Doncaster Local Plan

Local Plan Evidence Base

Identifying and Assessing Areas of Search (Aggregate Minerals) – Methodology and Process

Date: February 2016
Identifying and Assessing Areas of Search for Aggregate Minerals
Methodology and Process

Identifying and Assessing Areas of Search aims to identify and assess broad areas of search for mineral extraction across Doncaster.

The methodology will comprise two specific elements:
1) Identification and initial screening of Areas of Search for Aggregate Minerals
2) Detailed evaluation of the Areas of Search for Aggregate Minerals
3) Proposals for inclusion in the Local Plan

1) Identification and initial screening of feasible areas
Part 1 is a two stage process:
1a) Sourcing the information used to identify all relevant aggregate mineral areas

1b) Identifying broad screening questions aimed at ascertaining major constraints, preventing progression to part 2 (detailed evaluation)

2) Detailed evaluation of areas
Part two is a three stage process including:
2a) Referencing our adopted sustainability appraisal to identify features and designations relevant to minerals allocations (National legislation and policy, and local policy direction will also be used to identify the relevant thematic areas and guidance)

2b) Mapping proposed suitable areas identified in part 1 with features and designations identified part two, this stage will identify the relevant relationships to be considered at the next stage (workshop).

2c) Assessment of Areas of Search proposals by a panel of experts to review the information collected throughout the assessment to inform the final decision on which allocations should be included for consultation.

3) Areas of Search proposals for inclusion within the Local Plan

Note: The final choice on all proposals will be subject to a full council decision and public examination.
Part 1: Identification and initial screening of potentially suitable areas
Part 1 of the methodology seeks to identify ‘Areas of Search’ for inclusion within the Local Plan. It will include an initial broad screening of these to remove any identified potential areas which are fundamentally unsuitable for inclusion.

Stage 1a: Identification
Areas of Search proposals will be identified using:
- Analysis of minerals resource information, (British Geological Survey minerals resource data sets DiGMap – 100 and DiGMap v4_16 solid and superficial geology maps);
- Mineral Assessment Report 37 – SK 69 Bawtry, South Yorkshire, and;
- Mineral Assessment Report 92 – SE 60 Armthorpe, South Yorkshire
- BGS Review of Permitted Mineral Sites (active, ceased, restored, inactive and historic quarry map and database)
- BGS Review of Historic Mineral Planning Permissions map and database
- Review of existing site specific information (aerial photographs, recent map information etc) and the application of local knowledge

Stage 1b: Initial broad screening
Areas of Search proposals identified in Stage 1 will be explored in relation to a series of screening questions (see below). A technical judgement will be made on the broad suitability of an Area of Search, and the justification for progress (or otherwise) to Part 2 of the assessment will be set out in a table and added as an appendix in the assessment report.

Broad screening questions
- Does the area contain a viable resource? (Will it contribute toward maintaining the landbank of permitted reserves as required by national policy)
- Are there any major infrastructure / development constraints (for example accessibility limitations) rendering mineral development undeliverable?
- Are there any overriding major environmental constraints (for example SPA / SAC, functional flood plain (non-sand and gravel sites), EA flood alleviation scheme, such that the development is unlikely to be deliverable?
- Is there any evidence of historic / recent extraction in the area?
- Is the land likely to be available for the intended form of development within the relevant time period?

Any location receiving a negative response to one of more of the broad screening questions will not necessarily be removed from further consideration at this stage. Where the outcome of initial screening is uncertain, locations flagged up through this stage of the process will be reviewed by the panel as identified in stage 2c.
Part 2: Detailed evaluation of the potentially suitable areas identified under Part 1.
Part 2 of the methodology will provide a detailed, consistent and comparable appraisal of those sites or areas which have passed through from the Part 1 Identification and Screening process. The aim of this part of the assessment process is to facilitate identification of the most suitable locations for minerals-related development through detailed appraisal, taking into account any identified future requirements as set out within the Core Strategy. This is based around the councils adopted sustainability appraisal criteria, national and local policy guidance.

