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Newbury District Local Plan
Site 58 : Land West of Newbury
Agricultural Land Classification
ALC Maps and Report
March 1994

NEWBURY LOCAL PLAN
SITE 58: LAND WEST OF NEWBURY
AGRICULTURAL LAND CLASSIFICATION REPORT

1. Summary

- 1.1 ADAS was commissioned by MAFF's Land Use Planning Unit to provide information on land quality for a number of sites in the Newbury District of Berkshire. The work forms part of MAFF's statutory input into the preparation of the Newbury District Local Plan.
- 1.2 Approximately 184 ha of land relating to Site 58 was surveyed between January and March 1994. For convenience of description and representation the site has been divided into 5 separate blocks, denoted as 58A, 58B, 58C, 58D, 58E. With the exception of area 58B, the survey was undertaken at a detailed level of approximately one boring per hectare. A total of 184 soil auger borings, 11 soil inspection pits and a number of topsoil stone content measurements were assessed in accordance with MAFF's revised guidelines and criteria for grading the quality of land. These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose long term limitations on its use for agriculture.
- 1.3 Work was conducted by members of the ADAS Resource Planning Team in the Guildford Statutory Group.
- 1.4 The distribution of the grades and subgrades is shown on the two Agricultural Land Classification (ALC) maps attached. The extent of each of the grades on each site is given in the tables which follow. The maps have been drawn at a scale of 1:10,000. They are accurate at this scale, but any enlargement could be misleading. These maps supersede any previous information for this land.
- 1.5 Appendix I gives a general description of the grades, subgrades and land use categories identified in the survey. The main classes are described in terms of the limitation that can occur, the typical cropping range and the expected level and consistency of yield.
- 1.6 A brief summary of the ALC grading for each block of site 58 is given below:

Site 58A (Land East of Skinners Green)

1.7 Distribution of Grades and Subgrades

<u>Grade</u>	<u>Area (ha)</u>	<u>% of Site</u>	<u>% Agricultural Area</u>
2	21.4	17.8	18.8
3a	20.4	17.0	17.9
3b	68.4	57.0	60.2
4	3.5	2.9	<u>3.1</u>
Urban	3.3	2.8	100.0 (113.7 ha)
Non-agricultural	1.4	1.2	
Farm Buildings	0.6	0.5	
Woodland	<u>0.9</u>	<u>0.8</u>	
Total Area of site	119.9	100.0	

- 1.8 The majority of this block of land which is predominantly in arable use, is graded Subgrade 3b (moderate quality land) with small areas of Subgrade 3a (good land) and Grade 2 (very good land). Sporadic areas of Grade 4 (poor land) also occur. For land graded 3b the principal limitations in terms of agricultural land quality are soil wetness, particularly at lower elevations, and topsoil soil content and droughtiness which typifies the higher ground. Gradients of 7-11 degrees, associated with a major break in slope running across the site, also cause land to be grade 3b. Land graded Subgrade 3a comprises similar coarse and fine textured soils to those included in Subgrade 3b but where stone contents are lower. Grade 2 to the north of the block comprises relatively deep fine loamy and clayey soils over gravelly horizons. These are restricted by minor wetness, droughtiness and topsoil stone limitations. A small area of Grade 2 land also occurs on footslopes towards the west of the block. This area comprises deep loamy soils with a slight wetness limitation. Poor quality Grade 4 land occurs in isolated areas. North of Round Hill this is due to steep gradients of 12 degrees, whilst elsewhere Grade 4 is associated with severely waterlogged soils in the vicinity of springs and wet flushes.

Site 58B Land South of Speen

1.9 Distribution of Grades and Subgrades

<u>Grade</u>	<u>Area (ha)</u>	<u>% Agricultural Area</u>
4	14.8	100.0
Total Area of site	14.8	

- 1.10 All of the land on this block which is currently in permanent pasture has been classified as Grade 4, poor quality land, with soil wetness and flood-risk as the main limitations. The soils on the site suffer a severe wetness limitation, due to both the high groundwater levels and surface flooding. These soils which are not easily drained, are prone to annual flooding of a relatively long duration. These limitations can be attributed to the close proximity of the site to the River Kennet. As a result, this land is only suitable for seasonal grazing.

Site 58C Land South of Speen Church

1.11 Distribution of Grades and Subgrades

<u>Grade</u>	<u>Area (ha)</u>	<u>% of Site</u>	<u>% Agricultural Area</u>
2	4.9	29.6	31.4
3a	9.4	56.6	60.3
3b	1.3	7.8	<u>8.3</u>
Woodland	0.1	5.4	<u>100.0</u> (15.6 ha)
Urban	<u>0.1</u>	<u>0.6</u>	
Total Area of site	<u>16.6</u>	<u>100.0</u>	

- 1.12 The agricultural land on the site, currently in set-aside use, has been classified as Grade 2 and Subgrades 3a and 3b, with soil workability, droughtiness and wetness as the main limitations. The majority of the agricultural land has been classified as Subgrade 3a. This land comprises relatively shallow heavy clay loam soils over chalk. The shallow soil depth and restricted rooting into the chalk gives rise to a moderate droughtiness limitation. Some of the land classified as Subgrade 3a shows a moderate wetness limitation, reflecting the existence of imperfectly drained soils that prevail in parts of the south of the site. On the land classified as Grade 2, the soils are deep, contain less chalk and are well drained. The main limitation of such land is the heavy clay loam topsoil which restricts workability and means that there is a slight limitation on the number of days that this land can be worked effectively with machinery or grazed by livestock. Subgrade 3b land is associated with soils that show a significant wetness limitation.

Site 58D Land adjoining Benham Park

1.13 Distribution of Grades and Subgrades

<u>Grade</u>	<u>Area (ha)</u>	<u>% of Site</u>	<u>% Agricultural Area</u>
3b	8.4	41.2	45.7
4	10.0	49.0	<u>54.3</u>
Urban	0.7	3.4	<u>100.0</u> (18.4 ha)
Non Agricultural	0.1	0.5	
Woodland	<u>1.2</u>	<u>5.9</u>	
Total Area of site	20.4	100.0	

- 1.14 Of the agricultural land in this block, currently in permanent pasture, approximately half has been classified as Grade 4, poor quality land. Soil wetness and workability are the key limitations. Topsoils comprise medium silty clay loams and medium sandy silt loams, some of which are organic. These overlie similar or peaty textures. These subsoils exhibit evidence of wetness in the profile caused by a high groundwater table. The remainder of site has been assessed as Subgrade 3b, moderate quality agricultural land. This land is also subject to soil wetness. However, profile characteristics are such that these limitations are less severe than for those described above and assigned to Grade 4.

Site 58E Land North of A4, Speen

1.15 Distribution of Grades and Subgrades

<u>Grade</u>	<u>Area (ha)</u>	<u>% of Site</u>	<u>% Agricultural Area</u>
3a	2.2	18.0	20.4
3b	8.6	69.9	79.6
Urban	0.3	2.4	100.0 (10.8 ha)
Non Agricultural	1.0	8.1	
Woodland	0.2	1.6	
Total Area of site	12.3	100.0	

- 1.16 The majority of agricultural land, which is currently in set-aside use, has been classified as Subgrade 3b, moderate quality land. Soil droughtiness, wetness and workability are the main limitations to agricultural use. Where soil droughtiness is the principal limitation, moderately stony medium clay loam topsoils are underlain by very stony heavy textured subsoils in association with underlying gravel deposits. Soil wetness and workability are limiting where the presence of poorly structured clay horizons occur at shallow depths to significantly impair drainage. The remaining agricultural land can be graded no higher than Subgrade 3a, good quality land, because of a topsoil stoniness limitation. Hard stones larger than 2 cm act to impede cultivation, harvesting and crop growth.

2. Climate

- 2.1 The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.
- 2.2 The main parameters used in the assessment of an overall climatic limitation are average annual rainfall, as a measure of overall wetness, and accumulated temperature, as a measure of the relative warmth of a locality.
- 2.3 A detailed assessment of the prevailing climate was made by interpolation from a 5km gridpoint dataset (Met. Office, 1989). The details are given in the table below and these show that there is no overall climatic limitation at any of the five blocks of land which comprise Site 58. However, climatic factors do interact with soil properties to influence soil wetness and droughtiness limitations. At site 58A, the relatively large variation in altitude results in a correspondingly large range in crop adjusted moisture deficits (MD's) and field capacity days (FCD's). As the land becomes lower, the MD's increase and FCD's decrease.
- 2.4 No local climatic factors such as exposure or frost risk are believed to affect site 58.

2.5 Site 58A Land East of Skinners Green - Climatic Interpolations

Grid Reference	SU456664	SU448653	SU450648
Altitude, (m, AOD)	85	105	125
Accumulated Temperature (°days, Jan-June)	1435	1413	1390
Average Annual Rainfall (mm)	725	752	770
Field Capacity Days	163	168	171
Moisture deficit, wheat (mm)	105	101	98
Moisture deficit, potatoes (mm)	96	91	87
Overall Climatic Grade	1	1	1

2.6 Site 58B Land south of Speen - Climatic Interpolation

Grid Reference	SU456670
Altitude, (m, AOD)	80
Accumulated Temperature (°days, Jan-June)	1441
Average Annual Rainfall (mm)	713
Field Capacity Days	160
Moisture deficit, wheat (mm)	106
Moisture deficit, potatoes (mm)	98
Overall Climatic Grade	1

2.7 Site 58C Land South of Speen Church - Climatic Interpolation

Grid Reference	SU455677
Altitude, (m, AOD)	85
Accumulated Temperature (°days, Jan-June)	1434
Average Annual Rainfall (mm)	707
Field Capacity Days	158
Moisture deficit, wheat (mm)	105
Moisture deficit, potatoes (mm)	97
Overall Climatic Grade	1

2.8 Site 58D Land adjoining Benham Park - Climatic Interpolation

Grid Reference	SU454672
Altitude, (m, AOD)	80
Accumulated Temperature (°days, Jan-June)	1440
Average Annual Rainfall (mm)	711
Field Capacity Days	159
Moisture deficit, wheat (mm)	106
Moisture deficit, potatoes (mm)	98
Overall Climatic Grade	1

2.9 Site 58E Land north of the A4, Speen - Climatic Interpolation

Grid Reference	SU453685	SU452682
Altitude, (m, AOD)	95	115
Accumulated Temperature (°days, Jan-June)	1422	1400
Average Annual Rainfall (mm)	702	720
Field Capacity Days	156	159
Moisture deficit, wheat (mm)	104	101
Moisture deficit, potatoes (mm)	96	91
Overall Climatic Grade	1	1

3. **Relief**

Site 58A Land east of Skinners Green

- 3.1 The highest land occurs adjacent to Enborne Street and Essex Street, in the south east corner of the site. This land is virtually flat and lies at approximately 125 m AOD. From this plateau, the land falls with moderate slopes (gradients of 3° to 6°), to the north and west to altitudes of approximately 100m AOD. Within this area some of the land falls more steeply, through gradients of 7° to 12°, such that gradient is a limiting factor to agricultural land quality. Lower lying land north of Skinners Green Farm and the schools to the east of the site falls gently from 95m AOD to an altitude of 84m AOD adjacent to the mainline railway line, through gradients of 0° to 2°.

Site 58B Land south of Speen

- 3.2 This area is flat and lies at an altitude of 80 AOD on the River Kennet floodplain.

Site 58C Land south of Speen Church

- 3.3 The land gently slopes from 95m AOD in the north of the site to 80m AOD along the southern boundary of the site. Nowhere on the site does gradient or micro-relief affect agricultural land quality.

Site 58D Land adjoining Benham Park

- 3.4 The site is flat and lies at approximately 80m AOD. Levelling and infilling of former water meadow systems has resulted in a slight variation in micro-relief. However, nowhere on the site does gradient affect agricultural land quality.

Site 58E Land north of the A4 Speen

- 3.5 The south west corner of the site is relatively flat and lies at approximately 115m AOD. The western half of the site is occupied by a V-shaped valley which is

moderately steep in places (gradients of 6°). The remaining area of the site drops gently mid-slope from 105m AOD to 95m AOD and then levels out again north of the dismantled railway. Nowhere on the site does gradient or relief impose any restriction on agricultural land quality.

4. Geology and Soils

Site 58A Land east of Skinners Green

- 4.1 This block is shown to be underlain by six different geological deposits (BGS, 1971). The higher flatter land is mapped as plateau gravel and the mid-slope areas as Bagshot Beds. Land to the north of Skinners Green Farm and to the west of the playing field (SU 455662) is shown as Reading Beds, and land north of Oaken Hedges and Enborne Gate Farm as river and valley gravel. A small exposure of brickearth is mapped north east of Oaken Hedges. The remaining lower lying land is mapped as London Clay, which forms the main deposit associated with much of the lower lying land.
- 4.2 There are three soil types shown, (SSEW, 1979). In the south of the site, on the higher lying land, podzols or brown sands are mapped. These soils are described as “well drained, stony sandy soils, commonly with a subsurface pan, in river-terrace gravel, associated with slowly permeable loamy over clayey soils in Head over Eocene clay and occasionally with moderately well drained, loamy soils affected by high groundwater”, (SSEW, 1979). The lower lying land, in the middle and along the western edge of the site, is shown as stagnogley soils. These soils are described as “fine loamy over clayey soils, with impeded drainage, in Head over Eocene clays, associated with permeable loamy soils in Eocene loams, affected by groundwater”, (SSEW, 1979). In the north of the site, humic-alluvial gley soils are shown. These soils are described as “clayey alluvial soils, with humose or peaty surface horizons, and silty alluvial soils over peat, affected by high groundwater and occasional flooding, associated with well drained stony fine or coarse loamy, or silty soils in Head or brickearth over river-terrace gravel”, (SSEW, 1979).
- 4.3 Detailed field examination confirmed three broad soil types. Poorly drained profiles occur on the lower lying land associated with London Clay deposits, whilst stonier profiles occur on the highest land, adjacent to Enborne Street and Cope Hall Lane (SU 454652). Deeper profiles exhibiting no or a slight impedance to drainage occur in the north of the site and on footslopes towards the west of the block.

