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1. ABOUT THE NORTHAMPTONSHIRE MINERALS AND WASTE DEVELOPMENT FRAMEWORK

1.1. The Northamptonshire Minerals and Waste Development Framework, or MWDF, is the land use planning strategy for minerals and waste related development in the county. It provides the basis for investment in new minerals and waste development in Northamptonshire, and where in the county it should go to.

1.2. The MWDF identifies what minerals and waste related development should go where, why it should go there, and how by doing so, it can make other land use and infrastructure systems function better. It considers the impact and design of new minerals and waste development, and focuses on how this development can best relate to the surrounding land use and link with the wider community.

1.3. It is also intended to act as a driver for new investment and identifies how investment in minerals and waste development can be optimised for everyone’s benefit. It focuses, and where appropriate, integrates minerals and waste development activity and investment with other development and investment in the county. As such it is referred to as a ‘spatial plan’.

1.4. The MWDF consists of a portfolio of plans which each cover distinct matters relating to minerals and waste development. It must have a Core Strategy, but beyond this it is up to each council what to include in it. The components of Northamptonshire’s MWDF are set out in the Northamptonshire Minerals and Waste Development Scheme (MWDS).

1.5. Together, the adopted MWDF components provide the basis for determining planning applications for, or covering, minerals and waste related development in Northamptonshire.

The MWDF portfolio

1.6. The Northamptonshire MWDF comprises the:

- **Core Strategy Development Plan Document (DPD)**, which sets out the broad strategy for minerals and waste in the county and the amount of provision we will need to make for such development.
- **Locations for Minerals Development DPD**, which identifies specific sites for minerals-related development.
- **Locations for Waste Development DPD**, which identifies specific sites and locations for waste-related development.
- **Control and Management of Development DPD**, which covers aspects of controlling and managing minerals and waste development, as well as locally specific issues (such as the built & natural environmental, design, restoration, Mineral Safeguarding Areas, and preventing land use conflict).
- **Proposals Map**, which identifies the sites on a detailed map.
- **Development and Implementation Principles Supplementary Planning Document (SPD)**, which provides practical guidance concerning all other forms of development (such as waste minimisation & management and preventing land use conflict), as well as those specific to minerals and waste development (such as catchment areas, design, and restoration).
1.7. There are also two related documents that, although part of the MWDF, are not local development documents:

- The **Statement of Community Involvement (SCI)**, which sets out how the County Council will consult and engage with people during the preparation of the MWDF as well as on significant planning applications submitted to the County Council.
- The **Annual Monitoring Report (AMR)**, which monitors how the County Council is progressing with the MWDF, and particularly how its policies are being implemented. This is produced every December.

1.8. The DPDs above, those prepared by the district planning authorities in Northamptonshire (including the joint planning committees), and whilst it remains extant the Regional Plan for the East Midlands, form the Development Plan for the area.

Minerals and Waste Development Framework

![Diagram of the MWDF portfolio]

**Figure M1: The MWDF portfolio**
Sustainability and environmental assessment of the Plan

1.9. The Locations for Minerals Development DPD has undergone both a Sustainability Appraisal and a Habitats Regulations Assessment.

1.10. Sustainability Appraisal (SA) is required for each of the individual components of the MWDF. When preparing planning documents, such as the Locations for Minerals Development document, planning authorities must conduct an environmental assessment in accordance with the requirements of European Directive 2001/42/EC. This must include "assessment of the effects of certain plans and programmes on the environment" (the Strategic Environmental Assessment or SEA Directive). SA effectively broadens the concept of SEA to encompass economic and social impacts. The requirement to carry out SA and SEA are distinct. However, it is possible to satisfy both through a single appraisal process. It should be noted that where reference is made to SA it should be taken to include the requirements of the SEA Directive. The integration of sustainability considerations into the preparation and adoption of Plans is the key focus of the SA process.

1.11. Habitats Regulations Assessment (HRA) is required under the European Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora for plans that may have an impact on European Sites (Natura 2000). A HRA considers the impacts of a land-use plan against the conservation objectives of the site in order to ascertain whether it would adversely affect the site's integrity. Where significant negative effects are identified, alternative options should be examined to avoid any potential damaging effects. As the Upper Nene Valley Gravel Pits Site of Special Scientific Interest (SSSI) is designated a Special Protection Area (SPA), HRA is therefore required for relevant components of the MWDF.
2. THE ROLE OF THE LOCATIONS FOR MINERALS DEVELOPMENT DPD

2.1. Within the MWDF there is a need to produce a DPD that identifies, or allocates, specific locations for minerals-related development.

2.2. The Locations for Minerals Development DPD forms this component of the MWDF. It does this by taking forward the vision, objectives, spatial strategy and policies for minerals-related development in the MWDF Core Strategy by:
   - allocating specific sites for the extraction of sand and gravel, crushed rock (limestone), other mineral extraction, and facilities within the county, and
   - setting out the framework for implementing and monitoring the effects of the DPD.

2.3. The plan period for this DPD is from 1 January 2006 to 1 January 2026, a period of twenty years.

Relationship to the Core Strategy

2.4. The relationship between the Core Strategy and the Locations for Minerals Development DPD is very specific. This DPD acts to allocate sites in line with the spatial strategy for mineral extraction that will deliver the required provision; thus maintaining landbanks to ensure an adequate supply of aggregates for the construction industry over the plan period.

The MWDF vision and objectives

2.5. Implementation of minerals development in line with the spatial strategy is necessary to assist in delivering the MWDF vision and objectives relating to minerals development set out in the Core Strategy. The complete list of MWDF objectives, and the rationale for their selection, is set out in the Core Strategy.

The MWDF vision

The Northamptonshire of 2026 will have seen sustained growth and development. A network of well-designed urban-focused waste management facilities, and sensitively worked and restored mineral extraction sites from the glacial/pre-glacial areas in the western half of the county and certain of its river valleys, will have helped to have brought about the implementation and management of this growth.

Through growth and development, the creation of sustainable communities across Northamptonshire will have also been underpinned by optimising the efficient use of mineral and waste resources, including communities taking more responsibility for the waste they generate.
The MWDF objectives relating to minerals

**Objective 1: Developing sustainable communities**
Support the development of sustainable communities in the key national growth area of Northamptonshire by facilitating the provision of infrastructure, facilities and services through ensuring:
- a supply of minerals to the construction industry in line with national and regional guidance, and
- development of a modern network of sustainable waste management facilities which contributes towards achieving regional self-sufficiency and meets community, business and industry needs.

**Objective 2: Sustainable minerals and waste development in Northamptonshire**
Promote a step change in high quality design-led sustainable development by maximising materials resource efficiency; minimising waste; optimising the use of existing infrastructure, highway networks and previously developed land; and promoting the sustainable transport of materials.

