This Plan has been prepared in accordance with the provisions of the Town and Country Planning Act 1971 (as amended) and the Town and Country Planning (Structure and Local Plans) Regulations 1982, and was adopted by the Kent County Council on 15 May 1986.

GIVEN under the Seal of the Kent County Council this thirtieth day of July Nineteen hundred and eighty-six.

THE COMMON SEAL of the KENT COUNTY COUNCIL was heretofore affixed in the presence of:

[Signature]
Chief Solicitor

For County Secretary
KENT COUNTY COUNCIL
MINERALS SUBJECT PLAN:
BRICKKERTHR
WRITTEN STATEMENT
FORMALLY ADOPTED BY
THE KENT COUNTY COUNCIL
13TH MAY 1966

Kent County Council,
Springfield,
Maidstone,
Kent.

W.H. Drakin,
County Planning Officer
## CONTENTS

<table>
<thead>
<tr>
<th>Paragraph</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART 1</td>
<td></td>
</tr>
<tr>
<td>1.1 INTRODUCTION</td>
<td>B1</td>
</tr>
<tr>
<td>1.4 Strategic Planning Context</td>
<td>B1</td>
</tr>
<tr>
<td>1.5 National/Regional Guidelines</td>
<td>B2</td>
</tr>
<tr>
<td>1.8 Kent Development Plan</td>
<td>B2</td>
</tr>
<tr>
<td>1.9 The Kent Structure Plan</td>
<td>B3</td>
</tr>
<tr>
<td>PART 2</td>
<td></td>
</tr>
<tr>
<td>2.1 BRICKEARTH</td>
<td></td>
</tr>
<tr>
<td>2.1.1 Definition</td>
<td>B5</td>
</tr>
<tr>
<td>2.1.2 Occurrence and Definition</td>
<td>B5</td>
</tr>
<tr>
<td>2.1.4 Proposals Area</td>
<td>B5</td>
</tr>
<tr>
<td>2.1.5 Uses and Market</td>
<td>B6</td>
</tr>
<tr>
<td>2.1.6 Agriculture</td>
<td>B6</td>
</tr>
<tr>
<td>2.1.9 Future Demand for Brickearth</td>
<td>B7</td>
</tr>
<tr>
<td>2.1.11 Land Requirements</td>
<td>B7</td>
</tr>
<tr>
<td>2.1.14 Location of Future Areas for Working</td>
<td>B8</td>
</tr>
<tr>
<td>2.1.32 Working and Restoration Techniques</td>
<td>B10</td>
</tr>
<tr>
<td>2.1.35 Highways Issues</td>
<td>B12</td>
</tr>
<tr>
<td>2.1.30 Environmental Impact</td>
<td>B13</td>
</tr>
<tr>
<td>2.1.31 Landscaping</td>
<td>B13</td>
</tr>
<tr>
<td>2.1.32 Public Rights of Way</td>
<td>B14</td>
</tr>
<tr>
<td>2.1.33 Protection of Archaeological Sites</td>
<td>B14</td>
</tr>
<tr>
<td>APPENDIX 1 Supplementary Planning Guidance on the steps likely to be</td>
<td></td>
</tr>
<tr>
<td>required to achieve high quality agricultural restoration at</td>
<td>(1)</td>
</tr>
<tr>
<td>brickearth workings</td>
<td></td>
</tr>
<tr>
<td>APPENDIX 2 Supplementary Planning Guidance on the steps likely to be</td>
<td></td>
</tr>
<tr>
<td>required to achieve a satisfactory access at areas proposed for</td>
<td>(1v)</td>
</tr>
<tr>
<td>future brickearth extraction.</td>
<td></td>
</tr>
<tr>
<td>PROPOSALS MAP: Key Plan and Inset</td>
<td></td>
</tr>
</tbody>
</table>

The front cover depicts an early scene of hand brick-making, from a print published by Rowley and Foresters in 1821.
1 Introduction

1.1 The Minerals Subject Plan is being prepared in stages. The first part of the Plan containing policies for sand and gravel and ragstone was adopted by the County Council in November 1980. Policies for the other minerals occurring in Kent, namely chalk, clay and fullers earth, coal and oil, will be prepared in due course.

1.2 The purpose of the Minerals Subject Plan is to develop and amplify the objectives and policies of the Structure Plan with respect to specific minerals and minerals-related development. The policies of the Subject Plan together with the reasoned justification for them are intended to provide clear guidance to the general public, minerals industry and other interested parties as to the County Council’s approach to mineral extraction in Kent. Specifically, the objectives of the Brickearth part of the Plan are as follows:

(a) assess future needs for brickearth and the extent to which local supplies should meet demand.

(b) Identify and safeguard brickearth resources of economic importance.

(c) review previous allocations and identify areas for future working to which there are less planning and agricultural objections.

(d) establish policies on methods of working, restoration, and after-use with particular regard to minimising the loss of agricultural productivity.

(e) establish policies on providing adequate protection for the environment in areas close to brickearth extraction sites.

(f) identify suitable areas of access to brickearth workings and for transport of brickearth from extraction sites to brickworks.

1.3 The definitions of "brickearth" and "stockbrick" used in this Plan are given in paragraph 2.1 below.

STRATEGIC PLANNING CONTEXT

1.4 This part of the Subject Plan is being prepared now following a Government review of the stockbrick industry, and also in the context of the Kent Structure Plan, which has been republished with Alterations in January 1984. Background information to this part of the Subject Plan is contained in the Report of Survey. These various documents are summarised below so that as required by the
Regulations, this Plan is self-contained and does not require reference to other documents. However, for further details, reference should be made to the original reports.

National/Regional Guidelines

1.5 In 1956 an agreement was drawn up between the Government, Kent and Essex County Councils and the brickyard industry. It proposed that brickyard extraction in the two Counties should cease by 1996. It also set out special restoration conditions to be imposed on brickyard workings and proposed land allocations sufficient to enable the industry to continue production at a rate of 150 million bricks a year for 40 years from 1956. However, the agreement was never concluded.

