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Role and status of the Barnsley, Doncaster and Rotherham Joint Waste Plan

The Joint Waste Plan sets out the overall approach to managing waste across Barnsley, Doncaster and Rotherham over the next 15 years. Specifically, it indicates:

- what waste facilities are required;
- where they will be located (including sites and the broad pattern of waste facilities);
- when they will be provided; and
- how they will be delivered and monitored.

The Joint Waste Plan has core strategy status and forms part of each borough's development plan - the Local Development Framework.

The Joint Waste Plan is the starting point for assessing planning applications for waste management proposals.

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SUMMARY OF BARNSLEY, DONCASTER & ROTHERHAM JOINT WASTE PLAN

The Joint Waste Plan contains the following.

- Chapter I: Introduction and background: This explains the nature and role of the Joint Waste Plan and how it relates to other relevant plans and strategies.
- Chapter 2: Issues and challenges: This provides a summary of main issues and challenges facing Barnsley, Doncaster and Rotherham boroughs relating to waste management.
- **Chapter 3: Core approach:** This explains how we will plan for the provision and delivery of waste facilities, over the next 15 years, including the vision, aims and overall strategy for achieving sustainable waste management within Barnsley, Doncaster and Rotherham.
- Chapter 4: Detailed policies: This identifies the new and existing sites that will accommodate waste facilities and the detailed planning considerations that will inform future waste management proposals. This chapter also explains how we will implement and monitor these policies.
- **Chapter 5: Appendices:** These explain various issues in more detail, including a glossary of key terms, maps of the sites identified in the plan and a summary of the policies that will replace existing waste policies.

Waste management - the way in which waste is collected, treated and disposed of - is one of our most pressing issues. In recent years, we have collectively produced up to four million tonnes of waste each year - enough to fill Wembley stadium twice over. Much of this waste has been buried in landfill sites. As the waste decomposes (or rots), it releases harmful greenhouse gases and chemicals (e.g. methane and carbon dioxide) into the atmosphere which contribute to climate change. As landfill is becoming increasingly expensive and scarce, we urgently need to develop new technologies and alternative solutions to manage waste in a way that reduces emissions, conserves or produces new resources and protects or enhances the quality of the environment. Waste production has increased in some years - in part due to population and household growth, changing lifestyles and rising levels of consumption - but is currently showing some decline due to waste minimisation initiatives, but also the economic recession.

However, we still face a shortage of suitable recycling and treatment facilities to divert waste from landfill. This means that waste is often transferred over longer distances beyond our boundaries.

In order to address these future challenges, the three councils of Barnsley, Doncaster and Rotherham have prepared a detailed plan to guide and manage future waste provision across the boroughs over the next 15 years, known as the Joint Waste Plan. This includes waste from industrial and business sources, construction and demolition activities, agricultural processes, as well as waste from households.

The key aspects of the overall strategy for the Joint Waste Plan are as follows.

Most waste will be managed within our boundaries at the nearest appropriate location in the following order of priority: prevention, re-use, recycling, recovery and disposal. However, waste could be imported or exported where it represents the most sustainable option (e.g. minimises transport miles, reduces waste movements or requires specialist treatment).

A well planned and integrated network of waste facilities will be developed across the three boroughs to manage over one million tonnes of municipal, commercial and industrial waste per annum. To achieve this, we will:

- allocate new sites to manage waste by other means other than landfill and secure the necessary capacity over the plan period;
- **s**afeguard existing waste facilities of strategic importance such as recycling and treatment facilities, dredging sites and landfills (alternative uses such as offices and housing will not be allowed on these sites) to make sure sufficient capacity is available to meet current and future needs over the plan period; and
- set out criteria for assessing waste management proposals including those that come forward on other sites.

All new development (including waste facilities) will be expected to manage the waste it produces in a way that minimises resources and encourages on site recycling, recovery and storage.

The Joint Waste Plan is not specific about the mix and type of technologies that waste facilities could operate as these may change over time but identifies the processes that could manage waste as a means to encourage innovation.

In parallel with this process, we are working closely with the private sector to develop recycling and treatment facilities to manage the waste from your bins in line with the recycling, composting, recovery and landfill diversion targets from our separate municipal waste management strategies.

CHAPTER I INTRODUCTION AND BACKGROUND

(I) The waste challenge: a growing problem

- 1.1 Waste management is a significant issue facing Barnsley, Doncaster and Rotherham. The government's waste strategy states that: "If every country consumed natural resources at the rate the UK does, we would need three planets to live on". The government's goal is to move towards the concept of one planet living' essentially this means using fewer resources (e.g. land, fuel, water and man-made materials), conserving energy and producing less waste².
- 1.2 Currently, households and businesses across Barnsley, Doncaster and Rotherham produce over one million tonnes of waste a year. Much of this waste is sent to landfill sites. However, this cannot continue in the long term because:
 - landfill is generally harmful to the environment and human health (i.e. as waste slowly decays, it releases greenhouse gases such as carbon dioxide and methane into the atmosphere, which scientists believe may contribute towards global warming³);
 - landfill uses up land and resources that could be put to better use;
 - valuable resources (e.g. plastics, metals and liquids) that could potentially be re-used or recycled are being lost;
 - the government has set us challenging targets to increase recycling/composting and send less waste to landfill; and
 - alternative and more eco-friendly waste management practices (i.e. reduction, recycling, composting and energy recovery) are emerging.
- 1.3 As landfill space decreases and waste disposal becomes more expensive, we need to develop new ways to collect, treat and dispose of waste to address our long term needs, as well as recover value from waste. Modern waste technologies and practices offer an opportunity to enhance our green credentials since they:
 - can significantly reduce greenhouse gas emissions and energy costs (e.g. use of fossil fuels and road transport) as fewer resources are used;
 - are cleaner and more resource efficient than traditional methods of waste disposal;
 - can bring benefits to communities, such as green jobs, new waste collection services and alternative energy sources (e.g. biofuel and biomass) that can heat or power our homes and businesses:
 - are subject to strict environmental regulations through licences issued by the Environment Agency and subsequent licence enforcement/monitoring; and
 - set a good example to the rest of the region and the UK on delivering innovative waste solutions.
- In spite of efforts to reduce and recycle our waste, the amount of waste we produce each year has been steadily increasing⁴. If present trends continue, Barnsley, Doncaster and Rotherham face a significant shortfall of suitable recycling and treatment capacity over the next 15 years (see chapter 2). The upshot is that new waste management facilities need to be built across the three boroughs to address the capacity shortfall and government targets.
- 1.5 If these targets are not met, we will face heavy financial penalties (e.g. a higher rate of landfill tax). The fines from this process will ultimately be passed onto the local taxpayer⁵.

¹ The Waste Strategy for England (Department of Environment, Food and Rural Affairs, 2007)

² Waste is defined under the European Union Waste Framework Directive as 'any substance or object...which the holder discards or intends or is required to discard'.

³ Landfill sites are often unsightly and can harm soils and pollute ground and surface water (unless the leachate can be removed in a controlled manner).

Population, household and economic growth have been a major force in driving waste production across Barnsley, Doncaster and Rotherham and wider sub-region. The population of the plan area is forecast to grow at a slightly faster rate than South Yorkshire as a whole (6.4% and 5.5% respectively) from around 760,000 to 815,000 inhabitants between 2006 and 2030 (source: Yorkshire Futures/ University of Leeds).

(2) What is the Barnsley, Doncaster and Rotherham Joint Waste Plan?

- By law, every council in the country must plan for the appropriate provision of waste management facilities. In order to achieve this, the three councils of Barnsley, Doncaster and Rotherham have jointly produced the Joint Waste Plan.
- 1.7 The Joint Waste Plan forms part of each borough's development plan, known as the Local Development Framework. Each Local Development Framework sets out how places will develop in the future and guide the location and scale of new development and the use of land. Chapter 2 provides more information on this.
- 1.8 The Joint Waste Plan is the detailed planning strategy for providing waste management facilities across Barnsley, Doncaster and Rotherham over the period to 2026. More specifically, it sets out:
 - a long term vision and a series of aims that will guide and inform decisions regarding waste management facilities (see chapter 3);
 - the overall approach to managing and reducing waste in the three boroughs (see chapter 3);
 - the role that waste management will play in the context of South Yorkshire and the wider region (see chapter 3);
 - a range of waste management facilities and sites in accessible locations to meet our recycling, recovery and landfill diversion targets and waste capacity needs over the plan period (see chapter 4); and
 - a detailed policy framework against which planning applications for waste development (including small-scale facilities) will be assessed (see chapter 4)⁶.
- 1.9 The Joint Waste Plan covers all waste, including waste from commercial and industrial sources, construction, demolition and excavation activities, agricultural and hazardous waste, as well as waste from households (with the exception of mineral and colliery waste and waste water. These will be addressed elsewhere in each borough's Local Development Framework).
- 1.10 The Joint Waste Plan also explains how waste will be managed within all new development, including homes, offices, shops and community facilities (see chapter 4).
- 1.11 The key diagram (map 1) illustrates the main elements of the overall strategy of the Joint Waste Plan, including the location and distribution of waste management sites across the three boroughs and their relationship to existing urban areas, transport links and environmentally sensitive areas. These sites will also be shown on each borough's separate proposals map.
- 1.12 The Joint Waste Plan identifies two types of allocation.
 - Existing waste management sites (including recycling/treatment plants and landfills) that are safeguarded to meet future requirements (as shown on the location maps in appendix B).
 - New waste management sites (as shown on the location maps in appendix C).
- 1.13 Because landfill sites and quarries are often inextricably linked, the boundaries of these sites will be identified through each borough's separate allocation process.
- 1.14 The Joint Waste Plan has core strategy status because it makes spatial choices about where waste development should be located across the three boroughs.

⁵ Every tonne of waste sent to landfill incurs a fine from central government and this is increasing year-on-year.

⁶ If you wish to build or operate waste facilities, you need to obtain both planning permission (from the relevant local planning authority) and an environmental permit (from the Environment Agency under the environmental permitting regime). It is unlikely that an outline planning application would be acceptable in respect of a major waste recycling or treatment plant and applicants or developers must submit substantial evidence about the proposals to enable us to fully assess its effects on the immediate and surrounding area.

(3) Why are we working together?

- 1.15 As neighbouring councils, we have a history of working together to address waste management issues concerning recycling, cross boundary movements, capacity shortfalls, health and safety, fly-tipping problems and public awareness raising.
- 1.16 Barnsley, Doncaster and Rotherham councils are working closely with the private sector to secure suitable facilities to manage our municipal waste over the next 25 years through the private finance initiative (PFI) in line with the recycling, recovery and landfill diversion targets from our separate municipal waste management strategies. Chapters 2 and 3 provide further details on how these facilities will be delivered.

(4) How does the Joint Waste Plan relate to each borough's Local Development Framework (LDF)?

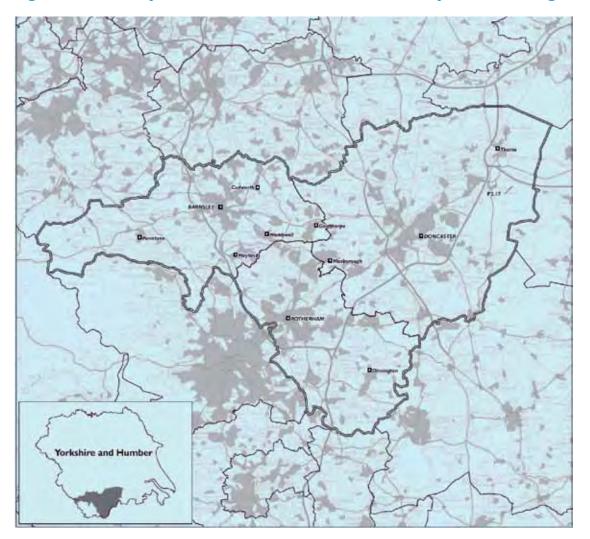
- 1.17 Each borough's Local Development Framework comprises a folder of documents covering different topics or areas. The main documents in the folder are called development plan documents (DPDs) and the Joint Waste Plan is one of these⁷.
- 1.18 The Joint Waste Plan must be read together as a whole. All waste proposals will be judged against the aims and policies set out in the Joint Waste Plan (see chapters 3 and 4) and other relevant Local Development Framework documents, including each borough's general Core Strategy (see chapter 2). These policies will assess the potential benefits of waste proposals against their potential adverse effects to help achieve the aims of the Joint Waste Plan.
- 1.19 The Joint Waste Plan replaces the policies relating to waste management in each borough's adopted Unitary Development Plan (UDP) as listed in appendix D.
- 1.20 Each borough's Local Development Framework also includes a Statement of Community Involvement. The Statement of Community Involvement is a 'code of practice' setting out how each council will involve people and organisations in planning decisions. This includes all stages of the plan making process and decisions on planning applications (including waste management proposals).

(5) General overview of the plan area

- 1.21 The Joint Waste Plan covers the three metropolitan boroughs of South Yorkshire: Barnsley, Doncaster and Rotherham (as figure 1 illustrates). Please note that the city of Sheffield also lies within the South Yorkshire sub-region, but has its own waste management policies in place.
- 1.22 Located in the heart of England, the plan area has direct links to the MI motorway to Leeds in the north and Sheffield to the west and south, the MI8 motorway to Hull and the AI (M) motorway to London in the east, as well as to strategic rail routes, such as the east coast and midland mainline. Robin Hood Airport is located near the town of Doncaster on the site of the former RAF airbase at Finningley (see the key diagram: map I). The plan area also has an extensive network of navigable canals and rivers including the Dearne and Dove Canal, Sheffield and South Yorkshire Navigation Canal and the Dearne and Don rivers.
- 1.23 The plan area, covering around 118,000 hectares (or 456 square miles) of land, contains the main urban areas of Barnsley, Doncaster and Rotherham and a dispersed pattern of former coalfield towns and villages, including Mexborough, Bolton upon Dearne, Goldthorpe, Thorne and Dinnington. It also retains extensive open countryside consisting of natural woodland, farmland, moorland and internationally renowned landscapes, notably the Pennines in the west and the Humberhead levels a low lying agricultural landscape (much of which is below sea level) stretching from the Humber estuary to Thorne and Hatfield moors in the east. The moors are the largest surviving examples of raised lowland peat bogs in Britain.

⁷ The purpose of these documents and the timescale for producing them is set out in more detail in each council's Local Development Scheme.

Figure 1: Barnsley, Doncaster and Rotherham metropolitan boroughs



- 1.24 Barnsley is the fourth largest metropolitan borough in England covering 32,892 hectares (127 square miles) of land from the Pennines and upland rural areas in the west to the urban and industrial lowlands in the east. Over three-quarters of the borough lies within the green belt.
- 1.25 Doncaster is the largest metropolitan borough in England covering 57,000 hectares (225 square miles) of land. Doncaster has a large rural hinterland containing over 44 settlements surrounded by attractive and low-lying countryside. The designated green belt covers much of the western half of the borough. Around two thirds of the borough is still in agricultural use, mainly in the eastern parts.
- 1.26 Rotherham borough lies between Doncaster and Sheffield near the confluence of the rivers Don and Rother and covers 28,278 hectares (109 square miles) of land. Around 70% of the borough is rural in nature. Rotherham lies at the heart of the borough and is surrounded by rolling countryside and a mixture of farming and former mining villages. The main urban areas are largely concentrated in the central and north eastern parts of the borough.
- 1.27 Barnsley, Doncaster and Rotherham boroughs share many similar characteristics in terms of population size (ranging between 225,000 and 290,000 inhabitants), economic profile, settlement pattern and levels of deprivation.
- 1.28 The plan area also includes part of two city regions: Sheffield and Leeds⁸. Sheffield city region covers the local authorities of South Yorkshire as well as five authorities within the North Midlands (Bassetlaw, Bolsover, Chesterfield, Derbyshire Dales and North East Derbyshire) with a population of around 1.7 million. Barnsley also forms part of the Leeds city region due to its links to the city of Leeds in the north.

⁸ City regions are defined as 'enlarged territories from which the main urban areas draw people for work and services, such as shopping, education, health and entertainment' (government definition) and are earmarked for future national growth.

(6) How does the Joint Waste Plan relate to other documents?

1.29 This section shows how the Joint Waste Plan relates to other plans and programmes at European, national and local level⁹.

European and national policy

1.30 Waste management practices are governed by European and national legislation. The key principle relating to waste management is the 'waste hierarchy' which sets out a range of options for managing waste in the following order of priority (see figure 2 below).

Preparing for re-use

Recycling

Other recovery
(e.g. energy recovery)

Disposal
(e.g. landfill)

Figure 2: The waste hierarchy

- 1.31 The European **Waste Framework Directive** sets a target that, by 2020, the UK must recycle 50% of its household waste and re-use, recycle and recover 70% of its non-hazardous construction and demolition waste. Under the Landfill Directive the UK must ensure that no more than a third of its biodegradable waste is sent to landfill by 2020¹⁰. The **Landfill Allowance Trading Scheme** allocates allowances to every council to meet their contribution towards the government's landfill diversion targets under the Landfill Directive. Whilst these allowances can be traded with other councils or borrowed over future years, we will incur financial penalties on every tonne of waste that is landfilled in excess of these allowances.
- 1.32 The government has translated the principles of these European directives into UK law. Achieving zero waste is a key aim of the government's approach to re-use, recycle or recover resources wherever possible and only dispose of waste as a last resort. This means that action will be taken to:
 - reduce or prevent waste wherever it occurs;
 - break the link between economic and waste growth;
 - increase recycling of household and business waste;
 - work with local communities, councils and businesses to find cost effective and integrated solutions to collect and deal with waste (including across administrative boundaries) and remove barriers to delivery; and
 - conserve natural resources and maximise value from waste where possible to help achieve its targets to reduce emissions and promote energy from renewable sources.

⁹ Biodegradable waste typically originates from plant or animal sources, which may be broken down by other living organisms such as food and garden waste, paper and cardboard.