**Objective 3: Promoting a clear investment framework**
Promote a clear investment framework that identifies priorities for future private and public investment in minerals and waste development which gives confidence in delivery and ensures linkages to other growth area investment within and adjacent to Northamptonshire.

**Objective 4: Spatial distribution of minerals development**
Facilitate mineral extraction within Northamptonshire through a strategic approach that directs through a clear and deliverable spatial strategy, particularly for sand and gravel, extraction of the mineral deposits that will meet the annual apportionments for Northamptonshire.

**Objective 6: Efficient use and re-use of mineral resources**
Ensure efficient use of primary aggregates and encourage the use of secondary and recycled materials for higher quality end-uses for development to support the growth of Northamptonshire and its infrastructure requirements.

**Objective 7: Safeguarding Northamptonshire’s mineral resources**
Safeguard Northamptonshire’s key mineral resources, particularly sand and gravel, from sterilisation by other forms of development.

**Objective 9: Supporting local identity**
Support the distinctive local identity of Northamptonshire through the supply of locally sourced building materials (including varieties of limestone, ironstone, sandstone and Collyweston stone slate) and encourage their use within the county for the purposes for which they are most suitable.

**Objective 10: Conserving and enhancing Northamptonshire’s built and natural environment**
Recognise Northamptonshire’s environmental systems and landscape linkages in order to conserve and enhance the built and natural environment through ensuring sensitive working, and where necessary high standards of mitigation of potentially adverse impacts of minerals and waste development.

**Objective 11: Responsible stewardship through restoration**
Ensure an appropriate and beneficial after-use from mineral, and where appropriate waste development, through restoration that maximises enhancement opportunities, delivers a net gain in environmental capital, and fosters responsible stewardship.

**Objective 12: Safe and healthy communities**
Preserve residential amenity, protect the health and safety of communities and promote recreational opportunities associated with minerals and waste development.
The spatial strategy for minerals extraction

2.6. The spatial strategy for minerals extraction within Northamptonshire is to focus extraction on the county’s pre-glacial and glacial deposits together with the reserves from the river valleys of the Nene (west of Wellingborough) and the Great Ouse.

Provision to be met

2.7. The provision to be met during the plan period, as set out in the Core Strategy, is an average annual figure of 1.36 million tonnes of aggregates to be provided consisting of 0.97 million tonnes of sand and gravel per annum and 0.39 million tonnes of crushed rock (limestone) per annum. For the remaining 17 years of the plan period (as at 1 January 2009) this equates to:
- 16.49 million tonnes of sand and gravel, and
- 6.63 million tonnes of crushed rock (limestone).
3. THE AlLOCATED AND COMMitted sITEs FOR MINERALS-RELATED DEVELOPMENT

3.1. The policies in this DPD allocate specific sites for minerals development. The allocation of specific sites within this DPD does not equate to the grant of planning permission. Any proposal for development of an allocation will still need to meet requirements set out in other components of the MWDF.

Sand and gravel

Baseline position and committed sites

3.2. At the commencement of the plan period, the following sand and gravel sites had planning permission with combined reserves of 4.09 million tonnes (all but the Warmington site being operational):
- Bozeat,
- Titchmarsh / Thrapston, Castle Manor Farm,
- Passenham, and
- Warmington (agricultural reservoir).

3.3. Since the commencement of the plan period, planning permission for a further 3.7 million tonnes has been granted at Earls Barton West. During that same period (January 2006 – December 2008) sales have comprised approximately 1.15 million tonnes.

3.4. The baseline position for the DPD is that the estimated committed reserves for Northamptonshire were 6.64 million tonnes as at 1 January 2009.

3.5. To meet the provision set out in the MWDF Core Strategy (Policy CS5) of 19.36 million tonnes to 2026, 16.49 million tonnes of sand and gravel provision for the remaining 17 years of the plan period needs to be identified; minus the commitments of 6.64 million tonnes.

Allocations for sand and gravel

3.6. The sites allocated for sand and gravel (under Policy M1) have a total estimated provision of 11.1 million tonnes. This, in addition to the estimated committed reserves of 6.64 million tonnes, equates to a total of 17.74 million tonnes, and will meet the required provision of 16.49 million tonnes.

3.7. The currently worked river valleys of the Nene between Northampton and Wellingborough and of the Great Ouse, will play a significant role in delivering the provision to be met. The Earls Barton West extension site (MA5) will provide the vast majority of the worked river valley supply. This site will help to ensure continuity of good quality supplies throughout the plan period and thus complement and support the pre-glacial and glacial allocations. The Milton Malsor site (MA2) will provide soft sand; all other sites will provide sharp sand and gravel.

3.8. As the former gravel pits in the Nene Valley are now designated as a potential site of European importance in relation to birds (SPA), it is important that further extraction from allocated sites in this valley will not lead to adverse effects on the integrity of this designation. A HRA was carried out on potential sites during the preparation of this DPD. Planning applications for mineral extraction at the Earls Barton West extension (MA5) and Wollaston West (MA6) sites will be required to undergo further HRA to ensure that development would not adversely affect the integrity of the SPA sites.

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1 Based on the assumption that 2008 sales are estimated to have been the same as for 2007.
Crushed rock (limestone)

Baseline position and committed sites

3.9. At the commencement of the plan period the following crushed rock sites with planning permission were operational:
   - Duddington (limestone),
   - Harlestone (sandstone),
   - Pitsford (limestone), and
   - Pury End (limestone and building stone).

3.10. The Pitsford site has an old minerals planning permission which was reviewed under the provisions of the Environment Act 1995 to agree modern conditions for extraction.

3.11. A further four sites, also reviewed under the Environment Act 1995 with modern conditions agreed, were not operational:
   - Cowthick Quarry / Weldon Landfill (ironstone and overlying minerals),
   - Priors Hall (ironstone and overlying minerals),
   - Wakerley (ironstone and overlying minerals), and
   - Weekley / Geddington (ironstone and overlying minerals).

3.12. The quantity of the economically viable resources at the above locations, other than Wakerley, was not known at the commencement of the plan period. The figure for the Wakerley site was 11 million tonnes. There was also an intention to utilise 1.2 million tonnes of limestone from the Priors Hall site in connection with an adjacent urban extension.

3.13. In addition there were a further 29 dormant ironstone sites in Northamptonshire, one of which (Park Lodge, Gretton) has modern conditions agreed. No prohibition or revocation orders have been served to date on the remaining 28 sites; the Mineral Planning Authority has no intention to do so for the foreseeable future. The quantity of economically viable mineral resources, if any, within these dormant sites is unknown.

3.14. Crushed rock reserves from operational sites and the Wakerley site were estimated to be 11.3 million tonnes at the commencement of the plan period, increasing to 12.5 million tonnes if Priors Hall were to be included.
Since the start of the plan period to 31 December 2008, planning permission for a further 3.6 million tonnes has been approved at Harlestone, Pury End and Duddington. During that same period sales have comprised approximately 1.1 million tonnes.