Site 58B Land south of Speen

- 4.4 The entire site is mapped as alluvium (BGS, 1971).
- 4.5 Humic-alluvial gley soils are shown across this site, (SSEW, 1979). These soils are described as “clayey alluvial soils, with humose or peaty surface horizons, and

silty alluvial soils over peat, affected by high groundwater and occasional flooding, associated with well drained stony fine or coarse loamy, or silty soils in Head or brickearth over river-terrace gravel”, (SSEW, 1979).

- 4.6 Detailed field examination revealed the large extent of algal marl and peat within subsoils on the site, with these soils being described as calcareous alluvial gley soils.

Site 58C Land south of Speen Church

- 4.7 The majority of this block is mapped as Upper Chalk (BGS, 1971). There is a small area of Reading Beds shown in the north of the site, and a band of river and valley gravel running along the southern boundary of the site.

- 4.8 There are two soil types mapped, (SSEW, 1979) the majority being that of humic-alluvial gley soils. These soils are described as “clayey alluvial soils, with humose or peaty surface horizons, and silty alluvial soils over peat, affected by high groundwater and occasional flooding, associated with well drained stony fine or coarse loamy, or silty soils in Head or brickearth over river-terrace gravel”, (SSEW, 1979). In the north east of the site a small area is shown as podzols or brown sands. These soils are described as “well drained, stony sandy soils, commonly with a subsurface pan, in river-terrace gravel, associated with slowly permeable loamy over clayey soils in Head over Eocene clay and occasionally with moderately well drained, loamy soils affected by high groundwater”, (SSEW, 1979).

- 4.9 Detailed field examination found well drained calcareous loamy soils over chalk at varying depths, with slowly permeable soils in the north east and south west of the site where soil textures are heavier.

Site 58D Land adjoining Benham Park

- 4.10 The entire site is shown to be underlain by alluvium over river terrace gravels (BGS, 1971).

- 4.11 Humic-alluvial gley soils are shown across the entire site, (SSEW, 1979). These soils are described as “clayey alluvial soils, with humose or peaty surface horizons, and silty alluvial soils over peat, affected by high groundwater and occasional flooding, associated with well drained stony fine or coarse loamy, or silty soils in Head or brickearth over river-terrace gravel”, (SSEW, 1979).

- 4.12 Detailed field examination found alluvial soils with shallow groundwater tables.

Site 58E Land north of the A4, Speen

- 4.13 The lower land in north of the site is shown as river and valley gravel (BGS, 1971). Along the western boundary Reading Beds are mapped and the remainder of the site as plateau gravel.
- 4.14 The majority of the site is shown as podzols or brown sands (SSEW, 1979). These soils are described as “well drained, stony sandy soils, commonly with a subsurface pan, in river-terrace gravel, associated with slowly permeable loamy over clayey soils in Head over Eocene clay and occasionally with moderately well drained, loamy soils affected by high groundwater”, (SSEW, 1979). To the north of the dismantled railway, humic-alluvial gley soils are shown. These soils are described as “clayey alluvial soils, with humose or peaty surface horizons, and silty alluvial soils over peat, affected by high groundwater and occasional flooding, associated with well drained stony fine or coarse loamy, or silty soils in Head or brickearth over river-terrace gravel”, (SSEW, 1979).
- 4.15 Detailed field examination found clay loam and clay profiles, some with slowly permeable subsoils and some with flinty subsoils.

5. Agricultural Land Classification

- 5.1 The tables referred to in sections 1.7, 1.9, 1.11, 1.13 and 1.15 provide details of the extent of each grade for blocks 58A, 58B, 58C, 58D and 58E respectively. The distribution of each grade for block 58A is shown on the attached ALC map 1. The distribution of each grade for the remaining blocks is shown on the attached ALC map 2.
- 5.2 The location of the soil observation points are shown on the attached sample point maps.

Site 58A Land east of Skinners Green

Grade 2

- 5.3 Very good quality agricultural land in the north of the site is limited by minor soil droughtiness and/or soil wetness and workability restrictions, and occasionally also by topsoil stone limitations. Land limited by soil wetness and workability generally comprises medium clay loam topsoils and upper subsoils over clay lower subsoils. Topsoils are slightly stony (0-3% flints >2cm v/v, 3-10% total flints v/v); subsoils are stoneless to moderately stony (0-25% total flints v/v). Profiles are gleyed from 45-70 cm and slowly permeable at 60-75 cm (Wetness Class II), resulting in minor restrictions on the flexibility of cropping, stocking and cultivations. Such land is typified by pit 8. The remaining Grade 2 land is limited by soil droughtiness, and in parts also by topsoil stoniness. Profiles generally comprise permeable medium clay loams which occasionally become heavier at depth. Topsoils are generally very slightly stony to moderately stony (0-9% flints > 2 cm v/v; 3-15 total flints v/v),

and in places the presence of large flints in the topsoil acts to impede cultivation, harvesting and crop growth. Subsoils are slightly to very stony (10-40% total flints v/v) and proved impenetrable to an auger between 70-95 cm. The interaction between soil textures and profile stone contents at this site acts to slightly restrict the available water for crops in such profiles. Consequently this land will have reduced levels and consistency of yields.

- 5.4 A small area of Grade 2 land also occurs on footslopes towards the west of the block. This area comprises deep loamy soils with a slight wetness limitation, which are typified by Pit 10. Profiles are moderately well-drained (Wetness Class II) caused by slowly permeable heavy clay loams at 67 cm depth. This land is subject to minor restrictions on the flexibility of cropping and stocking

Subgrade 3a

- 5.5 Moderate quality agricultural land in the north of the site is limited by soil droughtiness or occasionally by soil wetness and workability. In the north of the site profiles comprise loamy and coarse textured soils which proved impenetrable to an auger between 35 and 55 cm. Topsoils are moderately stony (5-7% flints > 2 cm v/v; 15-25% total flints v/v) and subsoils are moderately to very stony (25-65% total flints v/v). Such profiles are typified by Pit 7. The interaction between soil textures and profile stone contents at this site acts to moderately restrict the available water for crops, resulting in reduced level and consistency of yields. The restricted available water for crops in such profiles will tend to reduce the level and consistency of crop yields. Occasionally land is limited by soil wetness and workability. Medium textured upper profiles rest over slowly permeable clays and sandy clays from c.55cm resulting in imperfect drainage (Wetness Class III), as indicated by gleying from 35-55cm. This results in moderate restrictions on the flexibility of cropping, stocking and cultivations. Adjacent to Cope Hall Lane, land is restricted by a topsoil stone limitation. Medium clay loam topsoils contain between 11-12% flints > 2 cm v/v which act to impede crop growth and harvesting and increase implement and tyre wear.

Subgrade 3b

- 5.6 Moderate quality land is limited by soil droughtiness and topsoil stoniness on the higher flatter land, by soil wetness and workability on the lower lying land and by gradient on the mid-slopes of the site. On the higher flatter land medium clay loam and medium sandy silt loam topsoils are moderately stony (c. 16-23% flints > 2 cm v/v; 25-30% total flints v/v), with the high percentage of flints acting to significantly impede cultivation, harvesting and crop growth and greatly increase implement and tyre wear. Subsoils generally comprise loamy and coarse textured soils which are very stony (c. 35-55% total flints v/v) and generally proved impenetrable to an auger between 40 and 60 cm. Such profiles are typified by Pit 9. The interaction between local climate, soil textures and profile stone contents at this site means that the amount of available water is significantly reduced, lowering the level and consistency of crop yields.

- 5.7 Some of the mid-slopes have gradients of 7.5° to 11°. Such slopes, measured using an optical reading clinometer, restrict the range of farm machinery that may be safely and efficiently used.
- 5.8 The remaining Subgrade 3b is limited by soil wetness and workability. Medium and heavy clay loam topsoils, which are occasionally silty, overlie poorly structured slowly permeable clay subsoils. The clay severely impedes drainage as indicated by gleying below, and occasionally within, the topsoil. Such profiles are assigned to Wetness Class IV and are typified by Pit 11. This land is subject to significant restrictions in terms of flexibility of cultivations, cropping and stocking.

Grade 4

- 5.9 Land assessed as poor quality is either restricted by severe soil wetness and workability limitations, or gradient. To the north of Round Hill gradients of 11.5-12° were measured using an optical reading clinometer. Such gradients can severely restrict mechanised farm operations and such land is best suited to grazing. Elsewhere Grade 4 is associated with severely waterlogged soils in the vicinity of springs and wet flushes. Given the extreme saturation of the land for much of the year, as indicated by the predominance of hydrophilic vegetation such as rushes and sedges, the soils were considered to be no better than Wetness Class V. Such land is likely to be difficult to drain and will present severe difficulties in terms of cropping and cultivations. Consequently it is best suited to seasonal grazing.

Other Land Categories

- 5.10 The Urban marked on the map is occupied by a road and residential dwellings; the non-agricultural by a garden; the woodland comprises mature trees and the farm buildings are those at Wash Common Farm.

Site 58B Land south of Speen

Grade 4

- 5.11 All of the agricultural land on the site has been classified as Grade 4, poor quality land, with soil wetness and site flood risk as the main limitations. Soil profiles typically comprise heavy silty clay loam topsoils, with similar textures prevailing to a depth of 60-90 cm where a fibrous peat horizon commences. The upper subsoil is gleyed and the horizon overlying the peat consists of a gleyed heavy silty clay loam with approximately 20% small shells. This horizon is typical of the algal marl deposits which occur in the Kennet valley, and although gleyed it is not slowly permeable due to its structural condition and the presence of vertical channels which assist water movement and root penetration.

- 5.12 It was evident that the soils on the site suffer from problems associated with a high groundwater table. This can be directly attributed to the low position of the site in the landscape on the River Kennet floodplain. The feasibility of improvements to the land by the means of artificial soil drainage is limited, since the necessary outfalls for soil drainage cannot be achieved due to the high water levels in the River Kennet. As a result these soils are assigned to Wetness Class V, resulting in a classification of Grade 4. Soils that are waterlogged for long periods suffer from a lack of aeration which restricts crop root development. Wetness increases the liability of damage to soil structure through cultivations and grazing.
- 5.13 In addition, the site also suffers from surface water problems due to annual flooding from the River Kennet. There are some surface water drains on the site to assist with the dispersal of surface water, although their effectiveness is diminished due to their having silted up and become overgrown with vegetation. The floods tend to be of a long duration, (personal communication) and severely restricts the range of land uses for which the site is suitable. Land that is at a high risk from flooding is wholly unsuitable for arable cropping, both due to the damage that can occur to crops and the restrictions on timings of cultivations. Similarly, grazing by livestock is affected, as flooded land is both unsafe and unsuitable for grazing livestock and soil damage may result if the grazing intensity and soil surface conditions are not carefully monitored. Therefore, this land is classified as Grade 4 due to a severe risk of flooding and wetness caused by high groundwater levels, and is only suitable for seasonal grazing in the drier months.

Site 58C Land south of Speen Church

Grade 2

- 5.14 An area of agricultural land towards the south east of the site has been classified as very good quality, with soil workability and droughtiness as the main limitations. Profiles typically comprise well drained (Wetness Class I) heavy clay loam topsoils which become heavier with depth. The majority of soils tend to be relatively stonefree, although in some areas of the site they contain chalk fragments at depth, reflecting the occurrence of these deeper soils over chalk. These have a slight restriction on profile available water for plant growth and are consequently classified as Grade 2 due to a slight droughtiness limitation. Despite being well drained (Wetness Class I) the heavy topsoil texture results in a minor workability limitation and cannot be graded above Grade 2 because of slightly restricted flexibility for cultivations and grazing management.

Subgrade 3a

- 5.15 The majority of the agricultural land on the site has been classified as good quality, with soil droughtiness as the main limitation. The soils in this mapping unit are relatively shallow over chalk. Soil profiles typically comprise heavy clay loam topsoils over a similar textured upper subsoil containing abundant chalk fragments, with solid chalk commencing at a depth ranging between 55-85 cm. Pit 3 was dug

to assess the nature of these soils, particularly the depth to which rooting occurs into the chalk. This indicated that the land is moderately droughty and appropriately placed into Subgrade 3a on this basis. In the south of the site, an area of land has been classified as Subgrade 3a due to a wetness limitation, lower subsoils being of a slowly permeable nature. Soils are typically heavy clay loam topsoils over similar or slightly sandy (sandy clay loam) upper subsoils which may be gleyed. These rest over gleyed and slowly permeable clays, sandy clay loams and heavy clay loams which exhibit textural variability within short distances. Such land is allocated to Wetness Class II and with heavy clay loam topsoils is appropriately placed in Subgrade 3a.

Subgrade 3b

- 5.16 Two small areas of land in the north and south of the site have been classified as moderate quality, with soil wetness as the main limitation. Profiles typically comprise slightly stony heavy silty clay loam and heavy clay loam topsoils overlying similarly textured upper subsoils, which become heavier and occasionally sandy with depth. Pit 4 was dug in the south of the site to assess the nature of the wetness problem. Slowly permeable layers were identified in the subsoils resulting in these soils being assigned to Wetness Class III or IV. In combination with heavy clay loam topsoils these are appropriately placed in Subgrade 3b on this site. Soils that have a wetness limitation inhibit plant and root development, which will reduce yields. Furthermore, the sensitivity of the soil to structural damage from grazing livestock or the use of agricultural machinery is increased, and consequently there will be reduced flexibility in the timing of cultivations or grazing.