- 1.33 In line with these commitments, the government has set us challenging targets to recycle and compost at least 50% and recover value from at least 75% of our household waste by 2020.
- 1.34 The Joint Waste Plan is a key means of delivering a number of the government's planning objectives aimed at reducing carbon dioxide emissions, conserving energy, enhancing employment and training opportunities, protecting people's health, improving the quality of the built and natural environment and promoting alternatives to road transport. The key messages from the government's waste planning agenda are as follows.
 - Waste should be managed at its nearest appropriate location, preferably where it arises, using it as a resource where possible without endangering human health and the overall quality of the environment (except where landfill represents the only realistic available option).
 - Local authorities and their partners should work closely together to deliver more innovative waste solutions over the long term.
 - Plans and strategies should provide a framework in which communities should take greater responsibility to manage their own waste and the concerns and interests of communities and the needs of business are addressed.
 - Plans must set aside sufficient land in appropriate locations (including a range of suitable sites) to manage different waste streams in line with future capacity requirements over the next 15 years.
 - All new development should minimise waste production, maximise the use of recycled materials and facilitate the provision of adequate storage space.
- 1.35 Waste management activities require an environmental permit, or exemption, to operate as well as planning permission. The **Environmental Permitting Regulations 2010** require operators to obtain the relevant authorisations from the Environment Agency (for example, by applying for an environmental permit or registering an exemption) in order to carry out waste activities on a site. Environmental permits set controls and emission standards to prevent or reduce pollution and harm to human health. Once a permit is granted the Environment Agency will regulate a site by carrying out site inspections and audits to ensure that the waste operation complies with the conditions of the permit. We will work together with the Environment Agency to ensure that decisions taken on waste management proposals are consistent, effective and implemented in a timely fashion. Applicants and developers are encouraged where viable to prepare and submit their planning applications and environmental permit applications to the relevant authorities at the same time.

Local policy

- 1.36 The following documents shape and inform waste management decisions at the local level.
- 1.37 **Sustainable community strategies** set out the overall vision and priorities to deliver long term change over the next 10 to 15 years in each borough in partnership with local communities and key partners. A common theme running through these strategies is the desire to minimise, reduce and recycle waste and make best use of existing resources.
- 1.38 **Local development frameworks** are closely linked to sustainable community strategies, addressing the issues and priorities that relate to development and the use of land within different parts of each borough. Each borough's Local Development Framework sets out where these priorities will happen and how they will be implemented and delivered.

- 1.39 The main document within the Local Development Framework (known as the Core Strategy) sets out a long term vision and a series of overarching objectives and policies to guide development within each borough. Each borough's separate Core Strategy will explain how:
 - places will grow and develop over the next 15 years;
 - services, infrastructure and jobs will be provided and delivered;
 - regeneration needs and priorities will be addressed; and
 - the character and environment of the borough will be protected and enhanced.
- 1.40 The Joint Waste Plan covers planning policies and proposals on waste and recycling. The general purpose core strategies cover a wider range of issues, such as transport, energy, settlement growth, climate change and the quality of the built and natural environment. The key messages from these strategies are set out below.
- 1.41 The strategic focus for development will be centred on the main urban areas of the Barnsley, Doncaster and Rotherham boroughs where most jobs and services are located. Particular emphasis will be placed on securing large-scale regeneration and investment to revitalise the sub-regional centres, principal towns and other coalfield communities across the plan area.
- 1.42 Other parts of the Local Development Framework will include site specific allocations and detailed policies covering different land uses and areas. These designations will be shown on each borough's proposals map.
- 1.43 **Municipal waste management strategies** are legal documents and each borough's Local Development Framework (specifically this document) must have regard to them. These strategies address how municipal waste will be collected, sorted and treated. The Joint Waste Plan addresses where it will be managed to assist in the delivery of these strategies as well as other waste streams (e.g. industrial waste).

FACT BOX: Municipal waste management strategies

Barnsley's municipal waste management strategy devises a policy framework to deliver more sustainable waste management practices within the borough in the period to 2030. This strategy sets a target to recycle or compost 45% of its household waste by 2015/16. Its objectives are to dispose of waste within the borough or sub-region to reduce transport costs, encourage private sector investment and predict and assess the social, economic and environmental effects of waste management options.

Doncaster's municipal waste management strategy ('An opportunity not to be wasted') sets out how Doncaster will deal with its waste up to 2026 and beyond, including the types of technology and services needed to reach its goals and targets. This strategy sets targets to achieve a 60% recycling and composting rate by 2020/21 and prevent at least 60,000 tonnes of waste from entering the waste stream by 2026.

Rotherham's municipal waste management strategy ('Waste strategy') aims to address short, medium and long term needs over the period to 2020. This strategy sets a target to recover the value from 67% of municipal waste and achieve a recycling rate of 45% by 2015/16. Meeting these targets will require a commitment to provide new waste collection systems, waste minimisation activities and develop recycling and treatment facilities that reduce reliance on landfill.

All three strategies aim to achieve high levels of recycling and recovery, equal to or greater than regional or national targets. An action plan setting out how these targets will be achieved and implemented accompanies each document. Chapter 4 overleaf provides further information on these aims and targets.

New facilities will be developed to deal with Barnsley, Doncaster and Rotherham's left over municipal waste through the private finance initiative to ensure these targets are met. Private operators will operate these facilities on behalf of the three councils.

CHAPTER 2 ISSUES AND CHALLENGES

- 2.1 This chapter sets out the issues and challenges for dealing with the waste we produce and how it will be managed in the future. Despite the growing trend towards reducing and recycling waste, the overall volume of waste (known as arisings) is still expected to increase over the next 15 years in the plan area due to mainly social and economic factors, such as increasing population and household numbers (i.e. more single person households), construction of new homes and premises for businesses and industry, rising prosperity and changing lifestyles (i.e. work-home balance).
- 2.2 Barnsley, Doncaster and Rotherham have been identified as major growth areas where significant regeneration and investment will take place over the plan period¹⁰. Ambitious plans are well underway to regenerate these areas and facilitate their growth through the city region investment programme and renaissance towns initiative. Each borough's development plan provides a framework to ensure that sufficient infrastructure is put in place to support future growth needs and regeneration across the plan area. This includes the provision of new waste management facilities¹¹.
- 2.3 The box below sets out the different waste streams that need to be managed within the plan area.

FACT BOX: Definitions of different types of waste

Municipal waste largely consists of waste collected from households (including bulky waste) and some businesses, and also includes waste from recycling centres as well as from street cleaning, litter bins and publicly owned parks and gardens.

Household waste is the proportion of municipal waste which is collected from domestic properties

Commercial and industrial waste is derived from premises used wholly or mainly for the purpose of a trade or business and/or for the purpose of sport, recreation, education and entertainment. However, it does not include household and agricultural waste. The largest proportion of this waste within the plan area comes from mineral and industrial waste residues, such as colliery spoil, chemical wastes and power station ash. The other large sources come from retail and wholesale, services and the public sector.

Construction, demolition and excavation waste arises from construction, renovation and demolition activities. Materials include vegetation, soils, bricks, rock and concrete.

Agricultural waste includes organic matter such as manure, slurry, silage, effluent, crop residues as well as a wide range of materials, such as packaging and animal treatment dips.

Hazardous waste is defined as waste that poses a threat or potential hazard to human health or the environment, and largely arises as a result of the construction and demolition process, although some businesses and other industries produce small amounts of hazardous waste, as do households. The four main hazardous waste types produced in the region are: waste/water treatment, oil waste, waste from organic processes and construction and demolition waste (e.g. contaminated soil and asbestos).

Low level radioactive waste is the unavoidable by-product of certain industrial and commercial processes, including medical treatment and research, fuel processing plants/institutions and other specialist industrial processes, such as steel smelting.

Residual waste refers to materials that are left over after recycling and composting has taken place and require recovery or disposal.

Sewage waste or sewage sludge is the dry solid by-product of the sewage treatment process.

- 2.4 The tables in this chapter provide information on current and future waste arisings within Barnsley, Doncaster and Rotherham and estimate how many new facilities are required to meet future capacity requirements and targets over the period to 2026¹². In calculating the figures for municipal, commercial and industrial waste, we have made the two assumptions set out below.
 - Not all facilities will operate at full capacity all the time. We have therefore used estimated throughput (i.e. how much waste is actually managed through a facility) as a basis for calculating existing capacity.
 - Of the waste that is sent for processing, not all will be successfully diverted from landfill. We have therefore allowed for a proportion of the waste sent for processing to be subsequently landfilled as residues or rejects.
- 2.5 The implications of the above is that processing capacity will need to be higher than the actual amount of waste requiring processing and that the amount of waste that will need to be processed will be higher than the actual amount of waste that we are seeking to divert from landfill.

(I) Municipal waste

- 2.6 Local councils (as waste disposal authorities) have a legal duty to collect, recycle and treat **municipal waste** and must allocate sufficient land to meet capacity needs over the plan period. Barnsley, Doncaster and Rotherham currently produce approximately 400,000 tonnes of municipal waste each year and this is predicted to increase at less than 1% per year.
- 2.7 We must make provision to increase the overall amount of municipal waste which is diverted from landfill, whilst also ensuring that the statutory targets for recycling/composting the household waste element are met.

Table I: Household waste recycling and composting capacity requirements in Barnsley, Doncaster and Rotherham taking into account current capacity (thousand tonnes per year)

	2010	2015	2021	2026
Total Barnsley Doncaster and Rotherham household waste arisings	360	368	379	388
Recycling/composting target	40%	45%	50%	50%
Additional capacity required	0	19	55	61

¹⁰ This long term growth strategy is based on the results of various spatial studies, including the South Yorkshire Spatial Strategy and Sheffield City Region Transport Strategy. Each borough's Core Strategy sets out the overall approach to delivering growth and regeneration in their area during the plan period.

These projections take into account a number of modelling assumptions about economic and social change, such as economic growth rates, population change, household formation and the impact of waste minimisation strategies. These figures provide a benchmark for assessing capacity needs and will be updated and refined through regular monitoring and joint working between councils, waste operators and statutory agencies (e.g. Environment Agency) across the region (see chapter 3).

¹² While the figures for municipal, commercial and industrial waste are calculated separately, in reality many facilities are at a combination of these waste streams. The conclusions in this section therefore set out the total combined municipal, commercial and industrial waste capacity required.

Table 2: Municipal waste recovery or treatment capacity requirements (including household waste recycling and composting requirements) in Barnsley, Doncaster and Rotherham taking into account current capacity (thousand tonnes per year)

	2010	2015	2021	2026
Total Barnsley Doncaster and Rotherham household waste arisings	412	419	430	440
Target for diverting waste from landfill	53%	67%	90%	90%
Additional capacity required	0	167	324	337

- 2.8 The above calculations indicate that Barnsley, Doncaster and Rotherham will require an additional 337,000 tonnes of municipal waste recycling, composting, treatment or recovery capacity by the end of the plan period, including 61,000 tonnes of recycling and/or composting capacity.
- 2.9 While municipal waste represents a relatively small percentage of the overall waste generated in the plan area, it is often the end point of the production activities of other types of waste, and it can have an up-stream impact on other sources of waste generation. Municipal waste contains materials which are difficult to break down, such as glass and plastics.
- 2.10 A significant amount of new municipal waste recycling, composting and treatment capacity is required to achieve diversion from landfill. In order to implement the municipal waste management strategies and achieve this diversion over the long term, the three councils are working closely with the private sector to secure suitable facilities to manage municipal waste through a private finance initiative. Such provision will include the waste transfer station at Grange Lane (see policy WCS2) and a new dedicated waste recycling and recovery facility at Bolton Road, Manvers (see policy WCS3).

Key outcomes

- At least one large-scale recycling, composting and treatment waste plant is needed in the plan area to meet the predicted shortfall. This will involve rationalising and reviewing existing municipal waste management contracts.
- Policies WCS2 and WCS5 of the Joint Waste Plan will safeguard existing municipal waste facilities such as waste transfer stations, landfill sites and recycling, composting and treatment facilities that perform a strategic role within the wider management network to help address future capacity needs.

(2) Commercial and industrial waste

- 2.11 Barnsley, Doncaster and Rotherham currently produce around 700,000 tonnes of **commercial** and **industrial waste** each year (which equates to just over 10% of Yorkshire and the Humber's total commercial and industrial waste).
- 2.12 Unlike municipal waste, the volume of commercial and industrial waste is forecast to decrease by around 5% between 2010 and 2026, partly due to the decline in the industrial sectors of the economy and the predicted numbers of full time employees that will occur in the sub-region (see table 3).
- 2.13 Despite these assumptions, it is important that we make provision to maximise the amount of commercial and industrial waste that is diverted from landfill. To achieve this, Barnsley, Doncaster and Rotherham will require an additional 180,000 tonnes of commercial and industrial recycling, composting, treatment or recovery capacity by the end of the plan period.

Table 3: Commercial and industrial waste recycling, recovery or treatment capacity requirements in Barnsley, Doncaster and Rotherham taking into account current capacity (thousand tonnes per year)

	2010	2015	2021	2026
Total Barnsley Doncaster and Rotherham commercial and industrial waste arisings	686	694	671	653
Target for diverting waste from landfill	76%	80%	85%	90%
Additional capacity required	237	132	155	180

Key outcomes

- Commercial and industrial waste is often bulky and will require dedicated new waste processing facilities at the strategic level (see policies WCS1 and 3).
- Future growth in commercial and industrial waste arisings is forecast to fall over the plan period.
- New waste facilities are needed to plug the capacity shortfall (see table 3). Additional recycling, composting, treatment or recovery capacity is required based on existing targets (equating to I or 2 large scale facilities) with a potential need for additional capacity subject to changes to national targets and other related legislation.

(3) Construction, demolition and excavation waste

- 2.14 Based on estimates from national surveys, Barnsley, Doncaster and Rotherham currently produce around 1.9 million tonnes of **construction**, **demolition and excavation waste** per year, over half of all the waste generated in the plan area. A fairly constant level of growth in this waste (less than 0.6%) is forecast across the whole region, which suggests there would be just under 2 million tonnes of this waste stream within Barnsley, Doncaster and Rotherham by 2026.
- 2.15 Some of this waste can be used to create development platforms, and it is often reused on site. In addition, quarries and landfill sites present opportunities to recycle or process construction, demolition and excavation waste as reclaimed aggregate (e.g. low grade infill) and the fines from this process can often be incorporated into quarry reclamation schemes. Only a small proportion (7%) of this waste will require landfill as current rates of reuse and recycling are high, and current inert landfill capacity in the plan area is sufficient to dispose of this waste over the plan period.

Table 4: Construction, demolition and excavation waste forecasts (thousand tonnes per year)

	2010	2015	2021	2026
Total	1,829	1,869	1,932	1,983
Recycling/reuse (including on-site)	1,701	1,738	1,797	1,844
Landfill	128	131	135	139

Key outcomes

- The bulk of construction, demolition and excavation waste will continue to be managed on site close to where it arises.
- Our existing landfill sites have sufficient capacity to dispose of inert construction, demolition and excavation waste during the plan period.
- Colliery spoil and waste from minerals will be addressed separately within our individual core strategies.
- By law, developers and contractors are required to submit a site waste management plan setting
 out how the waste generated from the site will be managed during the construction and lifetime
 of the project (see policy WCS7). This requirement applies to all aspects of construction work,
 including preparatory work, such as demolition, excavation, maintenance and alteration of existing
 structures.

(4) Agricultural waste

- 2.16 Barnsley, Doncaster and Rotherham currently produce approximately 216,000 tonnes of **agricultural waste** per year, and this is forecast to decrease to approximately 84,000 tonnes by the end of the plan period. It is expected that most agricultural waste (particularly animal matter and vegetable plants) will be recycled and treated at the place of production (i.e. existing farms), or sent to dedicated composting facilities in other parts of the plan area, such as Brier Hills Farm (see policy WCS2).
- 2.17 It is estimated that around 2% of agricultural waste is non-natural (such as plastics, redundant machinery, clinical waste and packaging). Due to changes in legislation, farmers now have a duty to manage and dispose of their non-natural waste in the same way as other commercial and industrial operations. This means that the proportion of agricultural waste which needs to be proactively managed at waste recycling or treatment facilities could increase. However, as this would be an increasing proportion of an overall decreasing amount of waste, the actual tonnages involved are relatively small.

Table 5: Agricultural waste forecasts (thousand tonnes per year)

	2010	2015	2021	2026
Total	216	160	112	84
Composted/treated/disposed on-site	212	157	110	82
Recycling/treatment/recovery with other waste types (2%)	4	3	2	2

Key outcomes

- Agricultural waste will generally be managed at existing farms or composting facilities, wherever possible. The remainder will be addressed through commercial, industrial and hazardous waste facilities.
- On-site waste facilities should be provided through the re-use of redundant farm buildings and associated facilities.
- No sites have been identified to manage agricultural waste and criteria-based policies will be used to assess agricultural waste proposals along with other relevant Local Development Framework policies.

(5) Hazardous and low level radioactive waste

- 2.18 Barnsley, Doncaster and Rotherham contribute around 17% of the Yorkshire and Humber region's **hazardous waste** (equating to around 85,000 tonnes per annum, of which around 21,000 tonnes is landfilled).
- 2.19 We do not need to allocate land to accommodate specialist hazardous waste facilities since arisings are not expected to increase over the plan period and there appears to be sufficient capacity at existing recovery, treatment and disposal sites within the region. Any hazardous waste that cannot be recycled or treated will continue to be sent to a large specialist landfill site in East Yorkshire, which serves the whole region and further afield. A number of small-scale waste transfer stations across the three boroughs are licensed to accept hazardous waste where it is bulked up and transferred to specialist facilities both within and outside the region.
- 2.20 Policies WCS6 and 7 of the Joint Waste Plan seek to encourage more on site processing and waste treatment (e.g. contaminated soils) at the local level. This in turn will help to reduce the need to build new facilities.
- 2.21 Because of its specialist nature, low level **radioactive waste** is addressed at the national level and most of it arises from the decommissioning and clean-up of nuclear sites, none of which are located in the plan area.