The baseline position for the DPD is that the estimated committed reserves (excluding the dormant sites) for Northamptonshire were 13.8 million tonnes as at 1 January 2009. However, the vast majority of these commitments relate to the site at Wakerley, where at the time modern conditions were agreed the provision figure was identified as 11 million tonnes. Therefore, assuming that the other sites with modern conditions and the dormant sites will not come forward, there is an estimated overprovision as at 1 January 2009 for the remaining 17 years of the plan period of 7.17 million tonnes to 2026 (not including Priors Hall).

Allocations for crushed rock

The commitment with modern conditions at Wakerley is to be discounted from this DPD and instead substituted with the Wakerley allocation (MA8). This substitution effectively re-shapes the site to reduce potentially adverse environmental effects; the principle of this substitution is agreed and a planning application has been submitted to reflect this.

Before the Wakerley site can be worked a number of infrastructure improvements will be required which are likely to be quite costly. However given the extensive reserves (now estimated at 11.25 million tonnes), and life of operations (extending well beyond the end of the plan period of 2026), the site is considered to be economically viable. An assumption has been made that approximately 3 million tonnes (of the 11.25 million tonnes at the site) will be worked by 2026. This leaves an estimated provision of 5.8 million tonnes through revised commitments and that part of the Wakerley site estimated to be extracted by 2026.

This would not fully meet the required provision of 6.63 million tonnes for the remaining 17 years of the DPD. An additional allocation has therefore been identified at Ringstead (MA9), with provision from this site estimated at 2.1 million tonnes. The Ringstead site will help to supply areas to the south and west of Northamptonshire that are more remote from the Wakerley site. Furthermore, the Pury End (South) site (MA10) has been allocated primarily for its contribution to the provision of building stone (under Policy M3) but will also contribute to crushed rock provision. These sites will also help ensure that once production ceases at other sites, supply will not be restricted to the Wakerley site.

A HRA was carried out on the Ringstead site (MA9) during the preparation of this DPD. Any planning application for mineral extraction at this site will be required to undergo further HRA to ensure that development would not adversely affect the integrity of the SPA sites.

**Policy M2: Sites for the provision of crushed rock**

A supply of crushed rock to contribute to meeting the provision of crushed rock (limestone) will be provided for by: production since 1 January 2006, sites with planning permission as at 1 January 2009, and by the following allocated sites.

<table>
<thead>
<tr>
<th>Allocation</th>
<th>Description</th>
<th>Provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA8: Wakerley</td>
<td>3 million tonnes (approximately) to 2026 (8.25 million tonnes thereafter)</td>
<td></td>
</tr>
<tr>
<td>MA9: Ringstead</td>
<td>2.1 million tonnes (approximately)</td>
<td></td>
</tr>
<tr>
<td>MA10: Pury End (South) (limestone and building stone)</td>
<td>1.5 million tonnes (approximately)</td>
<td></td>
</tr>
</tbody>
</table>

Based on the assumption that 2008 sales are estimated to have been the same as for 2007.
Building and roofing stone

Baseline position and committed sites

3.21. The Core Strategy (Policy CS6) promotes small scale building and roofing stone extraction for its use in the restoration and renewal of existing historic buildings and structures, new buildings in conservation areas, and the enhancement of local character and distinctiveness in other sensitive locations. Locations for building and roofing stone extraction are required to comply with the Core Strategy (and other components of the MWDF). However, a specific provision figure for building and roofing stone is not set out in the Core Strategy.

3.22. At the commencement of the plan period the following sites had planning permissions that, as well as providing for crushed rock, included extraction of building and roofing stone:

- Duddington (roofing stone),
- Harlestone (building stone),
- Oundle (building stone),
- Purdy End (building stone),
- Rushton, Storefield Lodge (building stone), and
- Pitsford (building stone).

Of the above, only the Purdy End, Harlestone and Duddington sites were operational.

Allocations for building and roofing stone

3.23. As together the committed and allocated sites may not provide the building stone required over the plan period, it is possible that additional sites may need to come forward through the planning application process. These will be determined in line with MWDF policies. However, if at any stage during the plan period there is a need to manage the provision of building stone, in order to prevent over-supply or further provision of general crushed rock aggregates, then the allocated sites will be given preference for extraction over non-allocated sites.

3.24. It is not anticipated that further provision for roofing stone beyond that identified through the committed (Duddington) and allocated (Collyweston village) sites will be required.

Policy M3: Sites for the provision of building and roofing stone

Building and roofing stone will be provided for by: sites with planning permission as of 1 January 2009, the following allocated sites, and by any other site that comes forward in line with MWDF policies.

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA10: Pury End South (limestone and building stone)</td>
<td>150,000 tonnes (approximately)</td>
</tr>
<tr>
<td>MA11: Collyweston Village (roofing stone)</td>
<td>50,000 tonnes (approximately)</td>
</tr>
</tbody>
</table>

If there is a need to manage the provision of building and roofing stone, allocated sites will be given preference for extraction over non-allocated sites.

Secondary and recycled materials

Baseline position and committed sites

3.25. Secondary and recycled aggregates represent a potential major source of materials for construction, helping to conserve primary materials and reducing the waste produced.

3.26. The regional requirements for aggregate provision include ‘alternative materials’ (i.e. secondary and recycled materials). However, a specific sub-regional apportionment is not identified and hence cannot be cascaded down into the Core Strategy. Nevertheless, given the importance of such materials, sites for the provision of secondary and recycled materials are required.
3.27. At the commencement of the plan period the following sites with planning permission for the processing of secondary and recycled materials were operational:
- Astwick Quarry Croughton,
- Boughton Quarry Northampton,
- Castle Manor Farm quarry Titchmarsh,
- Cowthick Landfill Weldon,
- Duddington Quarry,
- (former) Earls Barton sewage works,
- (former) Potato Store Oundle Road Corby,
- Gretton Brook Road Corby,
- Harlestone quarry,
- Lakeside Works Crow Lane Great Billing,
- Long Drow Pits Weekly Wood Geddington,
- Monkton Sidings Fineshade,
- Nielson Road Finedon Road industrial estate Wellingborough,
- Northampton Coating Plant Great Billing, and
- The Old Brickworks Harborough Road Pitsford.
Of the above only two, the (former) Earls Barton sewage works and Cowthick, are no longer operational.

3.28. Other sites associated with significant development works (e.g. onsite waste management for key construction / demolition works) have also been operational during this period but due to their temporary (short-term) nature, have not been identified.

Allocations for secondary and recycled materials

3.29. Committed (permanent and temporary) and allocated sites, along with sites linked to key construction work, will provide a reasonable mix of secondary and recycled materials processing facilities. Other sites will come forward through the planning application process as appropriate, and be determined in line with MWDF policies.