Site 58D Land adjoining Benham Park

Subgrade 3b

- 5.17 Approximately one half of the agricultural land surveyed has been classified as Subgrade 3b, moderate quality land, with the key limitation being soil wetness. The land can be graded no higher than moderate quality because of wetness caused by high groundwater tables. At the time of survey (February) groundwater levels in soil auger borings and a soil inspection pit ranged from 30-50 cm depth, and occasionally deeper. The flat low-lying nature of this site means that drainage is unlikely to be effective. Consequently, groundwater levels at this site are difficult to control. Based upon these findings, it was considered that Wetness Class IV is appropriate. The interaction between the topsoil textures and the local climatic regime (which is relatively dry in a national context) means that this land can be graded no better than Subgrade 3b. Excessive soil wetness adversely affects seed germination and survival, and inhibits the development of a good root system. Soil wetness also imposes restrictions on cultivations, trafficking by machinery and grazing by livestock.

- 5.18 Topsoils comprise very calcareous medium sandy silt loams and medium silty clay loams, some of which are organic. These overlie similar textured upper subsoils which contain between 2-65% finely divided algal marl fragments which are composed of very small soft shells. The lower subsoils are similar to the upper subsoils, but can be interbedded with organic mineral or peaty textures (peat, loamy peats and peaty loams) at approximately 60-80 cm depth. These peaty textures are generally non-calcareous. Pit 5 typifies such profiles. Occasionally, profiles are impenetrable to a soil auger at depth because of underlying gravelly deposits.

Grade 4

- 5.19 The remainder of the agricultural land surveyed has been classified as Grade 4, poor quality land. The key limitations are soil wetness and workability. This land has been so graded because of high groundwater levels observed in soil auger borings, the abundance of marshy species in the grassland and wet surface conditions. This poorer quality agricultural land is found on the slightly lower land which tends to occur around the open drains. Based upon these findings and the difficulty in controlling groundwater levels it was felt that the soil profiles would be appropriately placed in Wetness Class V. The interaction between the topsoil textures and the local climatic regime (which is relatively dry in a national context) means that this land can be graded no higher than Grade 4. Such land is mainly suited to grass. Restrictions on land use are more severe than land assigned to Subgrade 3b, with the land mainly being suited to seasonal grazing use.
- 5.20 The soil profiles are similar to those described above and assigned to Subgrade 3b. However, the peaty textures tend to be present at much shallower depths, at approximately 25-40 cm, and often continue to depth with soils being significantly wetter. Occasionally, borings are impenetrable to an auger at depth because of underlying gravelly deposits.

Other Land Categories

- 5.21 The land marked as urban on the map is occupied by a gravel track; the non-agricultural by a small area of scattered trees; the woodland comprises mature deciduous trees.

Site 58E Land north of the A4, Speen

Subgrade 3a

- 5.22 Approximately one quarter of the agricultural land surveyed has been classified as Subgrade 3a, good quality land. The key limitations are topsoil stoniness, soil wetness and workability.

- 5.23 The majority of good quality land has been so graded because of topsoil stoniness. Medium clay loam topsoils are underlain by similar or heavier textured subsoils. These profiles are free draining. Topsoils are moderately stony, containing approximately 10-13% flints larger than 2 cm by volume and 20-25% total flints by volume. Subsoils are generally moderately stony, varying between approximately 20-30% total flints by volume, though less stony horizons also occur. At approximately 70-75 cm, these profiles pass into a very slightly stony clay. In the west of the mapping unit lighter textured subsoils of medium sandy loams exist and these profiles are gleyed within 40 cm. Such profiles are assessed as Wetness Class II. However, all of this land can be graded no better than Subgrade 3a because of topsoil stoniness. The moderately high volume percentage of flints larger than 2 cm act to impede cultivation, harvesting and crop growth.
- 5.24 A small area of land adjacent to the allotment gardens is classed as Subgrade 3a because of a moderate soil wetness limitation. Medium clay loam topsoils overlie subsoils which become heavier with depth. These profiles are slightly stony throughout, containing approximately 10-15% total flints by volume. They are gleyed and slowly permeable from approximately 50 cm, placing them into Wetness Class III. The interaction between these soil drainage characteristics and the topsoil textures at this site means that this land can be graded no higher than Subgrade 3a. This moderate soil wetness limitation adversely affects seed germination and survival, plus inhibits the development of a good root system. This affects crop growth and yields. In addition, moderate restrictions on cultivation, grazing by livestock and trafficking by machinery are imposed.

Subgrade 3b

- 5.25 The majority of the agricultural land surveyed has been classified as Subgrade 3b, moderate quality land. The key limitations are soil droughtiness, wetness and workability.
- 5.26 Land prone to soil wetness and workability is found on the slightly higher undulating land to the north and west of the reservoirs. Topsoils comprise medium clay loams which are underlain by clay upper and lower subsoils. Topsoils are either slightly or moderately stony, containing approximately 3-12% flints larger than 2 cm by volume and 10-25% total flints by volume. Subsoils vary from being stoneless to slightly stony, with 0-10% total flints by volume. All profiles are gleyed and poorly structured from approximately 30-33 cm. These profiles are typified by Pit 1, which was found to have a slowly permeable (moderately developed coarse angular-blocky) subsoil structure. These profiles are placed into Wetness Class IV. The interaction between these drainage characteristics and the topsoil textures at this site means that this land can be graded no higher than Subgrade 3b. This significant soil wetness limitation reduces the flexibility of cropping and stocking plus imposes restrictions on cultivations, grazing by livestock and trafficking by machinery.

- 5.27 The remainder of land agricultural classified as moderate quality is limited by soil droughtiness. Topsoils comprise medium clay loams which are moderately stony, containing approximately 11-14% flints larger than 2 cm by volume and 20-30% total flints by volume. These overlie free draining moderately structured subsoils of similar or heavier texture. Subsoils are moderately or very stony, containing approximately 25-65% total flints by volume. All of the soil auger borings within this mapping unit proved to be impenetrable to an auger below the upper subsoil. Pit 2 is typical of these soils and was found to have upper and lower subsoils containing 43% and 62% respectively of total flints by volume (stone contents were measured using volumetric displacement in water). The interaction of soil textures, profile stone contents and subsoil structural conditions at this site means that this land can be graded no higher than Subgrade 3b because of a significant soil droughtiness limitation. This lowers the profile available water for crops which tends to reduce the level and consistency of crop yields.

Other Land Categories

- 5.28 The urban marked on the map is occupied by covered reservoirs; the band of non-agricultural land shown in the north of the site comprises a dismantled railway and the larger area mapped in the east is occupied by allotment gardens; the woodland comprises mature deciduous trees.

ADAS Ref: 0202/007/94
MAFF Ref: EL02/0297

Resource Planning Team
Guildford Statutory Group
ADAS Reading

SOURCES OF REFERENCE

British Geological Survey (1971), Sheet 267, Hungerford, 1:63,360, (drift edition).

MAFF (1988), Agricultural Land Classification of England and Wales : Revised guidelines and criteria for grading the quality of agricultural land.

Meteorological Office (1989), Climatic datasets for Agricultural Land Classification.

Personal Communication Flood information from Benham Estate Office.

Soil Survey of England and Wales (1979), Bulletin No.8, Soils of Berkshire, 1:250,000, and accompanying legend.

APPENDIX I

DESCRIPTION OF THE GRADES AND SUBGRADES

Grade 1 : Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 : Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

Grade 3 : Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a : Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b : Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 : Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (eg. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 : Very Poor Quality Agricultural Land

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland

Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.

Agricultural Buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (eg. polythene tunnels erected for lambing) may be ignored.

Open Water

Includes lakes, ponds and rivers as map scale permits.

Land Not Surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above, eg. buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will be shown.

APPENDIX II

FIELD ASSESSMENT OF SOIL WETNESS CLASS

SOIL WETNESS CLASSIFICATION

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

Definition of Soil Wetness Classes

Wetness Class	Duration of Waterlogging ¹
I	The soil profile is not wet within 70 cm depth for more than 30 days in most years. ²
II	The soil profile is wet within 70 cm depth for 31-90 days in most years or , if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but only wet within 40 cm depth for 30 days in most years.
III	The soil profile is wet within 70 cm depth for 91-180 days in most years or , if there is no slowly permeable layer present within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31-90 days in most years.
IV	The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years or , if there is no slowly permeable layer present within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years.
V	The soil profile is wet within 40 cm depth for 211-335 days in most years.
VI	The soil profile is wet within 40 cm depth for more than 335 days in most years.

Soils can be allocated to a wetness class on the basis of quantitative data recorded over a period of many years or by the interpretation of soil profile characteristics, site and climatic factors. Adequate quantitative data will rarely be available for ALC surveys and therefore the interpretative method of field assessment is used to identify soil wetness class in the field. The method adopted here is common to ADAS and the SSLRC.

¹The number of days specified is not necessarily a continuous period.

²'In most years' is defined as more than 10 out of 20 years.

APPENDIX III
SOIL PIT AND SOIL BORING DESCRIPTIONS

Contents :

- Soil Abbreviations - explanatory note**
- Database Printout - soil pit information**
- Database Printout - boring level information**
- Database Printout - horizon level information**

SOIL PROFILE DESCRIPTIONS : EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a computer database. This uses notations and abbreviations as set out below.

Boring Header Information

1. **GRID REF** : national 100 km grid square and 8 figure grid reference.
2. **USE** : Land use at the time of survey. The following abbreviations are used.

ARA : Arable	WHT : Wheat	BAR : Barley
CER : Cereals	OAT : Oats	MZE : Maize
OSR : Oilseed rape	BEN : Field Beans	BRA : Brassicae
POT : Potatoes	SBT : Sugar Beet	FCD : Fodder Crops
LIN : Linseed	FRT : Soft and Top Fruit	FLW : Fallow
PGR : Permanent Pasture	LEY : Ley Grass	RGR : Rough Grazing
SCR : Scrub	CFW : Coniferous Woodland	DCW : Deciduous Wood
HTH : Heathland	BOG : Bog or Marsh	FLW : Fallow
PLO : Ploughed	SAS : Set aside	OTH : Other
HRT : Horticultural Crops		
3. **GRDNT** : Gradient as estimated or measured by a hand-held optical clinometer.
4. **GLEYSPL** : Depth in centimetres (cm) to gleying and/or slowly permeable layers.
5. **AP (WHEAT/POTS)** : Crop-adjusted available water capacity.
6. **MB (WHEAT/POTS)** : Moisture Balance. (Crop adjusted AP - crop adjusted MD)
7. **DRT** : Best grade according to soil droughtiness.
8. If any of the following factors are considered significant, 'Y' will be entered in the relevant column.

MREL : Microrelief limitation **FLOOD** : Flood risk **EROSN** : Soil erosion risk
EXP : Exposure limitation **FROST** : Frost prone **DIST** : Disturbed land
CHEM : Chemical limitation

9. **LIMIT** : The main limitation to land quality. The following abbreviations are used.

OC : Overall Climate	AE : Aspect	EX : Exposure
FR : Frost Risk	GR : Gradient	MR : Microrelief
FL : Flood Risk	TX : Topsoil Texture	DP : Soil Depth
CH : Chemical	WE : Wetness	WK : Workability
DR : Drought	ER : Erosion Risk	WD : Soil Wetness/Droughtiness
ST : Topsoil Stoniness		

Soil Pits and Auger Borings

1. **TEXTURE** : soil texture classes are denoted by the following abbreviations.

S :	Sand	LS :	Loamy Sand	SL :	Sandy Loam
SZL :	Sandy Silt Loam	CL :	Clay Loam	ZCL :	Silty Clay Loam
ZL :	Silt Loam	SCL :	Sandy Clay Loam	C :	Clay
SC :	Sandy Clay	ZC :	Silty Clay	OL :	Organic Loam
P :	Peat	SP :	Sandy Peat	LP :	Loamy Peat
PL :	Peaty Loam	PS :	Peaty Sand	MZ :	Marine Light Silts

For the sand, loamy sand, sandy loam and sandy silt loam classes, the predominant size of sand fraction will be indicated by the use of the following prefixes:

F :	Fine (more than 66% of the sand less than 0.2mm)
M :	Medium (less than 66% fine sand and less than 33% coarse sand)
C :	Coarse (more than 33% of the sand larger than 0.6mm)

The clay loam and silty clay loam classes will be sub-divided according to the clay content: **M** : Medium (<27% clay) **H** : Heavy (27-35% clay)

2. **MOTTLE COL** : Mottle colour using Munsell notation.
3. **MOTTLE ABUN** : Mottle abundance, expressed as a percentage of the matrix or surface described.

F : few <2% **C** : common 2-20% **M** : many 20-40% **VM** : very many 40% +

4. **MOTTLE CONT** : Mottle contrast

F : faint - indistinct mottles, evident only on close inspection
D : distinct - mottles are readily seen
P : prominent - mottling is conspicuous and one of the outstanding features of the horizon

5. **PED. COL** : Ped face colour using Munsell notation.
6. **GLEYS** : If the soil horizon is gleyed a 'Y' will appear in this column. If slightly gleyed, an 'S' will appear.
7. **STONE LITH** : Stone Lithology - One of the following is used.

HR :	all hard rocks and stones	SLST :	soft oolitic or dolimitic limestone
CH :	chalk	FSST :	soft, fine grained sandstone
ZR :	soft, argillaceous, or silty rocks	GH :	gravel with non-porous (hard) stones
MSST :	soft, medium grained sandstone	GS :	gravel with porous (soft) stones
SI :	soft weathered igneous/metamorphic rock		

Stone contents (>2cm, >6cm and total) are given in percentages (by volume).