Key outcomes

- In the plan area there is no significant shortfall in hazardous waste capacity: forecasts generally show that hazardous waste arisings will remain constant over the course of the plan period.
- No specific sites have been identified to manage hazardous and low level radioactive waste in the plan area and the criteria based policies will be used to assess low level radioactive and hazardous waste proposals should they come forward during the plan period.
- Hazardous waste will be addressed through a combination of existing recycling, treatment and recovery technologies and on-site remediation prior to landfill.

(6) Residual waste to landfill

- 2.22 The main aim of the Joint Waste Plan is to provide more facilities that manage waste in the most sustainable ways and reduce reliance on landfill. However, there will still be a continuing need to dispose of our waste that cannot be recycled, composted or treated (known as **residual waste**) within our existing landfill sites.
- 2.23 The table overleaf shows there is likely to be sufficient capacity within our existing licensed landfill sites to meet our future municipal, commercial and industrial waste disposal requirements over the plan period. Furthermore, surplus capacity will be available during the plan period if our recycling, composting and recovery targets are exceeded. In addition, some inert landfill sites have spare capacity which could be used to accommodate municipal, commercial and industrial waste (i.e. non-inert waste) and policy WCS5 provides flexibility for additional capacity should it be required during the plan period. For instance, the availability of voidspace will depend on a range of factors, including the life expectancy of landfill sites, the type of waste they will accept, current and future composting/recycling/recovery rates and targets, waste minimisation initiatives, waste growth rates and the delivery of new recycling and treatment facilities on the strategic sites (policy WCS3).
- 2.24 Policy WCS5 also safeguards existing landfill sites which have significant capacity remaining to dispose of this waste.

Table 6: Municipal, commercial and industrial landfill requirements (thousand tonnes per year)

	2010	2015	2021	2026
Landfill capacity required for municipal, commercial and industrial waste (total)	358	277	144	109
Non-inert landfill capacity remaining	6,919	5,194	4,155	3,474

2.25 Successful diversion from landfill will require more effective sorting and separation of municipal, commercial and industrial waste to increase quantities being recycled, composted and treated as well as stabilise and reduce the biodegradable element before residual waste is sent to landfill.

Key outcomes

- The Joint Waste Plan must make provision to dispose of our residual waste, some of which will have to be landfilled.
- Our existing landfill sites have sufficient capacity to meet our municipal, commercial and industrial waste disposal needs until at least the end of the plan period. Surplus capacity will be available during the plan period if our recycling, composting and recovery targets are exceeded.
- In addition, some existing waste management sites have capacity to accommodate new waste sorting, transfer and treatment facilities (see policy WCS2). This includes sites at Grange Lane, Stairfoot (Barnsley) and Sterecycle, Templeborough (Rotherham).
- In the event of a shortfall towards the end of the plan period, policy WCS5 sets out the circumstances in which additional landfill provision would be permitted (e.g. no other means of disposal are available and quarries require reclamation via landfill).

(7) Cross boundary movements

- A proportion of our waste (e.g. hazardous waste and some municipal, commercial and industrial waste) is exported to treatment and disposal facilities outside the plan area. Some waste is also imported from neighbouring authorities (e.g. Sheffield and Wakefield) into our landfill sites. However, cross boundary movements are likely to decrease over the course of the plan period so long as neighbouring authorities are successful in their intentions to manage their waste within their own boundaries.
- 2.27 The city of Sheffield will continue to play a key role in the plan area in the context of the waste hierarchy because:
 - a proportion of our municipal, commercial and industrial waste will continue to be recycled and treated in Sheffield (and vice versa) in the short and medium term (e.g. the material recycling facility at Beighton in Rotherham and the energy recovery facility at Bernard Road in Sheffield); and
 - strong links have been established between individual councils and waste operators through the Sheffield city region programme.
- 2.28 Sheffield's Core Strategy indicates that their last remaining landfill site at Parkwood Springs will close in 2018 but that the city can just provide for its needs up to 2024. In the event of a shortfall, the evidence suggests that existing landfill sites within Barnsley, Doncaster and Rotherham might not have spare capacity to dispose of the combined left over waste from the four councils of South Yorkshire during the remainder of the plan period. In these circumstances, there may be a need to carry out a wider review of landfill provision across the city region. Such a review would provide opportunities to explore integrated waste solutions across the city region.

As part of our commitment to liaise with relevant bodies, such as neighbouring councils, government agencies and waste operators, we will continue to monitor the capacity of waste management sites across the plan area (including landfill availability) and proposed sites in other parts of the region should they become available to take a proportion of our waste in the long term.

Freight transport

2.30 The river Don and the Sheffield and South Yorkshire Navigation Canal - an inland waterway running from Goole via the Aire and Calder Navigation towards Doncaster, Rotherham and Sheffield - are available as freight transportation routes to carry bulk waste.

(8) Conclusions

2.31 By 2026, Barnsley, Doncaster and Rotherham must provide sufficient new waste management facilities to meet the capacity shortfall of around 517,000 tonnes of recycling, treatment and recovery capacity for municipal, commercial and industrial waste. This could be met through the provision of three large sites (100 - 400,000 tonnes/year) or a number of smaller sites.

Table 7: Total new municipal, commercial and industrial recycling, treatment and recovery capacity requirements to meet future shortfall (thousand tonnes per year)

Additional recycling, composting and treatment capacity	2010	2015	2021	2026
Municipal waste	0	167	324	337
Commercial and industrial waste	237	132	155	180
Total	237	299	479	517

2.32 The next section explains how our waste capacity needs will be delivered and monitored.

CHAPTER 3 CORE APPROACH

(I) Moving towards sustainable waste management: our shared vision to 2026

By 2026, Barnsley, Doncaster and Rotherham boroughs will be leading exponents of environmentally friendly and innovative waste management solutions to support a diverse local economy and future growth. By working together with our partners, we will have:

- managed the majority of our waste within our boundaries and diverted it from landfill;
- met and exceeded our recycling, composting and recovery targets;
- developed a range of high quality, state-of-the-art and integrated facilities that manage different
 waste streams mainly within accessible urban locations close to where they arise, addressing
 the overall shortfall and anticipated growth in the volume of waste;
- put in place appropriate safeguards to make sure that new waste facilities respect and enhance the character and quality of the surrounding area and assets; and
- taken into account likely cross-boundary movements.
- 3.1 Our shared vision and aims flow from national, regional and local policy objectives (see chapter 2) and the results of the consultation process.

(2) The aims of the Joint Waste Plan

3.2 The Joint Waste Plan has eight aims. These set out the broad principles for bringing forward sites and assessing proposals for waste development.

Aim A: Encourage waste to move up the hierarchy (away from landfill towards greater reduction, re-use, recycling and recovery) to achieve the targets set out in our municipal waste management strategies and save energy and resources.

- 3.3 The overall aim of the Joint Waste Plan is to manage waste in the following order of priority: prevention (reduction), re-use, recycling, recovery and landfill disposal (see figure 2: the waste hierarchy). Hence, the Joint Waste Plan has an important role in making sure that:
 - a range of sites are available across the plan area in accessible locations to manage or treat different waste streams and meet our capacity requirements and recycling, recovery and landfill diversion targets over the plan period (see chapters 2 and 4); and
 - new developments such as homes, offices and shops facilitate the sorting, collection and recycling of waste (see policies WCS1 and WCS7).
- However, it is vital that the desire to move waste up the hierarchy does not come at the expense of other important planning considerations, including the protection of environmental assets (notably those listed under aim G). Equally, it is important that waste facilities which are lower in the hierarchy (such as recovering energy to divert waste from landfill) do not override the incentive to drive waste further up the hierarchy in the longer term i.e. towards the end of the plan period and beyond. These principles will apply to all new development, including new buildings, refurbishments and conversions.

Aim B: Ensure the timely provision of good quality waste management facilities to help address the predicted shortfall of recycling, composting, treatment and recovery provision within South Yorkshire and meet future waste needs within Barnsley, Doncaster and Rotherham up to 2026.

- 3.5 The Joint Waste Plan has a key role in addressing future capacity needs across South Yorkshire and the two city regions of Leeds and Sheffield. Based on future growth assumptions, Barnsley, Doncaster and Rotherham face a shortfall of around 517,000 tonnes of recycling, composting, treatment and recovery capacity for municipal, commercial and industrial waste during the period to 2026 (see chapter 2). The three boroughs also have a shortage of suitable facilities to treat leftover waste as an alternative to landfill.
- 3.6 The Joint Waste Plan has identified a range of sites to make sure sufficient opportunities are available to develop waste management facilities in the right locations at the right time over the course of the plan period.

Aim C: Deal with waste locally within accessible urban locations and maximise movements via rail and water where possible, so as to save resources and minimise transport costs, whilst allowing waste to be imported or exported where it represents the most sustainable option.

3.7 As a joint planning document, it is vital that new waste facilities are accessible to the main transport network (including motorways and rail/canal freight routes where possible) as well as the sources of waste within existing urban areas, so as to reduce energy/transport costs and ensure that waste is kept as close as possible to its source (the proximity principle). This will encourage more effective on site management and localised treatment to reduce the volume of waste prior to transport. However, some of this waste could be imported or exported where it represents the most sustainable option (e.g. minimises the distance where waste is transported).

Aim D: Maximise the local economic benefits of waste management activity, including using waste as a resource for industry.

Most of our waste has value as a resource in that it can be used to produce energy (e.g. electricity or heat) and create new products (e.g. plastics) or green collar jobs. Some organic waste (e.g. wood and plastics) can be used as feedstock to produce biomass, energy crops and biofuels. For instance, developing waste recycling facilities (e.g. wood waste plants) and associated infrastructure to use feedstock can have significant economic benefits, especially in the agriculture and manufacturing sectors associated with increased self sufficiency and productivity, reduced energy costs and increased market demand for local products. In addition, there is potential to develop biomass facilities sourced from local woodland and energy crops as South Yorkshire is a leading exponent of this technology in the region.

Aim E: Maximise the potential to co-locate and integrate facilities to manage different waste streams using a range of advanced technologies, including renewable energy generation (where possible).

- 3.9 Benefits attributed to co-locating and integrating complementary waste facilities include: energy and transportation savings (e.g. fewer emissions), flexibility (e.g. ability to manage different waste streams), technological innovation (e.g. from waste collection through to final treatment), renewable energy generation and additional employment activities associated with waste management (preferably existing employment or industrial sites in accessible locations). This will reduce land take for infrastructure and waste management purposes, such as car parking and storage.
- A wide range of proven waste technologies are available such as gasification, mechanical biological/ heat treatment, pyrolysis and anaerobic digestion (explanations are given in the glossary in appendix A). These technologies have the potential to capture carbon and convert waste that cannot be re-used or recycled into renewable energy, such as electricity (via the national grid) and biogas (e.g. methane from landfill sites). Our approach is designed to be flexible rather than prescriptive to encourage innovation and support advances in technology over the plan period.

Aim F: Make use of vacant and underused brownfield land within existing industrial or employment areas.

- In terms of location, preference will be given to employment and industrial areas or sites within existing waste management use that are accessible by a choice of means of transport within existing built-up-areas, preferably on underused brownfield or vacant land. This will make more efficient use of land/resources and reduce transportation costs. Most waste facilities are classed as employment uses (e.g. recycling facilities) and can be accommodated within existing employment sites.
- 3.12 Largely as a result of their industrial and mining heritage, Barnsley, Doncaster and Rotherham have a relatively dispersed settlement pattern of former mining communities with high levels of vacant and underused land relative to other parts of the region. National planning policy seeks to concentrate new development within or adjoining existing urban areas and make best use of brownfield land.

Aim G: Waste management facilities should protect, maintain and, where possible, enhance the amenity, health and safety of local communities and the wider built and natural environment, especially in areas of sensitivity such as the green belt, floodplain, Thorne and Hatfield moors, ground water protection zones, rivers Don and Dearne, historic assets and the Peak District National Park.

- 3.13 Despite being urbanised, the plan area contains a number of environmental assets of international and national importance, notably Special Protection Areas, Special Areas of Conservation (e.g. Thorne and Hatfield Moors see key diagram: map 1), Sites of Special Scientific Interest (e.g. Potteric Carr), country parks, historic parks and gardens, high grade agricultural land and part of the Peak District National Park. There are also extensive flood risk areas, in particular around the Dearne Valley and north east of Doncaster borough near the rivers Dearne, Don and Trent. The statutory green belt covers the majority of the plan area.
- 3.14 Policies WCS5, 6 and 7 of the Joint Waste Plan require measures to avoid and mitigate potential adverse effects on the amenity, health and safety of the immediate locality and wider landscape. New waste facilities provide an opportunity to enhance green infrastructure assets and corridors such as cycle and footpath routes, tree cover, waterways and habitat creation (e.g. via restoration).

Aim H: Reduce greenhouse gas emissions (especially carbon dioxide and methane) through energy efficient waste technologies and innovative transport solutions.

- 3.15 The Joint Waste Plan provides a framework to reduce and mitigate the effects of climate change arising from waste management practices. New waste recycling, composting and recovery facilities will save energy (especially from transportation), reduce greenhouse gas emissions such as carbon dioxide and methane and the use of fossil fuels and materials that would otherwise be landfilled¹³. Policies WCS1 and 6 of the Joint Waste Plan seek to promote and encourage the use of cleaner and more energy efficient waste technologies (e.g. energy-from-waste schemes from biomass/combined heat and power and thermal treatment) and construction measures as part of the design and layout of new development.
- 3.16 Opportunities also exist to utilise existing transport infrastructure such as canal/river wharfs (e.g. Sheffield and South Yorkshire Navigation Canal), pipelines and railheads to transfer waste as an alternative to road.

(3) Barnsley, Doncaster and Rotherham's overall strategy for achieving sustainable waste management

- 3.17 The Joint Waste Plan has seven policies. The justification for each policy is set out in the supporting text and a table is provided at the end of each policy setting out how it will be monitored and delivered. Each table includes a series of targets and indicators to assess and monitor the extent to which the policy is being achieved. The next section also describes the role of key partners (e.g. private operators, landowners, neighbouring councils and government bodies), phasing and delivery mechanisms to bring forward sites and associated infrastructure.
- 3.18 Policy WCST sets out the broad policy framework to reduce and better manage waste within Barnsley, Doncaster and Rotherham. It is based on the aims set out above and informs the more detailed policies set out in chapter 4.

POLICY WCSI: BARNSLEY, DONCASTER AND ROTHERHAM'S OVERALL STRATEGY FOR ACHIEVING SUSTAINABLE WASTE MANAGEMENT

Provision will be made to maintain, improve and expand the network of waste management facilities throughout Barnsley, Doncaster and Rotherham to achieve sustainable waste management across all waste streams.

- A. To facilitate proposals to address the identified municipal, commercial and industrial waste management capacity gap:
- 1) existing strategic waste management facilities are safeguarded to maximise their efficiency;
- 2) three sites are allocated for new strategic waste management facilities (and a fourth site is reserved); and
- 3) new or replacement smaller-scale facilities will be supported where these are required to serve local catchment areas and communities.
- B. No capacity gaps are identified for construction, demolition and excavation waste, hazardous waste or agricultural waste and therefore specific sites are not safeguarded or allocated. Proposals for new facilities processing these waste streams will be assessed on a case by case basis.
- C. Existing landfill sites are safeguarded, and proposals to maximise their life and efficiency will be supported. Proposals for additional capacity must demonstrate why it is required.
- D. The key principles set out below will guide the assessment of waste proposals.
- I) Large-scale waste management proposals will be directed towards the strategic site allocations where possible.
- 2) Innovative waste technologies will be allowed and promoted where these support the vision and aims of the Joint Waste Plan.
- 3) Proposals will be supported which enable Barnsley, Doncaster and Rotherham's waste to be managed locally, whilst allowing waste to be imported or exported where this represents the most sustainable option.
- 4) Priority will be given to waste proposals which maximise the reuse of vacant or underused brownfield land, particularly within established employment areas and which provide opportunities for co-location and priority areas for regeneration.
- 5) Waste proposals will be directed towards accessible locations with good transport links, particularly in and around urban areas.

¹³ Research confirms that recycling in the UK saves the equivalent of 10-15 million tonnes of carbon dioxide emissions a year, which is equivalent to taking 3.5 million cars off the road (Waste Resources Action Programme).

- 6) Waste proposals will be directed away from the most sensitive locations so as to avoid adverse harm to ground water aquifers (especially the Sherwood Sandstone and Magnesian Limestone aquifers), Thorne and Hatfield moors, historic assets and the functional floodplain.
- 7) Waste proposals will not be allowed (including on safeguarded or allocated sites under policies WCS2, WCS3 and WCS5) which may undermine the integrity of nature conservation sites of international importance (such as Thorne and Hatfield Moors Special Protection Area and Special Areas of Conservation).
- E. All development proposals (including non-waste uses such as housing) must:
- I) promote high quality design and layouts that minimise waste and reduce resources (e.g. recycled materials and secondary aggregates), especially during the construction process; and
- 2) ensure that they do not prevent or prejudice either the delivery or continued operation of waste facilities on safeguarded or allocated sites.

Justification

- 3.19 Policy WCS1 provides the broad policy framework to achieve the vision and aims of the Joint Waste Plan, and applies to both allocated and non-allocated sites. It also sets out in broad terms where new waste facilities will be located within Barnsley, Doncaster and Rotherham, and how they will be delivered.
- A well planned and integrated network of waste management facilities will be sought across the plan area to address future capacity needs (see tables in chapter 2) and contribute towards the predicted municipal, commercial and industrial waste recycling, composting, treatment and recovery capacity shortfall within Barnsley, Doncaster and Rotherham over the plan period. Meeting this shortfall will require a combination of different waste facilities and processes on both existing and new strategic sites (the glossary provides a brief summary of different waste facilities see appendix A). This includes safeguarding of existing sites where they have a strategic role within the waste management network (see policy WCS2) and the provision of three additional large-scale waste recycling, composting, treatment and recovery facilities (see policy WCS3).