Stage 2a: Identification of relevant features and designations
This stage will identify the main attributes of land in terms of physical and environmental features and designations. A range of relevant decision making criteria relating to the features and designations will be used to assess the areas in more detail. We will use our adopted sustainability appraisal criteria, national and local policy and guidance to identify relevant themes/constraints. The range is not intended to be exhaustive, rather it seeks to identify those factors that will enable meaningful comparison of site suitability, sensitivity and potential impacts, bearing in mind that the purpose of identifying areas is to establish ‘in principle’ suitability.

Paragraph 143 of the National Planning Policy Framework (NPPF) states…
In preparing Local Plans, local planning authorities should set out environmental criteria, in line with the policies in the Framework, against which planning applications will be assessed so as to ensure that permitted operations do not have unacceptable adverse impacts on the natural and historic environment or human health, including from noise, dust, visual intrusion, traffic, tip- and quarry-slope stability, differential settlement of quarry backfill, mining subsidence, increased flood risk, impacts on the flow and quantity of surface and groundwater and migration of contamination from the site; and take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality;

Paragraph 144 goes on to say ‘When determining planning applications, local planning authorities should give great weight to the benefits of the mineral extraction, including to the economy’

Where possible and practicable the NPPF criteria set out above will form the basis of the assessment criteria. However it should be noted that a more detailed assessment will take place through the development management process as and when any specific planning applications are submitted. The information included within this broad scoping process is based on sustainability appraisal objectives adopted by the council. In addition to the constraints identified, each area is likely to require the consideration of unique local factors which could affect its designation within the Local Plan.

Stage 2b: Mapping and Identification of Additional Features
This stage will use a Geographical Information System to identify further features and designations within the areas of search proposals along with those identified at stage 1. At this stage the methodology will:
- Identify local/non statutory features and designations within an Area of Search; and
- Identify international/national statutory designations within an Area of Search and within 1km of a Area of Search.
- Identify Airport Consultation Zone
- Identify Nightjar Foraging Habitat
- Identify Local Wildlife and Geological Sites
- Biodiversity Opportunity Mapping
- Best and most versatile soil
- Identify Listed Buildings
- Identify Scheduled Monuments
- Identify Parks and Gardens of Special Interest
- Identify Parks and Gardens of Local Historic Interest
- Identify Conservation Areas
- Coal Authority Land Instability
It is important to note any potential interaction between an Area of Search and features/designations will depend significantly on the type and scale of minerals proposal, and would need to be assessed in detail at the planning application stage.

A results table and map of each Area of Search will be produced as a visual representation of the features and designations identified around each Area of Search. This will be used and expanded upon at Stage 2c of the methodology.

**Stage 2c Assessment of Areas of Search Proposals**
The purpose of this stage is to assess the Areas of Search proposals identified throughout the methodology through the application a range of expert knowledge and local understanding.

A working group will be set up to discuss all mineral Areas of Search proposals included at this stage. The process will include consideration of the factors identified as being relevant to each Area of Search proposal such as:

- Employment representations and proposals
- Housing representations and proposal
- Transport
- Adverse impacts resultant from site development;
- Any opportunities that may arise as a result of the development (e.g. through contribution to delivery of green infrastructure through the site restoration process), and;
- Potential mitigation measures that could be applied.

Representatives on the working group will include (as appropriate):

- Natural and Built Environment (Ecology, Biodiversity, Flooding, Geodiversity / Geology, Historic and Cultural Environment)
- Landscape *(where will we get a landscape bod?)*
- Development Management
- Economy, Housing and Employment
- Transport (including waterways)
- Regeneration
- Pollution Control

The working group will draw on expert knowledge and provide a balanced view on applicable considerations. Record of discussions, meetings and emails will be used to inform the inclusion of an Area of Search proposal

**3) Areas of Search proposals for inclusion within the Local Plan**
The following literature has been considered to help identify the features and designations which will be used to assess the identified locations derived through Part A:

**Assets Example:**

**Datasets**

Natural England - (Areas of Outstanding Natural Beauty, Sites of Special Scientific Interest, National Nature Reserves, Special Areas of Conservation, Special Protection Areas and Ramsar Sites)

Historic England - (Scheduled Monuments)

**References:**

**Relevant national planning guidance**


**Sustainability Appraisal Objectives** (2015)
Appendix 1
The modified evaluation questions (based on Doncaster’s adopted SA criteria) are:

**Stage One Criteria:**

1. Does the area contain a viable resource? (Will it contribute toward maintaining the landbank of permitted reserves as required by NPPF and defined in LAA (SA objective 4))

