anaerobic digestion).

Environmental Appraisal of Chapter 7

7.27 It is essential to provide adequate sites for developing the facilities needed to sort, separate and recycle putrescible and polluting waste in order to achieve the key objective of maximising the re-use, recycling and processing of these wastes and to minimise landfill. Such sites raise many planning issues since none are problem free and even smaller facilities inevitably arouse local concerns.

7.28 The conclusions of the Environmental Appraisal in respect of "Sites for Recycling, Sorting and Transfer of Non-Inert Waste" may be summarised as follows:

7.29 Current trends show that the amount of waste generated is rising. At the same time, suitable landfill sites for the disposal of waste are diminishing. A large proportion of waste arising is capable of being re-used or recycled. The majority of the remaining waste is suitable for treatment in "alternative technology".

7.30 Key objectives of the prevailing waste strategy are, therefore, to maximise re-use, recycling and processing of these wastes and minimising landfill, thus reflecting EU, Government and regional guidance which seek a sustainable approach to waste related development. The policies in this chapter are a positive attempt to put this into practice, and enable the recycling targets set by the County Council's Waste Management Plan for Berkshire, to be realised.

7.31 The local authorities initially accept the targets set by the Government for local authorities to recycle 25% of household waste by the year 2000 but extends them to higher targets by the end of the Plan period. The scope for extending recycling to industrial and commercial wastes is also recognised. The Waste Local Plan seeks to create suitable conditions, through positive planning policies and the identification of sites for the development of appropriate waste management facilities, to assist in the realisation of these targets.

7.32 In accordance with the proximity principle put forward in the Plan permanent sites for recycling, sorting and transfer of non-inert waste near centres of population are favoured, although a few sites are located away from major centres due to limitations on site availability and the advantage of particular sites for recycling facilities. The provision of central facilities for waste separation and transfer is an integral part of the strategy.

7.33 Whilst financial costs may initially be higher than for local landfill, continued reliance on landfill is not sustainable and the need to minimise longer term environmental costs are of greater significance. The Plan identifies suitable sites for new waste management development taking account of all material impacts including the effects on people, adjoining uses, transport network and the environment in general.

8 MAJOR SITES FOR NON-INERT WASTE

Waste management technologies for putrescible and polluting wastes

8.1 The Waste Management Plan seeks to secure the development of alternative waste treatment technologies to landfill in order to recover resources and reduce the volume of waste for disposal to landfill. It proposes a flexible approach to the precise combination and configuration needed in the county area, but identifies three methods preferred by the former County Council which in order of preference are: industrial reprocessing; composting of mixed household waste; and anaerobic digestion. In addition, two other methods are included: waste derived fuel and waste-to-energy. However, waste to energy is identified as a contingency method of waste treatment. Further details of these technologies are provided in Appendices 2 and 4. There is a need to provide for a waste treatment capacity of some 400,000 tonnes per annum or more to be in place by 2005/06.

8.2 The Waste Management Plan also recognises the need to identify road-to-rail transfer sites to enable possible transport of waste to sites outside the county area if such a facility is needed as a transitional measure before the 'alternatives to landfill' technologies have been established. In addition, the waste strategy forecasts set out in Chapter 3 point to a continuing need for landfill for putrescible/polluting waste. A further consideration already referred to (Chapter 6) is the potential to establish other waste management facilities at the sites used for major waste treatment facilities.

8.3 This Chapter sets out the Plan's policies in respect of these technologies and facilities, which involve major sites:

- Waste treatment technologies: industrial reprocessing, composting and anaerobic digestion;
- Waste derived fuel;
- Waste to energy;
- Road to rail waste transfer;
- Major recycling facilities;
- Engineered landfill;

The Chapter also covers the following matters:

- Sites for difficult and Special waste;
- Policies for waste management development outside Preferred Areas;
- Sites safeguarded for waste management development;
- Provision for other wastes;
- Potential for energy recovery from waste.

Waste treatment technologies

8.4 This generic term covers three types of technology - industrial reprocessing, composting and anaerobic digestion - which can be operated together or separately in process and commercial terms. The requirements and implications of each are slightly different and are discussed below, but on the basis of these requirements eight Preferred Areas have been identified which are considered suitable for developing a waste treatment plant. These are listed in Policy WLP11.

Industrial reprocessing

8.5 This technology would be likely to involve developing two or three plants to serve the whole of Berkshire. Industrial reprocessing involves separating waste into different materials: glass, plastics, aluminium, paper etc and processing these into raw materials. Some of these materials can undergo further processing on site to manufacture products. The organic waste fraction can be treated by composting or anaerobic digestion. (These processes are considered below). The process is housed in a large industrial type building or buildings and could include separate tanks occupying an operational area of over 4ha. There processes can be effectively controlled to minimise nuisance. These factors point to a fairly central location in Berkshire preferably sited away from housing areas and other sensitive uses. A site within or adjacent to a mixed or general industrial area may be appropriate. The extensive industrial buildings require the impact on the landscape to be carefully assessed on brownfield sites in areas being restored or improved in landscape terms.

Mixed waste composting

8.6 Composting plants for mixed household waste are likely to have a capacity of up to about 160,000 tonnes of waste per year giving rise to a requirement for up to 3 plants to serve Berkshire.

8.7 A plant would occupy a site of up to 4ha and the process can either be totally or partially enclosed in a large industrial style building. The process involves initial sorting and preparation of waste, followed by the composting of waste in an enclosed building under controlled conditions, including aeration and mechanical turning of the material. Process control would include air filtration to prevent odours outside the building. The resulting material is a compost-like soil conditioner. The final part of the process (maturing) should preferably take place under cover to reduce the risk of contaminated run-off which would otherwise need to be treated. The industrial appearance of the operation would require the impact on the landscape to be carefully considered especially in greenfield or brownfield sites and in areas being restored or improved in landscape terms. The potential for smell and other nuisance can be effectively mitigated by enclosure, process control and air treatment which is important at the initial stage of composting. A large compost plant would be a significant traffic generator.

8.8 Siting considerations include the need to take account of the potential for adverse impacts on living conditions and on adjacent land uses, and for sites to have good road access. Enclosure of the whole process may be required except in locations away from residential areas.

Anaerobic digestion

8.9 This technology would be likely to involve developing up to 4 plants to serve Berkshire. A typical anaerobic digestion (AD) plant is likely to have a capacity of around 100,000 tonnes per annum and would occupy a large building possibly with separate sealed tanks, and might require a site of up to 2ha depending on the system used. The impact of buildings and plant, which would be 15-25m in height, could be minimised by appropriate design and landscaping. The process involves initial sorting and preparation of waste to separate out organic materials which are then put into sealed vessels to be broken down by micro-organisms under controlled conditions in the absence of oxygen. The end product is substantially reduced in volume and can be used as a soil conditioner. Biogas (methane) is produced during the process and can be used for energy production, including electricity generation potentially involving additional equipment linking the site to the national electricity grid. There appears to be some potential for smell and other nuisance but a number of mitigation measures can be employed to minimise these including process control measures and ensuring that all handling operations are enclosed. A large AD plant would be a significant traffic generator.

8.10 Siting considerations include the need to take account of any impact on living conditions. Locations away from housing and other sensitive uses would be preferable. Where sites are closer to housing additional mitigation measures should be employed. Good road access would also be required.

Waste derived fuel

8.11 The production of waste derived fuel (WDF) involves the receipt of sorted and unsorted waste, sorting of suitable combustible waste materials (paper and some plastics) and other recyclable and non-recyclable wastes, and the manufacture of a handleable fuel (by shredding or pelletising and adding some water). Household waste is susceptible to this treatment but packaging waste on its own results in a more consistent product. Any such operation would be fully enclosed in a substantial industrial unit of between 3,000m' and 10,000m' on a site of up to 2ha in area. Full environmental controls would be employed to minimise nuisances.

8.12 Slough Power Station has an existing capability to burn up to 70,000 tonnes of WDF fuel, mixed with coal. The Local Planning Authority supports, in principle, maximising the use of this facility and has identified a preferred area adjoining the Power Station in Fairlie Road (Preferred Area WLP Site 21) as a suitable site for a plant to produce WDF for the Power Station which could receive waste from industrial and commercial sources in east and part of central Berkshire and beyond. Planning applications have been approved for a smaller 'initial' plant on Slough Trading Estate, and for a full scale plant at Fairlie Road.

8.13 There could be sufficient suitable industrial and commercial waste in central and west Berkshire to support the provision of a second WDF plant. A further Preferred Area is identified for this use at Colthrop Board Mill where there may be potential for production of WDF in tandem with the recovery of paper for recycling in the Mill, and use of the fuel to burn in a power plant serving the Mill and other users. These sites are listed in Policy WLP11.

Waste to Energy

8.14 The 'minimum optimum' capacity of waste to energy (WTE) plants is currently approximately 200,000 tonnes/annum. (However, the local planning authorities are prepared to consider WTE plants as small as 100,000 tonnes per annum). If waste to energy has to be developed as a contingency technology in due course, this would be likely to involve a single plant unless a number of smaller plants were developed as part of realising some other, wider industrial process opportunity.

8.15 The following issues are important in considering suitable locations for new waste to energy plant:

- They would have a large catchment area. It is therefore preferable to locate them close to the major sources of waste in the county area (central and east Berkshire);
- A WTE plant is a major industrial development which is not incompatible with a general industrial location;
- The buildings are likely to be abnormally large, including tall buildings and a stack, and would be likely to have a significant and extensive landscape impact wherever they are located in Berkshire. This makes it particularly important to avoid sensitive landscapes and choose locations where views are limited, or where the extent of the plant's visual impact can be reduced by natural screening, by the scale of the landscape, or by the visual relationship with other development. A reduction in plant capacity does not result in a commensurate reduction in plant size. The site boundary must be sufficiently extensive to enable major landscaping around the plant, and additional strategic off-site planting may be necessary;
- A plant will generate a large volume of heavy traffic during the day. It is essential that there is already access to the primary road network and that the haul route to the primary network should avoid sensitive properties such as houses and schools;
- The process is largely enclosed and controlled so, with the exception of limited noise impact, nuisances from such plants can be effectively minimised. However, the size of the building and potential overshadowing results in the need for a buffer zone to houses. In addition, the plant will work continuously (24 hours a day), which points to locations where impacts on nearby development can be minimised;
- Waste to energy will generate electricity and heat, so locations are needed close to the national electricity grid and where there are opportunities for developing 'district heating systems';
- The incineration process produces residues which are likely to require disposal to an engineered landfill. Proximity to a suitable landfill site is therefore an advantage;
- A WTE plant involves major investment and can provide a focus for other related waste management development. There is therefore merit in identifying sites where there is space for other facilities; and
- The issue of emissions from waste to energy is dealt with in the Waste Management Plan (Chapter 8) and in Chapter 10 of this Plan.

8.16 As a result of the above, the preferred locations need to be close to urban areas within or adjoining industrial-type development, with access to the primary route network. Greenfield sites in open countryside are not considered appropriate for a development of this magnitude due to the scale, visual impact and incompatibility with a rural location.

8.17 Two locations have been identified as Preferred Areas for WTE on the basis of the above criteria. The first at Smallmead (Preferred Area 11C or 11D) is the 'contingency site' for developing a facility to serve the needs of all or part of Berkshire in the event that the waste treatment methods identified in the Plan are not capable of meeting that need. The site would only be required for WTE. The second site at Colthrop (Preferred Area 4A/4B) is identified because of the potential to link a WTE plant with the existing Colthrop Board Mill to provide heat and energy to the Mill. The sites are listed in Policy WLP11.

8.18 It is important to stress that some of the sites identified for waste treatment, as well as the different waste treatment technologies, are alternatives. Whilst there could be number of small treatment sites (e.g. green waste) it is unlikely that there would be more than four major treatment plants (including WDF and WTE) to serve the needs of the county area and not more than one treatment plant would be likely to secure permission in a particular location.

Rail and water transport of waste

8.19 National policy and regional planning guidance (RPG9) encourage increased use of rail and water transport. Regional guidance on waste planning (RPC2266) states that there should be a presumption in favour of rail and river transport, wherever feasible, for longer distance movements of waste in bulk.

8.20 The sustainable objectives of county self-sufficiency in waste management and the 'proximity principle' mean that the majority of journeys involving the transportation of waste which result from the Plan's proposals are likely to be short local trips within the county area. Given the limited geographical extent of the county area and the extent of its rail network, there is likely to be only limited potential to utilise rail transport, where minimum economic transport distances are currently 40-50 miles. The navigable waterways in the county area are also limited in extent, are primarily geared to recreational use, and have nature conservation value. Bulk transportation of waste could potentially be in conflict with these interests, and the Plan does not identify any specific locations for road-to-water or water-to-rail transfer stations[1].

8.21 However, the Plan recognises the potential importance of rail transport to the strategy by identifying three sites for road-to-rail waste transfer, and giving priority to this mode of transport for long distance disposal of waste. These facilities could be used in the short and medium term for export of putrescible wastes from the county area while alternative treatment technologies are being developed, but with scope for longer-term arrangements if waste is taken to suitable treatment plants outside the county. They might also provide opportunities for the rail transport of recyclable material recovered and bulked up in the county area which needs onward transport to distant specialist manufacturing or treatment plants.

[1]Operators considering the use of water transport should seek advice from British Waterways about the feasibility of their proposals, as well as consulting the relevant District/Borough Council about their likely acceptability in environmental terms.

8.22 These transfer stations can be simple operations in which sealed containers are loaded and unloaded by gantry or forklift. However, they can also include full transfer operations and major recycling facility. Such operations are fully enclosed in an industrial type building. As the sites would generate significant lorry traffic, the suitability of locations is clearly dependant on both existing or potential links to the rail network and good road access. For full waste transfer/ recycling operations, a buffer zone to housing and other sensitive uses may be necessary. The industrial appearance of such an operation would require the impact of the development to be carefully considered especially in open locations.

8.23 A minimum of two road-to-rail transfer stations would be required to deal with the whole of the household waste generated in the county area. On the basis of the site requirements described, three locations have been identified as Preferred Areas in the Plan. These are listed in Policy WLP11.

Major recycling facilities

8.24 These are large strategic facilities for receiving and comprehensively sorting pre-sorted and unsorted non-inert wastes including household and industrial/ commercial wastes to recover recyclable materials. It is likely that three to five facilities will be required across the county area. Some of these may also operate as transfer stations for bulking up waste for transfer to waste treatment facilities. Proposals for waste treatment plants would normally be expected to incorporate major recycling facilities. Consequently, the Plan identifies eight Preferred Areas for major recycling facilities (see Chapter 6, Policy WLP 11).

Sites for engineered landfill

8.25 The waste disposal strategy seeks to create conditions in Berkshire such that long term demand for engineered landfill sites is minimised. It also seeks to ensure that the disposal of putrescible waste to landfill is phased out before the end of the Plan period. This will be achieved by a combination of reducing waste generation at source, increasing recycling and the introduction of alternative treatment capacity. However, the effects of these measures will not be immediate. They will make a progressively larger contribution over time. Even when operating at their maximum currently predicted potential (by the end of the Plan period) the alternative disposal methods will not completely remove the requirement for engineered landfill since some polluting wastes are not susceptible to recycling or treatment. In addition the treatment methods themselves produce residues. While some of these residues may be recyclable, a proportion is likely to need disposal at engineered landfill sites since it is potentially polluting.

8.26 The waste strategy will therefore have two consequences. Not only will the demand for engineered landfill sites diminish over the period of the plan, but the nature of waste requiring disposal at these sites will also change progressively. The high proportion of putrescible wastes currently disposed of will be treated by other methods so that by the end of the Plan period the only wastes being deposited in landfills should be the rejects and residues from recycling and treatment, including those wastes which are not susceptible to the treatment methods being used.

8.27 The waste forecasts indicate that taking account of the predicted contribution made by recycling and waste treatment to reducing landfill requirements, existing landfill arrangements (in and out-county) for putrescible/polluting waste start to become insufficient to meet landfill requirement from around 1995/96. This results from current sites filling up and the existing out-county contracts (for household waste) coming to an end. Without further provision of landfill sites, the shortfall would increase to over 400,000 cubic metres before decreasing to up to 300,000 cubic metres by the end of the Plan period (Chapter 3). There is therefore a requirement to identify and bring into operation two or three engineered landfill sites during the Plan period if continued export of a proportion of the waste from the county area is to be avoided. This compares to a requirement for as many as seven sites required for putrescible and polluting waste, if the Councils did not change the previous strategy.

8.28 The local authorities therefore recognise the continuing need to dispose of some polluting wastes by landfill to engineered sites and the need for limited temporary interim arrangements for landfilling putrescible waste whilst alternative treatment capacity is being developed. In the case of putrescible waste this can be provided for by in-county landfill or a combination of in-county landfill and out-county treatment and/or disposal.

8.29 The Berkshire Structure Plan (Policy W5) considers that in general the disposal of waste by tipping should be restricted to the landfilling of active mineral extraction sites, or of other mineral sites which have either been restored unsatisfactorily or not restored at all. The search for suitable sites has therefore focused on existing and potential mineral sites where waste disposal would be a necessary means of achieving the restoration and after-use priorities of the site. Other key constraints in site selection include existing nature conservation, landscape and recreational interests in mineral workings, adequate access, adequate size of site, suitability of the underlying geology, the need to avoid groundwater protection zones, the need to prevent loss of flood storage and adverse effect on flood flows; the ability to integrate the proposed landform into the surrounding landscape; and the need to provide adequate buffer zones to minimise impacts on adjoining uses.

8.30 On the basis of these criteria, five Preferred Areas have been identified for engineered landfill. They are listed in Policy WLP11.

8.31 It should be recognised that not all of the sites identified may be available for engineered landfill, or wholly available, during the Plan period since several are prospective mineral extraction sites where waste disposal is dependent upon a decision to proceed with mineral extraction and upon the timing and rate of extraction. It is therefore appropriate to identify more than the minimum requirement to meet Berkshire's future landfill needs. However, it is stressed that identifying more sites than are likely to be needed does not mean that they are all committed to be used for engineered landfill purposes. The grant of planning permission for individual sites will depend upon, in the first instance, whether the policies of the Replacement Minerals Local Plan are satisfied and whether the release of further capacity is required to meet the waste disposal needs of the county area at a particular point in time and whether all other relevant policies of the Plan are satisfied.

8.32 The sites identified as suitable for engineered landfill (and any that might come forward through Policy WLP20) represent an extremely limited potential resource in Berkshire. The objective of the Waste Local Plan is to husband this resource and to ensure that new sites which are released contribute towards, and do not conflict with, the overall waste strategy. The waste strategy seeks to maximise the waste available for alternative treatment methods and minimise the disposal of putrescible waste to landfill in order to give fullest encouragement to the development of minimisation, re-use, recycling and treatment. These objectives will be supported by restricting the release of new engineered landfill sites and, where appropriate, the rate of fill on such sites to that which is essential to meeting Berkshire's own needs.

8.33 The Plan therefore includes policies which seek to confine the types of waste landfilled at such sites to those which cannot be disposed of practicably by any other means (Policy WLP14). In practice, any planning permission will be subject to conditions and/or legal agreements as appropriate restricting the nature of wastes which may be disposed of in the site, taking account of the changing character of waste requiring disposal over the Plan period. Depending upon the timing of release of specific sites, this could involve permitting only a temporary provision for small amounts of putrescible waste disposal in the early years of the Plan and phasing out and replacing such provision by the disposal of rejects and residues from recycling and treatment (to coincide with the development of alternative treatment capacity). Permissions for any sites released later in the Plan period are therefore likely to be restricted purely to the disposal of recycling and treatment rejects and residues.

8.34 Another way to husband the limited engineered landfill capacity of the county area is to ensure that as much waste as possible is sorted, recycled and treated before being taken for landfilling. To this end, the Plan identifies a number of sites on which permanent sorting, recycling and treatment facilities can be developed. It will normally be inappropriate to locate temporary non-inert waste recycling facilities on engineered landfill sites. To achieve high operating standards and to avoid problems of smell, dust and litter, the sorting and recycling of such waste is best carried out under cover in purpose-built, permanent facilities. The disposal of inert waste in engineered landfill sites is a wasteful use of a limited resource. However, it is recognised that some inert waste may be difficult wastes and may require disposal in such sites. Temporary facilities to sort and recycle inert wastes brought to such sites may also be useful in providing materials for use in covering waste and site restoration. Accordingly, such temporary facilities will normally be permitted on engineered landfill sites (Policy WLP15).

Policy WLP14 **All planning permissions granted for the disposal of wastes in engineered landfill sites will be restricted to the disposal of waste in the following categories:**

(i) putrescible/polluting waste which is not recyclable and not suitable for alternative treatment by processing;

(ii) the rejects and residues of waste recycling and treatment;

(iii) putrescible/polluting waste which cannot practicably be disposed of by any other means; and

(iv) inert waste which is necessary for operational needs.

Policy WLP15 **Proposals for temporary inert waste and skip waste recycling facilities on engineered landfill sites will be permitted provided that**

(i) the recycling relates to waste brought to the site for disposal and is required to separate inert waste from putrescible/polluting waste and recover recyclable materials; and

(ii) the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies in the Plan.

Sites for difficult and Special waste

8.35 Special and difficult wastes, whilst forming a relatively small proportion of all wastes produced, pose particular waste management problems. A network of facilities is required to provide for the safe and effective recycling, treatment and disposal of these wastes.

8.36 There are small quantities of potentially hazardous materials in household. commercial and industrial waste. The Waste Management Plan (Chapter 8) highlights the importance of removing these contaminants before the waste is subjected to treatment by the proposed treatment technologies. As a result there will be a requirement for these wastes to be stored and sorted properly before they can be removed for subsequent treatment and disposal. This may allow some of these difficult wastes to be concentrated in sufficient quantities to allow new recycling or treatment systems to be introduced to address these wastes.

8.37 Waste tyres are classified as difficult waste. There are currently two waste tyre transfer stations in the county area which collect waste tyres for re-use, recycling, etc.

8.38 There are also a number of industrial and commercial liquid wastes (landfill leachates, wastes from the food industry, interceptor wastes etc) which pose potential difficulties for disposal in landfills but can be efficiently recycled or treated using existing sewage treatment technology or pretreated to render them suitable for subsequent treatment at sewage works.

8.39 There are already some recycling or recovery plants for solvents, oil and water mixtures and photographic wastes in the county area at present as well as transfer stations where these and other recyclable materials are collected for processing in other parts of the UK. An additional treatment facility for liquid industrial wastes is desirable in the eastern part of the county area.

8.40 A number of agricultural operations involving the spreading of wastes on land as fertiliser are exempt from the need for planning permission. This practice involves some wastes classed as Special and difficult waste, including sewage sludge, brewery sludge, wastes from the dairy industry, abattoir waste and cesspit waste. Such operations are governed by other regulations and controls administered by the Ministry of Agriculture Fisheries and Food and the Environment Agency.

8.41 It is anticipated that a collection and preliminary sorting area for special and difficult wastes will be needed at each of the major urban areas in Berkshire. The most appropriate locations include major civic amenity sites, household waste transfer stations and new industrial reprocessing or WTE plant. In addition, there will be a need for one or two new sites to act as final sorting areas and to house any recovery or treatment systems. These could also be located at the above sites. There could also be a requirement for free-standing recycling, transfer and treatment facilities to deal with particular Special and difficult waste streams. In the light of the above assessment, the Plan (Policy WLP11) identifies 16 Preferred Areas considered suitable for Special and difficult waste recycling treatment or transfer facilities.

Major Sites for Waste Management Facilities

8.42 As a result of recent changes in legislation relating to contaminated land, increasing quantities of contaminated soils (which are classed as difficult waste) may be identified for remediation. It is not possible at this time to assess properly the scale of demand for such a service in the county area and the resulting land-use/environmental implications. It is possible that some of the Preferred Areas in the Plan may be suitable for this purpose.

8.43 Current engineered landfill sites in the county area provide disposal points for certain solid Special wastes, predominantly asbestos and pharmaceuticals, and for a range of difficult wastes such as tyres, filter cakes, contaminated soil and sewage screenings. Disposal to engineered sites ensure the risk of pollution by these wastes is minimised.

8.44 It is important that a number of landfill sites are available in the county area for disposing of these wastes. Some of the sites identified for engineered landfill in Policy WLP11 should, subject to detailed consideration, be authorised for this purpose to replace existing authorised landfill sites as these are completed.

8.45 However, due to their nature, some of these wastes benefit from being deposited along with household waste. If alternative technologies treat household waste which would otherwise have gone to landfill, then this will mean that these Special or difficult wastes could require an alternative method for disposal. The above wastes and other Special and difficult wastes can be treated in commercial incineration plants and the technology exists to burn tyres to recover steel and energy.

8.46 Due to the limited quantities of such wastes, incineration facilities are likely to be provided on a regional basis. The Waste Management Plan does not include proposals for these facilities and consequently there are no sites identified for these facilities in this Plan.

8.47 Clinical waste from Berkshire is disposed at National Health Service incinerators either inside or outside the county area, or else at the major clinical waste incinerator at Colnbrook. Movement of these wastes may require waste transfer facilities. Existing clinical waste incinerators will have to be upgraded to higher standards, and many may be closed as a result. The facility at Colnbrook serves a wide area, including the major NHS hospitals in the eastern part of the county area, and also including hospitals well beyond the county area. This plant, which its operators are seeking to upgrade to meet the new higher emission standards, is designed for continuous operation. Planning permission has already been granted for doubling its present capacity of approximately 1 tonne per hour, although separate authorisation for such an increase would have to be sought from the Environment Agency. In principle, it would therefore appear that adequate capacity exists for the incineration of clinical waste arising in the county area. If any additional facilities are nevertheless needed in the county area, they would be likely to require a separate plant using similar technology to waste-to-energy. Any proposals should ideally be located in conjunction with waste-to-energy, at a site identified for that purpose in this Plan.

Policies outside Preferred Areas

Waste management facilities - non landfill

8.48 In addition to the specific sites identified as potential preferred areas in the Plan there are other locations which may be suitable for the development of facilities for sorting, separating, recycling and treating waste. These include:

- existing permanent authorised waste management facilities where there may be scope for changing, intensifying or diversifying the use of the current site;

- temporary facilities where it may be appropriate in certain circumstances to extend the life of the existing planning permission; and

- industrial locations although not generally sites with a preponderance of office or light industrial style industrial uses. Temporary use of industrial sites awaiting development or undergoing development may also be acceptable.

8.49 The Plan also includes non site specific policies for certain categories of development, including green waste composting and waste treatment at sewage works.

8.50 In all cases, proposals would be required to satisfy all other relevant policies of the Plan.

Policy WLP16 **Outside Preferred Areas, proposals for waste management development other than landfill will normally be permitted on sites within existing permanent waste management facilities or within existing or proposed industrial areas [i.e. areas containing a proportion of uses in the Use Classes categories B2 to B8], subject to:**

(i) consideration of environmental impacts; and

(ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

8.51 The general presumption in favour of waste management facilities in appropriate industrial locations is a way of providing further opportunities for securing the development needed to implement the waste management strategy. However, such locations cannot be relied upon to supply all the sites required; hence specific preferred areas are identified in the Plan. Nevertheless, appropriate proposals in industrial type locations will stand an equal chance of securing planning permission as proposals in preferred areas.

8.52 In assessing need, if suitable sites outside Preferred Areas secure permission, then this will reduce the number of Preferred Areas which will need to be released subsequently.

Green waste composting

8.53 In addition to the sites identified as potential Preferred Areas for green waste composting (see Chapter 7), there may be other potentially suitable locations. Sites associated with existing authorised farm building complexes may be acceptable subject to detailed considerations. These include ensuring that the proposals are appropriate in scale and siting, that there is minimum visual intrusion, and that there is ready access to the principal road network to avoid excessive traffic on rural roads. The development of green waste composting facilities at such sites may also contribute to the diversification of the rural economy.

Policy WLP17 **Outside Preferred Areas, proposals for green waste composting will be supported in principle outside built-up areas and settlement boundaries defined in Local Plans where this involves the re-use of authorised permanent buildings which are in keeping with their surroundings or the use of land within or adjacent to farm building complexes, subject to:**

(i) the proposals being appropriate in scale, form, character and siting to its location in the countryside; and

(ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

Major Sites for Non-Inert Waste

Sewage works

8.54 Sewage works could treat waste other than sewage using the existing technology operating at some sites. This could include the anaerobic digestion of separately collected putrescible household and other suitable waste mixed with sewage sludge using sewage sludge digestors, and the treatment of some liquid wastes.

8.55 Sewage works are bad neighbour uses, generally located away from other sensitive development. It is appropriate to increase the waste treatment potential of such sites and the Local Planning Authorities should support proposals in appropriate circumstances.

Policy WLP18 **Outside Preferred Areas the Local Planning Authorities will support in principle proposals involving the processing of sewage sludge and other suitable wastes within existing sewage works, subject to:**

(i) the proposals being appropriate in scale, form, character and siting to its location; and

(ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

Farm and stable waste

8.56 Farms and stables (both the horse-riding industry and leisure) are major producers of waste. This includes surplus straw and also slurries from livestock production which can pollute groundwater and surface water. Much of this waste is disposed of safely in controlled quantities on agricultural land as fertiliser. However, the large volumes generated pose significant disposal problems in some cases.

8.57 Farm and stable wastes can be treated to recover resources and energy (e.g. compost, heat and power) and reduce the pollution potential of these wastes. Some methods could also treat other locally generated putrescible wastes. In the light of the above it is appropriate to encourage initiatives to treat farm and stable wastes close to their source provided that the treatment methods do not themselves have unacceptable environmental impacts. It is also recognised that the development of such facilities within rural areas can contribute to the diversification of the rural economy. Policy WLP11 identifies Membury Airfield as a Preferred Area of Search with potential for a waste treatment plant for processing farm and stable waste. Smaller facilities to treat these wastes may also be acceptable outside the preferred areas provided these are appropriate in scale, form, character and siting to a rural location. The development required for such facilities should be small in scale and should utilise existing farm or stable buildings where practicable and be located within existing groupings of buildings.

Policy WLP19 **Outside Preferred Areas, the Local Planning Authorities will support in principle proposals involving the treatment of suitable farm and stable wastes on farms and stables, subject to:**

(i) the proposals being located within or adjacent to existing groupings of farm buildings;

(ii) the proposal being appropriate in scale, form, character and siting to its location; and

(iii) the proposal overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

Other landfill sites for putrescible/polluting waste

8.58 In considering its proposed Preferred Areas for engineered landfilling, the former County Council assessed existing, former and known potential mineral extraction sites. Only those sites which currently have permission for engineered landfill, together with the preferred areas identified for this use in this Plan, are considered to be acceptable for engineered landfill. Applications for engineered landfill in other minerals voids will therefore normally be refused.

8.59 However, it is recognised that an additional category of site may possibly provide opportunities for engineered landfill during the Plan period. These are sites for which there is no site specific provision in the Replacement Minerals Local Plan - in particular sites for the extraction of minerals other than sharp sand and gravel which may be released in accordance with the policies of the Minerals Local Plan.

8.60 In view of the possible limitations on the availability of the preferred areas identified for landfilling, it is appropriate to ensure that the Waste Local Plan policies are flexible enough to respond to the above opportunities. Where such opportunities arise it will be necessary for proposals to demonstrate that mineral extraction is acceptable in its own right and complies with the provisions of the Replacement Minerals Local Plan; that infilling of the proposed mineral extraction site is appropriate and necessary in order to achieve satisfactory restoration; that all technical criteria for engineered landfill can be met; and that the requirements of all other relevant policies are met.

Policy WLP20 **Outside the Preferred Areas for engineered landfill set out in Policy WLP11 applications for engineered landfill may be acceptable where the proposal forms part of a planning application for mineral extraction outside the Preferred Areas in the Replacement Minerals Local Plan and which is acceptable under the terms of that Plan, or of subsequent amendments or revisions thereof; provided that:**

(a) the landfilling of waste is appropriate and necessary to achieve satisfactory restoration of the mineral extraction site;

(b) the site satisfies all of the technical requirements for engineered landfill and the proposed infilling forms part of a comprehensive scheme of restoration;

(c) the resulting final landform, landscape and after use are sympathetic to and compatible with the land uses, landscape and nature conservation interests of the surrounding area; and

(d) the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33, and satisfy the requirements of Policies WLP14 and WLP15 and all other relevant policies of the Plan.

Safeguarding sites for waste management

8.61 It is difficult to find suitable sites for waste management. Consequently, suitable sites (including the Preferred Areas identified in this Plan) should be safeguarded for such uses. In addition, it is proposed that those existing permanent authorised sites which are operating in an environmentally acceptable manner and any important new facilities which may be approved pursuant to other policies of the Plan, or identified subsequently, should be safeguarded. Without such safeguarding the success of the strategy could be impaired due to a shortage of suitable sites.

8.62 It is appropriate to include the opportunity to safeguard a further category of site: the sites of acceptable new applications for mineral extraction which fall outside the preferred areas identified in the Replacement Minerals Local Plan (i.e. generally proposals for mineral extraction other than sharp sand and gravel) where these prove potentially suitable for engineered landfill. In such circumstances, as well as being acceptable in terms of the policies of the Replacement Minerals Local Plan, they must also satisfy the requirements of Policy WLP20 of this Plan. The local planning authority could then consider safeguarding the site for engineered landfill. The effect of this would be to resist restoration proposals in any mineral application at the site concerned which do not incorporate an appropriate component of engineered landfill. The sites would only be safeguarded if engineered landfill proposals would be acceptable and appropriate in the context of other policies of the Plan, including whether there is an existing or foreseeable need for further engineered landfill capacity to be provided which cannot be met by the preferred areas identified in this Plan. The safeguarding is intended to relate only to new applications in the above category. Former mineral workings and current permissions (whether at operational sites or at sites not yet started) are precluded.

8.63 In addition to the preferred areas for non-inert waste landfill identified in Policy WLP11, further categories of site which require safeguarding include those sites which have already been accepted for landfill through the grant of permission or a resolution to grant permission, or through their identification as Preferred Areas in the Replacement Minerals Local Plan and which that Plan identifies as requiring fill material to achieve satisfactory restoration. It is important that the landfill component of these permissions etc is safeguarded to ensure that there is sufficient void space available to meet the needs of the county area and to contribute to regional needs.

Policy WLP21 **The Local Planning Authorities will seek to safeguard for appropriate waste management purposes:**

(i) the following existing permanent authorised sites in waste management uses:

Civic Amenity Sites & Household Waste Transfer Stations	**Grid ref**
Pinchington Lane, Newbury	SU 478 633
Paices Hill, Aldermaston	SU 588 633
Smallmead, Reading	SU 706 701
Longshot Lane, Bracknell	SU 854 693
Braywick, Maidenhead	SU 894 802
Chalvey, Slough	SU 963 793

Other Sites	**Grid ref**
Southern Recovery Services Ltd., Membury Aerodrome - waste solvent recycling	SU 314 756
Orcol Fuels Ltd., Lambourn Woodlands - storage of waste oils	SU 322 759
Cleansing Services Group Ltd., Pinchington Lane, Newbury - waste oil recycling	SU 478 633
Boulton Bins Transfer Station, Newbury - inert waste transfer station	SU 479 651
Runways and taxiways, Greenham Common Airbase - source of inert waste for recycling	SU 500 647
Whitehouse Farm, Aldermaston - inert & skip waste recycling	SU 609 627
Cow Lane, Reading - storage & sale of recycled building materials	SU 704 738
Planners Farm, Winkfield - waste composting	SU 895 720
Lakeside Road, Colnbrook ' materials recovery facility and clinical waste incinerator	TQ 038 773

(ii) sites where permanent permission is granted for the establishment of waste treatment, recycling, storage and transfer facilities which are considered to be essential to the achievement of the objectives of the Waste Management Plan;

(iii) new sites approved for mineral extraction in accordance with the provisions of the Replacement Minerals Local Plan (in addition to the Preferred Areas identified in that Plan) where landfilling would form an acceptable and appropriate means of restoring the mineral working and which are suitable in technical and planning terms for engineered landfill;

(iv) for inert waste landfill, the sites listed in Appendix 8A, except for the sites with planning permission which are judged unlikely to be implemented;

(v) for non-inert waste landfill, the sites listed in Appendix 8B; and

(vi) the Preferred Areas identified in this Plan.

8.64 The circumstances in which development proposals on sites outside the identified preferred areas for waste management uses and outside the provisions of Policies WLP16 to 21 may be acceptable are considered in Chapter 10.

Policies for other wastes

Sewage Sludge

8.65 Sewage sludge will continue to be disposed of on agricultural land in the county area in accordance with guidelines set by other agencies. Improved sewage treatment processes arising from the EU Urban Wastewater Directive may lead to a slight increase in the volume of sludge production in the future. The reliance on direct disposal to land for soil improvement may become significantly reduced as a number of sludge utilisation initiatives are currently being actively pursued including composting and anaerobic digestion of sewage sludge and household waste. Reading and Slough Sewage Works are both equipped with sewage sludge digestion and power generating plant exporting energy to the national grid. Policy WLP18 is supportive in principle of proposals within existing sewage treatment works for treating sewage sludge and other suitable wastes.

Dredging waste

8.66 Dredgings from rivers and waterways in the county area do not generally create a disposal problem. Most of the river and canal dredgings are cast on associated river or canal banks, or spread on agricultural land. Such operations are normally exempted from the need to obtain planning permission[2]. This disposal method is not practical along the banks of the Thames particularly in the built-up eastern part of the county area. Some 50,000 to 100,000 tonnes of dredgings requiring disposal are generated annually from the Thames in the eastern part of the county area. This is currently landfilled at a dedicated site in Surrey which has limited remaining capacity. Dredged waste from the Thames in central Berkshire is generally disposed of to a landfill in Oxfordshire. Similarly, some canal dredgings (around 45,000 tonnes/year, or about 30% of the total volume dredged from the canals in the county area) are unsuitable for disposal on the canal banks or agricultural land, and are disposed at commercially operated landfill sites in the county.

[2]Town and Country Planning General Permitted Development Order 1995

8.67 In particular cases, where the waste concerned is not being disposed of under permitted development rights or exemptions from the waste management licensing system, then the appropriate disposal route for non-recyclable material - i.e. to engineered or non-engineered landfill - will depend on the character of the material.

8.68 There is potential for composting river and canal dredgings and aquatic weeds. Where dredgings are not being deposited to fertilise agricultural land, the first priority should be to compost suitable material, and this could be carried out as part of a mixed waste or green waste composting operation. Policy WLP23 also makes provision for temporary facilities associated with dredging projects.

8.69 There are sufficient safeguarded landfill sites and preferred areas in the county area to dispose of any dredgings requiring landfill, where this is unavailable.

Radioactive waste

8.70 In England and Wales, the Environment Agency is responsible for issuing authorisations for the accumulation and disposal of radioactive waste. Registrations and authorisation certificates set out limitations and conditions relating to the control of radioactive materials and waste.

8.71 Many small users (e.g. hospitals, universities, research laboratories, and manufacturing and service industries) are authorised to dispose of 'Very Low Level Waste' (VLLW) in normal refuse. VLLW is defined as waste which can be safely disposed of with ordinary refuse, and maximum concentrations are specified.

8.72 Some non-nuclear industries, as well as major hospital and universities, produce 'Low Level Waste' (LLW), which is defined as waste containing radioactive materials other than those acceptable for disposal with ordinary refuse; again, maximum levels are specified. Such wastes may in certain circumstances be disposed of by controlled burial at suitable landfill sites, although authorisations are rare. Disposals are permitted by the Environment Agency only when the waste containment characteristics and performance of the site have been fully assessed, and when the Agency is satisfied that the public will be fully protected. There are no current operational sites in the county area authorised by the Environment Agency for the disposal of LLW, and none are planned.

8.73 A large number of small users are authorised to dispose of low-level combustible solid waste by means of incineration.

8.74 None of the radioactive wastes from Burghfield Ordnance Factory or the Atomic Weapons Establishment at Aldermaston is disposed of in sites in the county area.

Energy recovery from waste

8.75 Waste management development can potentially enhance renewable energy sources thereby contributing to an increased diversity of energy supply, the conservation of natural resources, and the reduction of harmful greenhouse gas emissions. Whilst waste-to-energy is included in this Plan only as a contingency measure, other waste treatment methods (for example anaerobic digestion) and methane combustion from essential engineered landfill sites also have potential for energy recovery. The local authorities will, in principle, encourage and support the recovery of energy from waste, within the framework of the waste management hierarchy (Policy WLP2) and having regard to the feasibility and environmental acceptability of the available technologies and the need to meet acceptable environmental standards. In particular, proposals for waste management development will be expected to show what consideration has been given to the potential for energy recovery from the waste within the context of the development proposed, and to incorporate schemes for energy recovery where appropriate.

Policy WLP22 **Where appropriate, and having regard to Policy WLP2, to available technologies, and to the need to meet acceptable environmental standards, proposals for waste management development should include consideration of the potential for energy recovery from the waste and if appropriate should incorporate schemes for energy recovery.**

Environmental Appraisal of Chapter 8

8.76 To secure the wider benefits of a more sustainable waste strategy, it is necessary to release sites for major new waste management facilities, as well as sites for engineered landfill to deal with wastes which cannot be disposed of by other means. However, due to the nature and scale of these facilities, difficult planning and environmental issues and choices are raised.

8.77 The conclusions of the Environmental Appraisal in respect of "Major Waste Management Sites" may be summarised as follows:

8.78 The preferred waste management technologies were chosen taking account of, amongst other issues, the waste hierarchy, environmental factors (including environmental capacity and sustainability), the potential for pollution, and responses to the public consultation exercises. Consideration was also given to alternative power generation facilities and energy recovery, in accordance with Government guidance (RPG9).

8.79 In order to implement the preferred strategy (which is aimed at the treatment of waste to recover resources and reduce the volume of waste for disposal to landfill and hence embodies principles of sustainability in line with EU, Government and regional policy guidance), it is necessary to identify sites for major new waste management facilities. This includes engineered landfill. The spatial distribution of such major facilities is an important element in implementing the prevailing waste strategy. To accord with the proximity principle and the concept of sustainable development, major waste management facilities need to be close to the sources of waste and have good access. However, the relationship with adjoining land uses and the need to protect people and the natural environment need to be carefully assessed and balanced as part of the site selection process. The sites identified for each specific use are considered to be the least damaging in environmental terms.