1.6 By 1981 it had become evident that, because of reduced production of stockbricks, the Brickyard Committee allocations would not be worked out by 1996. A review of the 1956 Agreement was therefore carried out by the Government. In 1983 the following conclusions were published in a letter written on behalf of the Secretary of State for the Environment:

(a) The statutory planning system, in particular the preparation of subject plans, is the most satisfactory method of ensuring that the allocations of land for brickyard working is sensitive to both the long-term needs of agriculture and to the national level of demand for stockbricks, which the Review expected will continue at about current levels. If these are maintained the area of land required will be much less than was anticipated in 1956. The 1996 limit of extraction is therefore cancelled.

(b) The allocation of land for brickyard working will be determined within the statutory land use planning system. The Government expect that, within this system, the mineral planning authorities will make provision for the regular review of the allocation of land, taking full account of prevailing agricultural considerations balanced against the level of demand for stockbricks. In addition, suitable restoration and aftercare conditions should be applied to all new permissions for brickyard working and, following the review required by the Town and Country Planning (Minerals) Act 1981, to current permissions as appropriate.

1.7 In principle the County Council has accepted the Secretary of State's conclusions. This part of the Minerals Subject Plan is being prepared as a consequence of that decision, which includes the acceptance that provision should be made for continuation of the stockbrick industry for some 15 years or more.

Kent Development Plan

1.8 The Kent Development Plan contained the County Council's planning policies for brickyard prior to the Structure Plan and this Minerals Subject Plan. It identified "Surface Mineral Reserves" and stated "Account will be taken of the importance of these deposits when considering applications to develop land within these areas". The areas identified were based on those of the 1956 Brickyard Committee. It is intended that these areas should be superseded by the proposals in this Plan.
The Kent Structure Plan

1.9 The Kent Structure Plan (as published in January 1986) adopts as its principal theme the encouragement of growth of economic activity and employment. However at the same time it is intended to conserve rural land resources and the character of the built environment to a scale compatible with the principal theme. The policies of the Structure Plan particularly relevant to this Subject Plan are as follows:

Agriculture

CC 1 Development which will cause a loss of productive or potentially productive agricultural land, or reduce the viability of farm holdings, will not be permitted, unless it can be demonstrated that the need for the development overrides agricultural considerations and no alternative site on non-agricultural land is available.

CC 2 Policy CC 1 will be applied with particular force in respect of land classified as Grade 1 and 2 (as defined by the MAFF land classification system) or on the better Grade 3 land, where there will be presumption against development, other than for the purposes of agriculture.

CC 3 Seven Areas of Special Significance for Agriculture are defined:

North West Kent Market Garden Belt
North Kent Horticultural Belt
North East Kent
Ightham to Pluckley
North East of Ashford
Romney Marsh

The local planning authorities will give long term protection to these areas and will give priority to the needs of agriculture over other planning considerations.

Minerals

1.10 Minerals have to be worked where they are found. The importance of certain minerals and their limited availability means that countryside policies may have to be overridden where a strong enough case of need can be demonstrated. Provision for this is provided by the following minerals policy which also sets out the basic criteria against which planning applications will be considered:

MND 1 Before permitting any mineral extraction or associated plant and buildings, the County Council will require to be satisfied that there is a need for such development which would override a material agricultural, landscape, conservation or environmental interest. Further, permission will only be granted if there are adequate access proposals, measures to landscape the site, to remove plant or buildings after workings have ceased and to restore the land to an appropriate after-use, normally as working progresses. Pending adoption of a mineral subject plan steps will be taken to prevent the sterilisation of known resources.
1.11 Structure Plan policy for brickearth was prepared in the knowledge that a Government review of the 1996 deadline was pending. Now that the review has been concluded it will be appropriate to consider the Structure Plan policy afresh. However, at present it provides the statutory policy context for this Subject Plan.

Structure Plan policy MWD 4 reads as follows:

MWD 4 Workings will normally be permitted to maintain each stockbrick works with about 10 years' reserves of brickearth. All proposals for brickearth extraction must provide for the site to be restored to agriculture progressively as working proceeds.

Transport

1.12 Mineral working, including brickearth extraction, can introduce large vehicles onto country roads. The following Structure Plan transportation policies are important in this respect.

TP 12 A general presumption will be adopted against any proposed development outside built-up areas that generates vehicular or pedestrian traffic. This presumption will only be set aside where an overriding case can be made in the context of the County Council policies for agriculture, rural settlement, conservation, recreation, tourism, minerals, waste disposal and derelict and despoiled land. These policies are found under references R5, GC, TR and MWD.

TP 13 There will be a general presumption against any proposed development outside built-up areas which involves construction of new accesses or increased use of existing accesses on to primary or secondary distributor roads. New development should normally have access by an Access Road onto a local distributor.

TP 14 There will be a general presumption against any proposed development that generates significant volumes of commercial vehicle traffic if it is not well related to the Primary and Secondary Distributor network.

1.13 The Structure Plan sets the strategic planning context in terms of policies for countryside conservation, mineral extraction and transportation, within which proposals for brickearth extraction will be judged. It is for this Subject Plan to identify the allocation of land for future working and to establish the detailed criteria against which applications will be determined. The plan makes provision for 15 years ahead but will be reviewed about every 5 years to ensure that the policies and proposals remain relevant.
2 Brickearth

Definition

2.1 The name brickearth is given to superficial deposits of homogeneous, structureless loam or silt. The term derives from the brick-making industry to describe deposits which require little or no admixture of other material to render them suitable for brick manufacture. Throughout this plan the term 'stockbrick' will be used to describe bricks in which the essential raw material is brickearth. Stockbricks, in this sense, are only manufactured in Kent (where they are often known as London Stocks) and Essex, where suitable brickearth deposits are found.