FACT BOX: Strategic sites

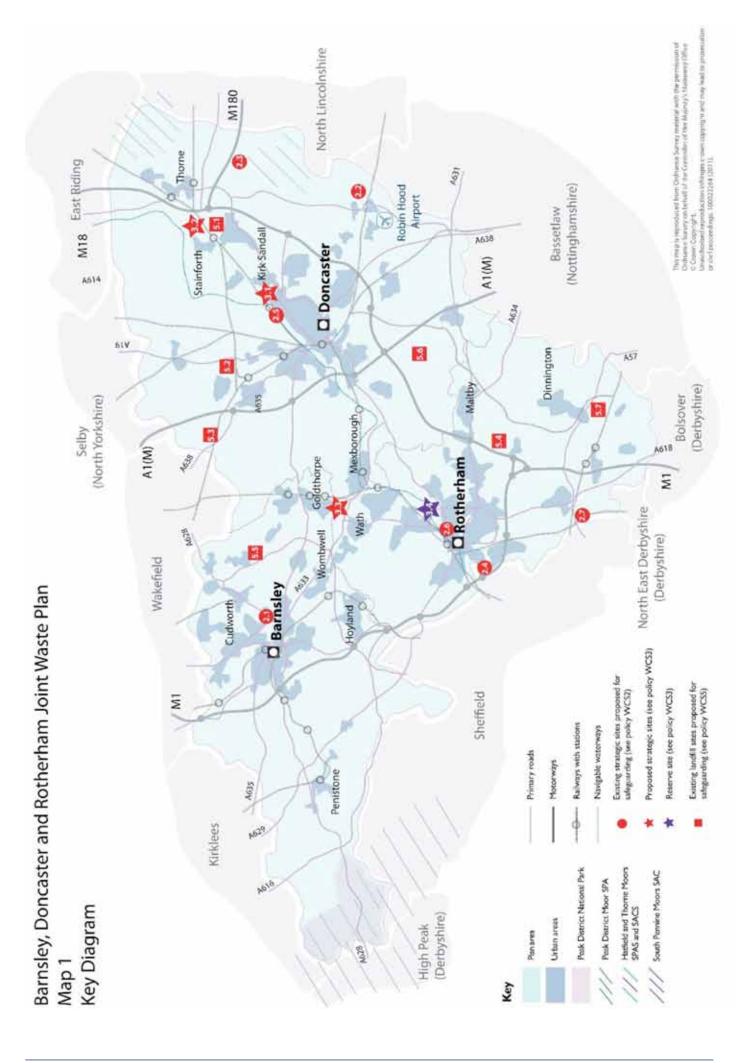
By way of definition, strategic sites are:

- typically around 2 to 5 hectares in size¹⁴;
- critical to delivering the actions and targets for recycling, recovering and diverting waste from landfill from our municipal waste management strategies;
- near to areas of population (e.g. main urban areas);
- · capable of serving a sub-regional or regional catchment area;
- able to accommodate a range of waste technologies and specialist facilities (i.e. co-location opportunities); and
- deemed to have the capacity to manage significant volumes of waste.
- 3.21 The Joint Waste Plan does not safeguard existing or allocate new small-scale facilities because their use and suitability may change over the plan period and because their overall capacity is limited to a predominately local catchment area (e.g. household waste recycling centres are located within close proximity to existing communities to allow easy access to recycling and disposal services). These facilities are designed to separate, bulk up, transfer and recycle waste before it is transported to the network of strategic waste facilities to facilitate the delivery of our recycling, recovery and landfill diversion targets. Future proposals for these types of facilities will be assessed on an individual basis (see policy WCS4).

- 3.22 Proposals dealing with other waste streams (e.g. agricultural waste or construction, demolition and excavation waste) will be assessed on an individual basis (see policy WCS4). Chapter 2 of this document confirms there is no significant waste management capacity gap across the plan area and there is no need to allocate new sites to deal with these waste streams. There is unlikely to be a shortfall of landfill capacity during the plan period, however the policy provides flexibility to deal with unforeseen circumstances (see policy WCS5).
- 3.23 The key diagram (map I) overleaf shows the location of strategic waste sites in relation to existing settlements (including the sub-regional centres of Barnsley, Doncaster and Rotherham), key transport routes (e.g. air, road, rail and inland waterways) and neighbouring council boundaries. It also illustrates the relationship between these sites and environmental assets (e.g. the open countryside and natural conservation sites of international importance) that could limit future waste opportunities in certain parts of the plan area.
- 3.24 In terms of location, new waste facilities will mainly be directed towards the urban areas and future growth and regeneration areas in the plan area, preferably on brownfield or vacant employment sites that are accessible by sustainable modes of transport and offer co-location potential¹⁵. Other locations such as quarries and existing waste or industrial sites could also be suitable depending on the type and size of the proposed facility and its proximity to existing waste arisings.
- 3.25 Waste facilities should avoid locations that are within close proximity to sensitive receptors, such as ground water aquifers, protected habitats, floodplains and housing. The Sherwood Sandstone and Magnesian Limestone aquifers (from which our drinking water is obtained) are nationally important groundwater aquifers. Care must be taken to ensure that waste facilities do not cause pollution or harm abstraction activities as these groundwater sources are relatively low.
- 3.26 While the Joint Waste Plan policies provide a positive framework to guide decisions relating to waste facilities, they do not provide overriding backing to proposals that are shown to have an adverse impact either individually or in-combination with other plans or projects on the integrity of a European site of nature conservation importance. Waste proposals that are located within 10 kilometres of the Thorne and Hatfield moors Special Protection Area and Special Areas of Conservation must demonstrate that they will have no significant adverse impact on the integrity of these sites arising from air emissions and water-related changes in line with the requirements of European legislation.
- 3.27 Policy WCS I also seeks to maximise opportunities to reduce, re-use, recycle and recover resources from waste. While large-scale developments (e.g. office parks and mixed-use housing) offer greater potential to reduce waste at source, small-scale developments (e.g. extensions, conversions and refurbishments) can also contribute to reducing waste and resource consumption in line with the principles of good design (see policy WCS7). In considering the location, layout and design of non-waste facilities in the vicinity of waste sites (both safeguarded sites and allocations), it is important that they do not prevent or prejudice the delivery of future operation of waste facilities.

¹⁴ Facilities processing around 250,000 tonnes of waste per year typically require between 2-5 hectares of land (Planning for Waste Management Facilities, Office of Deputy Prime Minister, 2004). Smaller facilities processing around 50,000 tonnes per year generally need I or 2 hectares. Larger sites offer significant opportunities for co-location i.e. resource recovery parks comprising more than one waste facility (e.g. a transfer station, materials recovery facility and composting plant).

¹⁵ The general core strategies set out in broad terms where new development will be located. This includes the pattern of future settlement growth. New waste facilities will support the delivery of these strategies.



(4) Flexibility and review

- 3.28 We will aim to review the Joint Waste Plan every five or six years (2015, 2021 and 2026) against the municipal, commercial and industrial waste management requirements set out in chapter 2. At the end of each period, we will evaluate the progress and effectiveness of the aims and policies of the Joint Waste Plan against these targets. However, a review may occur even sooner if there are signs of under-provision of waste processing capacity or over-provision of disposal options which would restrict the movement of waste up the waste hierarchy (see figure 2). Any future review will be timed to coincide with the review of existing recycling, composting, recovery and landfill diversion targets from our municipal waste management strategies and relevant waste legislation.
- 3.29 If future monitoring indicates that policies are failing to achieve these targets, action will be taken to correct this. This may involve:
 - extending the contracts of existing safeguarded sites to cover the life of the plan period;
 - producing supplementary planning documents (SPDs) to provide more detail of how policies should be implemented;
 - reviewing or amending the Joint Waste Plan (including the supporting evidence base such as waste tonnages and capacity) to make sure it reflects up-to-date policy guidance and any future changes to growth forecasts;
 - holding discussions with developers and landowners to identify barriers to delivery; and
 - reviewing site allocations to make sure there is an adequate supply of large-scale waste facilities across the three boroughs in the event that they do not come forward as anticipated.

How the policies of the Joint Waste Plan will be monitored and implemented

- 3.30 The table overleaf sets out the indicators and targets that will be used to monitor the progress of the Joint Waste Plan. These relate to the aims and policies set out in chapters 3 and 4. The monitoring framework also describes the role of key partners, phasing and delivery mechanisms to bring forward sites, associated infrastructure and other waste management proposals.
- 3.31 The delivery of the Joint Waste Plan depends on close partnership between ourselves, waste operators, landowners and government agencies.
- 3.32 As unitary authorities, we have a wide-ranging role in putting the plan into practice. Our functions include the following.
- 3.33 Each council has a duty to collect rubbish and recyclables from households (including some businesses) and manage and dispose of this waste. Each council also has a duty to determine planning applications for waste development and make decisions on where these facilities will be built. We will collectively use our planning powers to increase the quality of waste development and make sure that all new development fits with the strategy set out in this plan. In addition, we will buy or use our own land to support waste projects, where appropriate. This may involve selling sites to developers or other agencies. With support from government funding, we have set up a dedicated project team to deliver the private finance initiative (PFI) alongside the private sector and other agencies. We will also seek to find a coordinated way to deliver infrastructure (e.g. energy, water and waste facilities) at a community scale in consultation with transport and environmental bodies.
- 3.34 The private sector will fund and operate most of the proposals set out in this plan. Private operators and the three councils will be expected to consult and engage with local people and voluntary organisations to promote waste prevention, increase recycling rates and ensure that future waste facilities achieve maximum community benefit.

Table 8: Monitoring and implementation framework

Indicator	Target	Relevant aims	Relevant policy	Key agents	Delivery
I Proportion of municipal waste recycled, composted and treated within Barnsley, Doncaster and Rotherham 2 Proportion of household waste recycled and composted	50% (up to 2015) 90% (by 2016) Barnsley, Doncaster and Rotherham (50% by 2020) Barnsley (45% by	A - C	Policies WCSI - WCS4 and WCS7	disposal and planning authorities (BDR), waste operators, households, businesses, and regional stakeholders (e.g. neighbouring local authorities) Regular monitoring of waste movements through RTAB and Environment Agency audits	Development management process (enforcement control, monitoring and planning applications), municipal waste management
	2015/2016) Doncaster (60% by 2015/2016) Rotherham (45% by 2015/2016)				strategies, community strategies, developer investment and
3 Proportion of municipal, commercial and industrial waste diverted from landfill	Municipal waste: 90% (2016) Commercial and industrial waste: 80% (2015) 85% (2021) 90% (2026)				government funding
4 Net increase in municipal, commercial and industrial waste recycling, composting, treatment and recovery capacity (with planning permission, licences and built)	299,000 tonnes (2015) 479,000 tonnes (2021) 517,000 tonnes (2026)				
5 Proportion of construction, demolition and excavation waste diverted from landfill	At least 93%	A	Policies WCS1, WCS4 and WCS7	Waste collection, disposal and planning authorities, waste operators and site owners, construction	Development management process (enforcement control, monitoring
6 Amount of hazardous waste produced in Barnsley, Doncaster and Rotherham that is landfilled	No increase from 85,000 tonnes			industry and businesses	and planning applications), municipal waste management strategies, community strategies, developer investment and government funding

Indicator	Target	Relevant aims	Relevant policy	Key agents	Delivery
7 New strategic sites coming forward for municipal, commercial and industrial waste facilities in line with phasing 8 Proportion of new waste management facilities permitted on brownfield land	3.1: Sandall Stones Road (by 2015) 3.2: Hatfield Power Park (by 2021) 3.3: Bolton Road (by 2015) 100%	A to C and E	Policy WCS3 Policies WCS1 - WCS4 and WCS6	Waste collection, disposal and planning authorities, waste operators and site owners Site owners (including council and privately owned), waste operators and	Development management process (enforcement control, monitoring and planning applications), municipal waste management
 9 Proportion of new waste management facilities permitted on: safeguarded or allocated waste sites; other existing waste transfer, recycling, composting, treatment and recovery sites; existing or designated employment and industrial areas/sites; agricultural buildings; waste water treatment and sewage works; active mineral workings (including collieries); and landfill sites. 	100%	A, B, C, D and F	Policies WCSI - WCS4 and WCS6	waste collection, disposal and planning authorities (BDR)	strategies, community strategies, developer investment and government funding The joint PFI project has secured 77 million pounds of central government funding towards municipal waste facilities at Bolton Road (site 3.3)
II Remaining landfill capacity (per annum)	No new landfill sites other than for the purposes set out under policy WCS5 Thousand tonnes of remaining non inert landfill capacity (municipal, commercial and industrial waste): 4,951 (2015) 3,780 (2021) 3,023 (2026) Thousand tonnes of remaining inert landfill capacity (construction, demolition and excavation waste):	A - C	Policies WCSI - WCS5 and WCS7	Waste collection, disposal and planning authorities (BDR), waste operators, households, businesses, and regional stakeholders (e.g. neighbouring local authorities)	Development management process (enforcement control, monitoring and planning applications), municipal waste management strategies, community strategies, developer investment and government funding
	5,299 (2015) 4,178 (2021) 3,212 (2026)				

Indicator	Target	Relevant aims	Relevant policy	Key agents	Delivery
I2 Proportion of operational landfill sites with an approved reclamation scheme	100%	G and H	Policies WCS5 and WCS6	Local planning authorities (BDR) Environment Agency	Development management process (enforcement control, monitoring
13 Number of planning permissions granted contrary to advice from: • the Environment Agency on flooding or water quality grounds; • the Highways Agency; and • consultees on air quality and amenity	None	C, G and H	Policies WCS1 and WCS6	Local planning authorities (BDR), waste operators, local drainage boards and statutory bodies (e.g. Environment Agency, Health and Executive Agency, Highways Agency and South Yorkshire Passenger Transport Executive)	and reviewing planning applications) and environmental permitting regime Green travel plans, design and access statements, air quality surveys and transport
I4 Proportion of permitted facilities meeting BREEAM 'Very Good'	100%	E, G and H			assessments
15 Proportion of permitted facilities complying with conditions	100%	G and H			
I 6 Number or reported complaints about permitted waste management facilities	0	G and H			
17 Proportion of relevant planning applications accompanied by an appropriate waste management plan	100%	A - D	Policy WCS7	Landowners, developers, applicants, statutory agencies (e.g. Environment Agency)	Development management process (scrutiny of planning applications, planning conditions and legal agreements)

CHAPTER 4 DETAILED POLICIES

4.1 This chapter sets out the detailed policy framework for achieving sustainable waste management across the three boroughs.

POLICY WCS2: SAFEGUARDING AND ENHANCING EXISTING STRATEGIC WASTE MANAGEMENT SITES

A. The following sites (as shown on the key diagram: map I) have been safeguarded to help achieve our recycling, composting and recovery targets as well as the requirements of statutory bodies, and also ensure the delivery of our municipal waste management strategies.

Reference	Site name	Type of facility	Size (ha)
2.1	Grange Lane, Stairfoot (Barnsley)	Waste transfer station	3.4
2.2	Wroot Road Quarry, Finningley (Doncaster)	Composting	3
2.3	Brier Hills Farm, Thorne (Doncaster)	Green waste composting and recycling	3
2.4	Sterecycle, Templeborough (Rotherham)	Autoclave treatment and recycling	2.9
2.5	Long Sandall (Doncaster)	Dredging	1.7
2.6	Eastwood, Parkgate (Rotherham)	Dredging	4.8

B. The following site has been safeguarded to ensure the delivery of Sheffield's municipal waste management strategy.

Reference	Site name	Type of facility	Size (ha)
2.7	Rotherham Road, Beighton (Rotherham)	Materials recovery facility	N/A

- C. Where sites are expanded or redeveloped to improve their efficiency or accommodate new facilities, the opportunity must be taken to reduce or mitigate their impact and develop innovative solutions that move waste up the hierarchy in line with the vision and aims of the Joint Waste Plan and other policy requirements. These proposals will be assessed in the same way as they would on non-allocated sites.
- D. Non-waste management proposals will only be permitted on these sites where they can demonstrate that equivalent municipal, commercial and industrial waste capacity can be achieved elsewhere within the plan area.

Justification

- 4.2 The purpose of this policy is to protect and safeguard these sites for waste management purposes. Essentially, this is because:
 - safeguarded sites are central to achieving the overall strategy of the Joint Waste Plan (see policy WCSI) and the recycling, recovery and landfill diversion targets from our separate municipal waste management strategies;
 - the capacity of these sites will continue to make a significant contribution towards meeting overall waste needs and capacity targets across the plan area (see table 7);
 - safeguarding these sites provides flexibility in the event that waste facilities do not come forward on the other strategic sites (as identified under policy WCS3) as anticipated and/or capacity targets are revised in the light of new evidence;

- existing dredging sites need to be safeguarded to enable the effective operation and facilitate the use of the waterways (e.g. Sheffield and South Yorkshire Navigation Canal) as an alternative to road transport (sites 2.5 and 2.6); and
- some of Sheffield's municipal waste will continue to be exported to the materials recovery facility in Rotherham (site 2.7).
- 4.3 This policy seeks to safeguard existing waste capacity within the three boroughs over the plan period. In some cases, there may be scope to increase the capacity of existing licensed waste management facilities to improve their operational efficiency or accommodate new waste processes and technologies. For instance, the existing transfer station at Grange Lane (site 2.1) has capacity to accommodate new waste recycling and treatment facilities (excluding final treatment). New waste facilities on this site will need to safeguard those elements which contribute to the significance of the scheduled ancient monument at Monk Bretton Priory and other listed buildings in the area. Site location plans are attached at appendix B.
- 4.4 The site at Rotherham Road, Beighton (site 2.7) is located within close proximity to a high voltage overhead power line. Any proposal to extend or redevelop the existing waste recovery facility will need to consider the location and nature of this electricity transmission equipment.
- 4.5 Safeguarded waste management sites will be shown on each borough's proposals map. The proposals map is a separate document within each borough's Local Development Framework and will show waste management sites and other designations.

POLICY WCS3: NEW STRATEGIC WASTE MANAGEMENT SITES

A. The following strategic sites (as shown the key diagram: map 1) have been identified for large-scale municipal, commercial and industrial waste management facilities aimed at addressing our capacity needs over the period to 2026.