8. **STRUCT** : the degree of development, size and shape of soil peds are described using the following notation:

degree of development **WK** : weakly developed **MD** : moderately developed
 ST : strongly developed

ped size **F** : fine **M** : medium
 C : coarse **VC** : very coarse

ped shape **S** : single grain **M** : massive
 GR : granular **AB** : angular blocky
 SAB : sub-angular blocky **PR** : prismatic
 PL : platy

9. **CONSIST** : Soil consistence is described using the following notation:

L : loose **VF** : very friable **FR** : friable **FM** : firm **VM** : very firm
EM : extremely firm **EH** : extremely hard

10. **SUBS STR** : Subsoil structural condition recorded for the purpose of calculating profile droughtiness : **G** : good **M** : moderate **P** : poor

11. **POR** : Soil porosity. If a soil horizon has less than 0.5% biopores >0.5 mm, a 'Y' will appear in this column.

12. **IMP** : If the profile is impenetrable to rooting a 'Y' will appear in this column at the appropriate horizon.

13. **SPL** : Slowly permeable layer. If the soil horizon is slowly permeable a 'Y' will appear in this column.

14. **CALC** : If the soil horizon is calcareous, a 'Y' will appear in this column.

15. Other notations

APW : available water capacity (in mm) adjusted for wheat

APP : available water capacity (in mm) adjusted for potatoes

MBW : moisture balance, wheat

MBP : moisture balance, potatoes

SOIL PIT AND SOIL BORING DESCRIPTIONS

**NEWBURY LOCAL PLAN
SITE 58A**

Contents:

Soil Pit Descriptions

Database Printout - Boring Level Information

Database Printout - Horizon Level Information

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58A Pit Number : 7P

Grid Reference: SU45706638 Average Annual Rainfall : 752 mm
 Accumulated Temperature : 1413 degree days
 Field Capacity Level : 168 days
 Land Use : Set-aside
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 28	MCL	10YR42 00	5	20	HR					
28- 46	MCL	10YR43 00	0	51	HR			FR	M	
46- 62	LMS	10YR54 00	0	65	HR			VF	M	
62- 75	MSL	10YR54 00	0	46	HR			FR	M	
75-100	MCL	10YR53 63	0	46	HR	C		FR	M	
100-120	C	10YR53 63	0	46	HR	M		FM	M	

Wetness Grade : 1 Wetness Class : I
 Gleying : 075 cm
 SPL : No SPL

Drought Grade : 3A APW : 91 mm MBW : -13 mm
 APP : 68 mm MBP : -27 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58A Pit Number : 8P

Grid Reference: SU45406610 Average Annual Rainfall : 752 mm
 Accumulated Temperature : 1413 degree days
 Field Capacity Level : 168 days
 Land Use : Set-aside
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 29	MCL	10YR42 00	3	10	HR					
29- 45	MCL	10YR54 52	0	2	HR	F	MDCSAB	FR	M	
45- 64	MCL	10YR53 52	0	6	HR	C	MDCSAB	FR	M	
64- 80	C	10YR52 00	0	10	HR	M	WKCAB	FM	P	
80-120	C	10YR52 00	0	10	HR	M			P	

Wetness Grade : 2 Wetness Class : II
 Gleying : 045 cm
 SPL : 064 cm

Drought Grade : 2 APW : 122mm MBW : 18 mm
 APP : 108mm MBP : 13 mm

FINAL ALC GRADE : 2
 MAIN LIMITATION : Soil Wetness/Droughtiness

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58A Pit Number : 9P

Grid Reference: SU45476509 Average Annual Rainfall : 752 mm
 Accumulated Temperature : 1413 degree days
 Field Capacity Level : 168 days
 Land Use : Cereals
 Slope and Aspect : 01 degrees E

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 27	MSZL	10YR31 00	20	23	HR					
27- 42	SCL	10YR42 00	0	40	HR				M	
42- 85	SCL	10YR52 00	0	55	HR	C			M	

Wetness Grade : 1 Wetness Class : I
 Gleying : 042 cm
 SPL : No SPL

Drought Grade : 3B APW : 77 mm MBW : -25 mm
 APP : 75 mm MBP : -17 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Topsoil Stoniness

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58A Pit Number : 10P

Grid Reference: SU44906518 Average Annual Rainfall : 752 mm
 Accumulated Temperature : 1413 degree days
 Field Capacity Level : 168 days
 Land Use : Arable
 Slope and Aspect : 03 degrees W

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 27	MZCL	10YR4.2 4.3	1	2	HR					
27- 67	MCL	10YR5.3 5.4	0	0		C	MDCSAB	FR	M	
67- 90	HCL	10YR5.3 0.0	0	0		M	MDMPR	FR	M	
90-120	FSL	10YR6.3 0.0	0	0		C			M	

Wetness Grade : 2 Wetness Class : II
 Gleying : 067 cm
 SPL : 067 cm

Drought Grade : 1 APW : 166mm MBW : 64 mm
 APP : 119mm MBP : 27 mm

FINAL ALC GRADE : 2
 MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58A Pit Number : 11P

Grid Reference: SU45346559 Average Annual Rainfall : 752 mm
 Accumulated Temperature : 1413 degree days
 Field Capacity Level : 168 days
 Land Use : Arable
 Slope and Aspect : 02 degrees W

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 27	HCL	10YR32 00	0	2	HR	C				
27- 60	C	25YR62 00	0	0		C	MASSIV	FM	P	

Wetness Grade : 3B Wetness Class : IV
 Gleying : 0 cm
 SPL : 027 cm

Drought Grade : APW : mm MBW : 0 mm
 APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Wetness

SAMPLE NO.	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS	
			GRDNT	GLEY	SPL CLASS	GRADE	AP	MB	AP	MB						DRT
7P	SU45706638	SAS		075	1	1	91	-13	68	-27	3A			DR	3A	PIT84 AUGD 120
8P	SU45406610	SAS		045 064	2	2	122	18	108	13	2			WD	2	PIT80 AUGD 120
9P	SU45476509	CER E	01	042	1	1	77	-25	75	-17	3B			ST	3B	DR=3A TO 120
10P	SU44906518	ARA W	03	067 067	2	2	166	64	119	27	1			WE	2	
11P	SU45346559	ARA W	02	0 027	4	3B		0	0					WE	3B	
63	SU45406650	SAS		050 070	2	2	141	37	112	17	1			WE	2	
63A	SU45316656	SAS		065	1	1	103	-1	112	17	3A			DR	2	IMP72,2 TO 120
64	SU45506650	SAS		065	1	1	108	4	110	15	2			DR	2	IMP82,2 TO 120
65	SU45606650	SAS		070 070	2	2	133	29	110	15	1			WD	2	
66	SU45706650	SAS		050 060	2	2	99	-5	105	10	3A			WD	2	IMP82,2 TO 120
67	SU45806650	SAS			1	1	139	35	108	13	1				1	IN 2 UNIT
68	SU45406640	SAS N	01		1	1	111	7	98	3	2			DR	2	TOPSOIL SIEVED
69	SU45506640	SAS		035 055	3	3A		0	0					WE	3A	
70	SU45606640	SAS N	01		1	1	52	-52	52	-43	3B			DR	3A	I35, 3A TO 120
71	SU45706638	SAS			1	1	65	-39	65	-30	3B			DR	3A	I50, 3A TO 120
72	SU45246630	SAS			1	1	47	-57	47	-48	4			DR	3A	I35, 3A TO 120
73	SU45406630	SAS N	01		1	1	52	-52	52	-43	3B			DR	3A	I35, 3A TO 120
74	SU45506630	SAS			1	1	57	-47	57	-38	3B			DR	3A	I52, 3A TO 120
75	SU45606630	SAS			1	1	105	1	98	3	3A			DR	2	IMP92,2 TO 120
76	SU45706630	SAS			1	1	98	-6	104	9	3A			DR	2	IMP75,2 TO 120
77	SU45806630	SAS N	01		1	1	72	-32	73	-22	3B			DR	3A	IMP52, 3A/2
78	SU45266620	SAS		060 060	2	2	104	0	113	18	3A			WD	2	IMP75,2 TO 120
79	SU45406620	SAS			1	1	104	0	107	12	3A			DR	2	IMP80,2 TO 120
80	SU45506620	SAS		035	2	2	99	-5	103	8	3A			DR	2	IMP80,2 TO 120
81	SU45606620	SAS			1	1	56	-48	56	-39	3B			DR	3B	IN 2 MAP UNIT
82	SU45706620	SAS		055 075	2	2	127	23	111	16	2			WD	2	IMP85,2 TO 120
83	SU45406610	SAS		035 075	2	2	141	37	110	15	1			WE	2	GLEY 35
84	SU45506610	SAS		030 030	4	3B		0	0					WE	3B	IN 3A MAP UNIT
85	SU45606610	SAS		093	1	1	141	37	111	16	1			1	SL GLEYED 93	
86	SU45706610	SAS			1	1	150	46	113	18	1			1	IN 2 MAP UNIT	
87	SU45406600	SAS		040	2	2	74	-30	74	-21	3B			DR	2	IMP48,2 TO 120
88	SU45506600	SAS			1	1	55	-49	55	-40	3B			DR	3B	IMP52,3B TO 12
89	SU45606600	SAS		045 060	2	2	131	27	107	12	2			WD	2	
90	SU45206600	PLO		020 055	3	3A		0	0					WE	3A	Q SPL 35+
91	SU45306600	PLO		025	2	2	154	52	114	22	1			WE	3A	
92	SU45206590	PLO S	02	028 028	4	3B		0	0					WE	3B	
93	SU45306590	PLO		030 030	4	3B		0	0					WE	3B	
94	SU45206580	PLO W	02	024 024	4	3B		0	0					WE	3B	
95	SU45306580	PLO		0 025	4	3B		0	0					WE	3B	
96	SU45206570	PLO W	01	025 025	4	3B		0	0					WE	3B	
97	SU45306570	PLO		025 025	4	3B		0	0					WE	3B	
98	SU45406570	PLO		055 055	3	3A		0	0					WE	3A	TOPSOIL STONES

SAMPLE NO.	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
			GRDNT	GLEY SPL	CLASS	GRADE	AP	MB	AP	MB					
99	SU45506570	PLO W	02	030	2	2			0	0				DR 2	DR=2 TO 120
100	SU45606570	PLO		030 030	4	3B			0	0				WE 3B	
101	SU45706570	PLO		025 025	4	3B			0	0				WE 3B	
102	SU45806570	PLO		030 030	4	3B			0	0				WE 3B	
103	SU44906560	PGR N	02	0 045	2	2	76	-26	76	-16	3B			DR 3A	150, 3A TO 120
104	SU45006560	PGR		024 024	4	3B			0	0				WE 3B	
105	SU45206560	PLO W	01	028 028	4	3B			0	0				WE 3B	
106	SU45306560	PLO		025 025	4	3B			0	0				WE 3B	
107	SU45406560	PLO		030 030	4	3B			0	0				WE 3B	
108	SU45506560	PLO W	03	025 025	4	3B			0	0				WE 3B	
109	SU45606560	PLO		025 025	4	3B			0	0				WE 3B	Q SPL 25+
110	SU45706560	PLO			1	1	133	31	107	15	1			TS 3A	TOPSOIL STONES
111	SU45806560	PLO		025 025	4	3B			0	0				WE 3B	
112	SU44906550	PGR N	02	0 025	4	3B			0	0				WE 3B	
113	SU45006550	PGR N	02	022 020	4	3B			0	0				WE 3B	Q SPL 22-30
114	SU45106550	PGR N	02	0 024	4	3B			0	0				WE 3B	
115	SU45206550	PLO N	01	022 022	4	3B			0	0				WE 3B	
116	SU45306550	PLO N	01	028 040	4	3B			0	0				WE 3B	
117	SU45406550	PLO N	03	025 025	4	3B			0	0				WE 3B	IMPEN 80
118	SU45506550	PLO N	01	032 032	4	3B			0	0				WE 3B	
119	SU45606550	CER W	02	062 062	2	2	95	-7	98	6	3A			ST 3A	TOPSOIL STONES
120	SU45706550	CER N	01		1	1	51	-51	51	-41	4			ST 3B	TS STONE IMP40
124	SU45206540	PGR E	05	0	2	2	155	53	117	25	1			WE 2	GLEYED AT ZERO
125	SU45306540	CER N	03	030 030	4	3B			0	0				WE 3B	
126	SU45406540	CER NE	07	055 055	3	3A			0	0				WE 3A	
127	SU45506540	CER NW	03	040	1	1	71	-31	75	-17	3B			ST 3B	160, 3A TO 120
128	SU45606540	CER N	04		1	1	64	-38	64	-28	3B			ST 3B	150, 3A TO 120
129	SU45706540	CER			1	1	42	-60	42	-50	4			ST 3B	138, 3B TO 120
130	SU44806530	PGR		025 035	4	3B			0	0				WE 3B	Q SPL 25+
131	SU44906530	PGR		025 040	4	3B			0	0				WE 3B	Q SPL 25+
132	SU45006530	CER			1	2	62	-40	62	-30	3B			DR 3A	140, 3A TO 120
134	SU45206530	CER NE	06	075 075	2	1	159	57	134	42	1			ST 2	TOPSOIL STONE
135	SU45306530	PGR W	02	0 028	4	3B			0	0				WE 3B	HIGH GDWATER
137	SU45506530	CER NW	03		1	1	43	-59	43	-49	4			ST 3B	IMP50, 3B TO 1
138	SU45606530	CER E	02	025	1	1	133	31	117	25	1			ST 3A	TOPSOIL STONE
139	SU44806520	CER		030 030	4	3B			0	0				WE 3B	
140	SU44906520	CER			1	1	154	52	116	24	1			1	
141	SU45006520	CER		080	1	1	159	57	102	10	1			ST 3A	TOPSOIL STONE
142	SU45096520	CER			1	1	109	7	98	6	2			ST 3A	TOPSOIL STONE
143	SU45206520	CER E	05	090 090	1	1	156	54	115	23	1			ST 3A	TOPSOIL STONE
144	SU45306520	PGR N	2	0	5	4			0	0				WE 4	WET FLUSH
145	SU45406520	CER NW	08		1	1	47	-55	47	-45	4			ST 3B	TOPSOIL STONE