Occurrence and Definition

2.2 Brickearth typically occurs in discontinuous spreads, about 6 to 12 feet thick, overlying chalk, Thanet Beds or London Clay. There are extensive brickearth deposits in Kent, particularly on the North Downs dip slope. Brickearth deposits occur elsewhere in Kent, e.g. on the Hoo Peninsula and in sections of the Medway and Stour river valleys, which have once supported several small stockbrick works. The Rainham - Faversham area is now the focus of stockbrick manufacturing because the depth and quality of brickearth meet the industry's requirements and because of the good river and rail access to markets, particularly London. The mineral content of the brickearth is critical in determining its suitability for brickmaking and fairly precise proportions of chalk, clay and iron are required by modern production processes.

2.3 There are now 4 active stockbrick works in Kent, operated by 3 separate companies. Redland Bricks have active works at Otterham and Punton, together with a works at Conygar which is now closed. Blue Circle have a works at Hurston, and Cremar and Whiting a works at Ospringe.

Proposals Area

2.4 The survey work for this Plan has concluded that, during the next 15 years at least, brickearth working is unlikely to be feasible or desirable outside the Rainham - Faversham area. The Ministry of Agriculture would prefer to avoid the introduction of the stockbrick industry into areas with no previous history of brickearth working (for example east of Canterbury), and the industry seek to minimise transport costs from the point of extraction to the brickworks. For these reasons it is proposed to confine detailed attention in the Plan to the inset area defined on the Proposals Map. There are no existing brickearth workings outside that area, nor is it intended to propose any in this Plan. Since the existing brickworks are also all within the inset area, and no new
ones are proposed, it is not anticipated that any developments related to brickearth within the inset area will have any significant impact outside it.

Uses and Markets

2.5 The stockbrick industry contributes to the quality of the built environment and to the maintenance of employment. The traditional Kent stockbrick is a high quality facing brick of proven durability, with a very pleasing appearance. A stockbrick has a characteristic non-uniformity of colour which mellow with age, and an 'open' texture and depth of colour which is not found in other types of brick. This is a continuing demand for stockbricks for renovation work on historic buildings, particularly in London, and for new developments in traditional styles and materials, designed to harmonize with their surroundings. The stockbrick industry meets architectural specifications, particularly for historic buildings, which cannot be fully met by bricks made from materials other than brick-earth. The Government decision on the review of the industry concludes with an acceptance of the need to make provision for a continuing supply of stockbricks.

Agriculture

2.6 Agriculture is the main constraint on future brick-earth extraction. Typical soils overlying brick-earth deposits are among the best examples of Grade I land in the country. Grade I land has very minor or no physical limitations to agricultural use. It is versatile and high yielding and is a scarce resource. Brick-earth soils are capable of producing a very wide range of agricultural and horticultural crops including top fruit, soft fruit, field vegetables, hops, potatoes, cereals and grass. The local climate and soils of the Rainham - Faversham area are very favourable. The land lies within the North Kent Horticultural Belt Area of Special Significance for Agriculture as defined in the Structure Plan and Kent Countryside Plan. Structure Plan policies CC 1-3 carry a presumption against development, other than for the purposes of agriculture, on such high quality farmland.

2.7 However, minerals can only be worked where they are found and the conclusions reached from the Government's review of the stockbrick industry implies acceptance of further brick-earth working on Grade I land. This is however subject to careful site selection and attention to the best techniques of working, restoration and aftercare, in order to ensure that Grade I quality can be resumed as soon as possible after working. Structure Plan policy HDP 1 is relevant here.

2.8 The Ministry of Agriculture has undertaken a detailed assessment of all potential and known brick-earth deposits in the Proposals Map area. This assessment included all unworked areas remaining from the 1956 Brickearth Committee allocation as well as additional areas identified by geological analysis. The industry co-operated in making the results of any geological investigations available and deposits known to be of inadequate depth or mineral composition were not assessed further. The survey has identified sites from those assessed which could be worked with the least harm to the overall agricultural interest. They involve a loss, even if only temporary, of Grade I agricultural land. However, by virtue of the criteria applied which are set out in detail in Chapter 5 of the ROS, the selected sites are those which are believed to have the greatest potential to return to their original agricultural productivity. The sites are identified on the basis that a satisfactory restoration scheme is agreed at the time of an application in order to provide for a return to Grade I quality, as well as a satisfactory programme of aftercare.
2.9 In recent years, stockbrick production has dropped considerably from peak production achieved in the 19th Century and in the postwar reconstruction period. The most recent production figures in Kent are depressed by the closure of 2 out of the 5 brickworks. One of these has re-opened this year. Recent output has been much less than was anticipated by the brickearth Committee in 1956. This fall in production was one of the major factors in persuading the government to review its policy for the industry. However, the industry is confident that a healthy demand for stockbricks will continue for the foreseeable future. On the basis of current knowledge, it seems unlikely that alternative materials or new types of brick will lead to a reduction in demand for stockbricks during the plan period. Stockbricks are a specialised product with certain well defined characteristics which cannot be met from clays other than brickearth. However the County Council will continue to encourage the industry to pursue the development of new techniques and alternative materials.

2.10 The government review of the industry expects demand for stockbricks to continue "at about current levels". An analysis of stockbrick production in Kent, taking into account the temporary closure of one works (Otterham), concludes that a reasonable figure for existing production would be some 40 million bricks per annum (ROS Chapter 3). Allowing for some planned and committed investment, together with provision for fluctuations year by year and a possible upturn in the construction industry, it is estimated that production could rise to some 50 million bricks per annum. This 40-50 million bricks p.a. is considered as the appropriate range of brick production to plan for in the next 15 years. It is recognised that if Conyer brickworks re-opens, which is not currently considered likely, these figures may need to be reviewed.

Land Requirements

2.11 Converting the above forecast of demand into an estimate of land requirements needs to take account of

(a) the thickness of brickearth deposit, and related factors such as size of unworked margins.

(b) possible future economies in the use of brickearth. These factors are studied in detail in the ROS.

On the basis of the assumptions as set out, it is considered that between 4 and 5 hectares of land will need to be worked each year to meet forecast demand.