8.80 The objectives of the waste strategy cannot be achieved "overnight". Although the environmental risks associated with putrescible waste landfill are likely to be far greater than the alternative facilities proposed by the strategy, there is a need to identify some engineered landfill capacity in the Plan. Thus, although identifying such landfill sites as Preferred Areas may appear to be fundamentally contrary to the overall strategy (which follows EU, Government and regional guidance, and is embodied in the Berkshire Structure Plan as proposed to be modified), some limited provision is justified. It is also recognised that some engineered landfill will be required for the final disposal of non-recyclable waste, residues of treated waste, and some types of special and difficult waste.

8.81 The inclusion of policies relating to the development of major waste management facilities outside Preferred Areas is necessary to incorporate flexibility in the Plan. All relevant environmental issues would be considered when assessing individual planning applications (see Chapter 10).

SITES FOR INERT WASTE

Separation, Sorting and Recycling

9.1 Inert waste is composed primarily of material from construction, demolition and improvement works but can nevertheless come from domestic and business sources. It includes soil, brick and concrete as well as clean excavations resulting from site preparation work for development.

9.2 The Berkshire Structure Plan seeks to conserve natural resources by, amongst other measures, re-using building materials and recovering demolition and construction waste. Recent Government guidance, Minerals Planning Guidance Note 6 'Guidelines for Aggregates Provision in England' strongly encourages the recycling of each waste as an important means (along with secondary aggregates) of reducing future demand for primary aggregates. This Guidance is reflected in the policies of the Replacement Minerals Local Plan for Berkshire. Up to 50% of this material is thought to be recyclable. This usually requires processing in the form of crushing and screening to produce a consistent product. The objective should be to maximise the market potential of these materials to compete with primary products.

9.3 Inert waste recycling is already well established in Berkshire due to the efforts of a handful of local operators who generally occupy sites on temporary planning permission (one permanent permission exists). Some 18% of inert waste within Berkshire was recycled in 1993/94. The recycled product (crushed concrete, asphalt, etc) currently competes in the 'lower end' of the aggregates market. It is used mainly as engineering fill material on construction sites but is beginning to be used as a material in road construction. There appears to be scope for its use in concrete and asphalt making.

9.4 In order to achieve the Waste Management Plan's target of recycling 40% of inert waste by the end of the Plan period, there is a requirement for a network of additional facilities.

Local facilities

9.5 Chapter 5 addresses the need to minimise the generation of construction and demolition waste by re-using this material as part of the new development. This may require some processing e.g. crushing concrete for demolition waste for re-use as foundations for new buildings. There may also be a need to carry out initial sorting and processing of surplus waste prior to the removal from the site for further treatment. Similar considerations may apply on occasion with materials dredged from rivers and waterways. Short term operations of this nature may not require planning permission.

9.6 However, there is often insufficient space or time on such sites to stockpile and adequately process material to an appropriate specification for re-use. Certain locations close to housing and other sensitive development may be unacceptable in planning and environmental terms. Consequently support for such proposals in principle must be weighed against other considerations.

Policy WLP23 **There will be support in principle for temporary facilities on demolition and construction sites, and on river and waterway dredging projects, for the recovery, separation, and where appropriate, processing of the waste materials generated, subject to:**

(i) consideration of environmental impacts; and

(ii) the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

Central facilities

9.7 As well as temporary facilities, there is a need for more established sites to process, stockpile and distribute material. Such sites would have a fuller range of machinery available to meet different specifications.

9.8 Not all of the 1 million plus tonnes of inert waste generated each year will be suitable for processing but it is estimated that a capacity of at least 0.6 million tonnes may be required to meet the target of 40% recycling by 2005/06. Consequently, between four and six sites are required across the county. Each site would occupy an area of 1-3 ha.

9.9 The processing of demolition and construction waste involves the use of large machines to load, unload, crush and screen materials (concrete, metal, brick, asphalt, etc) and large stockpiles of materials. Lorries bring unprocessed material to the site and remove the processed material and some reject materials. Whilst the material is largely inert and non-polluting the process is noisy, dusty and potentially visually intrusive. For practical reasons it is likely to be carried out in the open. Sites therefore need to be located sufficiently far away from housing and other sensitive uses to avoid nuisance. Visual and acoustic screening and dust control is likely to be required. Some ten sites appear to be potentially suitable as Preferred Areas for inert waste recycling. These sites are listed in Policy WLP11.

Strategic facilities

9.10 There may be a need to establish temporary facilities on landfill sites for the recycling of inert waste and skip waste, such as the recovery of material for use in the restoration of landfill sites or the avoidance of recyclable materials being deposited. However, the local authorities' preference, in the first instance, is for waste to be recycled on permanent sites. Nevertheless, there are certain circumstances in which a landfill location is to be preferred, such as where non-recyclable wastes predominate or where a landfill site is much closer than a permanent facility. In such cases, proposal will need to demonstrate why a landfill location is required, as well as showing that other relevant policies of the Plan are satisfied.

Policy WLP24 **Proposals for temporary inert waste and skip waste recycling facilities on inert waste landfill sites for the duration of the landfill operation will normally be permitted provided that:**

(i) the recycling relates to waste brought to the site for disposal and is required to separate inert waste from putrescible/polluting waste and recover recyclable materials; and

(ii) the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

Disposal of the waste remaining after recycling

9.11 The non-recyclable element of inert waste cannot be treated by any other method. However, in some cases it is an essential component of restoring mineral workings to a beneficial after use, and future mineral extraction in the county area will create a need for fill which is likely to exceed supply. It is therefore very important to husband the use of the non-recyclable waste which is available and to ensure that it is used to restore those mineral sites where there is a fill requirement to achieve satisfactory restoration. In addition to the existing planning permissions and sites subject to a resolution to grant planning permission upon completion of a legal agreement, many of the sites identified as preferred areas for sand and gravel extraction in the Replacement Minerals Local Plan require inert fill material for restoration; and other mineral voids may be created requiring fill material as a result of planning permissions being granted for other minerals pursuant to the policies of the Replacement Minerals Local Plan.

Policy WLP25 **The disposal of inert waste by landfilling will only be permitted in:**

(i) Preferred Areas for mineral extraction identified in the Replacement Minerals Local Plan and subsequent amendments and revisions thereof where there is a requirement for fill to achieve restoration and where the filling is limited to that which is required to achieve the restoration objectives set out in that Plan; and

(ii) other mineral extraction sites where the disposal of waste forms an appropriate and necessary part of a scheme to achieve satisfactory restoration of the mineral site;

subject to the proposals overcoming or accommodating all constraints deriving from the considerations set out in Policies WLP26, WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

9.12 A list of existing and prospective inert waste landfill sites is given in Appendix 8. These existing and prospective sites have been identified because they require some inert fill to restore them to the most appropriate after-use. The use of fill in such cases is important to secure beneficial use of the land. It helps to bring the mineral sites back to a beneficial use. As such, the use of inert waste for this purpose may be thought of as a non-wasteful use of the resource which, if not recycled itself, helps to recycle the use of the land.

Controls on landfill permissions to secure inert waste recycling

9.13 However, in line with the objective of maximising inert waste recycling, it is appropriate to seek to restrict the wastes which are landfilled as far as possible to those which cannot be recycled. Sorting and recycling should always take place prior to disposal and where waste is received at landfill sites unsorted it should undergo this process prior to final disposal. Proposals for inert waste disposal will be required to demonstrate how the disposal of recyclable inert wastes will be avoided. This complements the principle that facilities to carry out sorting and recycling on inert waste landfill sites will normally be permitted (Policy WLP24).

Policy WLP26 **Planning permission will not normally be granted for the disposal of waste in inert landfill sites except in the following categories:**

(i) inert waste remaining after recycling;

(ii) nert waste which is incapable of being recycled; and

(iii) other inert waste which is necessary for operational needs.

Sites for Inert Waste

Environmental Appraisal of Chapter 9

9.14 Inert waste is a major component of the total waste generated in Berkshire and a high proportion can be recycled. It is, therefore, very important to provide adequate sites for the development of recycling facilities for this waste and encourage the marketing of the recycled products. However, inert waste recycling is a 'bad neighbour' and it is important to provide sites where it can be carried out with minimal adverse impact.

9.15 The conclusions of the Environmental Appraisal in respect of 'Sites for Inert Waste' may be summarised as follows:

9.16 Policies promoting the separation, sorting and recycling of inert waste contribute to the husbanding of resources, both in terms of landfill capacity and mineral resources, within the environmental capacity of the County and are a positive attempt to put general environmental policy guidance on sustainable development and Policy LD1 of the BSP into practice.

9.17 Although facilities for the recycling, separation and processing of waste materials are encouraged they can be "bad neighbours". The need to minimise any potential for local environmental impact is therefore recognised and appropriate site specific mitigation measures may need to be employed.

9.18 Recycling is stressed throughout the Plan and Policy WLP31 seeks to avoid recyclable inert waste being disposed of by landfill. Whilst the policy is radical in its approach, assuming a market for recycled inert waste, it is an essential element of the strategy. Furthermore, major changes in approach and attitudes to recycling are taking place and education is a key element of the strategy.

9.19 In environmental terms, it is important to husband the use of non-recycled inert waste to restore mineral workings thus helping to recycle the use of land. The valuable nature of non recyclable inert waste for restoration of mineral sites is dealt with in the Plan and accords with the basic philosophy of the Plan which relies on the principles of promoting sustainablility and takes account of the Minerals Local Plan as required by PPG23.

ASSESSING PLANNING APPLICATIONS FOR WASTE MANAGEMENT DEVELOPMENT

Is Development Needed?

10.1 This Chapter sets out the detailed considerations which the Planning Authority will take into account in judging the acceptability of individual planning applications for waste management development.

10.2 Given the objective of the Berkshire Structure Plan of limiting the impact of development (BSP Policy LD3), the starting point in considering proposals for waste management is to establish whether the facilities in question are actually necessary and also whether this need outweighs the inevitable impacts of the development. The impacts include the wider impacts associated with new development (loss of undeveloped land, resource implications of new buildings etc.) and the specific impacts attributable to particular proposals during construction and subsequent operation. Consideration is also needed as to whether the development can be avoided by providing the same capacity in some more appropriate form or location. There may also be circumstances where the wider environmental benefits add weight to the need arguments and become overriding in relation to the particular local environmental concerns the proposals generate.

10.3 However, in all circumstances proposals must include adequate safeguards for the protection of the environment and the amenities of local residents. Proposals which would give rise to any unacceptable adverse impacts on living conditions or in terms of pollution risk, danger to public health and safety and other detrimental effects will be refused. The potential for pollution arising from development affecting the current and future use of land is capable of being a material consideration in planning decisions. The Plan does not, however, seek to duplicate controls which are the responsibility of other agencies (for example the Environment Agency and the Health and Safety Executive - see Appendix 9).

Policy WLP27 **Planning applications for waste management development will only be permitted if the Local Planning Authorities are satisfied that:**

(i) having regard to Policy WLP2, there is a need for the development;

(ii) there is a wider environmental benefit resulting from the development which outweighs any adverse environmental and other effects resulting from it;

(iii) the development and its associated traffic would not give rise to any unacceptable environmental impacts; and

(iv) satisfactory arrangements are made to secure infrastructure, services and amenities made necessary by the development.

10.4 In judging need, the Local Planning Authorities will also have regard to the extent to which proposals contribute positively to achieving the overall waste management priorities (Policy WLP2). This implies that proposals for development further down the waste management hierarchy must demonstrate a progressively stronger case on need grounds.

10.5 It is also necessary to consider the contribution of individual proposals to the achievement of the strategy in detail. In the context of the flexible approach proposed, this implies a dynamic and evolving situation, where individual proposals are assessed according to their contribution to the emerging pattern of provision. Another consideration is the contribution made to the overall objective of meeting the waste management needs of the county area. This includes the need for interim arrangements (including out-county disposal) during the process of achieving a greater level of self-sufficiency in the longer term.

10.6 The Planning Authority will have regard to the forecasts set by the Waste Management Plan for waste minimisation, reuse, recycling and treatment and the extent to which further facilities are needed to achieve these forecasts at any particular point in time. The annual waste management returns will assist in this judgement.

Sites for waste management development

10.7 The basic approach of this Plan in relation to future facilities for waste management is, so far as practicable, to define in advance the sites which are considered to be appropriate.

10.8 However, it is open to any developer or landowner to submit development proposals on any area of land irrespective of its status in a Local Plan, and such an application must be considered on its merits. In many cases these proposals may be unacceptable in planning terms because the need for the development cannot be demonstrated, and/or the proposal has adverse environmental impacts, and/or conflicts with planning policies generally. Nevertheless, having regard to the possibility of such applications, it is helpful for the Plan to give clear guidance on the criteria against which they will be judged.

Policy WLP28 **Development proposals which do not accord with the provisions of Policies WLP11, WLP16 to 21 and WLP24 to 25 and WLP34 will normally be refused. In considering whether to make an exception to this principle in any particular case, the Local Planning Authorities will take account of:**

(i) whether there is need to develop land outside the Preferred Areas or other areas defined in the above policies in order to meet the need for waste management facilities as defined by the Plan;

(ii) whether the need could be more acceptably met elsewhere than on the application site, having particular regard (among other things) to the presumptions against waste management uses in the specific areas indicated in Policy WLP29; and

(iii) whether the proposals overcome or accommodate all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

Policy WLP29 **In all cases outside the Preferred Areas, and notwithstanding the provisions of Policy WLP28, there will be a strong presumption against allowing waste management development, either within or adversely affecting the following:**

(i) areas designated as Sites of Special Scientific Interest (including proposed and designated Special Protection Areas, Special Areas of Conservation and Ramsar sites), Regionally Important Geological and Geomorphological Sites, or Geological Conservation Areas;

(ii) **statutory nature reserves;**

(iii) **Scheduled Ancient Monuments;**

(iv) **land owned by or covenanted to the National Trust;**

(v) **common land, and town or village greens;**

(vi) **major historic parks and gardens;**

(vii) **conservation areas;**

(viii) **Land protected under the special provisions of the Green Belt (London & Home Counties Act 1938)[1];**

(ix) **the sites and settings of buildings and features of architectural and/or historic interest;**

(x) **groundwater protection areas where the proposals would conflict with the Environment Agency's groundwater protection policy;**

(xi) **the function of land important to the character, setting or amenities of individual settlements, including land important to the separation of settlements except for:**

- (a) **the landfilling of waste where this forms an acceptable and necessary element of permitted mineral extraction and restoration; and**
- (b) **temporary waste recycling and transfer facilities located on landfill sites in accordance with Policies WLP15 and WLP24;**

(xii) **Metropolitan Green Belt, and land outside built up areas and settlement boundaries, except for the following purposes:**

- (a) **the landfilling of wastes where this forms an acceptable and necessary element of permitted mineral extraction and restoration;**
- (b) **temporary waste recycling and transfer facilities located on landfill sites in accordance with Policies WLP15 and WLP24;**
- (c) **green waste composting in accordance with the requirements of Policy WLP17;**
- (d) **the treatment of sewage and other wastes in accordance with the requirements of Policy WLP18; and**
- (e) **the treatment of farm and stable waste in accordance with the requirements of Policy WLP19;**

(xiii) **North Wessex Downs Area of Outstanding Natural Beauty and Areas of Special Landscape Importance except for the following purposes:**

[1]This refers only to a very small area of land at Ankerwycke (near Wraysbury), and not to the general area of the Metropolitan Green Belt in the county area.

(a) the landfilling of wastes where this forms an acceptable and necessary element of the restoration of permitted mineral extraction and restoration;

(b) temporary waste recycling and transfer facilities located on landfill sites in accordance with Policies WLP15 and WLP24;

(c) the treatment of sewage and other wastes in accordance with the requirements of Policy WLP18;

(d) the treatment of farm and stable waste in accordance with the requirements of Policy WLP19;

(xiv) areas at risk from flooding except in exceptional circumstances where adequate and appropriate flood compensation measures are provided as part of the proposals

(xv) Wildlife Heritage Sites, Parks and Gardens of County Importance, and non-scheduled archaeological sites meriting preservation in situ where these interests would be harmed by waste management development;

(xvi) the immediate settings of any waterbodies or other water features and the aquatic environment in general, where the proposed development would result in material adverse impacts.

10.9 Policies WLP28 and WLP29 are therefore complementary to Policies WLP11 to WLP13, WLP16 to WLP25 and WLP34. Together, all these policies provide a clear framework to indicate the planning authorities' likely response in principle to applications throughout the county area.

10.10 It is emphasised that the inclusion of certain exceptions in items (xii) and (xiii) in Policy WLP29 is not intended to represent a weakening of the general strong controls over development that apply in the Green Belt and the AONB. Provisos reflecting these controls are already written into the other policies to which items (xii) and (xiii) refer, for example by requiring the activities to be located within existing buildings, and/or by requiring them to be appropriate in scale, form, character and siting to their location.

Assessing the impact of development proposals

10.11 Wherever a planning application is submitted, a wide range of issues will need to be considered to assess the impact of the proposals and hence the issues referred to in Policy WLP27. The following policies therefore set out the criteria which will be used to assess the general environmental and other impacts of proposals for waste management development, and the content required in planning applications. When considering these criteria in the context of individual planning applications, the local planning authorities will have regard (among other things) to prevailing government advice about the weight which should be accorded to the protection of particular areas or interests.

Policy WLP30 **Within the framework provided by Policy WLP27, the merits of waste management development proposals will be assessed having regard to all relevant considerations, and in particular:**

(i) the likely effects of the traffic and traffic-related impacts which the development would generate;

(ii) the need to safeguard health and living conditions;

(iii) the likely effects of the proposed development on the surrounding population and the environment, including the effect on living and working conditions; the effect on the air and water environment; the amenity and wider environmental implications of any emissions, or any changes in the nature, quality and quantity of watercourses and groundwater, and drainage and flooding impacts;

(iv) the visual impact of the proposed development; its effect on the landscape; the need for additional on-site and off-site planting, screening, or other landscaping measures, including planting in advance of the development; and the need to safeguard and enhance areas of attractive landscape and local landscape character, individual landscape features (woodlands, hedgerows etc), the character and setting of rivers, canals and streams, and areas of nature conservation value;

(v) the need to safeguard the character, setting and amenities of individual settlements and to safeguard important open gaps between settlements from development which would cause long-term harm to the function of the land;

(vi) the need to safeguard and enhance the character and use of sites used for recreation and public rights of way;

(vii) the need to safeguard and enhance sites of ecological importance and protected species and their habitats, and the need to safeguard sites of geological, archaeological, historic, architectural or scientific importance, and to safeguard those sites comprising best and most versatile agricultural land;

(viii) the need to safeguard aviation interests (including guarding against bird strike risks and safeguarding airfield protection zones), and to safeguard the interests of public utilities;

(ix) the likely cumulative effects of the proposed development in combination with other developments taking place, or permitted to take place, in the locality;

(x) the need to minimise disturbance from waste disposal operations by securing the phased release of sites where appropriate and the orderly progression of working and restoration where landfilling is taking place; and

(xi) the need to ensure satisfactory restoration, after-care and management of sites for an acceptable after-use.

Policy WLP31 **Every application for waste management development must be accompanied by a written statement, drawings and plans which:**

(i) describe the existing conditions of the site and surroundings;

(ii) set out the detailed development proposals and a reasoned justification for the proposals;

(iii) analyse the implications and impact of the proposals against relevant factors in Policies WLP27 to WLP30;

(iv) explain the measures proposed to overcome or accommodate relevant issues and constraints and mitigate any adverse impacts;

(v) assess the degree to which these measures address the constraints and overcome any such impacts; and

(vi) set out proposals for monitoring the impact of development during construction and operation and following completion.

Proposals which do not provide sufficient information or fail to meet the environmental standards and planning requirements set out in the relevant policies of this Plan will not be permitted.

10.12 Not all of the issues in Policy WLP30 will necessarily be relevant to every application for waste management. However, key factors in judging the acceptability of proposals will include access, impact on living conditions, emissions to air, protection of water resources, protection against flooding, and landscape impact/visual issues. In the case of landfill, the ability to secure satisfactory restoration, after-care and after-use is a major consideration. The issues to be addressed are summarised in the following paragraphs. When preparing proposals the applicant should discuss the scope of these issues with the Planning Authority.

10.13 Unless the proposed **access** to the site and the surrounding highway network is adequate in terms of strength, capacity, safety and environmental considerations (including the effects of vehicles on living conditions along the haul route), then permission for a proposed development will be refused. For proposals generating a large volume of traffic, the relationship with the principal road network is of critical concern, and haul routes to the main road should avoid settlements or residential frontages close to the carriageway. Where adequate access can be secured through improvements to the local highway network, it will be necessary to consider the acceptability of such improvements in environmental terms. The Planning Authorities will seek to secure any road improvements required at the developer's expense and through appropriate legal agreements.

10.14 The effects of proposals on **living conditions** in the broadest sense, including protection of human health, is an issue of major concern. Proposals should not give rise to unacceptable levels of noise, vibration, smell, dust, fumes or noxious emissions or visual intrusion beyond the site boundary, and should seek to minimise the creation of these nuisances by the best practicable means. The Planning Authorities will expect proposals to demonstrate no unacceptable adverse effects and include appropriate specific measures to control nuisances and emissions. These measures will include the siting of working areas away from sensitive development (buffer zones); enclosure of operations where applicable; control of working practices and processes; control over hours of operation and hours during which lorries may enter and leave the site and control over lorry routeing; and visual and acoustic screening.

10.15 Buffer zones for waste management development will vary according to specific cases, but engineered landfill and some waste management facilities will require a substantial buffer zone to settlements. Buffer zones may also be required to help mitigate impacts on other sensitive uses. The following minimum buffer zones to settlements would normally be expected to apply, although the precise requirements at individual sites will be assessed case-by-case according to the nature and range of the facilities proposed:

Waste management use		Distance from settlements
Engineered landfill	Deposit of household waste and difficult and Special waste	250m
	Deposit of industrial/commercial waste	150m
Inert waste landfill		100m*
Inert waste recycling		150m
Waste to energy plant		400m

**or limit of approved mineral restoration using fill material*

10.16 It will not always be possible to apply the above buffer zones to isolated dwellings/ groups of dwellings. Buffer zone characteristics for other waste management uses will depend upon individual site characteristics and upon proposals demonstrating the extent to which particular mitigation measures are effective in minimising impacts. Decisions on buffer zones with respect to all sites will be made in the light of detailed local circumstances including the relationship of the site to surrounding uses, topography, screening, etc. (On buffer zones, see also paragraph 6.23.)

10.17 **Emissions to air** are a very important consideration particularly in relation to WTE. The Waste Management Plan (Chapter 8) includes WTE in the 'mini-hierarchy' of waste treatment options but states that its confirmation as a main (but contingency) element of the strategy is subject to further confirmation from authoritative sources that risk to health need not be a constraint on adoption of this technology. The decision to give WTE no more than a contingency status in the waste strategy will be reflected in the planning authority's response to individual proposals. Guidance to planning authorities on emissions to air is provided in Planning Policy Guidance Note 23 'Planning and Pollution Control'. This advises that the potential for pollution affecting the use of land is capable of being a material consideration in planning decisions.

10.18 Proposals for waste to energy will be required to include a comprehensive risk assessment to demonstrate that there will be no unacceptable impact from emissions from the incineration of waste on the surrounding population and no adverse effects on ecological and other environmental interests, including water quality. As a minimum requirement, proposals must show not only that airborne emissions can be maintained within the standards of emission control required by the Environment Agency, but must also reflect emerging statutory requirements as far as these are known. In accordance with the advice of PPG23, the local authorities will seek close consultation with the Environment Agency to ensure the fullest appreciation and consideration of pollution issues and assessment of pollution risk at the planning application stage; but will not seek to duplicate controls imposed by this and other agencies.

10.19 Landfill gas generated by the decomposition of waste can cause nuisance and safety issues locally and give rise to public health concerns, and contributes significantly to greenhouse gas emissions. Proposals for landfill of putrescible/polluting waste will be required to minimise the discharge of landfill gas to the atmosphere by providing for the earliest practical introduction of gas collection and flaring systems. Proposals should also include landfill gas utilisation measures including schemes for the recovery of energy from landfill gas, unless this can be clearly demonstrated to be impracticable.

10.20 The protection of **water resources** is particularly significant in relation to waste management facilities since the decomposition of putrescible/polluting wastes, coupled with infiltration of water, produces polluting liquids (leachate) which can be noxious, poisonous and polluting if allowed in contact with surface or groundwater. The Environment Agency's policies for the protecting of groundwater seek to exclude putrescible/polluting waste landfill from certain protection zones for individual groundwater sources, and to ensure full engineered containment in sensitive locations elsewhere. There may also be occasions when the engineered containment of inert waste material is required, for example to prevent silt migration in fissured chalk. The local planning authorities will refuse applications for all types of waste management development which would be prejudicial to the protection of groundwater interests and will ensure that elsewhere proposals which are acceptable in principle include necessary measures for the protection of groundwater quality and quantity, and in the case of landfill necessary measures for engineered containment consistent with the policies of the Environment Agency. All proposals for waste management development relating to previously contaminated land must ensure that measures for dealing with contamination do not give rise to unacceptable risks in respect of water quality or other pollution. The protection of groundwater flow also needs to be taken into consideration and in certain landfill situations it will be necessary to employ groundwater relief measures.

10.21 Protection against the **risk of flooding** is important in the context of landfill where proposals often involve some raising of fill levels above those existing. Raising of ground levels in flood plains results in a loss of flood storage capacity and/or impedance of flood flows. Proposals which are prejudicial to flood protection interests will be refused unless, exceptionally, the applicant can demonstrate satisfactory compensatory measures can be achieved and are included as an integral part of the application. Proposals must also demonstrate no adverse impact upon the adjacent and downstream land drainage system.

10.22 The **landscape impact** of waste management development needs to be carefully considered. The nature of the material and process can give an unsightly appearance to waste management development. Furthermore, major facilities, whilst generally enclosed, are housed in substantial buildings which can be incompatible with local landscape character. Proposals must demonstrate no material adverse impact on the landscape or the landscape setting of sites of natural or heritage importance or other recognised interests. They should include a thorough assessment of landscape and visual impact; detailed survey of the existing landscape; detailed landscape proposals and proposals for the treatment of the external appearance of buildings and structures, with specific attention to measures to mitigate their visual impact; a management scheme referring where appropriate to after-use objectives; and temporary measures to minimise impact during construction and/or operation.

10.23 Waste-to-energy plants involve very large buildings with the potential for extensive visual intrusion and overshadowing of nearby areas. Mitigation measures should include careful consideration of detailed siting to take advantage of existing topography, vegetation and other screening, together with attention to height, massing, orientation, design and finish of the building and stack. The opportunity should be taken of using existing buildings and structures, either in the foreground or as a backdrop, to reduce the visual impact of new buildings. For major developments generally there is likely to be a requirement for substantial structural planting on and off site. It is important to recognise this and to incorporate the necessary areas as part of the planning proposals.

10.24 Proposals for landfill with putrescible/polluting waste involve raising of levels above existing to provide adequate drainage. This needs careful consideration to ensure that the visual impact of temporary operations is minimised by judicious screen planting/ bunding, etc., and through a phased restoration programme which provides screening of filling operations by previously restored areas. There is a need to ensure the proposed landform is designed to be assimilated as far as possible into the landscape and that the detailed landscaping reinforces and enhances existing landscape features. Recent guidance suggests there is no technical reason to prevent the planting of trees on restored sites filled with putrescible and polluting waste (engineered sites). Proposals will be expected to provide for appropriate planting on the landfill site and additional off-site works as necessary.

10.25 Smaller facilities (including temporary and permanent sites) will also require careful assessment of landscape and visual impacts, including enclosure of visually intrusive operations in buildings as appropriate; the use of screen planting and landscape bunding to reduce visual impacts; and the careful design and siting of buildings, plant and machinery to take advantage of existing landform and screening.

10.26 Where proposals could have direct or indirect impacts on **sites of natural or heritage importance**, i.e. sites designated internationally, nationally or locally for their nature conservation, landscape, historic, conservation or archaeological importance, or other sites where such interests may be present, proposals must demonstrate no material adverse impacts on these interests. To allow their impacts to be assessed, proposals must include appropriate survey and evaluation of these interests and where appropriate measures for assessing and monitoring the effects of development upon them. Details must also be submitted demonstrating how these interests will be protected during construction and subsequent operations or where appropriate, proposals for any removal and recording of natural and heritage features, together with other suitable compensatory mitigation measures. Proposals which provide insufficient information and evaluation and monitoring or which would result in material adverse impacts will be refused.

10.27 **Site restoration, monitoring and after-care** is an essential element of landfill operations to ensure that the site is restored and maintained in a satisfactory condition to support an appropriate after-use. The intended after-use should be identified at the outset and related to the design of the scheme. The Planning Authorities will impose conditions to secure monitoring and restoration and after-use requirements and before granting planning permission will need to be satisfied that the site can be satisfactorily restored and managed for an appropriate after-use. Where engineered landfill of putrescible and polluting waste is involved, the detailed waste disposal operation, including placement and compaction of waste and allowance for settlement, are legitimate restoration concerns since they affect the success of the final restoration in terms of contours, drainage, etc.

10.28 Detailed restoration and aftercare proposals will be required and should incorporate site investigation to identify existing characteristics and resources including landscape, vegetation, drainage and soils. There should be proposals for removal, storage and placement of restoration materials. Proposals should incorporate details of 'surcharged levels' of the proposed landform to provide for settlement of waste and details of the final landform and drainage. The depth of soil on the restored site is often critical to the quality of restoration and also affects the ability to carry out landscape planting, particularly on engineered landfill sites. Where in situ materials are in short supply, it will be necessary for these to be made good by utilising suitable soil-making materials from incoming waste or by importing soils. Full details of the proposed after-use for the site should be provided.

10.29 Where an agricultural after-use is intended, proposals for sites on the best and most versatile land (Grades 1, 2 and 3a of the MAFF Agricultural Land Classification System) must demonstrate schemes to return the land to similar potential. The Planning Authorities will co-operate closely with MAFF or the Forestry Authority in assessing proposals involving agricultural or forestry restoration respectively. A minimum 5 year after-care period will be required in all cases. The Planning Authority may seek specific provision to secure the long-term management of sites to be restored for amenity or nature conservation. There is also a long-term management liability under the waste management licence with regard to pollution monitoring and control. The aftercare and site management requirements need to be closely harmonised with this regime.

10.30 It is important to note that the grant of planning permission for a particular waste management development does not remove the need to obtain other consents that may be necessary under other legislation, and neither does it imply that such consents will necessarily be forthcoming.

Environmental Assessment

10.31 Planning applications for certain categories of waste management development are subject to a process known as Environmental Assessment (EA). EA is intended to ensure that the environmental effects of major developments are taken into account at the earliest possible stage in the planning and decision-making process. An important benefit of EA is that it requires the developer to identify the environmental effects of proposals and to indicate the steps being taken to mitigate them. EA involves submission of an 'Environmental Statement' by the intending developer, at the same time as he submits his planning application for assessment by the Planning Authority.

10.32 The Regulations governing environmental statements identify several types of waste management development for which an EA is always required (Schedule 1 projects); and others for which an EA may be required if the operations would be 'likely to have significant effects on the environment by virtue of factors such as their nature, size or location' (Schedule 2 projects). Additional planning guidance reinforces the likely need for Environmental Statements to accompany Schedule 2 projects which are likely to have significant effects upon important interests, such as nature conservation (PPG9).

10.33 The types of waste management development which will always require an EA (Schedule 1 projects) include the incineration or chemical treatment of special waste and the disposal of this waste to landfill. Other installations where an EA may be required (Schedule 2 projects) include landfill sites and sites for the transfer, treatment and disposal of household, industrial and commercial waste. Government advice (in DoE Circular 15/88) is that the latter may well be candidates for EA where the capacity of the installation is greater than 75,000 tonnes a year. Except in the most sensitive locations, sites taking smaller tonnages of waste and sites accepting only inert waste are unlikely to require an EA.

10.34 In the context of the prevailing Waste Strategy, the local planning authorities consider that an EA will almost certainly be required for the following Schedule 2 projects: major waste treatment plants and putrescible/polluting waste landfills, together with larger transfer and recycling facilities. In considering whether an Environmental Statement is required, and in preparing proposals accompanied by an Environmental Statement, applicants will be expected to carry out a detailed 'scoping' exercise and all necessary consultations with relevant organisations and interests to ensure that relevant issues are covered in the Statement. Where appropriate, an appraisal of the main alternatives considered by the applicant should be submitted.

10.35 Even where it is judged that there is no formal requirement for an EA, proposals may still be judged to have significant environmental effects by virtue of their nature, scale and location and/or their potential impacts on important interests. In such cases the proposals will be required to give detailed consideration to all relevant environmental impacts, and will also be required to satisfy all of the relevant policies of this Plan.

Policy WLP32 **The local planning authorities will require an Environmental Statement to be submitted with a planning application for waste management development where, having regard to the relevant Regulations and the provisions of DoE Circular 15/88 and other relevant government guidance, it appears to them that the proposals are likely to have significant environmental effects. Any decision not to require such a Statement in a particular case will not preclude the authorities, when taking the decision on the overall merits of the application concerned, from judging that the environmental effects of the proposal are sufficient to justify refusing planning permission.**

Environmental improvements and wider benefits

10.36 Waste management uses are often 'bad neighbour' uses and it is recognised that there are few, if any, ideal sites for new waste management development. All such development will, therefore, be expected to include appropriate mitigation measures on site and operate to acceptable environmental standards thereby ensuring that any potential for adverse impact on amenity and the environment in general is kept to a minimum.

10.37 It may also be necessary to seek opportunities to carry out environmental improvements and to provide other benefits away from the site where these are closely related to the proposed development. The resultant improvements and benefits should also be fairly and reasonably related in scale and kind to the development. It is important that developers are not required to make improvements and to pay for facilities which are needed solely to resolve existing problems or deficiencies. More detailed guidance on the appropriateness of using planning conditions and planning obligations to secure such improvements and other benefits is contained in Circulars 11/95 and 1/97.

10.38 In accordance with Policy WLP33, the local planning authorities will look to those submitting proposals for waste management development to make provision for environmental improvements or other benefits both on the site and in the locality where it is appropriate to do so. Improvements and benefits may take many different forms. For example, they may include measures to reduce the impact of the development, such as through off-site tree planting. They may include measures to compensate for the loss of a resource as a result of the development, such as through the creation of a new nature reserve or the provision of new footpaths. They may also include measures to improve the infrastructure of an area to enable the development to go ahead, such as through the widening of narrow approach roads to a site or the strengthening of a weak bridge.

10.39 The local planning authorities recognise, however, that waste related uses are often 'low value' commercial operations and opportunities to seek such benefits may be limited and will depend on the nature and scale of the development proposed.

10.40 In addition to the above, it is recognised that some existing waste management development uses may not be operating to optimal environmental standards. The local planning authorities therefore consider it important to achieve, through development proposals, environmental improvements to these operations.

Policy WLP33 **When considering proposals for waste management development, the local planning authorities will take the opportunity to seek environmental improvements and other public benefits both on the site and in the surrounding area where these are directly related to the proposed development.**

Conditions and planning obligations

10.41 In order to ensure that necessary waste management development has the minimum environmental impacts, the Planning Authorities will impose suitable conditions on all planning permissions. These conditions are designed to ensure that the operator complies with all of the details in the approved scheme, and that operations at the site are carried out so as to protect the environment and residential amenity. They will also be used to secure satisfactory restoration and reinstatement of sites following cessation of operations.

10.42 Certain matters cannot be controlled by planning conditions, such as lorry routeing to and from the site and financial contributions for off site works. In many cases these matters are necessary to render the development acceptable in planning terms. Accordingly, planning obligations will be sought in the form of voluntary legal agreements between the developer and the Planning Authorities. Where the developer is unwilling to enter into appropriate legal agreements, permission will normally be refused.

Enforcement

10.43 The local planning authorities will continue to use their planning enforcement powers to secure the cessation and removal of unacceptable unauthorised waste management activities and compliance with planning permissions for waste management development.

Land Raising

Is land raising necessary?

10.44 The term land raising refers here to:

(i) the deposit of waste on land (as distinct from holes in the ground created by mineral workings) resulting in the level of land being raised above existing;

(ii) the raising of levels on landfills in mineral voids above those necessary to achieve satisfactory drainage and restoration. [In the case of putrescible and polluting waste landfill it is necessary to raise levels significantly above original ground levels to achieve satisfactory drainage. This is known as 'doming'. The level to which the site is filled and restored also has to take account of the fact that the waste will settle somewhat over time so it is necessary to restore to higher levels than those required to achieve satisfactory final levels (this is known as 'surcharging'). For the avoidance of doubt the doming of landfills in order to achieve satisfactory drainage and any necessary surcharging of levels does not fall within this Plan's definition of land raising.]

(iii) the landfilling of proposed mineral voids where there is no justification for mineral extraction in its own right or where waste disposal forms the major element of the scheme.

10.45 The Berkshire Structure Plan (BSP Policy W6), reflecting EU and regional guidance, is normally opposed to land raising unless it can be clearly demonstrated that there is no reasonably practicable alternative way of meeting the waste disposal needs of the county area. In addition, land raising uses up waste materials which may be required for filling the holes created by mineral extraction in order to restore these sites to a beneficial after-use. Land raising also prolongs the duration of disturbance on mineral sites or extends disturbance into new areas.

10.46 In the case of putrescible and polluting waste the local planning authorities will oppose land raising on sites outside mineral voids. It is considered that there is no need to resort to this method in view of the mineral sites identified as potentially suitable in this Plan for landfilling these wastes.

10.47 Land raising in mineral voids will not normally be permitted. However, there may be certain circumstances where some land raising is appropriate in restoration terms (e.g. to reflect or marry in with surrounding topography). There may equally be circumstances where the minimum doming necessary to achieve satisfactory drainage proves to be unacceptable due to adverse landscape impact (e.g. due to incompatibility with the surrounding low lying area). The detailed design of a scheme may mitigate its landscape impact e.g. by restoring to several small domes instead of one much higher dome. A key restoration consideration is therefore the relationship of the resultant landform to the surrounding landform. Individual restoration proposals in mineral extraction sites will consequently need to be considered on their merits reflecting the restoration needs of the site in landscape terms and other relevant policy considerations.

Inert Waste

10.48 The local planning authorities also consider that the circumstances where land raising using inert waste might be acceptable are very limited. It is anticipated that the need for inert fill to restore mineral extraction sites will exceed the supply of inert waste generated in the county area (Chapter 3). Consequently, it is essential that available waste is used to restore mineral voids. Also, given the current agricultural surpluses in the EU and the widespread application of agricultural 'set aside' (involving agricultural land being taken out of production), the local planning authorities consider that the circumstances where tipping as a means of improving agricultural land might be justified will be rare. The disposal of sewage sludge and dredgings on land in accordance with good agricultural practice is not considered to be land raising.

10.49 However, there may be circumstances where land raising with inert waste is acceptable. The three most likely are:

(i) the use of waste to stabilise polluted, despoiled or derelict land provided that this represents the best practicable means of achieving the reinstatement of the land to a beneficial use and is otherwise acceptable in relation to other policies of the Plan;

(ii) use of clean excavated waste material as part of a specific engineering operation to prepare and landscape sites for development; and

(iii) the formation, in appropriate cases, of environmental bunds to protect adjoining land uses from the adverse impacts of development (e.g. noise screens alongside motorways).

Major Construction Projects

10.50 The other situation where land raising may, in limited circumstances, be acceptable is in relation to the disposal of large quantities of surplus spoil generated by major construction projects (particularly new roads) on, adjacent to or near the construction site. This practice can be beneficial in confining disturbance to the immediate vicinity of the development and preventing the traffic impact of lorries which would otherwise be required to haul surplus material away. The material can be used in the scheme for landscaping etc or in restoring land excavated as 'borrow pits' for the project. However, in other circumstances the resulting disturbance to land and the final landform and restoration may be unsatisfactory. The waste will usually be better employed in restoring mineral workings in need of fill material.

10.51 The local planning authorities therefore consider that the prime objective for disposal of such surplus material should be to secure a positive use for it, either within the development or elsewhere. The maximum amount of re-usable material should first be recovered and/or used. The remaining material should be used to restore mineral sites unless there are very significant reasons why this could give rise to excessive environmental disturbance. Only in such cases will land raising of surplus spoil be contemplated.

10.52 Early planning is required by developers (including the Department of Transport and/or their contractors) about the most appropriate locations for disposal. Past practices, which have tended to treat disposal as an afterthought, have resulted in inadequate consideration of the options by developers. In turn, this has on occasion resulted in unacceptable pressure on the planning authority to determine applications which are deficient in content and detail, and to do so extremely speedily purely as a matter of expediency imposed by contractual commitments. Such an approach would be unacceptable to the Local Planning Authorities.

Policy WLP34 **The Local Planning Authorities will not normally permit the disposal of waste by land raising unless:**

(i) there is no reasonably practicable alternative, including the use of existing waste disposal facilities;

(ii) the benefits of the scheme outweigh the environmental impacts and other adverse impacts which the development is likely to cause; and

(iii) the proposal overcomes or accommodates all constraints deriving from the considerations set out in Policies WLP27 and WLP29 to WLP33 and all other relevant policies of the Plan.

10.53 In conclusion the local planning authorities recognise that there are occasions when land raising may be beneficial for strictly defined purposes. However, it is as a general principle undesirable and proposals for such development will be very rigorously examined to assess the need for the development as well as ensuring that their environmental impacts are acceptable.

Environmental Appraisal of Chapter 10

10.54 A key role of the Waste Local Plan is to set out the criteria by which all waste management proposals, both inside and outside Preferred Areas, will be judged. The emphasis throughout is on the need to safeguard living conditions and the environment and reduce adverse impacts to a minimum by ensuring an appropriate form and standard of waste management development.

10.55 The conclusions of the Environmental Appraisal in respect of "Assessing Planning Applications for Waste Management" may be summarised as follows:

10.56 The framework of policies in this Chapter reflect Government policy guidance in PPG12 and PPG23 and the objectives of the EU Waste Framework Directive by setting out the environmental criteria against which all applications for waste management development will be considered.

10.57 The Preferred Areas approach guides future waste management development to the most suitable locations in principle, having regard to the wider policy issues of sustainability. It is not within the scope of the Plan to consider in detail the local environmental issues of each potential waste management project. However, the remaining environmental criteria which require to be further addressed by potential developers in drawing up their detailed proposals are identified and set out for each Preferred Area in Appendix 7 to the Plan. Formal, individual project environmental assessment will be required in appropriate cases.

