

Cover photograph

We see Southampton city centre from the air, looking northwards over the Royal Pier and Mayflower Park (where a Boat show is taking place) in the foreground. The low-lying area in the left centre, occupied mainly by industrial buildings, is formed of reclaimed land over Estuarine Alluvium deposits. Most of the rest of the city is built on River Terrace Deposits overlying formations of the Bracklesham Group.

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MAPS OF BOREHOLE LOCATIONS (N1-N6) AND SITES OF SPECIAL SCIENTIFIC INTEREST (O)

VOLUME 11

BGS Research Report ICSO/87/2



Natural Environment Research Council BRITISH GEOLOGICAL SURVEY

APPLIED GEOLOGICAL MAPPING SOUTHAMPTON AREA

Area covered by 1:50 000 Geological sheet No. 315 (Southampton) Parts of OS 1:10 000 sheets SU20, SU21, SU22, SU30, SU31, SU32, SU40, SU41, SU42, SU50, SU51 and SU52

VOLUME 11: MAPS OF BOREHOLE LOCATIONS AND SITES OF SPECIAL SCIENTIFIC INTEREST

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Notes to the user

There is considerable variation in the quality and reliability of the source data used to compile this report and the accompanying set of applied geology maps, as well as a great disparity in the density of site investigation data within the study area. Therefore, the accuracy and reliability of the interpreted information reflects that of the source data. However, emphasis has been placed throughout on the most reliable data, particularly those derived from authoritative sources such as geotechnical engineers and geologists.

Thus the report and maps are to be regarded as the best interpretation of the information available at the time of compilation. They should be used for preliminary studies only and are not intended as a substitute for on-site investigations or detailed local searches. The responsibility for assuring that geological, geotechnical and mineral and water resource data for any given site are as indicated in the maps and in the figures and text of this report must remain solely that of the user.

The possible occurrence of undetected anomalous site conditions should always be anticipated. The indicated occurrences of mineral deposits do not necessarily imply an economic resource. The possible presence of unmapped variable thicknesses of superficial deposits and Made Ground, particularly within the urban area of Southampton, should also be taken into account in any planning procedures.

There is no substitute for the knowledge provided by a detailed site investigation that takes into consideration the extent, nature and location of a proposed development. Therefore the report and maps are intended a) to give guidance on when to seek specialist advice and b) to aid developers in formulating effective investigations.

No information made available after the end of 1986 has been taken into account in this report.

All National Grid references in the report lie within the 100km square SU. Grid references are given to either eight figures (accurate to within 10m), or six figures for more extensive locations.

Data used in preparing this report and associated maps is lodged at the Exeter office of the British Geological Survey. Any enquiries concerning these documents should be directed to that office. Enquiries concerning the computer techniques or methodology should be directed to the Edinburgh or Keyworth office of the Survey. Enquiries about purchase of the report or maps should be

directed to the National Geosciences Data Centre, British Geological Survey, Keyworth, Nottingham NG12 5GG.

DESCRIPTION OF THE APPLIED GEOLOGICAL MAPS

DATA DISTRIBUTION

Distribution of boreholes (Maps N1-N6)

The six maps, at 1:25 000 scale, show the distribution of all boreholes held in the BGS archive and sited within the area of those OS 1:10 000 sheets in whole or in part covered by the project area. The maps therefore include some boreholes outside the project area which were not used in the present study. Borehole in this context includes trial pits dug using a mechanical excavator.

No indication of borehole depth is given on the maps but the majority are shallow and put down for site investigation surveys. Of the 4549 boreholes plotted on the maps 1456 are less than 5m deep and 2645 less than 10m deep.

The distribution of those boreholes used in producing particular applied geology maps is given in the margin of the relevant map.

OTHER

Sites of Special Scientific Interest (Map O)

This map, at 1:50 000 scale, shows the locations and approximate boundaries of Sites of Special Scientific Interest (SSSIs) that occur within the project area. The boundaries of the SSSIs have been taken from 1:10 000 and 1:25 000 scale maps supplied by the Nature Conservancy Council (NCC), and users requiring to know precise boundaries of particular SSSIs are recommended to consult the definitive maps held by the NCC.

Sites of Special Scientific Interest are notified to the Department of the Environment, local authorities, and to landowners of the sites. Notifications were made under section 23 of the National Parks and Access to Countryside Act, 1949, or section 28 of the Wildlife and Countryside Act 1981. Some of the sites shown on the map have still to be notified under the 1981 Act, and there may well be additional sites to be notified.

SSSIs are defined as areas of land which have special scientific interest because of their flora, fauna, geological or physiographical features. The map of SSSIs is included in this report because the presence of an SSSI has relevance to planning and development decisions. A local authority is required to consult the NCC if a planning application is made for development within an

SSSI. If development is proposed that does not require planning permission, the landowner is required to consult the NCC directly in order to gain consent for the development, or to negotiate a management agreement.