Policy M4: Sites for the provision of secondary and recycled materials

Facilities for the provision of secondary and recycled materials will be provided for by: sites with planning permission as of 1 January 2009, the following allocated site, and by any other site that comes forward in line with MWDF policies.

MA12: Earls Barton Quarry Plant Site

Refractory minerals / clay

3.30. Northamptonshire has two sites with permission to extract refractory minerals and / or clay: Kings Cliffe and Nassington. The former is part of the Kings Cliffe hazardous landfill site. The latter is related to a foundry that has now closed, and is also now largely part of the Kings Cliffe Regeneration Centre site identified in the Locations for Waste Development DPD for waste management uses (preliminary treatment). Some provision could still come from these two locations.

3.31. A number of limestone and other landfill sites have permission to extract clay where it is found. This clay is used on-site for engineering works and fill, although is not significant in quantity. As such it is likely that the county’s demand for these uses of clay can be met through such incidental working, or through the use of alternative materials. This DPD does not include site specific allocations for the provision of refractory minerals and / or clay.
4. IMPLEMENTATION AND MONITORING OF THE LOCATIONS FOR MINERALS DEVELOPMENT DPD

Implementation

4.1. The MWDF will ultimately be implemented through the grant of planning permission for individual proposals that are then realised on the ground. Planning permission will be forthcoming in accordance with the Government’s National Planning Policy Statements (PPSs), Minerals Policy Statements (MPSs), the MWDF policies, and any relevant policies in local development frameworks.

4.2. However, activities that can affect the delivery of the MWDF may rely on the operation of other policies, work of other agencies, behaviour of the general public, and actions of industry. Such projects, place making activities, investment decisions and behaviour include the:

- Sustainable Community Strategy for Northamptonshire (and the district ones that flow from it),
- programmes and projects of the statutory agencies,
- actions and decisions of infrastructure providers, and
- actions of the general public.

4.3. Production and implementation of these strategies, and the actions of these bodies or individuals, may impact upon planning for minerals within the plan area. The County Council will take such matters into account as necessary, including through the process of monitoring and review.

4.4. The County Council will therefore seek to meet the MWDF objectives through its own actions such as:

- Its development and construction activities - for example, in the construction and operation of County Council owned new schools and community facilities.
- Implementation of other plans and strategies - for example, the Local Transport Plan.

Monitoring

4.5. The purpose of monitoring is twofold, as monitoring needs to consider both beneficial and adverse effects. Firstly, to measure the actual significant effects of implementing the Locations for Minerals Development DPD policies and measure contribution towards achievement of desired objectives. Secondly, it assists in identification of unforeseen adverse effects and the need to undertake appropriate remedial action. Monitoring should aim to answer questions such as:

- Are the policies contributing towards the plans vision and objectives, as well as the SA objectives and sustainable development as predicted?
- Are mitigation measures performing as well as expected?
- Are there any adverse effects? Are these within acceptable limits, or is remedial action desirable?

4.6. The approach taken to monitoring should be objective and target led. It is not necessary to monitor everything, or monitor an effect indefinitely; instead monitoring should be focused on significant effects. Monitoring should involve measuring indicators which may establish a causal link between implementation of the plan and the likely significant effects being monitored.

4.7. In addition it may be beneficial for monitoring requirements to build on existing monitoring systems (such as the SA monitoring framework) in order to reinforce links and ensure efficiency within planning processes. Gaps in existing information will be identified so that consideration might be given to how these could be addressed in the longer term.
4.8. There is a specific requirement for the implementation of the MWDF and its individual components to be monitored. The most appropriate vehicle for this is the MWDF AMR, produced each December. Monitoring is therefore to be undertaken on an annual basis (unless otherwise specified) in line with the AMR.

4.9. The plan period for the MWDF is by calendar year of January to December rather than by April to March. This is largely because monitoring of minerals production by the East Midlands Regional Aggregates Working Party (EM RAWP) is on this basis.

4.10. The monitoring framework for the Locations for Minerals Development DPD is set out in Table M1.

**Table M1: Locations for Minerals Development monitoring framework**

<table>
<thead>
<tr>
<th>Policy and link to objectives</th>
<th>Key indicator(s)</th>
<th>Target</th>
<th>Key implementation partners</th>
<th>Trigger point for correction and / or mitigation measures</th>
</tr>
</thead>
</table>
| **Policy M1:** Sites for the provision of sand and gravel  
*Contributes towards Objectives 1, 3 & 4.* | Amount of sand and gravel produced from identified sites is in line with annual provision. | Allocated sites come forward to ensure sand and gravel production of 0.97 Mt per annum. | Minerals industry - Environment Agency - Highways Agency | More than two unallocated sites are given planning permission during the plan period. |
| **Policy M2:** Sites for the provision of crushed rock  
*Contributes towards Objectives 1, 3 & 4.* | Amount of crushed rock produced from identified sites is in line with annual provision. | Allocated sites come forward to ensure crushed rock production of 0.39 Mt per annum. | Minerals industry - Environment Agency - Highways Agency | More than two unallocated sites are given planning permission during the plan period. |
| **Policy M3:** Sites for the provision of building and roofing stone  
*Contributes towards Objectives 1, 3 & 4.* | Amount of building and roofing stone produced and consumed (sales) annually. | Allocated sites for building and roofing stone extraction approved. | Building and roofing stone industry - Environment Agency - English Heritage | No sites for the provision of building and roofing stone are operational within the county (at any time during the plan period). |
| **Policy M4:** Sites for the provision of secondary and recycled materials  
*Contributes towards Objectives 1, 3, 4 & 9.* | Amount of secondary and recycled aggregates produced and consumed (sales) annually. | Allocated sites for secondary and recycled aggregates processing approved\(^3\). | Minerals industry - Environment Agency - Highways Agency | No sites (including allocated) are granted planning permission by 2016. |

\(^3\) Not including temporary onsite facilities associated with construction and demolition works.
APPENDIX 1: PROFILES OF THE ALLOCATED SITES

The following profiles of the allocated sites are listed according to the type of mineral development proposed: sand & gravel, crushed rock (limestone), and building & roofing stone. Allocated sites are also shown on the Proposals Map.