10.58 Although this Plan adopts the Preferred Areas approach, all planning applications - whether for Preferred areas or not - must be considered on their merits (PPG1). The policies in this Chapter, therefore, seek to ensure that all necessary and appropriate environmental issues are taken into account and balanced when assessing detailed development proposals for Preferred Areas and other sites. These policies reflect the criteria listed in the site selection process, including the environmental constraints of the county area, and the need to protect the environment and human health in the context of potentially polluting development on the uses of land and amenity of the area. The criteria also reflect relevant government guidance (e.g. PPG2, PPG7, PPG9, PPG12, PPG13, PPG23 and RPG9) and the objectives of the EU Waste Framework Directive.

10.59 There are, however, tensions between different policies' objectives, in particular between the need to protect the natural environment and the need to protect people. The weight given to these policy objectives will vary according to each individual development proposal, and appropriate site specific mitigation measures may assist in overcoming some policy conflicts and tensions.

10.60 Considerations of need and the waste management hierarchy are also relevant material considerations. The test of need is fundamental to the implementation of the prevailing waste strategy. Developments further down the hierarchy (i.e. least favourable in environment terms) will be required to demonstrate a progressively stronger case to justify planning permission because the least preferred techniques for dealing with waste require the greatest justification in terms of need. This is an essential element of the waste hierarchy, and reflects EU, Government and regional guidance.

10.61 In line with Government advice (e.g. PPG1 and PPG23), the Plan does not attempt to duplicate other legislation and regulations. In particular, although the potential for pollution arising from a proposed development is a material consideration in the context of its impact on adjoining land uses, the actual regulatory standards of control cannot fall within the remit of this Plan.

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11 IMPLEMENTATION, MONITORING & REVIEW

Implementation

11.1 Implementation of the prevailing waste management strategy will depend on successfully achieving the objectives and policies of both the new Waste Management Plan and the Waste Local Plan. In many respects, these two Plans are reverse sides of the same coin. The former's strategy sets the framework within which land use planning policies in the latter are developed, but the implications of the latter are critical in developing the strategy. Accordingly, the implementation (and subsequent monitoring and review) of each Plan will need to pay regard to the other.

11.2 So far as the implementation of the policies of the Waste Local Plan is concerned, these will be implemented principally through the normal development control process. The local planning authorities will be guided by them when making decisions on planning applications for waste management or related development, and in deciding on the conditions which should be attached to any permissions.

Monitoring

11.3 The monitoring and review of regional waste planning policy is, in the first instance, the responsibility of the South East Regional Planning Conference (SERPLAN), and the preparation of any national guidelines on such matters is the responsibility of central government. The local planning authorities will continue to work with SERPLAN on all matters relevant to regional waste planning.

11.4 The unitary Councils will continue to liaise with other local planning authorities, both inside and outside Berkshire, over matters of common concern related to waste planning. In particular, the Councils will endeavour to ensure that the policies of other local plans would not conflict with or prejudice the implementation of the policies of this Plan, nor lead to the unacceptable sterilisation of land especially suited to use for waste management facilities.

11.5 The local planning authorities will continue to monitor waste management facilities and sites in Berkshire and will take appropriate action (including enforcement action if necessary) to remedy breaches of planning control. Regular meetings will be held with major waste operators in the county to review progress and any problems at individual sites. Such monitoring by the Councils as Waste Planning Authorities will be co-ordinated where possible and appropriate with monitoring by the Environment Agency as Waste Regulation Authority.

11.6 Annual reports will be prepared on the operation of this Plan. These will consider above all the continuing effectiveness and appropriateness of the Plan's policies regarding the implementation of new waste management facilities and their implications for achieving the objective of a changed waste strategy, along with the implications of the grant of any 'windfall' permissions. If any corrective measure is apparently needed by the Waste Planning Authorities to ensure effective implementation of the new strategy, it will be reported to the appropriate authority so that suitable action can be taken and the momentum of policy implementation can be maintained.

Review

11.7 The Waste Local Plan provides policies covering the period to 2006. It appears desirable that a further review of the Plan should be completed before the end of 2006, in order to maintain a continuous statutory framework for detailed waste planning in the area of Berkshire. That will, however, be a matter for the local authorities to decide, having regard to the prevailing circumstances at the time. However, the work in producing the Waste Management Plan and this Plan has demonstrated how quickly matters related to the environment, and especially those concerning waste, are changing. An earlier review of all or part of the Plan will therefore be carried out if necessary in the light of any material changes in the national or regional policy background, any major changes arising out of review of the Waste Management Plan, or of any other major changes of circumstance.

Environmental Appraisal of Chapter 11

11.8 The conclusions of the Environmental Appraisal in respect of 'Implementation, Monitoring and Review' may be summarised as follows:

11.9 The monitoring of the Plan in environmental terms is essential to providing a sound environmental base for the review of the Plan. It will provide a check to ensure the environmental objectives of the Plan are achieved and that the predicted outcomes and conclusions of the Environmental Appraisal are robust.

APPENDIX 1: GLOSSARY OF TERMS

1 **Anaerobic Digestion** is a waste treatment process which means sorting waste into recyclables and organic material. The organic fraction is then digested in an enclosed tank in the absence of oxygen. The products are methane and a digestate which may be suitable for soil improvement. The technology can be applied to suitable household, industrial and commercial wastes (including garden waste from householders and parks waste from local authorities).

2 **Berkshire Structure Plan:** the latest strategic planning document covering the county area. It was prepared by the former County Council, and was formally adopted in November 1995. Some Alterations to the Plan were adopted in August 1997.

3 **Civic Amenity Waste** is a sub-group of Household Waste, delivered by the public direct to sites provided by the Waste Disposal Authority. It consists generally of bulky items such as beds, cookers and garden waste and other household waste which would otherwise have been collected by the Waste Collection Authority.

4 **Civic Amenity Site (CAS)** is a site provided by the relevant local authorities for receipt of the above waste. Recycling facilities are also provided. Details of CASs in the county area are given in Appendix 4.

5 **Clinical Waste** is generally a sub-group of Industrial Waste and is largely from medical or similar practices but may be from any domestic, commercial or industrial premises. It is human or animal tissue, fluids, medicines or equipment which, unless rendered safe, may prove hazardous or infectious to persons coming into contact with it.

6 **Co-disposal** means the disposal of liquid wastes and solid wastes and some chemical solid wastes in engineered landfill sites.

7 **Commercial Waste** is waste from trade, business, leisure and entertainment premises. It includes waste from shops, offices, air and seaports, bus and rail stations, clubs, societies, courts, government departments, local authorities, markets and fairs.

8 **Composting** is a waste treatment process which involves sorting out and conditioning the organic fraction of waste and subjecting it to the natural action of micro-organisms. The product is a compost-like soil conditioner. The term refers to mixed household waste (including garden waste from householders and park waste from local authorities) and to industrial and commercial wastes. Composting can also be undertaken with garden/park waste only. In this case it is referred to as 'green waste composting'

9 **Controlled Waste** is waste described as such in the Control of Pollution Act 1974 and the Environmental Protection Act 1990 and includes Household, Commercial and Industrial wastes.

10 **Development** The carrying out of building, engineering or mining operations in, over or under land or a making of a material change in the use of any buildings or other land. *(Definition from the Town & Country Planning Act 1990)*

11 **Difficult Waste** is a term to describe a Controlled Waste which due to its composition requires special attention or techniques to avoid problems upon disposal or afterwards. It may be produced in household, industrial or commercial premises.

12 **Eco-labelling** is an EC initiative to identify the best environmental performers in each group of products such that consumers can take account of environmental factors. (In the future, purchasers will be able to gauge the environmental impact of the product they intend to buy.)

13 **Engineered Landfill** is landfill where the bottom, sides and top of the site are made impermeable using natural materials or man made liners. See Appendix 3.

14 **Green Waste Composting**: see Composting

15 **Household Waste** is waste generally from a place of residence or from a public hall, place of worship or premises of a charitable organisation. It also includes waste arising from local authority efforts to keep roads and other public areas clean and free from litter.

16 **Industrial Reprocessing** is a waste treatment process which involves sorting waste into a number of fractions. The treatments involved can vary but could include composting, anaerobic digestion, waste derived fuel and the production of a variety of products from recycled materials.

17 **Industrial Waste** is waste from a factory or industry. It includes premises for the maintenance of vehicles, vessels and aircraft, workshops (trade or otherwise), laboratories, construction and demolition sites, excavation and dredging, poisonous or noxious wastes from certain processes, animal breeding and boarding etc. and scrap metal. Other sources include imported waste from outside the UK, sewage waste which has been taken from sewage works but not deposited for agricultural purposes and most clinical waste.

18 **Inert Waste** is waste composed of non polluting material (non decomposing or rotting) generally from Industrial and Commercial Waste, and some dredging wastes. It largely originates from demolition and construction works.

19 **Integrated Pollution Control** is an approach to pollution control (and prevention) which considers the effects of a process upon the environment as a whole (air, water and land).

20 **Landfill Gas** is a gas generated at landfill sites by the decomposition of putrescible waste. It is a mixture of carbon dioxide, methane and a number of other constituents.

21 **Leachate** is a liquid generated at landfill sites by the solution in water (or other liquids) of chemical compounds which are present in the waste and/or arise through decomposition.

22 **Life Cycle Analysis** is a technique intended to quantify the total environmental impact of a product during its lifetime (production, distribution, use and recycling, treatment or disposal). Considerations should include energy and natural resource implications and a judgement of things like noise and pollution.

23 **Minerals Planning Guidance** is Government advice to the minerals planning authorities and minerals industry published in Mineral Planning Guidance Notes (MPGs).

24 **Mineral Voids** are the space left at sites after minerals have been excavated. In Berkshire, such voids are often used for the disposal of wastes.

25 **Planning Policy Guidance** is Government advice for planning authorities, developers and other interested bodies on specific policy matters. These are published as Planning Policy Guidance Notes (PPGs).

26 **Polluting Waste** is waste which has the potential to pollute ground or surface water. Polluting waste can be found in all waste types and also in treatment rejects and residues.

27 **Preferred Areas** is the term used in the Deposit Draft Waste Local Plan to describe areas or sites identified as being suitable in principle for waste management facilities to meet the needs of the new waste strategy for Berkshire. Appendix 7 lists the Preferred Areas detailed in the Deposit Draft.

28 **Putrescible Waste** is waste largely composed of material which, due to decomposition or rotting, is potentially polluting. This includes Household (and most Civic Amenity Waste) together with parts of Commercial and Industrial Waste.

29 **Recycling Credits** are a financial measure implemented by the Government to encourage the recycling of household waste. The Waste Disposal Authority is obliged to pay Waste Collection Authorities (and others) to separate for recycling household waste which would otherwise go for disposal.

30 **Regional Planning Guidance** sets out Government's planning guidance for the South East Region. It is intended to help shape the region's environment and guide its development. This is published in the Regional Planning Guidance document RPG 9.

31 **Rejects** are wastes which are not susceptible to a particular method of treatment.

32 **Replacement Minerals Local Plan**: a statutory local plan setting out minerals policies for the whole of the county area of Berkshire. It comprises a main document adopted by the former County Council in November 1995, and a set of Alterations covering the Colnbrook/ Poyle area adopted in November 1997.

33 **Residues** are wastes which are the result of a particular form of treatment.

34 **Risk assessment** is a comprehensive exercise to demonstrate the impacts of a particular development on the health of surrounding populations, taking account of site-specific and local factors. The details required of such an assessment in the case of a waste-to-energy plant are set out in the Seventh Report of the Royal Commission on Environmental Pollution ('Incineration of Waste'), and have since been endorsed by the government as being matters which should be addressed in an Environmental Statement accompanying relevant planning applications (see para 10.29). The exercise should include an assessment by Her Majesty's Inspectorate of Pollution of the plant itself, so that the consequences of any malfunction can be taken into account, as well as the consequences of the plant operating under normal conditions.

35 **SERPLAN** (the London and South East Regional Planning Conference) is a non-executive body formed by the County and District Councils in the South East Region and the London Boroughs. It co-ordinates the formulation of planning policies on issues which have a Region-wide impact. SERPLAN has drawn up waste descriptions which include types A, B, C and D.
A = clean uncontaminated earth spoil/demolition waste
B = slowly degrading waste
C = degradable and putrescible waste
D = difficult waste

36 **Special Waste** is a sub-group of Difficult Waste and contains defined quantities of certain Controlled Wastes deemed to be injurious to human health. Special Waste may not be transported without prior notification to the receiving Waste Regulation Authority.

37 **Supplementary Credit Approvals** is a financial measure implemented by the Government to encourage the recycling of household waste. If the Department of Environment approves of an innovative or 'trial' project, it may permit the local authority involved to increase expenditure without being capped.

38 **Trade Waste** is waste which is Commercial or Industrial in origin. It is either collected by a District Council or taken direct to a Civic Amenity Site by a trader and then becomes the responsibility of the Waste Disposal Authority for treatment and/or disposal.

39 **Voids:** see Mineral Voids

40 **Wasteline** is a service provided by the some of the unitary authorities in the county area giving advice and information to the public, schools, businesses and other bodies regarding waste minimisation, re-use and recycling.

41 **Waste Derived Fuel** (WDF) is a waste treatment process involving the manufacture of fuel from waste for subsequent combustion to generate energy (see waste to energy below).

42 **Waste Management Papers** are a series of papers on waste management issues published by the Department of Environment. There are currently 28, dealing with issues as diverse as "A Review of Options" and "Cadmium Bearing Wastes".

43 **Waste Minimisation** is an activity to avoid the production of waste. It requires individuals and companies to examine their current practices or production techniques to see whether changes may be introduced which will reduce the amount of waste produced. It is applicable to both the public and business.

44 **Waste to Energy (WTE)** is a waste treatment process involving the incineration of waste. The resulting heat is used to make steam, from this electricity is generated and fed into the National Grid. It is also possible to provide district heating. Significant emission control equipment would be provided at such a plant to minimise pollution. Also sometimes known as Energy from Waste (EfW).

For full definitions or sources of the following terms, see:

3 Environmental Protection Act 1990, S 51

5 Collection and Disposal Waste Regulations 1992

7, 9, 15 & 17 Control of Pollution Act 1974, S 30
Collection and Disposal Waste Regulations 1992
Environmental Protection Act 1990, S 75

10 Town and Country Planning Act 1990, S 55

29 Environmental Protection (Waste Recycling Payment) (Amendment) Regulations 1994

36 Control of Pollution (Special Waste) Regulations 1980
Transfrontier Shipment of Waste Regulations 1994

APPENDIX 2: ALTERNATIVES TO LANDFILL

As part of the assessment of alternatives to landfill for the treatment and/or disposal referred to in Chapter 8, the following technologies were investigated in relation to household waste:

i) **Anaerobic Digestion** - this is the breakdown of the organic fraction of waste by bacteria in the absence of oxygen. The waste can be separately collected or sorted and conditioned for treatment. The products include methane (which can be burned to generate energy) and a digestate which may be suitable for spreading on land. Anaerobic digestion can be applied to some industrial and commercial wastes.

ii) **Composting** - this was considered in the context of mixed household wastes. The organic fraction of the wastes is separated out and conditioned ready for composting. It is then subjected to the natural process of decomposition by micro-organisms. The resulting product is a compost-like soil conditioner. The process may be carried out in the open or in an enclosed building. Enclosure enables controls on conditions that affect the speed of the operation and on the nuisances which can arise. Recyclable materials can also be removed from the wastes at the separation stage. Composting is also applicable to some industrial and commercial wastes.

iii) **Industrial Reprocessing** - this involves the receipt of separated or mixed waste. This is mechanically sorted into a number of 'products'. These could be recyclables such as plastics, glass, metal, paper, etc. Other fractions of the waste could be subjected to composting, anaerobic digestion or be processed into waste derived fuel. Such a plant could carry out the reprocessing of the recycled material into saleable products.

iv) **Neutralysis** - this is similar to waste to energy above but with the major difference that waste and clay are mixed together and then burned to create an aggregate which could be used by the construction industry. Energy (and heat) are generated and metals could be removed from the waste. The ash from emission control measures would be disposed of to engineered landfill.

v) **Recycling** - the effectiveness of a variety of recycling techniques was gauged.

vi) **Waste Derived Fuel** - this involves the separation of waste in order to treat its burnable fraction into floc (non-densified) and densified fuel. The floc material is simply shredded waste which can be blown into a grate for burning (a fuel plant and burner need to be located together). Densified fuel is compressed at high pressure into pellets which can be stored and transported to distant burners. The fuel can be used as a coal substitute for energy generation. Depending upon the degree of treatment, a variety of recyclables can be removed.

vii) **Waste to Energy** - this involves the incineration of wastes. In order to maximise the tonnage treated in this way, some of the wastes may need crushing or shredding. The heat generated by the incineration is used to generate electricity (and can be used for heating domestic or business premises). Metals are removed from the ash residue for recycling. Currently, all the ash residue would probably go to engineered landfill. Ash removed by the emission control measures (removing dust and a variety of potential pollutants) is considered polluting. It may be possible in the future to recycle some of the ash for construction purposes.

The above alternatives to landfill were assessed in terms of meeting the needs of household waste in Berkshire and their application was gauged individually and in combination. Their application to other waste types was also considered.

The assessment was carried out in terms of the following criteria:

- Technical - will the option work? Is it reliable? Does it give a long term solution? How flexible is the method to change? Will pollution controls work?

- Environmental - does the method pollute (locally or globally)? How much traffic is created? How 'green' is the method? Can operational standards be enforced?

- Planning - does the option fit current planning policies? Is it visually intrusive? Is nuisance caused to people nearby? Is this a contentious option?

- Finance - how much does it cost? Will the cost increase above inflation? Does it affect existing contracts? Can Berkshire afford it?

APPENDIX 3: GUIDANCE NOTES FOR WASTE MANAGEMENT FACILITIES IN BERKSHIRE

The following Guidance Notes were drawn up by the former Berkshire County Council

1 LOCAL RECYCLING SITES

(i) By preference, locate the local recycling site on the site of or near to some other public facility which already attracts users (and so traffic). Suitable sites are shopping centres, superstores, supermarkets, offices, industrial sites, civic amenity sites, sports centres, schools, village halls and pubs.

(ii) Not immediately adjacent to residential properties, a minimum distance of approximately 50 metres is generally recommended.

(iii) Good access with any queuing while waiting to use facilities taking place off main roads. Access is required for users and servicing vehicles (up to front-end loader size) and appropriate highway standards for sight lines etc should be adopted.

(iv) Where appropriate, sites should be large enough to be expanded with additional containers. Sites should also be large enough to be landscaped if this is considered necessary.

(v) Signing of sites should be from the nearest point on the highway with the standard legend 'Recycling Site' (black letters, white background, and blue border). The recycling symbol may be used if authorised by the Department of Transport. On-site facilities should be signed.

(vi) All sites need to be safe for users and, where appropriate, drained, fenced and gated.

(vii) Sites to be on public property by preference and, whether on public or private property, a short agreement detailing the principles of site provision and operation should be made with the owners.

(viii) Sites to be operated to high standards, agreed by all the servicing contractors.

(ix) Sites on public property to be maintained in good order and kept clean and tidy by the District Councils (or via arrangements made by them). Interested local bodies to be involved wherever appropriate.

(x) Neighbouring Councils to agree locations near boundaries in order to avoid duplication of provision.

2 WASTE TO ENERGY

(i) Any waste to energy plant constructed in Berkshire for municipal waste will comply with the requirements of Municipal Waste Incineration Directive 89/369/EEC and recently revised guidance ion the Environment Agency's IPC Guidance Note S2 5.01 'Waste Incineration'. ("Municipal" solid waste includes household, civic amenity and trade wastes, together with industrial and commercial wastes of a similar nature to household waste.)

(ii) A waste to energy plant provided in Berkshire for the treatment of municipal waste should have a minimum capacity of approximately 200,000 tonnes/annum, but plants as small as 100,000 tonnes/annum will be considered.

(iii) Current (1998) UK emission standards are shown in the table below.

Substance	**UK STANDARDS** (see Notes 1 and 2)
Carbon monoxide [CO], hourly average value	50
Dust	25
Sulphur dioxide [SO_2]	50
Nitrogen oxides [NO_x]	250-300
Hydrogen chloride [HCl]	30
Hydrogen fluoride [HF]	2
Carbon / Hydrocarbons [C/C_xH_y]	10
Inorganic compounds	
Arsenic, chromium, copper, lead, manganese, nickel and tin, taken together	1.0
Cadmium	0.1
Mercury	0.1
Dioxins (total Toxic Equivalent)	0.000001 [See notes 1 & 3]

NOTES

1 All volumes are in milligrams of pollutant in each cubic metre of exhaust gas from the incinerator, as measured at 'normal' air temperature (273°K, or 0°C), and pressure (1 atmosphere), and 11% oxygen. For dioxins, the figure given is more usually referred to as "1 nanogram per cubic metre". [1 nanogram is one one-thousand-millionth of a gram, or 0.000000001 gram - i.e. 0.000001 milligram].

2 The UK standards relate to plants with a throughput of 1 tonne/hour or more. Waste to energy plants to meet Berkshire's needs would be likely to operate well in excess of this figure.

3 The EA Guidance Note says that the emission of dioxins should be reduced as far as possible by progressive techniques, with the aim of achieving a guide value of 0.1 nanogram per cubic metre.

3 LANDFILL SITES

Control of the lining of landfill sites and of leachate management is now the responsibility of the Environment Agency in its role as Waste Regulation Authority. Further information on these matters can be obtained from the Agency.

APPENDIX 4 - SITE CHARACTERISTICS OF WASTE MANAGEMENT FACILITIES

A FACILITIES REQUIRED BY THE WASTE MANAGEMENT PLAN STRATEGY

FACILITY	APPROX NUMBER REQUIRED AND CAPACITIES	SPATIAL DISTRIBUTION
Waste treatment plant (i) (composting, industrial reprocessing, anaerobic digestion)	3 to 5 (capacity 80-150 Ktpa each, total capacity c 400 Ktpa).	Central/east Berkshire for larger plants; close to individual population centres for smaller plants
(ii) farm and stable waste	1	West Berkshire
Green waste composting	3 to 6 (capacity 5-10 Ktpa each, total capacity c 30 Ktpa)	Close to centres of population
Waste derived fuel plant	1 to 2	West (to serve possible WTE providing heat and power to Colthrop Board Mill). East (to provide fuel for Slough Power Station)
Waste to Energy plant	1 or 2 (capacity 200-400 Ktpa each, total capacity 310 Ktpa excluding any imported waste), or more if smaller plants prove feasible; plus existing capacity at Slough Power Station	Central/east Berkshire for larger plant(s)
Engineered landfill	2 to 3	Convenient location to population centres and treatment plants: west, central, east
Waste transfer station (household waste/other waste) [for transfer of waste to central recycling/treat-ment/ disposal facilities or for temporary out County disposal (by road)]	2 to 3	Close to main centres of population
Road to rail waste transfer station (household and other wastes) for out County disposal	2 to 3 (capacity c 100 Ktpa each, total capacity c 250 Ktpa)	Close to major centres of population
Major recycling - non-inert (large central facility for collection, sorting etc of household and industrial/ commercial waste)	3 to 5 (capacity 40-70 Ktpa each, total capacity c 200 Ktpa)	Close to main centres of population

FACILITY	APPROX NUMBER REQUIRED AND CAPACITIES	SPATIAL DISTRIBUTION
Recycling and transfer - non-inert waste (smaller local facilities, or facilities dealing with particular waste streams)	up to 15 (input c 10-20 Ktpa each, total capacity up to 310 Ktpa, or less if some pre-sorting takes place)	Distributed across the County close to centres of population
Recycling and transfer - inert waste (facilities dealing with inert waste such as demolition and construction industry waste)	4 to 6 (throughput c 100-150 Ktpa each, total throughput c 650 Ktpa)	Distributed across the County close to centres of population
Special and difficult waste		
(i) Clinical waste incineration capability (as part of WTE)	1	See waste to energy
(ii) Landfill site licensed to dispose of Special and difficult wastes	2 to 4	See engineered landfill
(iii) Industrial/commercial liquid waste treatment	2	Existing plant in west Berkshire (Newbury) plus additional plant in east Berkshire
(iv) Solvent recovery plant	1	Existing plant in west Berkshire (Newbury)
(v) Special and difficult waste transfer/recycling	3 to 5	Distributed close to major centres of population
Metal recycling	3 to 8 (throughput 20-50 Ktpa each, total throughput 150 Ktpa)	Close to centres of population
Civic amenity site	6 (as existing)	As existing but scope for enhancement in association with new waste treatment plants etc

Note: The number of sites developed will depend upon the following:

i) technologies adopted (i.e. waste to energy is contingent upon the performance of other treatment technologies);
ii) annual throughput of waste at each site; and
iii) the number of facilites which can be located together on one site.

The total capacity estimates indicated in the second column derive from the estimates of waste requiring treatment as set out in Chapter 3 of the Plan.
Ktpa = '000 tonnes per year.

B WASTE MANAGEMENT FACILITIES SITE PLANNING REQUIREMENTS

FACILITY	SITE REQUIREMENTS	TRAFFIC (average daily movements)
Waste treatment plant (i) (composting, industrial reprocessing, anaerobic digestion) (ii) farm and stable waste	Up to 160,000 tonnes/annum waste throughput. 2 to 4ha; large industrial building(s) up to 10,000m˝, building height 20-25m,; open areas for compost etc maturation, parking, turning, storage of products etc	150 HGV
Green waste composting	2 to 4ha. Concrete slab with drainage; small building (20 x 10m, 7m high) containing shredding/bagging equipment; linear heaps of compost 3m high turned regularly by machine. Could be carried out in larger building on smaller overall site	12 HGV, 6 small vehicle movements
Waste derived fuel plant	1.5ha. Large industrial building 3,000 to 10,000m˝; (building height 10-15m), parking, turning etc	150 HGV
Waste to Energy plant	200,000 tonnes/annum waste throughput, 3 ha plus; 400,000 tonnes/annum, 5ha; building footprint - 100 x 80m; building height 40 - 50m, stack height 100m	200,000 tonne/ annum - 200 HGV 400,000 tonne/ annum - 400 HGV (plus other small vehicle traffic)
Engineered landfill	Mineral void of minimum waste capacity of 0.5 million m^3 outside floodplain; suitable geology; no groundwater source nearby	Up to 300 HGV dependent upon size/ input (plus mineral lorries where fill site is also an extraction site)
Waste transfer station (household waste/other waste) [For transfer of waste to central recycling/ treatment/ disposal facilities or for temporary out County disposal (by road)]	Can be of varying size up to 150,000 tonnes/annum waste throughput per year; circa 1ha. Parking, turning etc. Industrial style building (50 x 30 x 10m high)	Up to 200 HGV (dependent upon size)
Road to rail waste transfer station (household and other wastes) for out County disposal	(a) 'Basic' (load/unload sealed waste containers) requires a long thin site 400m long by 20 to 30m wide adjacent to railway. No large buildings, forklift truck or gantry for loading containers	50 HGV
	(b) As per (a) but with waste transfer station and material recycling facility in industrial style building	100 to 150 HGV

FACILITY	SITE REQUIREMENTS	TRAFFIC (average daily movements)
Major recycling - non-inert (Large central facility for collection, sorting etc of household and industrial/ commercial waste)	Can be of varying size up to 100,000 tonnes/annum waste throughout; circa 2ha. Parking, turning, storage of sorted waste. Large industrial style building (60 x 50 x 10m high)	Up to 200 HGV (dependent upon size)
Recycling and transfer - non-inert waste (Smaller local facilities, or facilities dealing with particular waste streams)	0.5 to 2ha, hardstanding, with stockpiles of material in bays or medium sized industrial building (up to 1,500m"; 10m high)	40 to 80 HGV
Recycling and transfer - inert waste (facilities dealing with inert waste such as demolition and construction industry waste)	1 to 3ha hardstanding, with stockpiles of concrete, road planings and soils; crushing, screening and grading machinery	50 to 100 HGV
Special and difficult waste (i) Clinical waste incineration capability (as part of WTE)	See waste to energy	
(ii) Landfill site licensed to dispose of special and difficult wastes	See engineered landfill	
(iii) Industrial/commercial liqid waste treatment	0.3ha plus; hardstanding with receptor tank and several settlement tanks (6-10m high); site office; parking and turning	Up to 50 HGV
(iv) Solvent recovery plant	0.5 to 1ha; industrial building, 200-500m"; hardstanding areas for storage, parking, turning	Up to 40 HGV
(v) Special and difficult waste transfer/ recycling	Less than 0.1ha to 0.5ha; building for sealed container(s); parking, turning, loading and unloading areas. May comprise ancillary area within larger waste management site	Up to 20 HGV, 20 small vehicles
Metal recovery	Less than 0.1ha to 2ha, hardstanding, stockpiles/storage bays of sorted and unsorted vehicles and other waste metals. Industrial style buildings	Up to 40 HGV, 25 small vehicles
Civic amenity site	1ha. 50% hardstanding for parking, turning, recycling bins. Industrial type building (approximately 20 x 20 x 7m high)	6 HGV, 200 cars/ vans (much more in peak periods, Bank Holidays, etc)

Note

Landfill - inert waste: No preferred areas are identified for this facility in the Plan. The sites listed at Appendix 8 (comprising existing planning permissions, S106 sites and Replacement Minerals Local Plan Preferred Areas) are sufficient to meet the need for inert waste landfill.

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APPENDIX 5: BERKSHIRE'S WASTE MANAGEMENT FACILITIES AT JULY 1998

Sites detailed in the following Tables have both a valid Planning Permission (or equivalent such as a Certificate of Lawful Use) and a valid Waste Management Licence (or equivalent). For key to 'Status', please see page 123.

LANDFILL SITES	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Barton Court I Kintbury	P	SU 385 682	Inert (A)	4,999
Barton Court II Kintbury	N	SU 385 682	Inert (A)	74,500
Welford Gravel Pit Easton	S	SU 413 720	Inert (A)	—
Enborne Gate Newbury	S	SU 458 663	Inert (A)	—
Hermitage Farm Oare	N	SU 500 745	Household, Commercial, Industrial & selected Difficult (A, B, C, D)	100,000
Limberlost Farm Crookham Common	R	SU 533 648	Inert (A)	—
Colthrop Board Mill Colthrop	P	SU 540 662	Industrial (B)	24,999
Bath Road Midgham	N	SU 560 665	Inert (A)	100,000
Larkwhistle Farm Brimpton	M	SU 571 627	Inert (A)	200,000
Beenham Stage IV Beenham	N	SU 600 680	Industrial & Commercial (A,B,C)	70,000
Barlows Plantation Aldermaston	P	SU 605 626	Inert (A)	74,999
Marley Tile Beenham	S	SU 605 680	Household Commercial, Industrial & selected Difficult (A, B, C, D)	—
Decoy Plantation Aldermaston	N	SU 612 635	Inert (A)	74,999
Poors Allotment Ufton Nervet	N	SU 637 667	Inert (A)	74,999
Herons Nest I, Theale	N	SU 665 668	Inert (A)	24,999
Herons Nest II, Theale	N	SU 665 668	Inert (A)	74,999

LANDFILL SITES	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Field Farm II, Theale	P	SU 675 705	Commercial, Industrial & selected Difficult (A, B, C, D)	74,999
Field Farm IIB, Theale	P	SU 675 705	Commercial, Industrial & selected Difficult (A, B, C, D)	74,999
Field Farm III Theale	P	SU 672 703	Inert (A)	74,999
Knights Farm Burghfield	S	SU 682 698	Inert (A)	—
Reading Quarry Pingewood	M	SU 686 697	Inert (A)	74,000
Smallmead Farm A Burghfield	N	SU 697 704	Commercial, Household & Industrial (A, B, C)	>75,000
Smallmead Farm Burghfield	S	SU 702 709	Household, Commercial, Industrial & selected Difficult (A, B, C, D)	—
Reading Football Club Smallmead	S	SU 710 700	Previously deposited household waste	—
Whistley Court/Lea Farms Hurst	N	SU 790 733	Commercial, Industrial & Selected Difficult (A, B, C, D)	>150,000
Whistley Mill III, Hurst	S	SU 790 748	Inert (A)	—
Whistley Mill IV, Hurst	N	SU 790 748	Inert (A)	74,999
Strande Castle Maidenhead	P	SU 885 839	Inert (A)	4,999
Sheephouse Farm, Maidenhead	P	SU 894 833	Inert (A)	1,025t per day
London Road, Bracknell	R	SU 895 693	Household, Civic Amenity, Commercial & selected Difficult (A, B, C, D)	—
Stroud Farm Bray	S	SU 906 776	Household, Civic Amenity, Commercial & selected Difficult (A, B, C, D)	—

LANDFILL SITES	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Stroud Farm (extension) Bray	S	SU 906 776	Household, Civic Amenity, Commercial & selected Difficult (A, B, C, D)	—
Shorts of Ascot St. Georges Lane, Ascot	N	SU 928 685	Inert (A)	24,500
Manor Farm Slough	S	SU 935 791	On-site contaminated soil only	—
Kennedy Park Slough	S	SU 953 823	Inert, Industrial (A, B)	—
Staines Road Wraysbury	S	TQ 012 733	Inert (A)	—
Hythe End Road Wraysbury	P	TQ 013 726	Inert (A)	24,999
Sutton Lane Colnbrook	N	TQ 026 780	Inert, Commercial, Industrial, Civic Amenity & selected Difficult (A,B,C,D)	>75,000
Tanhouse Farm Colnbrook	S	TQ 035 773	Inert, Commercial, Industrial, Civic Amenity & selected Difficult (A,B,C,D)	—
Longford II Poyle	N	TQ 037 763	Inert, Industrial & selected Difficult (A,B,C,D)	>75,000
Egglesey Farm Colnbrook	S	TQ 040 770	Inert, Industrial & selected Diffcult (A,B,D)	—

TRANSFER STATIONS	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Orcol Fuels Ltd Lambourn Woodlands	N	SU 322 759	Hydrocarbon oils	3,500
Boulton Bins NEWBURY	N	SU 479 651	Household Commercial & Industrial	—
John Stacey & Sons Ltd Aldermaston	P	SU 609 626	Asbestos waste	—
John Stacey & Sons Ltd Aldermaston	N	SU 609 627	Commercial & Industrial	—
Darwin Close Reading	N	SU 712 703	Household, Commercial & Industrial	32,000
Lanstar Arborfield	P	SU 786 665	Waste oil	13,000
Artel Wokingham	N	SU 803 705	Industrial Commercial (A,B)	4,999
Zeneca Jealotts Hill	N	SU 876 733	Difficult & Special - own use only	2,499
J Tanner	N	TQ 019 761	Industrial (A,B)	4,999

TREATMENT PLANTS	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Southern Recovery Services Ltd Membury Aerodrome (Solvent recovery)	N / H	SU 314 756	Halogenated & non-halogenated solvents	—
Cleansing Services Group Ltd, Newbury (Oil separation & recovery plant)	N	SU 478 651	Oil & water mixtures, weak acid/alkali wastes	74,999
Computer Salvage Newbury	N	SU 479 670	Electronic Equipment	4,000
AWE Aldermaston	N	SU 595 635	Trade effluent special waste	500,000
John Stacey & Sons Ltd Silchester Road Aldermaston (Inert waste recycling)	N	SU 608 627	Inert (A)	24,999
The Hangar, Theale (Waste Sorting)	N	SU 648 699	Commercial & Industrial	38,000
Herons Nest Theale	N	SU 664 669	Commercial & Industrial (A,B,C)	4,900

TREATMENT PLANTS	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Clembins Pingewood	N	SU 696 702	Industrial & Commercial (A,B,C)	24,900
Smallmead Farm Yard, Reading (Treatment)	S	SU 702 700	Commercial & Industrial	—
Island Road, Reading (Inert waste recycling)	N	SU 710 703	Inert (A)	300,000
Jealotts Hill, Bracknell (Incinerator for own waste)	N / D	SU 876 733	Selected Difficult	< 1 tonne per hour
Kimbers Lane, Maidenhead (Soil screening & improvement)	N	SU 884 793	Soils and spent mushroom compost	4,800
Onyx Maidenhead	N	SU 892 805	Commercial & Industrial (B,C)	20,000
Planners Farm, Winkfield (Composting Plant)	N	SU 895 720	Green waste from parks and verges	4,999
St Georges Lane, Ascot (Waste Sorting)	N	SU 928 685	Commercial & Industrial	4,900
Slough Estates Power Station, Slough (Combustion plant)	N / H	SU 955 815	Waste derived fuel pellets	—
UK Waste Slough	N	SU 956 816	Commercial & Industrial (B,C)	74,999
Belmont Works Slough	N	SU 975 804	Commercial & Industrial (A,B)	4,999
Langley Tyre Co Ltd Slough (Tyre Sorting)	N	TQ 013 798	Tyres	—
Wiggins Transport Ltd. Poyle (concrete crushing)	N	TQ 028 763	Inert (A)	85,000
Lanz Farms Ltd. Poyle (inert waste recycling)	N	TQ 036 766	Inert (A) & some non-inert skip waste (B)	70,000
S Grundon (Waste) Ltd. Colnbrook (Waste sorting & baling)	N	TQ 038 773	Household (inc. Civic Amenity), Commercial & Industrial, some Difficult (B,C,D)	>75,000
S Grundon (Waste) Ltd. Colnbrook (Incinerator)	N / H	TQ 038 773	Clinical waste	1 tonne/hour

SCRAP METAL YARDS	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Elliott Metals, Reading	N	SU 702 738	Scrap metal	4,999
EGW Carter Reading	P	SU 704 736	Scrap metal	4,999
Berkshire Car Spares Arborfield	N	SU 758 658	Scrap vehicles	4,999
Brierly Autos Twyford	S	SU 791 759	Scrap vehicles	—
Blackbushe Metals Wokingham	N	SU 798 706	Scrap metal	24,999
Bennet Commercials Wokingham	N	SU 835 679	Scrap vehicles	4,999
JP Spares Wokingham	N	SU 836 687	Scrap vehicles	4,999
DD Horwood Maidenhead	N	SU 895 806	Scrap vehicles	4,999
Webber Slough	N	SU 959 794	Scrap vehicles	4,999
Bruce Bishop Slough	N	SU 964 805	Scrap metal	74,999
W N Thomas & Sons Slough	N	SU 975 803	Scrap metal	20,000

CIVIC AMENITY SITES	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY (tpa)
Pinchington Lane CAS off Sandleford By-Pass Newbury	N	SU 478 650	Household, selected Commercial & Industrial	15,000
Paices Hill CAS off A340, Aldermaston	N	SU 588 633	Household, selected Commercial & Industrial	15,000
Smallmead CAS Island Road, Reading	N	SU 705 708	Household, selected Commercial and Industrial	—
Smallmead CAS Bennett Road, Reading	S	SU 710 701	Household, selected Commercial and Industrial	—
Longshot Lane CAS, Western Industrial Estate, Bracknell	N	SU 854 690	Household, selected Commercial and Industrial	125,000
Braywick CAS, Stafferton Way, Maidenhead	N	SU 892 805	Household, selected Commercial and Industrial	15,000
Chalvey CAS, White Hart Road, Slough	N	SU 966 792	Household, selected Commercial and Industrial	—

Chalvey CAS, White Hart Road, Slough	N	SU 966 792	Household, selected Commercial and Industrial	125,000

STORAGE SITES	STATUS	LOCATION	ACCEPTABLE WASTES	MAX. CAPACITY
ICI Paints plc, Slough	N	SU 986 803	Difficult & Special	—

KEY TO STATUS OF SITES AND FACILITIES

M not yet commenced
N operational
P temporarily closed (or intermittent operation)
R under restoration
S finished, but licence not returned
H Environment Agency authorisation
D District Authorisation + Licensed Storage and/or transfer

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APPENDIX 6: GEOLOGY AND HYDROGEOLOGY OF BERKSHIRE

The geology of the county has a major influence on the suitability and release of sites for landfilling, currently through the voids created by mineral extraction. Plan 1 shows the solid geology of the county.

Chalk occupies the high ground in the west of the county and around Maidenhead and contains numerous old quarries of very limited size. Only the current working quarry at Hindhay Chalk Pit, Maidenhead, supplying agricultural lime, is of any real magnitude (potential volume 800,000 m^3).

A series of sands, silts and clays (Reading, Bagshot, Bracklesham and Barton Beds and London Clay) form the lower ground in central and eastern Berkshire. Pits dug for soft sand and clays have mostly been restored. The present workings in the Hermitage area (for building sand) and at Knowl Hill (clay for tile making) are the only voids in these deposits currently available.

Gravel deposits occur both as large spreads in the river valleys (Thames, Kennet, Loddon and Blackwater) and capping to higher ground, covering some 30% of the total area of the county. Large scale extraction of the gravel over the last 40 years has created a large number of voids, many of which remain as areas of open water.

The chalk is the major water resource within the county, with water movement controlled predominantly by well developed fissure systems. Gravels and sandy formations are generally of minor importance yielding only small local supplies. The only large scale abstractions in the gravels are close to the Thames in the east of the county.

Utilisation of the mineral extraction voids for waste disposal therefore requires the assessment of pollution risks and of the controls to be applied to ensure protection of these water resources.

Impending UK and EU legislation on waste management practices and the Environment Agency's groundwater protection policies will require waste disposal sites to be engineered for the containment of waste except where the waste can be demonstrated to be consistently composed of completely inert material.

However, each potential site will need to be considered on an individual basis, in terms of the above requirements and appropriate engineering standards applied as set out in the former County Council's adopted Guidance Notes for the Design of Landfill Sites, summarised in Appendix 3.

The area of chalk outcrop, covering some 50% of the county, is designated by the Environment Agency as a major aquifer resource protection zone. The disposal of putrescible/polluting waste in this area is considered technically acceptable only where a thick unsaturated zone is present, in areas remote from water resource interests. Further potential for infilling old workings within chalk areas is limited to a former lime quarry at Frilsham which, because of its valley situation, is likely to be used for inert wastes only.

The sands and clays in the central and eastern part of the county, not subject to Environment Agency water resource restrictions, can provide acceptable locations for the development of engineered landfills, often utilising in-situ clays.

Sand deposits have provided a dilute and attenuation capacity for landfill operations in the past but this mode of operation has become unacceptable from both groundwater and landfill gas control aspects. The existing landfill in soft sand at Hermitage is an engineered site operated on the full containment principle.

