

STATEMENT OF PHYSICAL CHARACTERISTICS AND AGRICULTURAL LAND CLASSIFICATION

Rooms Lane, Gildersome

Proposed Waste
Disposal Site

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1. STATEMENT OF PHYSICAL CHARACTERISTICS

A. INTRODUCTION

The site is located around National Grid Reference SE25902955 to the north east of Gildersome and adjoining the A62 Leeds to Huddersfield road. The site is in two blocks to the north and south of Rooms Lane and covers a total of 9.7 hectares. Survey work was carried out in January 1990 when soils were examined by hand auger borings to a depth of one metre at a density of two borings per hectare. One soil pit was dug to confirm details of soil morphology.

Land Use

The agricultural land on the site is currently in arable production. There is a derelict railway line and derelict site of a former goods depot running north-south through the centre of the site. To the north of Rooms Lane and west of the derelict railway is an operational landfill site.

Climate and Relief

Average annual rainfall is approximately 725 mm. The accumulated temperature above 0°C (January to June) is 1307 day °C and the site is at field capacity for a period of around 179 days each year. These factors indicate that there is an overall climatic limitation of grade two on the site.

Altitude ranges from 120 m aod in the south of the site down to 80 m aod in the north. The site is moderately undulating with slopes generally between about 5° and 10°.

Geology

The site is underlain by Carboniferous Coal Measures which is reflected in the heavy soil textures. Solid strata were generally not encountered within one metre of the surface. However, in a restricted area on the southern edge of the site and to the west of the derelict railway tabular sandstones are common on the surface and it was not possible to auger down to one metre suggesting a more limited depth of soil here.

Drainage

All soils are slowly permeable from about 30 cm depth and, in an area with a field capacity period of 179 days, meet the criteria for Wetness Class IV.

B. SOIL PROPERTIES

There is only one soil type present which occurs everywhere apart from the derelict and landfill areas. There are only minimal soil forming materials on the derelict railway areas.

Topsoil textures are heavy, predominantly heavy clay loam. Mean thickness is 28 cm. These soils are generally stoneless or very slightly stony. Subsoils are also heavy being generally clay with silty clay often found at depth. Subsoils are predominantly stoneless.

C. SOIL RESOURCES

The topsoil and subsoil resources on the site are down on the accompanying maps along with soil depth information.

i. Topsoils

Unit T1

This unit comprises heavy textured soils which are predominantly stoneless moderately well structured heavy clay loams with a mean thickness 28 cm.

ii. Subsoils

Unit S1

This unit comprises heavy textured soils which are generally stoneless, predominantly moderately well structured clays and silty clays. Mean unit depth is 72 cm.

2. SOIL PROFILE DESCRIPTION

Rooms Lane, Gildersome

Poorly drained heavy soil

LAND USE: Arable

GRADIENT: 5°

HORIZONS
(cm)

0 - 25 Dark grey (10 YR 4/1) stoneless, unmottled heavy clay loam; wet; moderately developed medium subangular blocky; medium packing density; moderately porous; moderately firm soil strength; very sticky and very plastic; common very fine fibrous roots; non calcareous; abrupt smooth boundary.

25 - 100 Light grey (5 Y 7/1) stoneless clay with very many prominent medium and coarse brownish yellow (10 YR 6/8 mottles; moist; moderately well developed coarse prismatic; high packing density; very slightly porous; very firm soil strength; very sticky and very plastic; few very fine fibrous roots; non calcareous.

3. AGRICULTURAL LAND CLASSIFICATION

Grade 4 (6.7 ha)

All the agricultural land has been placed in this grade. The soils are assessed as being in Wetness Class IV which, taken with the days the area is at field capacity and the texture of the topsoils, indicates an overall soil wetness limitation that places the land in grade 4.

Urban (3.0 ha)

This consists of the operational landfill site in the north west of the area and the derelict railway land.

RPG Leeds
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