Profiles of the committed sites are not included in this DPD, but are shown on the Proposals Map. Details of committed sites are contained in the relevant planning permission.
Allocations for minerals-related development

Policy M1: Sites for the provision of sand and gravel
MA1: Dodford
MA2: Milton Malsor
MA3: Bozeat Extension
MA4: Heyford
MA5: Earls Barton West Extension
MA6: Wollaston West
MA7: Passenham South

Policy M2: Sites for the provision of crushed rock
MA8: Wakerley
MA9: Ringstead
MA10: Pury End South

Policy M3: Sites for the provision of building and roofing stone
MA10: Pury End South
MA11: Collyweston Village

Policy M4: Sites for the provision of secondary and recycled materials
MA12: Earls Barton Quarry Plant Site
Sand and gravel
MA1: Dodford

Location: Parish of Dodford, Daventry
Grid Reference: SP 605 612
Area: 35.7 hectares (ha)
Quantity: 2.4 million tonnes

Site characteristics:
- Located in close proximity to the village of Dodford, Lower Weedon and isolated rural residential properties.
- Adjacent to an indicative flood plain and Dodford Brook (identified as a main river).
- Situated on a southern slope facing the A45 corridor, with a dismantled railway running across the southern part of the site.
- Overlaps with County Wildlife Site (CWS) 33 (Dodford Disused Railway).
- Currently used for agricultural production with agricultural land and countryside surrounding the site.
- Within the Bugbrooke and Daventry Landscape Character Area.

Development requirements:
- Access to be from A45 via haul route.
- Protection and enhancement measures (including restoration) to be identified regarding the CWS.

4 All tonnages are approximate.
MA2: Milton Malsor

Location:
Parish of Milton Malsor, South Northamptonshire

Grid Reference: SP 742 557

Area: 15.0 ha

Quantity: 1.2 million tonnes

Site characteristics:
- Lies between and is in close proximity to Collingtree residential areas and Milton Malsor village; the M1 and the rail line separates the site from Collingtree and Milton Malsor respectively.
- Despite the location the site has a rural character and is currently used for agricultural production (arable fields) with agricultural land to the north and south of the site.
- Overlays a minor aquifer and is not located within a flood risk zone.
- Within the Bugbrooke and Daventry Landscape Character Area.

Development requirements:
- Access to not be via the village centres of Milton Malsor and Collingtree. Materials to be transported over rail bridge north of the site and then via haul road to Towcester Road (former A43).
MA3: Bozeat Extension

Location:
Parish of Strixton, Wellingborough

Grid Reference:
SP 900 606

Area:
14.8 ha (extension area)

Quantity:
1.5 million tonnes

Site characteristics:
- Located in proximity to the villages of Strixton and Bozeat (the latter separated by the A509 bypass) and isolated rural residences.
- Adjacent to an existing quarry operation (shaded grey).
- Located within 500 m of a historic flood area, an identified indicative floodplain, flood zone and a main river.
- Currently used for agricultural production with agricultural land and countryside surrounding the site.
- Within the Wollaston to Irchester Landscape Character Area.

Development requirements:
- Access to be through existing quarry operation.
- Use of on-site water management systems and mobile plant or existing infrastructure & plant (on associated extraction / processing sites) in order to reduce potential risks associated with flooding. Associated infrastructure (static plant) and built development to be locate in areas of lowest flood risk. Restoration of site should give consideration to flood alleviation measures.
MA4: Heyford

Location: Parish of Upper Heyford, South Northamptonshire
Grid Reference: SP 672 591
Area: 35.4 ha
Quantity: 1.4 million tonnes

Site characteristics:
- Located in close proximity to the villages of Nether Heyford & Upper Heyford, isolated rural residences, and Bugbrooke Mills.
- Adjacent to M1 / A45 Junction 16.
- Adjoins a designated Air Quality Management Area (associated with transport emissions).
- Adjacent to Bugbrooke Meadows SSSI.
- The River Nene runs along the southern boundary of the site. Located within a historic flood area and an identified indicative floodplain and flood zone.
- Currently used for agricultural production with agricultural land and countryside surrounding the site.
- Within the Nene-Weedon Bec to Duston Mill Landscape Character Area.

Development requirements:
- Protection and enhancement measures to be identified regarding Bugbrooke Meadows SSSI.
- Restoration of site to include some creation of wet grassland to link with the SSSI.
- Use of on-site water management systems and mobile plant in order to reduce potential risks associated with flooding. Associated infrastructure (static plant) and built development to be locate in areas of lowest flood risk. Restoration of site should give consideration to flood alleviation measures.
MA5: Earls Barton West Extension

Location: Parish of Ecton, Wellingborough
Grid Reference: SP 847 617
Area: 153 ha (extension area to the west and east)
Quantity: 3 million tonnes

Site characteristics:
- Located in proximity to the villages of Cogenhoe and Ecton, the Northampton urban area (Ecton Brook and Crow Lane industrial area) and isolated rural residential dwellings.
- Separated from Earls Barton, Ecton and Ecton Brook by the A45 trunk road dual carriageway.
- Located within a historic flood area and an identified indicative floodplain and flood zone.
- In agricultural use with agricultural land and countryside surrounding the site except to the west. Earls Barton West extraction site is adjacent to the eastern boundary.
- Within the Nene - Billing Wharf to Woodford Mill Landscape Character Area.
- Access to site via eastern or western end (and therefore A45 junctions). If access is to be from the west, the implementation of a one-way traffic system should be considered. This may utilise: an existing site road from Lower Ecton Lane feeding into the allocation; and land to the east, south, and west of the existing Wastewater Treatment Works, rejoining an existing site road and access to Crow Lane. Carriageway and junction improvements from the site onto Crow Lane, Lower Ecton Lane, and the A45 may be required.

- Mitigation measures and restoration to be carried out in line with the HRA\(^5\) for this allocation.

- A site specific (project level) HRA is to be carried out at the planning application stage.

- Use of on-site water management systems and mobile plant or existing infrastructure & plant (on associated extraction / processing sites) in order to reduce potential risks associated with flooding. Associated infrastructure (static plant) and built development to be locate in areas of lowest flood risk. Restoration of site should give consideration to flood alleviation measures.

\(^5\) Northamptonshire County Council August 2007 Northamptonshire MWDF Habitats Regulation Appropriate Assessment.
MA6: Wollaston West

Location:
Parish of Wollaston, Wellingborough

Grid Reference:
SP 886 623

Area:
17.8 ha

Quantity:
200,000 tonnes

Site characteristics:
- Located in a rural area to the west of Strixton, and near to isolated rural residences (including The Old Lodge).
- Adjacent to an existing quarry network and this location could complement existing operations, particularly in terms of processing infrastructure.
- Located in proximity to one of the Upper Nene Valley Gravel Pits SSSI / SPA sections.
- Located within a historic flood area and an identified indicative floodplain and flood zone.
- Site currently used for agricultural production with agricultural land and other countryside surrounding the site.
- Within the Nene - Billing Wharf to Woodford Mill Landscape Character Area.