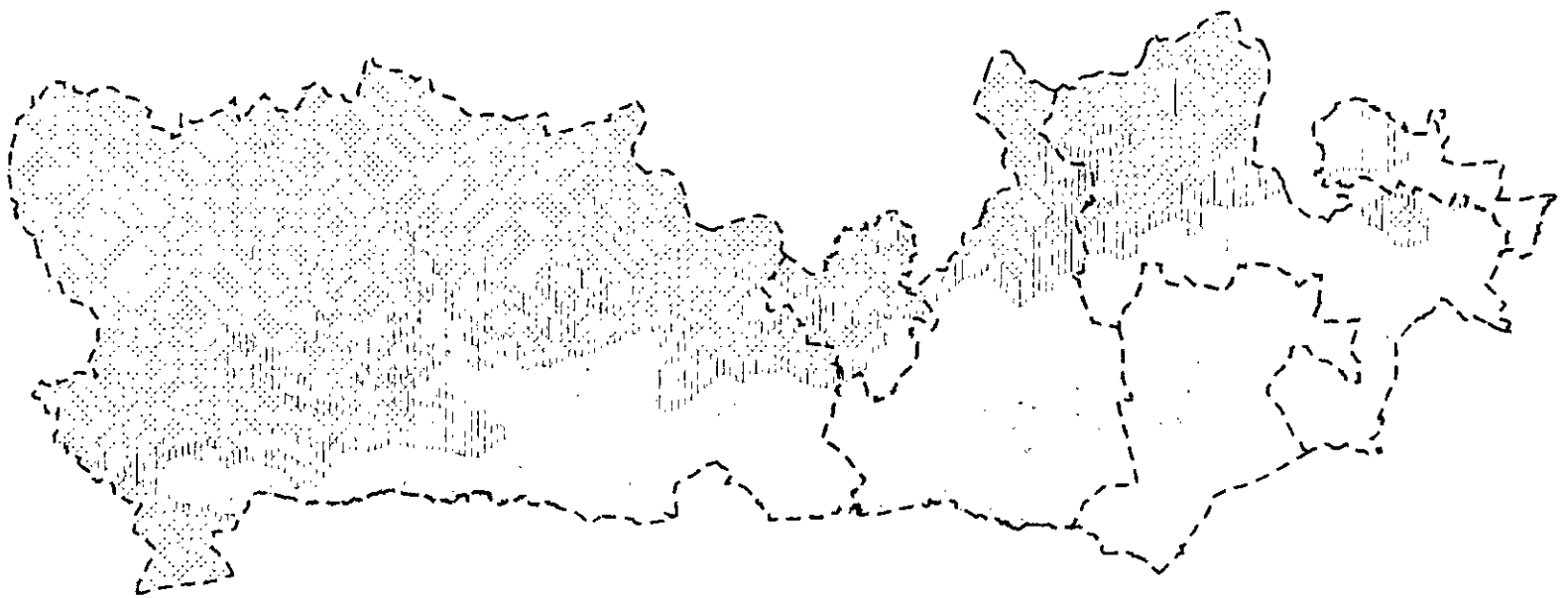
Extensive excavation of the gravel deposits has created and continue to create large voids which, although within groundwater protection zones, could involve placement of wastes below the water table. Certain of these may be technically acceptable if adequately engineered with liners, subject to detailed investigation.

All sites accepting putrescible/polluting wastes are fully engineered except for the nearly completed London Road Landfill at Bracknell which, although developed on the "dilute and attenuate" principle, has been modified by lining to restrict lateral gas migration.

Future landfilling will continue to rely heavily on voids in the gravels, with only limited resources available in the sands and clays.

This situation is likely to remain unchanged into the foreseeable future with increasingly elaborate systems of engineered containment involving lining and integrated collection and management of leachate and landfill gas.

SOLID GEOLOGY OF BERKSHIRE



Data source: British Geological Society

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APPENDIX 7: PREFERRED AREAS FOR WASTE MANAGEMENT USES

This Appendix includes for each of the preferred areas identified in Policy WLP11, a synopsis of the detailed planning requirements which must be satisfied before planning permission could be granted. Paragraphs 6.35 to 6.43 and Policy WLP11 give further guidance on the relationship of this Appendix to policies in the Plan.

It is stressed that the issues and requirements set out in this Appendix are not necessarily a comprehensive set of all the matters which need to be addressed in the preparation of a planning application for the site concerned. Each of the Preferred Areas in this Appendix has a **reference number** which locates the site on the Proposals Map. Each synopsis lists the **waste management uses** for which the site is potentially suitable. Where appropriate, further details of these potential uses are also given. Uses shown in italics would only be developed on the site as ancillary to the main proposed use. To assist in understanding the proposed sites and areas, Table 1 below lists potential uses by Preferred Areas and Table 2 lists the Preferred Areas by potential uses.

TABLE 1: POTENTIAL WASTE MANAGEMENT USES LISTED BY PREFERRED AREAS

Use	Preferred Area
Waste treatment plant	
(i) Industrial reprocessing, composting, anaerobic digestion	3, 4, 6, 11, 20, 22, 24
(ii) Farm and stable waste	1
Green Waste Composting	1, 3, 10, 24, 27
Waste derived fuel	4, 20, 21
Waste to energy	4, 11
Engineered landfill	11, 12, 18, 24, 25
Transfer station	4, 13, 22
Road-to-rail transfer	6, 8, 23
Major recycling - non-inert waste	3, 4, 6, 8, 11, 13, 20, 22
Recycling - non-inert waste	1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 13, 15, 16, 17, 20, 21, 23, 26, 27
Recycling - inert waste	1, 3, 4, 7, 10, 11, 14, 18, 26, 27
Difficult and Special waste	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 15, 19, 20, 22, 23
Metal recovery	1, 3, 4, 5, 6, 8, 10, 11, 12, 13, 15, 20, 22, 23
Civic Amenity Site	2, 11, 13, 15, 22

Appendix 7

TABLE 2: PREFERRED AREAS LISTED BY POTENTIAL WASTE MANAGEMENT USES

Preferred Area		Uses
1	Membury Airfield	WT, GR, RNI, RI, SP, ME
2	Pinchington Lane, Newbury	RNI, SP, CAS
3	Greenham Common	WT, GR, MR, RNI, RI, SP, ME
4	Colthrop	WT, WDF, WTE, TR, MR, RNI, RI, SP, ME
5	Knott Lane, Beenham	RNI, SP, ME
6	Padworth Sidings	WT, RTR, MR, RNI, SP, ME
7	Whitehouse Farm, Aldermaston	RNI, RI, SP
8	Blue Circle Depot, Theale	RTR, MR, SP, ME
9	The Hangar Sheffield Bottom	RNI
10	ARC plant site, Sheffield Bottom	GR, RNI, RI, ME
11	Smallmead	WT, WTE, LF, MR, RI, SP, ME, CAS
12	Star Works, Knowl Hill	LF, RNI, SP, ME
13	Longshot Lane, Bracknell	TR, MR, RNI, SP, ME, CAS
14	Hindhay Quarry, Pinkneys Green	RI
15	Braywick, Maidenhead	RNI, SP, ME, CAS
16	Timber Yard, Off A329 North Ascot	RNI
17	Plant Site, Monkey Island Lane, Bray	RNI
18	Manor Farm, Slough	LF, RI
19	Slough Sewage Works	SP
20	Slough Trading Estate	WT, WDF, MR, RNI, SP, ME
21	Fairlie Road, Slough	WDF, RNI
22	Chalvey WTS, Slough	WT, TR, MR, SP, ME, CAS
23	Slough Goods Yard	RT, RNI, SP, ME
24	Riding Court Farm, Datchet	WT, GR, LF
25	North of Horton	LF
26	Rosary Farm, Poyle	RNI, RI
27	Colnbrook Proposed Rail Depot Site	GR, RNI, RI

Abbreviations for potential waste management use referred to in Table 2

Waste Treatment	WT
Green waste composting	GR
Waste Derived Fuel	WDF
Waste to Energy	WTE
Engineered Landfill	LF
Waste Transfer	TR
Road to rail waste transfer station	RTR
Major Recycling	MR
Recycling non-inert waste	RNI
Recycling inert waste	RI
Special/difficult waste recycling treatment or transfer	SP
Metal recycling	ME
Civic amenity site	CAS

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MEMBURY AIRFIELD AREA OF SEARCH

POTENTIAL USES

- **Waste treatment (farm and stable waste)**
- ***Waste treatment (household waste)***
- **Green waste composting**
- **Recycling non-inert**
- **Recycling inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

Area of Search : 15ha
Area A : 1.5ha
Area B : 5ha.

LOCATION

Part of area comprising former Membury Airfield.

EXISTING USE

Land and buildings parts of which have been redeveloped and are occupied by industrial and commercial uses. A high proportion of buildings and sites are currently vacant.

PLANNING CONTEXT

The site is designated in the draft Newbury District Local Plan as a protected employment area. The site lies in the AONB and the adopted Local Plan includes a landscape strategy to secure major improvements to the landscape quality of the former Membury Airfield and employment area to reduce its visual impact, including removal of derelict buildings, remaining runways and eyesores. Development on the employment area is required to contribute to the implementation of the scheme. The draft Local Plan continues this initiative.

SITE PLANNING REQUIREMENTS

(i) General

Waste management uses could be accommodated on parts of the area of search within the large vacant buildings and sites or by the development/redevelopment of certain sites. The whole area identified on the attached plan is considered to have potential but the areas considered to have greatest potential are highlighted. The site is particularly appropriate for dealing with locally generated farm and stable wastes. Such proposals should also seek to treat locally generated putrescible waste. No incineration is envisaged.

Appendix 7

(ii) Access and Traffic

Access to the area is via the B4000 eastwards to M4 Junction 14 and via the local road network. Proposals involving significant movements from outside the Lambourn area would need associated legal agreements to route vehicles via the B4000 to the M4. Local highway improvements would also be required.

(iii) Environmental Protection

(a) People

There are isolated properties and employment uses adjacent to and near the area of search. Waste management uses must be developed and operated in such a way that the amenities of these properties and uses are protected from material adverse impacts.

(b) Landscape

The area of search lies in an AONB location. Waste management development would be expected to contribute to the adopted District Plan objectives for major landscape improvements on adjoining land. This is likely to involve a substantial commitment to on-site and off-site landscaping. Development or redevelopment should be to a high standard of design and buildings should normally be low profile and have minimum visual impact. Where additional ancillary development is involved, such as connections to existing power supply for electricity generation, such development must not detract from the character of the AONB.

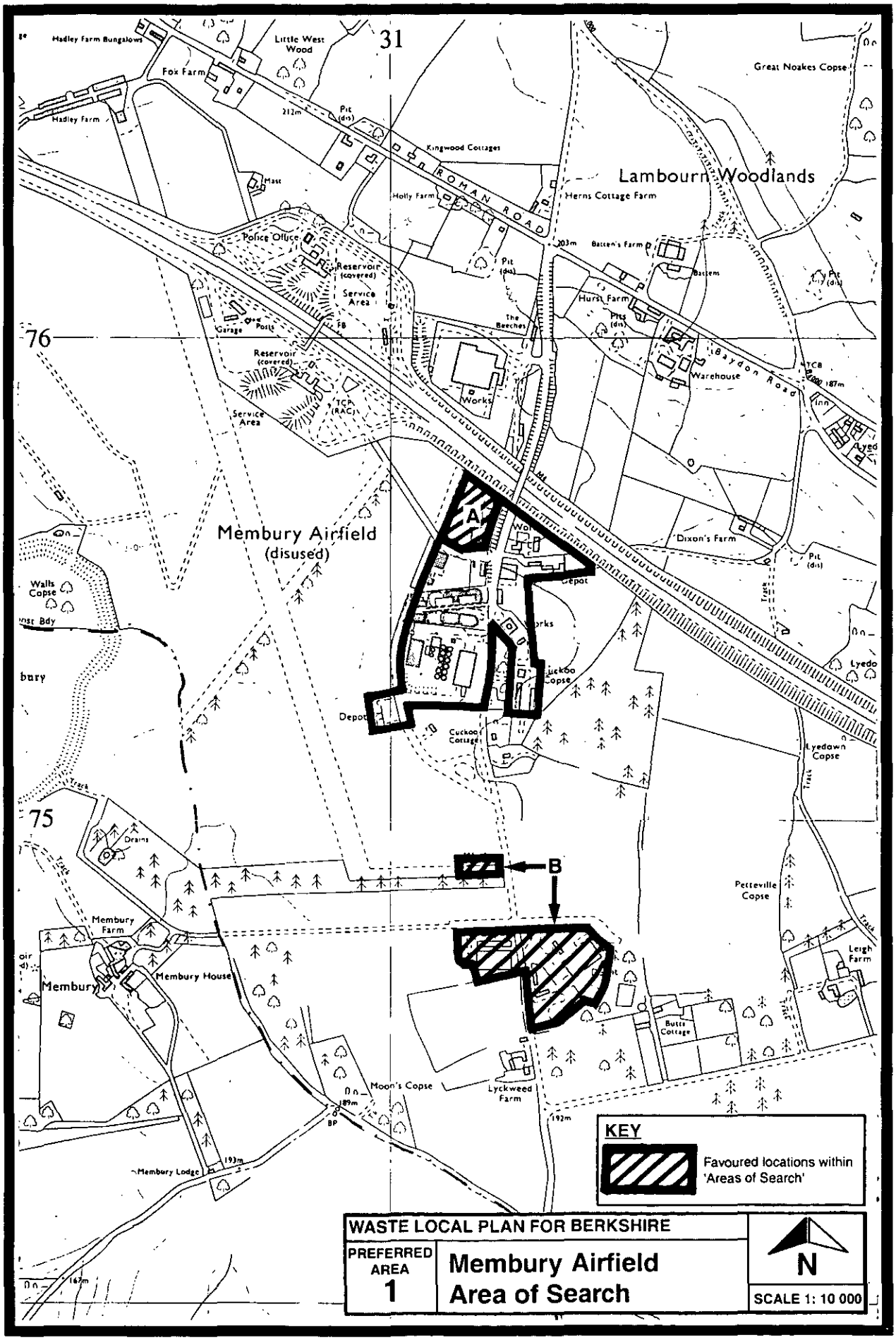
(c) Water environment

Proposals must ensure no adverse impact on nearby watercourses and the water environment. In developing the site particular regard shall be had to Policy WLP30(iii) and the requirements of paragraphs 5.4 and 10.20 of the Plan.

(iv) Requirements relating to specific uses

Waste recycling facilities and treatment plant handling biodegradable waste, composting and other special or difficult wastes - Ideally all operations should be under cover and waste handling and treatment operations with the potential to generate smell or harmful emissions would be likely to require full enclosure of processes. Noise pollution should be minimised by appropriate enclosure and baffling of plant. Preference would be given to locations in Areas A and B for these uses. Facilities handling "problem" wastes must be accompanied by an Environmental Statement which must demonstrate that potential environmental effects can be minimised.

Recycling of inert waste - Facilities must be located a minimum of 200m from houses and include appropriate acoustic screening (earth bunding etc). Applicants must demonstrate with appropriate noise assessments that there would be no significant increase in noise nuisance. Preference would be given to locations in Area A close to the M4, where noise disturbance can be masked by existing high noise levels. The scale of the operation should be such as to meet predominantly local needs.


31
76
75
Membury Airfield
(disused)
Lambourn Woodlands
ROMAN ROAD
Baydon Road
A
B
Membury Farm
Membury House
Membury Lodge
Membury
Membury Airfield Area of Search
KEY
Favoured locations within 'Areas of Search'
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 1
N
SCALE 1: 10 000

SOUTH OF PINCHINGTON LANE, GREENHAM

POTENTIAL USES

- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Civic amenity site**

SITE AREA

4.3ha.

LOCATION

South of Pinchington Lane, east of the A43(T), west of Greenham Common, south of Newbury.

EXISTING USE

In the north-west is a Civic Amenity and local recycling site. To the north-east is a temporary small aggregate sales site, and in the area to the south is a former gravel extraction site and silt beds, now restored to agriculture.

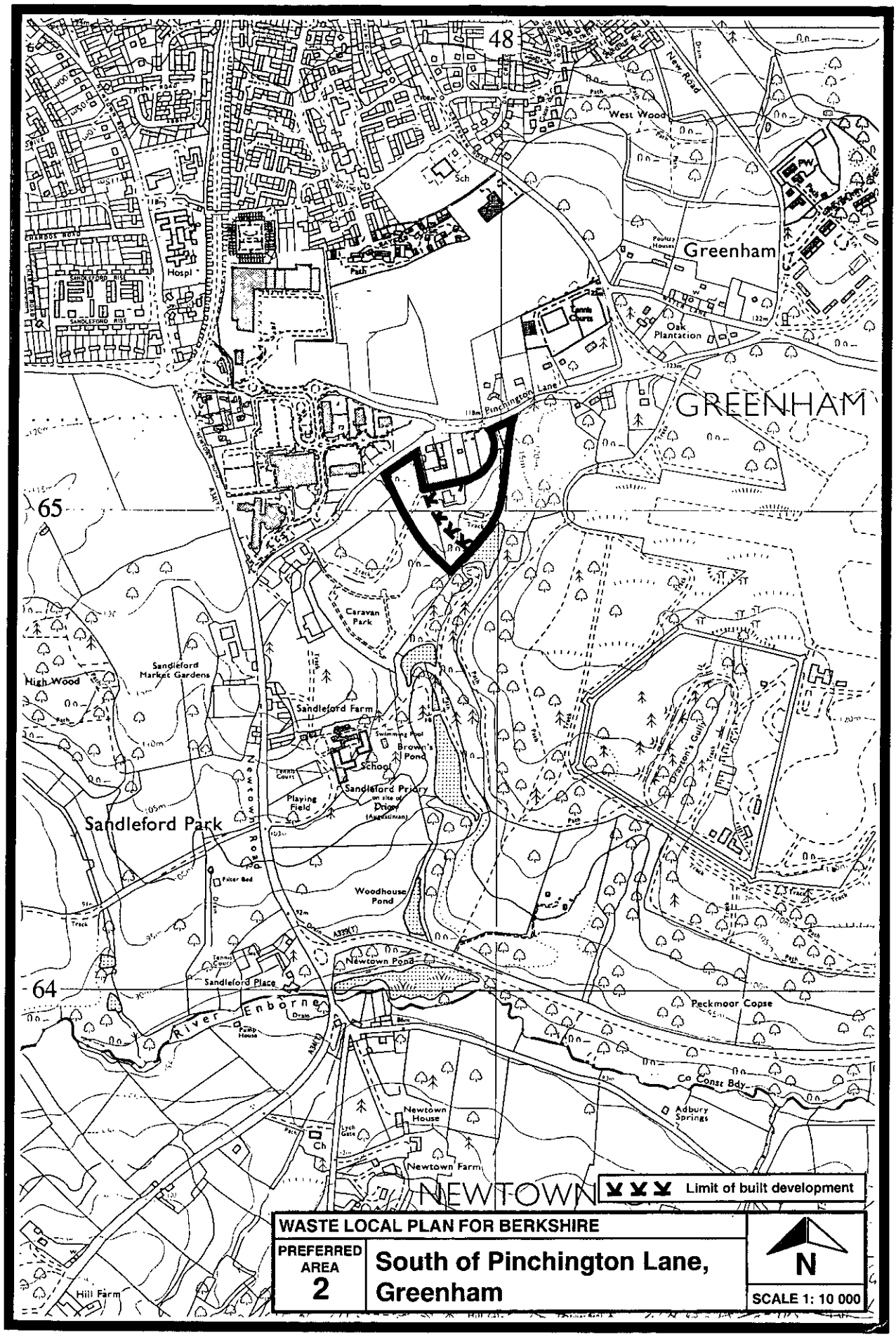
PLANNING CONTEXT

The site is identified in the adopted Newbury District Local Plan as being outside the urban boundary. The southern area of the site was formerly part of Sandleford Priory and its historic park designed by Capability Brown. The site adjoins to the east Greenham Common Airbase Site of Special Scientific Interest (SSSI). The SSSI is noted for its extensive complex of heathland, grassland, gorse scrub, broad-leaved woodland, alder-lined gullies and a large coppiced woodland at Peckmoor Copse. The site also lies in an area of land important ot the setting of Newbury, as defined in the Draft Newbury District Local Plan 1991-2006.

SITE PLANNING REQUIREMENTS

(i) General

There is a preference for extending the existing Civic Amenity Site to include household and/or industrial/ commercial waste recycling. The enclosure of processes is likely to be required, with operations relatively small in scale with no substantial increase in lorry traffic.


48
65
64
GREENHAM
Greenham
Pinchington Lane
West Wood
Oak Plantation
Tennis Courts
Caravan Park
Sandleford Market Gardens
High Wood
Sandleford Farm
Swimming Pool
Brown's Pond
School
Sandleford Priory
Playing Field
Sandleford Park
Newtown Road
Woodhouse Pond
Newtown Pond
Sandleford Place
River Enborne
Peckmoor Copse
Co Const Bdy
Adbury Springs
Newtown House
Newtown Farm
NEWTOWN
Hill Farm
Limit of built development
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 2
South of Pinchington Lane, Greenham
N
SCALE 1: 10 000

(ii) Access and Traffic

There is access via Pinchington Lane to the A34 and the strategic highway network. The need for local highway improvements will be considered at the planning application stage. However, in order to minimise the number of lorries travelling through Greenham, a legal agreement would be required to ensure all lorries enter and leave the site from the west via the A34.

(iii) Environmental Protection

(a) People

The dwellings opposite the proposed access would not experience a significant change in conditions. However, potential nuisances would need to be limited by mitigating measures, such as control over hours of operation and landscape screening. The caravan park to the south of the site would be protected by the field south of the site and landscape screening.

(b) Landscape/Ecology

Any proposals should ensure that there is no adverse effect on the adjacent SSSIs. In view of the proximity of the SSSI an environmental statement may be required. The proposal would extend the limit of development marginally, but would still fall within an area disturbed by mineral extraction. Careful landscape planting would be needed to contain the site and to screen the proposal visually while protecting and enhancing the setting of Sandleford Priory Historic Park. In particular, built development should not encroach south-west or south of the area currently developed or previously disturbed by gravel processing and stockpiling; and special attention should be paid to protecting and enhancing the northern lake adjoining the site and its margins. Proposals will be expected to include provision for screen planting and for other appropriate planting in the area of historic park south of the site which has been damaged by mineral extraction.

(c) Water

Proposals must ensure no adverse impact upon adjoining lakes and watercourses.

GREENHAM COMMON AIRBASE AREA OF SEARCH

POTENTIAL USES

- **Waste Treatment Plant**
- **Green waste composting**
- **Major recycling**
- **Recycling non-inert**
- **Recycling inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

57ha approx.

LOCATION

Part of Greenham Common Airbase located to the south-east of Newbury and south of Thatcham.

EXISTING USE

Redundant airbase buildings (aircraft hangars, workshops, industrial and other non-residential buildings), concrete hardstandings and adjacent taxiways. Planning permission already exists for the lifting and breaking of the concrete runways and taxiways, the location of temporary concrete crushers and the crushing of the concrete to provide a secondary aggregate. This development is permitted until 1999 and will produce environmental benefits in terms of saving primary aggregates and restoring heathland.

PLANNING CONTEXT

Greenham Common Airbase was declared surplus to Ministry of Defence requirements in 1993, and the process of disposal has commenced. The adopted Newbury District Local Plan does not take account of the current position. The District Council produced a draft planning brief as a basis for public consultation in 1993, and has approved a final version of the brief. The whole site (apart from the westernmost aprons) now falls within an area designated under Policy ECON 6 in the Draft Newbury District Local Plan 1991-2006, which provides for employment and sporting uses. Outline planning permission has now been granted for these uses. A 3-hectare site within the total area is to be protected for waste management purposes, but no specific site has been allocated for this use. Extensive areas in and around the former airbase comprise the Greenham and Crookham Common Site of Special Scientific Interest (SSSI), notified in view of its extensive complex of heathland, grassland, gorse scrub, broadleaved woodland, and elder-lined gullies.

SITE PLANNING REQUIREMENTS

(i) General

Waste management uses could be accommodated on parts of the Area of Search within the large vacant hangar buildings or within the smaller industrial type buildings. The largest hangar buildings are probably the most suitable for a waste treatment plant together with a materials recycling facility. Within the area designated for employment and sporting uses in the Planning Brief for Greenham Common Airbase produced by Newbury District Council, proposals for developing this area should designate a single 3ha area as a site for waste management purposes. An Environmental Statement should accompany any proposal for such a plant. The concrete hardstandings may also offer opportunities for more permanent inert waste recycling to meet local needs, subject to landscape considerations. It is anticipated that only a small part of the area would be given over to waste related uses, the major future use should be industrial based employment and sporting facilities.

(ii) Access and Traffic

Access should only be via the main airbase access onto the A339. Depending on the scale of the traffic generation, improvements may be required to the A339. Operators using this Preferred Area will be required to enter into a legal agreement to ensure that HGV movements are confined to the A339 and A34 trunk roads.

(iii) Environmental Protection

(a) People

Because of the isolation of the buildings within the airbase the use of them for waste treatment and recycling uses should not cause adverse impacts on housing close to the airbase. Noise impact from inert waste recycling operations would need to be mitigated, with the necessary measures being dependent on the location.

(b) Landscape

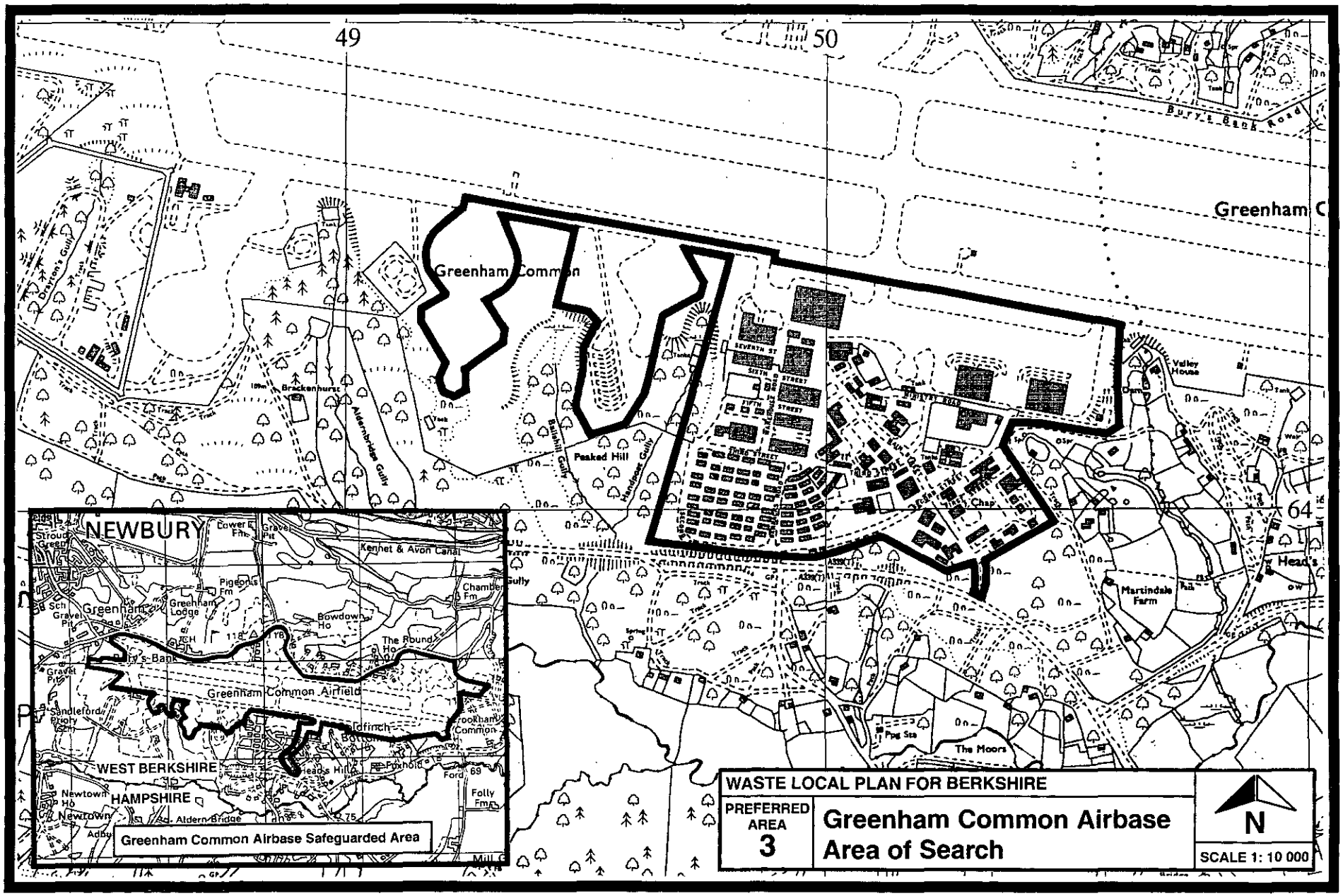
The use of existing buildings should not result in any change to landscape. However, proposals should provide for landscape improvements to the setting of all the airbase buildings, particularly adjacent to the SSSI within the context of requirements in the Draft Newbury District Local Plan 1991-2006. Enclosure of operations should be undertaken where appropriate in order to protect the wider landscape.

(c) Ecology

All proposals should ensure that there are no adverse effects on the adjacent SSSIs. This includes no adverse impacts from pollution arising from waste management operations. In view of the proximity of the SSSI an environmental statement may be required.

(d) Water

Proposals must ensure no adverse impact on nearby watercourses and the water environment. In developing the site particular regard shall be had to Policy WLP30(iii) and the requirements of paragraphs 5.4 and 10.19 of the Plan.


49
50
Greenham Common
Greenham C
Peaked Hill
Alderbridge Gully
Bailshill Gully
Handover Gully
Brackenhurst
Valley House
Martindale Farm
The Moors
Pig Sty
Chap
Burys Bank Road
NEWBURY
Kennet & Avon Canal
Greenham Common Airfield
WEST BERKSHIRE
HAMPSHIRE
Greenham Common Airbase Safeguarded Area
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 3
Greenham Common Airbase Area of Search
N
SCALE 1: 10 000

COLTHROP

POTENTIAL USES

- **Waste treatment plant**
- **Waste derived fuel**
- **Waste to energy**
- **Transfer station**
- **Major recycling**
- **Recycling non-inert**
- **Recycling inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

Area A : 14ha
Area B : 3.5ha
Area C : 3.3ha

LOCATION

Part of area developed for employment uses east of Thatcham and between the A4 and the Kennet and Avon Canal.

EXISTING USE

Area A - the existing Colthrop Board Mill and adjacent vacant land.
Area B - vacant land formerly part of the Board Mill.
Area C - warehouse units (one currently vacant) with open storage area used for car storage.

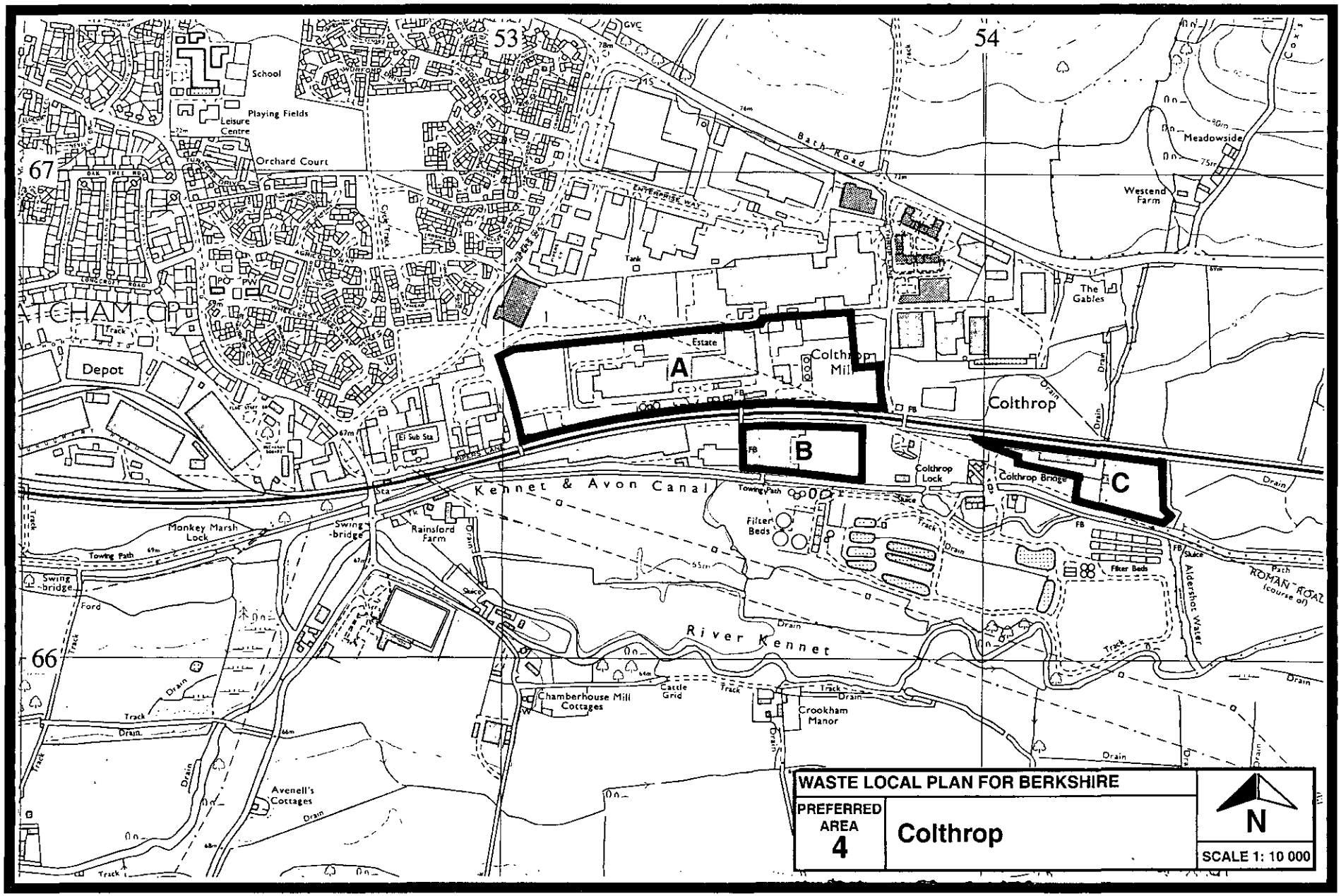
PLANNING CONTEXT

All this Preferred Area lies within a protected employment area within the Draft Newbury District Local Plan 1991-2006. The relevant policy (ECON 1) provides for such uses, either via new building or redevelopment, provided that a range of criteria is satisfied. These criteria include traffic implications and landscaping considerations.

SITE PLANNING REQUIREMENTS

(i) General

These three areas offer a combination of characteristics which make them particularly suitable for a range of waste management uses. There is a preference for a waste treatment plant on Area B, but no more than one treatment plant would be likely to secure planning permission in the Colthrop area. A waste to energy facility on Area A is unlikely to be acceptable without provision for serving the energy needs of the Board Mill and other local users. The opportunity should be taken to replace the existing power plant. There is a preference for inert waste recycling on the eastern part of Area C. Where appropriate proposals should provide landscape improvements to the canal environment.


53
54
67
66
School
Playing Fields
Leisure Centre
Orchard Court
Depot
Bath Road
Meadowside
Westend Farm
The Gables
Estate
Colthrop Mill
A
B
C
Colthrop
Colthrop Lock
Colthrop Bridge
Kennet & Avon Canal
Towing Path
Monkey Marsh Lock
Swing-bridge
Rainsford Farm
Filter Beds
Aldershot Water
ROMAN ROAD (course of)
River Kennet
Chamberhouse Mill Cottages
Cattle Grid
Crookham Manor
Avenell's Cottages
Track
Drain
Ford
Sluice
El Sub Sta
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 4
Colthrop
N
SCALE 1: 10 000

(ii) Access and Traffic

Any development involving large scale traffic generation would be required to provide a package of highway improvements. Limited improvements to Colthrop Lane would be required in relation to smaller scale uses with more limited traffic generation. Major traffic generating activities may require improvements to the private railway level crossing which provides access to Areas B and C. Proposals may need to provide, where appropriate, for improvement or replacement of the Level Crossing and should not prejudice future improvement or replacement. At present a new access road is being constructed on to the A4, to the east of Colthrop Lane. This is due to be completed during 1998.

(iii) Environmental Protection

(a) People

Applications for major waste treatment plants would need to be accompanied by an Environmental Statement to cover issues relating to emissions and health risks to ensure that there were no unacceptable risks to the local and nearby population. The canal corridor and environment should also be safeguarded from nuisances and visual impacts. The effects of noise from inert recycling operations would also need to be addressed.

(b) Landscape

All buildings and plant should be located in areas where they are in contact with surrounding industrial buildings and landscaping measures should be taken to mitigate any possible exposure to views, particularly from the higher ground, including the edge of the AONB to the north. Landscape protection and enhancement of the canal environment should be provided.

(c) Ecology

The site is close to the River Kennet which is a proposed SSSI and the Kennet and Avon Canal. Any proposals should ensure that there is no adverse impact on the proposed SSSI, the water environment and water resources. Proposals likely to affect the proposed SSSI may require an Environmental Statement.

(d) Rights of Way

The canal towpath runs adjacent to Areas B and C and should be protected at all times. Landscape improvements to the canal environment should make provision for improvements to the footpath.

(iv) Requirements relating to specific uses

Waste Treatment Plant - The eastern end of Area A is considered to be the only suitable location for a major waste treatment plant because it would be closely associated with the taller mill buildings. Also this location offers most opportunities for links with the mill and for use by the mill of power/heat generated by the treatment plant. The scale of the operation should be restricted to a level suitable to meet local needs (Newbury/Thatcham) for a waste treatment facility.

Materials Recycling Facility - Area A is the most suitable location if the facility is associated with the Board Mill. A paper recovery plant within the existing Board Mill complex could also be acceptable as part of any redevelopment of the industrial complex. Areas B and C may be suitable for a free-standing major recycling facility, although the scale of the operation should not overload the level crossing, or result in an over-use of site having regard to the need for improvements to the canal environment.

Inert and Skip Waste Recycling - Areas B and C could be suitable for a temporary use, subject to adequate screening from the canal. Permanent uses should be within a building and the scale should not overload the railway level crossing or result in over-use of the site, having regard to the need for improvements to the canal environment.

Appendix 1

KNOTT LANE, BEENHAM

POTENTIAL USES

- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

1ha.

LOCATION

North of the A4 and immediately to the south-west of Grundon's Depot, Beenham.

EXISTING USE

The site consists of three parcels of land, one of which is a vacant field and the other two are car scrapyards.

PLANNING CONTEXT

The site lies within a protected employment area as defined in the Draft Newbury District Local Plan 1991-2006, in which new employment proposals would be allowed provided that a range of criteria is satisfied. These include considerations relating to access and landscape improvements. Landscaping is especially significant since the site lies in the North Wessex Downs Area of Outstanding Natural Beauty.

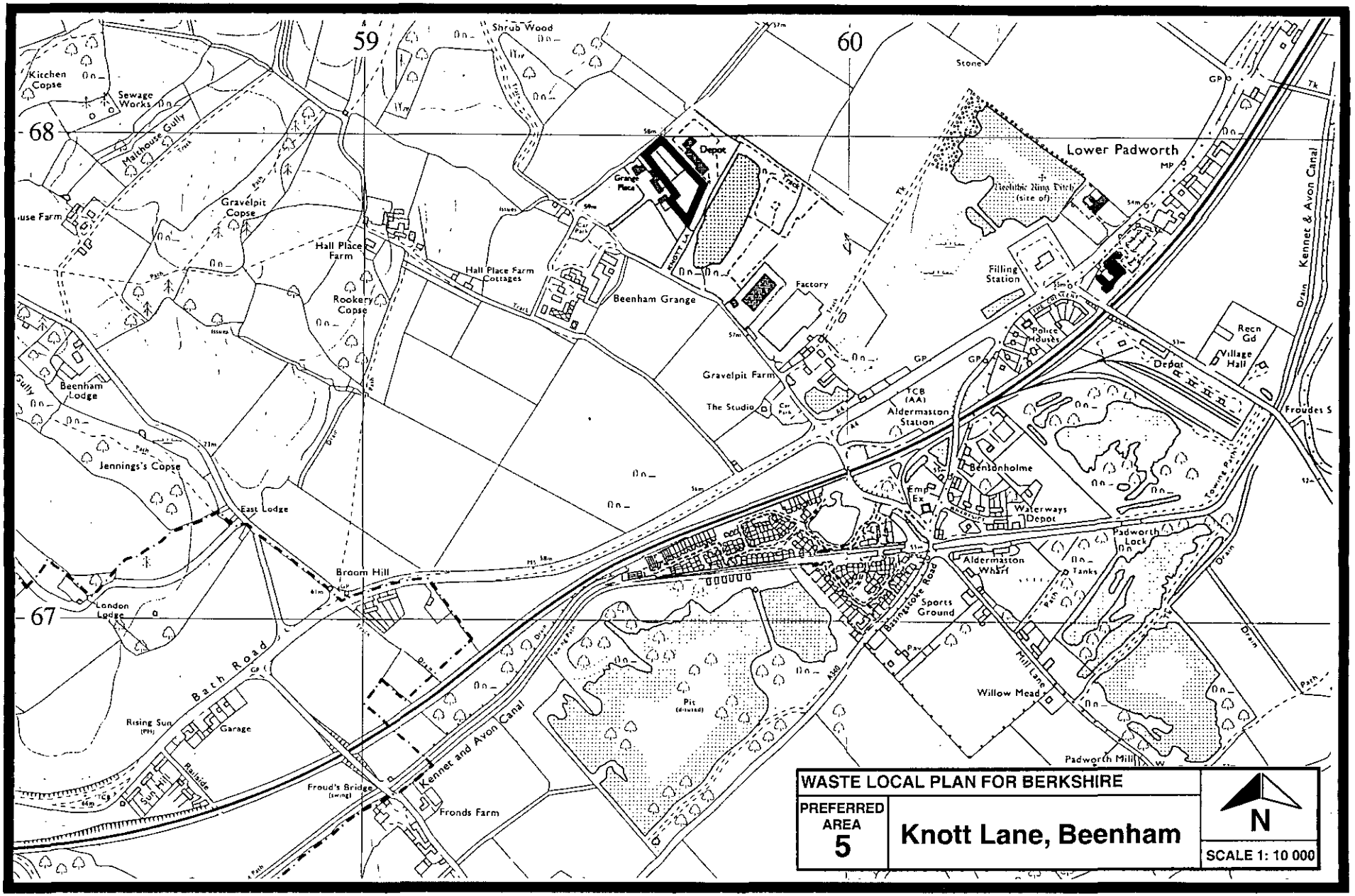
SITE PLANNING REQUIREMENTS

(i) General

Any waste management uses accommodated on this site would fit in with the existing transport depot at Grundons.

