



**British
Geological Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL



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Case Study: Defining Mineral Safeguarding Areas in Staffordshire County Council

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Introduction

- In 2006, Staffordshire County Council (SCC) commissioned BGS to review its MCAs.
- Needed to meet the requirements of reforms to the planning system.
- Needed to take account of changes to national and regional policy since the adoption of the current Minerals Local Plan in 1999.
- Information shared with 8 district councils (Stoke On Trent is a unitary authority).



Overview

Preparing Core Strategy

- Tackle issues associated with the supply of minerals within MPA for next plan period.
- Review safeguarding policies.
- Issues and Options (conducted before BGS study).

Stage 1 – Identifying mineral resources



Stage 2 – Consultation



Stage 3 – Defining MSAs



Stage 4 – Defining MCAs



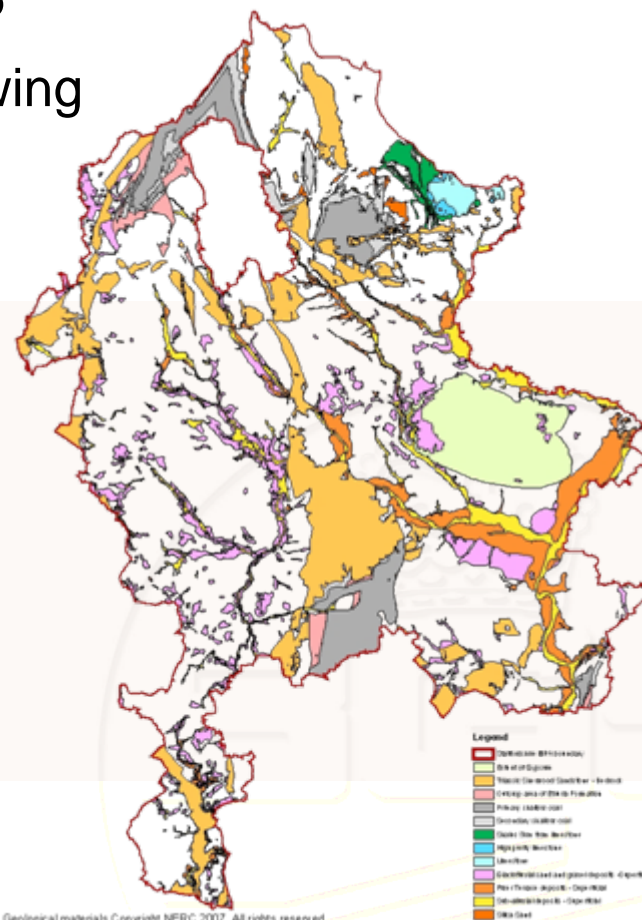
Stage 5 – Implementation



Stage 1 – Identifying Mineral resources

Using the BGS mineral resource data, the following mineral resources were identified:

- Sand and gravel
- limestone
- brick clay (Etruria Formation)
- shale for cement manufacture
- silica sand
- gypsum/ anhydrite
- building stone and
- shallow coals with associated fireclays