2.12 Structure Plan policy MND 4 proposes that each stockbrick works should have about 10 years reserves of brickearth. The industry consider that between 25 and 40 years reserves are needed to justify the level of investment required in the brickworks. The Government review of the industry considered that 15 years reserves should be identified for future working, with provision to review this allocation regularly. This would give the industry a reasonable degree of certainty that land would be available for future investment, but at the same time permit a regular review of land allocations in the light of prevailing market trends and land availability. Structure Plan policy MND 4 will be reviewed at the next opportunity in the light of the Government's conclusions. In exceptional cases the County Council would be prepared to consider granting permissions for brickearth working for periods in excess of 15 years, if a special case could be made out for reserves in excess of that figure. In these circumstances, satisfactory assurances may be sought concerning rates of working.

87
2.13 On the basis that 4 to 5 hectares of land need to be worked each year, from 60 to 75 hectares would be required for a 15 year period. This may be compared to the 56 hectares of land which already has planning permission, but which has not yet been worked. However because of the distribution of reserves between the companies, not all of this land may be worked during the next 15 years. An analysis of each individual company's anticipated requirements set against their permitted reserves, suggests a net requirement for the plan to identify some 30-38 hectares of land which may need to be released for brick-earth working during the next 15 years. However, subject to future review of the Plan and of policy HWD 4 of the Kent Structure Plan, further release of land may be justified within the next 15 years in order to maintain a 15 year reserve of brick-earth at each stockbrick works. The additional reserve required for a "landbank" of 15 years at the end of the plan period, allowing for existing permitted reserves, would be some 34-56 hectares.

Location of future areas for working

2.14 As explained above (para.2.4) it is proposed to confine attention to the inset areas defined on the Proposals Map in seeking future working areas. Within this area, geological investigation has identified certain sites where brick-earth deposits are considered most likely to be of sufficient depth and quality to be suitable for brick-making. Additional potential deposits have been inferred from geological records, evidence of past workings, and local knowledge. All these sites have been considered against possible planning objections to working.

2.15 The agricultural constraint has proved to be the key determinant of sites which may be acceptable for future working, subject to need. The following additional constraints have been taken into account (see BOS, Chapter 5 for details):

(a) Vehicular access, from highway safety and environmental aspects.

(b) Proximity to housing and other development which might be affected by any noise or dust nuisance.

(c) Features of local landscape or amenity importance.

2.16 These factors have contributed to some further deletion of and boundary amendments to the sites identified. At the remaining sites, it is considered that these other constraints are capable of being resolved at the sites in question at planning application stage, including if necessary the exclusion from working of parts of the sites.

2.17 The total of the sites identified in this way is some 188 hectares. This figure includes Lobbing Farm site for which planning permission was given in 1985. This is substantially in excess of the area estimated in paragraph 2.13 as the 15 year requirement. Therefore, planning permission would only be granted on the basis of a proven case of need in each case. All permissions would also be subject to appropriate conditions to safeguard the agricultural and local interests referred to above. In practice, some of the sites may prove to be geologically unsuitable; at others landowners may be unwilling to agree to working. At most only some 18% of the total area of the identified sites, and probably less, is likely to be worked in the next 15 years.

2.18 The following policy will apply to release of land for brick-earth working:
POLICY Bl: APPLICATIONS FOR THE EXTRACTION OF BRICKEARTH FROM SITES IDENTIFIED UNDER THIS POLICY ON THE PROPOSALS MAP WILL BE ACCEPTABLE PROVIDED THAT THE COUNTY COUNCIL IS SATISFIED OF A SUFFICIENT CASE OF NEED TO RELEASE ADDITIONAL LAND WHICH OVERRIDES PLANNING OBJECTIONS PURSUANT TO STRUCTURE PLAN POLICIES MD0 1 AND MD0 4.

2.19 The County Council considers that compared with the 1956 Brickearth Committee allocations and the provisions of the Kent Development Plan, the areas referred to in policy B1 and shown on the Proposals Map, provide a much better indication to the industry, members of the public and District Councils of areas known or thought likely, to contain brickearth deposits of economic importance. The extent of viable reserves will be reassessed at future reviews of the Plan as further geological information becomes available. It is also necessary to safeguard brickearth reserves at sites already with planning permission but where brickearth reserves remain to be worked. Accordingly, the following policy will apply:

B2: THE SITES IDENTIFIED ON THE PROPOSALS MAP AS:

(1) POLICY B1 SITES
(11) SITES WITH PLANNING PERMISSION FOR BRICKEARTH WORKING WHERE RESERVES REMAIN TO BE WORKED OR WHERE WORKING HAS NOT YET COMMENCED

WILL BE SAFEGUARDED FROM DEVELOPMENT WHICH WOULD EITHER STERILISE WORKABLE BRICKEARTH RESERVES, OR BE ADVERSELY AFFECTED BY SUCH WORKING. District Councils will be asked to consult the County Council formally in accordance with agreed arrangements pursuant to para. 19(2) (c) of Schedule 16 of the Local Government Act 1972 as amended by Section 86 of the Local Government Planning and Land Act 1980 on these areas.

2.20 The boundaries of the areas shown on the Proposals Map generally follow ownerships or field boundaries or coincide with areas previously surveyed by the industry. They do not necessarily indicate the precise extent of a brickearth deposit. There may be land on the fringe of the site, perhaps in another ownership, which could be worked in conjunction with the main site and which has not been separately identified.

2.21 Development Land. Over the years, much development in the Rainham - Faversham area has taken place on brickearth deposits which could have been extracted before the development took place. This has sterilised a valuable mineral resource and imposes additional pressure on the release of further land for mineral working. So far as the specific sites identified in policy B1 are concerned, the safeguarding policy B2 above should prevent this occurring in the future. In addition, whilst there is generally an agricultural objection to brickearth working from other sites and to the permanent loss of Grade 1 land for development, there may be opportunities, particularly on the urban fringe or in connection with road improvements, to investigate the prior extraction of brickearth before any such development takes place in future. Schemes would need to be of a suitable size and the brickearth of a suitable mineral content, to make excavation a viable proposition. The following policy applies:

B9
B 3: THE LOCAL PLANNING AUTHORITIES WILL MONITOR PLANNING PERMISSIONS FOR NEW DEVELOPMENT IN THE AREAS DEFINED BY THE INSECTS TO THE PROPOSALS MAP AND WILL SEEK TO ENSURE, IN APPROPRIATE CASES, THAT ANY COMMERCIALLY USEFUL DEPOSITS OF BRICK EARTH ARE EXCAVATED PRIOR TO THE DEVELOPMENT TAKING PLACE.