Reference	Site name	Size (ha)
3.1	Sandall Stones Road, Kirk Sandall (Doncaster)	2
3.2	Hatfield Power Park, Stainforth (Doncaster)	16
3.3	Bolton Road, Manvers (Rotherham)	4.8

B. The following site has been identified as a reserve site (as shown on the key diagram: map I) in order to provide flexibility in the event that not all of the above sites come forward within the plan period, having regard to the indicators and targets set out in the monitoring and implementation table. This site may be released for other uses once waste management facilities on the above sites have been implemented and are in operation, or when it can be demonstrated that municipal, commercial and industrial waste capacity requirements have been fully addressed before the end of the plan period.

Reference	Site name	Size (ha)
3.4	Aldwarke Steelworks, Parkgate (Rotherham)	5

- C. These sites have the potential to accommodate a range of technologies, including new and innovative technologies and divert a significant amount of waste from landfill. Development must be carried out in line with the mitigation requirements outlined in table 9 of the Joint Waste Plan along with other relevant policies in each borough's Local Development Framework.
- D. Facilities on these sites could also manage agricultural waste or construction, excavation and demolition waste provided they:
- I) do not prejudice or prevent the timely delivery of municipal, commercial and industrial waste facilities on these sites;
- 2) have sufficient spare capacity to accept non-municipal/commercial/industrial waste; and

- 3) contribute towards addressing overall waste capacity needs over the course of the plan period.
- E. Non-waste management proposals will only be permitted on these sites where they can demonstrate that additional municipal, commercial and industrial waste capacity is no longer required because it has been addressed elsewhere within the three boroughs until the end of the plan period.

Justification

- 4.6 Based on future growth forecasts, three additional large-scale waste management facilities are needed to address the municipal, commercial and industrial waste management capacity gap (see key diagram: map 1). The allocation of a reserve site provides flexibility in the event that large-scale facilities do not come forward on these sites within the anticipated timetables (see table 9).
- 4.7 The sites have been selected on the basis of their performance against a range of criteria, including:
 - deliverability (including landowner interest and physical or environmental constraints, such as flood risk);
 - accessibility (e.g. the capacity of the transport network to accommodate waste uses and the proximity of the site to the main urban areas and road, rail and waterway corridors);
 - social, economic and environmental effects of the site (see the accompanying sustainability appraisal); and
 - co-location potential (e.g. opportunities to integrate different types of waste processes and technologies).
- The key diagram (map I) confirms that the sites are well located in relation to the main transport routes (e.g. motorways, primary roads, navigable waterways and freight lines) and existing built-up-areas in line with the principles set out in policy WCSI of the Joint Waste Plan. As such, they are capable of serving the wider catchment area. These sites will be sufficient to deliver the required capacity over the plan period and support the continued regeneration of former mining communities, including the redevelopment of former colliery sites close to where waste arises¹⁶.
- 4.9 In certain circumstances, waste facilities on these sites could also accept agricultural waste as well as construction, demolition and excavation waste as a means to encourage co-location and reduce transport costs in line with aims E and H of the Joint Waste Plan. Proposals to manage other waste streams will be assessed against the criteria set out under policies WCS4 and WCS6.

Infrastructure requirements and timescales

4.10 The strategic sites are at various stages of preparation and development. Many of these sites have firm commitments in terms of investment decisions from both the public and private sector and benefits from planning permission. It is anticipated that large-scale municipal, commercial and industrial waste facilities will come forward on these sites in line with the requirements set out overleaf.

¹⁶ The general core strategies set out the broad locations for future development, including the pattern of future settlement growth. These waste facilities will support the delivery of these strategies.

Table 9: Infrastructure requirements and timescales

Site name	Potential processes	Potential capacity	Infrastructure requirements and mitigation	Anticpated timescale
Sandall Stones Road, Kirk Sandall (Doncaster)	Recycling and recovery	120,000 (tonnes per year)	Proposals must include mitigation measures to protect the Sherwood Sandstone aquifer, control noise, dust and emissions and minimise the risk of flooding (e.g. sustainable drainage system).	Ву 2015
Hatfield Power Park, Stainforth (Doncaster)	Recycling and recovery	400,000 (tonnes per year)	The site is dependant on the construction of a new link road to M18 motorway, new flood defences, appropriate lorry routing to avoid sensitive areas and mitigation measures to protect the Sherwood Sandstone aquifer and avoid and reduce air pollution. Planning applications for waste facilities that include energy recovery will need to demonstrate that any emissions from the site will not result in acid deposition (nitrogen and sulphur) at the Thorne Moor Special Area of Conservation.	2015-2021
Bolton Road, Manvers		265,000 (tonnes per year)	The site is dependant on the construction of a new bridge to secure access to the site, air quality and flood mitigation measures (e.g. new sustainable drainage system) and appropriate lorry routing to avoid sensitive areas. Proposals must contribute towards the regeneration of the wider area. The site may have long term potential for freight access via rail and barge.	Ву 2015
Aldwarke steelworks, Parkgate	Recycling, composting and recovery	250,000 (tonnes per year)	The site should provide rail and river access (via river wharf and railhead) to handle bulk waste. Proposals must include a new sustainable urban drainage/flood alleviation scheme and minimise any impact on the significance of historic assets (including consideration of the impact upon views from the historic park and garden at Wentworth Woodhouse) through appropriate design and landscaping.	2021-2026 (if required)
	Stones Road, Kirk Sandall (Doncaster) Hatfield Power Park, Stainforth (Doncaster) Bolton Road, Manvers Aldwarke steelworks,	Sandall Stones Road, Kirk Sandall (Doncaster) Hatfield Power Park, Stainforth (Doncaster) Bolton Road, Manvers Recycling and recovery Recycling and recovery	Sandall Stones Road, Kirk Sandall (Doncaster) Hatfield Power Park, Stainforth (Doncaster) Bolton Road, Manvers Recycling and recovery Recycling and recovery 400,000 (tonnes per year) 265,000 (tonnes per year) Aldwarke steelworks, Composting and 250,000 (tonnes per	Recycling and recovery Proposals must include mitigation measures to protect the Sherwood Sandstone aquifer, control noise, dust and emissions and minimise the risk of flooding (e.g. sustainable drainage system). Hatfield Power Park, Stainforth (Doncaster) Recycling and recovery Proposals must include mitigation measures to protect the Sherwood Sandstone aquifer, control noise, dust and emissions and minimise the risk of flooding (e.g. sustainable drainage system). The site is dependant on the construction of a new link road to M18 motorway, new flood defences, appropriate lorry routing to avoid sensitive areas and mitigation measures to protect the Sherwood Sandstone aquifer and avoid and reduce air pollution. Planning applications for waste facilities that include energy recovery will need to demonstrate that any emissions from the site will not result in acid deposition (nitrogen and sulphur) at the Thorne Moor Special Area of Conservation. The site has potential rail access. The site is dependant on the construction of a new bridge to secure access to the site, air quality and flood mitigation measures (e.g. new sustainable drainage system) and appropriate lorry routing to avoid sensitive areas. Proposals must contribute towards the regeneration of the wider area. The site may have long term potential for freight access via rail and barge. Aldwarke steelworks, Parkgate Recycling, composting and recovery The site should provide rail and river access (via river wharf and railhead) to handle bulk waste. Proposals must include a new sustainable urban drainage/flood alleviation scheme and minimise any impact on the significance of historic assets (including consideration of the impact

Potential capacity is based on the site area required to accomodate typical throughputs of different sized facilities (from generic site requirements in "Planning for Waste Management Facilities", Office of Deputy Prime Minister, 2004).

The table gives a broad indication of the likely phasing of these sites i.e. the period in which the waste facility is expected to become operational. However, these timescales are not intended to preclude waste development from coming forward earlier or later in the plan period.

- 4.11 The site at Sandall Stones Road (3.1) is centrally located within an established industrial area close to existing waste facilities and major transport routes on the gateway to Doncaster town centre.
- 4.12 Hatfield Power Park (site 3.2) forms an integral part of a major regeneration scheme called DN7 (Hatfield Triangle). The masterplan for the wider site also includes a new clean coal and natural gas power station, a business park, coal mining activities associated with Hatfield colliery and new transport infrastructure. These proposals will involve the use of different waste technologies and processes. The site is relatively flat and is well screened from surrounding uses via a 15-metre landscape bund and development platform.
- 4.13 The site at Bolton Road, Manvers, in Rotherham, has been identified as the location to develop a dedicated waste facility using proven treatment technologies to deal with our left over municipal waste as part of the joint private finance initiative, in line with our recycling, recovery and landfill diversion targets (site 3.3). Some of this waste will be recycled and composted at the site. The site lies within an established employment area in the heart of the plan area within the Dearne Valley regeneration area. Future proposals at the site will need to take into account the principles of the Dearne Valley eco-vision¹⁷. As part of the waste contract, municipal waste from Barnsley will be sorted and bulked up at the existing waste transfer station at Grange Lane (site 2.1) before it is transferred to the facility at Bolton Road.
- 4.14 The Aldwarke site (3.4) is located within the existing steelworks complex on the north side of the river Don.

¹⁷ The eco-vision for the Dearne Valley aims to reduce carbon dioxide emissions so that within a decade it will become the lowest carbon community of its type in the UK, bringing new jobs and leading technologies to tackle climate change. The programme will apply the principles of the government's eco-towns programme to existing communities in the Dearne Valley to provide a showcase for sustainable living across a range of issues, such as housing, transport, economic development and the environment over the next 20 to 30 years.

- 4.15 In addition, new waste facilities on these sites will:
 - help us achieve our recycling, composting and recovery targets over the plan period;
 - be located on derelict or reclaimed brownfield land within established employment areas close to existing waste facilities and public transport corridors, such as railway stations (e.g. sites 3.1 and 3.2) and bus lanes/routes;
 - divert a significant proportion of our waste from landfill;
 - offer the potential to provide freight access via railheads and canal/river wharfs in the longer term;
 - offer the potential to generate renewable energy, such as electricity (via the national grid); and
 - create jobs/investment and encourage regeneration, especially in run down areas.

Alternative uses

- 4.16 In respect of planning applications for alternative uses (e.g. offices, shops and housing), the applicant or developer will be required to demonstrate that the site is no longer required to address the municipal, commercial and industrial waste capacity gap in the period up to 2026. In doing this, particular regard will be given to (amongst other things):
 - new capacity brought forward on both allocated and unallocated sites (i.e. waste facilities have planning permission, relevant license(s) and are fully operational);
 - increased capacity and improved efficiency at existing waste management facilities (including but not limited to those identified under policy WCS2);
 - whether safeguarded sites (2.1 4) could contribute towards the remaining capacity gap during the plan period (i.e. available for waste development); and
 - whether strategic sites are likely to come forward for large-scale municipal, commercial and industrial waste facilities during the plan period.

POLICY WCS4: WASTE MANAGEMENT PROPOSALS ON NON ALLOCATED SITES

- A. Proposals for waste development on non-allocated sites will be permitted provided they demonstrate how they:
- 1) do not significantly adversely affect the character or amenity of the site or surrounding area;
- 2) contribute towards the aims of sustainable waste management in line with the waste hierarchy;
- 3) do not undermine the provision of waste development on strategic sites set out under policy WCS3;
- 4) prioritise the reuse of vacant or underused brownfield land, where possible; and
- 5) facilitate quicker and better quality reclamation, and do not prevent the timely reclamation of the site (where applicable).
- B. Subject to meeting these criteria, the types of location where waste proposals may be acceptable in principle include:
- 1) existing waste transfer recycling, composting, treatment and recovery sites;
- 2) designated employment and industrial areas/sites;
- 3) agricultural buildings;
- 4) waste water treatment and sewage works;
- 5) active mineral workings (including collieries); and
- 6) landfill sites.

Justification

- 4.17 Policy WCS4 provides a positive framework to facilitate the development of waste management facilities on sites that are not allocated in the Joint Waste Plan but which may come forward in the future.
- 4.18 The above policy lists the types of location where waste facilities could be accommodated. Employment areas, such as industrial estates, are well-suited to waste facilities because they usually have good links to the main transport network (including primary roads and alternative routes, such as rail and waterways) and existing built-up-areas¹⁸. Where waste processing activities take place within a sealed building and there is no external treatment or waste storage, they are similar in character to an industrial process. These proposals will be acceptable in principle within employment or industrial areas subject to meeting other policy requirements.
- 4.19 In addition, some waste facilities (e.g. temporary or small-scale recycling, energy recovery and invessel composting facilities) can be accommodated at existing landfill sites, operational quarries and sewage works provided they are tied to the life of existing operations or the future reclamation of the site. Opportunities may exist to treat agricultural waste on or close to the farm where it is generated, preferably where it re-uses existing holdings or redundant buildings.
- 4.20 Future waste proposals on non-allocated sites will be assessed against policies WCS4, 5, 6 and 7 of the Joint Waste Plan and other relevant policies within each borough's Local Development Framework, including general principles relating to layout, design, energy efficiency and sustainable construction as well as detailed requirements relating to green infrastructure, landscape, biodiversity and flood prevention.

¹⁸ Recycling and composting waste operations are generally compatible with B2 uses (general industrial) as defined under the Town and Country Use Classes Order (see glossary for definition). It means that waste recycling proposals within existing industrial units may not always require a specific planning permission (as there might not be a change of use).

POLICY WCS5: LANDFILL

A. The following landfill sites (as shown on the key diagram: map I) have been safeguarded as they have significant capacity remaining. Non-waste management proposals will only be permitted on these sites where they would not prejudice their ability to fulfil the function for which they have been identified in the table below.

Reference	Site name	Type of facility
5.1	Bootham Lane, Hatfield/Stainforth (Doncaster)	Non-inert
5.2	Croft Farm, Bentley/Askern (Doncaster)	Non-inert
5.3	Hazel Lane (Doncaster)	Non-inert
5.4	Thurcroft (Rotherham)	Non-inert
5.5	Carlton Brickworks (Barnsley)	Inert
5.6	Holme Hall Quarry (Doncaster)	Inert
5.7	Harrycroft Quarry (Rotherham)	Inert

- B. Proposals to extend the life and operational efficiency (but not capacity) of the above sites will be supported in principle.
- C. Proposals for additional landfill (including extensions to the above sites and any other new sites or extensions) will only be permitted where they can demonstrate that:
- 1) in the case of municipal, commercial and industrial waste, other means of disposal are not available;
- 2) in the case of construction, demolition and excavation waste, it represents the only viable method of reclaiming land and existing mineral workings that require reclamation;
- 3) in the case of operations that are incidental in nature, it is necessary to allow the development to proceed (e.g. formation of a golf course) and will be complementary to existing activities; and
- 4) details of future phasing and programme of after care will form part of the submission of a reclamation scheme.
- D. Schemes for the reclamation of mineral workings or landfill sites must demonstrate how they have considered:
- 1) the health and safety implications of low level reclamation/exposed faces;
- 2) the potential biodiversity and geodiversity benefits of low level reclamation/exposed faces against benefits delivered by reclamation (via landfill);
- 3) the effects of reclamation on the Magnesian Limestone and Sherwood Sandstone aquifers within Doncaster and Rotherham boroughs; and
- 4) the effects of reclamation in terms of potential bird strike risk (in relation to air travel).

Justification

- 4.21 Barnsley, Doncaster and Rotherham are likely to have sufficient landfill capacity to dispose of municipal, commercial and industrial waste over the plan period.
- 4.22 This policy safeguards sites which have significant disposal capacity remaining and provides some flexibility for additional capacity should it be required during the plan period. It also seeks to actively manage landfill provision in a balanced way to ensure it does not drive down prices or preclude the development of alternative waste technologies in the sub-region.

- 4.23 A review of this policy will take place if changes occur to existing landfill sites (e.g. increased fill rates or closures) and the regular reviews of capacity requirement and levels of provision show that additional landfill will be required before the end of the plan period. In demonstrating a need for additional landfill, applicant and developers will be required to assess the viability of extending the capacity and life of the existing landfill site subject to the requirements set out above and other policies in the Joint Waste Plan. No physical extension will be permitted unless it is evident that existing landfill capacity will run out before the end of the plan period and there are no other alternative residual waste treatment options available. However, new landfill sites will only be permitted if there is a shortfall. Safeguarding existing landfill sites also provides flexibility in the event of delays in the delivery of new waste management facilities.
- 4.24 The key diagram (map I) shows the location and distribution of existing inert and non-inert landfill sites across the three boroughs that are safeguarded under policy WCS5. These sites will also be shown on each borough's proposals map. In some cases, landfill can provide opportunities to restore and recreate new landscapes and habitats at former quarries and spoil heaps, such as golf courses and country parks. However, inert construction, demolition and excavation waste cannot be landfilled unless it is the only viable means of restoring mineral workings and/or is incidental to engineering operations which are necessary to allow the development to go ahead. In considering such proposals, particular regard will be given to the duration of the operation and the business case for the wider development. In these circumstances, waste facilities or landfill restoration schemes should be complementary to existing activities.
- 4.25 Proposals relating to closed or remediated landfill sites will be assessed against relevant policies within our general core strategies.