Development requirements:
- Mitigation measures and restoration to be carried out in line with the HRA for this allocation.
- A site specific (project level) HRA is to be carried out at the planning application stage.
- Use of on-site water management systems and mobile plant or existing infrastructure & plant (on associated extraction / processing sites) in order to reduce potential risks associated with flooding. Restoration of site should give consideration to flood alleviation measures.
MA7: Passenham South

Location: Parishes of Wicken and Deanshanger, South Northamptonshire

Grid Reference: SP 768 386

Area: 57.7 ha (45 ha for extraction)

Quantity: 1.4 million tonnes

Site characteristics:
- Extension of an existing extraction operation.
- Located in proximity to the villages of Passenham and Deanshanger (and Beachampton in Buckinghamshire), a number of isolated rural residences and a golf course. The site is separated from Deanshanger by the A422.
- Located in an indicative flood plain, historic flood area, an identified flood zone and the Grand Union Canal Buckingham Arm (not currently navigable) runs along the western boundary.
- Located adjacent to existing quarrying operations (shaded grey), with surrounding use being arable farmland.
- Surrounds the Kingfisher CWS.
- Within the River Tove Floodplain Landscape Character Area.

Development requirements:
- Site should utilise existing extraction infrastructure and access should be via existing Passenham site to the north.
- Restoration to enhance linkages with existing CWS.
- Use of on-site water management systems and mobile plant or existing infrastructure & plant (on associated extraction / processing sites) in order to reduce potential risks associated with flooding. Associated infrastructure (static plant) and built development to be locate in areas of lowest flood risk. Restoration of site should give consideration to flood alleviation measures.
Crushed rock (limestone)

MA8: Wakerley

Location: Parish of Wakerley, East Northamptonshire
Grid Reference: SP 945 981
Area: 107.9 ha
Quantity: 11.25 million tonnes
3 million tonnes to 2026 and 8.25 million tonnes thereafter

Site characteristics:
- Related to an old ironstone permission
- Located in close proximity to the village of Wakerley (400 m north of the site).
- Close to the River Welland and located on a major aquifer, with drains bordering and intersecting the site.
- Located adjacent to the Wakerley Great Wood.
- Currently used for agricultural production with agricultural land and other countryside surrounding the site.
- Within two landscape character areas – Harringworth to Duddington Slopes and Kirby and Gretton Plateau.

Development requirements:
- Access to be via a haul road to the south-east of Wakerley village and accessing the A43 east of Wakerley Oaks (not the Top Lodge junction).
MA9: Ringstead

Location:
Parish of Ringstead, East Northamptonshire

Grid Reference:
SP 979 738

Area:
66 ha (40 ha for extraction)

Quantity:
2.1 million tonnes

Site characteristics:
- Includes extraction of building stone
- Located between Raunds and Ringstead, with the villages of Great and Little Addington to the west beyond the River Nene. There is an isolated rural residence (Ringstead Grange) close to the site.
- Part of the Raunds urban area (an employment location) is just to the south of the site separated by the A45.
- Overlays a minor and major aquifer, is located adjacent to an indicative flood plain, and is within 500 m of a historic flood area and the River Nene.
- In close proximity to the Ringstead and Upper Nene Gravel Pits SSSI / SPA.
- Currently used for agricultural production with agricultural land surrounding the site.
- Within the Higham Ferrers to Thrapston Landscape Character Area.

Development requirements:
- Mitigation measures and restoration to be carried out in line with the HRA for this allocation.
- A site specific (project level) HRA is to be carried out at the planning application stage.
Building and roofing stone

MA10: Pury End South

Location: Parish of Pauerspury, South Northamptonshire
Grid Reference: SP 704 458
Area: 8.2 ha
Quantity: 1.5 million tonnes

Site characteristics:
- Linked to the extraction of crushed rock (limestone)
- Located in proximity to the village of Pury End and isolated rural residences.
- Overlays a major aquifer and is located 500 m from an identified flood risk zone and historic flood area.
- Site is south of previous and currently worked quarrying operations.
- Within the Tove Catchment Landscape Character Area.

Development requirements:
- Site not to be worked until the existing Pury End quarry is close to completion of its operational life.
MA11: Collyweston Village

Location: Parish of Collyweston, East Northamptonshire
Grid Reference: SK 997 037
Area: 8.5 ha
Quantity: 50,000 tonnes

Site characteristics:
- Collyweston stone slate (roofing slate) extraction
- Located in proximity to the villages of Collyweston and Easton on the Hill and isolated residential dwellings.
- Overlays a major and minor aquifer and is adjacent to a historic flood zone.
- Currently used for agricultural production, and with agricultural land to the north and west.
- Collyweston Quarries Nature Reserve is to the east of the site.
- Within the Western Clay Uplands Landscape Character Area.

Development requirements:
- No open casting of roofing stone or other materials from this site.
Facilities for secondary and recycled aggregates

MA12: Earls Barton Quarry Plant Site

Location: Parish of Earls Barton, Wellingborough

Grid Reference: SP 860 618

Area: 6.5 ha

Site characteristics:
- Located in proximity to Earls Barton and Whiston villages and isolated rural residences and commercial uses.
- Linked to existing mineral extraction operations.
- Overlays a minor aquifer and is located within an area of historic flooding, identified flood zone and indicative flood plain.
- Adjacent to the Upper Nene Valley Gravel Pits SSSI / SPA.
- Within the Nene - Billing Wharf to Woodford Mill Landscape Character Area.

Development requirements:
- Site to be in operational use whilst there is extraction in the vicinity.
- Mitigation measures and restoration to be carried out in line with the HRA for this allocation.
- A site specific (project level) HRA is to be carried out at the planning application stage.
- Use of on-site water management systems and where possible mobile plant in order to reduce potential risks associated with flooding.
APPENDIX 2: COMMITMENTS

Commitments for mineral extraction as at end 2010 are set out in the schedule below, and include sites for:

- Sand and gravel,
- Crushed rock,
- Building and roofing stone.

For sites that have old minerals permissions only those with modern conditions agreed have been included in the schedule.

Appendix 2a: Sand and gravel

<table>
<thead>
<tr>
<th>Site</th>
<th>Permission reference</th>
<th>Grid reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Castle Manor Farm, Titchmarsh</td>
<td>09/00006/MIN</td>
<td>501600 278200</td>
</tr>
<tr>
<td>Church Farm, Bozeat</td>
<td>WP/96/0340</td>
<td>498744 260125</td>
</tr>
<tr>
<td>Eaglethorpe, Warmington</td>
<td>EN/02/0846</td>
<td>508100 292300</td>
</tr>
<tr>
<td>Earls Barton Quarry, Grendon Road</td>
<td>SN/06/1670 WP/07/0039</td>
<td>484359 262356</td>
</tr>
<tr>
<td>Earls Barton Spinney Quarry</td>
<td>07/00050/MIN</td>
<td>486130 261960</td>
</tr>
<tr>
<td>Passenham Quarry, Passenham</td>
<td>SN/05/0395</td>
<td>477300 239500</td>
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</tbody>
</table>