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Stage 2: Consultation

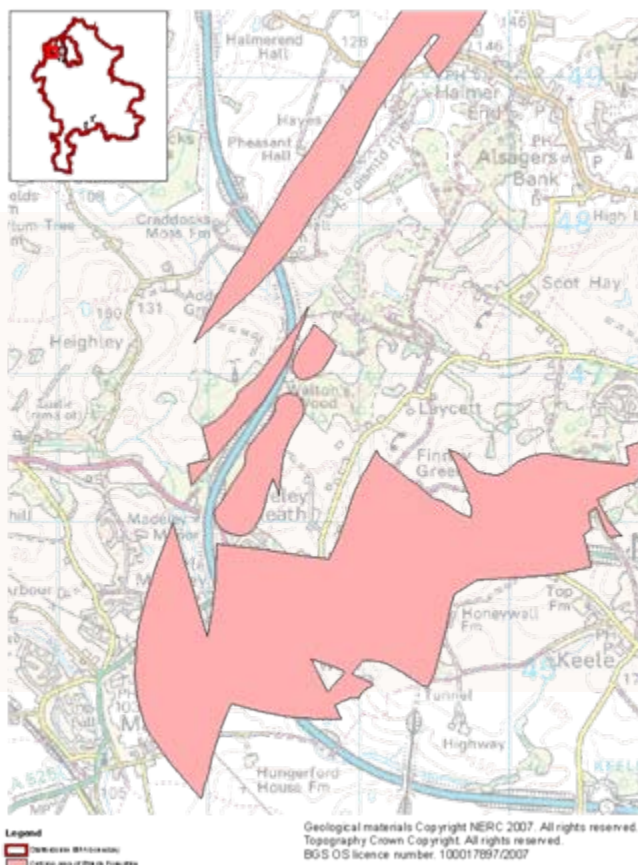


- Conducted by email, telephone or on-site meetings.
- Gained local knowledge about the quality and viability of working different formations.
- Industry often have detailed mineral exploration surveys.
- Resource line work amended after consultation.



Example: Brick Clay

Largest output of clay & shale in Britain (912,000 tonnes in 2004).

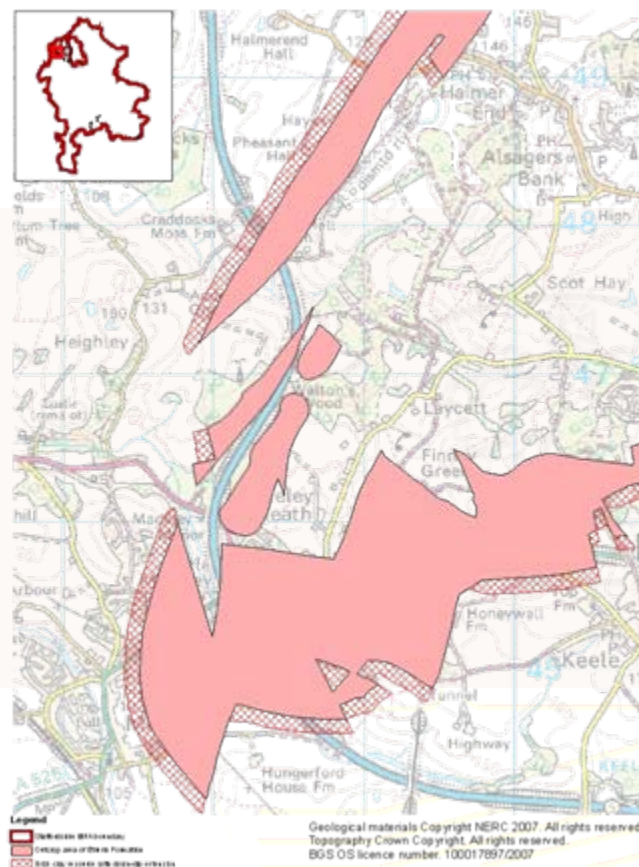
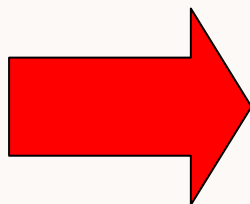
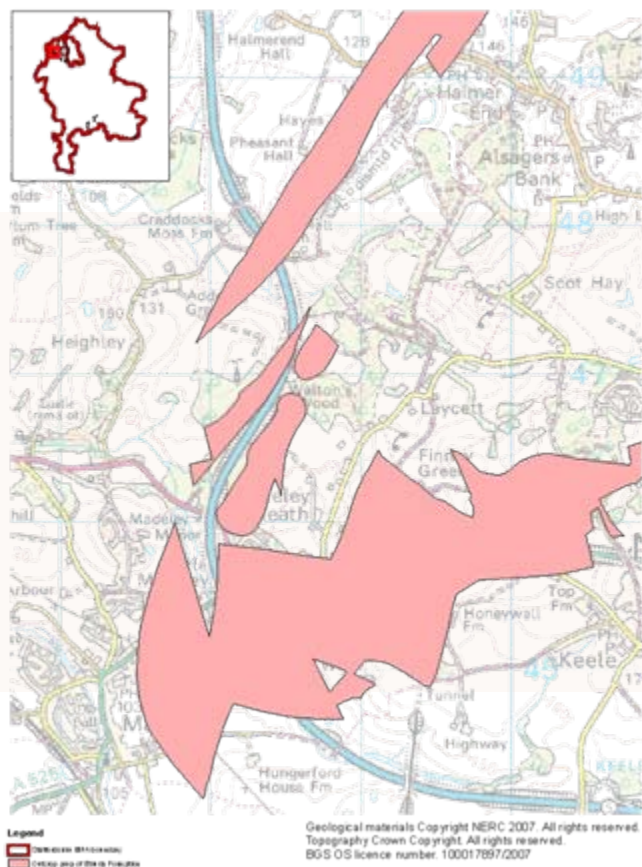


- Principal clay resource in Staffordshire.
- Pressure on remaining resource has increased.
- Depth of overburden that can be economically removed therefore also increased.
- Down-dip continuation of resource examined.