Working and Restoration Techniques

2.22 The County Council attaches high priority to improving and maintaining standards of working, restoration and aftercare at existing and future brick earth workings. This is the only basis on which the further release of Grade 1 land at the sites identified in policy B 1 could be considered. The survey work for this plan has demonstrated that care and attention must be paid to the best working and restoration techniques, otherwise excavation will result in a lowering of agricultural land quality. This is most common due to insufficient depth of brick earth remaining, compaction of topsoil and/or subsoil, and/or creation of frost pockets. The prospects for a Grade 1 restoration at each site will vary according to the topography, the presence or absence of artificial barriers to air or surface water drainage, and according to the underlying geology. These factors have been taken into account in identifying the sites.

2.23 It will be necessary to show that there is an adequate reserve of brick earth to justify disturbing the land. The following policy will apply:

B 4: THE COUNTY COUNCIL WILL REQUIRE IN SUPPORT OF AN APPLICATION FOR BRICK EARTH WORKING, GEOLOGICAL EVIDENCE THAT A SITE CONTAINS ECONOMICALLY WORKABLE RESERVES OF SUITABLE QUALITY, THE NEED FOR WHICH JUSTIFIES TAKING LAND OUT OF AN EXISTING BENEFICIAL USE, ESPECIALLY AGRICULTURE, AND THAT THE SITE CAN RETAIN AN ADEQUATE DEPTH OF BRICK EARTH TO PROVIDE FOR RESTORATION IN ACCORDANCE WITH POLICY B 5 BELOW.

2.24 This evidence should normally comprise borehole locations and readings, the estimated depth and quantity of brick earth to be excavated, details of the thickness of topsoil and subsoil to be retained for restoration, and identify the geological substrata underlying the brick earth. The advice of the Ministry of Agriculture will be sought in considering schemes of working, restoration and after-care at future workings. Such details will normally be required as part of the planning application. The depth of brick earth retained on the floor of workings is a critical factor in determining the long term agricultural potential of restored sites. A sufficient depth of top and sub-soil is required to provide reserves of moisture for plant growth, permit deep rooting and allow natural drainage. The depth required varies according to the underlying geology. The following policy applies:

B 5: IN PERMITTING BRICK EARTH EXCAVATION THE COUNTY COUNCIL WILL REQUIRE THE FOLLOWING DEPTHS OF BRICK EARTH AND TOPSOIL TO BE RETAINED

(i) AT LEAST 75CM OF BRICK EARTH AND TOPSOIL IN THE CASE OF RESTORATION OVER THANET BEDS.

(ii) AT LEAST 1M OF BRICK EARTH AND TOPSOIL IN THE CASE OF RESTORATION OVER CHALK, UNLESS THE UNDERLYING CHALK JUSTIFIES A LESSER DEPTH.
The County Council will seek to ensure that existing brickearth sites, and those already with planning permission, are also worked and restored to this standard.

2.25 Achieving high quality restoration to agriculture requires careful planning of operations on site. Working and restoration schemes should be designed to meet the circumstances prevailing at individual sites, including topography, geology, and surrounding land uses. The following policy outlines the minimum measures likely to be required in a brick earth excavation and restoration scheme (more detailed guidance is given in Appendix I):-

B 6: IN PERMITTING BRICKEARTH EXCAVATION THE COUNTY COUNCIL WILL REQUIRE THE SUBMISSION OF AN INTEGRATED AND PROGRESSIVE WORKING AND RESTORATION SCHEME FOR ITS APPROVAL, NORMALLY AS PART OF THE APPLICATION. THIS SCHEME SHOULD SPECIFY:

(i) THE TYPE OF MACHINERY TO BE USED, VEHICLE ROUTES AND THE TIMING OF SOIL HANDLING OPERATIONS.

(ii) MEASURES TO AVOID COMPACTION OF TOPSOIL, AND ALSO BRICKEARTH TO REMAIN ON THE FLOOR OF THE WORKINGS, AND TO ALLEVIATE ANY COMPACTION THAT DOES OCCUR.

(iii) THE MINIMUM AREA TO BE TAKEN OUT OF AGRICULTURAL USE AT ANY ONE TIME AND PROVISION FOR CONTINUED ACCESS TO BE ASSURED TO ALL REMAINING FARMLAND.

(iv) LEVELS AND CONTOURS, BEFORE AND AFTER WORKING AND RESTORATION, WHICH SHOULD BE DESIGNED TO MATCH IN WITH SURROUNDING CONTOURS AND TO FACILITATE NATURAL AIR AND SURFACE WATER DRAINAGE.

2.26 Restored land is particularly vulnerable to further damage during the years it takes for soil structure to re-establish. Farming operations should allow for this, avoiding working the soil when wet and regularly inspecting the state of soil structure. Under the Town and Country Planning (Minerals) Act 1991 the County Council can impose a condition requiring the agricultural after-care of the land for five years after completion of restoration. To reflect this the following policy will apply:

B 7: IN PERMITTING BRICKEARTH EXCAVATION, THE COUNTY COUNCIL WILL ATTACH CONDITIONS REQUIRING THE CARRYING OUT OF A PROGRAMME OF AGRICULTURAL AFTER-CARE FOR FIVE YEARS AFTER COMPLETION OF RESTORATION, THE STEPS FOR WHICH WILL BE SPECIFIED IN THE PLANNING PERMISSION OR REQUIRED TO BE SUBMITTED AS A SCHEME. SUCH PROGRAMME SHALL BE DESIGNED TO ENSURE THAT THE LAND IS BROUGHT TO THE STANDARD OF PHYSICAL CHARACTERISTICS EXISTING WHEN IT WAS LAST USED FOR AGRICULTURE, SO FAR AS IT IS PRACTICABLE TO DO SO.