Appendix 2b: Crushed rock

<table>
<thead>
<tr>
<th>Site</th>
<th>Permission reference</th>
<th>Grid reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collyweston Quarry, Duddington</td>
<td>EN/98/0374</td>
<td>499900 301300</td>
</tr>
<tr>
<td>Cowthick Quarry, Weldon</td>
<td>CO/97/0040</td>
<td>492775 287546</td>
</tr>
<tr>
<td>Park Lodge, Gretton</td>
<td>CO/96/0040 EN/96/0083</td>
<td>491110 294452</td>
</tr>
<tr>
<td>Pitsford / Boughton</td>
<td>DA/97/1140</td>
<td>474679 265218</td>
</tr>
<tr>
<td>Priors Hall Quarry, Weldon</td>
<td>CO/97/0055</td>
<td>492500 290500</td>
</tr>
<tr>
<td>Rushton Landfill</td>
<td>08/00102/WAS</td>
<td>485000 283500</td>
</tr>
<tr>
<td>Wakerley</td>
<td>08/00026/MIN</td>
<td>494500 297800</td>
</tr>
<tr>
<td>Weekley Hall Wood</td>
<td>KE/97/0464</td>
<td>487529 281815</td>
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</tbody>
</table>

Appendix 2c: Building and roofing stone

<table>
<thead>
<tr>
<th>Site</th>
<th>Permission reference</th>
<th>Grid reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collyweston Quarry, Duddington</td>
<td>EN/98/0374</td>
<td>499900 301300</td>
</tr>
<tr>
<td>Harlestone</td>
<td>08/00037/WAS</td>
<td>470811 264046</td>
</tr>
<tr>
<td>Pitsford</td>
<td>DA/97/1140</td>
<td>475473 267241</td>
</tr>
<tr>
<td>Pury End</td>
<td>SN/01/0938</td>
<td>471000 246100</td>
</tr>
<tr>
<td>Rushton Landfill</td>
<td>08/00102/WAS</td>
<td>485000 283500</td>
</tr>
</tbody>
</table>
Appendix 2d: Clay

<table>
<thead>
<tr>
<th>Site</th>
<th>Permission reference</th>
<th>Grid reference</th>
<th>Easting</th>
<th>Northing</th>
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<tbody>
<tr>
<td>King's Cliffe Industrial Estate</td>
<td>EN/92/0386</td>
<td></td>
<td>504300</td>
<td>298400</td>
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<tr>
<td>King's Cliffe Landfill Site</td>
<td>EN/97/0113</td>
<td></td>
<td>500853</td>
<td>300083</td>
</tr>
<tr>
<td>Sidegate Lane Landfill Site</td>
<td>WP/07/0008</td>
<td></td>
<td>491932</td>
<td>270363</td>
</tr>
</tbody>
</table>

Note:

The locations of commitments are not indicated on the hard copy MWDF Proposals Map DPD. This information can be viewed via the County Councils online Proposals Map (http://northamptonshire.opus3.co.uk/ldf/maps) or in hardcopy upon request to the County Council.

The identification of a site as a commitment does not necessarily mean that the permission has been implemented or that the site is currently operational.
APPENDIX 3: REPLACEMENT OF MINERALS LOCAL PLAN POLICIES BY THE LOCATIONS FOR MINERALS DEVELOPMENT POLICIES

There is not necessarily a clear cut transfer from one Local Plan policy to a particular MWDF policy as the MWDF is a different type of development plan to the old Local Plans. Nevertheless the following schedule sets out where the intent of a Minerals Local Plan policy is now covered by the Locations for Minerals Development DPD. In some cases the intent of a policy is now split between different DPDs. Where this is the case the relevant policy has been italicised in the schedule. If a Local Plan policy is not shown here its intent is fully covered by one or more of the other MWDF components.

<table>
<thead>
<tr>
<th>Minerals Local Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy 3: Allocated Sites for Sand &amp; Gravel Extraction</td>
</tr>
<tr>
<td>Policy 5: Allocated Site for Crushed Rock Aggregate</td>
</tr>
<tr>
<td>Policy 8: Refractory Minerals Proposals</td>
</tr>
<tr>
<td>Policy 9: Secondary &amp; Recycled Materials</td>
</tr>
<tr>
<td>Policy 34: Review of Old Mineral Permissions</td>
</tr>
<tr>
<td>Policy 35: Prohibition Orders</td>
</tr>
</tbody>
</table>
APPENDIX 4: GLOSSARY

A

After-use - The ultimate use to which a minerals working or waste site (landfill/raise) is put following its restoration, such as forestry, amenity, agriculture, nature conservation, recreation or industrial.

Aggregate - Inert particulate matter which is suitable for use (on its own or with the addition of cement or bituminous material) in construction as concrete, mortar, finishes, road stone, asphalt, or drainage course, or for use as constructional fill or railway ballast.

Amenity - A land use which is not productive agriculture, forestry or industrial development; can include formal and informal recreation and nature conservation.

Aquifer - An underground layer of permeable rock or unconsolidated materials (gravel, sand, silt, or clay) that either contains or conducts ground water.

B

Blasting - Blasting of rock with explosives takes place where the rock to be extracted is hard enough to warrant fracturing prior to removal and processing.

C

Collyweston stone slate - A roofing material widely used in Northamptonshire, in adjoining areas and on important buildings further afield. Collyweston stone slates are produced by the action of frost on the so called ‘log’ which is derived from the lowest beds of Lincolnshire Limestone. Suitable log is only found in discrete areas the best known sources being centred historically on Collyweston village. Other sources have been documented.

Crushed rock - Hard rock, which has been quarried, fragmented and graded for use as aggregate.

D

Development control - The sector of land use planning that deals with the processing and enforcement of planning applications and decisions under the Town and Country Planning legislation. Each application is judged on its merits at the time of the application.

Dimension stone - A natural stone that has been selected and fabricated (i.e. trimmed, cut, drilled, ground, or other) to specific sizes or shapes; the main applications of which is building materials such as solid stone building blocks (i.e. building façades), decorative / ornamental exterior and interior structures, paving, etc.

G

Gravel - Naturally occurring aggregates of more or less rounded rock fragments (pebbles) which are coarser than sand (i.e. 2 - 64 millimetres in diameter) and used as a building and construction material and in drainage work.

Groundwater - Water associated with soil or rocks below the ground surface, usually taken to mean water in the saturated zone.

H

Hazardous waste - Waste that contains hazardous properties that if improperly handled treated or disposed of, by virtue of its composition carries the risk of death, injury, or impairment of health, to humans or animals, the pollution of waters, or could have an unacceptable environmental impact.
I

**Inert fill** - Aggregates or inert materials used in construction or land reclamation works to create new levels. Inert fill includes inert waste material that when buried will have no adverse effect on people or the environment and does not contain contaminants (e.g. combustible, putrescible, degradable, leachable, hazardous, or liquid wastes, etc). May include waste recovery (refer to Environmental Permitting Regulations 2010 EPR13).