Example: Brick Clay

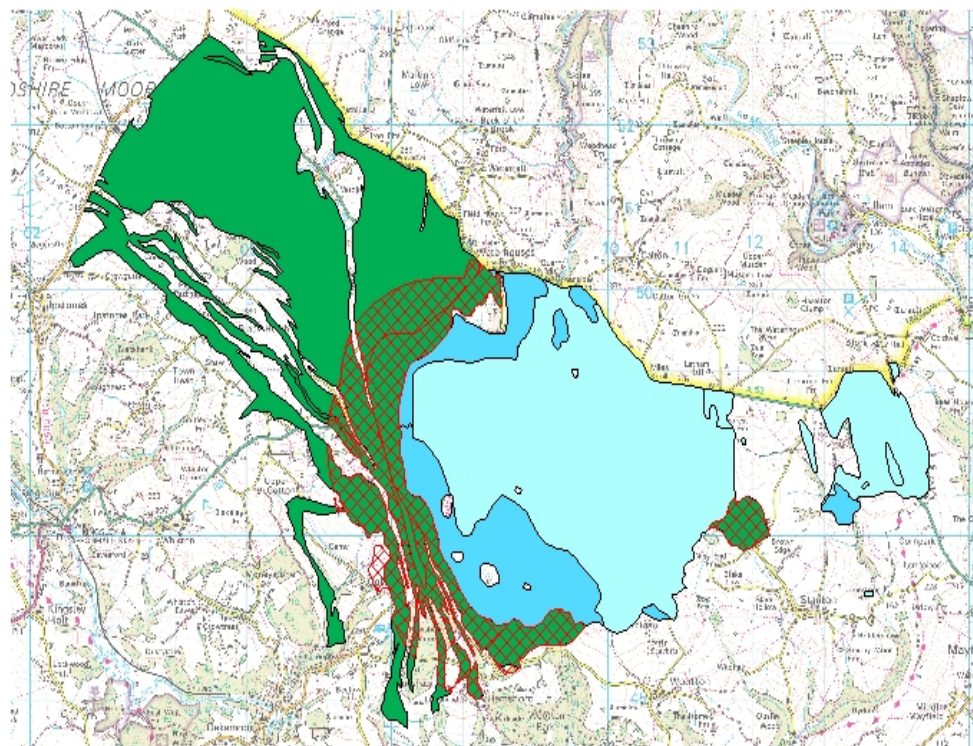
Largest output of clay & shale in Britain (912,000 tonnes in 2004).









Example: Cement Shale

- Relative importance of transport costs decreased.
- Increased limits from of cement shale resource boundary from 1km to 5km from limestone.



1:75,000

Legend

-  Shales 1km from limestone
-  Shales 5km from limestone
-  High purity limestone
-  Limestone