SAMPLE NO.	GRID REF	ASPECT USE	GRDNT	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
				GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB					
46	SU45506520	CER NW	01		1	1	43	-59	43	-49	4			ST	3B	WATER TABLE 85
47	SU44806510	CER SW	05	0	025	4	3B		0	0				WE	3B	
148	SU44906510	CER SW	05			1	1	144	52	116	24	1			1	
149	SU45006510	CER SW	05	065	065	2	2	144	52	116	24	1		WE	2	
150	SU45106510	CER				1	1	75	-27	75	-17	3B		DR	3A	I50, 3A TO 120
151	SU45206510	CER NE	01	070	070	2	1	143	41	104	12	1		ST	3B	TOPSOIL STONE
152	SU45306510	PGR N	02	060	060	3	3A	110	8	83	-9	2		WE	3A	TOPSOIL STONE
153	SU45406510	CER NW	02			1	1	52	-50	52	-40	3B		ST	3B	DR=3A TO 120
154	SU45506510	CER E	01			1	1	100	-2	80	-12	3A		ST	3B	I60, 3A TO 120
155	SU44606500	CER SW	02	0	030	4	3B		0	0				WE	3B	PLASTIC 30
156	SU44706500	CER W	01	0	025	4	3B		0	0				WE	3B	W/TABLE 10
157	SU44806500	CER W	01	0	030	4	3B		0	0				WE	3B	W/TABLE 30
158	SU44906500	CER		025	025	4	3B		0	0				WE	3B	
159	SU45006500	CER NE	05	025	025	4	3B		0	0				WE	3B	
162	SU44606490	CER W	03	0	025	4	3B		0	0				WE	3B	W/TABLE 10
163	SU44706490	CER E	01	0	030	4	3B		0	0				WE	3B	
164	SU44806490	CER N	01	0	020	4	3B		0	0				WE	3B	
167	SU45106490	CER				1	1	54	-48	54	-38	3B		DR	3A	I40, 3A TO 120
168	SU45206490	CER		028	050	3	3A		0	0				WE	3A	
169	SU44806480	CER N	01	0	045	4	3B		0	0				WE	3B	Q SPL 25+
171	SU45006480	ARA W	01	045	045	3	3A		0	0				WE	3A	Q WC4
172	SU45106480	ARA W	01	045		1	1	124	22	93	1	2		DR	2	BORDER 3A,WET
173	SU45206480	ARA		028	028	4	3B		0	0				WE	3B	IMPEN 60
174	SU45026474	ARA W	02			1	1	061	-41	061	-31	3B		DR	3B	IMP 50 PROB 3B
175	SU44906474	ARA NW	03	0	025	4	3B		0	0				WE	3B	IN BASE OF DIP
176	SU45406590	ARA		046	046	3	3A		0	0				WE	3A	JUST WC3
177	SU45506590	ARA N	01			1	1	61	-41	61	-31	3B		DR	3A	I45, 3A TO 120
177A	SU45556597	ARA N	01			1	1	136	34	104	12	1		ST	2	LOWER LAND
178	SU45606590	ARA N	02			1	1	69	-33	69	-23	3B		DR	3A	I45, 3A TO 120
178A	SU45576595	ARA N	01			1	1	55	-47	55	-37	3B		DR	3A	IMP 40: RE 7P
179	SU45406580	ARA		025	025	4	3B		0	0				WE	3B	
180	SU45506580	ARA N	01	028		2	2	73	-29	73	-19	3B		DR	3A	I50, 3A TO 120
181	SU45606580	ARA N	04	055	072	2	2	129	27	109	17	2		WD	2	IN 3A MAP UNIT
182	SU45586575	ARA N	02	038	038	4	3B		0	0				WE	3B	
183	SU45506574	ARA N	01	028		2	2	83	-19	80	-12	3A		DR	3A	I80, 3A TO 120
184	SU45426574	ARA N	01			1	1	40	-62	40	-52	4		DR	3B	I30, 3A TO 120

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES----			STRUCT/	SUBS			SPL	CALC			
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH	TOT	CONSIST	STR			POR	IMP	
7P	0-28	mc1	10YR42 00					5	0	HR	20								
	28-46	mc1	10YR43 00					0	0	HR	51	FR	M						
	46-62	lms	10YR54 00					0	0	HR	65	VF	M						
	62-75	ms1	10YR54 00					0	0	HR	46	FR	M						
	75-100	mc1	10YR53 63	10YR56 00 C				Y	0	0	HR	46	FR	M					
100-120	c	10YR53 63	10YR58 00 M				00MN00	00	Y	0	0	HR	46	FM	M				
8P	0-29	mc1	10YR42 00					3	0	HR	10								
	29-45	mc1	10YR54 52	10YR56 00 F			10YR54	00	0	0	HR	2	MDCSAB	FR	M				
	45-64	mc1	10YR53 52	10YR56 00 C				Y	0	0	HR	6	MDCSAB	FR	M				
	64-80	c	10YR52 00	75YR58 00 M			00MN00	00	Y	0	0	HR	10	WK	CAB	FM	P	Y	Y
	80-120	c	10YR52 00	75YR58 00 M			00MN00	00	Y	0	0	HR	10			P	Y	Y	Y
9P	0-27	msz1	10YR31 00					20	0	HR	23								
	27-42	sc1	10YR42 00					0	0	HR	40			M					
	42-85	sc1	10YR52 00	10YR58 00 C				Y	0	0	HR	55			M				
10P	0-27	mzc1	10YR42 43					1	0	HR	2								
	27-67	mc1	10YR53 54	75YR44 00 C				S	0	0	0	MDCSAB	FR	M	Y		SL GLEYED		
	67-90	hc1	10YR53 00	10YR56 00 M				Y	0	0	0	MDMPR	FR	M	Y	Y	MED/COARSE PRISM		
	90-120	fs1	10YR63 00	05YR34 00 C				Y	0	0	0			M			BANDS OF HCL		
11P	0-27	hc1	10YR32 00	75YR44 00 C				Y	0	0	HR	2							
	27-60	c	25YR62 00	10YR56 00 C				Y	0	0	0	MASSIV	FM	P	Y	Y	VERY WET		
63	0-35	mc1	10YR42 00					0	0	HR	3								
	35-50	mc1	10YR53 52	10YR56 00 F				0	0	HR	5			M					
	50-65	mc1	10YR53 62	10YR56 00 C				Y	0	0	HR	10			M				
	65-70	mc1	10YR53 62	10YR56 00 C				Y	0	0	HR	25			M				
	70-100	c	10YR52 00	75YR58 00 M				Y	0	0	HR	5			P		Y		
	100-120	hc1	10YR52 00	75YR58 00 M				Y	0	0	HR	5			M		Y		
63A	0-35	mc1	10YR42 00					0	0	HR	3								
	35-55	mc1	10YR43 82					0	0	HR	10			M		Y			
	55-65	hc1	10YR54 82					0	0	HR	10			M		Y			
	65-72	mc1	10YR61 62	10YR56 00 C				Y	0	0	HR	15			M		Y		
64	0-32	mc1	10YR42 00					0	0	HR	5								
	32-65	hc1	10YR54 00					0	0	HR	10			M					
	65-80	hc1	10YR62 63	10YR58 00 C				Y	0	0	HR	15			M		QUERY SPL		
	80-82	hc1	10YR63 62	10YR66 00 C				Y	0	0	HR	50			M				
65	0-28	mc1	10YR42 00					0	0	HR	8								
	28-40	mc1	10YR54 00					0	0	HR	15			M					
	40-50	mc1	10YR54 00					0	0	HR	5			M					
	50-70	mc1	10YR64 00					0	0	HR	1			M					
	70-120	c	10YR53 52	10YR58 00 M				Y	0	0	HR	1			P		Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			CALC	
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP
66	0-25	mc1	10YR42 00						3	0	HR	10					
	25-33	mc1	10YR54 00						0	0	HR	20		M			
	33-50	c	10YR54 56						0	0	HR	2		M			
	50-60	c	10YR54 00	10YR56 68 M			10YR53 00 Y		0	0	HR	15		M			QUERY SPL
	60-70	c	10YR53 00	10YR56 68 M				Y	0	0	HR	20		P		Y	
	70-82	c	10YR58 00	10YR68 00 M				Y	0	0	HR	20		P		Y	
67	0-25	mc1	10YR42 00						4	0	HR	10					
	25-40	mc1	10YR43 00						0	0	HR	10		M			
	40-50	mc1	10YR54 43						0	0	HR	10		M			
	50-95	mc1	10YR54 64						0	0	HR	5		M			
	95-120	c	10YR64 00						0	0	HR	5		M			
68	0-32	mc1	10YR43 00						7	0	HR	15					
	32-60	mc1	10YR43 46						0	0	HR	20		M			
	60-90	mc1	10YR44 00						0	0	HR	25		M			
	90-100	hc1	10YR54 56	75YR68 00 F				S	0	0	HR	25		M			SL. GLEYED
69	0-28	mc1	10YR42 00						6	0	HR	23					
	28-35	sc1	10YR54 00						0	0	HR	50		M			
	35-55	hc1	10YR53 00	10YR56 00 C			00MN00 00 Y		0	0	HR	10		M			
	55-120	c	10YR53 00	10YR56 00 M			00MN00 00 Y		0	0		0		P		Y	
70	0-30	mc1	10YR42 00						5	0	HR	15					
	30-35	mc1	10YR54 00						0	0	HR	30		M			
71	0-30	mc1	10YR42 00						5	0	HR	17					
	30-50	mc1	10YR54 00	10YR66 00 F					0	0	HR	40		M			
72	0-30	mc1	10YR42 00						7	0	HR	25					
	30-35	mc1	10YR42 44						0	0	HR	30		M			
73	0-28	mc1	10YR42 00						7	0	HR	15					
	28-35	mc1	10YR44 00						0	0	HR	25		M			
74	0-30	mc1	10YR42 00						7	0	HR	22					
	30-52	sc1	10YR44 54						0	0	HR	60		M			
75	0-28	mc1	10YR43 42						5	0	HR	15					
	28-60	mc1	10YR44 00						0	0	HR	20		M			
	60-80	mc1	10YR56 44						0	0	HR	20		M			
	80-92	mc1	10YR56 43						0	0	HR	30		M			
76	0-30	mc1	10YR32 42						2	0	HR	7					
	30-45	mc1	10YR43 00						0	0	HR	10		M			
	45-65	mc1	10YR44 00						0	0	HR	15		M			
	65-75	sc1	10YR54 00						0	0	HR	40		M			

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED		---STONES---			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC
77	0-28	mc1	10YR42 00						4	0	HR	15						
	28-52	mc1	10YR44 00						0	0	HR	25		M				
78	0-28	mc1	10YR42 00						0	0	HR	3						
	28-50	mc1	10YR44 00	10YR56 00 C			00MN00 00 S	0	0		0			M				SL. GLEYED
	50-60	mc1	10YR44 00	10YR56 00 C			00MN00 00 S	0	0	HR	2			M				SL. GLEYED
	60-75	c	10YR53 54	10YR56 00 M				Y	0	0	HR	2		P		Y		
79	0-28	mc1	10YR42 00						7	0	HR	15						
	28-40	mc1	10YR43 00						0	0	HR	5		M				
	40-70	mc1	10YR43 00	10YR62 56 C			00MN00 00 S	0	0	HR	5			M				SL. GLEYED
	70-80	mc1	10YR43 00	10YR62 56 C			00MN00 00 S	0	0	HR	20			M				SL. GLEYED
80	0-35	mc1	10YR42 00						0	0	HR	7						
	35-65	mc1	10YR42 52	10YR46 00 C				Y	0	0	HR	20		M				
	65-75	mc1	10YR53 00	10YR56 00 M				Y	0	0	HR	40		M				
	75-80	hc1	10YR53 00	10YR56 00 M				Y	0	0	HR	60		M				
81	0-30	mc1	10YR42 00						5	0	HR	15						
	30-38	mc1	10YR43 00						0	0	HR	30		M				
82	0-32	mc1	10YR42 00						0	0	HR	3						
	32-55	mc1	10YR54 00	10YR56 00 F					0	0	HR	10		M				
	55-75	mc1	10YR53 00	10YR58 00 C				Y	0	0	HR	10		M				
	75-85	c	10YR52 00	75YR58 00 M				Y	0	0	HR	30		P		Y		
83	0-25	mc1	10YR43 00						0	0	HR	5						
	25-35	mc1	10YR44 00						0	0	HR	5		M				
	35-75	mc1	10YR64 63	10YR56 00 C				Y	0	0	HR	8		M				
	75-95	c	10YR62 53	10YR58 00 M			00MN00 00 Y	0	0	HR	15			P		Y		
	95-120	hc1	10YR63 53	10YR56 00 M				Y	0	0	HR	5		P		Y		
84	0-30	mc1	10YR42 00						3	0	HR	13						
	30-100	c	10YR53 00	75YR58 00 M			00MN00 00 Y	0	0	HR	10			P		Y		
	100-120	sc1	10YR53 00	75YR58 00 M				Y	0	0	HR	20		M		Y		
85	0-27	mc1	10YR42 00						3	0	HR	8						
	27-60	mc1	10YR44 00						0	0	HR	5		M				
	60-75	mc1	10YR54 00						0	0	HR	3		M				
	75-93	ms1	10YR54 00						0	0	HR	8		M				
	93-120	c	10YR56 64	10YR58 61 M				S	0	0	HR	3		P		Y		SL. GLEYED
86	0-25	mc1	10YR42 00						0	0	HR	5						
	25-55	mc1	10YR44 54	10YR56 00 F					0	0	HR	3		M				
	55-80	mc1	10YR53 54	10YR56 00 F					0	0	HR	3		M				
	80-120	hc1	10YR53 54	10YR56 00 F			00MN00 00		0	0	HR	3		M				
87	0-28	mc1	10YR42 43						0	0	HR	5						
	28-48	mc1	10YR53 54	10YR58 00 M			00MN00 00 Y	0	0	HR	20			M				