2.27 The County Council recognises that a high quality of agricultural restoration cannot be achieved on a site via planning conditions alone. So much depends on the operating companies themselves attaching a high priority to the quality of restoration, and on the exercise of close supervision over the operations actually taking place on site from day to day. The County Council looks to the industry to take upon itself the responsibility for securing high standards. Its success or otherwise in this regard will be a material factor to the County Council in reaching decisions as to whether to release further reserves. Accordingly the following policy will apply:

BII
Highways Issues

2.28 The road traffic associated with brick earth workings is one of the most significant elements, after agriculture, in the overall environmental impact. Either side of the A2, the road network consists of narrow country lanes which are generally unsuitable for heavy goods vehicles on highway safety and environmental grounds. However, it is recognised that because brick earth can only be worked where it is found, excavations must sometimes take place in locations where vehicular access, and the roads serving the site, are not ideal. The County Council has undertaken an analysis of the steps likely to be required to achieve a suitable access to the sites identified in policy B 1 for possible future working. These are included for guidance purposes in Appendix 2. It is not possible to specify these steps in a planning policy at this stage because of uncertainties about for example, land ownerships, or which brickworks are likely to be served by which sites. The planning application is the right stage, and the Council will expect applicants to have had regard to the guidance. Pursuant to Structure Plan policy M&D 1, the Council may refuse permission on access grounds alone. Essential requirements are not met. The following policy will apply:

B 9: IN CONSIDERING APPLICATIONS FOR BRICK EARTH WORKINGS, THE COUNTY COUNCIL:

(i) WILL REQUIRE EVIDENCE THAT REASONABLE EFFORTS HAVE BEEN MADE TO SECURE AN ACCESS IN CONFORMITY WITH STRUCTURE PLAN POLICIES TP 13 AND TP 14. The supplementary planning guidance contained in Appendix 2 to this Plan will also be taken into account.

(ii) WILL NOT GRANT PERMISSION IF THE PROPOSED ACCESS, OR THE EFFECT OF LOHRISS USING ROADS TO REACH THE ACCESS, WILL BE SUCH AS TO CAUSE AN UNACCEPTABLE HAZARD TO OTHER ROAD USERS.

(iii) WILL REQUIRE ADEQUATE VISIBILITY SPLAYS WHERE THE QUARRY ACCESS ROAD EMERGES ONTO THE PUBLIC HIGHWAY IN ACCORDANCE WITH THE CURRENT ADVICE ISSUED BY THE DEPARTMENT OF TRANSPORT.

(iv) WILL RELAX ITS OBJECTION TO INADEQUATE VISIBILITY SPLAYS OR OTHER HAZARDS TO TRAFFIC RESULTING FROM THE PROPOSAL WHERE THESE CAN BE OVERCOME BY CARRYING OUT HIGHWAY IMPROVEMENTS, SUBJECT TO AN AGREEMENT BEING MADE BETWEEN THE OPERATOR AND THE COUNTY COUNCIL PROVIDING FOR THE NECESSARY WORKS TO BE CARRIED OUT BEFORE ANY EXCAVATIONS COMMENCE AT NO ADDITIONAL COST TO THE COUNTY COUNCIL.

2.29 To prevent mud and stones being carried onto the public highway the following additional policy will apply:

B 10: THE COUNTY COUNCIL WILL REQUIRE TO BE SATISFIED, BEFORE PERMITTING BRICK EARTH EXCAVATION, THAT ADEQUATE MEASURES WILL BE TAKEN BY THE OPERATOR TO PREVENT MUD OR STONES FROM BEING CARRIED ONTO THE PUBLIC HIGHWAY. The Council will also apply this policy to existing workings.

B12
Environmental Impact

2.30 It is unavoidable that future brick-earth workings will have some form of
local environmental impact, particularly where workings may take place on land
which adjoins residential properties such as in the immediate vicinity of the
A2. If workings approach too close to housing this may present a potential
source of nuisance to local residents in terms of noise and/or dust.
Apropriate measures to avoid nuisance can only be determined at the planning
application stage, in the light of full knowledge of proposed working and
restoration techniques, details of site topography, screening etc. The
following policies will apply:

B 1: THE COUNTY COUNCIL WILL REQUIRE TO BE SATISFIED, BEFORE PERMITTING
BRICK-HEARTH EXCAVATION, THAT OPERATIONS WILL NOT CAUSE UNREASONABLE
DISTURBANCE TO OCCUPIERS OF RESIDENTIAL PROPERTY OR OTHER SENSITIVE
DEVELOPMENT (SUCH AS SCHOOLS) IN THE VICINITY, BY VIRTUE OF NOISE,
DUST, VISUAL IMPACT, LORRY TRAFFIC OR OTHER FORM OF INTRUSION. IF
MEASURES TO AVOID SUCH DISTURBANCE CANNOT BE PROVIDED SATISFACTORILY
THROUGHOUT A SITE, THEN EITHER PERMISSION WILL NOT BE GRANTED OR A
SUFFICIENT SAFEGUARDING MARGIN WILL BE REQUIRED TO ENSURE THAT SUCH
DISTURBANCE WILL NOT OCCUR.

B 12: IN AMPLIFICATION OF POLICY B 11:

(a) THE COUNTY COUNCIL WILL REQUIRE TO BE SATISFIED THAT NOISE
LEVELS FROM FIXED AND MOBILE MACHINERY AND VEHICLES HAVING
ACCESS TO THE SITE, WILL NOT CAUSE UNREASONABLE NUISANCE. Where
necessary it will require measures to be taken to suppress or
insulate noise and specify maximum permissible noise levels in
accordance with published standards. Normally workings will
only be permitted to operate between the hours of 7am to 6 pm
Mondays to Fridays and 7am to 1pm on Saturdays. If it appears
that excessive noise nuisance cannot be prevented, permission
will not be granted.

