AGRICULTURAL LAND CLASSIFICATION

Proposed Shipton-by-Beningbrough Bypass, North Yorkshire

ADAS
Leeds Regional Office

January 1992
File Ref: 2FCS 5706
Job No: 133/91

CONTENTS

AGRICULTURAL LAND CLASSIFICATION OF LAND AFFECTED BY ALTERNATIVE ROUTES OF THE PROPOSED SHIPTON-BY-BENINGBROUGH BYPASS, NORTH YORKSHIRE

1. INTRODUCTION

The proposed bypass runs from National Grid Reference SE548604 (which lies about 1½km north-west of the village of Shipton) to SE563 570 (approximately 2km south-east of the village), and passes to the east of the village. It has an approximate length of 4km. The three alternative corridors surveyed cover a total area of approximately 89ha.

Survey work was carried out in January 1992 when soils were examined by hand auger borings to a depth of 1.00m at intervals of approximately 100m. The boring density was approximately one per hectare and further borings were made, where necessary, to refine grade boundaries. Land quality assessments were made using the revised guidelines published by MAFF in 1988.

1.1 Land Use

Most of the land surveyed is in agricultural use, being either arable land or ley grassland. Small areas of non-agricultural land (either scrub, woodland or gardens) and urban land (existing roads and farm tracks, a house and a service station and restaurant) occur at various points along the routes.

1.2 Climate and Relief

Average Annual Rainfall is 622mm. The accumulated temperature above 0°C (January to June) is 1384 day °C and the site is at field capacity for 141 days a year. The temperature and rainfall figures indicate that there is no overall climatic limitation on A L C grade on the site. The land is flat to slightly sloping and varies from 14m to 18m A O D.

1.3 Geology, Soils and Drainage

The whole route is underlain by Bunter Sandstone over which there is a considerable thickness of drift deposits. Although lacustrine clay is the most important of these, there are also areas of wind blown sand in the north, the centre and southern parts of the route, along with smaller areas of boulder clay and glacial sand and gravel. The soils closely reflect the drift geology. Heavy textured poorly drained (Wetness Class IV) soils are widespread on the lacustrine clay deposits. Soils formed on the blown sand and glacial sand deposits are well-drained, falling in Wetness Class I, but have a slight to moderate drought limitation. In transitional areas where thin sand deposits overlie clay, soils consist of light or medium textured top and upper subsoils passing into heavy clay at depth. Profiles of this type are usually moderately well drained or imperfectly drained and fall into Wetness Classes II or III

2. AGRICULTURAL LAND CLASSIFICATION GRADES

Grade 2 (9.1ha or 10.24% of the route corridors).
Grade 2 land occurs in three separate areas in the northern central and southern parts of the routes. Topsoils consist of light to medium-textured material (often fine sandy loam, medium sandy loam or medium clay loam) and overlie light-textured subsoils (usually medium sandy loam or loamy medium sand). Profiles are stoneless and well drained (Wetness Class I) but slightly droughty and limited to Grade 2 for this reason.

Subgrade 3a (17.30ha or 19.47% of the route corridors).
Land in this subgrade occurs in the central and southern parts of the routes and includes areas of both light-textured and medium to heavy-textured soil. The light-textured soils consist mainly of medium clay loam or medium sandy loam topsoils over loamy medium sand subsoils. These soils are stoneless and well-drained (Wetness Class I) but are moderately droughty and this is the main limitation on A L C grade. The medium to heavy-textured soils generally consist of medium clay loam topsoils and upper subsoils, over heavy clay loam or clay lower subsoils. These soils are also stoneless but are imperfectly drained, with slowly permeable layers generally occurring at depths of around 50cm. In profiles of this type soil wetness is the main limitation on A L C grade.

Subgrade 3b (54.24ha or 61.04% of the route corridors).
Land in this subgrade occurs over much of the route. Soils consist of medium clay loam or heavy clay loam topsoils overlying heavy clay subsoils. Profiles are stoneless and poorly drained (falling in Wetness Class IV) with slowly permeable layers generally starting at around 35cm depth. Soil wetness and workability problems are the main limitations on A L C grade.

Urban (4.12ha or 4.63% of the route corridors).
This consists of a number of roads and farm tracks and a house, service station and restaurant in the north.

Non Agricultural (2.88ha or 3.24% of the site area)
This category includes a number of smaller areas of scrub, farm woodland (0.25ha) and gardens in the central and southern parts of the route.

Resource Planning Group
Leeds Regional Office
January 1992

MAP