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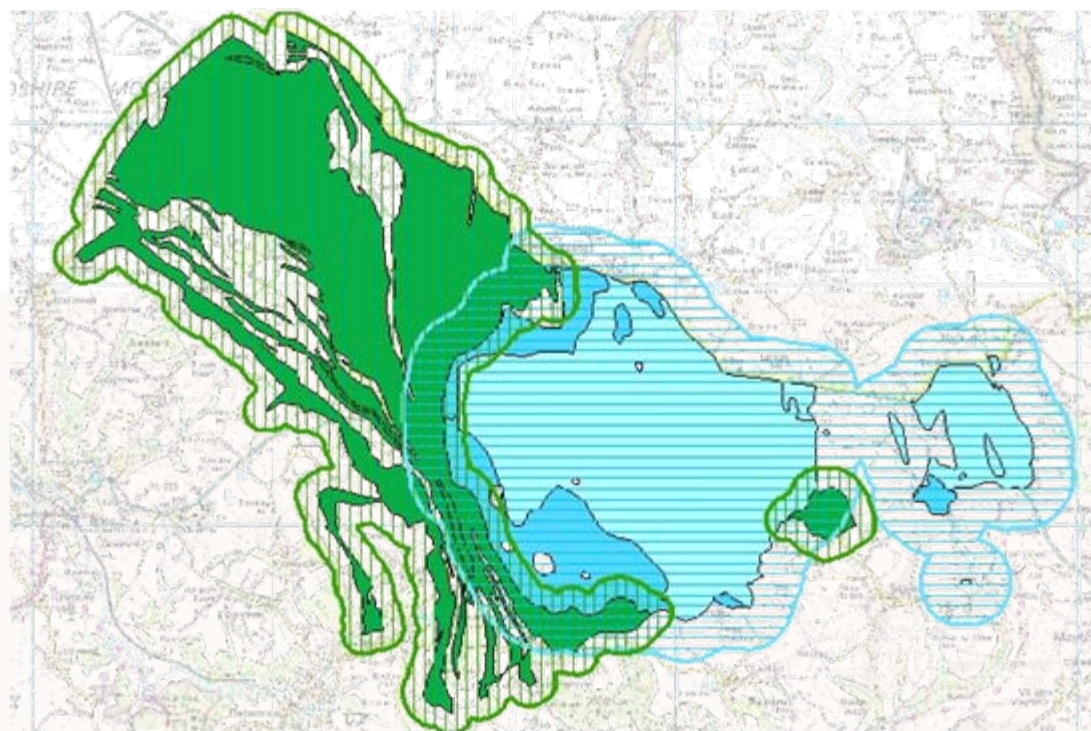
Stage 3: Defining MSAs

- Buffered mineral resources.
- Need to safeguard entire resource.
- Ensures that developments proposed in close proximity of the resource do not impact on the potential winning of that resource.
- Inexact nature of geological boundaries.

Rock type and extraction method	Resource	Buffer
Hard Rock (generally requires blasting)	Limestone	500 m
Soft Rock (requires no blasting)	Sand and Gravel, Coal and Fire Clay, Silica Sand, Cement Shale, Building Stone	250 m
Clay (uses small excavators)	Brick Clay	50 m
Underground gypsum mining	Gypsum	0 m



Effect of a buffer on resource



Legend

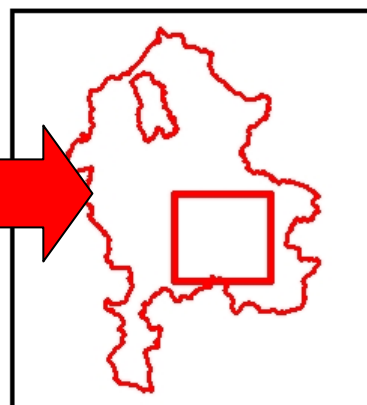
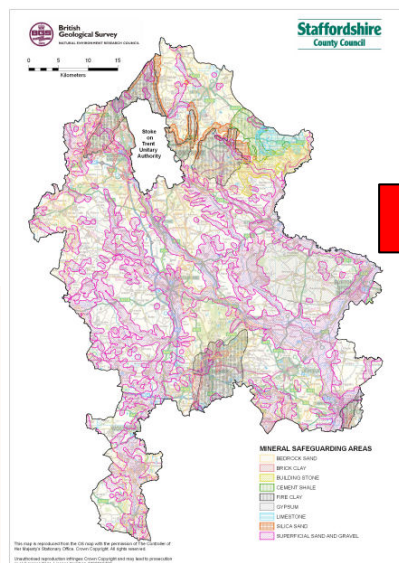
-  MSACement
-  MSALimestone
-  Shales 5km from limestone
-  High purity limestone
-  Limestone