POLICY WCS6: GENERAL CONSIDERATIONS FOR ALL WASTE MANAGEMENT PROPOSALS

- A. Proposals for waste development will only be permitted within Barnsley, Doncaster and Rotherham provided they can demonstrate how they:
- I) support the vision, aims and overall strategy of the Joint Waste Plan and, where relevant, the delivery of our municipal waste management strategies;
- 2) provide access (which is appropriate to the scale and nature of the development) to and from the main transport network including, where possible, rail and canal/river links that offer the potential to transport waste;
- 3) ensure there is adequate highway capacity to accommodate any additional vehicles generated;
- 4) ensure there is adequate space on site for vehicles to enter, wait, unload and leave safely;
- 5) propose technology which is suitable for the location and nature of the site;
- 6) provide high quality design and architecture, sympathetic to its context and surroundings using sustainable construction, water and energy saving measures to maximise efficiency and recover energy, where practicable;
- 7) provide effective on-site waste management measures to ensure safety and security;
- 8) mitigate any constraints that may reduce the potential to redevelop the site and adjoining areas in the future;
- 9) provide adequate means of controlling noise, vibration, glare, dust, litter, odour and vermin and other emissions (e.g. greenhouse gases and leachate) so as to avoid adverse effects on the amenity of the immediate and surrounding environment and human health, both during and after operations;
- 10) will not result in loss or damage to the diversity of wildlife and habitats at the site or adjoining land, including linear or other features that facilitate the dispersal of species;
- (11) will not have an adverse impact upon the quality of ground and surface water or drainage, especially ground water aquifers and flood risk areas;

- 12) will not have an adverse impact upon the integrity of conservation sites of national and international importance, particularly Thorne and Hatfield moors;
- 13) will not have an adverse impact upon the significance of heritage assets and features;
- 14) maintain, safeguard and enhance green infrastructure corridors and assets, particularly within areas of sensitivity such as the greenbelt, air quality management areas, country parks, river and wildlife corridors;
- 15) will not reduce the safety of air travel (i.e. will provide effective management of bird-strike risk);
- 16) will not increase the risk of flooding elsewhere in the catchment area and will, where possible, improve the existing flood risk situation; and
- 17) will maximise any training and educational opportunities arising from the development.
- B. Proposals must include sufficient information with the planning application to demonstrate how they comply with the above criteria. This will include:
- 1) the type of process;
- 2) the amount and type of waste to be handled or treated at the site (together with any residues) and how they will be addressed (including estimated annual throughput);
- 3) details of proposed hours of working, expected number of existing and proposed employees and the anticipated number and type of vehicle movements per day both in and out of the site;
- 4) the estimated life of the operation;
- 5) the origins of the waste and where it is going;
- 6) the location of storage facilities within the site; and
- 7) access and travel arrangements for both employees and customers, including alternative modes of travel to the private car, such as public transport, cycling and walking.

Justification

- 4.26 Policy WCS6 sets out the criteria against which all waste development proposals (on both allocated and unallocated sites) will be assessed. In all cases, the onus will be on the applicant or developer to demonstrate that the site is in a suitable and sustainable location to deal with waste close to its source. Individual proposals will also be assessed against other policies in each borough's Local Development Framework.
- 4.27 The types of waste technology that will be suitable will depend on the nature and scale of the proposed scheme and the characteristics of the site and its surroundings. The locations with the greatest potential for recycling and treatment are concentrated on existing industrial estates and employment areas within or adjoining the main urban areas of the three boroughs (including sub-regional centres and principal towns). In addition, other suitable locations may include vacant brownfield land and sites adjacent to an existing waste management use (e.g. a waste transfer station). New recovery technologies (e.g. energy from waste) will particularly suit locations that have access to gas, electricity and freight networks. However, small-scale anaerobic digestion and major windrow composting plants are more suited to rural or semi-rural settings (e.g. existing farms) and are normally not compatible with hi-tech office or business parks. Landfill sites, quarries, collieries and sewage works will be potentially suitable locations to build leachate treatment, landfill gas plants and composting schemes (especially if linked to reclamation). Construction, excavation and demolition waste could potentially be re-used or recycled at existing mineral and landfill sites as part of a reclamation scheme. Small-scale facilities in enclosed buildings will be suitable in most locations.

- 4.28 Waste technologies and practices will continue to evolve over the life of the plan in response to the need to reduce emissions and avoid landfill. If alternative technologies come forward on existing sites or facilities they may require planning permission.
- 4.29 In the case of energy-from-waste proposals, the opportunity should be taken to supply renewable energy (e.g. heat or electricity) to existing or new networks, such as district heating or combined heat and power schemes. This will contribute towards reducing our carbon footprint and addressing our energy needs over the long term.

Minimising the effects of waste development

- 4.30 Applicants and developers are strongly encouraged to consult with both the relevant planning authority and the local community at an early stage on their proposals in line with good practice. Where necessary, we will use legal agreements or planning conditions to ensure measures are put in place to mitigate or manage any effects associated with traffic, noise, vibrations, odour, litter, air quality, dust, glare, visual impact, flooding, and any other potential effects. Applicants and developers will be expected to provide sufficient information with the planning application to enable the relevant planning authority to assess their proposals against the above criteria.
- 4.31 Some waste proposals will be subject to an Environmental Impact Assessment (EIA) as part of the planning application process. The level of detail and scope of the EIA will depend on the size and scale of the proposed development. The EIA will need to demonstrate that the proposed waste facility will not have an adverse impact on the environment.
- 4.32 Before making a planning application, applicants and developers must consider the need to undertake an 'appropriate assessment' to demonstrate that their proposals will have no adverse impact on the integrity of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs). For example, emissions from waste development must not contribute to excessive acid deposition (nitrogen and sulphur) at the Thorne Moor SAC.
- 4.33 New waste facilities should be compatible with neighbouring uses/activities and should not reduce the attractiveness of employment sites to potential investors. In addition, such proposals should set out how many employment opportunities they will create and how they will promote access to these (e.g. through travel plans and education/training schemes).

Pollution control

4.34 Planning and pollution control regimes are separate yet complementary. Control of waste processes is a matter for the Environment Agency (the waste regulatory authority). Pollution control - otherwise known as 'environmental permitting' - is concerned with preventing pollution through the use of measures to prohibit or limit the release of substances into the environment to the lowest practicable level. This ensures that ambient air and water quality meet standards that guard against impacts on the environment and human health.

High quality design

- 4.35 Applicants and developers should consider design and layout issues from the outset of the project through to detailed planning application stage. Where waste facilities are well designed and carefully sited they can operate without causing undue disturbance to living conditions or long-term damage to the character of the built and natural environment. All waste processes and storage should be well screened within enclosed, purpose-built buildings so as to prevent or minimise the risk of odour, fumes, dust, noise and the visual impact on the surrounding landscape. Appropriate buffer areas such as car parking, landscape, tree planting and open space should be provided between waste facilities and neighbouring areas.
- 4.36 New waste facilities will be expected to have regard to the latest BREEAM (BRE Environmental Assessment Method) standards on sustainable design and all new development will be expected to incorporate measures that minimise energy, waste, water consumption and carbon emissions in line with the principles of good design (see table 10 overleaf).

Access and safety

- 4.37 New waste facilities will require access which is appropriate to the scale and nature of the development to transport waste, and should be well connected to sustainable transport links, such as cycle, footpath and bus routes to facilitate employee access by non-car modes. The key diagram (map I) shows the location of the main transport links across the three boroughs. Where possible lorries should transport waste along the main road network so as to avoid sensitive locations (e.g. residential areas and narrow roads) in the interests of protecting local amenity, highway safety and the efficiency of the wider network.
- 4.38 Early in the development process, applicants and developers should explore opportunities to transport waste from the site via rail, canal and pipeline (including shared facilities at existing railheads, depots and wharves) as a means to reduce congestion and lorry movements on the road network. In cases where waste uses would create or add highway safety problems due to inadequate capacity or access, particularly within less accessible locations, applicants and developers will be required to implement measures or provide a contribution to ensure that necessary improvements go ahead. In addition, planning conditions and other measures may be used to protect the amenity of the surroundings or to ensure the surrounding highway has sufficient capacity. This may involve restricting the routes that vehicles can take, their size and weighting and the hours that they can enter and exit the site, especially during peak morning and evening periods. It is also important to ensure clear separation between pedestrians and vehicles within the site.

Flood risk

- 4.39 Where waste facilities are proposed within areas of flood risk, planning applications must provide 19:
 - the sequential test (to provide evidence that all other reasonable alternative sites have been considered);
 - a detailed site specific flood risk assessment (to ensure development will be safe and not cause flooding elsewhere)²⁰; and
 - the exception test (to provide further justification for development in flood risk areas) where appropriate.
- 4.40 The new waste sites (see policy WCS3) have been subject to and passed the sequential test. Proposals on these sites must still apply a sequential approach to site layout and design whereby more vulnerable uses are located within the parts of the site at lowest probability of flooding. However, proposals involving alternative uses on these sites and other waste proposals within medium to high risk flood areas will normally require a sequential test in line with government guidance. No waste proposals (apart from waste water and sewage treatment works) will be permitted on the functional floodplain as shown on each borough's proposals map.

Other detailed policy considerations

4.41 The criteria listed under policy WCS6 is not exhaustive and other factors will be taken into account in the decision making process, as set out in table 10. New waste proposals will also be considered against relevant policies from other Local Development Framework documents, such as the general Core Strategy. These policies will apply to all developments, including waste facilities.

¹⁹ New developments are classified in terms of their vulnerability to flood risk (see government guidance). Waste facilities are classified as 'less vulnerable' to flood risk, while landfill and hazardous waste sites are defined as 'more vulnerable'. This means that waste recycling, composting, treatment and recovery facilities that are located on sites within high risk areas will not require an exception test.

²⁰ Flood risk assessments apply to sites over one hectare in size or sites located within medium or high risk flood areas.

Table 10: Other detailed policy considerations

Area	Issues	Relevant policy and legislation	Local policy and evidence
High quality design and	High quality and inclusive design	Sustainable development	General core strategies
sustainable	Renewable energy	Renewable energy	
construction	Sustainable drainage systems	Development and flood risk	Catchment flood management plans: rivers Don and Trent (Environment Agency) and strategic flood risk assessments
Local amenity	Transport, noise, fumes, vibration, glare, dust, litter, odour, vermin and visual impacts	Waste management Planning and pollution control Environmental permitting regime	Supplementary planning documents
Health and	Impact on local	Waste management	General core strategies
safety	communities	Planning and pollution control	Health impact assessments
		Environmental permitting regime	
		Health and Safety Executive: safe transport in waste management facilities	
Wider environment	Protecting land, air, ground and surface water	Waste management and pollution control	Air quality management plans Surface water management plans
	Ground stability	Development on unstable land	General core strategies
	Remediating contaminated land	Planning and pollution control	Contaminated land strategies
	Potential water consumption	Development and flood risk	Catchment abstraction management plans (Environment Agency)
	Safeguarding mineral resources	Minerals policy statements	General core strategies
	Safeguarding valuable farmland	Development in rural areas	
	Impact upon landscape character	Renewable energy Delivering sustainable development in rural areas	Landscape character assessments and green infrastructure strategies
	Impact upon heritage assets	Historic environment	General core strategies
	Greenbelt	Greenbelts	General core strategies
Physical infrastructure	Impact upon transport network (including rail and canal)	Transport	Local transport plans
	Drainage and flooding issues	Development and flood risk	Catchment flood management plans and strategic flood risk assessments
Social infrastructure	Impact on schools and other community facilities	Waste management and pollution control	General core strategies

POLICY WCS7: MANAGING WASTE IN ALL DEVELOPMENTS

- A. All development proposals (excluding minor planning applications) must submit a waste management plan as part of the planning application. In particular, such plans will need to include:
- 1) information on the amount and type of waste that will be generated from the site
- 2) measures to reduce, re-use and recycle waste within the development, including the provision of on-site separation and treatment facilities (using fixed or mobile plants where appropriate);
- 3) an assessment of the potential to re-use or adapt existing buildings on the site (if demolished it must explain why it is not possible to retain them);
- 4) design and layouts that allow effective sorting and storing of recyclables and recycling and composting of waste and facilitate waste collection operations during the lifetime of the development;
- 5) measures to minimise the use of raw materials and minimise pollution of any waste;
- 6) details on how residual waste will be disposed in an environmentally responsible manner and transported during the construction process and beyond;
- 7) construction and design measures that minimise the use of raw materials and encourage the re-use of recycled or secondary resources (particularly building materials) and also ensure maximum waste recovery once the development is completed; and
- 8) details on how the development will be monitored following its completion.
- B. Where waste management plans include on-site recycling, recovery and re-processing provision they must demonstrate how these activities will comply with the requirements set out under policy WCS6.
- C. Proposals for non-waste development must not prevent or prejudice the delivery and operation of waste management facilities within the vicinity of the safeguarded and allocated sites set out under policies WCS2, WCS3 and WCS5.

Justification

- 4.42 Parts A and B of this policy apply to all development proposals (including waste management facilities) apart from minor planning applications (such as changes of use, small-scale alterations and extensions to buildings, advertisements and telecommunications).
- 4.43 By law, developers and waste operators must produce a site waste management plan before work starts setting out details on the amount and type of waste that will be produced on site, and how it will be re-used, recycled or otherwise disposed. The site waste management plan must be updated during the construction project when waste is removed from the site. Some of the information required under this policy will therefore be relevant in the preparation of the site waste management plan. The policy also covers the broader elements of resource efficiency and pollution prevention, such as waste collection and the effective sorting of waste material.
- 4.44 Appropriate private or communal waste storage areas and recycling facilities should be well screened and integrated into the design and layout of new development. The location of these facilities should be accessible to residents as well as waste collection vehicles from the kerbside, and these proposals must be shown on site plans.

- 4.45 Waste minimisation sits at the top of the waste hierarchy (see figure 2) and represents the most sustainable method of waste management. Development proposals will be expected to include measures to minimise the amount of waste used during the construction and lifetime of the project and re-use and recycle waste materials on site, wherever possible. For large-scale development proposals, waste minimisation issues should also be addressed through the Environmental Impact Assessment (EIA).
- 4.46 In addition, proposals that require the disposal of harardous waste from the clear up of contaminated sites (e.g. former petrol stations) should prioritise on-site treatment (bioremediation orencapsulation) of such waste.

CHAPTER 5 APPENDICES

Appendix A: Glossary

Appendix B: Location plans of the safeguarded strategic sites (policy WCS2)

Appendix C: Location plans of the new strategic sites (policy WCS3)

Appendix D: Unitary Development Plan policies to be replaced

APPENDIX A: GLOSSARY

Term	Abbreviation	Description
Anaerobic digestion		Anaerobic digestion is a series of processes in which microorganisms break down biodegradable waste material in the absence of oxygen. The process takes place within a digester - a warm, sealed, airless container. The process produces biogas, which can be used to generate heat and electricity, a fibre which can be used as a soil nutrient, and a liquid fertiliser.
Amenity		A positive element or elements that contribute to the overall character or enjoyment of an area or place.
Biodegradable waste		Waste that is capable of breaking down naturally, such as food and garden waste.
Biodiversity		The variety of plants and animals and other living things
Biofuel		Fuel produced directly or indirectly from biomass such as wood, charcoal, biodiesel and biogas (methane).
Biomass		Biological material derived from organisms, such as wood, waste and alcohol fuels. It is commonly plant matter grown to generate electricity or produce heat as a renewable energy source.
BRE Environment Assessment Method	BREEAM	A tool designed to assess the environmental performance of new buildings
Bring sites		Recycling schemes where the public deliver their waste recyclables to a central collection point, such as those in supermarket car parks for bottles and cans.
Brownfield land		Land that is or was occupied by a permanent structure (excluding agricultural or forestry buildings) and associated fixed-surface infrastructure (otherwise known as previously developed land)
Community strategy		An overarching long term strategy designed to improve the quality of life and aspirations of an area. It sets out the overall vision and aims and priorities of the council and local partners (also known as the 'sustainable community strategy')
Combined heat and power	CHP	The process whereby fuels (both fossil and renewable) are used to produce electricity or mechanical power and thermal (heating and cooling).
Composting		The process whereby organic waste decomposes to form a compost or soil like mixture. As well as producing a useful material, it removes a significant and potentially polluting element of the waste stream and reduces demand for peat and other soil improvement products for horticulture and land reclamation.
Core strategy		A development plan document setting out the vision and objectives of the planning framework to guide development and the use of land within an area. It is one of the key elements of the LDF. Core strategies can cover specific topics, such as waste and minerals.
Design and access statements		Reports that accompany and support planning applications covering both the design principles and concepts applied to the proposed development. The level of detail will depend of the scale and complexity of the application.
Development management	DM	The process whereby the local planning authority receives and considers the merits of a planning application and whether it should be given permission having regard to the development plan and all other material considerations.

Term	Abbreviation	Description
Development Plan Document	DPD	A document within the LDF which is used to make decisions on development proposals. DPDs are the equivalent of the adopted Unitary Development Plan (UDP) and are subject to public examination. DPDs must include a core strategy, site-specific allocations of land and a proposals map illustrating the spatial extent of policies within the LDF. Other types of DPD can include area action plans covering specific areas and detailed policies to assess planning applications.
Dredging		Waste material that is created to maintain waterways, such as rivers and canals. It is usually disposed via lagoons where excess water drains
Employment land		Land allocated for industrial and business use.
Energy from waste		The process of creating and recovering energy in the form of heat and power (e.g. electricity) from the burning of waste or through collecting gases, such as methane.
Environment Agency	EA	A public body charged with protecting and improving the environment in England and Wales
Environmental Impact Assessment	EIA	By law, some planning applications for large-scale development must include a detailed document which looks at the effects the proposal will have on wildlife, water quality, air quality and living conditions.
Examination in public	EIP	The process by which a government appointed and independent planning inspector assesses the soundness of the DPD (including any representations) and makes changes in a binding report following the examination
Fly-tipping		The unlawful dumping of waste on land
Functional floodplain		An area of land where water has to flow or be stored in times of flood.
Gasification		Unlike combustion, gasification involves a chemical reaction which takes place at high temperature. Carbon is converted to syngas, leaving a solid residue. This takes place in the presence of air or air enriched with oxygen. Energy can then be generated from gasification to produce electricity or steam.
General core strategy		Each council has prepared a general core strategy to provide the planning framework to guide all types of development (with the exception of waste) within their area.
Geodiversity		The variety of rocks, minerals and landforms and the processes that have formed these features over time.
Greenhouse gases		Gases which contribute to climate change. Naturally occurring examples include water vapour, carbon dioxide, methane, nitrous oxide and ozone. Some human activities increase greenhouse gases, including fossil fuel combustion within motor vehicles and some power stations.
Green jobs		A job in an organisation that creates products and services that directly improve the quality of the environment i.e. reduce energy/ waste materials and protect water resources and ecosystems. Jobs are mainly found in waste management and energy conservation sectors.
Green infrastructure		A strategically planned network of integrated, multi-purpose and interconnected green spaces, linkages and other environmental features.
Household waste		The proportion of municipal waste which is collected from domestic properties.