(b) THE COUNTY COUNCIL WILL REQUIRE OPERATORS TO EMPLOY THE BEST
PRACTICAL MEANS TO AVOID DUST EMISSIONS. Appropriate measures
which will be encouraged when considering planning applications
include: the use of conveyors rather than vehicles for internal
haulage; the covering or seeding down of exposed earth surfaces;
and the watering of access roads in dry weather.

(c) THE COUNTY COUNCIL WILL ENSURE THAT AS FAR AS PRACTICABLE LORRY
TRAFFIC TRAVELLING TO AND FROM A BRICK-HEARTH EXCAVATION IS ABLE
TO FOLLOW ROUTES WHICH DO NOT AdVERSELY AFFECT RESIDENTIAL OR
OTHER BUILT UP AREAS.

The Council will seek to apply similar policies at existing workings.

Landscaping

2.31 Brick-earth excavations are shallow and dry and have less of the visual
impact associated with other types of mineral extraction. Former workings are
only distinguishable in the landscape by a lowering of the land surface and by a
characteristic bank around the perimeter of the site up against roads or other
adjoining land at pre-existing levels. At active workings, no working takes
place during the winter months and the only evidence of mineral extraction is a
shallow bank of exposed brick-earth at the working face. There are no large,
potentially intrusive items of processing plant compared, for example, with a sand and gravel site, and other than topsoil and subsoil, no overburden or waste materials to be disposed of on site. Only a small area of land is opened for working at any one time as sites are progressively restored to agriculture. This assists their rapid integration back into the surrounding countryside. However, there may be justification in seeking landscaping at brickearth sites, either to screen workings from nearby houses, to protect or enhance existing landscape features, or to replace features which are lost during workings - e.g. hedgerow trees. The following policy applies:

B 13: IN PERMITTING BRICKEARTH EXCAVATION THE COUNTY COUNCIL WILL REQUIRE THE SUBMISSION OF A DETAILED LANDSCAPING SCHEME NORMALLY BEFORE ANY OPERATIONS COMMENCE. THE DETAILED LANDSCAPING PROPOSALS SHOULD HAVE REGARD TO THE FOLLOWING:

(i) THE LOCATION, TYPE, SIZE AND DENSITY OF ALL NEW PLANTING AND ITS PROTECTION FROM STOCK, VERMIN AND MACHINERY.

(ii) PROVISION SHOULD BE MADE TO RETAIN AND WHERE APPROPRIATE, TO ENHANCE EXISTING LANDSCAPE FEATURES EITHER PERMANENTLY OR WHERE THIS IS IMPRACTICAL FOR AS LONG AS POSSIBLE, AND PHYSICALLY PROTECTING THEM FROM DAMAGE.

(iii) SCREEN PLANTING SHOULD BE CARRIED OUT TO BECOME EFFECTIVE AS QUICKLY AS POSSIBLE, PREFERABLY BEFORE WORKING COMMENCES.

(iv) THE CHOICE OF TREE AND SHRUB SPECIES SHOULD BE BASED ON (ALTHOUGH NOT NECESSARILY LIMITED TO) NATIVE PLANTS GROWING IN THE LOCALITY.

(v) THE LANDSCAPING PROPOSALS SHOULD INCORPORATE A MANAGEMENT SCHEME WHICH IN RESPECT OF ANY PART OF THE SITE SHALL COVER THE PERIOD OF 5 YEARS SUBSEQUENT TO COMPLETION OF RESTORATION OF THAT PART.

(vi) THE CREATION OF HEDGEROWS IN CONNECTION WITH ANY PROPOSED AGRICULTURAL AFTER-USE.

Public Rights of Way

2.32 Where a proposed mineral working affects the line of a public right of way there is a legal requirement that it be stopped up or diverted before it is obstructed. This is controlled separately to planning provisions, but the County Council takes account of the interests of users of footpaths in considering planning applications. The following policy will apply:

B 14: WHERE PROPOSED BRICKEARTH EXTRACTION WILL AFFECT A PUBLIC RIGHT OF WAY, THE COUNTY COUNCIL WILL TAKE ACCOUNT OF THE INTERESTS OF USERS OF THE FOOTPATH AND WILL ENSURE, IF PLANNING PERMISSION IS GRANTED, THAT THE OPERATOR'S ATTENTION IS DRAWN TO THE RIGHT OF WAY AFFECTED AND TO HIS OBLIGATION TO SECURE ITS DIVERSION OR STOPPING UP BEFORE ANY OPERATIONS TAKE PLACE WHICH WOULD OBSTRUCT IT.

Protection of Archaeological Sites

2.33 There are at present no scheduled Ancient Monuments likely to be affected by any of the proposed areas for future working although the position could change. There may be sites of lesser archaeological interest which will be
disturbed. Where there is an overriding case for brick earth extraction which will lead to such sites being destroyed, reasonable facilities for the prior recording of archaeological details should be allowed. In general, even where an archaeological interest is not known in advance, provision should be made, if requested, for archaeologists to investigate sites especially at the top soil stripping stage to check for any previously unknown remains. In the event of any archaeological discoveries being made during an excavation, the County Council encourages operators to notify the appropriate archaeological body (normally the Kent Archaeological Rescue Unit) so that where appropriate, an opportunity can be made to investigate and record the archaeological evidence before working proceeds. In other respects the County Council will have regard to, and expect mineral operators to follow the Code of Practice for Archaeological Investigation agreed between the CBI, the Council for British Archaeology and the DoE. The County Council will apply the following policy in this respect:

B 15: WHERE BRICK EARTH EXTRACTION IS CONSIDERED LIKELY TO AFFECT FEATURES OF ARCHAEOLOGICAL INTEREST, THE COUNTY COUNCIL WILL ENCOURAGE OPERATORS TO ENABLE THE ARCHAEOLOGICAL INVESTIGATION OF THE SITE BEFORE WORKING COMMENCES AND DURING OPERATIONS, AND WILL IN APPROPRIATE CASES REQUIRE THAT SUCH AN OPPORTUNITY BE GIVEN.
APPENDIX I

Supplementary Planning Guidance on the steps likely to be required to achieve high quality agricultural restoration at brickearth workings.

