

Igneous Rock

IGNEOUS ROCK

a. Production

- 4.1 Igneous rock intrusions of economic importance occur on the flanks of Charnwood Forest and to the south west of Leicester. There were 7 operational igneous rock quarries within Leicestershire in 1992. National and County production figures for igneous rock are shown below for the period 1984 to 1993. These indicate significant increases in production. Since the mid 1970's there has been virtually uninterrupted growth with output passing its previous 1975 peak in 1981/2 and then continuing to rise. The County contribution to regional crushed rock production has also gone up from about 38% in 1984 to almost 52% in 1993.
- 4.2 The reasons for the increases in the County's production are that Leicestershire provides the nearest rock resources to the ever-expanding markets of south-eastern England, increased investment has occurred in major roads and extensive permitted reserves have been available at large quarries in the County. Average annual production from Leicestershire over the period 1989 to 1993 was 15.2 million tonnes. This represents 47.8% of regional crushed rock production over this period.

<u>Igneous Rock Production</u>			
	GB (million tonnes)	Leicestershire* (million tonnes)	County as % of Regional Crushed Rock Production
1984	30	7.61	38.4
1985	31.7	8.45	39.3
1986	34	9.6	42.2
1987	39.5	10.9	41.3
1988	44.6	12.9	40.4
1989	46.8	14.3	42.6
1990	49.5	16.2	47.6
1991	46	13.64	45.1
1992	48.6	15.65	51.8
1993	49.2	16.46	51.8

* includes a small amount from Derbyshire
 Source: Business Monitor PA1007 (GB)
 AM Surveys (Leicestershire)

- 4.3 With regard to the distribution of sales, the 1993 AM statistics show that 61% of Leicestershire's igneous rock production was consumed outside the County. This was slightly higher than in 1989. The main export destinations were the South East (20% in 1993 compared to 24% in 1989), the rest of the East Midlands particularly Northamptonshire (17.5% compared to 13% in 1989), East Anglia (8% compared to 9%) and the West Midlands (10% compared to 9%). The proportion of material transported by rail was 22%, slightly higher than in 1989.
- 4.4 The level of permitted reserves as at the end of December 1989 was 412 million tonnes including 60 million tonnes at dormant sites. Since 1990, reserves have either been permitted or there is a resolution to grant permission subject to a Section 106 Agreement at 4 operations totalling 190 million tonnes. Permitted reserves as at the beginning of 1992 would be sufficient for 22 years based on average production over the five year period 1989-93. Reserves are not however equally divided between operations. Of the seven operational sites, 4 operations have less than 15 years life based on average production over the last 5 years, although at 2 of these operations the County Council has since granted planning permission for additional extraction.
- b. Demand Forecasts**
- 4.5 Paragraphs 3.6 and 3.7 above set out the current national and regional guidelines for the provision of aggregates. The anticipated regional production of crushed rock between 1992 and 2006 is 505 million tonnes. The County's contribution to regional crushed rock production has gone up from about 38% in 1983 to 51.8% in 1992/3. The contribution from the County's igneous rock quarries to regional crushed rock production (including a small amount from a single Derbyshire site) over the five year period 1989 to 1993 was 47.8%. This has been endorsed by the East Midlands Regional Planning Forum as the County's sub-regional apportionment figure for igneous rock. Applying this sub-regional apportionment figure, the county's requirement over the period 1992-2006 would be 241.4 million tonnes, an annual average of 16.1 million tonnes.
- 4.6 Rock resources suitable for road making and building purposes are generally absent from south of a line between the Humber and Exe estuaries. Leicestershire is thus ideally placed to serve the South East, East Anglia and the East Midlands. Rock is transported to the South East, primarily North and West London, for use as coated roadstone and railway ballast. Leicestershire igneous rock is particularly hard and strong such that it is suitable for high quality uses for which lower standard aggregates cannot be substituted. Greater attention towards road surfacing materials with a longer life and higher specifications for railway ballast will make Leicestershire rock increasingly in demand.

c. Meeting Demand Requirements

4.7 The table below sets out the situation for igneous rock production within Leicestershire based on the sub-regional apportionment of the regional requirement set out in MPG6 as endorsed by the Regional Forum and the provision of a 20 year landbank at the end of the plan period (2006). (MPG6 suggests that a longer period than 7 years would be appropriate for landbanks for rock. Whilst not specifying how long that should be, 20 years seems to have been generally accepted as a reasonable timescale).

Regional Requirement 1992-2006:	505 million tonnes (MPG6 para. A5.3)
County Requirement 1992-2006:	241.4 million tonnes (Assuming 47.8% contribution)
20 yr landbank as at 2006:	322 million tonnes (Based on average annual output 1992 - 2006)
TOTAL REQUIREMENT:	563.4 million tonnes
Permitted reserves as at 1.1.92:	340.6 million tonnes
Reserves permitted since 1.1.92:	145 million tonnes
Reserves permitted subject to S.106 Agreement:	45 million tonnes
SHORTFALL 563.4MT MINUS 530.6MT: 32.8MT	

4.8 Minerals and Waste Disposal Policy 6 of the Leicestershire Structure Plan (1994) states

“Planning permission for igneous rock will only be granted where the proposal is to extend an existing operational quarry to ensure continuity of supply, provided that the environmental impact and other effects of the proposed development can reasonably be kept to an acceptable level. New quarries will only be considered if, in exceptional circumstances, the continuity of supply could not be met from existing quarries, or extensions to them, and provided that the environmental impact and other effects of the proposed development can reasonably be kept to an acceptable level”.

Given the level of permitted reserves in relationship to future requirements as set out above, the County Council does not consider that it is necessary to make specific provision in this plan for future igneous rock extraction. In most cases, the long-term quarries have sufficient plant capacity to increase output in the event of higher than expected demand, and extensions to such quarries might be appropriate to ensure continuity of supply provided that the effects of the proposed operations in the vicinity of the site would be environmentally acceptable, having taken account of the potential alleviation of any impacts by appropriate measures. It is not considered appropriate at the current time to contemplate any new greenfield sites for igneous rock production.