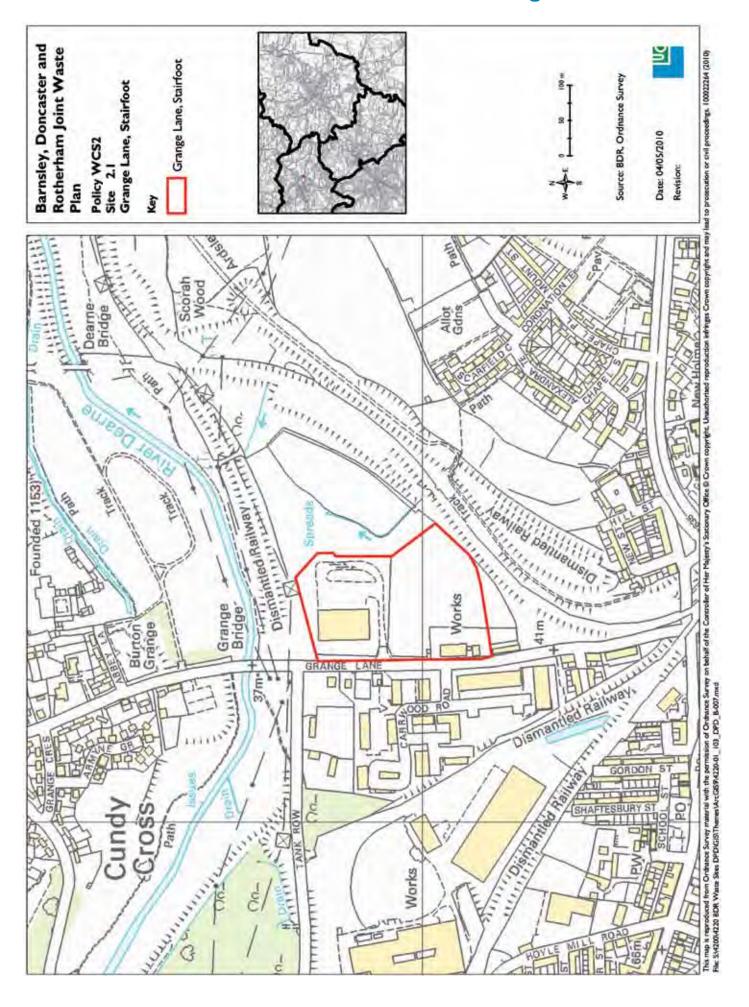
Term	Abbreviation	Description		
Incineration		Waste is burned at a very high temperature, and the heat released from this process is recovered and used to generate electricity and/or provide steam or hot water. An incinerator is a furnace for burning waste. Modern incinerators include equipment to reduce pollution, such as flue gas cleaning. Incinerators reduce the volume of the original waste by 95-96%, which greatly reduces the amount of waste going to landfill.		
Inert waste		Waste which is neither chemically or biologically reactive and will not decompose. Examples include sand, drywalls and concrete.		
In-vessel composting		In-vessel composting is a means to dispose animal by-products arising from food processing and manufacturing plants, distribution premises, wholesale and retail outlets, food markets and catering facilities. There are strict regulations for their disposal. In-vessel composting is a proven treatment process, and a wide choice of compost technologies exist.		
Landfill site		Sites where local authorities and industry can take waste to be buried and compacted with other wastes. The Environment Agency licenses and regulates landfill sites to ensure their impact upon the environment is minimised.		
Leachate		Liquids that drain or percolate through a landfill site.		
Local Development Framework	LDF	A series of documents which provide the framework to shape the future of each area and guide and control development and the use of land		
Materials recycling facility	MRF	A facility for sorting, separating and packing or baling recyclable materials into individual materials prior to reprocessors, who wash and prepare the materials for manufacturing into new recycled products. MRFs can also be referred to as materials recovery or reclamation facilities.		
Mechanical biological treatment	MBT	A process which treats left over waste after recycling has taken place. Reusable and contaminated materials are separated from the waste stream via a mechanical process. The reminder is treated to create fuel products.		
Mechanical heat treatment		Waste is treated using heat and/or steam which may or may not be applied under pressure. The treated waste is then removed for mechanical and/or manual separation. The process makes the waste dry and odourless, and it can be further processed as a fuel or sent to landfill. The process is similar to mechanical biological treatment, and is sometimes called autoclaving.		
Municipal waste		Largely consists of waste collected from households (including bulky waste) and some businesses, and also includes waste from recycling centres as well as from street cleaning, litter bins and publicly owned parks and gardens.		
Municipal waste management strategy		Councils have a legal duty to prepare these strategies to explain how municipal waste will be managed within their area.		
Private Finance Initiative	PFI	A method in which public and private sectors work in partnership to develop or operate new or improved waste management facilities.		
Planning condition		A condition attached to a planning permission setting out requirements under which the development can take place (e.g. the use of specific methods of construction or hours of operation).		
Planning Policy Statement 10	PPS10	This sets out the government's national planning policies on waste management.		
Planning Policy Statements	PPS	National statements of government policy relating to planning		

Term	Abbreviation	Description
Proposals map		An ordnance survey map illustrating the policies and proposals within the LDF covering specific sites, land uses and areas.
Pyrolysis		A process where waste is heated and broken down in the absence of oxygen. The process can be used to create fuel and renewable energy sources.
Resource recovery parks		A group of businesses working together to recover, reuse and recycle waste in one location.
Safeguarded site		An existing waste management or disposal site that will be protected from development or activity, either on the site itself or in the vicinity of the site, which may prejudice its ability to fulfil the function for which it has been identified
Segregation		A process through which waste is separated into different categories to reduce the costs of waste disposal and encourage recycling and reuse. Local businesses may be able to use the waste as a raw material.
Site waste management plans		These set out how waste resources will be managed during all stages of the development. It is a legal requirement in England for all construction projects over £300,000.
		The level of detail that site waste management plans must contain will depend on the size and cost of the construction project.
Strategic Environmental Assessment	SEA	Part of the sustainability appraisal specifically assessing the effects of the plan on the environment as required under the EU Directive 2001/42/EC
Supplementary Planning Document	SPD	A non-statutory document which forms part of the Local Development Framework and provides further detail and guidance on the policies and proposals contained in a development plan document. SPDs have no legal status and are not subject to public examination.
Sustainability appraisal	SA	A legal assessment of the economic, environmental and social effects of a plan from the outset of the preparation process to make sure decisions are made in line with the principles of sustainable development.
Sustainable waste management		The concept, enshrined in legislation, essentially means using resources as efficiently as possible to cut down on waste and green house gas emissions. In practice, it means developing high quality and environmentally efficient collection, recycling and treatment services close to where waste is generated.
Unitary authority		An administrative unit of Great Britain. Unitary authorities are responsible for all local government services.
Use classes order		Specifies groups of uses within which a change of use does not constitute development and is therefore do not require a specific planning permission.
Waste collection authority		A section of the council that collects household waste. Councils also have a duty to collect commercial waste if requested to do so and may also collect industrial waste. The waste collection authority may differ from the waste disposal authority.
Waste disposal authority		A section of the council that manages and disposes the waste it collects from homes and businesses

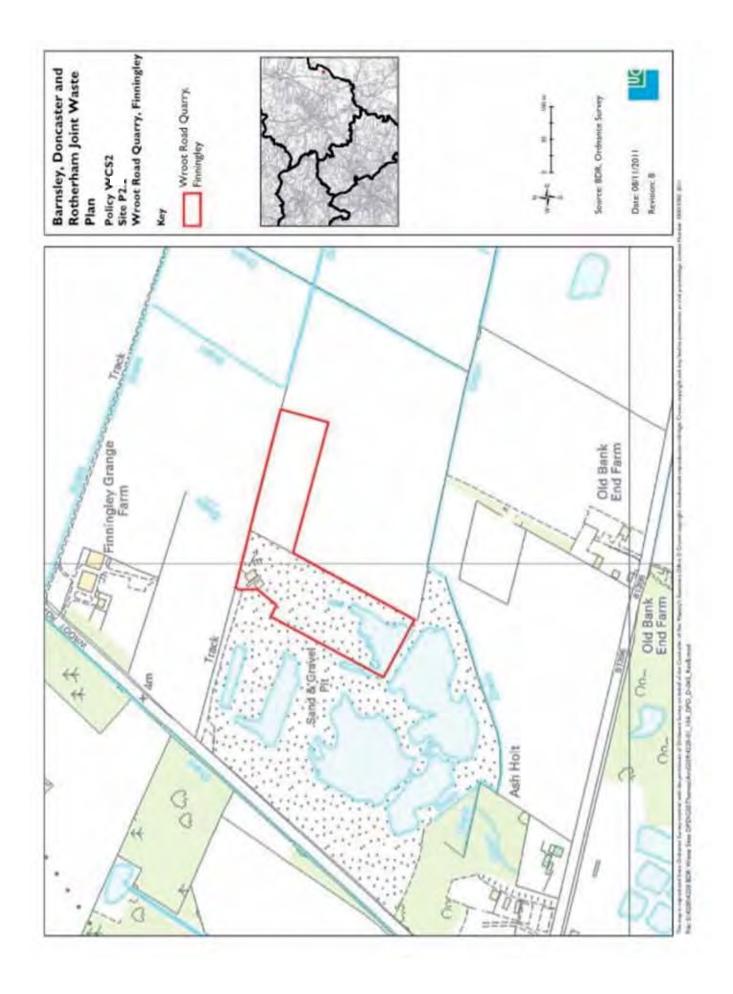
Term	Abbreviation	Description
Waste hierarchy		The waste hierarchy provides a framework within which waste management decisions can be made in line with government objectives. The most effective environmental option is to prevent or reduce waste in the first place. Where this is not possible, products and materials should be re-used either for the same or different purpose. Failing that, value should be recovered from waste through recycling, recovery and composting. However, landfill sites should only accept waste as a last resort where there are no alternative options available.
Waste minimisation		Minimising waste sits at the top of the waste hierarchy and involves prevention, reuse and recycling - it is essentially about reducing the environmental impact of waste. Benefits include: • cost savings (i.e. fewer transport movements); • greater resource efficiency (i.e. less packaging and waste disposal etc); • enhanced product quality and design; • increased business profile and investment opportunities; and; • community engagement and educational attainment.
Waste transfer station		A site to which waste is delivered for sorting or baling prior to transfer to another place for recycling, treatment or disposal.
Windrow composting		The aerobic (i.e. involving oxygen) decomposition of shredded and mixed organic waste using open linear heaps known as 'windrows', which are approximately three metres high and four to six metres across.

APPENDIX B: LOCATION PLANS OF THE SAFEGUARDED STRATEGIC SITES (POLICY WCS2)

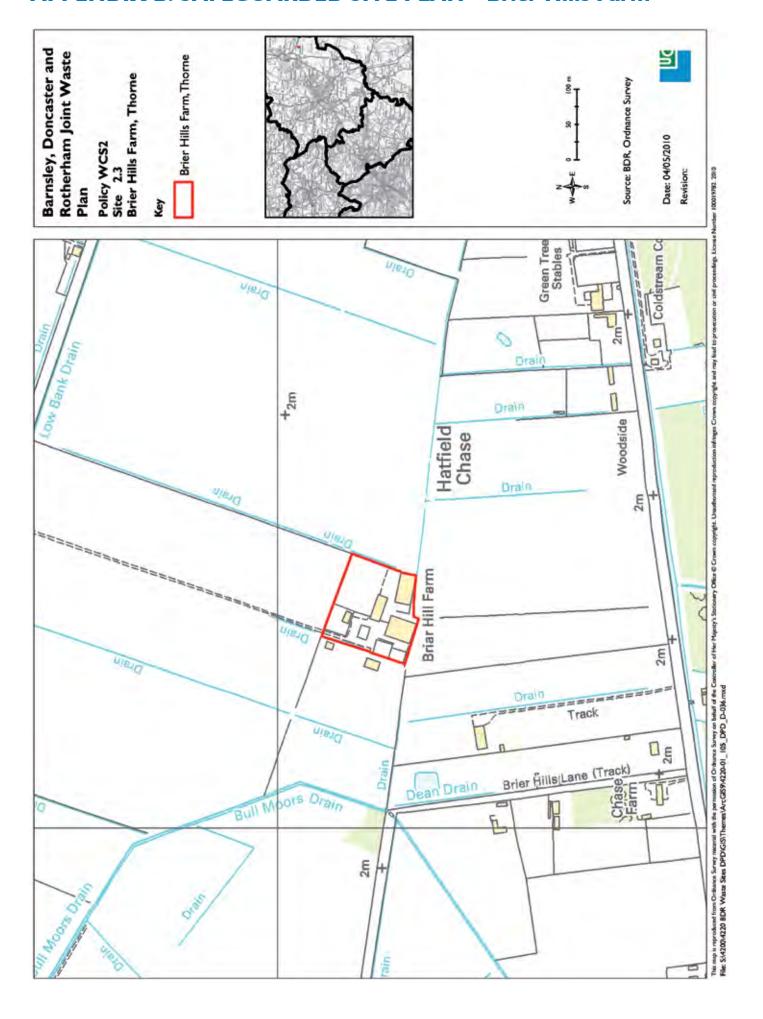
APPENDIX B: SAFEGUARDED SITE PLAN - Grange Lane



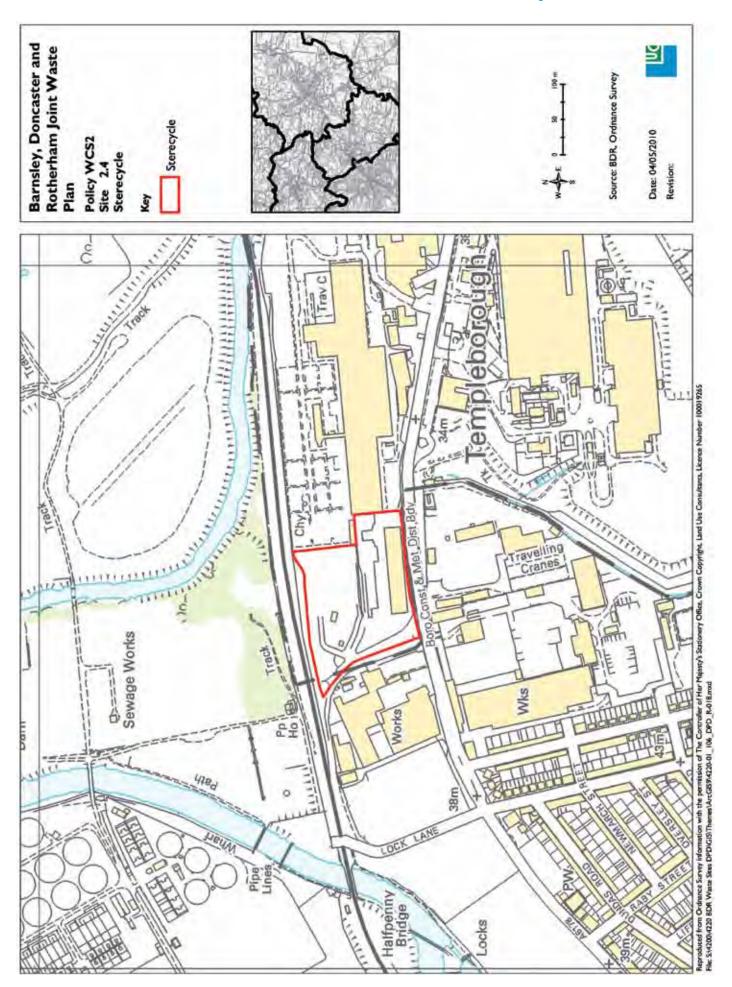
APPENDIX B: SAFEGUARDED SITE PLAN - Wroot Road Quarry



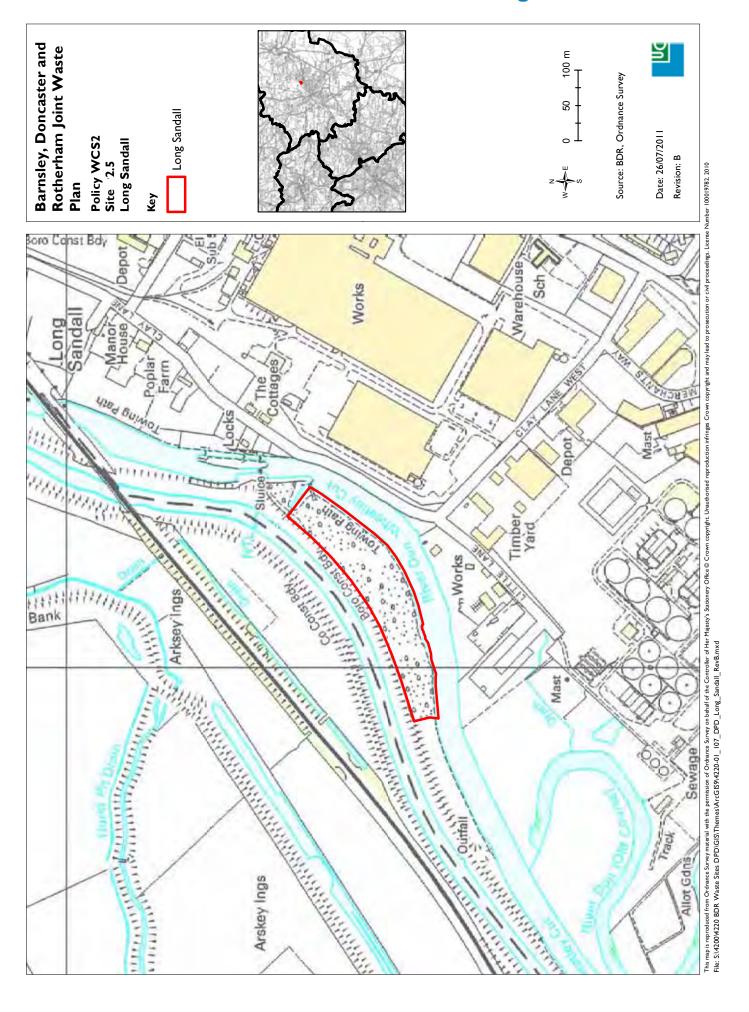
APPENDIX B: SAFEGUARDED SITE PLAN - Brier Hills Farm