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED		----STONES----			STRUCT/ CONSIST	SUBS			CALC	
				COL	ABUN	CONT	COL.	GLEYS	>2	>6	LITH		TOT	STR	POR		IMP
88	0-35	sc1	10YR43 00						9	0	HR	29					
	35-45	sc1	10YR44 54						0	0	HR	40		M			
	45-52	lms	10YR54 00						0	0	HR	60		M			
89	0-35	mc1	10YR42 00						0	0	HR	7					
	35-45	mc1	10YR44 54	10YR56 00	F				0	0	HR	15		M			
	45-55	mc1	10YR53 52	10YR56 00	C			Y	0	0	HR	15		M			
	55-60	hc1	10YR53 00	10YR66 00	C			Y	0	0		0		M			
	60-120	c	25Y 63 61	10YR68 00	M			Y	0	0		0		P		Y	
90	0-20	mc1	10YR43 00	10YR					0	0	HR	5					
	20-35	mc1	10YR53 00	10YR46 00	C			Y	0	0	HR	20		M			
	35-55	hc1	25Y 53 52	10YR56 00	M			Y	0	0	HR	20		M			QUERY SPL
	55-85	c	25Y 53 52	10YR58 00	M			Y	0	0	HR	15		P		Y	
91	0-25	mzc1	10YR53 00						5	0	HR	8					
	25-55	hc1	10YR52 00	10YR58 61	C			Y	0	0		0		M			
	55-85	sc1	10YR62 00	10YR58 00	M			Y	0	0		0		M			
	85-120	sc1	10YR54 00	10YR58 00	C			S	0	0		0		M			SL. GLEYED
92	0-28	mc1	10YR42 00						0	0	HR	3					
	28-45	c	10YR53 51	10YR58 00	M			Y	0	0	HR	3		P		Y	
	45-65	c	10YR53 52	75YR58 00	M			Y	0	0	HR	5		P		Y	
93	0-30	hzc1	10YR52 00						5	0	HR	10					
	30-65	c	10YR53 00	10YR78 00	M			Y	0	0	HR	10		P		Y	
94	0-24	mc1	10YR42 00						0	0	HR	2					
	24-70	c	10YR53 52	10YR58 00	M			Y	0	0		0		P		Y	
95	0-25	hc1	10YR52 00	10YR58 00	C			Y	0	0	HR	2					
	25-65	c	10YR62 00	10YR78 51	M			Y	0	0		0		P		Y	
96	0-25	mc1	10YR43 00						0	0	HR	2					
	25-45	c	25Y 53 52	10YR58 00	M			Y	0	0		0		P		Y	
	45-80	c	05Y 53 51	10YR58 00	M			Y	0	0		0		P		Y	
97	0-25	hzc1	10YR52 00						4	0	HR	6					
	25-60	c	10YR52 00	75YR58 51	M		00MN00 00	Y	0	0		0		P		Y	
98	0-25	mc1	10YR42 52						11	0	HR	15					
	25-55	sc1	10YR52 00						0	0	HR	35		M			
	55-90	sc	75YR52 00	10YR78 00	M			Y	0	0	HR	10		P		Y	
99	0-30	mc1	10YR42 00						5	0	HR	10					
	30-55	mzc1	10YR52 00	10YR58 00	C			Y	0	0	HR	5		M			
	55-80	sc1	10YR56 00						0	0	HR	25		M			

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES----			STRUCT/	SUBS						
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
100	0-30	hc1	10YR52 00					5	0	HR	8							
	30-40	c	10YR62 00	10YR58	61	M		Y	0	0	0			P			Y	
	40-70	c	10YR72 00	10YR78	51	M	00MN00	00	Y	0	0	0		P			Y	
101	0-25	hc1	10YR52 00					5	0	HR	8							
	25-65	c	10YR62 00	10YR58	61	M		Y	0	0	0			P			Y	
102	0-30	mc1	10YR44 00					4	0	HR	6							
	30-65	c	10YR52 00	10YR58	61	M		Y	0	0	0			P			Y	
103	0-28	hc1	10YR42 00	10YR46	00	C		Y	0	0	0							
	28-40	hc1	10YR53 00	10YR56	00	C		Y	0	0	HR	5			M			
	40-45	hc1	10YR53 00	10YR56	00	C		Y	0	0	HR	20			M			
	45-50	gh	10YR64 00						0	0	0				P			
104	0-24	hc1	10YR42 00					0	0	0								
	24-70	c	25Y 53 00	10YR56	00	M		Y	0	0	0			P			Y	
105	0-28	mc1	10YR43 00					0	0	HR	2							
	28-70	c	25Y 52 51	10YR58	00	M		Y	0	0	0			P			Y	
106	0-25	hc1	10YR42 00					0	0	0								
	25-60	c	75YR52 00	10YR58	61	M		Y	0	0	0			P			Y	
107	0-30	hc1	10YR43 00					0	0	HR	5							
	30-70	c	10YR52 00	10YR58	61	M	00MN00	00	Y	0	0	0		P			Y	
108	0-25	mc1	10YR42 00					0	0	HR	6							
	25-60	c	10YR52 00	10YR58	61	M	00MN00	00	Y	0	0	0		P			Y	
109	0-25	mc1	10YR42 00					13	0	HR	18							
	25-50	hc1	10YR52 00	10YR58	00	M		Y	0	0	0				M		Y	
	50-80	c	10YR62 00	10YR58	61	M		Y	0	0	0			P			Y	
110	0-30	mc1	10YR52 00					12	0	HR	16							
	30-55	mc1	10YR44 00					0	0	HR	5				M			
	55-110	mc1	10YR43 00	10YR58	00	C		S	0	0	HR	5			M			SL. GLEYED
111	0-25	fsz1	10YR43 00					0	0	HR	4							
	25-55	sc	10YR53 00	10YR58	61	M		Y	0	0	0			P			Y	
	55-75	c	10YR62 00	10YR58	61	M		Y	0	0	0			P			Y	
112	0-25	mc1	10YR41 00	10YR46	00	C		Y	0	0	HR	2						
	25-35	c	10YR41 00	10YR56	00	C		Y	0	0	HR	5			P		Y	
	35-40	c	25Y 53 00	10YR56	00	M		Y	0	0	HR	20			P		Y	
	40-65	c	25Y 53 00	10YR56	00	M		Y	0	0	HR	5			P		Y	
	65-120	c	25Y 41 00	75YR56	00	M		Y	0	0	HR	10			P		Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS				
				COL	ABUN	CONT	COL.	GLEYS	>2	>6	LITH		TOT	STR	POR	IMP	SPL
113	0-22	mc1	10YR41 00 10YR46 00 F						0	0	0						
	22-30	hc1	10YR52 00 10YR56 00 C					Y	0	0	0		M				Y
	30-40	c	10YR52 00 10YR56 00 M					Y	0	0	HR 10		M				Y
	40-80	c	25Y 52 00 10YR56 00 M					Y	0	0	0		P				Y
114	0-24	mc1	10YR41 00 10YR46 00 C						Y	0	0	0					
	24-44	c	10YR51 00 10YR58 00 M					Y	0	0	0		P				Y
	44-70	c	25Y 51 00 75YR56 00 M				00MN00	00 Y	0	0	0		P				Y
115	0-22	mc1	10YR42 00						0	0	HR 2						
	22-70	c	10YR52 00 10YR56 00 M					Y	0	0	0		P				Y
116	0-28	mc1	10YR42 00						0	0	HR 10						
	28-40	c	10YR41 51 10YR46 00 M					Y	0	0	HR 20		P				
	40-70	c	25Y 52 00 10YR56 00 M					Y	0	0	0		P				Y
117	0-25	hzc1	10YR52 00						0	0	HR 5						
	25-70	c	10YR52 00 10YR58 61 M					Y	0	0	0		P				Y
	70-80	c	10YR52 00 10YR58 61 M					Y	0	0	HR 25		P				Y
118	0-32	hc1	10YR31 00						0	0	HR 10						
	32-50	c	10YR53 00 75YR58 00 M					Y	0	0	HR 5		P				Y
	50-60	c	75YR58 00						0	0	HR 20		M				
119	0-25	mc1	10YR32 00						11	0	HR 20						
	25-62	mc1	10YR54 00						0	0	HR 15		M				
	62-82	c	10YR52 53 75YR58 00 M					Y	0	0	0		P				Y
120	0-30	mc1	10YR32 00						16	0	HR 25						
	30-40	ms1	10YR54 00						0	0	HR 35		M				
124	0-25	mc1	10YR42 00 10YR46 00 C					Y	0	0	0						
	25-120	mc1	10YR53 00 10YR56 00 C					Y	0	0	0		M				
125	0-30	mc1	10YR42 00						0	0	HR 5						
	30-60	c	10YR52 00 10YR58 61 C					Y	0	0	0		P				Y
126	0-30	mc1	10YR32 00						9	0	HR 15						
	30-55	lfs	10YR54 00 10YR56 00 F						0	0	HR 5		M				
	55-80	c	10YR53 00 75YR56 00 M					Y	0	0	0		P				Y
127	0-25	msz1	10YR32 00						17	0	HR 25						
	25-40	msz1	10YR32 00						0	0	HR 35		M				
	40-60	mc1	10YR52 00 10YR56 00 C					Y	0	0	HR 35		M				
128	0-30	msz1	10YR32 00						17	0	HR 25						
	30-50	ms1	10YR58 00						0	0	HR 35		M				

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES----			STRUCT/ CONSIST	SUBS						
				COL	ABUN	CONT		GLY	>2	>6		LITH	TOT	STR	POR	IMP	SPL	CALC
129	0-30	mc1	10YR32 00					19	0	HR	30							
	30-38	lcs	10YR64 00					0	0	HR	35		M					
130	0-25	mc1	10YR43 00					0	0		0							
	25-35	hc1	10YR42 00	10YR58	61	C		Y	0	0	0		M					
	35-65	c	25Y 53 00	10YR58	61	M		Y	0	0	0		P			Y		
131	0-25	hzc1	10YR43 00	10YR58	00	C		S	0	0	0							SL. GLEYED
	25-40	hc1	10YR52 00	10YR58	61	C		Y	0	0	0		M					
	40-70	c	10YR62 00	10YR58	61	M		Y	0	0	0		P			Y		
132	0-35	mc1	10YR42 00					8	0	HR	12							
	35-40	mc1	10YR54 00					0	0	HR	20		M					
134	0-25	fsz1	10YR42 00					7	0	HR	10							
	25-50	fsz1	75YR46 56					0	0		0		M					
	50-75	mc1	10YR54 00	75YR56	00	C		S	0	0	0		M					SL. GLEYED
	75-120	c	10YR53 00	75YR46	00	C		Y	0	0	0		P			Y		
135	0-28	mc1	10YR41 00					Y	0	0	0							
	28-70	c	10YR51 00	75YR56	00	M		Y	0	0	0		P			Y		
137	0-28	mc1	10YR31 00					19	0	HR	35							
	28-50	lcs	10YR54 00					0	0	HR	40		M					
138	0-25	msz1	10YR42 00					12	0	HR	25							
	25-75	fs1	10YR63 00	75YR56	00	M		Y	0	0	0		M					
	75-90	fs1	10YR63 00	75YR58	00	M		Y	0	0	0		M					
139	0-30	hc1	10YR43 00	10YR58	00	C		S	0	0	0							SL. GLEYED
	30-60	c	10YR62 00	10YR58	61	M		Y	0	0	0		P			Y		
140	0-30	mc1	10YR53 00					0	0	HR	4							
	30-75	hc1	10YR56 00					0	0		0		M					
	75-120	sc1	10YR58 00					0	0		0		M					
141	0-35	mc1	10YR42 00					11	0	HR	15							
	35-50	mc1	10YR43 00					0	0	HR	25		M					
	50-80	lfs	10YR64 00					0	0		0		M					
	80-95	sc1	10YR63 00	05YR56	00	C		Y	0	0	0		M					
	95-120	lfs	10YR64 00	05YR58	00	C		Y	0	0	0		M					
142	0-40	mc1	10YR42 00					12	0	HR	15							
	40-65	mc1	10YR43 00					0	0	HR	25		M					
	65-100	mc1	10YR52 00					0	0	HR	35		M					
143	0-30	mc1	10YR32 00					12	0	HR	17							
	30-38	mc1	10YR53 54					0	0	HR	17		M					
	38-65	fs1	10YR66 00	10YR58	00	F		0	0		0		M					
	65-90	fsz1	10YR56 00	10YR63	00	C		0	0		0		M					
	90-120	c	10YR56 63			M		Y	0	0	0		P			Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES-----			STRUCT/ CONSIST	SUBS			CALC
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	
145	0-30	mc1	10YR32 00					18	3	HR	21				
	30-35	ms1	10YR52 53					0	0	HR	50		M		
146	0-30	mc1	10YR32 00					23	1	HR	26				
	30-100	sz1	10YR53 00					0	0	HR	50		M		
147	0-25	hc1	10YR52 00	10YR58 61 C				Y	0	0	0				
	25-60	c	10YR62 00	10YR58 61 M				Y	0	0	0		P		Y
148	0-25	mc1	10YR43 00					0	0	HR	2				
	25-55	mc1	10YR54 00					0	0		0		M		
	55-120	hc1	10YR54 00					0	0		0		M		
149	0-30	mc1	10YR43 00					0	0	HR	4				
	30-40	mc1	10YR53 00					0	0		0		M		
	40-65	mc1	10YR54 00					0	0		0		M		
	65-120	hc1	75YR53 00	75YR58 00 C				Y	0	0	0		M		
150	0-35	mc1	10YR43 00					8	0	HR	10				
	35-50	mc1	10YR44 00					0	0	HR	25		M		
151	0-30	msz1	10YR32 00					17	0	HR	21				
	30-65	mc1	10YR54 00					0	0	HR	10		M		
	65-70	sc1	10YR54 00					0	0		0		M		
	70-120	sc	10YR53 00	75YR58 00 M				Y	0	0	0		M		Y
152	0-30	mc1	10YR32 00					12	0	HR	15				
	30-60	sc1	10YR46 00					0	0	HR	50		M		
	60-120	c	10YR72 00	75YR58 00 C				Y	0	0	0		P		Y
153	0-30	mc1	10YR32 00					18	0	HR	20				
	30-40	sc1	75YR58 00					0	0	HR	50		M		
154	0-30	msz1	10YR32 00					20	0	HR	23				
	30-60	msz1	10YR42 52					0	0	HR	50				
155	0-30	hc1	10YR41 00	75YR46 00 C				Y	0	0	HR	1			
	30-55	c	10YR52 00	10YR58 00 M				Y	0	0	0		P		Y
156	0-25	mc1	10YR42 00	10YR56 00 C				Y	0	0	HR	1			
	25-55	c	10YR53 51	10YR58 00 M				Y	0	0	HR	2		P	
157	0-30	mc1	10YR42 00	10YR58 00 C				Y	0	0	HR	1			
	30-60	c	10YR51 00	10YR58 00 M				Y	0	0	0		P		Y
158	0-30	mc1	10YR43 00	10YR58 61 C				S	0	0	0				
	30-60	c	10YR52 00	10YR58 00 M				Y	0	0	0		P		Y