(ii) Access and Traffic

The present vehicular access to the two former scrapyards is from an unmade track/bridleway to the north. If the site is developed for waste management uses access would be required to be via Knott Lane to protect the bridleway to the north. A contribution would be required for improvements to the A4/Grange Lane junction and to the A4/A340 junction.


59
60
68
67
Shrub Wood
Kitchen Copse
Sewage Works
Malthouse Gully
Gravelpit Copse
Hall Place Farm
Hall Place Farm Cottages
Rookery Copse
Beenham Grange
Grange Place
Depot
Factory
Knott La
Lower Padworth
Filling Station
Police Houses
Village Hall
Recn Gd
Kennet & Avon Canal
Gravelpit Farm
The Studio
Beenham Lodge
Jennings's Copse
East Lodge
Broom Hill
London Lodge
Aldermaston Station
TCB (AA)
Benlonholme
Waterways Depot
Towing Path
Froudes
Padworth Lock
Aldermaston Wharf
Sports Ground
Basingstoke Road
Tanks
Mill Lane
Willow Mead
Padworth Mill
Bath Road
Rising Sun (PH)
Garage
Railside
Sun Hill
Froud's Bridge (swing)
Kennet and Avon Canal
Fronds Farm
Pit (disused)
Drain
Path
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 5
Knott Lane, Beenham
N
SCALE 1: 10 000

(iii) Environmental Protection

(a) People

There are a number of individual properties situated to the south-west of the site, one of which immediately adjoins the site. In order to minimise potential nuisance, all operations would need to be under cover and those with the potential to generate smell should be fully enclosed. Facilities must be located away from housing to minimise the potential noise effect and must include appropriate acoustic screening.

(b) Landscape

The site is located within the AONB and lies within the foreground of the Beenham escarpment. It is therefore important for the natural beauty and recreational potential to be protected and enhanced. It is also essential that development is of a modest scale and is not intrusive. A high standard of design would be required to minimise impact. The District Plan requires that appropriate landscape treatment is undertaken to the northern and western boundaries, in order to reduce the visual impact of development on the AONB.

(c) Ecology/Water

Any development must ensure no detrimental effect on water courses and the adjacent lake.

(d) Archaeology

An archaeological evaluation of the vacant field may be required before any application is determined.

PADWORTH SIDINGS

POTENTIAL USES

- **Waste treatment**
- **Road-to-Rail Transfer**
- **Major recycling**
- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

9ha.

LOCATION

South of the A4 Bath Road between Woolhampton and Theale. The Reading to Newbury railway line (Paddington to Exeter main line) runs adjacent to the northern boundary of the site, and the Kennet and Avon Canal forms the southern boundary of the site.

EXISTING USE

The majority of the site is presently vacant, the remainder of the land being used as a coal depot. The land to the north-east is used as a rail linked depot.

PLANNING CONTEXT

The site lies outside the designated built-up area. The Draft Newbury District Local Plan 1991-2006 designates the site as open countryside, and the north-western corner forms part of the Aldermaston Wharf Conservation Area.

Two small areas within the site were the subject of successful applications for rail depots in 1973 and 1992. However, no development has taken place to date and the validity of the 1973 (and related 1976) permission is now open to question. The site is a safe-guarded rail depot site in the Replacement Minerals Local Plan for Berkshire.

SITE PLANNING REQUIREMENTS

(i) General

The site is large enough to accommodate a number of waste management uses, and due to its location offers the opportunity for a road to rail waste transfer station. Major recycling, non-inert, special and metal recycling would only be acceptable provided that they did not prejudice a road-to-rail transfer station or a rail aggregates depot.

(ii) Access and Traffic

Access to the site must be from the A4 via the existing access to Padworth Lane. Improvements to Padworth Lane, and to its junction with the A4, would be required in association with any future planning application. A contribution would be required towards improvements to the A4/A340 junction.

(iii) Environmental Protection

(a) People

Dwellings are situated to the north and west of the site; and it is essential that they are protected as far as possible from any adverse impacts of waste management development. Waste management uses must be developed and operated in such a way that these and other interests are protected from material adverse impacts. Operations with potential to generate smell should be fully enclosed.

(b) Landscape

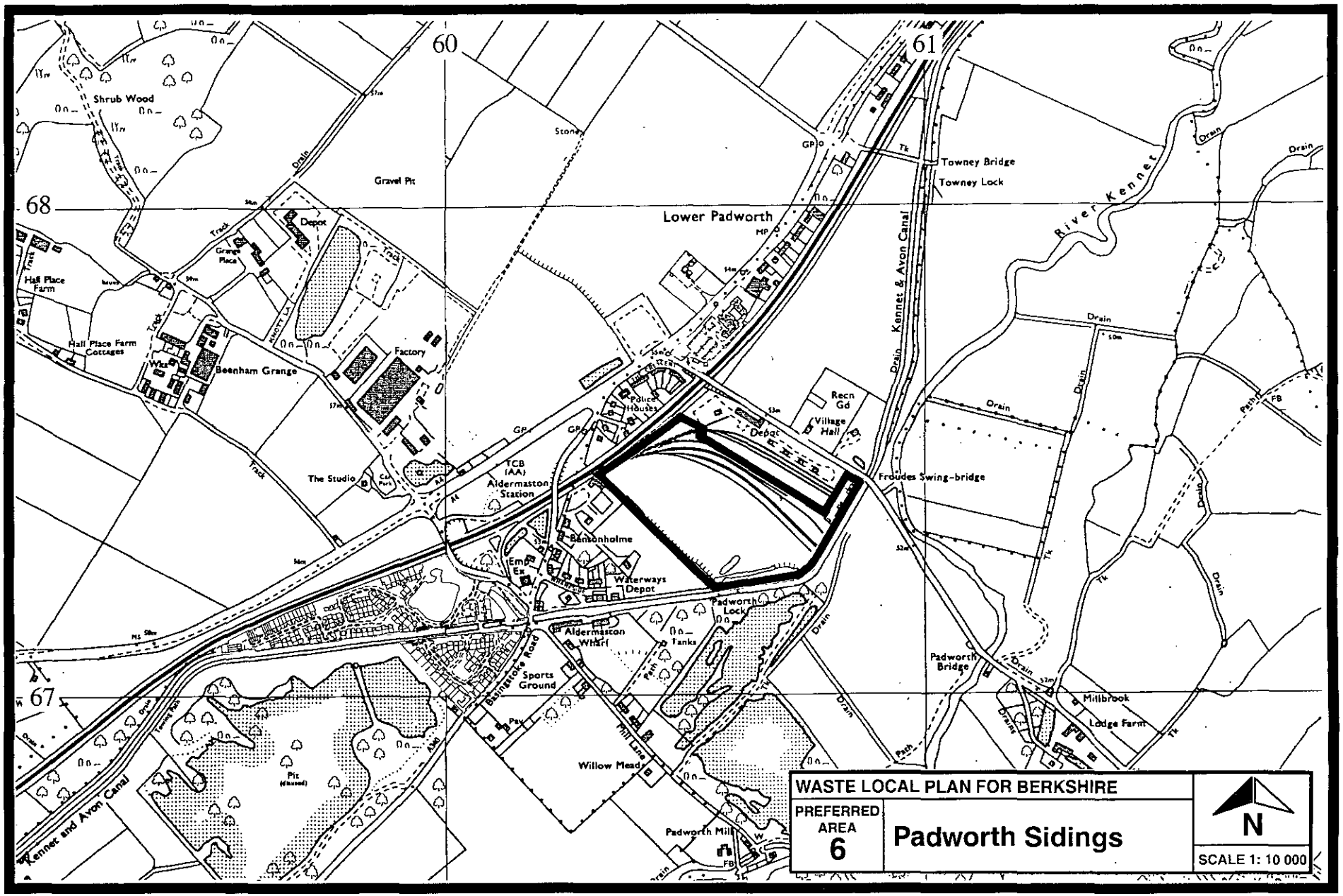
The site is situated in a predominantly rural area and any development of waste facilities must be considered in terms of its impact on the Kennet and Avon Canal, visual impact on properties at Wharfside and The Crescent and of its scale in relation to the rural environment. However, the site consists mainly of degraded land in need of rehabilitation and enhancement. Existing vegetation of amenity and/or ecological value must be retained.

The proximity of this site to housing would mean that any composting or industrial reprocessing operation sited here would have to be a fully enclosed process. This type of building would be fairly prominent due to its size and its location in a predominantly rural area. Use could be made of existing tree cover on site, which should be retained, although it is probable that further on and off-site landscaping would be required, in order to reduce not only the impact of a composting plant, but also that of road-to-rail and recycling operations.

The impact on the setting of the canal and its towpath, and the rural area to the south must also be carefully considered. It is important that views from the canal and towpath are effectively screened, and that plant buildings are carefully sited and designed in order to minimise impact. A combination of uses at the site might give rise to an unacceptable impact. It would be desirable for operations to be kept within a tight boundary, and for the remainder of the site to be restored to woodland. The large size of the site provides the opportunity to create a buffer zone or landscaping to nearby properties and the canal as considered necessary.

(c) Ecology/Water

Any proposal should ensure that there are no adverse ecological and water environment impacts on the Kennet and Avon Canal and the River Kennet.


60
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Shrub Wood
Gravel Pit
Lower Padworth
Towney Bridge
Towney Lock
River Kennet
Kennet & Avon Canal
Hall Place Farm
Hall Place Farm Cottages
Beenham Grange
Factory
Depot
Grange Place
Police Houses
Recn Gd
Village Hall
Froudes Swing-bridge
The Studio
TCB (AA)
Aldermaston Station
Bensonholme
Waterways Depot
Padworth Lock
Aldermaston Wharf
Tanks
Sports Ground
Padworth Bridge
Millbrook
Lodge Farm
Willow Mead
Mill Lane
Padworth Mill
Pit
Kennet and Avon Canal
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 6
Padworth Sidings
N
SCALE 1: 10 000

WHITEHOUSE FARM, ALDERMASTON

POTENTIAL USES

- **Recycling non-inert**
- **Recycling inert**
- **Difficult/special waste recycling, treatment or transfer**

SITE AREA

4ha.

LOCATION

North-east of Tadley (Hampshire) on the Hampshire/Berkshire border and west of Pamber Heath.

EXISTING USE

This area is a former mineral site which was filled with waste during the 1970s. Parts of the site have permission for a number of uses including demolition contractors yard, concrete crushing, asbestos storage, building skip waste, recycling, workshops and ancillary offices. Part of the site is also used for the Tadley Sunday market.

PLANNING CONTEXT

The site is within a rural area outside the settlement boundaries of Tadley and Pamber Heath. Adjacent land is either currently being used for waste disposal or has in the past been used and is now restored back to agricultural uses. The land is designated as being important to the setting of settlements in the Draft Newbury District Local Plan 1991-2006.

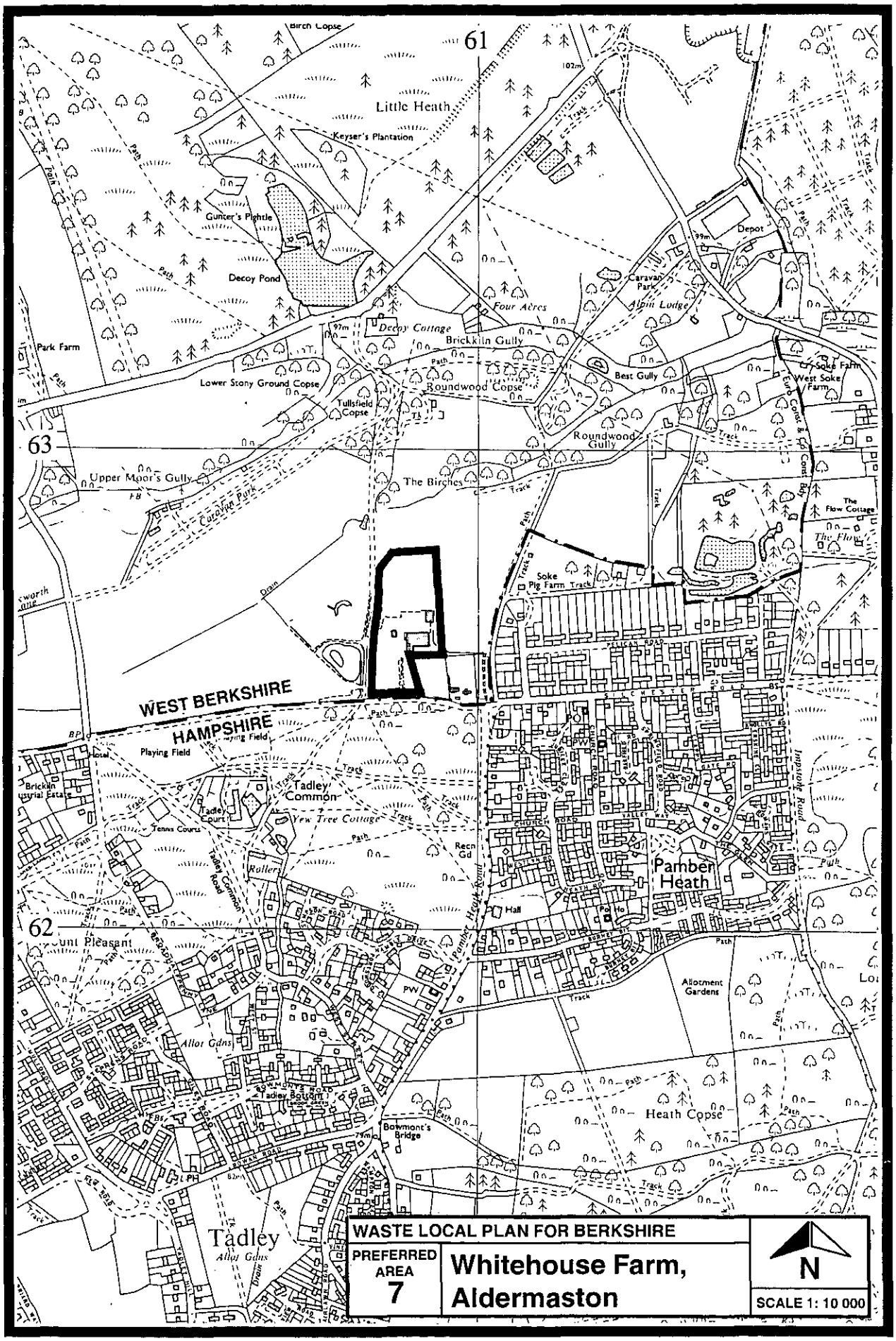
SITE PLANNING REQUIREMENTS

(i) General

In view of the planning permission on this site, it should be safeguarded for waste-related uses. There is scope for rationalisation of the planning permission to cover all uses. Preference would be given to a proposal which included the enclosure of the more environmentally intrusive uses within a building. Metal waste recycling would be acceptable provided it did not prejudice the use of the site for the other activities specified.

(ii) Access and Traffic

All vehicles would be required to enter and leave the site from the west via Silchester Road as is currently required. The level of vehicle movements should not be allowed to increase above existing levels.


WEST BERKSHIRE
HAMPSHIRE
Little Heath
Keyser's Plantation
Gunter's Plightle
Decoy Pond
Decoy Cottage
Four Acres
Brickkiln Gully
Park Farm
Lower Stony Ground Copse
Roundwood Copse
Tullsfield Copse
Best Gully
Roundwood Gully
Upper Moor's Gully
The Birches
Caravan Park
Depot
Alpin Lodge
West Soke Farm
Soke Pig Farm Track
The Flow Cottage
Tadley Common
Yew Tree Cottage
Tadley Court
Tennis Courts
Playing Field
Pamber Heath
Heath Copse
Allotment Gardens
Bowmont's Bridge
Tadley
Allot Gdns
Mount Pleasant
61
62
63
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 7
Whitehouse Farm, Aldermaston
N
SCALE 1: 10 000

(iii) Environmental Protection

(a) People

There are a number of houses within the settlement of Pamber Heath which are within 200m of the site boundary. These should be afforded protection from the effects of noise and dust by providing noise attenuation mounds, intervening planting, and control over hours of operation.

(b) Landscape

A comprehensive scheme of landscape improvements should be provided as part of composite application for the site. Particular attention should be paid to the western and eastern margins, taking into account the character of the landscape adjacent to the northern boundary, to provide improved visual amenity to local residents and users of local footpaths.

(c) Ecology

The Decoy Pit, Pool and Woods SSSI lies to the north of the site. Any proposal should ensure there is no adverse effect on the SSSI.

BLUE CIRCLE SITE, THEALE

POTENTIAL USES

- **Road to Rail transfer**
- ***Major recycling***
- ***Difficult/special waste recycling, treatment or transfer***
- ***Metal recycling***

SITE AREA

2.5ha

LOCATION

South-west of Theale, south of the A4 Bath Road and north of the Reading to Newbury railway line.

EXISTING USE

The site was formerly in use as a rail linked bulk cement depot and packaging plant, which ceased operations in 1993. It is currently vacant.

PLANNING CONTEXT

The Draft Newbury District Local Plan 1991-2006 identifies the site as being reserved solely for industries which require and need a permanent and proven rail link coupled with access to the primary road network. This replicates Policy EMP1A in the adopted District-wide Local Plan. Land to the east and north of the Preferred Area is identified in the Draft Local Plan as falling in an area important to the setting of settlements.

SITE PLANNING REQUIREMENTS

(i) General

The industrial nature of the surrounding uses means that development of a road to rail transfer station would generally be in keeping with the character of the area. The County Council will continually review the requirement for the provision of a road to rail waste transfer station in order not to prejudice alternative proposals for rail-linked employment uses at the site in accordance with Policy EMP1A of the Newbury District Local Plan. Metal recycling, major recycling and special/difficult waste operations would only be acceptable if the site is developed for road to rail transfer. These uses must be ancillary to road to rail transfer in terms of function and scale. The planning authorities will continually review the requirement for the provision of a road to rail waste transfer station in order not to prejudice alternative proposals for rail-linked employment uses at the site in accordance with the policies of the adopted and draft District Local Plans.

(ii)Access and Traffic

The site has good access to the strategic road network via the A4 and M4. However, improvements are likely to be required to the A4/A340 junction. A contribution might be required towards these improvements.

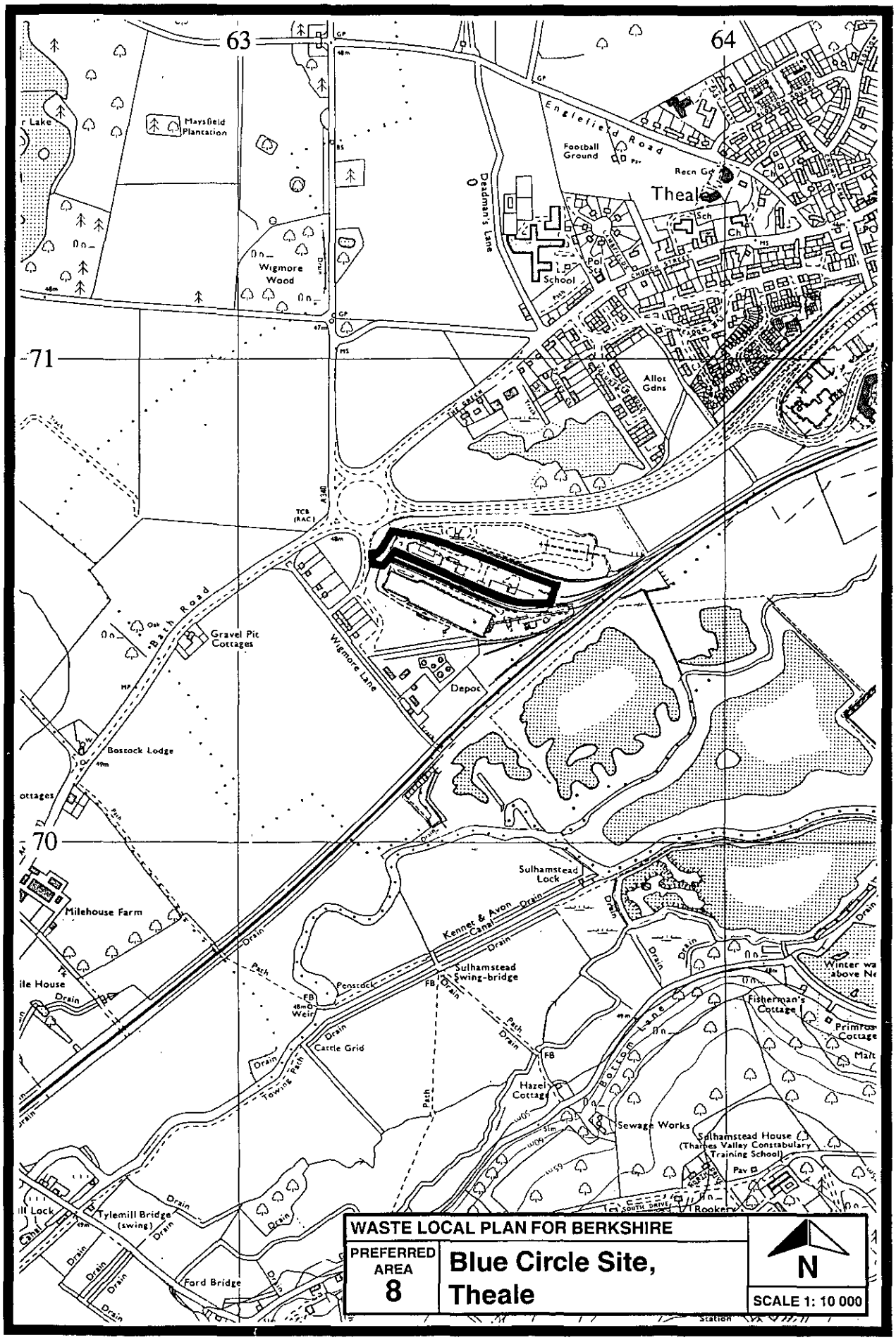
(iii) Environmental Protection

(a) People

The site and access are both situated close to housing in Wigmore Lane, and there is a history of complaints from local residents over operations at the Theale depots. Care must therefore be taken to ensure that mitigation measures are employed to limit impacts such as noise, dust and smell.

(b) Landscape

The site is well screened and situated in an industrial landscape. However, the area lies within a semi-rural location with distant views from elevated positions (including Englefield and the North Wessex Downs AONB) and from local highways. Existing tree cover should be retained and additional planting introduced to ameliorate any visual impact and enhance the landscape interface with the rural area.


63
64
71
70
Mayfield Plantation
Wigmore Wood
Deadman's Lane
Englefield Road
Football Ground
Recn Gd
Theale
School
Allot Gdns
A340
TCB (RAC)
Bath Road
Gravel Pit Cottages
Wigmore Lane
Depot
Bossock Lodge
Milehouse Farm
Sulhamstead Lock
Kennet & Avon Canal
Sulhamstead Swing-bridge
Penstock
Weir
Cattle Grid
Towing Path
Hazel Cottage
Bolton Lane
Sewage Works
Sulhamstead House (Thames Valley Constabulary Training School)
Fisherman's Cottage
Primrose Cottage
Tylemill Bridge (swing)
Ford Bridge
Rookery
Station
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 8
Blue Circle Site, Theale
N
SCALE 1: 10 000

THE HANGAR, SHEFFIELD BOTTOM

POTENTIAL USES

〈 **Recycling non-inert**

SITE AREA

2.4ha

LOCATION

South of Theale and adjacent to the small cluster of housing at Woolwich Green.

EXISTING USE

The site and the Hangar building, formerly part of a wartime airfield, are used for a mix of haulage related uses with associated workshops. There is also a skip waste recycling and transfer station with a temporary planning permission on a small part of the site. Part of the site was a former landfill which has an outstanding restoration requirement for tree planting.

PLANNING CONTEXT

Although in a rural area, the site has established rights for industrial type use. The site also has planning permission for redevelopment for B1 uses. It falls within a protected employment area in the Draft Newbury Local Plan 1991-2006, and also within the Lower Kennet Water Park, where water-based recreation is promoted by the policies of the District Local Plan.

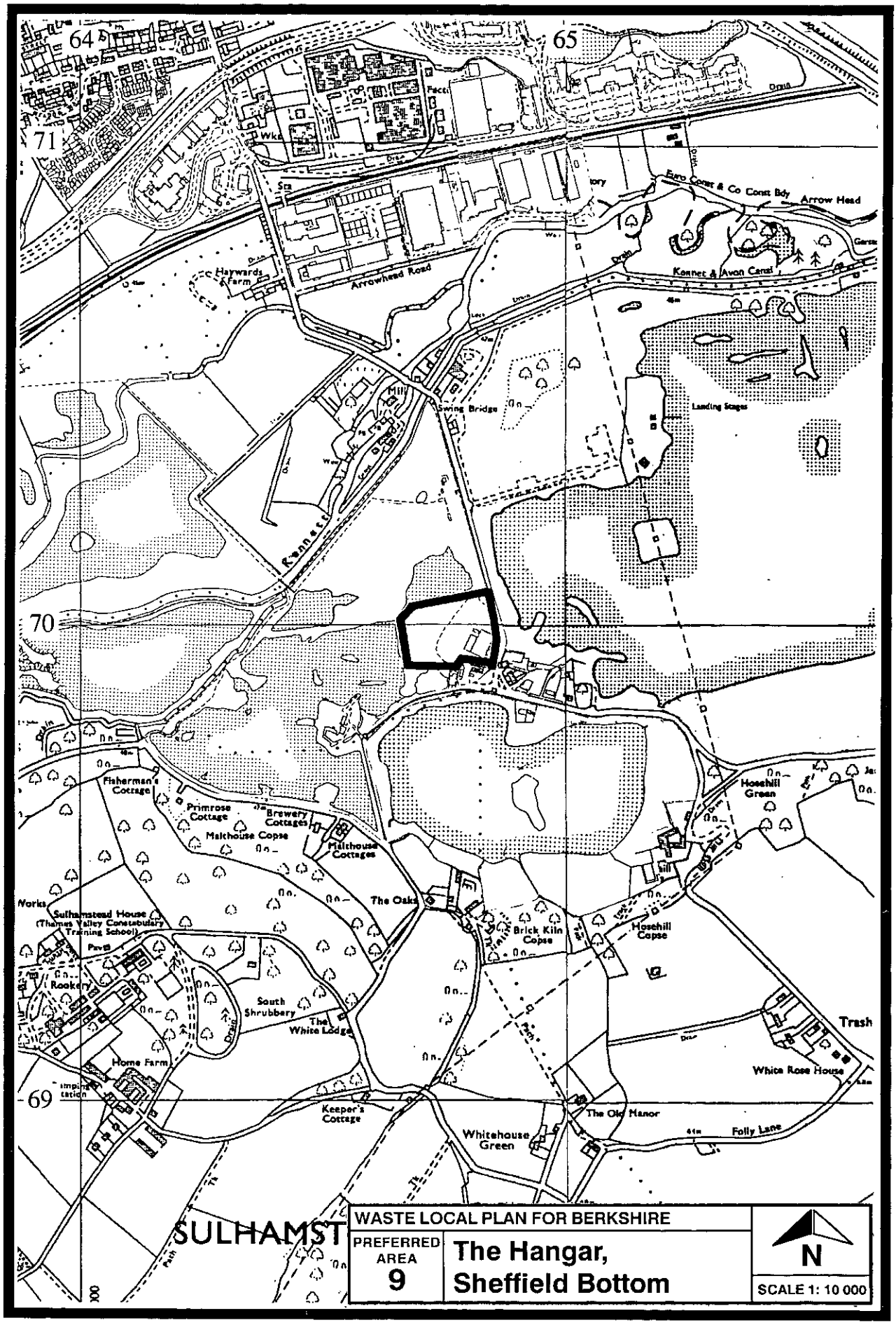
SITE PLANNING REQUIREMENTS

(i) General

The whole of the site is considered to be potentially suitable for a waste recycling and transfer station. Any permanent use should be within either the existing hangar building or a purpose built building.

(ii)Access and Traffic

The local road network is substandard. Accordingly, any proposal for development of the site for waste management purposes, if on a scale that would increase existing traffic levels, should include provision for improvements to the local highway network. In order to safeguard the character of the Sheffield Bottom Conservation Area, all traffic should avoid using Sheffield Bridge. A legal agreement would be required to secure an acceptable haul route.


64
65
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69
Arrowhead Road
Hayward's Farm
Swing Bridge
Landing Stages
Kennet & Avon Canal
Arrow Head
Fisherman's Cottage
Primrose Cottage
Brewery Cottages
Malthouse Copse
Malthouse Cottages
The Oaks
Brick Kiln Copse
Hosehill Green
Hosehill Copse
Sulhamstead House (Thames Valley Constabulary Training School)
Rookery
South Shrubbery
The White Lodge
Home Farm
Keeper's Cottage
Whitehouse Green
The Old Manor
Folly Lane
White Rose House
Trash
SULHAMST
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 9
The Hangar, Sheffield Bottom
N
SCALE 1: 10 000

(iii) Environmental Protection

(a) People

There are a number of houses close to the site. Adequate protection from noise, dust and smell nuisance should be provided.

(b) Landscape

A comprehensive scheme of landscape improvements would be required for the whole site, with particular attention paid to the road frontage and areas of the site closest to housing. The landscape scheme should reflect the landscape setting of the site.

(c) Ecology

The site lies adjacent to a number of former mineral workings which are recorded as Wildlife Heritage Sites for their ornithological interest. Although the site itself is not of ecological interest, any proposals should ensure that there is no adverse impact on the Hosehill Lake Wildlife Heritage Site.

(d) Flooding

The site is within the floodplain of the River Kennet. If the development were to significantly increase the floor area that currently exists on this site, the proposal should include a suitable flood compensation scheme which would need to be agreed with the Environment Agency.

ARC PLANT SITE, SHEFFIELD BOTTOM

POTENTIAL USES

- **Green waste composting**
- **Recycling non-inert**
- **Recycling inert**
- **Metal recycling**

SITE AREA

7.5ha

LOCATION

Between James Copse and ARC lake at Sheffield Bottom, south of Theale.

EXISTING USE

Sand and gravel processing plant and concrete plant, associated stockpiling areas and offices.

PLANNING CONTEXT

Planning permission was granted in 1963 for the extraction of sand and gravel. Subsequently permission was granted in 1968 for a sand and gravel processing plant and a concrete plant. Both plants are required to be moved as soon as the 1963 permission excavations have been completed. The majority of the site is yet to be excavated for minerals and the permission requires the site to be restored to a landscaped lake. The site forms part of the Theale Lakes Wildlife Heritage Site, but there is no wildlife interest within the site itself. It is also close to James's Copse, which is part of an ancient woodland Wildlife Heritage Site. It lies within the Lower Kennet Water Park as identified in the Draft Newbury District Local Plan 1991-2006.

SITE PLANNING REQUIREMENTS

(i) General

The priority is inert waste recycling, which should not be prejudiced by the other possible uses. The proposals are likely to replace rather than add to existing mineral processing and concrete batching, but there may be scope for waste management uses to become established in advance of the cessation of mineral processing subject to detailed site planning requirements and subject to the resulting lorry traffic levels not exceeding those generated at present by the activities on Preferred Area 10 and the adjoining Heron's Nest landfill and temporary recycling permission.

(ii) Access and Traffic

Improvements to the existing entrance to the plant sites may be required. In order to safeguard the character of the Sheffield Bridge Conservation Area, all traffic should avoid using Sheffield Bridge. A legal agr eement would be required to secure an acceptable haul route.

Appendix 7

(iii) Environmental Protection

(a) People

There are no properties close to the site. The phasing in of waste management uses at the site in co-ordination with the phasing out of mineral-related uses should ensure that, overall, traffic levels did not increase and that, therefore, there would be no detriment to residents in properties along the haul routes.

(b) Landscape

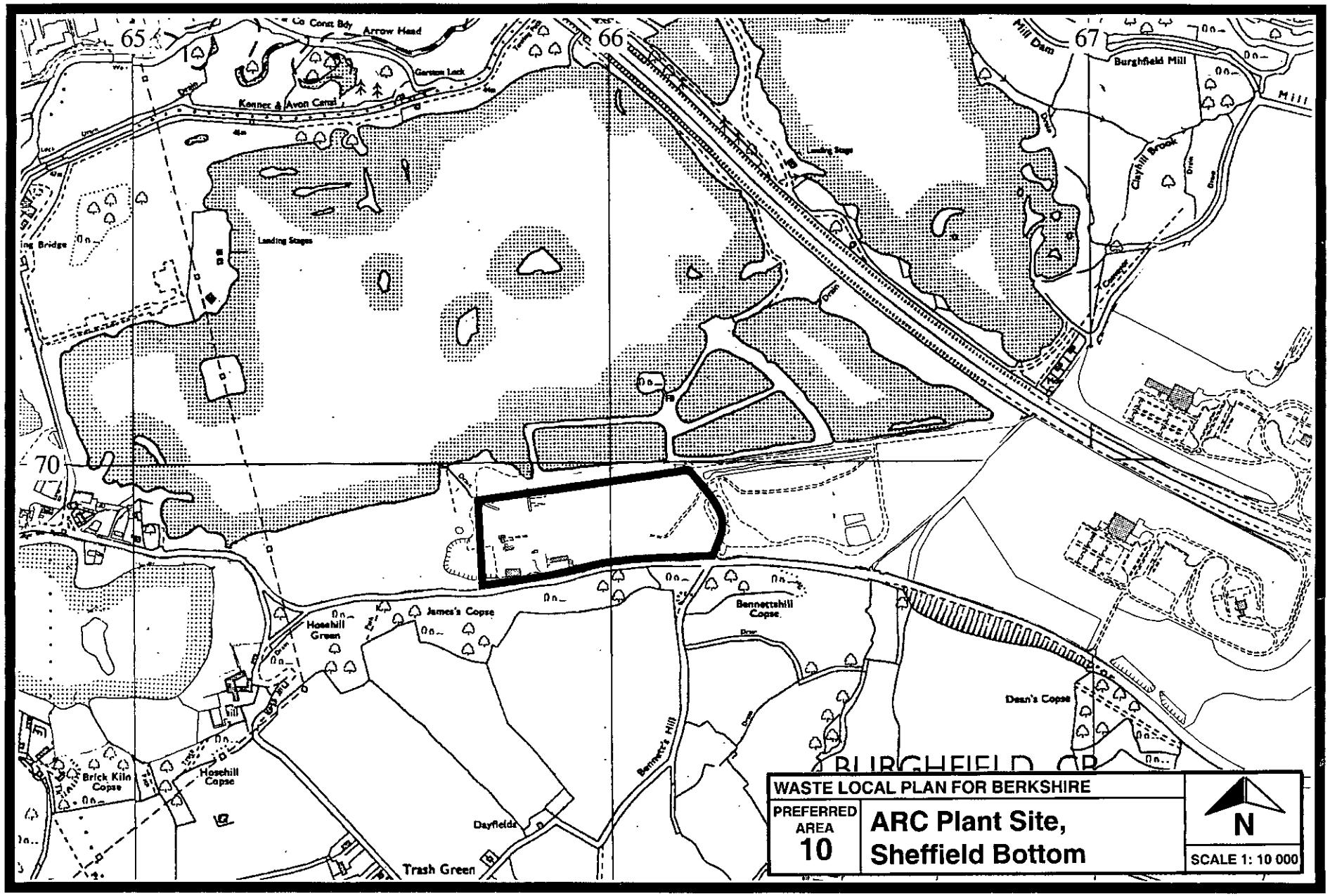
The development should be designed to protect the landscape character of the Lower Kennet Water Park and the surrounding countryside. The current landfill site, once restored, will screen the site from the east. Additional screening and planting would be required within or on the northern and western boundaries to screen the operations from the users of the recreational lake to the north. A landscaped buffer zone should be included adjacent to Theale Lake. The thickening of the existing roadside vegetation on the southern boundary may also be required.

(c) Ecology

The site forms part of Theale Gravel Pits Wildlife Heritage Site, comprising open water important for birds. The actual site has no wildlife interest. Any proposals should ensure that there is no adverse effect on the Wildlife Heritage Sites.

(d) Mineral sterilisation

Waste management uses must not sterilise the remaining mineral reserves at the site.


65
66
67
70
Kennet & Avon Canal
Arrow Head
Landing Stages
Mill Dam
Burghfield Mill
Clayhill Brook
Hosehill Green
James's Copse
Bennettshill Copse
Dean's Copse
Brick Kiln Copse
Hosehill Copse
Dayfields
Trash Green
Bennett's Hill
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 10
ARC Plant Site, Sheffield Bottom
N
SCALE 1: 10 000

SMALLMEAD, READING

POTENTIAL USES

- **Waste treatment**
- **Waste to energy**
- **Engineered landfill**
- **Civic amenity site**
- **Recycling inert**
- ***Major recycling***
- ***Difficult/special waste recycling, treatment or transfer***
- ***Metal recycling***

SITE AREA

Area A :	57ha	Area C :	17ha
Area B :	3ha	Area D :	20ha

LOCATION

South-west of Reading, north of the M4, south of the River Kennet, west of the proposed A33 Relief Road and east of the Reading to Basingstoke railway line

EXISTING USE

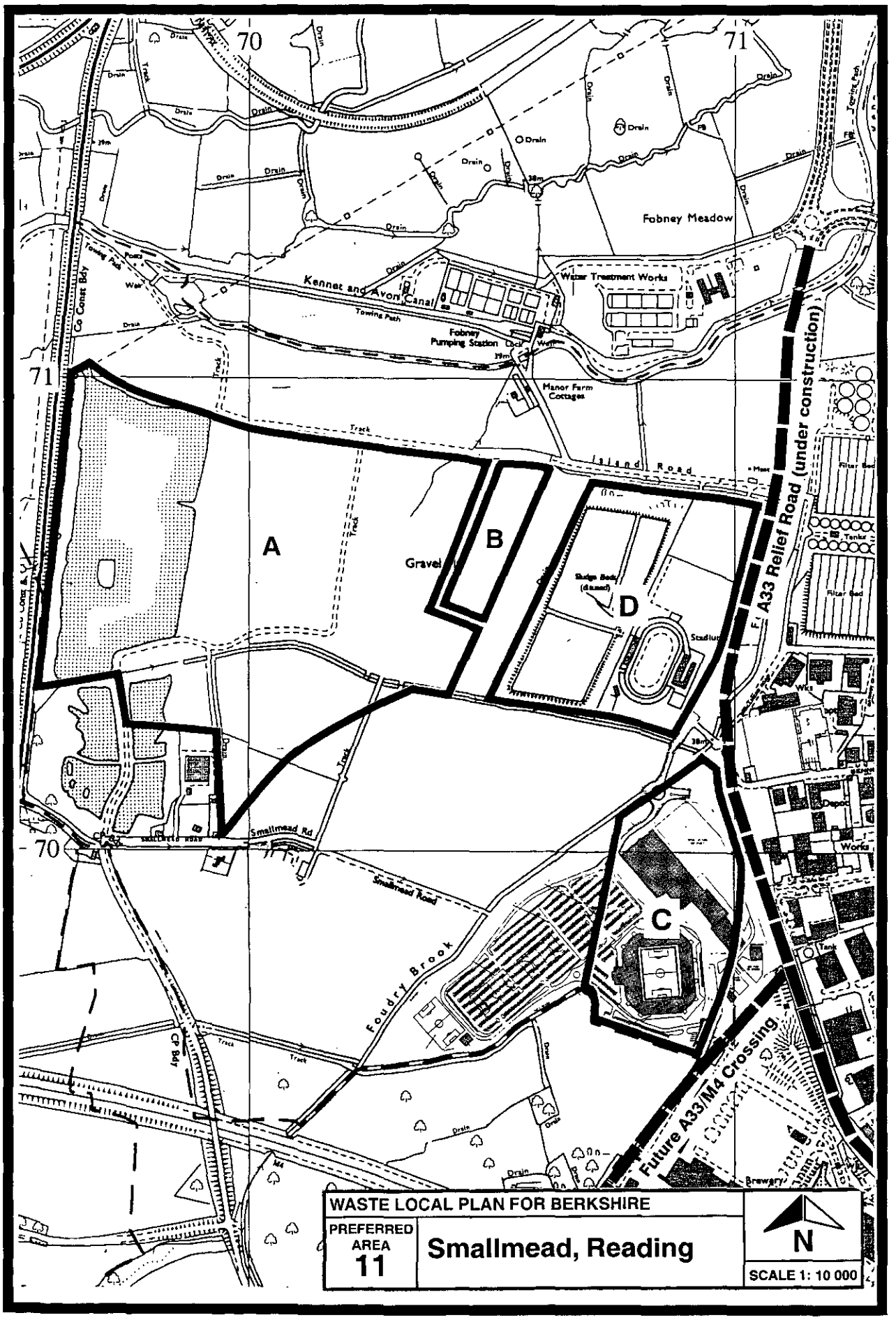
Area A is mainly a landfill site, about a quarter of which has been restored. The western third is a mineral extraction area. The southern part is agricultural land. Area B is part of the extraction area which is being filled with inert waste. Area C is a restored household waste tip which has been restored to rough grassland with a Civic Amenity Site (proposed to be relocated to Area B) at its northern end. The western half of Area D is occupied by disused sludge lagoons. A temporary inert waste facility occupies the northern part of Area D, with the Smallmead greyhound and speedway stadium covering the remainder. Most of Area C is now given over to the new Reading FC football stadium and associated development.

PLANNING CONTEXT

Areas A and B are identified as a major landscape feature in the Reading Borough Local Plan Deposit Draft (RBLP), where development would not be permitted which would detract from the appearance or character of such features. Area A includes land identified as a Preferred Area for mineral extraction in the Replacement Minerals Local Plan (RMLP). Part of Area A is also proposed to be used for the temporary stockpiling of soils during the construction of the adjacent Reading Business Park.

Planning permissions have been granted in Area B for a new Civic Amenity Site (1989) and for a major waste reclamation plant (1996). The former was intended to replace the earlier Civic Amenity Site which has now been displaced by the A33 Relief Road/access to Reading Business Park. In mid-1998, it was decided not to proceed with the waste reclamation plant as approved in 1996. Area C is one of two alternative locations identified for a 'park & ride' facility in the RBLP. Area D has not been identified in the RBLP for any use. Planning permission has been granted for the infilling and restoration of the sludge lagoons for recreational purposes.

The Reading Business Park is proposed to the south-east of Area A and to the west and south of Area C.