1. The pre-working survey submitted as part of a planning application should cover the following matters:

   (i) Details of geological survey of the site, including a description and the depths of various layers, and amounts to be taken or left.

   (ii) Levels and contours, before and after working and restoration.

   (iii) Method of working, including the type of machinery to be used, vehicle routes and the timing of soil stripping operations. Traffic patterns should be designed to keep vehicle movements on reinstated soil to an absolute minimum.

   (iv) Method of restoration as amplified below. Similar details to method of working.

2. Supervision and machinery A hydraulic machine such as a Dynac is generally preferred to a dragline in that it can work with greater precision and, more easily leave a level floor to the workings as well as a clean face. It is likely to impose less downward pressure on the subsoil than would a dragline bucket. Ultimately, however, success or failure will depend mainly on the skill of the machine operator and the quality of the supervision. The importance of close supervision cannot be overstressed.

3. Soil Handling Techniques To a greater or lesser extent depending on the machines used, modern mechanised methods of stripping, excavating and respreading soils are likely to cause compaction or smearing of the delicate brickearth soil structure. Whereas compaction is caused mainly by the pressure of vehicles running over the soil, smearing is caused by the movement of a blade across soil or by slipping or spinning wheels or tracks.

4. The following recommendations will minimise compaction in the unexcavated topsoil:

   (i) Use a conveyor to carry the brickearth to the site entrance to avoid the need for lorries to run on the brickearth top soil. This technique has not been used in Kent in recent years but is probably the best solution.

   (ii) Run lorries on reinforced timber mats on the top soil which by distributing vehicle weight will help to minimise structural damage to that soil. Fewer mats will be needed if lorries turn round on the service road and reverse along the top of the working face to the excavating machine.

   (iii) Avoid running lorries on unprotected top soil at all times. This causes considerable damage to soil structure which may be difficult to alleviate during restoration.

(1)
5. **Contours and air and water drainage** The following recommendations apply:

(i) Avoid creating depressions or "bouls" in the land form which would tend to cause surface water drainage problems or localised frost pockets. Keep to a regular, even level at the base of the workings to ensure that the ultimate restored level matches in with surrounding contours.

(ii) Ensure that both natural air and surface water drainage are not impeded by excavating too deeply or by leaving high embankments at the lower end of the site.

6. **Soil Condition** Both compaction and swelling are related to the wetness of the soil. Severe damage can result from handling soils when moist and it is very important to restrict soil handling to dry periods of the year (normally May – September) and to suspend operations during or after heavy rain. Particular damage can be caused by the levelling of topsoil when the subsoil is too moist as compaction is caused in the subsoil. This is evident on many restored sites and can be difficult to remedy because of the depth of the compaction.

7. Restrictions on the periods when soils are safe to handle can only be specified in general terms in planning conditions, and much depends ultimately on the willingness and ability of the operator. However, scope may exist to incorporate such details in the private agreement negotiated between the landowner and the mining operator. It is normal practice for planning permissions to require that soil be handled only when it is dry and friable and only between May and September. The County Council is currently investigating with the Ministry of Agriculture whether soil moisture meters can give an objective measure of conditions when it is appropriate to move topsoil.

8. **Subsoiling**

(i) Before levelling the top soil, the subsoil should be examined for compaction. Some tightness in the subsoil may be natural at that depth although compaction is probably due to the excavating machinery. If compaction is present, the top soil heaps should be pushed aside and the subsoil thoroughly ripped before spreading the top soil.

(ii) Once the top soil has been spread and levelled, the final surface should be ripped with a tracked machine.

9. **Agricultural Use**

(i) While the seeding of restored land with an appropriate grass mixture would be in the best interests of re-establishing the soil structure, it must be accepted that this is not often possible within the management policy of most existing farming systems in this area. A few farms in the area grow grass (for sheep or cattle enterprises) on deep brick-earth deposits and most have no livestock at all. It is more likely that most restored land will be returned to arable or horticultural use.

(ii) Restored land is particularly vulnerable to further damage during the years it takes for soil structure to re-establish and farming operations should allow for this, avoiding working the soil when wet and regularly inspecting the state of soil structure.
10. **Underdrainage** Field underdrainage should not be necessary unless the brickearth overlies an impermeable layer such as London clay. However, the drainage status on all restored sites will need assessing after the final restoration and action taken as appropriate. Depressions which lead to surface water ponding may be difficult to drain because of levels and brickearth will need to be returned to such areas to raise the general level to eliminate such low spots.
APPENDIX 2

Supplementary planning guidance on the steps likely to be required to achieve a satisfactory access at areas proposed for future brick earth extraction.

(a) Libbetwell - Access via Church Lane and School Lane would be unacceptable, but Breach Lane, to the west, would be suitable. Access to Breach Lane would require either an internal haul road across intervening land, or improvements to local roads (the D864 and D963).

(b) Hill Hill - same requirements as Libbetwell.

(c) Paradise Farm - Access should if possible be to the A2 via the existing access at the former Newington Brickworks site. If this cannot be achieved, access via Lower Martlip Road to the west may be suitable, although this road will require local highway improvements to provide adequate passing bays, and the point of access should be north of the junction with Manna Lane.

(d) Bobbing - Access to Quinton Road would be suitable but this would require removal of a long length of existing tree screen for visibility at spays. Replacement planting may be required.

(e) West Tonge Farm - Direct access to the A2 is unsatisfactory but access to Hurston via Lomas Road is likely to be suitable.

(f) Heepstead House - Access to the A2 via Pantry Lane is likely to be acceptable provided passing bays are constructed.

(g) Barrow Green - Access to the A2 via Lower Road and Norton Ash Lane (where improvements have already been undertaken) is likely to be acceptable.

(h) Oppringo - Should be worked as extension to existing site with continuation of present access arrangements.

(i) East of Claxfield Farm - Access should be via Claxfield Lane onto the A2.