**Inert waste** - Waste which will not biodegrade or decompose (or will only do so at a very slow rate), examples include glass, concrete, bricks, tiles & ceramics, and soil & stone (excluding topsoil & peat)\(^6\).

L

**Landbank** - A stock of planning permissions sufficient to allow for extraction over a given period at an appropriate local level.

**Landfill** - The deposition of waste into hollow or void space in the land, usually below the level of the surrounding land or original ground level in such a way that pollution or harm to the environment is prevented. Landfill sites have to be sited where an existing void is available; former mineral workings have historically been used for this purpose.

**Limestone** - A sedimentary rock consisting predominantly of calcium carbonate. Often used as aggregate (crushed rock) or a building stone.

M

**Materials resource efficiency** - The using of materials as efficiently as possible in order to minimise the total use of materials and energy, use of primary materials and disposal of waste to landfill; and maximise the recycled content of materials.

O

**Old minerals permission** - A planning permission held for the extraction of minerals (often ironstone in Northamptonshire) and any overlaying materials granted under the Town and Country Planning Acts between 1948 and 1983. Also includes dormant sites (which have valid planning permission but where there has been no substantial working of minerals between 22 February 1982 and 6 June 1995).

**Overburden** - Soil and other material that overlies a mineral deposit of economic value which must be removed in order to extract the mineral.

P

**Primary aggregates** - Aggregates that are comprised of naturally occurring materials such as crushed rock (e.g. limestone) and sand and gravel which are land won (in other words extracted directly from the ground).

**Progressive restoration / rehabilitation** - Restoration or rehabilitation undertaken progressively or having a staged approach, commencing when areas become available within the operational land.

**Public rights of way** - Footpaths, bridleways, tracks and lanes used as public paths and public byways.

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\(^6\) The Landfill (England and Wales) Regulations 2002 (SI No. 1559) (as amended), Schedule 1(4).
**R**

**Recovery** - The collection, reclamation and separation of materials from the waste stream. That is, any waste management operation that diverts a waste material from the waste stream and which results in a certain product with a potential economic or ecological benefit. Recovery mainly refers to the following operations: material recovery (i.e. recycling), energy recovery (i.e. re-use as a fuel) biological recovery (e.g. composting), and re-use.

**Recovery facilities** - A facility that recovers value, such as resources and energy, from waste prior to disposal. Recovery facilities include recycling, biological processing or treatment, and thermal treatment.

**Recycling** - The collection, separation, recovery and re-use of materials from waste that would otherwise require disposal and subsequent reprocessing in a production process of the waste materials either for the original purpose or for other purposes including organic recycling but excluding energy recovery (EEA 2006).

**Reduction** - Means either the (1) use of technology requiring less waste generation from production, (2) production of longer lasting products with lower pollution potential, or (3) removing material from the waste stream (i.e. green waste used in home composts).

**Reserves** - Mineral deposits which have been tested to establish the quality and quantity of material present and which could be economically and technically exploited. Permitted reserves are reserves having the benefit of planning permission for extraction.

**Resources** - A potential mineral deposit where the quality and quantity of material present has not been tested.

**Restoration** - The return of land to its former use, or an appropriate condition, and stable landform (using subsoil, topsoil and/or soil making material); may include the remediation of contaminated land.

**Re-use** - Any operation by which end of life products and equipment or its components are used for the same purpose for which they were conceived (EEA 2006).

**S**

**Sand and gravel** - Naturally occurring materials formed as a result of the disintegration of rocks through weathering processes, then transported and deposited by wind, water and ice. In Britain the most common rock types are flint, limestone, quartzite and igneous rocks. Sand and gravel are therefore derived from similar sources, and are similar in their composition, though they differ in the size of their respective particles.

**Secondary and recycled aggregates** - Materials that do not meet primary aggregate (e.g. sand, gravel and crushed rock) specifications in certain circumstances. Secondary aggregates are waste or by-products from industrial processes (e.g. scalpings and crusher fines from the production of primary aggregates), whereas recycled aggregates are reprocessed materials previously used in construction (e.g. demolition materials). Both secondary and recycled aggregates are used in the construction industry to replace the use of primary aggregates.

**Sharp sand** - Angular grains of sand which are suitable for use in concrete manufacture (also known as concreting sand).

**Significant integrated facility** - A waste management facility that incorporates a range of different treatment technologies (either advanced or preliminary) on one site.

**Site of Special Scientific Interest (SSSI)** - A site statutorily protected for its nature conservation, geological or scientific value.

**Soft sand** - Sand of a generally fine rounded grain shape (also known as ‘building sand’). Soft sand is used in a variety of building operations, such as the manufacture of mortar, and in the manufacture of asphalt for road construction purposes.

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**Special Protection Area (SPA)** – A designation under the European Union Directive on the Conservation of Wild Birds; also referred to as Natura 2000 sites.

**Sterilisation** - Where minerals cannot be extracted due to surface level development e.g. buildings on top of reserves which prevent access.

**Stewardship** - The practice of carefully managing land usage to ensure natural systems are maintained or enhanced for future generations.

**Sustainable waste management** - The efficient use of material resources with the aim of reducing the amount of waste ultimately produce. Where waste is generated in Northamptonshire it should be dealt with in a way that contributes to the social, economic and environmental goals of Northamptonshire.

**Treatment** - Defined according to a ‘three point test’ (1) a physical / thermal chemical or biological process including sorting that: (2) changes the characteristics of waste and (3) does so in order to reduce its volume, or reduce its hazardous nature, or facilitate its handling or enhance its recovery.

**Void space** - The capacity within a landfill or landraise available for the disposal of waste, together with cover, construction material, capping, engineering and restoration layers.

**Waste** - Waste is defined in circular 11/94 and in the Waste Management Licensing Regulations 1994 as ‘any substance or object which the holder discards, or intends to discard or is required to discard’ and may include production residues and some by-products.

**Waste minimisation** - The process of reducing the quantity of waste arising and requiring processing and / or disposal.
APPENDIX 5: LIST OF ACRONYMS

AMR - Annual Monitoring Report
BGS - British Geological Survey
CWS - County Wildlife Site
DPD - Development Plan Document
EA - Environment Agency
EEA - European Environment Agency
EM RAWP - East Midlands Regional Aggregates Working Party
ha - Hectare
HRA - Habitats Regulations Assessment
MPA - Mineral Planning Authority
MPG - Mineral Planning Guidance
MPS - Mineral Planning Statement
m - metre
Mt - Million tonnes
MWDF - Minerals and Waste Development Framework
NCC - Northamptonshire County Council
PPG - Planning Policy Guidance
PPS - Planning Policy Statement
SA - Sustainability Appraisal
SCI - Statement of Community Involvement
SEA - Strategic Environmental Assessment
SPA - Special Protection Area
SPD - Supplementary Planning Document
SSSI - Site of Special Scientific Interest
t - Tonnes
tpa - Tonnes per annum