70
71
Fobney Meadow
Kennet and Avon Canal
Towing Path
Water Treatment Works
Fobney Pumping Station
Manor Farm Cottages
Island Road
A33 Relief Road (under construction)
A
B
Gravel
D
C
Smallmead Rd
Foudry Brook
Future A33/M4 Crossing
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 11
Smallmead, Reading
N
SCALE 1: 10 000

SITE PLANNING REQUIREMENTS

(i) General

The RMLP envisages that its Preferred Area 8 (which is the southernmost part of Area A in this Plan) will be filled and restored, with substantial tree and hedge planting to marry in with the proposals for the final restoration of the land to the north (i.e. the remainder of Area A), and to enhance the general appearance of the area. Area A could be phased so that it is filled in advance of the final phase of the existing filling operations. The deposit of putrescible waste would be required to diminish over time and be replaced by polluting waste.

On Area B there is a priority for a Civic Amenity Site with or without an associated waste treatment facility. Major recycling, special/difficult waste facilities and metal recycling would only be suitable as ancillary to the preferred uses or if the site is not eventually required for those uses.

On Area C there should be sufficient space to accommodate a 'park and ride' facility in addition to the waste management uses envisaged. A waste to energy facility should be located at the southern end of the site. Major recycling, special/difficult waste facilities and metal recycling would only be acceptable if a waste to energy facility is developed. A temporary inert waste recycling facility could be developed to replace that at Area D.

In the event that Area D (in whole or in part) is to be brought forward for waste to energy within the terms set out in paragraph 8.17 of this Plan, a waste to energy facility should be located towards the northern end of the site. This would enable the existing stadium to be retained if necessary, although relocation of the parking areas would probably be required. Major recycling, special/difficult waste facilities, and metal recycling would only be acceptable if a waste to energy facility were developed. The temporary inert waste recycling facility could be retained, dependent on the availability of space following development of the other facilities.

(ii) Access and Traffic

Areas A and B should be served by the existing access to the Smallmead landfill site along Island Road. Access to Areas C and D for waste to energy should not occur until after the construction of the A33 Relief Road, which would facilitate access to the strategic network. Contributions may be required to improvement to the network.

(iii) Environmental Protection

(a) People

The site is relatively remote from major housing areas, although there are a few dwellings on Smallmead Road to the south and off Island Road to the north. Measures would need to be incorporated in any proposal to protect the amenity of these residents and also users of recreational routes in the vicinity.

(b) Landscape

Proposals should be designed to enhance the setting of the Kennet and Avon Canal and the River Kennet and to contribute to the enhancement of the area.

On Area A, doming proposals should carefully consider the effect on the existing restored part of the landfill site and the land topography. The development provides the opportunity to upgrade the landscape through the provision of increased screening and landscape structure planting adjacent to Area B and the proposed Reading Business Park, as well as additional planting within and on the boundaries of the existing landfill site.

In view of the relatively small size of Area B, substantial off-site planting would be required to soften the structures and to reduce the overall visual impact.

Substantial landscape provision would be required for proposals on Areas C and D to upgrade the appearance of the site and to reduce both short and long distance views. This would help to provide an appropriate landscape setting for the development, linking with adjacent landscape and enhancing a major approach to Reading. Additional landscape planting would be required in the event that the temporary inert waste recycling in Area D were to be retained.

(c) Flooding and Hydrogeology

Development proposals would need to take into account that part of Area A is situated within the floodplain. A flood compensation scheme must be provided as part of any proposals for this area. A diversion of an existing water course in the area is sensitive in respect of groundwater protection. The acceptability of landfill on this site would be dependent upon the results of detailed investigations, including a full hydrogeological investigation, covering the level of compaction of previously deposited waste, the identification of leachate present (including perched leachate), and current groundwater and surface water quality adjacent to the site. The results of these investigations would need to form part of any application.

(d) Relationship to former landfill sites

Part of Area B is a recently restored engineered landfill, and Area C is a former household refuse tip. Proposals should ensure that measures for overcoming these constraints do not give rise to pollution, nuisance, or other risks to health and safety.

(e) Ecology

Proposals should seek to safeguard and where possible enhance existing nature conservation interests. Where proposals give rise to any loss of nature conservation interests. Where proposals give rise to any loss of nature conservation interests, appropriate mitigation and compensation measures should be provided.

(f) Archaeology

An archaeological evaluation of Area A would be necessary before any proposals for extraction and infilling were determined.

(g) Relationship to Surrounding Uses

The proximity of the potential areas for development to the proposed Reading Business Park and Stadium Site means that particular attention would need to be paid to suitable mitigating measures to limit the impact of the waste management activities. Measures must also be taken to safeguard the railway.

(h) Restoration and After-use

Provisions for the restoration and after-use of Area A should be closely guided by the advice set out in the RMLP (Appendix 3, Preferred Area 8).

Appendix 7

STAR WORKS, KNOWL HILL

POTENTIAL USES

- **Engineered landfill**
- **Recycling non-inert**
- ***Difficult/special waste recycling, treatment or transfer***
- ***Metal recycling***

SITE AREA

Area A : 5ha
Area B : 0.8ha

LOCATION

North west of the village of Knowl Hill, Wargrave.

EXISTING USE

Clay has been extracted from approximately half of Area A for use in tile manufacturing at the adjacent tile works. The site includes some assets of nature conservation and landscape value.

Area B is divided into two areas, within Ibstock Warner's tile manufacturing site. The larger site is currently vacant, whilst the smaller site contains a building and concrete hardstanding which is partially used as a tile stacking area.

PLANNING CONTEXT

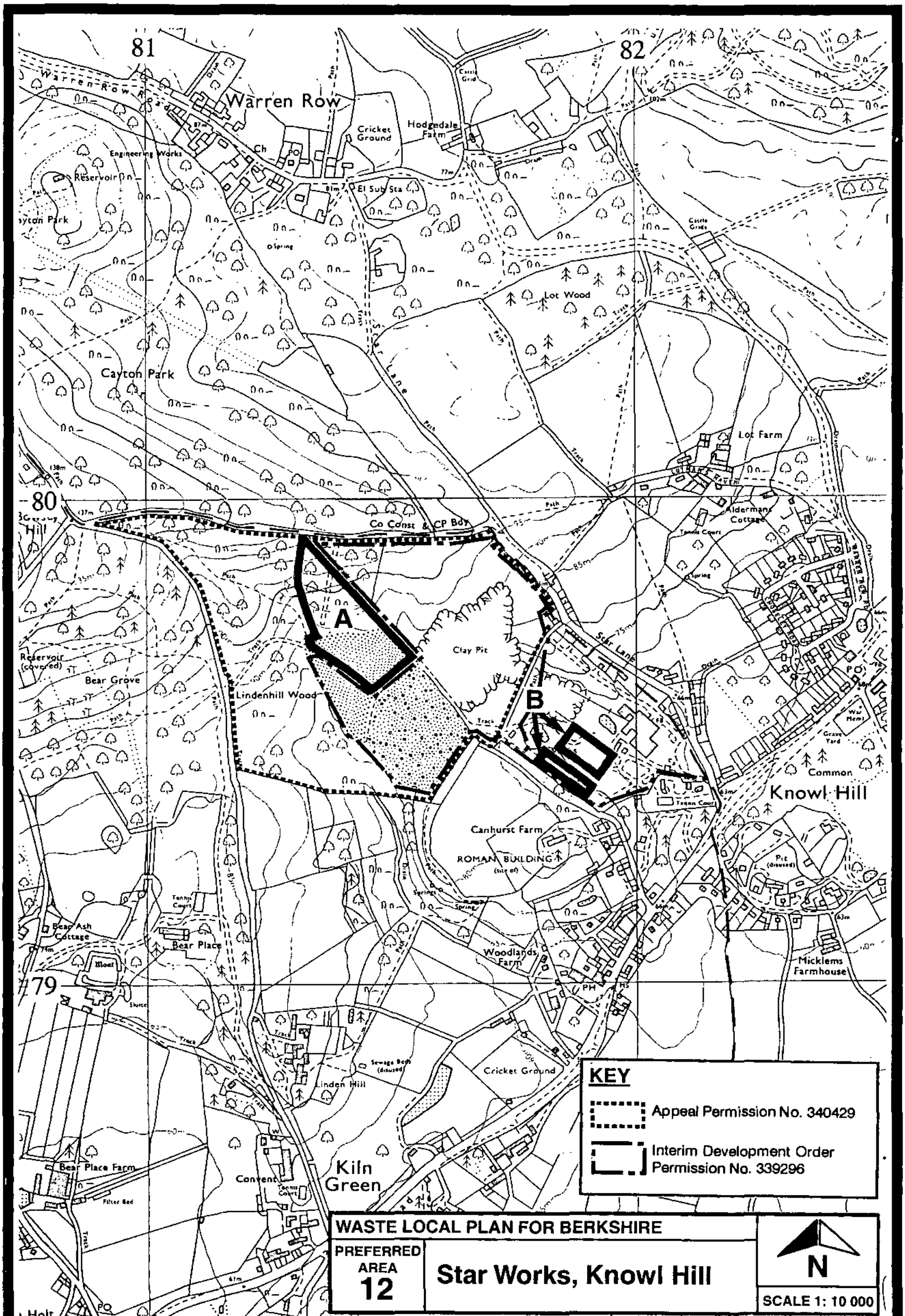
The site is located within the Green Belt and is identified in the Structure Plan as being within an 'Area of Special Landscape Importance'. It lies within a Wildlife Heritage Site and abuts two others. These are designated for their ancient woodland, and diverse habitats.

Planning permission was granted in 1947 for excavations. This Interim Development Order (IDO) permission was registered in 1993. Permission was granted in 1994 on appeal for an engineered landfill site to the east of Site A.

SITE PLANNING REQUIREMENTS

(i) General

Area A is suitable as an engineered landfill facility. It is anticipated that the area would be filled towards the end of the plan period, and therefore it is likely that the site would be required to take polluting rather than putrescible waste.



Warren Row
Cricket Ground
Hodgedale Farm
Cayton Park
Lot Wood
Lot Farm
Aldermans Cottage
Co Const & CP Bdy
Clay Pit
Bear Grove
Lindenhill Wood
Canhurst Farm
ROMAN BUILDING
Knowl Hill
Common
Bear Ash Cottage
Bear Place
Woodlands Farm
Micklems Farmhouse
Cricket Ground
Linden Hill
Kiln Green
Convent
Bear Place Farm
A
B
KEY
Appeal Permission No. 340429
Interim Development Order Permission No. 339296
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 12
Star Works, Knowl Hill
N
SCALE 1: 10 000

In view of the IDO permission, there would potentially be a discontinuity of landform between the restored levels of Site A after infilling and the restored levels of the land to the west after extraction. Any proposal would therefore need to address the relationship between these areas and the long-term restoration of the wider site. On Area B priority will be given to non-inert recycling areas which process the waste stream destined for the landfill site to recover materials and reduce volumes. The other facilities are more likely to be acceptable as small scale, ancillary operations.

(ii) Access and Traffic

The site has direct access to the strategic road network via Star Lane to the A4. The detailed implications of HGV turning movements at the A4/Star Lane junction would require to be addressed in any planning application.

(iii) Environmental Protection

(a) People

The site, and the access in particular, are located close to housing. One part of Area B is located very close to individual dwellings. The majority of housing is well-screened, although potential problems of noise, smell and dust must be addressed by any planning application. In order to minimise potential nuisance, all operations on Area B must be fully enclosed and provision must include a proposal for acoustic screening of the access.

(b) Landscape

The site is very well screened by existing vegetation, and has a number of peripheral landscape features that must be retained. Infilling operations would have a limited visual impact on surroundings, subject to the retention of these features. It would be necessary for landfill contours to be designed so that they were compatible with the surrounding landform and the recently permitted restoration contours. It is unlikely that the landfill operation would be visible from areas of raised ground. However, it is important that the proposed landform and additional planting are integrated with the local landscape and that they reflect the habitat composition of the adjoining Wildlife Heritage Site.

Area B is at present partially screened and is within a Wildlife Heritage Site. Improvements and additions to these landscape features would be required in order to protect the amenities of nearby properties.

(c) Ecology

Any proposals should ensure that ecological interests are taken into account.

(d) Rights of Way

Two bridleways are situated adjacent to the sites and it is considered necessary to protect the amenity of users. In addition a footpath abuts Area A and the existing route of the footpath should be retained with measures required to protect the amenity of footpath users. There are opportunities for recreational access improvements, compatible with future restoration proposals, which would need to be considered, particularly in connection with the long-term restoration of the wider site.

(e) Water

Groundwater relief measures would be required in connection with the infilling of Area A, along with appropriate pollution prevention measures including the protection of non-main rivers. Information would also be required on the water level within the Reading Beds, the engineering properties of the clay and the hydrogeology of the chalk aquifer.

LONGSHOT LANE TRANSFER STATION, BRACKNELL

POTENTIAL USES

- **Transfer Station**
- **Major recycling**
- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**
- **Civic Amenity Site**

SITE AREA

2ha

LOCATION

West of Longshot Lane, within the Waterside Park Industrial Estate, on the west side of Bracknell town centre.

EXISTING USE

The site accommodates a civic amenity site and a waste transfer station.

PLANNING CONTEXT

The site falls within an area designated for major new employment in the adopted North Bracknell Local Plan, and is described as being suitable for business, industrial, distribution and storage uses. Similar provisions are included in the Draft Borough-wide Local Plan. Planning permission has been granted for a materials recycling facility.

SITE PLANNING REQUIREMENTS

(i) General

The site may continue to be required for waste transfer activities. Other uses should not prejudice this function. Other priority uses are for major recycling and other non-inert recycling activities which concentrate on recycling the existing waste stream (principally household and civic amenity waste) and which also deal with industrial and commercial waste (with priority for non-skip waste). Special waste activities are most likely to be developed as ancillary functions to the priority uses.

(ii) Access and Traffic

There is good access to the strategic highway network via Longshot Lane and Western Road.

Appendix 1

(iii) Environmental Protection

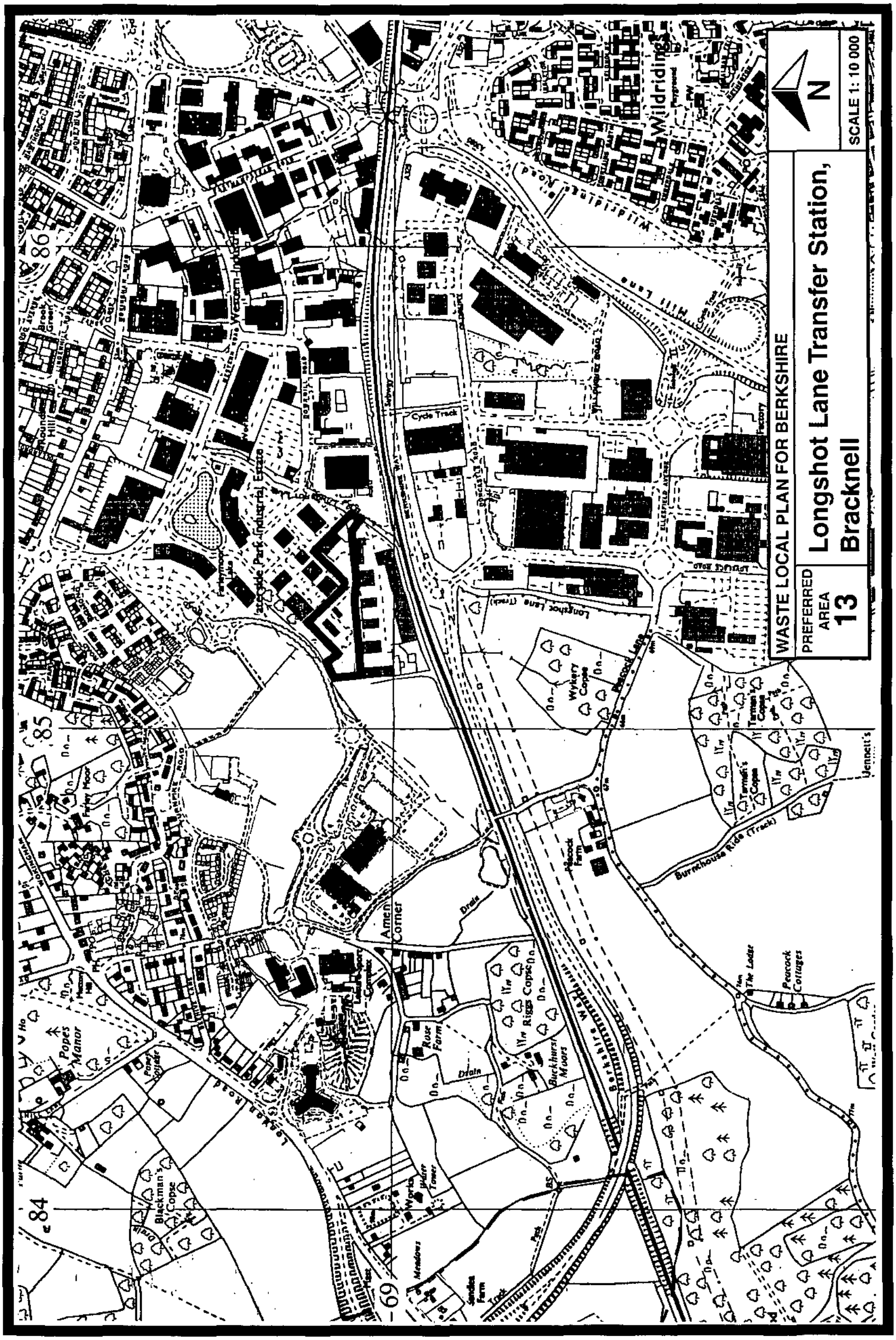
(a) People

The impact of the proposals would require a detailed assessment to identify the possible impacts, such as visual intrusion, noise and smell and, as a result, careful mitigation measures would be proposed.

However, there is an existing facility and the site is within an industrial area with a limited number of properties nearby. Redevelopment of some areas of the existing operation and careful design and management of additional facilities offers an opportunity for environmental improvements.

(b) Landscape

The site is screened from long and middle distance views. Any proposal would create an opportunity to screen short distance views. Any new building proposed would need to be of a scale and design to minimise the impact, be sympathetic and enhance the surrounding landscape. Existing planting within and bordering the site should be rationalised to maintain the most robust features and supplemented with additional planting to provide a positive contribution to the wider landscape of the area.


WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA
13
Longshot Lane Transfer Station, Bracknell
N
SCALE 1: 10 000

HINDHAY QUARRY, PINKNEYS GREEN

POTENTIAL USES

〈 **Recycling inert**

SITE AREA

2.2ha.

LOCATION

North of Furze Platt Road, east of Pinkneys Green and north of Maidenhead.

EXISTING USE

Chalk quarry.

PLANNING CONTEXT

The site lies outside the urban area within the Green Belt.

SITE PLANNING REQUIREMENTS

(i) General

The site would be used as an inert waste recycling facility which would be linked to the life of the existing quarry and removed on cessation of extraction operations. The extent of the facilities would be restricted by the size of the permitted quarry.

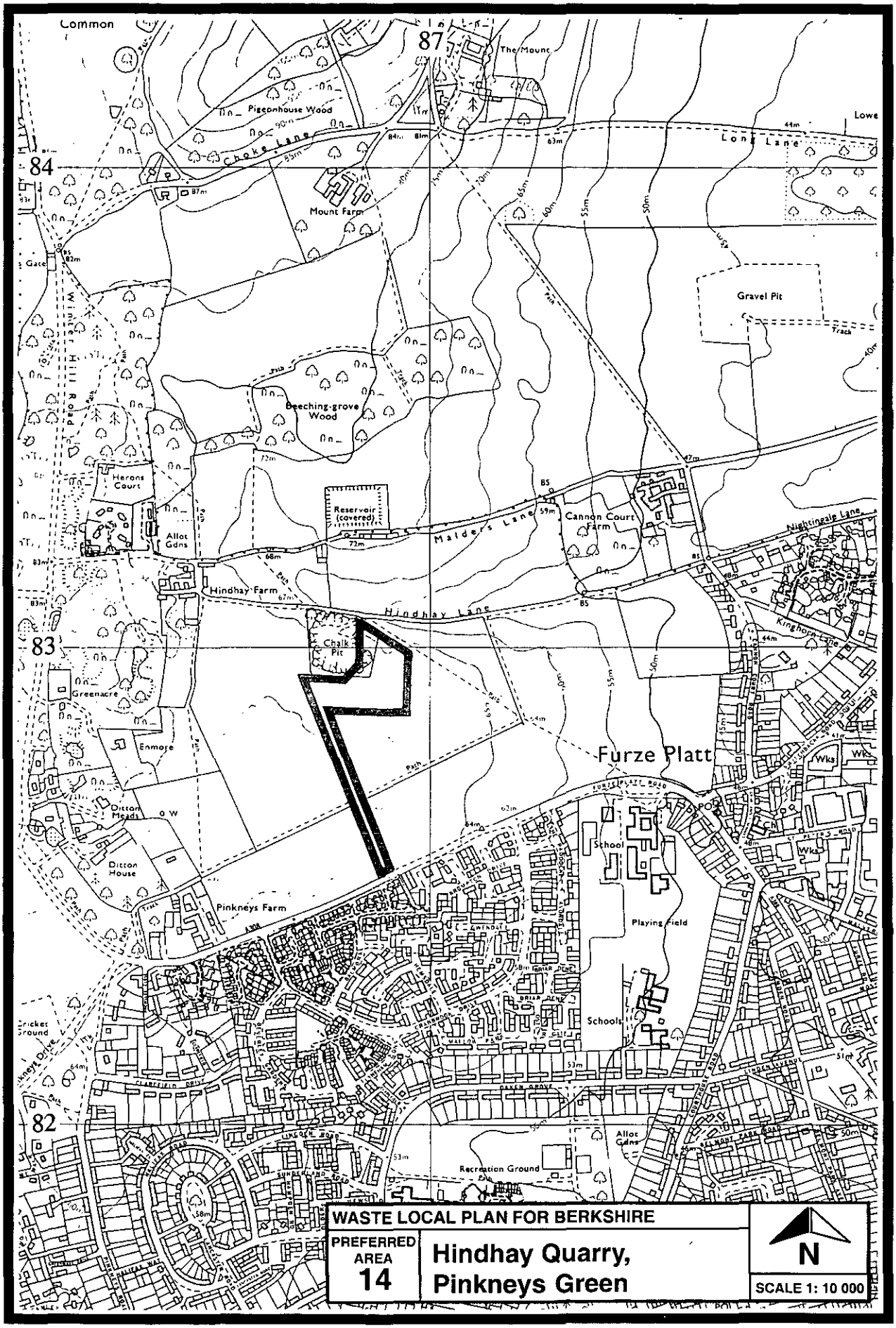
(ii) Access and Traffic

The site has access off the A308. The scale of the operation should be limited and the additional traffic generated would be restricted to ensure that disturbance to properties opposite the access would be minimised. Some improvements would however be required to the junction between the access and the A308, Furze Platt Road, and would be required to be carried out in sympathy with the rural setting.

(iii) Environmental Protection

(a) People

The recycling operation would be located in the base of the quarry in the open countryside, away from residential development. The quarry walls would screen and act as a noise buffer to the operations. Therefore there would be minimal disturbance.


Common
87
84
83
82
The Mount
Pigeonhouse Wood
Choke Lane
Lone Lane
Mount Farm
Gravel Pit
Track
Beeching-grove Wood
Herons Court
Allot Gdns
Reservoir (covered)
Malders Lane
Cannon Court Farm
Nightingale Lane
Hindhay Farm
Hindhay Lane
Kingthorn Lane
Chalk Pit
Greenacre
Enmore
Furze Platt
Ditton Meads
Ditton House
Pinkneys Farm
School
Playing Field
Schools
Cricket Ground
Recreation Ground
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 14
Hindhay Quarry, Pinkneys Green
N
SCALE 1: 10 000

(b) Landscape

The operations would mostly be screened by quarry walls. However, the site is isolated in an area of open fields. Any landscaping would require sensitive treatment to link in with the character of the surrounding area. Additional planting may be required to screen exposed areas. This could include selective screening of parts of the access road to minimise visual impact of vehicles.

(c) Rights of Way

A public footpath crosses the haul route and others adjoin the site. It is therefore important that the amenity and safety of users should be protected.

(d) Water

The site is situated within a groundwater protection zone. Necessary measures should be taken to ensure that no pollution of the aquifer occurs.

BRAYWICK CIVIC AMENITY AND SEWAGE WORKS

POTENTIAL USES

- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**
- **Civic Amenity Site**

SITE AREA

3ha.

LOCATION

Off Stafferton Way, east of Braywick Park, on the south side of Maidenhead.

EXISTING USE

The majority of the site is part of a currently vacant area at Braywick sewage works. The eastern part is Braywick Civic Amenity Site.

PLANNING CONTEXT

The site falls within the Green Belt, and is north and east of Braywick Park, a restored landfill site. To the east of the existing Civic Amenity Site is the 'Greenway' a proposed recreational route identified in the Royal Borough of Windsor and Maidenhead Local Plan.

SITE PLANNING REQUIREMENTS

(i) General

The priority is for the extension of the existing Civic Amenity Site functions and for the recycling of household and mixed industrial/commercial waste (preferably non-skip) waste.

(ii) Access and Traffic

Access to the site would be along Stafferton Way to the A308. There would probably be a small increase in the present level of traffic, but the adjoining strategic network can accommodate the additional traffic without creating a particular increase in disturbance. The access road leading to Stafferton Way would require some minor improvements in width and surfacing to ensure a safe and smoother surface and to avoid disturbance to the properties at Greenfields.

Appendix 1

(iii) Environmental Protection

(a) People

The site is an existing waste management area and redevelopment would not result in a significant change in the present characteristic of the area. There are properties along the access road and mitigation measures would need to be undertaken to minimise nuisance from the proposed operations. All new operations would be required to be under cover, and those with potential to generate smell should be fully enclosed.

(b) Landscape

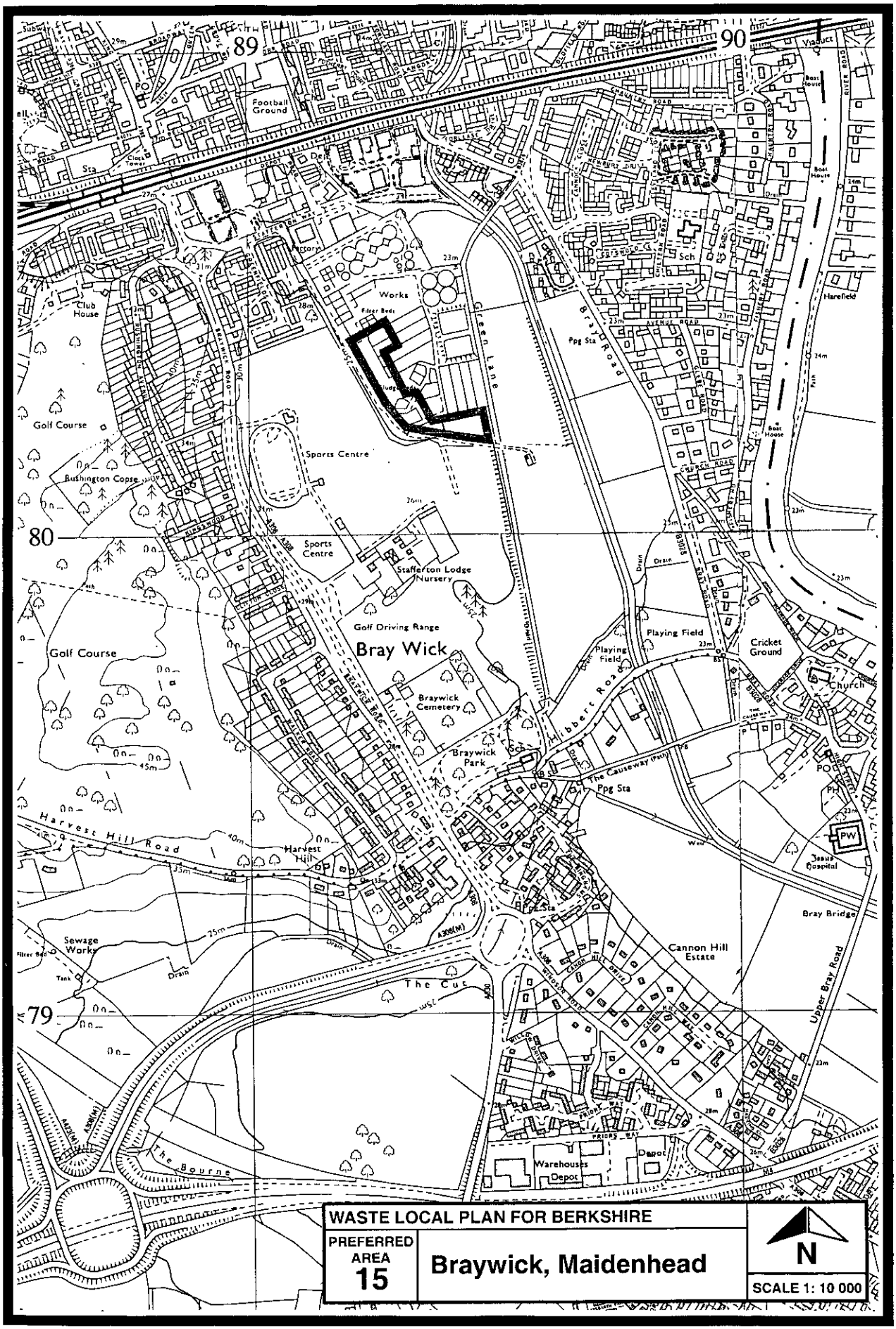
The site would remain in waste management uses and hence there is unlikely to be a significant impact from the proposals on existing uses. Instead, redevelopment offers an opportunity for environmental improvements, including landscape planting on the western and southern boundaries. The buildings should be of a scale and design to minimise the impact and enhance the surrounding landscape.

(c) Water

The site is on the edge of a groundwater protection zone and is close to two main rivers. Appropriate pollution prevention measures should be taken to protect the water environment.

(d) Contaminated land

The land has been used for sewage disposal purposes, mainly filter beds. Any planning application for development must ascertain the extent of any pollution of the land and make suitable provision for its containment and the satisfactory disposal elsewhere of the contaminated soils.


89
90
80
79
Football Ground
Sta
Club House
Golf Course
Bushington Copse
Works
Green Lane
Sports Centre
Sports Centre
Stafferton Lodge Nursery
Golf Driving Range
Bray Wick
Golf Course
Braywick Cemetery
Braywick Park
Harvest Hill Road
Harvest Hill
Sewage Works
The Cut
The Bourne
Braywick Road
Ppg Sta
Playing Field
Playing Field
Cricket Ground
Church
Hibbert Road
The Causeway
Ppg Sta
Jesus Hospital
Bray Bridge
Cannon Hill Estate
Upper Bray Road
Warehouses
Depot
Depot
Harefield
Viaduct
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 15
Braywick, Maidenhead
N
SCALE 1: 10 000

FORMER TIMBER YARD, ENGLEMERE, NORTH ASCOT

POTENTIAL USES

〈 **Recycling non-inert**

SITE AREA

1.5ha

LOCATION

South of A329 London Road, Englemere, North Ascot

EXISTING USE

Vacant former timber yard.

PLANNING CONTEXT

The site lies outside defined settlement boundaries within the Green Belt. It adjoins Englemere Pond Site of Special Scientific Interest. The site is designated due to scarce marginal habitats around a large pond dominated by Common Reed. A Ramblers' route runs along the south-western boundary of the site.

SITE PLANNING REQUIREMENTS

(i) General

As the proposed use would need to be enclosed, consideration should be given to adapting the existing buildings or to a redevelopment of the site.

(ii) Access and Traffic

The provision of a right-turn ghost island on the A329 would be required.

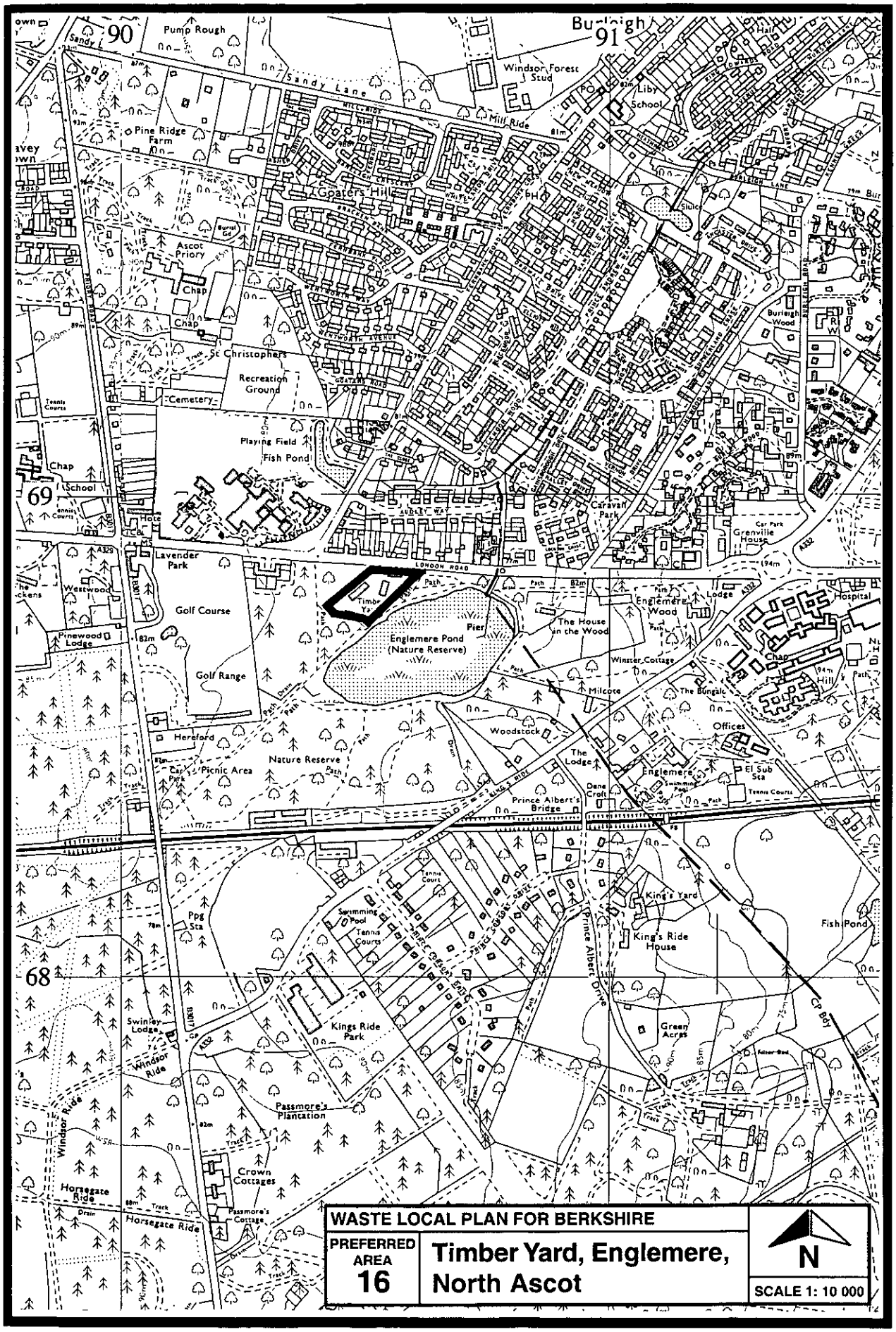
(iii) Environmental Protection

(a) People

Any new buildings would need to be located well into the site and designed to minimise impacts on residents to the north. The layout of the site would need to take these impacts into account.

(b) Landscape

Existing planting would need to be protected and additional planting undertaken to protect and complement adjoining vegetation and habitats and to screen the proposed facilities.


WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 16
Timber Yard, Englemere, North Ascot
N
SCALE 1: 10 000

(c) Ecology

Any proposal must ensure that there are no adverse impacts on the SSSI. In view of the proximity of the SSSI an environmental statement may be required.

(d) Water

Appropriate pollution prevention measures must be taken to protect the water environment in this area.

PLANT SITE, MONKEY ISLAND LANE, BRAY

POTENTIAL USES

〈 **Recycling non-inert**

SITE AREA

2ha

LOCATION

West of Monkey Island Lane, Bray and immediately to the north of the Tithe Barn Drive residential estate.

EXISTING USE

The site is currently occupied by a sand and gravel processing plant and a concrete plant.

PLANNING CONTEXT

The site is located within the Green Belt. The concrete plant is tied to the life of the processing plant. The land to the north has been developed as a Water Treatment Works. Land to the east of Monkey Island Lane contains Bray Pennyroyal Field SSSI. This site is designated due to the presence of a rare plant species. Bray Pit, 800m to the west of the plant site, is a Wildlife Heritage Site due to its ornithological interest.

SITE PLANNING REQUIREMENTS

(i) General

There is limited scope for any recycling at the site until such time as the processing and concrete plants are removed.

(ii) Access and Traffic

Access would be via Monkey Island Lane (a bridleway) to the A308 and thence to the strategic highway network. Improvements to Monkey Island Lane may be required dependant on the scale of the operations.

(iii) Environmental Protection

(a) People

The Tithe Barn Drive housing area is situated immediately to the south of the site. The large bund which separates the site from the housing should be retained. In order to minimise potential nuisance both on the housing area and on the water treatment works, all operations would need to be fully enclosed.

(b) Landscape

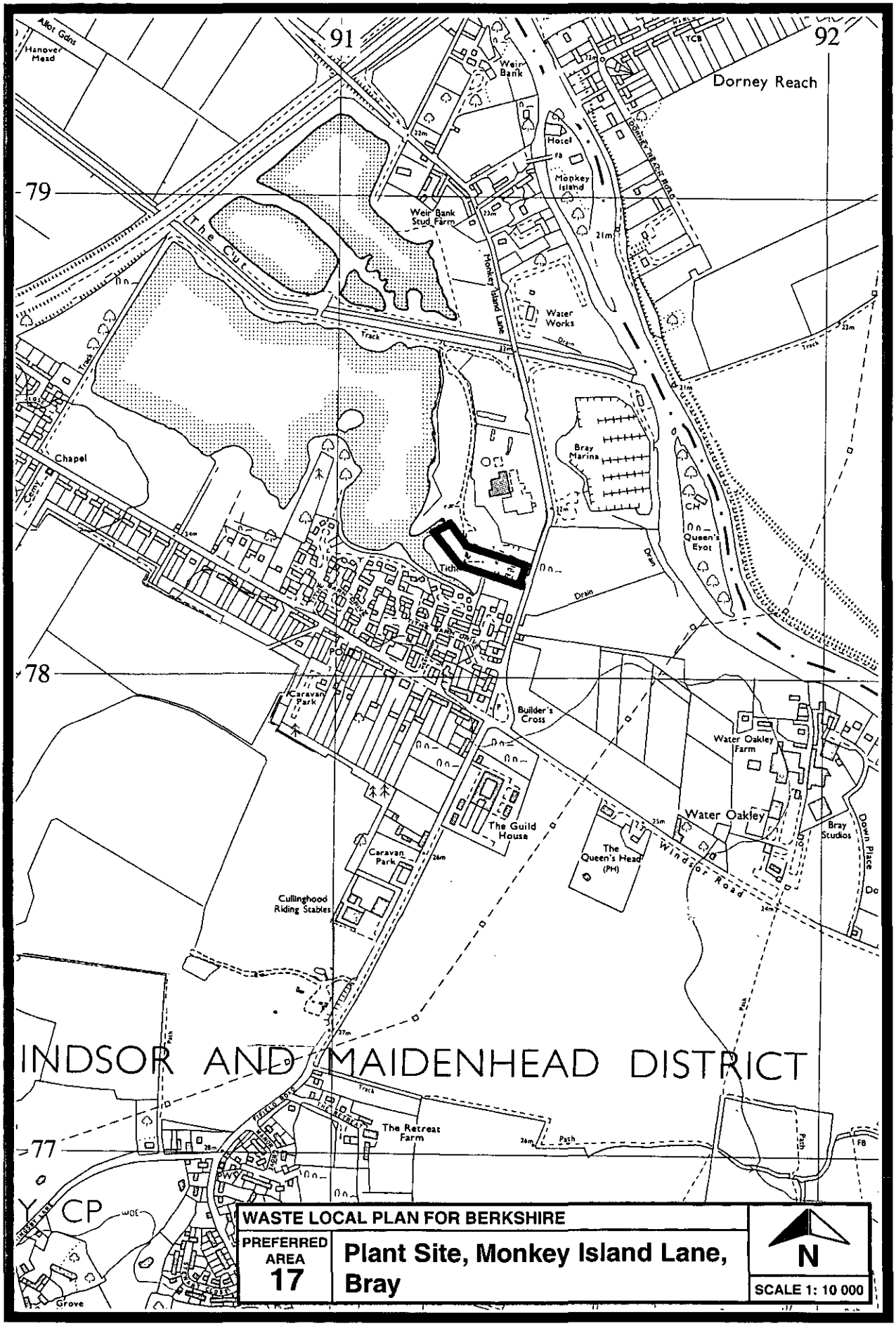
The site is located within the Green Belt and it is important that the building and any operations at the site are fully screened to minimise visual intrusion. Additional screening and landscape planting, particularly on the western boundary, would therefore be required to enhance the lake edge. Landscaping should also enhance views from the housing to the south.

(c) Ecology

Any proposals must ensure that there are no adverse impacts on the SSSI. In view of the proximity of the SSSI an environmental statement may be required.

(d) Flooding

The site is located within the floodplain and any development must not increase the flooding risk to people and property.


91
92
79
78
77
Dorney Reach
Weir Bank
Hotel
Monkey Island
Weir Bank Stud Farm
The Cut
Monkey Island Lane
Water Works
Track
Bray Marina
Chapel
Cem.
Queen's Eyot
Drain
Caravan Park
Builder's Cross
Water Oakley Farm
Water Oakley
The Guild House
The Queen's Head (PH)
Bray Studios
Windsor Road
Cullinghood Riding Stables
The Retreat Farm
Path
INDSOR AND MAIDENHEAD DISTRICT
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 17
Plant Site, Monkey Island Lane, Bray
N
SCALE 1: 10 000

MANOR FARM, SLOUGH

POTENTIAL USES

〈 **Engineered landfill**
〈 ***Recycling inert***

SITE AREA

19ha

LOCATION

South of Slough and the M4, west of Slough Sewage Works.

EXISTING USE

Farmland (largely disused at present). The topography of the site is generally flat.

PLANNING CONTEXT

The site is within the Green Belt and is identified in the adopted Local Plan for Slough as being part of the Slough Sewage Works site. The site is identified in the Replacement Minerals Local Plan (RMLP) as a Preferred Area for gravel extraction. The RMLP acknowledges that imported fill would be required to achieve the restoration of the site and that in technical terms the use of putrescible waste in restoration could be acceptable, although no commitment is given to accepting the principle of using putrescible waste in the restoration of this site.