1:75,000

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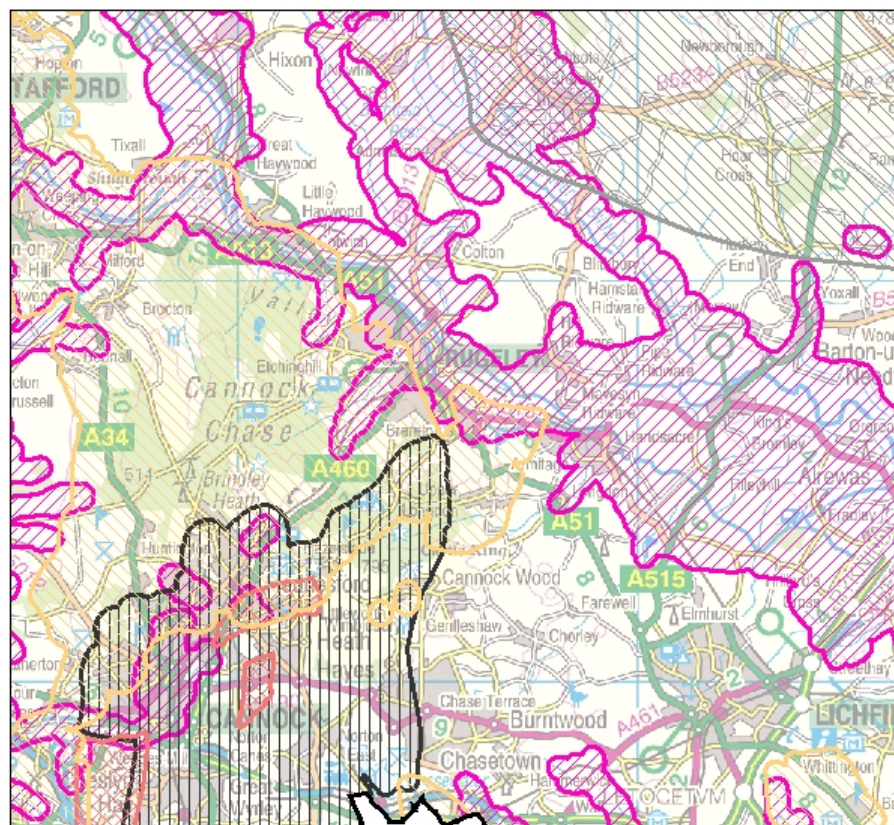


MSA Map

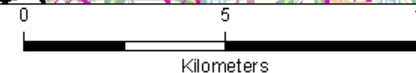


MINERAL SAFEGUARDING AREAS

- BEDROCK SAND
- BRICK CLAY
- BUILDING STONE
- CEMENT SHALE
- FIRE CLAY
- GYPSUM
- LIMESTONE
- SILICA SAND
- SUPERFICIAL SAND AND GRAVEL



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Stage 4: Defining MCAs

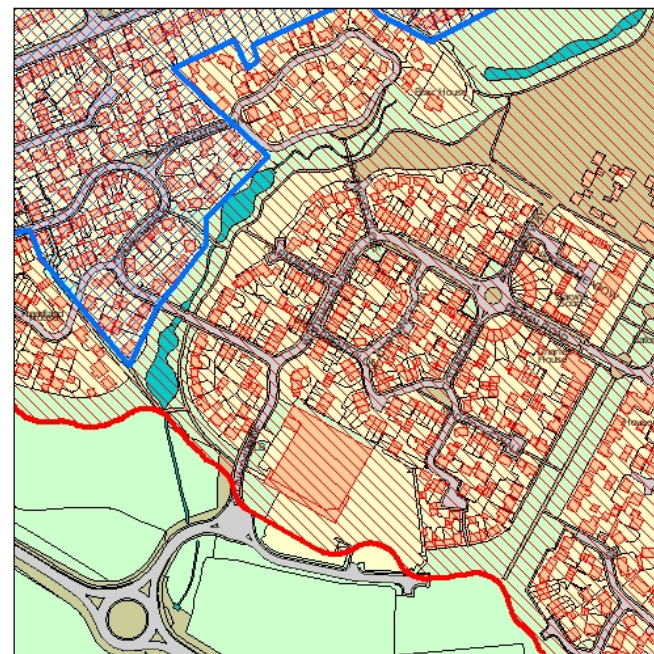
- Two-tier Authority – may use MCAs.
- Consultation needs to be practical & straight forward.
- SCC provide districts with list of types of application exempt from consultation.
- MSAs modified to form MCAs based on local factors, policy and practical planning experience within the MPA.



Local planning experience - 1

Removal of urban areas >20ha



- Rare for situations of prior extraction to occur within urban areas in SCC.
- Can reduce number of consultations.
- Used OS MasterMap ® to gain up-to-date information.