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SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED COL.	-----STONES-----			STRUCT/ CONSIST	SUBS STR POR IMP SPL CALC			
				COL	ABUN	CONT		GLY	>2	>6			LITH	TOT	
159	0-25	mc1	10YR43 00					0	0	HR	4				
	25-55	c	10YR62 00	05YR58	00	M		Y	0	0	0	P	Y		
	55-75	hc1	10YR52 5B	05YR58	00	C		Y	0	0	0	M	Y		
	75-120	fs1	10YR64 00	05YR58	00	C		Y	0	0	0	M			
162	0-25	mc1	10YR42 00	10YR56	52	C		Y	0	0	HR	2			
	25-60	c	10YR51 00	10YR58	00	M	00MN00	00	Y	0	0	0	P	Y	
163	0-30	hc1	75YR41 00	75YR46	00	M		Y	0	0	HR	2			
	30-60	c	10YR61 00	75YR56	00	M		Y	0	0	HR	2	P	Y	
164	0-20	mc1	10YR42 00	10YR56	00	M		Y	0	0	HR	2			
	20-50	c	25Y 51 00	75YR56	00	M		Y	0	0	HR	2	P	Y	
	50-65	c	25Y 51 00	10YR58	00	M	00MN00	00	Y	0	0	HR	2	P	Y
167	0-28	mc1	10YR42 00					6	0	HR	20				
	28-40	mc1	10YR33 00					0	0	HR	35	M			
168	0-28	mc1	10YR32 00					6	0	HR	20				
	28-50	mc1	75YR32 00	75YR46	00	M		Y	0	0	HR	15	M		
	50-70	c	10YR52 53	10YR58	56	M		Y	0	0	HR	2	P	Y	
169	0-25	mzc1	10YR42 00	75YR46	00	C		Y	0	0	HR	5			
	25-45	hc1	10YR51 00	75YR56	46	M		Y	0	0	HR	2	M		
	45-65	c	10YR61 00	75YR56	00	M	00MN00	00	Y	0	0	HR	2	P	Y
171	0-25	mc1	10YR42 00					4	0	HR	12				
	25-45	c	10YR58 00					0	0	HR	5	M			
	45-65	c	10YR63 00	10YR58	00	M		Y	0	0	HR	2	P	Y	
172	0-28	mc1	10YR42 32					6	0	HR	20				
	28-45	mc1	10YR33 00					0	0	HR	30	M			
	45-120	mc1	10YR32 5B	10YR58	00	C		Y	0	0	HR	20	M		
173	0-28	mc1	10YR42 00					6	0	HR	20				
	28-48	c	10YR53 00	10YR58	00	C		Y	0	0	HR	15	p	Y	
	48-60	c	10YR53 00	10YR58	00	C		Y	0	0	HR	8	P	Y	
174	0-30	mc1	10YR32 00					8	0	HR	25				
	30-50	ms1	10YR63 32					0	0	HR	35	M			
175	0-25	hc1	75YR32 00	75YR46	00	C		Y	2	0	HR	8			
	25-55	hc1	10YR51 00	75YR46	00	M		Y	0	0	HR	2	P	Y	
	55-75	hc1	10YR61 00	10YR58	00	M		Y	0	0	HR	2	P	Y	
176	0-25	mc1	10YR43 00					6	0	HR	20				
	25-46	mc1	10YR44 00	10YR56	53	F		0	0	HR	15	M			
	46-75	c	10YR53 00	75YR58	00	M		Y	0	0	HR	10	P	Y	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL.	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLY	>2	>6		LITH	TOT	STR	POR	IMP	SPL
177	0-30	mc1	10YR42 00					7	0	HR	20						
	30-45	mc1	10YR43 00					0	0	HR	30		M				
177A	0-30	mc1	10YR42 00					6	0	HR	15						
	30-60	mc1	10YR43 00					0	0	HR	10		M				
	60-70	mc1	10YR54 00					0	0	HR	10		M				
	70-120	mc1	10YR54 00					0	0	HR	15		M				
178	0-28	mc1	10YR43 00					4	0	HR	15						
	28-45	mc1	10YR54 00					0	0	HR	5		M				
178A	0-30	mc1	10YR43 00					7	0	HR	20						
	30-40	mc1	10YR44 00					0	0	HR	35		M				
179	0-25	mc1	10YR42 00					6	0	HR	15						
	25-55	c	10YR53 64	10YR56 58	M		Y	0	0	HR	5		P			Y	
180	0-28	mc1	10YR42 00					6	0	HR	15						
	28-45	mc1	10YR52 42	10YR58 00	C		Y	0	0	HR	10		M				
	45-50	mc1	10YR52 42	10YR58 00	C		Y	0	0	HR	40		M				
181	0-27	mc1	10YR43 00					6	0	HR	15						
	27-55	mc1	10YR44 00					0	0	HR	2		M				
	55-72	mc1	10YR44 53	10YR56 00	C		S	0	0	HR	5		M				
	72-120	c	10YR52 00	75YR68 00	M		Y	0	0	HR	10		P			Y	
182	0-25	mc1	10YR43 00					5	0	HR	15						
	25-38	mc1	10YR44 00	10YR53 00	F			0	0	HR	2		M				
	38-60	c	10YR52 00	75YR58 00	M		00MN00 00	Y	0	0	HR	2		P			Y
183	0-28	mc1	10YR42 00					5	0	HR	15						
	28-48	mc1	10YR52 00	10YR58 00	C		Y	0	0	HR	20		M				
	48-70	lms	10YR58 00					0	0	HR	35		M				
	70-80	mc1	10YR52 00	10YR58 00	M		Y	0	0	HR	35		M				
184	0-25	mc1	10YR42 00					6	0	HR	25						
	25-30	mc1	10YR42 52					0	0	HR	30		M				

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SOIL PIT AND SOIL BORING DESCRIPTIONS

**NEWBURY LOCAL PLAN
SITE 58B**

Contents:

Soil Pit Descriptions

Database Printout - Boring Level Information

Database Printout - Horizon Level Information

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58B Pit Number : 6P

Grid Reference: SU57456710 Average Annual Rainfall : 713 mm
 Accumulated Temperature : 1441 degree days
 Field Capacity Level : 160 days
 Land Use : Permanent Grass
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 20	HZCL	10YR42 00	0	0						Y
20- 39	HZCL	10YR42 00	0	0		C	MDCSAB	FR	M	Y
39- 62	HZCL	10YR52 71	0	10	SLST	M	WDMSAB	FR	M	Y
62- 75	PT	10YR21 00	0	0					M	

Wetness Grade : 4 Wetness Class : 5
 Gleying : 020 cm
 SPL : No SPL

Drought Grade : APW : mm MBW : 0 mm
 APP : mm MBP : 0 mm

FINAL ALC GRADE : 4
 MAIN LIMITATION : Wetness

SAMPLE NO.	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRONT	GLEY SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
6P	SU57456710	PGR	020		5	4			0	0		Y			WE 4 WT AT 60
51	SU57406710	PGR	0		5	4			0	0		Y			WE 4 WT AT 50
53	SU57806710	PGR	035		5	4			0	0		Y			WE 4 WT AT 60
56	SU57506700	PGR	035		5	4			0	0		Y			WE 4 WT AT 65
57	SU57606700	PGR	035		5	4			0	0		Y			WE 4 WT AT 50
58	SU57706700	PGR	030		5	4			0	0		Y			WE 4 WT AT 60
61	SU57306690	PGR	020 020		5	4			0	0		Y			WE 4 WT AT 55

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			SPL	CALC	
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR			IMP
6P	0-20	hzc1	10YR42 00						0	0	0						Y	
	20-39	hzc1	10YR42 00	10YR58 00	C			Y	0	0	0	MDCSAB	FR	M			Y	
	39-62	hzc1	10YR52 71	10YR68 81	M			Y	0	0	SLST	10	WDMSAB	FR	M		Y	
	62-75	pt	10YR21 00					Y	0	0	0				M			
51	0-40	hzc1	10YR42 00	10YR58 00	C			Y	0	0	0						Y	
	40-50	zc	10YR52 00	10YR58 00	C			Y	0	0	10			M			Y	
	50-65	hzc1	10YR62 00	10YR58 81	M			Y	0	0	20			M			Y	
	65-110	pt	10YR21 00					Y	0	0	0			M				
53	0-35	hzc1	10YR42 00						0	0	HR	2					Y	
	35-60	mzc1	10YR81 00	10YR86 00	C			Y	0	0	SLST	10		M			Y	
	60-110	pt	10YR21 00					Y	0	0	0			M				
56	0-35	hzc1	10YR42 00						0	0	0						Y	
	35-60	hzc1	10YR61 81	10YR58 00	C			Y	0	0	SLST	10		M			Y	
	60-90	hzc1	10YR51 00					Y	0	0	SLST	20		M			Y	
	90-110	pt	10YR21 00					Y	0	0	0			M				
57	0-35	hzc1	10YR43 00						0	0	0						Y	
	35-110	pt	10YR21 00	10YR58 00	C			Y	0	0	0			M				
58	0-30	mzc1	10YR43 00						0	0	HR	2					Y	
	30-95	sc1	10YR71 00	10YR58 00	C			Y	0	0	SLST	25		M			Y	
	95-110	pt	10YR21 00					Y	0	0	0			M				
61	0-20	hzc1	10YR42 00						0	0	0							
	20-65	zc	10YR52 00	10YR58 61	C			Y	0	0	SLST	20		P	Y		Y	Y
	65-110	pt	10YR21 00	10YR58 00				Y	0	0	0			M			Y	

SOIL PIT AND SOIL BORING DESCRIPTIONS

**NEWBURY LOCAL PLAN
SITE 58C**

Contents:

Soil Pit Descriptions

Database Printout - Boring Level Information

Database Printout - Horizon Level Information

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58C Pit Number : 3P

Grid Reference: SU45606770 Average Annual Rainfall : 707 mm
 Accumulated Temperature : 1434 degree days
 Field Capacity Level : 158 days
 Land Use : Set-aside
 Slope and Aspect : 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 30	HCL	25Y 42 00	0	3	HR					Y
30- 56	HCL	25Y 54 00	0	65	CH				M	Y
56- 85	CH	05YR81 00	0	0					M	

Wetness Grade : 2 Wetness Class : I
 Gleying : cm
 SPL : No SPL

Drought Grade : 3A APW : 102mm MBW : -3 mm
 APP : 98 mm MBP : 1 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58C Pit Number : 4P

Grid Reference: SJ45156760 Average Annual Rainfall : 707 mm
 Accumulated Temperature : 1434 degree days
 Field Capacity Level : 158 days
 Land Use : Set-aside
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 24	HZCL	10YR42 00	7	11	HR					
24- 48	HCL	10YR44 00	0	10	HR		MDCSAB	FR	M	
48- 72	SCL	10YR53 52	0	10	HR	C	MDCPR	FR	M	
72-100	C	75YR52 00	0	15	HR	C	MDCPR	FM	M	

Wetness Grade : 3B Wetness Class : III
 Gleying : 048 cm
 SPL : 048 cm

Drought Grade : APW : mm MBW : 0 mm
 APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Wetness