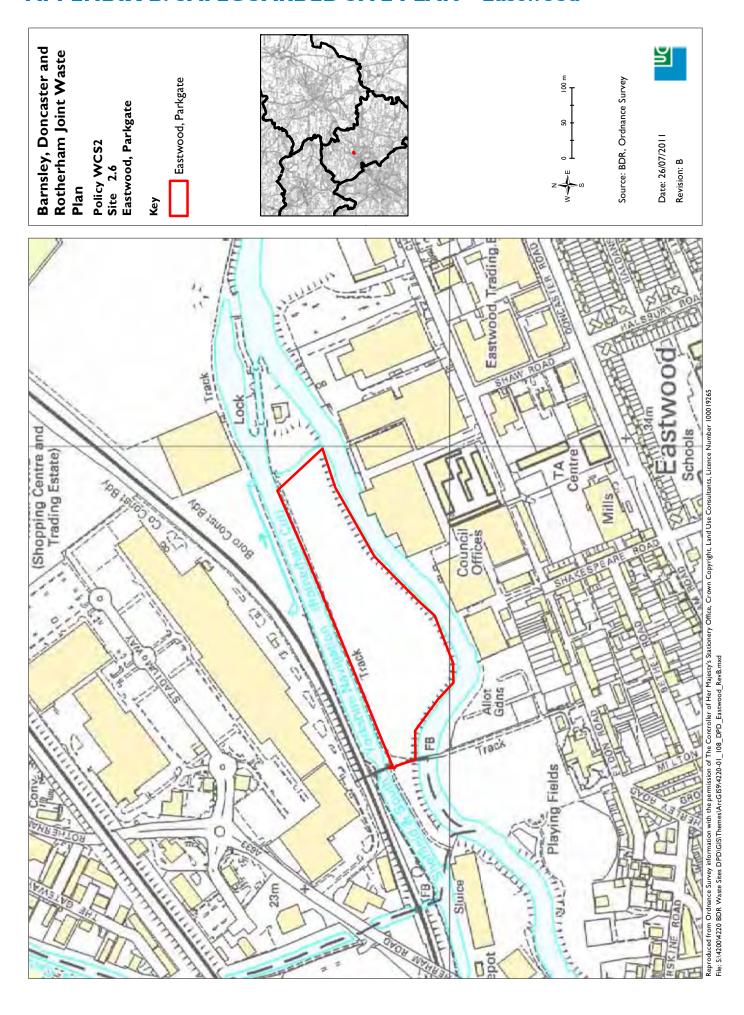
APPENDIX B: SAFEGUARDED SITE PLAN - Sterecycle



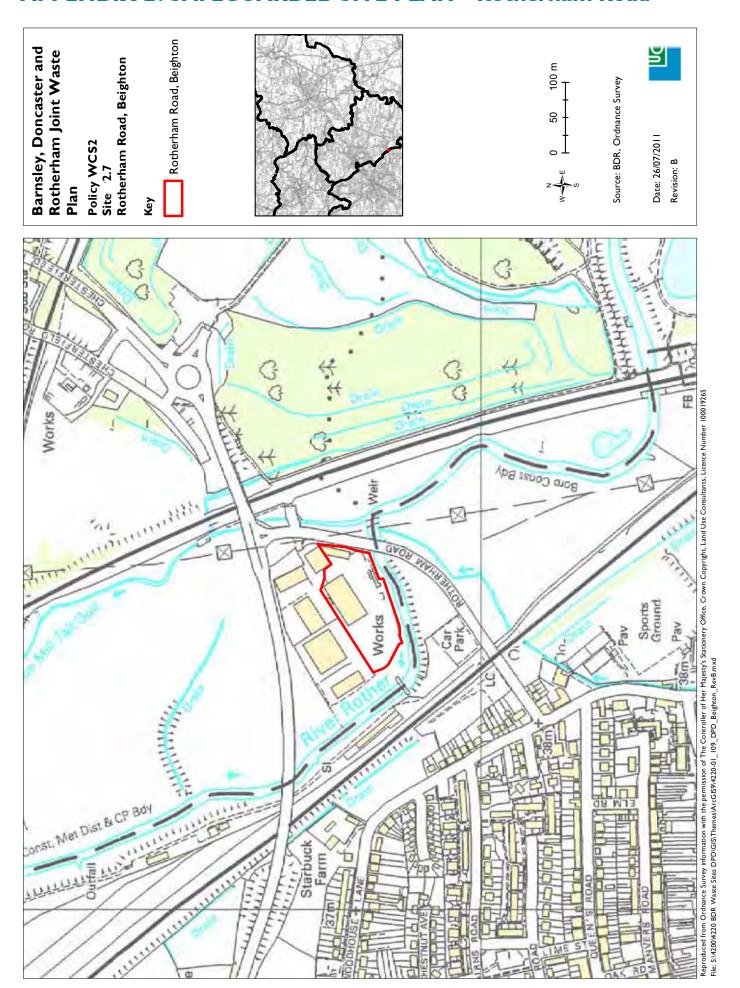
APPENDIX B: SAFEGUARDED SITE PLAN - Long Sandall



APPENDIX B: SAFEGUARDED SITE PLAN - Eastwood

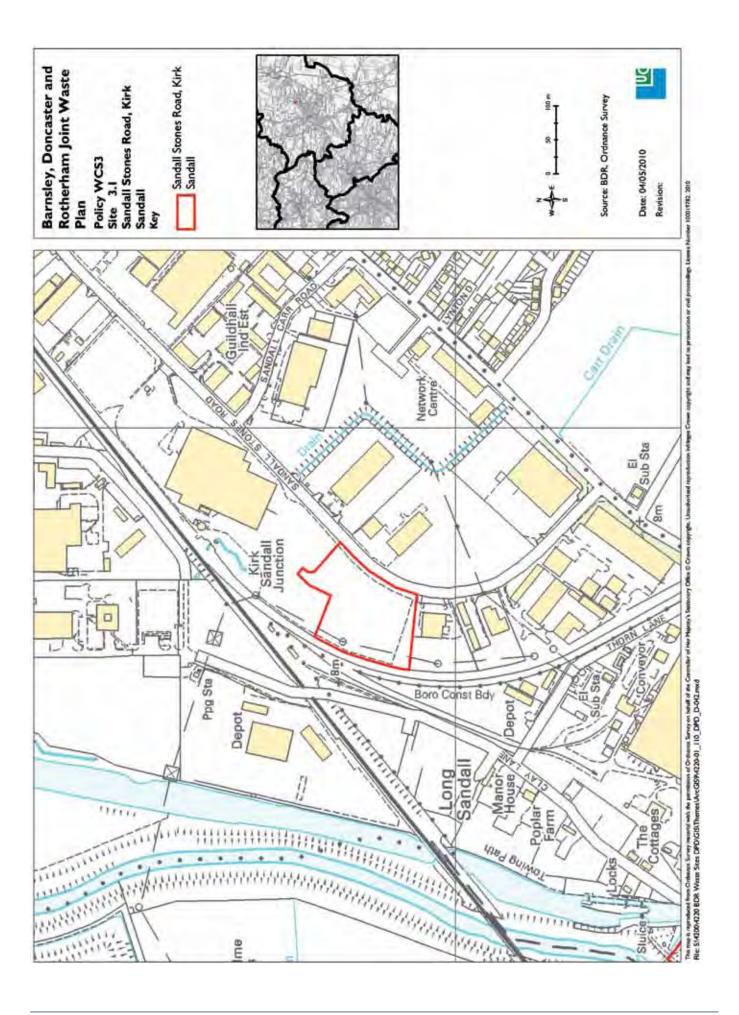


APPENDIX B: SAFEGUARDED SITE PLAN - Rotherham Road

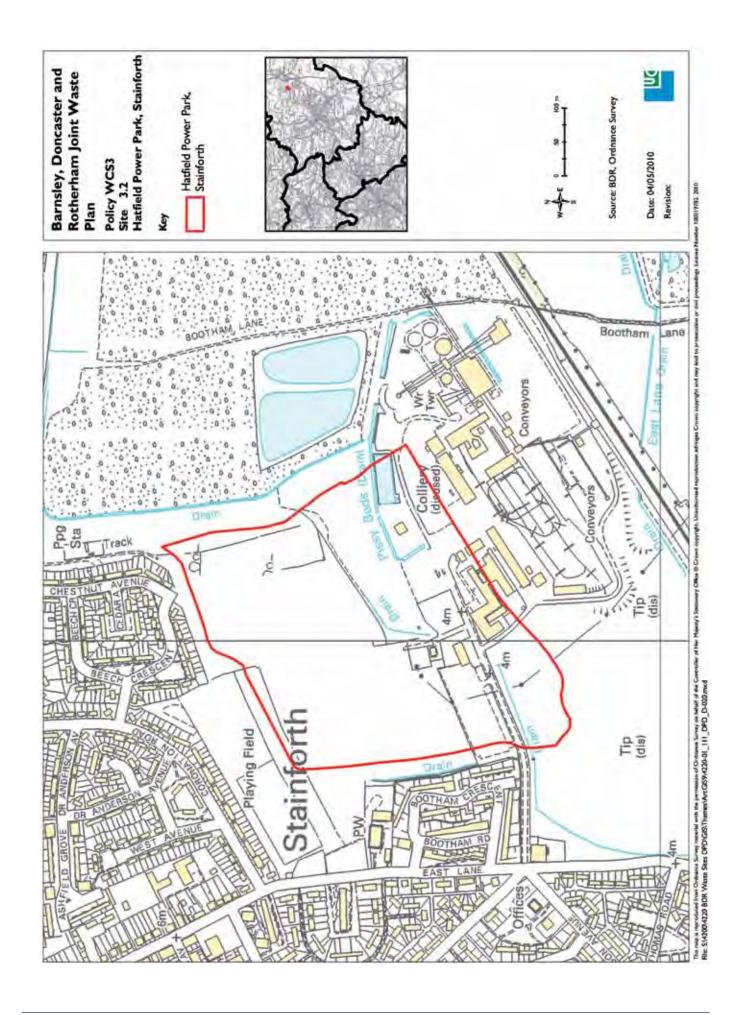


APPENDIX C: LOCATION PLANS OF THE NEW STRATEGIC SITES AND RESERVE SITE (POLICY WCS3)

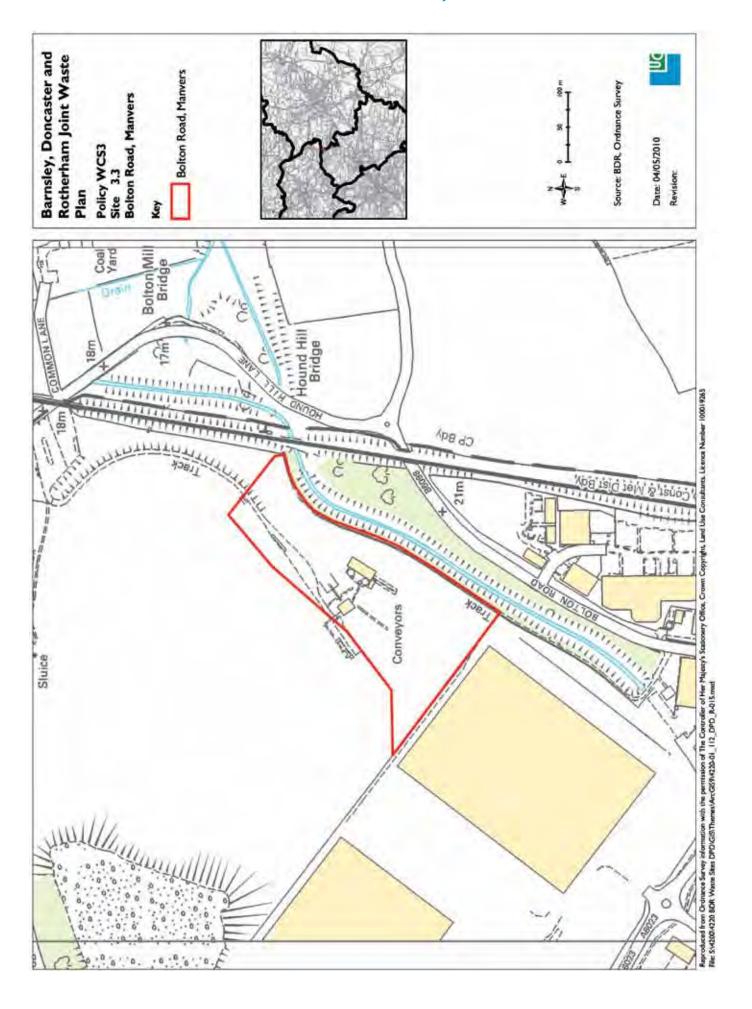
APPENDIX C: SITE PLAN - Sandall Stones Road



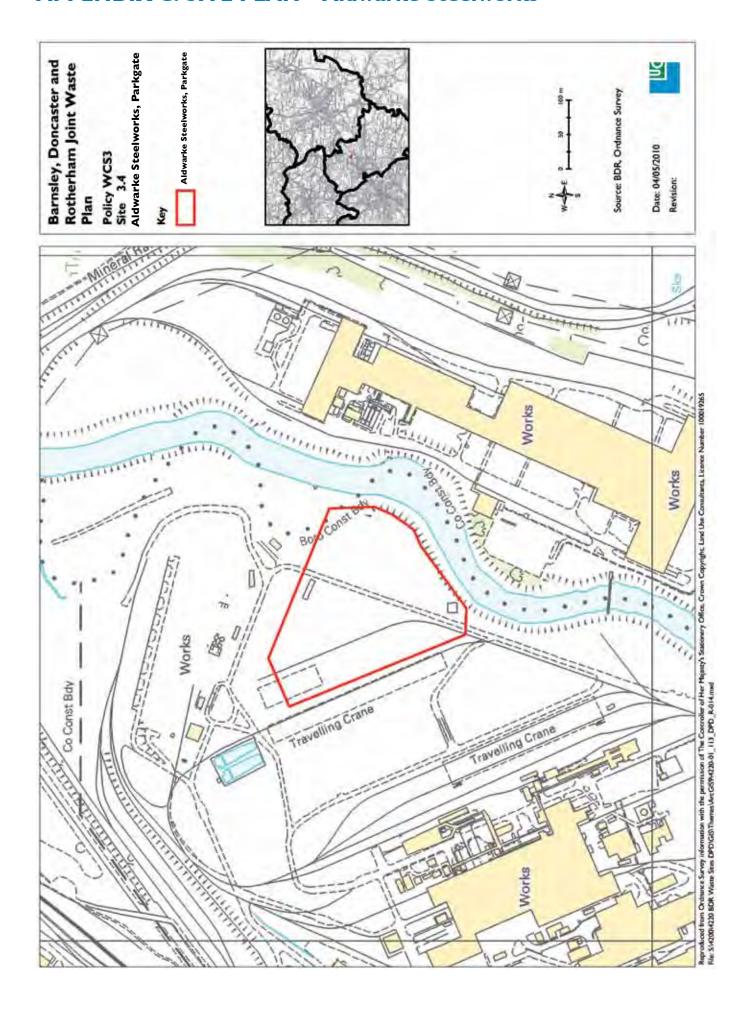
APPENDIX C: SITE PLAN - Hatfield Power Park



APPENDIX C: SITE PLAN - Bolton Road, Manvers



APPENDIX C: SITE PLAN - Aldwarke Steelworks



APPENDIX D: UNITARY DEVELOPMENT PLAN POLICIES TO BE REPLACED

The policies contained in the Joint Waste Plan will replace a number of policies which are contained in each borough's Unitary Development Plan. The following table shows how policies have been replaced.

Barnsley

Joint Waste Plan policy	Relevant UDP policy
Policy WCS I	Policy WD1: Need for waste disposal sites
Policy WCS I	Policy WD2: Recycling
Policies WCS3 and 6	Policy WD3: Environment
Policies WCS3 and 6	Policy WD3A: Environment
Policies WCS3 and 6	Policy WD3B Environment
Policies WCS3 and 6	Policy WD3C Environment
Policies WCS4 and WCS5	Policy WD3D Environment
Policies WCS3 and 6	Policy WD4: Transportation
Policy WCS6	Policy WD5: Improved standards
Policies WCS4 and WCS5	Policy WD5A: Improved standards
Policies WCS5 and WCS6	Policy WD5B: Improved standards
Policies WCS5 and WCS6	Policy WD5C: Improved standards
Policies WCS3 and 6	Policy WD6: Pollution gas
Policies WCS3 and 6	Policy WD7: Pollution gas

Doncaster

Joint Waste Plan policy	Relevant UDP policy
Policy WCS I	Policy SWD1:Waste management strategy
Policies WCS1 and 6	Policy WD2: Support landfill gas
Policies WCS1 and 6	Policy SWD3: Solvent recovery and special waste
Policies WCS1 and 6	Policy WD4: Preference for derelict sites and mineral sites
Policy WCS6	Policy WD5: Protection of water resources and flood defences
Policy WCS6	Policy WD6: Protects agricultural land
Policy WCS5	Policy WD7: Improve agricultural land by landfilling
Policy WCS6	Policy WD9: Public rights of way
Policy WCS6	Policy WD11: Sites of regional/local importance
Policies WCS3, 4 and 6	Policy SWD6: Working and reclamation
Policy WCS6	Policy WD I 2: Landscaping
Policies WCS4 and 5	Policy WD I 3: Working, restoration, aftercare
Policies WCS4 and 5	Policy WD I 4: Working, restoration, aftercare
Policies WCS4 and 7	Policy WD I 5: Landfill detail
Policy WCS5	Policy WD I 6: Aftercare
Policy WCS6	Policy SWD7: Development near landfills
N/A	Policy SWD9: Colliery spoil

Rotherham

Joint Waste Plan policy	Relevant UDP policy	
Policies WCS4 and WCS5	Policy WM 1.1: Land reclamation schemes	
Policies WCS5 and 6	Policy WM 1.2: Assessment of waste management proposals	
Policy WCS3	Policy WM 1.4: Agricultural tipping	
Policies WCS4 and WCS5	Policy WM 1.9: Landfill gas	