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Legend

-  ODPM Urban Areas dataset 2001
-  Urban Areas defined using OS MasterMap



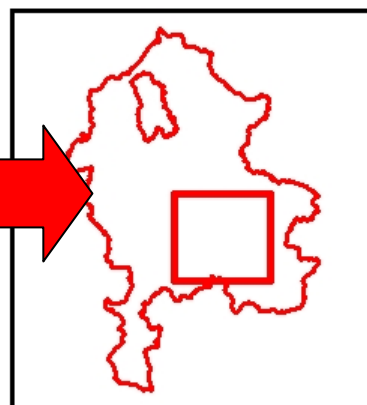
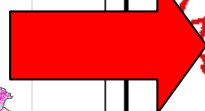
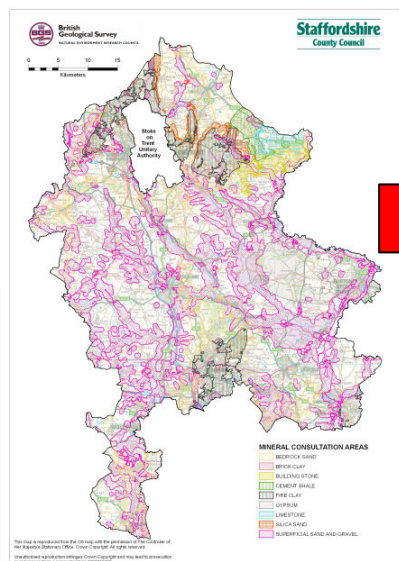
Local planning experience - 2

Removal of planning permissions

- Current and previously worked areas removed from MCAs.
- Highlights the real extent of viable resource and thus highlight need for safeguarding the remaining resource.
- Any remaining area <5ha in size and more than 500m from existing permitted site removed.