The land immediately to the south forms part of the site of the Maidenhead, Windsor and Eton Flood Alleviation Scheme, now under construction. The use of this site may be restricted by M4 widening proposals.

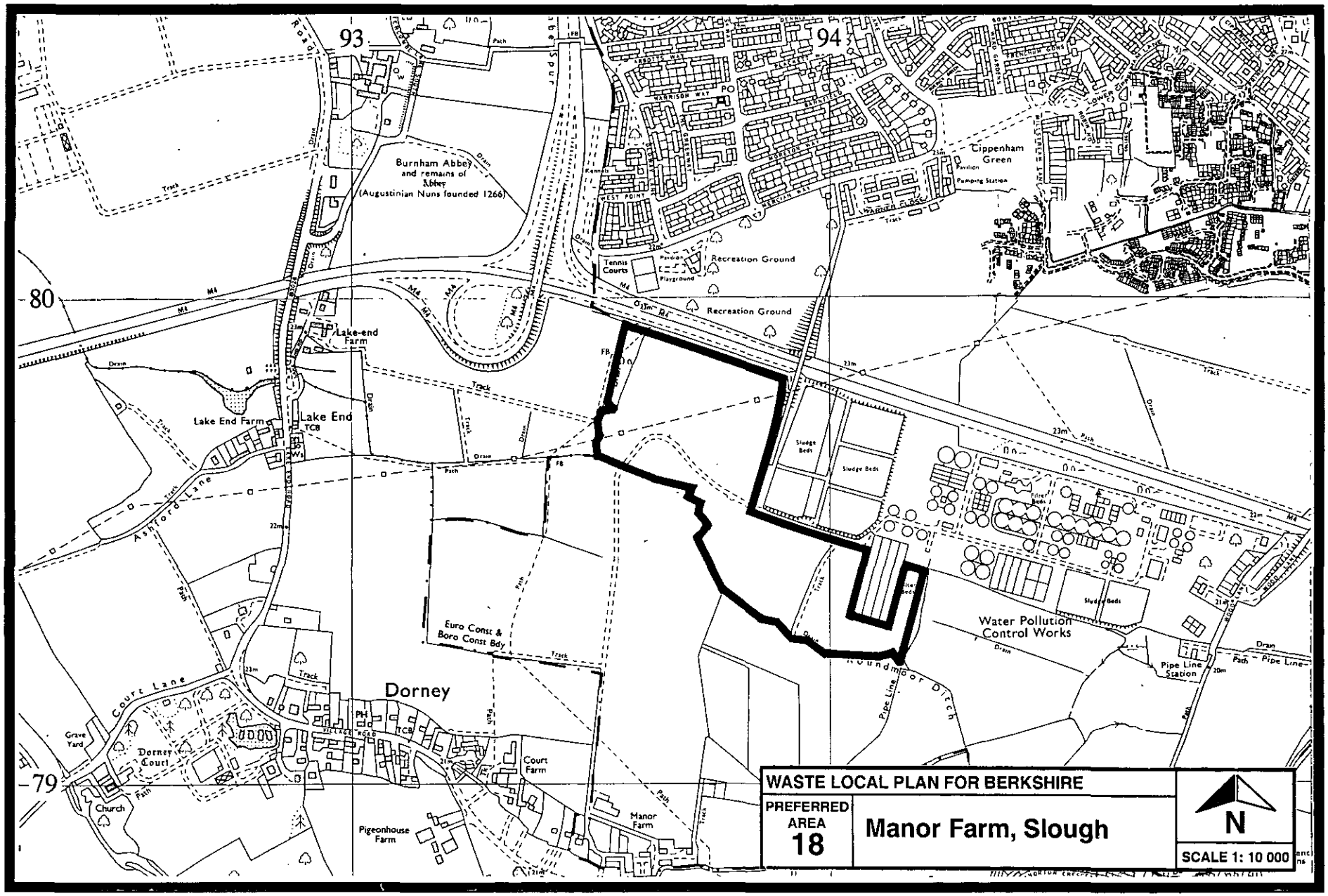
SITE PLANNING REQUIREMENTS

(i) General

Proposals for engineered landfill at this site should be accompanied by an Environmental Statement. The ES should consider the potential impacts of such a development on the environment and propose measures to ameliorate those impacts. The appropriate standards on containment must be met, and a phased working and restoration programme incorporated, together with noise attenuation and landscape screening bunds. All plant and machinery must be located to ensure satisfactory screening. Buffer zones will be required which conform with the minimum standards outlined in Chapter 10 but which also take account of local circumstances.

There are no restrictions in the RMLP on the timing of the release and working of this site. If it were worked early in the Plan period, the deposit of putrescible waste would be required to diminish over time and be replaced by polluting waste.

Inert waste recycling would only be permitted in connection with landfill activities and would be tied to the life of the landfill.


93
94
80
79
Burnham Abbey and remains of Abbey (Augustinian Nuns founded 1266)
Cippenham Green
Recreation Ground
Tennis Courts
Lake-end Farm
Lake End Farm
Lake End
Ashford Lane
Sludge Beds
Water Pollution Control Works
Pipe Line Station
Roundmoor Ditch
Euro Const & Boro Const Bdy
Dorney
Court Lane
Grave Yard
Dorney Court
Church
Court Farm
Manor Farm
Pigeonhouse Farm
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 18
Manor Farm, Slough
N
SCALE 1: 10 000

(ii) Access and Traffic

Access to the strategic road network would be across adjoining land to the west (in Buckinghamshire) via Lake End Road to the A4 only.

(iii) Environmental Protection

(a) People

There are no residential properties in the immediate locality of the site, although residents of properties on Lake End Road may suffer some adverse impact and loss of amenity due to increased traffic.

(b) Water

The site lies within a major aquifer and waste would be tipped below the water table. Putrescible landfill must be subject to engineered containment and stringent standards. The site lies in an area of contaminated ground (old sewage sludge beds), and stringent precautions must be applied to protect water quality. Proposals should minimise adverse impacts on the adjacent main river (Roundmoor Ditch). Groundwater relief measures would be required. The groundwater and surface water issues must be addressed by the ES and appropriate precautions and mitigation measures implemented. The impact of dewatering on licensed water abstraction points must be addressed and effective measures incorporated.

(c) Landscape

The landscape of the site is generally degraded and featureless. Landfill activity would provide an opportunity to restore and upgrade the landscape. Appropriate measures, for example screen planting and bunds, would need to be implemented to protect the amenity of users of public rights of way in the locality, and of Dorney Common. The site is screened to the north by the M4 and there is screen planting along the motorway boundary of the site. Careful consideration would need to be given to the final landform of doming proposals, and the restored landscape structure would need to be integrated with the proposed landscape treatment for the Flood Alleviation Scheme.

(d) Powerlines

The route of, and access to, the overhead power line crossing the site must be safeguarded at all times.

(e) Restoration and after-use

The restoration and after-use of the site should be closely guided by the advice set out in the RMLP (Appendix 3, Site 10).

MANOR FARM SEWAGE WORKS, SLOUGH

POTENTIAL USES

〈 **Difficult/special waste, recycling, treatment or transfer**

SITE AREA

28 ha

LOCATION

Within the existing sewage works, south-west of Slough, immediately south of the M4

EXISTING USE

Sewage works

PLANNING CONTEXT

The site is within the Green Belt, and north of the National Rivers Authority's proposed flood relief channel.

SITE PLANNING REQUIREMENTS

(i) General

Only treatment operations related to the processing of special/difficult waste could be accommodated on this site in order to limit the environmental impact of lorry movements on the nearby residential areas.

(ii) Access and Traffic

Access northwards would be via Wood Lane and local distributor roads to the A4. The route would be through residential areas. Proposals for widening the M4 could affect the detailed access arrangements through the works.

(iii) Environmental Protection

(a) People

The site itself is remote from residential areas, with the M4 acting as a buffer to the north. The facilities would need to be located well within the site, away from the properties in Wood Lane to restrict potential nuisances. Any potential adverse impacts must be addressed and strict environment standards applied.

(b) Landscape

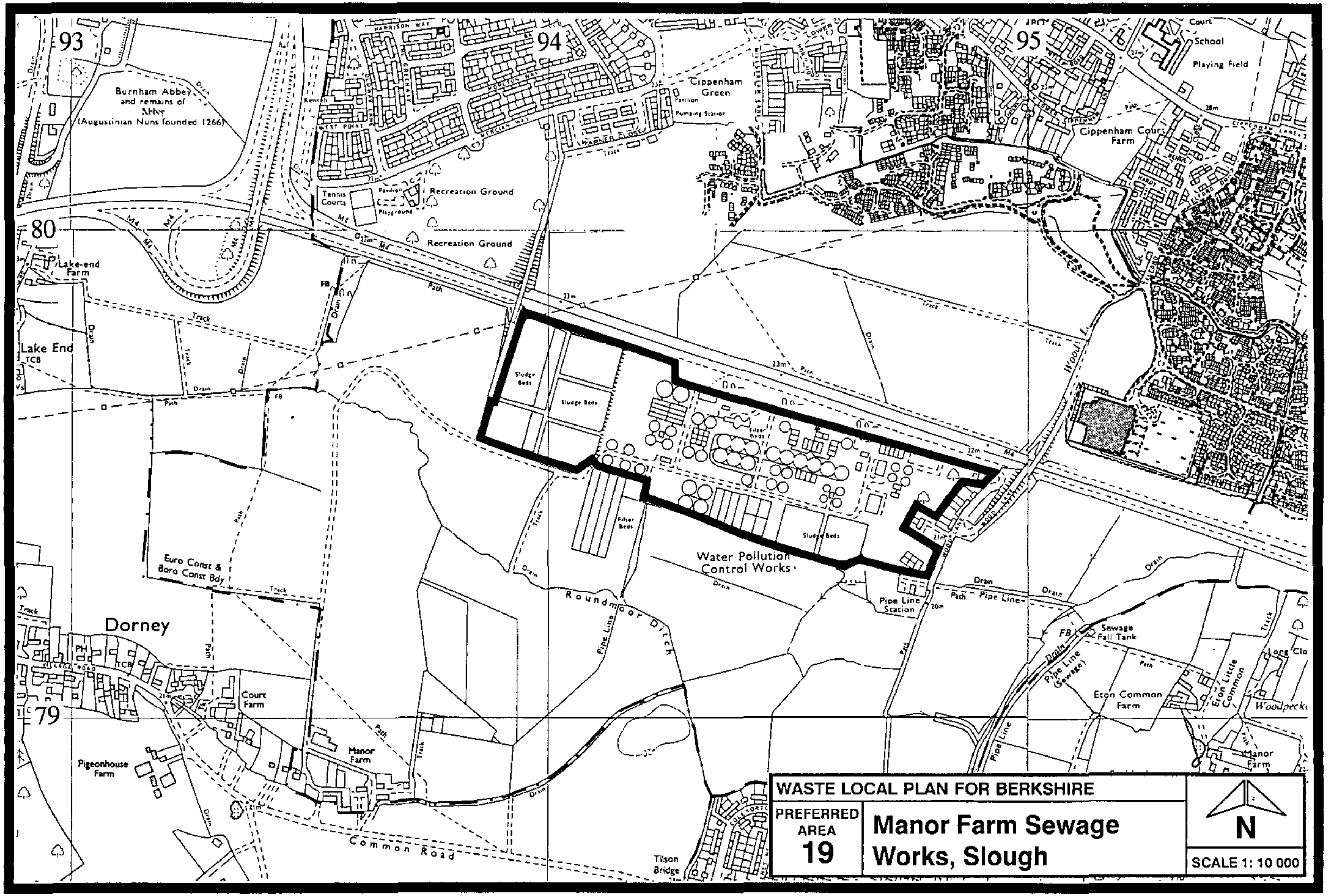
The waste facility would be a compatible use with the existing sewage works and adjoining M4. However, a high standard of design including modest scale, would be required to minimise impact. In addition landscape planting could be used to help screen operations.

(c) Water

Any waste management proposals must address the implications of developing new waste management facilities at the sewage works in respect of contaminated land and surface and groundwater protection. Proposals should minimise adverse impacts on the adjacent main river (Roundmoor Ditch).

(d) Powerlines

The route of, and access to, the overhead power line crossing the site must be safeguarded at all times.


WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 19
Manor Farm Sewage Works, Slough
N
SCALE 1: 10 000
93
94
95
80
79
Burnham Abbey and remains of Abbey (Augustinian Nuns founded 1266)
Cippenham Green
Pumping Station
Recreation Ground
Recreation Ground
Tennis Courts
Cippenham Court Farm
School
Playing Field
Lake-end Farm
Lake End
Track
Path
Drain
Sludge Beds
Sludge Beds
Filter Beds
Filter Beds
Sludge Beds
Water Pollution Control Works
Roundmoor Ditch
Pipe Line
Pipe Line Station
Sewage Fall Tank
Pipe Line (Sewage)
Eton Common Farm
Eton Little Common
Manor Farm
Euro Const & Boro Const Bdy
Dorney
PH
Court Farm
Manor Farm
Pigeonhouse Farm
Common Road
Tilson Bridge
M4

SLOUGH TRADING ESTATE AREA OF SEARCH

POTENTIAL USES

- **Waste treatment**
- **Waste derived fuel**
- **Major recycling**
- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

182ha.

LOCATION

Wholly within the built-up area of Slough, to the west of Slough town centre. The Industrial Estate is bounded to the south by the A4 Bath Road, to the east by the A355 Farnham Road, and to the north by residential development and public open space.

EXISTING USE

The Trading Estate currently includes a wide variety of business, industrial and warehouse uses (Class B1 to B8) and a limited number of service activities, including shops and banks. Slough Power Station is also within the Trading Estate.

PLANNING CONTEXT

Slough Trading Estate is within a recognised business area as defined by the adopted Local Plan for Slough, where there is a general presumption in favour of business development (Class B1 to B8). The Estate is also subject to a Simplified Planning Zone Scheme (SPZ). Waste management uses, however, fall outside the scope of the SPZ scheme and are therefore subject to normal planning controls.

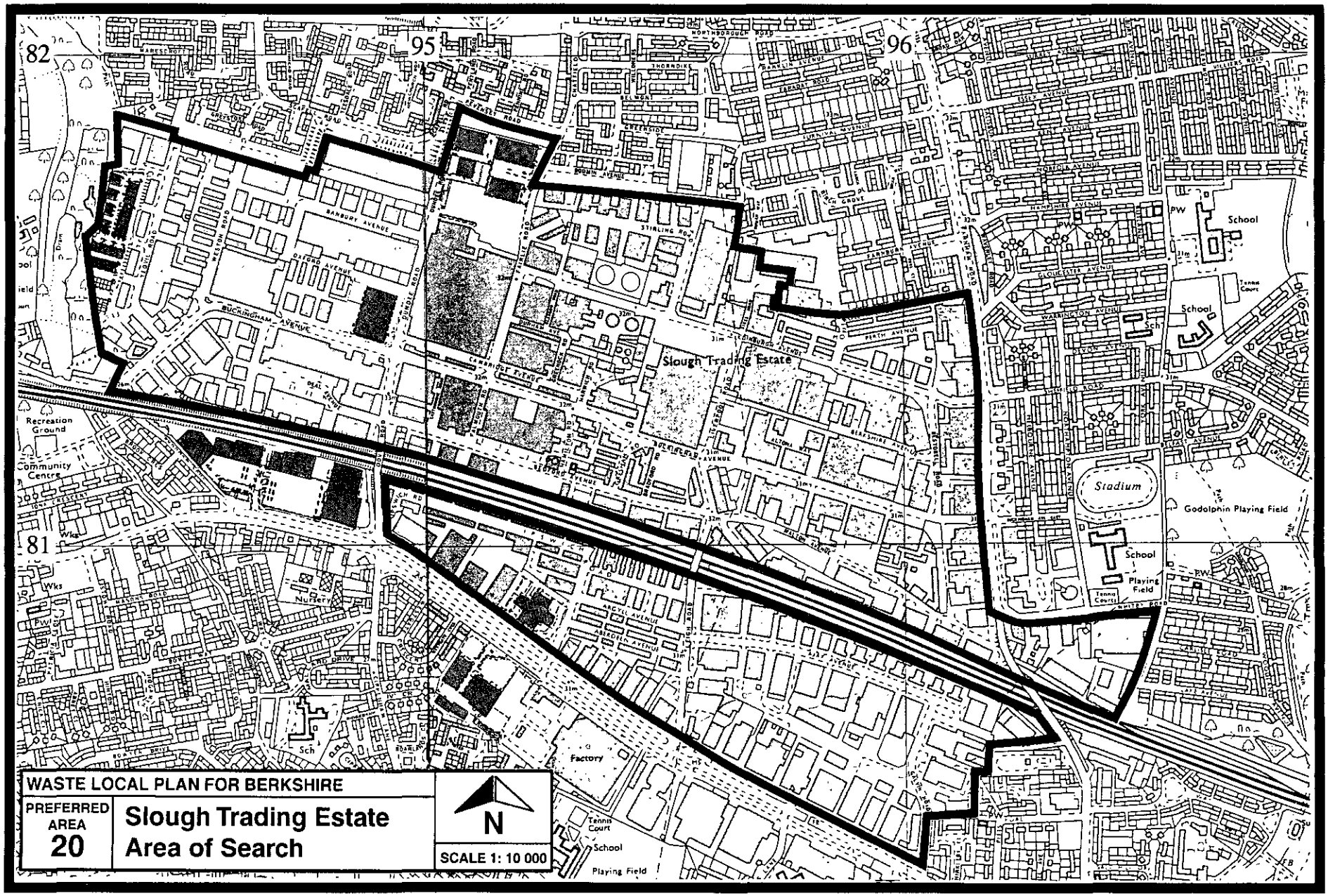
SITE PLANNING REQUIREMENTS

(i) General

Waste management uses could be accommodated on parts of the Areas of Search within large vacant buildings and sites or by the redevelopment of sites within the Trading Estate. The whole area identified on the attached plan is considered to have potential, although sites adjacent to sensitive Estate boundaries and the service zone at the centre of the Estate should be avoided. The detailed site planning requirements will be dependent on the particular use and the particular location envisaged.

(ii) Access and Traffic

The site has good access to the strategic road network (A4). The Trading Estate and the rest of Slough are a potential source of industrial/commercial waste. Access would not be permitted from the north via Chatfield Road. A haul route agreement would be necessary to meet this requirement.


WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 20
Slough Trading Estate Area of Search
N
SCALE 1: 10 000
Slough Trading Estate
Stadium
Godolphin Playing Field
School
Playing Field
Recreation Ground
Community Centre
Factory
Tennis Court
Nursery
82
95
96
81

(iii) Environmental Protection

(a) People

The Trading Estate is relatively self-contained and it should be possible to locate waste management facilities within its area with minimum impact on the amenity of the surrounding area. However, in order to minimise any potential nuisance, sites within the Estate and adjacent to residential areas should be avoided.

(b) Other sensitive uses

Waste management uses must be developed and operated in such a way that other interests within the Estate, for example B1 uses and other sensitive uses (such as food processing), are protected from material adverse impact.

(c) Landscape

Proposals for the development of waste management uses would be expected to contribute to the landscape enhancement of the Trading Estate.

FAIRLIE ROAD, SLOUGH

POTENTIAL USES

- **Waste derived fuel**
- ***Recycling non-inert***

SITE AREA

1ha.

LOCATION

At the centre of Slough Trading Estate on the east side of Fairlie Road adjacent to Slough Power Station.

EXISTING USE

The site is currently occupied by a vacant B2 (general industrial) unit and is surrounded by industrial type buildings and uses.

PLANNING CONTEXT

The site is within an existing business area, identified by the adopted Local Plan for Slough, where there is a general presumption in favour of business development (Class B1 to B8). Slough Trading Estate is also subject to a Simplified Planning Zone Scheme. Waste management uses, however, fall outside the uses permitted under the scheme and are therefore subject to normal planning controls. Planning permission for a waste-derived fuel plant at this site was granted in 1997, but the plant has yet to be constructed.

SITE PLANNING REQUIREMENTS

(i) General

The planning application approved in 1997 proposed the construction of a plant for the recycling and processing of pre-sorted paper and plastic wastes from industrial and commercial sources to produce fibre fuel suitable for burning in the adjacent Power Station. The Environmental Statement (ES) submitted with the application addressed the environmental impacts of the proposed development including the secondary impacts relating to emission from the Power Station.

(ii) Access and Traffic

The Trading Estate is bounded to the south by and accessible to the strategic highway network (A4). In terms of traffic generation, the fibre fuel would be used to supplement coal which is transported to the adjacent Power Station by road, and a significant proportion of the waste material would be generated from within the Trading Estate. The net increase in traffic is not, therefore, likely to be significant. Access and traffic issues were addressed in detail in the ES. The legal agreement completed in association with the 1997 planning permission limits the routes that may be used to provide access to or from the site, and among other things this has the effect of precluding access from the north via Chatfield Road.

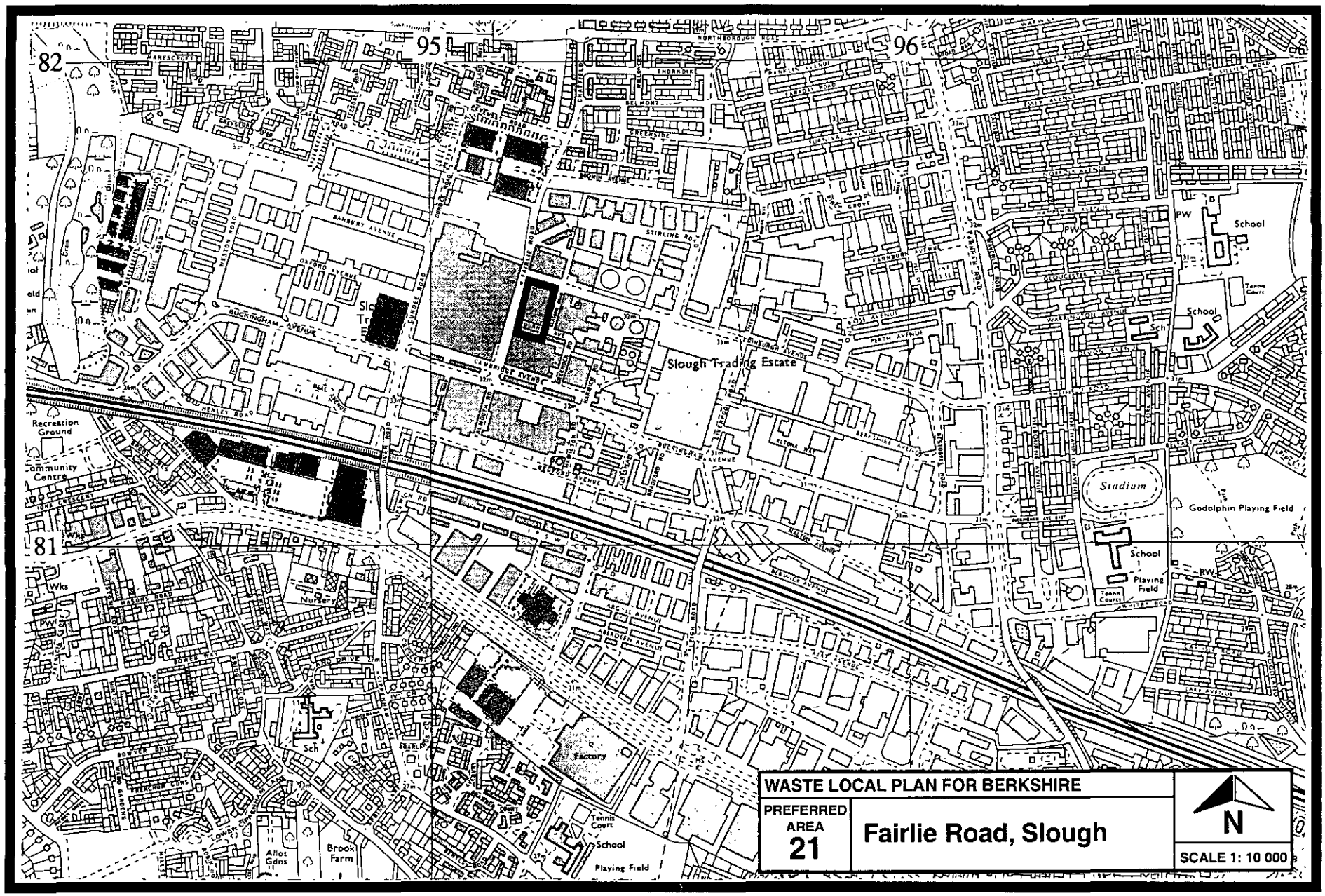
(iii) Environmental Protection

(a) People

The site is well located to minimise impacts on people, being centrally located on the industrial estate, surrounded by industrial buildings and with a buffer zone of some 250m to housing. The process of making the fibre fuel pellets is believed to be clean. Appropriate process controls and full enclosure should ensure that any potential adverse impacts are minimised. Slough Power Station has an existing capability to burn WDF and limited amounts of this fuel have been imported from outside the county for use at this site. The issue of emissions (an impact secondary to the fuel production process) was considered in detail in the ES.

(b) Landscape

There are no landscaping constraints on the site and the redevelopment would provide an opportunity to achieve landscape enhancements within the Trading Estate.


82
95
96
81
Slough Trading Estate
Recreation Ground
Community Centre
Stadium
Godolphin Playing Field
School
Playing Field
Factory
Brook Farm
Allot Gdns
Tennis Court
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 21
Fairlie Road, Slough
N
SCALE 1: 10 000

CHALVEY WASTE TRANSFER STATION, SLOUGH

POTENTIAL USES

- **Waste treatment**
- **Transfer station**
- **Major recycling**
- **Civic Amenity Site**
- ***Difficult/special waste recycling, treatment or transfer***
- ***Metal recycling***

SITE AREA

1.2ha.

LOCATION

Off White Hart Road, south-west of Slough town centre, immediately north of the M4 near junction 6.

EXISTING USE

A waste transfer station and Civic Amenity Site.

PLANNING CONTEXT

The site is identified as being within an existing business area in the adopted Slough Local Plan. It might be affected by the M4 widening proposals which could reduce the size of the site.

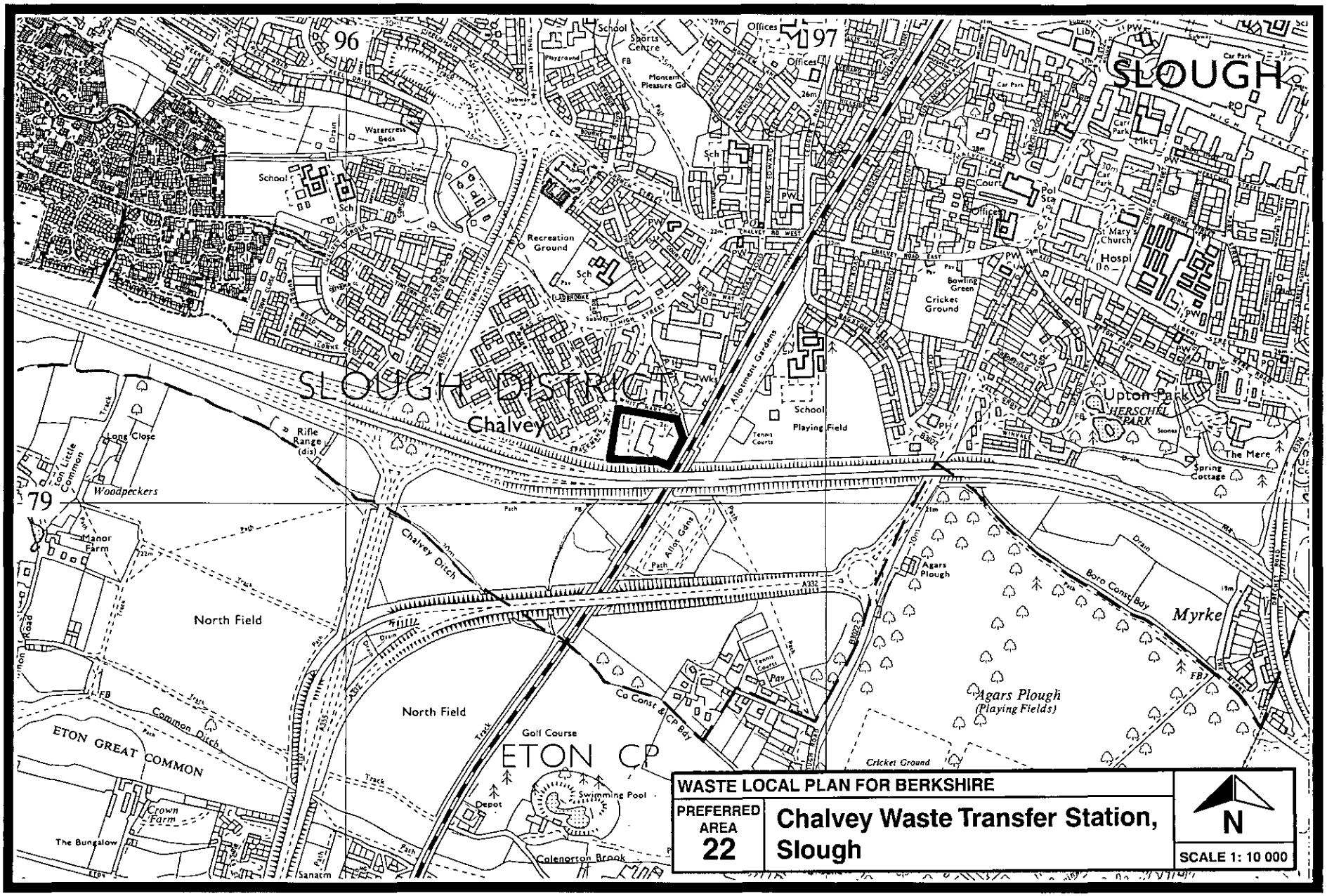
SITE PLANNING REQUIREMENTS

(i) General

There will be a requirement for a facility to treat household waste after 1997, which would involve the redevelopment of existing buildings. Priority will be given to redevelopment for either waste treatment including major recycling, or major recycling in its own right. Any new buildings would need to be sympathetically designed to minimise impacts on the surroundings. Proposals must provide for a continuation within the site of the existing Civic Amenity Site use.

(ii) Access and Traffic

Access to Chalvey would be from the M4 and A355 via local distributor roads. A lorry routeing agreement would be required. The proposed development would be likely to generate similar or slightly less levels of traffic than at present. Proposals that increase the existing level of traffic would not be acceptable.


SLOUGH
SLOUGH DISTRICT
Chalvey
96
97
79
Recreation Ground
Cricket Ground
Bowling Green
Allotment Gardens
School
Playing Field
Upton Park
HERSCHEL PARK
The Mere
Spring Cottage
Rifle Range (dis)
Long Close
Woodpeckers
Manor Farm
Chalvey Ditch
North Field
Agars Plough
Boro Const Bdy
Myrke
Agars Plough (Playing Fields)
Cricket Ground
Co Const & Cp Bdy
Golf Course
ETON CP
Swimming Pool
Depot
ETON GREAT COMMON
Common Ditch
Crown Farm
The Bungalow
Colenorton Brook
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 22
Chalvey Waste Transfer Station, Slough
N
SCALE 1: 10 000

(iii) Environmental Protection

(a) People

The site is within an industrial area and a limited number of residential properties would be affected. The impact of the proposals would require a detailed assessment to identify the possible impacts, such as visual intrusion, noise and smell and to include appropriate mitigation measures to ensure no material adverse impacts upon local residents. Redevelopment of the existing operation offers an opportunity for environmental improvements and a reduction of impacts as a result of placing much of the proposed processes within a building.

(b) Landscape

The site is visible from properties to the west, the M4 and Windsor. However, the redevelopment of the site offers an opportunity to carry out side landscaping to limit visual intrusion at Chalvey.

SLOUGH GOODS YARD

POTENTIAL USES

- **Road to rail transfer**
- **Recycling non-inert**
- **Difficult/special waste recycling, treatment or transfer**
- **Metal recycling**

SITE AREA

0.7ha

LOCATION

In the centre of Slough on the main BR Paddington line, 800 metres west of Slough station.

EXISTING USE

The site was formerly in use as a goods yard. It now consists of an area of open commercial uses, including waste transfer operations in the eastern half, and vacant ground with rail sidings.

PLANNING CONTEXT

The site is identified in the adopted Slough Borough Council Local Plan as an Existing Business Area. Part of the western half of the site is also a safeguarded rail depot in the Replacement Minerals Local Plan. In September 1998, Slough Borough Council resolved that Slough Goods Yard (including this Preferred Area) will be proposed for housing development in the Deposit Draft version of the Review of the Local Plan for Slough, which is expected to be placed on deposit early in 1999. If that designation is retained when the Review of the Local Plan for Slough is eventually adopted, it will supersede the 'Preferred Area' designation of the site in the present Plan. The Joint Strategic Planning Committee has accepted the Borough Council's right to re-examine the designation of the site in the review of the Borough Plan in the light of acute housing land shortages.

SITE PLANNING REQUIREMENTS

(i) General

Due to space limitations, and the identification of the site as a safeguarded rail aggregates depot in the Replacement Minerals Local Plan, there may be insufficient room for all proposed uses. The road to rail transfer operation is the priority use for the site. Other uses must be small scale and must not prejudice the road to rail transportation or the rail aggregates depot. Appropriate environmental mitigation measures must be employed as necessary.

Appendix 7

(ii) Access and Traffic

Access to the site would be via the existing route into the site from Stoke Poges Lane. However, the local road network is congested and the impact of any further traffic must be assessed at the planning application stage. The possibility of overloading the highway network means that this site is better suited to a small-scale, low key operation.

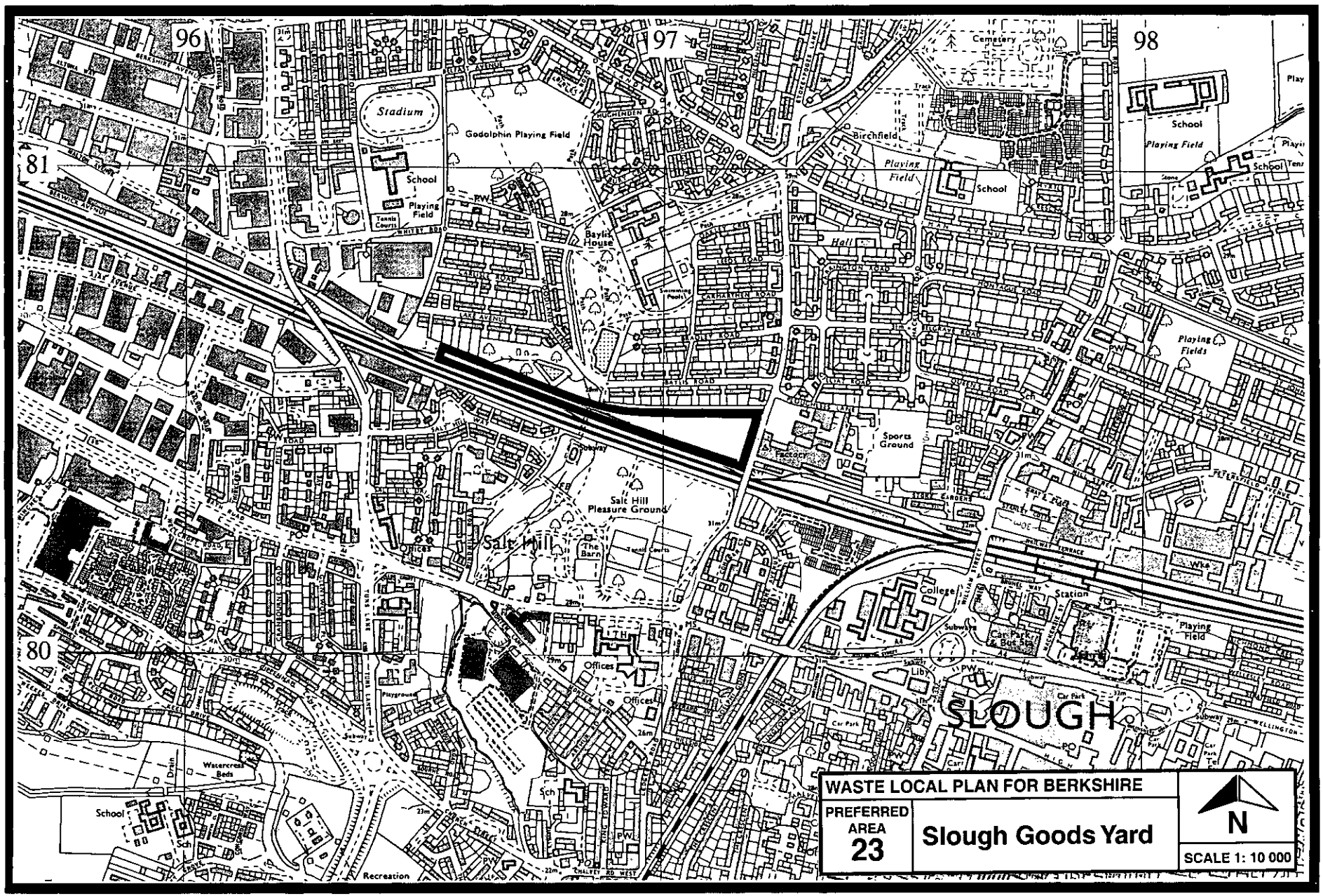
(iii) Environmental Protection

(a) People

The location of the site and the industrial character of its surroundings mean that the proposed uses would be largely in keeping with the general nature of the area. An area of housing is however situated immediately to the north of the site and it would be necessary to employ measures to minimise any impacts.

(b) Landscape

The site has no existing landscape value but is well contained and partly screened. Landscaping measures would be required to mitigate any impact on adjacent housing and Salt Hill playground.


96
97
98
81
80
Stadium
Godolphin Playing Field
School
Playing Field
Tennis Courts
Baylis House
Birchfield
Playing Field
School
Hall
Cemetery
School
Playing Field
Playing Fields
Sports Ground
Factory
Salt Hill Pleasure Ground
Salt Hill
Offices
The Barn
College
Station
Subway
Car Park
Playing Field
Offices
Offices
Offices
Playground
SLOUGH
Car Park
Watercress Beds
School
Recreation
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 23
Slough Goods Yard
N
SCALE 1: 10 000

RIDING COURT FARM, DATCHET

POTENTIAL USES

- **Waste treatment (final maturing and storage of compost/digestate)**
- **Engineered landfill**
- **Green waste composting**

SITE AREA

40ha

LOCATION

South-east of Slough, north of and immediately adjacent to the M4 and north of Datchet

EXISTING USE

Generally flat, high grade agricultural land within which is a complex of farm buildings, some still in use and others converted for offices.

PLANNING CONTEXT

The site is within the Green Belt and is identified as a strategic gap in the Local Plans. There is a listed building within the complex of structures and the area adjoins Ditton Park which is included in the Register of Parks and Gardens of Special Historic Interest in England.

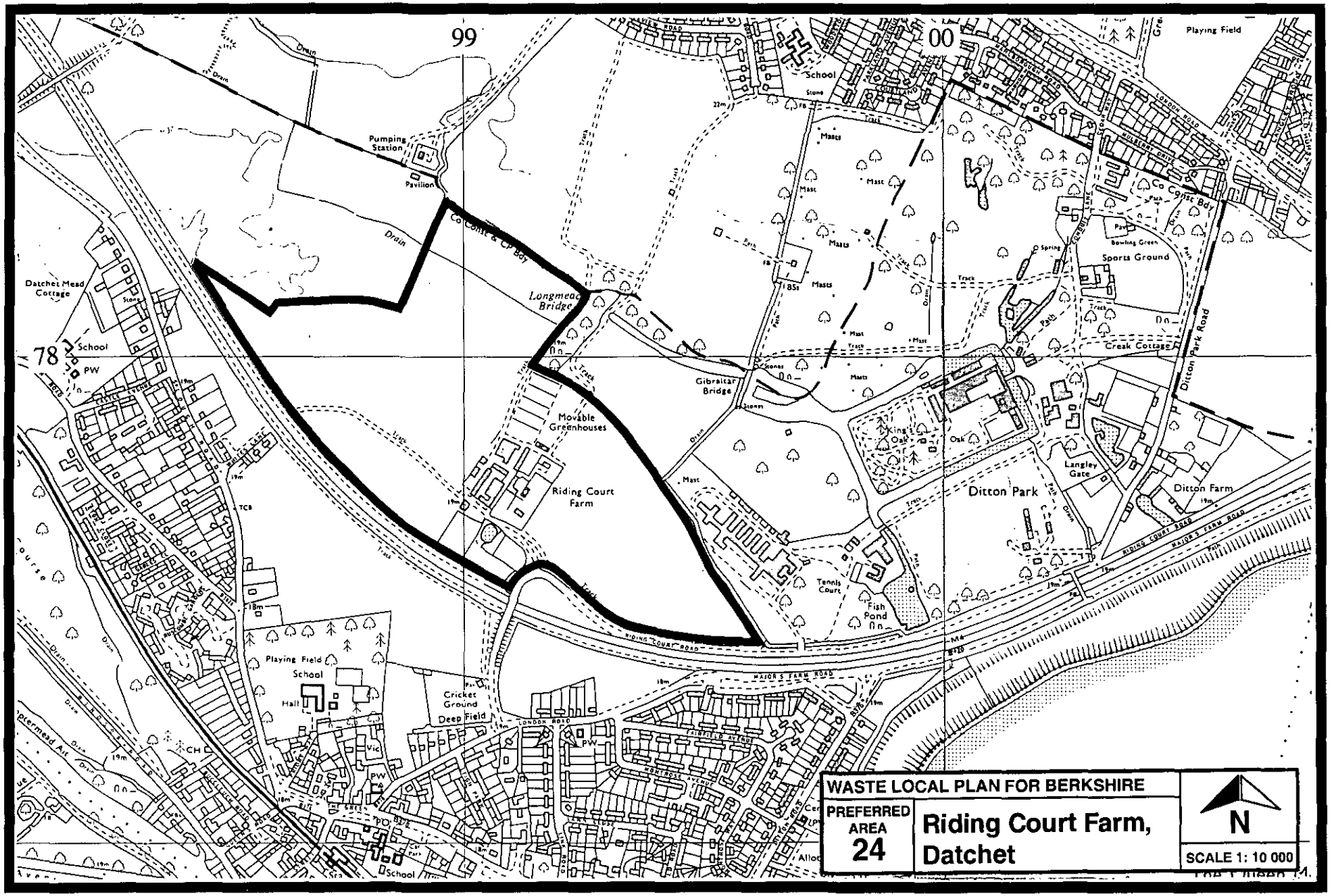
The site is identified within the Replacement Minerals Local Plan (RMLP) for extraction of gravel with restoration by infilling to agriculture. The RMLP acknowledges that imported fill would be required to achieve the restoration of the site and that in technical terms the use of putrescible waste in restoration could be acceptable, although no commitment is given to accepting the principle of using putrescible waste in the restoration of this site.