2. Are there any major infrastructure / development issues (e.g. accessibility limitations) rendering mineral development undeliverable? (SA objectives 1 (Maintain and strengthen economic growth) and 8 (capacity of existing infrastructure to support new development proposals))

3. Is there any evidence of recent / historic extraction in the area? (Quantifiable information)

4. Are there any overriding major environmental constraints (for example SPA / SAC, functional flood plain (non-sand and gravel sites), EA flood alleviation scheme, such that the development is unlikely to be deliverable? (SA objective 12 (Protect... sites of international importance))

5. Is the land likely to be available for the intended form of development within the relevant time period? (Is it deliverable with the Local Plan time frame?)

**Stage Two Criteria:**

**Areas of Search Assessment Records**

<table>
<thead>
<tr>
<th>Area No. …</th>
<th>Resource and Borehole Data: Sand and Gravel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location, Description and Size: …</td>
<td></td>
</tr>
</tbody>
</table>

**Assessment Criteria and Summary**

Landscape Character (SA objective 12b)

BGS Brit Pit Data and Historic Permissions

Housing Proposals (SA objective 5)

Employment Proposals (SA objective 1)

Multiple / Mixed Use options

Transport Proposals and Highways (SA objective 3)

Natural Environment (National and Local Biodiversity, Ecology, Geodiversity) (SA objective 12)

Impact on (or the setting of historic and cultural heritage). Listed Building, Conservation Area, Parks and Gardens of Historic Value and Special Interest, Scheduled Monuments (SA objective 13)

Best and Most Versatile Land (SA objective 14)

Air Quality Management Areas (SA objective 14)

1 positive or negative effects dependent on restoration proposals
Groundwater Source Protection Zone (SA objective 14b)

Flood zones

Coal Authority Land Stability

Main Potential Adverse Impact (if any)

Conflict with incompatible Uses

Opportunities (including Biodiversity opportunity mapping BOM)

Airport Consultation Zone

Cumulative Impacts

Development Management Issues

Summary

2 will impact on restoration proposals
3 Less vulnerable or water compatible development / appropriate restoration proposals could alleviate flooding
4 [Link](http://mapapps2.bgs.ac.uk/coalauthority/home.html)
SA Objectives (2015 SA Scoping Report)\textsuperscript{5}

1. Maintain and increase Doncaster’s growth/prosperity and diversify its economic base (no relationship to the assessment criteria)

2. Reinforce and support community identity and pride (no relationship to the assessment criteria)

3. Improve accessibility to place and services, both within and outside of the borough (no relationship to the assessment criteria)

4. Ensure resources are available and efficiently used to sustain development and reduce waste and consumption (minerals and waste)

5. Provide affordable, good quality housing that is available to everyone, including vulnerable and disadvantaged groups (relevant)

6. Reduce social exclusion and disadvantage (no relationship to the assessment criteria)

7. Make places that are safe, attractive, culturally interesting and distinctive to live, work and travel in (no relationship to the assessment criteria)

8. Renew and reuse existing buildings, land and infrastructure (no relationship to the assessment criteria)

9. Improve the health and well-being of the borough’s population (no relationship to the assessment criteria)

10. Provide education and training provision to build the skills and capacity of the population (no relationship to the assessment criteria)

11. Manage and adapt to climate change (relevant – \textit{consideration of contributing to the creation of flood alleviation schemes?})

12. Protect, increase and enhance the natural environment, including the landscape, its underlying geology and wildlife habitat (relevant)

13. Protect, conserve and enhance the historic and cultural heritage (relevant)

14. Protect and enhance soil, air and water quality (watercourses and ground water) (relevant)

\textsuperscript{5} S\textbackslash Development & Planning\textbackslash Spatial Planning\textbackslash LOCAL PLAN\textbackslash Sustainability Appraisal
Please note: the system of assessment and appraisal used will not attempt to give any particular weighting to the assessment of the options. The appraisal is an objective-led approach which uses judgment and values to determine the ‘significance’ of the effects. Significance is, however, essentially subjective and relies on qualitative, contextual-based analysis, although some effects will clearly be more significant than others.

Please note - sustainability appraisal has been carried out separately.
Appendix Two: Landscape Capacity for Mineral Working