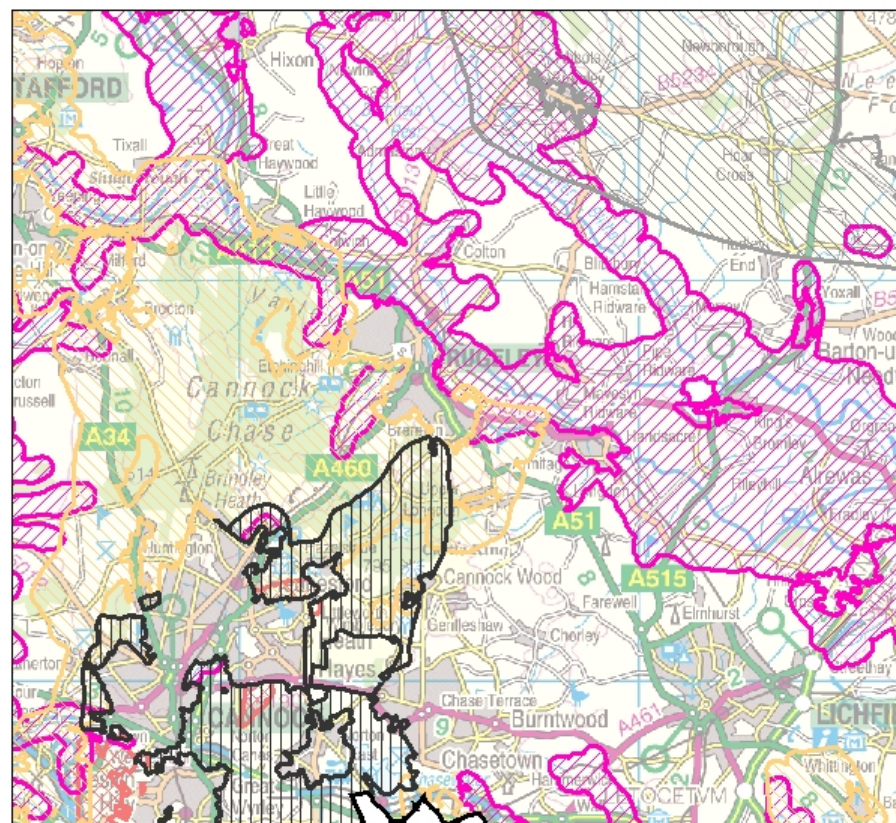


MCA Map



MINERAL CONSULTATION AREAS

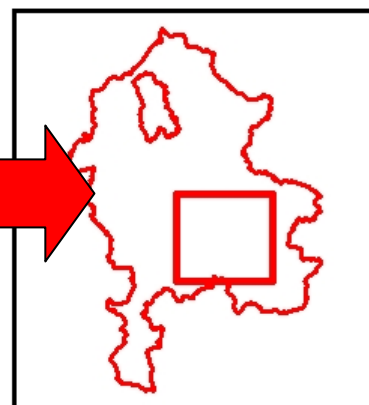
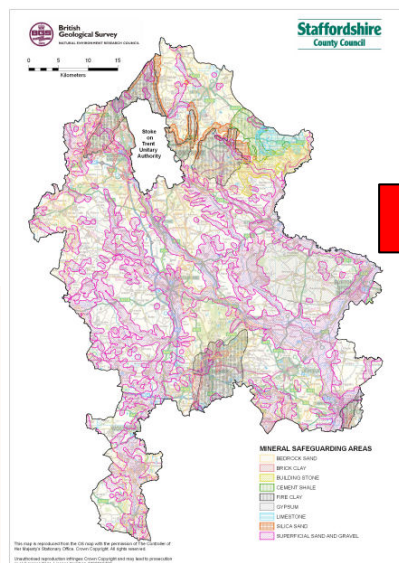
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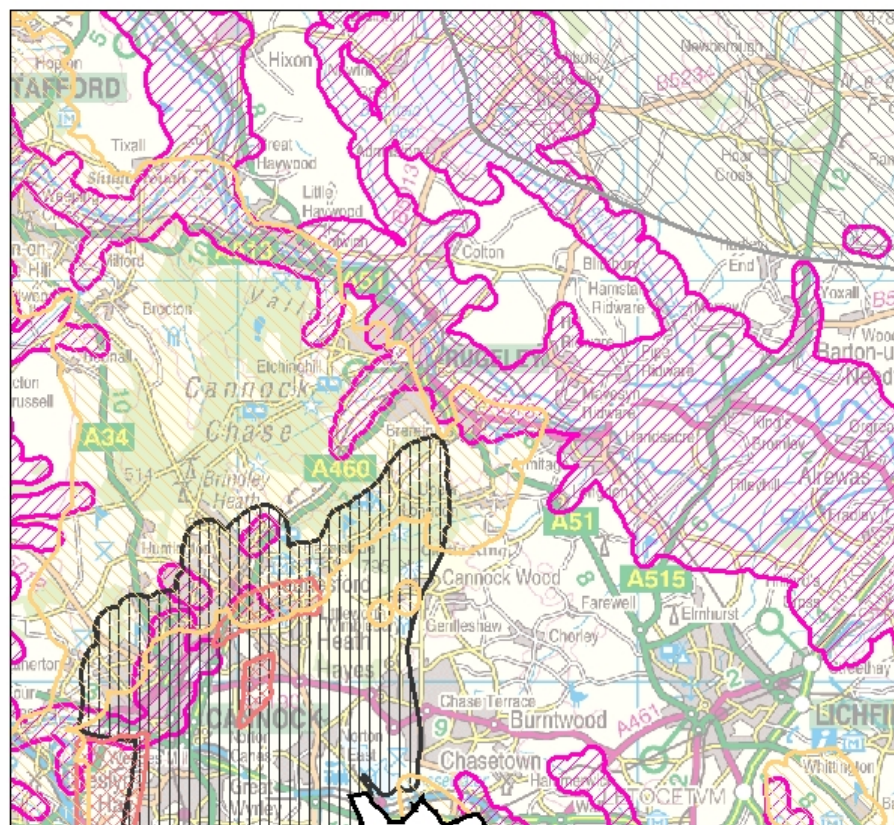


MSA Map



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Stage 5: Implementation

- Consulting on preferred options (April 2007).
- Submit Core Strategy to Secretary of State (October 2007).
- Subject to modifications by Secretary of State, policies adopted.
- MCAs used by Districts as a mechanism for consultation with MPA.
- Decision to permit non-mineral development by MPA within MCA based on Safeguarding policy within Core Strategy.



Stage 5: Implementation

Staffordshire's current safeguarding policy is that non-mineral development should not be permitted within the MCA unless:

- **The mineral is proved to be of no economic value**; this requires the developer of the 'other' development to prove the existence or otherwise, quantity or quality of the mineral prior to determination of the planning application of the 'other' development. On the basis of the information provided, a decision is made as to whether to object to the application, recommend prior exploitation of the mineral prior to other development taking place or to raise no objections;
- **extraction of the mineral would be environmentally unacceptable**; and
- **there is an overriding need for the 'other type of development'**; or an acceptable quantity of mineral can be extracted in an environmentally acceptable manner prior to the other development taking place.



Thanks

- **Matt Griffin – Principal Planning Officer (SCC)**

- **Tim Billings – Senior Technical Assistant (SCC)**

- **Paul Wilcox – Head of Development and Waste Planning (SCC)**