There are proposals for the M4 widening which may affect the site and in particular access arrangements presently proposed for the site in the RMLP.

SITE PLANNING REQUIREMENTS

(i) General

Proposals for engineered landfill at this site should be accompanied by an Environmental Statement. The ES would consider the potential impacts of such a development on the environment of nearby uses (including the proposed new housing area and sports facilities to the north of the site, and Slough Borough Council's proposed linear park which crosses the land to the north) and on the wider environment, and propose measures to ameliorate those impacts.


99
00
78
Pumping Station
Pavilion
Drain
Datchet Mead Cottage
School
PW
Longmead Bridge
Gibraltar Bridge
Movable Greenhouses
Riding Court Farm
Playing Field
School
Hall
Cricket Ground
Deep Field
Vic
CH
PO
Tennis Court
Fish Pond
Sports Ground
Bowling Green
Creak Cottage
Ditton Park Road
Ditton Park
Ditton Farm
Langley Gate
King's Oak
Oak
Masts
Track
Path
Spring
RIDING COURT ROAD
MAJOR'S FARM ROAD
LONDON ROAD
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 24
Riding Court Farm, Datchet
N
SCALE 1: 10 000

Appendix 7

The RMLP envisages that the site would be worked later in the plan period. It is therefore likely that the site would be required to take polluting rather than putrescible waste. Buffer zones will be required which conform with the minimum standards outlined in Chapter 10 but which also take account of local circumstances.

The waste treatment function would be confined to the maturation/storage of organic products of waste treatment at Chalvey. Green waste composting would be acceptable if the site were not required for waste treatment purposes. Priority will be given to utilising existing redundant farm buildings on the site to accommodate these uses. Any necessary large new buildings should be kept to a minimum, and should be located immediately north of the existing buildings. They should be designed to complement the agricultural-style buildings adjoining.

(ii) Access and Traffic

Access should be provided via Riding Court Road and Ditton Road to the A4 and M4 and a legal agreement would be required to prevent traffic travelling through the centre of Datchet. The proposals for widening the M4 would affect the details of how access to the site would be achieved.

(iii) Environmental Protection

(a) People

Datchet would be protected from operations by the M4, which would act as a buffer zone to the village. There is also a substantial buffer zone between the site and residents in Slough. Nevertheless, appropriate measures must be taken to minimise impacts on the Riding Court Farm complex and on nearby uses, in the form of buffer strips, screen planting and/or noise attenuation bunds. The buffer strips required for putrescible waste would be wider than those for inert waste.

(b) Landscape

The site comprises flat agricultural land and there are important and exposed views, particularly for the residents in the southern part of Slough and from Upton Court Park. However, existing woodland, copses, trees and hedgerows within and adjoining the site screen it from the M4 and the east and must be retained and protected at all times. These, along with advance land modelling and screen planting, would help to screen exposed working areas, plant and machinery, while maintaining both short and long views as far as possible. The grounds of Ditton Park and its setting must be protected from damage to its landscape integrity.

(c) Water

The site lies in a major aquifer and adjacent to Datchet Common Brook, a main river course, which supplies the canalised moat at Ditton Park. Mitigating measures must be incorporated to ensure that no water becomes contaminated and that water flows are maintained, and flooding is not created downstream. A detailed site investigation will be required to confirm the suitability of the geology and hydrogeology for accepting non-inert wastes.

(d) Phasing, Timing, Restoration and After-use

The phasing and timing of filling operations and the restoration and after-use of the site should be closely guided by the advice set out in the RMLP.

NORTH OF HORTON

POTENTIAL USES

〈 **Engineered landfill**

SITE AREA

82ha.

LOCATION

North of Horton and south of Colnbrook, to the east of The Queen Mother Reservoir.

EXISTING USE

High grade agricultural land which is currently being farmed.

PLANNING CONTEXT

The site lies within the Green Belt and the Colne Valley Regional Park. It is identified in the Replacement Minerals Local Plan (RMLP) as a Preferred Area for gravel extraction. It is envisaged that the site would be restored by infilling to agriculture. The RMLP acknowledges that imported fill would be required to achieve the restoration of this site and that in technical terms the use of putrescible waste in restoration could be acceptable, although no commitment is given to accepting the principle of using putrescible waste in the restoration of this site.

SITE PLANNING REQUIREMENTS

(i) General

Proposals for engineered landfill at this site should be accompanied by an Environmental Statement. The ES would consider the potential impacts of such a development on the living conditions of nearby residents, on the agricultural viability of the area, and on the environment generally and propose measures to ameliorate those impacts.

The RMLP envisages this site being worked relatively early in the plan period. The deposit of putrescible waste would be required to diminish over time and be replaced by polluting waste.

(ii) Access and Traffic

The site is accessible to the strategic road network via the A4 and M4 or via Poyle to the M25. The Environmental Statement should consider the relative merits of these alternatives and provide clear conclusions to support the access and haul route proposed in association with any application to fill this site. The potential haul route to the A4 passes housing in Colnbrook. A possible access onto the public highway at Poyle is also opposite houses. A legal agreement would be required to prevent traffic travelling through the centres of Horton and Colnbrook.

Appendix 1

(iii) Environmental Protection

(a) People

Appropriate measures must be taken, in the form of buffer strips, screen planting and/or noise attenuation bunds, to protect the amenities of residents in Colnbrook and Horton and to protect the recreation ground adjacent to the southern end of the site. The buffer zones will be required to conform with the minimum standards outlined in Chapter 10 and also take account of local circumstances. All plant and machinery should be located as far from developed areas as possible.

(b) Landscape

The existing landscape is generally flat and largely featureless. Houses in Colnbrook currently have exposed views to the site. Appropriate measures, for example screen planting and bunds, would need to be implemented to protect the amenities of houses in Colnbrook and Horton, and those of users of the Colne Valley Way. Careful consideration would need to be given, in landscape terms, to the final landform of doming proposals bearing in mind the surrounding landform and the setting of the Colnbrook. The site should be restored with a strong landscape structure of new copses, hedges and woodland linked into existing landscape features on the periphery of the site and alongside the Colne Valley Way.

(c) Ecology

The site lies north of Wraysbury Lakes SSSI and adjacent to important ornithological sites which are Wildlife Heritage Sites. Any proposals should ensure that there is no adverse effect on these interests and the ES will need to address potential impacts on nature conservation.

(d) Powerlines

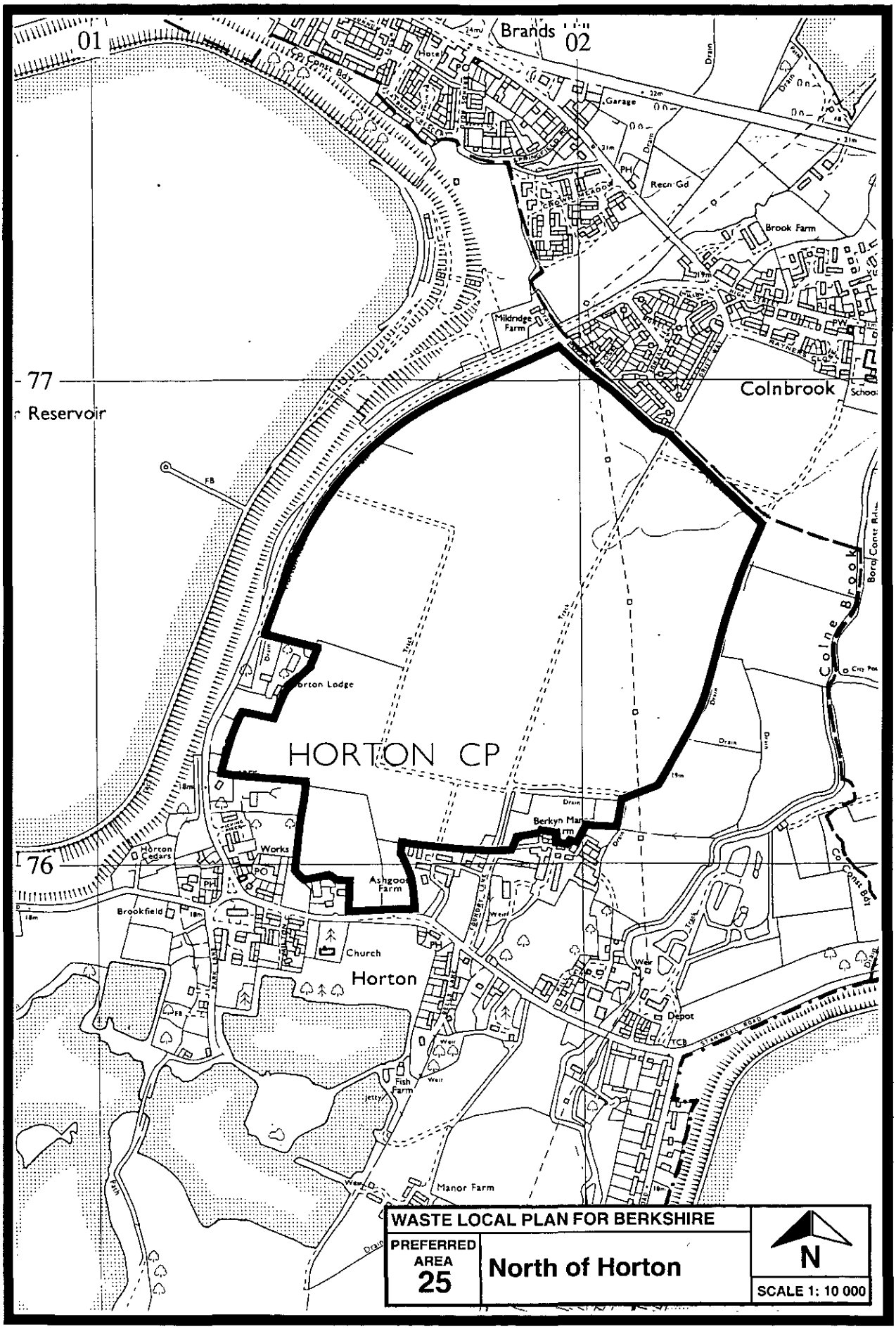
The route of, and access to, the overhead power line crossing the site must be safeguarded at all times.

(e) Flooding

The site lies outside but immediately to the north of the floodplain of the River Thames. As a result of recent works undertaken as part of the Lower Colne Flood Alleviation Scheme, the whole of the site has now been taken out of the flood plain of the Colne Brook. Proposals to develop this site should ensure that any increased run-off from the doming of the landfill area does not exceed the capacity of the watercourse.

(f) Groundwater and Surface Water Regime

The site lies within a major aquifer and waste could be tipped below the water table. Putrescible landfill must be subject to engineered containment and stringent standards. A detailed site investigation will be required to confirm suitability of the geology and hydrogeology for accepting non-inert wastes, with reference to groundwater quality and groundwater relief. There may be constraints on large scale dewatering, and appropriate measures would be required to prevent impedance of groundwater flows. Any proposals for infilling the site should demonstrate that the development would not create or exacerbate conditions which could result in any detrimental change to the groundwater and surface water regime, and it will be necessary to demonstrate through appropriate modelling and design the impact of the proposals and the combined impact with other relevant permitted and planned development in the locality.


01
Brands
02
77
Reservoir
Colnbrook
HORTON CP
Colne Brook
76
Horton
Church
Brookfield
Ashgood Farm
Berkyn Manor Farm
Manor Farm
Depot
Brook Farm
Mildridge Farm
Fish Farm
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 25
North of Horton
N
SCALE 1: 10 000

(g) Other issues

There may be a restriction on the extraction of clay, for use in the engineered containment of the site, in close proximity to The Queen Mother Reservoir.

(h) Phasing, Timing, Restoration and After-Use

The phasing and timing of filling operations and the restoration and after-use of the site should be closely guided by the advice set out in the RMLP.

ROSARY FARM, POYLE

POTENTIAL USES

- **Recycling inert**
- ***Recycling non-inert*** (see below)

SITE AREA

1.5 ha

LOCATION

South of Bath Road, Poyle, just to the east of the former Staines - West Drayton railway line. The southern boundary is marked by the Poyle Channel.

EXISTING USE

The site is currently used for the sorting and transfer of (primarily) inert waste. It operates in part in conjunction with the Longford II landfill site to the south.

PLANNING CONTEXT

The whole site lies in the area of the Colne Valley Park, and the south-western sector lies in the Metropolitan Green Belt.

The southern 0.6ha of the site, including almost all of the part of the site in the Green Belt, has planning permission (granted in 1993) for the storage and sorting of waste materials and various associated activities. The area of this permission overlaps with an area (partly in, partly out of the Green Belt) which has an Established Use Certificate for the storage of topsoil and excavated material, and various associated activities including ancillary office use of Galleymead House and the former Rosary Farm buildings. Some areas in the north and the east of the site are outside the area of both the planning permission and the Established Use Certificate.

The planning permission granted in 1993 is temporary until 1 August 1999, or until completion of landfilling at Longford II. A condition of the permission is that, following its expiry, the Green Belt part of the site should be restored to grassland.

SITE PLANNING REQUIREMENTS

(i) General

Permanent use of part of this site for the recycling of primarily inert wastes (including topsoil and excavated material), with limited subsidiary recycling of non-inert wastes such as wood, paper, metal and plastics, brought to the site as part of mixed skip-loads of construction/demolition waste, would be acceptable subject to the general requirements set out below. No other types of non-inert wastes (such as general household wastes or food wastes) would be permitted to be handled at the site. The following general requirements would have to be satisfied before the grant of a permanent permission for these uses could be considered:

(a) the satisfactory prior implementation of all the conditions attached to the 1993 planning permission;

(b) the redistribution of uses within the total site, such that the part of the site now in the Green Belt is restored to grassland as required by the 1993 permission, but with a replacement area being found elsewhere within the parts of the site which are subject to neither the planning permission nor the Established Use Certificate;

(c) all activities currently taking place within the steel-framed building permitted under the 1993 permission continuing to take place within a suitably-designed building, even though the existing building would have to be removed in accordance with (b) above;

(d) all activities which are currently authorised only on an ancillary basis remaining ancillary to the principal use of the site for inert waste recycling;

(e) all the other site planning requirements set out below being met.

(ii) Access and Traffic

Access to and from the site shall be via the existing access road to the east of the site. Any intensification of the use of the site would require the provision of a ghost-island right-turning junction on Bath Road.

(iii) Environmental Protection

(a) People

The bund and associated planting to the south of the site, required under the 1993 permission to protect the amenities of Poyle New Cottages, shall be retained. Additional screening of the site, together with landscaping and amenity planting on the land east of the access road and within the control of the present site operator, would be desirable in any event, and especially so in association with the redistribution of uses within the site.

Measures must be taken to limit the impacts of noise (including machinery noise) and dust from the site on nearby residents.

The wheel-wash required to be provided under the 1993 permission must be provided, to minimise danger and inconvenience to users of the access road and Bath Road.

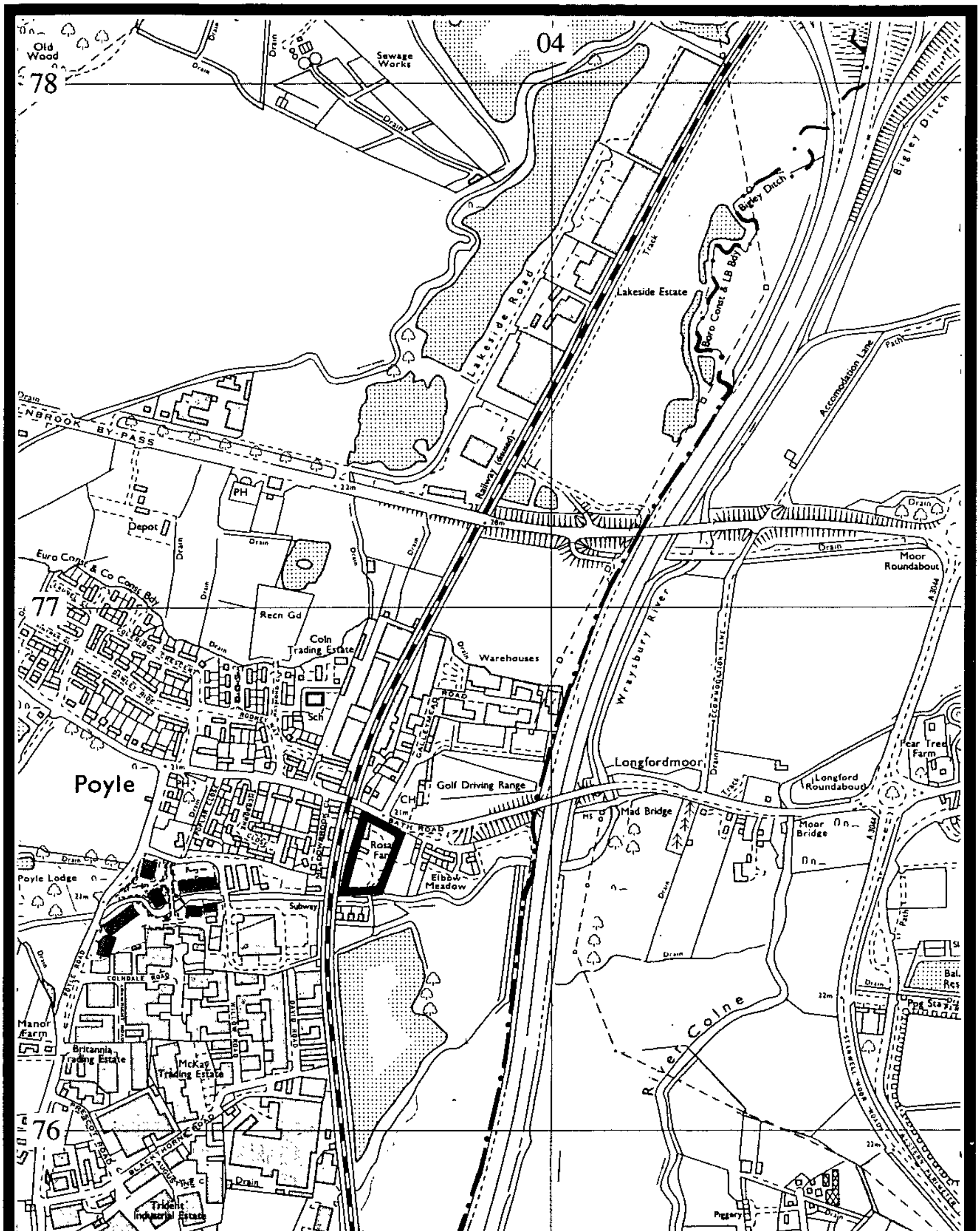
(b) Flooding

This site lies in an area which could be liable to flooding in extreme weather conditions. Any development at this site must make appropriate provision to accommodate this constraint.

(c) Other matters

No associated development will be permitted on the land to the east of the present alignment of the site access road, as indicated on the Inset Map.

The interests of the Environment Agency and of the owner/operator of the nearby railway must be protected at all times, as described in the letters accompanying the 1993 planning permission.


WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 26
Rosary Farm, Poyle
N
SCALE 1: 10 000
Old Wood
Sewage Works
Lakeside Road
Lakeside Estate
Bigley Ditch
Boro Const & LB Bdy
Accomodation Lane
Railway (disused)
Track
PH
Depot
Euro Const & Co Const Bdy
Recn Gd
Coln Trading Estate
Warehouses
Sch
Moor Roundabout
Wraysbury River
Longfordmoor
Golf Driving Range
Mad Bridge
Longford Roundabout
Pear Tree Farm
Moor Bridge
Poyle
Poyle Lodge
Subway
Elbow Meadow
Manor Farm
Britannia Trading Estate
McKay Trading Estate
River Colne
Trident Industrial Estate
Viscount Industrial Estate
Bedfont Court Estate
Piggery
Piggeries
Lintell's Bridge
Horton Road
Blackthorne Road
Colndale Road
Bath Road
04
78
77
76

All conditions of the 1993 permission not otherwise referred to above must be implemented strictly according to the terms of the permission, unless varied by the formal written approval of the planning authority.

Any non-inert waste handled on the site must be of a type which is acceptable to the Civil Aviation Authority, having regard to the safeguarding of Heathrow Airport.

COLNBROOK PROPOSED RAIL DEPOT SITE

POTENTIAL USES

- **Recycling inert** (temporary)
- **Recycling non-inert** (temporary)
- **Green waste composting** (temporary)

SITE AREA

4.5 ha

LOCATION

On the east side of the currently-disused Staines-West Drayton branch railway line, north of the A4 Colnbrook by-pass and just west of the M25 motorway.

EXISTING USE

Vacant.

PLANNING CONTEXT

The whole site lies in the Green Belt and the Colne Valley Park. Planning permission for the construction of a depot for importing aggregates by rail, and various related and ancillary activities, was granted in November 1987. Screen bunds have been constructed around the site to be occupied by the operational area of the depot, but no work has yet begun on the construction of the depot proper, and it is not known when further construction work will be undertaken. The site is safeguarded for use as a rail aggregates depot in accordance with the provisions of Policy 26 of the Replacement Minerals Local Plan for Berkshire (as amended by the Alterations adopted in 1997).

SITE PLANNING REQUIREMENTS

(i) General

Use of the site for the recycling of inert and non-inert waste and for green waste composting would be acceptable on a temporary basis, pending the construction of the rail aggregates depot. Any application for the establishment of temporary waste management facilities at the site, or for the subsequent renewal of any temporary permission which may be granted, would be considered having regard (among other things) to the prospects at that time for the construction of the rail depot. The initiation or continuation of waste management uses on the site would not be appropriate if for any reason the rail depot proposal were abandoned.

Appendix 7

(ii) Access and Traffic

The use of the site as a depot for importing aggregates will rely on minerals being brought to the site by rail. However, it would be expected that its temporary use for waste management purposes would rely on materials being brought to and taken from the site by road. Road access to and from the site should be as proposed for the rail depot (and as used in recent years in connection with mineral extraction and restoration of land to the south), namely, directly to/from the Colnbrook by-pass. Traffic arriving from the east, or leaving to the west, exits from/gains access to the main road by means of an underpass, to avoid any need for turning movements across the main carriageway.

(iii) Environmental Protection

(a) People

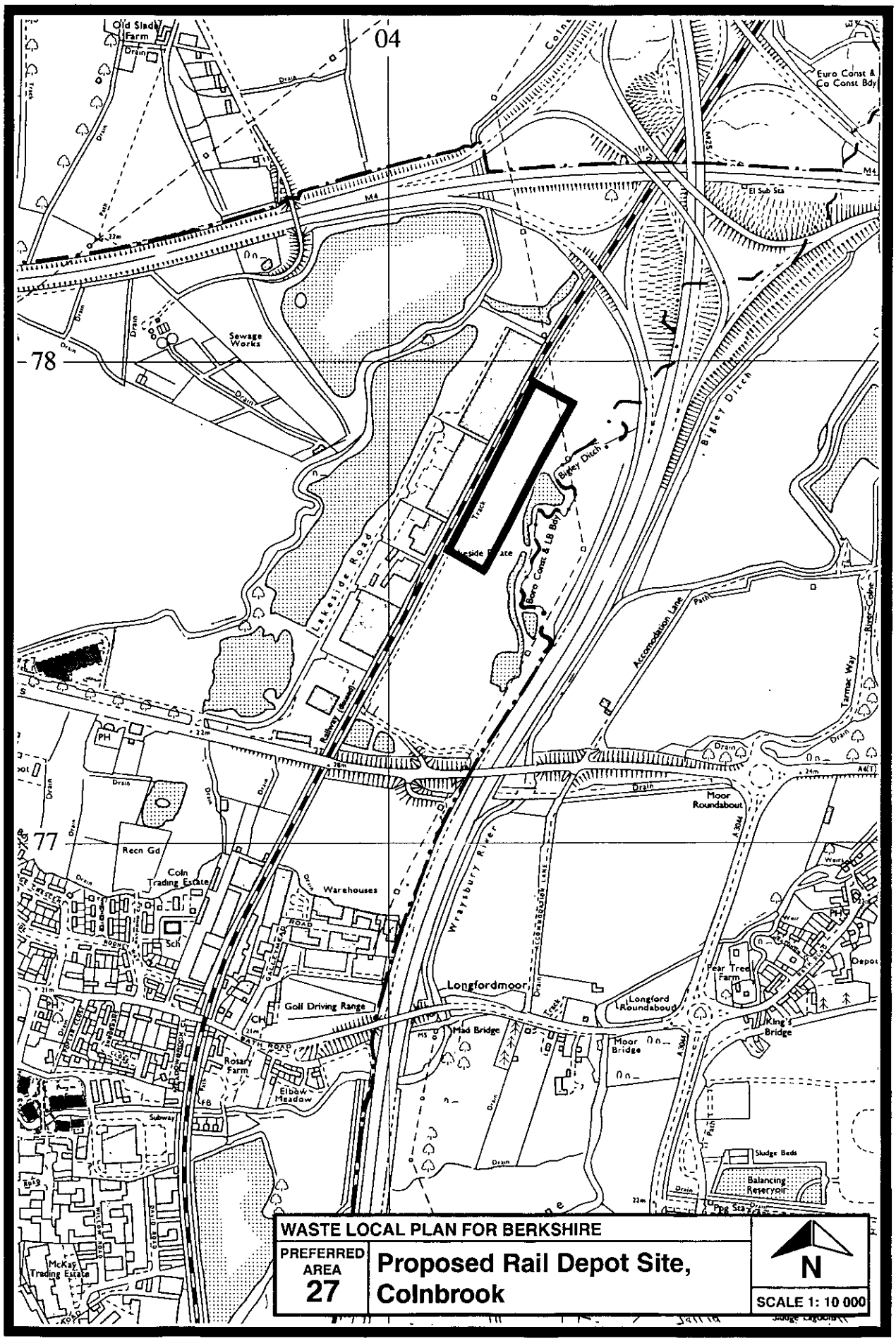
There are no houses in the immediate vicinity of the site.

(b) Other matters

Great care must be taken to ensure that no works are undertaken in connection with the use of the site for recycling and/or composting which would prejudice the landscaping and planting already carried out as part of the rail depot permission, or which could prejudice the successful implementation of the remainder of that permission.

The environment of and working conditions in the nearby Lakeside Road commercial area should be safeguarded from additional adverse impacts resulting from carrying out waste management operations on the site (i.e. adverse impacts different from or in excess of those already authorised by virtue of the rail depot permission).

The route of, and access to, the overhead power line crossing the site must be safeguarded at all times.


04
78
77
Old Sindlesham Farm
Euro Const & Co Const Bdy
M4
El Sub Sta
Sewage Works
Bigley Ditch
Track
Lakeside Road
Boro Const & LB Bdy
Accomodation Lane
Tarmac Way
Railway (disused)
PH
Recn Gd
Coln Trading Estate
Warehouses
Moor Roundabout
Wraysbury River
Longfordmoor
Golf Driving Range
Mad Bridge
Longford Roundabout
Pear Tree Farm
King's Bridge
Moor Bridge
Rosary Farm
Elbow Meadow
Subway
Sludge Beds
Balancing Reservoir
Ppg Sta
McKay Trading Estate
WASTE LOCAL PLAN FOR BERKSHIRE
PREFERRED AREA 27
Proposed Rail Depot Site, Colnbrook
N
SCALE 1: 10 000

APPENDIX 8: LANDFILL SITES

APPENDIX 8A - SITES FOR INERT WASTE LANDFILL

Sites with planning permission

SITE	GRID REFERENCE
Barton Court, Kintbury	SU 383 682
Kiln Cottage, Welford	SU 406 716
Hermitage Farm, Oare [1]	SU 500 745
Bath Road, Midgham	SU 554 666
Larkwhistle Farm, Brimpton Common	SU 574 627
Gardners Lane, Upper Basildon	SU 596 757
Barlows Plantation, Aldermaston	SU 605 626
Bath Road, Beenham	SU 605 680
Decoy Plantation, Aldermaston	SU 612 635
Poors Allotment, Ufton Nervet	SU 637 669
Meales Farm, Sulhamstead	SU 638 687
Herons Nest, Theale	SU 661 699
Field Farm, Burghfield [1]	SU 675 705
Field Farm Cottages, Burghfield	SU 675 705
Knights Farm, Pingewood	SU 675 705
Smallmead Farm, Reading [1]	SU 682 698
Moores Farm, Burghfield	SU 691 687
Whistley Court/Lea Farm, Hurst [1]	SU 798 661
Whistley Mill, Hurst	SU 709 740
Manor Farm, Finchampstead	SU 800 625
Strande Castle, Cookham	SU 885 839
Sheephouse Farm, Maidenhead	SU 894 833
St Georges Lane, Ascot	SU 925 685
Kennedy Park, Slough	SU 953 823
Kingsmead, Horton	TQ 011 755
Hythe End, Wraysbury	TQ 013 726
Staines Road, Wraysbury	TQ 013 730
ARC Wraysbury	TQ 015 734
Sutton Lane, Colnbrook[1]	TQ 026 780
Tanhouse Farm, Colnbrook[1]	TQ 035 773
Longford II, Poyle[1]	TQ 037 763
Egglesey Farm, Colnbrook[1]	TQ 040 770

[1]Sites with planning permission which includes non-inert as well as inert waste.

Sites with planning permission which are judged unlikely to be implemented

SITE	GRID REFERENCE
Railway Land, Pingewood	SU 695 694
Wraysbury No. 1 Pit	TQ 005 746
Wraysbury No. 2 Pit	TQ 010 739

S106 Sites [1]

SITE	GRID REFERENCE
Marleys, Beenham	SU 600 681

Replacement Minerals Local Plan Preferred Areas

SITE	RMLP SITE REF	GRID REFERENCE
Chamberhouse Farm, Thatcham	1	SU 518 659
Bath Road, Midgham	2	SU 555 665
Station Road, Theale	4	SU 644 705
Arrowhead Road, Theale	5	SU 655 710
Smallmead Farm, Reading	8	SU 702 703
Manor Farm, Slough	10	SU 938 945
Riding Court Farm, Datchet [2]	11	SU 992 780
North of Horton [2]	12	TQ 018 765
Kingsmead	13	TQ 010 747

APPENDIX 8B - SITES FOR NON-INERT WASTE LANDFILL

SITE	GRID REFERENCE
Hermitage Farm, Oare	SU 500 745
Bath Road, Beenham (Marley Tile site)	SU 605 680
Field Farm II and IIB, Theale	SU 675 705 *
Smallmead Farm, Reading	SU 702 709
Smallmead Farm Section A, Reading	SU 697 704
Whistley Court Farm/Lea Farm, Hurst	SU 790 740 *
Star Works, Knowl Hill *(not yet licensed)*	SU 815 797 *
London Road, Bracknell	SU 895 693
Kennedy Park, Slough	SU 953 823 *
Sutton Lane, Colnbrook	TQ 026 780 *
Tanhouse Farm, Colnbrook	TQ 035 773 *
Longford II, Poyle	TQ 037 763 *
Egglesey Farm, Colnbrook	TQ 040 770 *

Details of the wastes acceptable at these sites (except Knowl Hill) can be found in Appendix 5.

Sites marked with an asterisk are **not** licensed to receive household waste.

The planning permission for the site at Knowl Hill expressly precludes the landfilling of household waste, other than civic amenity waste.

[1] Sites with a resolution by the Waste Planning Authority to grant planning permission subject to the prior completion of a legal agreement

[2] Sites which are also proposed in the Waste Local Plan for non-inert landfill which would in practice dispose of quantities of both inert and non-inert waste

APPENDIX 9: THE RELATIONSHIP BETWEEN PLANNING CONTROLS & POLLUTION CONTROLS

The Unitary Councils as **waste planning authorities** are responsible for the processing and determination of planning applications for waste management development in their area, and for monitoring compliance with the conditions attached to any planning permission for waste development.

Local authorities are also required to produce a waste local plan setting out policies to guide existing and future developments. Following the reorganisation of local government in Berkshire as from 1 April 1998, these responsibilities have been taken over by the successor authorities, working jointly through the 'Joint Strategic Planning Committee'.

There has been some confusion in the past between the roles of the planning authorities and those of other bodies. To clarify this confusion the Government produced a planning policy guidance note, PPG23, entitled 'Planning and Pollution Control', which outlines the relationship between controls over development under the planning law, on the one hand, and under pollution control legislation on the other. At the time of issue of PPG23, pollution control was administered by three separate bodies, or groups of bodies: **Her Majesty's Inspectorate of Pollution** (HMIP), the **National Rivers Authority** (NRA), and the **Waste Regulation Authorities** (WRA; at the time, waste regulation was a local authority responsibility, and County Councils were the WRA). In April 1996 these three responsibilities became the function of a single body, the **Environment Agency,** in order to introduce an integrated approach to pollution control.

In its role as successor to the HMIP, the Environment Agency is responsible for the imposition of high pollution control standards over a range of processes. Operators of these processes must have prior authorisation from the Agency before a plant can operate. Assessment of such proposals by the Agency involves the consideration of the total impact of all releases to air, water, and land. The Agency's statutory involvement in the planning process is limited to commenting on environmental assessments, although the Agency reserves the right to give non-statutory advice on the range of environmental issues for which it has some responsibility. When planning applications for particular types of waste development are accompanied by an Environmental Statement (see Chapter 8 of this Plan), the planning authorities are obliged by statute to consult the Agency. In addition to this statutory role, PPG23 recommends that the Agency should be consulted on any potentially polluting developments, in order that account may be taken of the scope of the relevant controls which they exercise, and to avoid any conflicts with them. Such consultation is now general practice. Other government guidance, known as PPG12 ('Development Plans and Regional Planning Guidance'), advises planning authorities to consult the Agency when preparing development plans. The Agency will then endeavour to indicate areas where there is a risk of harm to the environment or to human health and where potentially polluting developments might therefore need to be restricted or avoided.

Appendix 9

In its role as successor to the NRA, the Environment Agency is responsible for the conservation and enhancement of water resources, for licensing water abstraction, and for the control of water quality and pollution in relation to "controlled waters". "Controlled waters" includes the sea up to the three mile limit, estuaries, water contained in underground strata, and most lakes, ponds, reservoirs, rivers and other watercourses. In these capacities, the Agency has an important consultative role in the planning system. The supply of water and sewage disposal are capable of being material considerations in planning applications, and should also be taken into account in drawing up development plans. The Agency must also be consulted on planning applications in circumstances specified in the Town and Country Planning (General Development Procedure) Order 1995, for example, where development would involve works or operations on the bank of a river or where it would involve the deposit of waste. In practice the Agency is consulted on virtually all waste-related applications, to ensure that its wide range of interests are all taken into account when the applications are decided.

As Waste Regulation Authority, the Environment Agency regulates the keeping, treatment and disposal of controlled wastes (i.e. household, commercial and industrial wastes) for the purposes of preventing pollution of the environment, harm to human health, and serious detriment to the amenities of the locality. These aims are achieved by waste management licences issued by the Agency. Licences may not be issued unless a site has obtained planning permission, or its equivalent (eg Certificate of Lawful Use).

When County Councils were the WRA, they had a responsibility to prepare the overall waste strategy for its area (in the form of a Waste Management Plan). Following the transfer of waste regulation responsibilities to the Environment Agency, Waste Management Plans that had already been adopted (such as Berkshire's) remained in force. However, the Agency is not required to prepare or maintain Waste Management Plans at 'county level'. The Secretary of State for the Environment, Transport and the Regions is responsible for preparing a waste strategy setting out his policies for the recovery of waste in England and Wales, on which he must consult the Environment Agency. Whether any more 'local' strategic waste management guidance will be prepared in future is still undecided.

The role of the Environment Agency as WRA must not be confused with the role of the local authorities as Waste Planning Authority (see above), or as Waste Disposal Authority - whereby the Councils are responsible for the provision of a number of services to the public and businesses, including the receipt and disposal of household and trade waste, the provision and operation of civic amenity sites, and recycling of selected wastes and abandoned cars. Nor should it be confused with the role of the local authorities as Waste Collection Authorities - providing services such as the collection of household waste and selected traders' waste, recycling and street cleaning.

The Borough and District Councils as planning authorities have a statutory responsibility to consult the WRA on any development within 250 metres of land which has been used at any time in the last 30 years for the deposit of waste, or on proposals for any new waste facilities. PPG12 also makes it clear that Waste Local Plans should have regard to Waste Management Plans produced, under the former arrangements, by County Councils as WRA.

PPG23 states that there should be close consultation between the planning authority and pollution control bodies to prevent unnecessary duplication and conflict of interests. The role of the planning system is to control development and use of land in the public interest. It has an important part to play in determining the location of development which may give rise to pollution. The potential for pollution affecting the land is therefore a material consideration in deciding whether to grant planning permission. However, the role of the planning process is to focus on whether the development itself is an acceptable use of the land, rather than on the control of the processes or substances themselves. Planning authorities are expressly charged not to duplicate controls which are the statutory responsibility of other bodies, and not to seek to substitute their own judgement on pollution control matters for that of the bodies with the relevant expertise and the statutory responsibility for that control.

To this end, both through the process of preparing this Waste Local Plan and in the processing of planning applications, the former County Council and the successor Unitary Authorities (and the Joint Committee) have consulted and will continue to consult the Environment Agency (or its predecessors the HMIP, NRA and WRA), and their views form a very important contribution to the decisions made. In reaching these decisions, the planning authority has regard to the general policy documents of these organisations, as well as to the guidance which they give on specific proposals. It also has regard to relevant legislation and government advice.

The key documents referred to during the preparation of the draft waste local plan included the following, prepared by agencies which have since become part of the Environment Agency:

HMIP:

1 The Environmental Protection Act 1990 - which outlines the former HMIP's responsibilities and legislative requirements.
2 The Chief Inspector's Guidance Notes - identifies standards and are updated every four years. *(These are now issued as Environment Agency Technical & Process Guidance Notes, which identify the criteria to be taken into account when determining applications for Integrated Pollution Control.)*

NRA:

1 Policy and Practice for the Protection of Groundwater, 1992.
2 Landfill and the Water Environment - NRA Position Statement, January 1995.
3 River Kennet Catchment Management Plan Final Report - produced by the NRA Thames Region in April 1994.
4 Proposed Datchet, Wraysbury, Staines and Chertsey flood plain management proposals.
5 Thames 21 - A planning perspective and sustainable strategy for the Thames Region - Consultation Draft, produced by the NRA Thames Region in September 1994.

WRA:

1 Draft Waste Management Plan for Berkshire - November 1994. *(The Waste Management Plan was finally approved by the former County Council in July 1995.)*
2 Environmental Protection Act 1990.
3 Waste Management Papers - produced by the Department of the Environment on a broad range of topic areas, e.g. land filling.

Following the amalgamation of the above functions into the remit of the Environment Agency in 1995, other documents covering these and related subject-areas have been issued by the Agency, and these have been taken into account where appropriate in the preparation of this final version of the Plan. Details of all EA publications can be obtained from the Agency.

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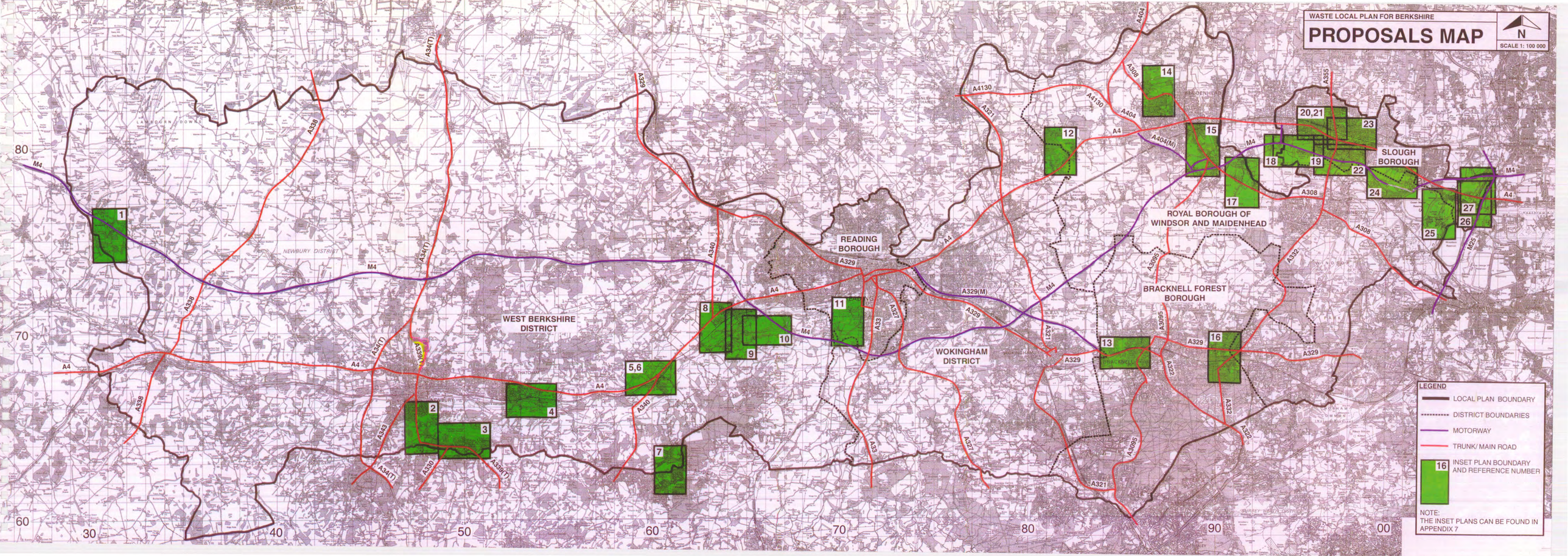
WASTE LOCAL PLAN FOR BERKSHIRE
PROPOSALS MAP
N
SCALE 1: 100 000
WEST BERKSHIRE DISTRICT
READING BOROUGH
WOKINGHAM DISTRICT
ROYAL BOROUGH OF WINDSOR AND MAIDENHEAD
BRACKNELL FOREST BOROUGH
SLOUGH BOROUGH
NEWBURY DISTRICT
LEGEND
LOCAL PLAN BOUNDARY
DISTRICT BOUNDARIES
MOTORWAY
TRUNK/ MAIN ROAD
16 INSET PLAN BOUNDARY AND REFERENCE NUMBER
NOTE:
THE INSET PLANS CAN BE FOUND IN APPENDIX 7

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