SAMPLE NO.	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
3P	SU45606770	SAS S	02		1	2	102	-3	98	1	3A			DR 3A	ROOTS 85
4P	SU45156760	SAS		048 048	3	3B		0	0					WE 3B	
13	SU45706780	SAS S	02	025 025	4	3B		0	0					WE 3B	
14	SU45006770	SAS S	01		1	2	124	19	110	13	2			WK 2	DR = 2
15	SU45106770	SAS S	01		1	2	126	21	102	5	2			WK 2	
16	SU45206770	SAS S	01	035 065	3	3B		0	0					WE 3B	
17	SU45306770	SAS S	02		1	3A	112	7	103	6	2			WK 3A	
18	SU45406770	SAS S	02		1	2	80	-25	83	-14	3B			DR 3B	
19	SU45506770	SAS			1	2	132	27	115	18	2			WK 2	DR = 2
20	SU45606770	SAS S	02		1	2	93	-12	96	-1	3A			DR 3A	IMPEN 70
21	SU45706770	SAS S	01		1	2	124	19	92	-5	2			WK 2	DR = 2
22	SU45806770	SAS S	01		1	1	144	39	116	19	1			1	
23	SU45106760	SAS		045 045	3	3B		0	0					WE 3B	IMPEN 75
23A	SU45056760	SAS		055 055	3	3A		0	0					WE 3A	
24	SU45206760	SAS		065 065	2	3A		0	0					WE 3A	
25	SU45306760	SAS S	02	065 065	2	3A		0	0					WE 3A	
26	SU45406760	SAS		025	1	2	130	25	110	13	2			WK 2	Q GLEY 25-50
27	SU45506760	SAS			1	2	135	30	116	19	1			WK 2	
28	SU45606760	SAS			1	2	123	18	106	9	2			WK 2	DR = 2
29	SU45706760	SAS S	01		1	2	105	0	98	1	3A			DR 3A	
30	SU45806760	SAS S	02	080	1	2	133	28	115	18	2			WK 2	DR = 2
31	SU45806750	SAS		055 055	3	3B		0	0					WE 3B	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES-----			STRUCT/		SUBS		SPL	CALC
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH	TOT	CONSIST	STR	POR		
3P	0-30	hc1	25Y 42 00						0	0	HR	3					Y
	30-56	hc1	25Y 54 00						0	0	CH	65		M			Y
	56-85	ch	05YR81 00						0	0		0		M			
4P	0-24	hzc1	10YR42 00						7	0	HR	11					
	24-48	hc1	10YR44 00						0	0	HR	10	MDCSAB	FR	M	Y	
	48-72	sc1	10YR53 52	10YR58	73	C		Y	0	0	HR	10	MDCPR	FR	M	Y	Y
	72-100	c	75YR52 00	75YR56	71	C		Y	0	0	HR	15	MDCPR	FM	M		Y
13	0-25	hc1	25Y 42 00						0	0	HR	2					
	25-70	sc	10YR63 00	10YR58	71	M		Y	0	0		0		P			Y
14	0-30	hc1	25Y 42 00						0	0	HR	2					
	30-55	hc1	10YR54 00						0	0	HR	2		M			
	55-85	hc1	10YR64 00						0	0	CH	65		M			
	85-100	ch	05YR81 00						0	0		0		M			
15	0-25	hc1	25Y 42 00						0	0	HR	3					
	25-35	hc1	25Y 54 00						0	0	CH	5		M			
	35-110	hc1	10YR54 00						0	0	CH	65		M			
16	0-35	hc1	10YR42 00						5	0	HR	8					
	35-50	c	10YR53 00	10YR58	00	C	00MN00	00	Y	0	0	HR	2		M		Q SPL
	50-65	c	10YR53 00	10YR58	00	C	00MN00	00	Y	0	0	HR	15		M		Q SPL
	65-110	c	10YR52 00	10YR78	00	C	00MN00	00	Y	0	0	HR	2		P		Y
17	0-25	c	25Y 52 00						5	0	HR	8					
	25-80	c	10YR46 00						0	0	CH	30		M			
	80-100	ch	05YR81 00						0	0		0		M			
18	0-30	hc1	25Y 42 00						0	0	CH	5					
	30-60	ch	05YR81 00						0	0		0		M			
19	0-30	hc1	25Y 42 00						0	0	CH	5					
	30-55	c	25Y 54 00						0	0	CH	2		M			
	55-110	c	25Y 63 00						0	0	CH	15		M			
20	0-30	hc1	25Y 43 00						0	0	CH	5					
	30-45	hc1	25Y 63 00						0	0	CH	65		M			
	45-75	ch	05Y 81 00						0	0		0		M			
21	0-25	hc1	25Y 43 00						0	0	CH	10					
	25-55	ch	10YR71 00						0	0		0		M			
	55-120	hzc1	10YR83 00						0	0	CH	65		M			
22	0-25	mc1	10YR42 00						0	0	HR	2					
	25-50	mc1	75YR43 00						0	0		0		M			
	50-70	hc1	75YR53 00						0	0		0		M			
	70-110	mc1	75YR43 00						0	0		0		M			

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES-----			STRUCT/ CONSIST	SUBS				CALC	
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR		IMP
23	0-30	hc1	25Y 42 00					5	0	HR	9						
	30-45	hc1	25Y 43 00					0	0	HR	5	M					
	45-60	sc1	10YR53 00	10YR58	C		Y	0	0	HR	10	M				Y	
	60-75	sc1	10YR52 54	10YR56	C		Y	0	0	HR	35	M					Y
23A	0-25	mc1	25Y 42 00					6	0	HR	8						
	25-55	mc1	10YR53 54					0	0	HR	5	M					
	55-80	sc1	10YR52 54	10YR56	C		Y	0	0	HR	30	M					Y
24	0-30	hc1	10YR42 00					7	0	HR	12						
	30-45	sc1	10YR53 00					0	0		0	M					
	45-65	hc1	10YR52 00					0	0		0	M					
	65-80	hc1	10YR52 00	10YR58 61	C		Y	0	0		0	M					Y
	80-110	c	75YR53 00	10YR58 61	C	00MN00	00	Y	0	0		0	P				
25	0-25	hc1	10YR42 00					8	0	HR	10						
	25-65	sc1	10YR54 00					0	0	HR	2	M					
	65-110	hc1	10YR52 54	10YR58	C		Y	0	0	HR	2	M					Y
26	0-25	hc1	25Y 52 00					0	0	CH	6						
	25-50	c	10YR63 00	10YR58 61	C		Y	0	0	CH	10	M					
	50-80	hc1	10YR78 00					0	0	CH	35	M					
	80-110	ch	05YR81 73					0	0		0	M					
27	0-25	hc1	25Y 42 00					0	0	CH	2						
	25-65	hc1	25Y 54 00					0	0	CH	2	M					
	65-110	c	10YR53 00					0	0	CH	2	M					Y
28	0-30	hc1	25Y 43 00					0	0	CH	5						
	30-45	c	10YR53 00					0	0	CH	10	M					
	45-75	hc1	10YR63 00					0	0	CH	65	M					
	75-105	ch	05Y 81 00	25Y 66 00	C			0	0		0	M					
29	0-30	hc1	25Y 43 00					0	0	CH	10						
	30-60	hc1	25Y 53 00					0	0	CH	65	M					
	60-90	ch	05YR81 00					0	0		0	M					
30	0-25	hc1	10YR42 00					0	0	HR	2						
	25-65	hc1	10YR43 00					0	0	HR	2	M					
	65-80	c	10YR44 00	10YR58 00	F			0	0	HR	2	M					
	80-110	c	10YR71 00	10YR58 00	C			Y	0	0	CH	15	M				
31	0-30	hc1	10YR42 00					0	0	HR	3						
	30-55	hc1	10YR53 00					0	0	HR	2	M					
	55-80	hc1	10YR52 00	10YR66 61	C			Y	0	0	HR	2	M				Y
	80-120	c	10YR52 00	10YR66 61	M	00MN00	00	Y	0	0		0	M				

QUERY GLEYING

SOIL PIT AND SOIL BORING DESCRIPTIONS

**NEWBURY LOCAL PLAN
SITE 58D**

Contents:

Soil Pit Descriptions

Database Printout - Boring Level Information

Database Printout - Horizon Level Information

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58D Pit Number : 5P

Grid Reference: SU44516749 Average Annual Rainfall : 711 mm
 Accumulated Temperature : 1440 degree days
 Field Capacity Level : 159 days
 Land Use : Permanent Grass
 Slope and Aspect : degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 29	OMZCL	25Y 21 00	0	4	CH					Y
29- 34	MSZL	10YR52 21	0	50	CH	C	MDCSAB	FR	M	Y
34- 50	OZL	05Y 21 00	0	2	CH				M	Y

Wetness Grade : 3B Wetness Class : IV
 Gleying : 029 cm
 SPL : No SPL

Drought Grade : APW : mm MBW : 0 mm
 APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Wetness

SAMPLE NO.	GRID REF	ASPECT USE	--WETNESS--			-WHEAT-		-POTS-		M.REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
5P	SU44516749	PGR			029	4	3B		0	0				WE	3B	WT 30
32	SU44406750	PGR	S	01	045 045	4	3B		0	0				WE	3B	SPL 45
32A	SU44306750	PGR			025	5	4		0	0				WE	4	WT 65; RUSHES
33	SU44506750	PGR			035	4	3B		0	0				WE	3B	WT 50
33A	SU44356747	PGR			0	5	4		0	0				WE	4	WT 30; RUSHES
35	SU44686746	PGR			028	4	3B		0	0				WE	3B	WT 30
36	SU44406743	PGR			025	5	4		0	0				WE	4	WT 40; RUSHES
36A	SU44406747	PGR			025	5	4		0	0				WE	4	WT 40; RUSHES
37	SU44506740	PGR			060	4	3B		0	0				WE	3B	WT 50
39	SU44706740	PGR			028	4	3B		0	0				WE	3B	WT 40
40	SU44306730	PGR			025	5	4		0	0				WE	4	WT 40; RUSHES
41	SU44406730	PGR			045	5	4		0	0				WE	4	RUSHES NEARBY
42	SU44506730	PGR	S	01	030	5	4		0	0				WE	4	WT 10; RUSHES
42A	SU44506732	PGR	S	01		5	4		0	0				WE	4	WT 40; RUSHES
43	SU44606730	PGR			060	4	3B		0	0				WE	3B	
44	SU44706730	PGR			020	4	3B		0	0				WE	3B	WT 90
45	SU44806730	PGR			020	4	3B		0	0				WE	3B	WT 45
45A	SU44836737	PGR			035	4	3B		0	0				WE	3B	WT 40
46	SU44906730	PGR			035	5	4		0	0				WE	4	WT 35; RUSHES
47	SU44346719	PGR			0	5	4		0	0				WE	4	WT 20; RUSHES
48	SU44506720	PGR	N	02		5	4		0	0				WE	4	WT 75; RUSHES
48A	SU44496723	PGR			035	5	4		0	0				WE	4	WT 40; RUSHES
49	SU44606720	PGR			040	5	4		0	0				WE	4	WT 30; RUSHES

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			SPL	CALC	
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR			IMP
5P	0-29	omzc1	25Y 21 00						0	0	CH	4					Y	
	29-34	msz1	10YR52 21	75YR46	44	C		Y	0	0	CH	50	MDCSAB	FR	M		Y	CH =ALGAL MARL
	34-50	oz1	05Y 21 00					Y	0	0	CH	2			M		Y	PIT DUG TO 50
32	0-30	mzc1	10YR31 00						0	0		0						
	30-45	hc1	10YR31 00						0	0		0			M			
	45-70	c	10YR55 63	10YR56	62	M		Y	0	0		0			P	Y	Y	SPL AT 45
32A	0-25	mzc1	10YR32 00						0	0	HR	2					Y	Q ORGANIC TS
	25-35	mzc1	10YR42 00	75YR46	00	C		Y	0	0	CH	1			M		Y	CH= ALGAL MARL
	35-60	mzc1	10YR42 82	10YR56	00	C		Y	0	0	CH	5			M		Y	CH= ALGAL MARL
	60-75	z1	10YR42 00	10YR58	00	F		Y	0	0	CH	10			M		Y	CH= ALGAL MARL
	75-85	lp	10YR21 00					Y	0	0	CH	2			M		Y	CH= ALGAL MARL
	85-120	hp	05Y 21 00					Y	0	0		0			M			
33	0-25	mzc1	10YR32 00						0	0	CH	1					Y	Q ORGANIC TS
	25-35	mzc1	10YR31 00	10YR46	00	F			0	0	CH	2			M		Y	CH= ALGAL MARL
	35-55	msz1	10YR53 82	10YR56	00	C		Y	0	0	CH	15			M		Y	CH= ALGAL MARL
	55-70	msz1	10YR42 00	10YR46	00	C		Y	0	0	CH	2			M		Y	CH= ALGAL MARL
	70-80	z1	10YR73 00	10YR56	68	C		Y	0	0	CH	65			M		Y	CH= ALGAL MARL
	80-120	hp	05Y 21 00	75YR44	00	C		Y	0	0		0			M			
33A	0-25	omzc1	10YR21 00	75YR46	00	C		Y	0	0		0					Y	
	25-38	z1	10YR21 00	75YR46	00	C		Y	0	0		0			M		Y	
	38-90	lp	75YR21 00					Y	0	0		0			M		Y	
	90-120	msz1	25Y 61 00					Y	0	0	CH	65			M		Y	CH= ALGAL MARL
35	0-28	mzc1	10YR32 00						0	0	CH	2					Y	Q ORGANIC TS
	28-60	msz1	10YR53 82	10YR58	00	M		Y	0	0	CH	50			M		Y	CH= ALGAL MARL
	60-75	msz1	10YR43 00					Y	0	0	CH	50			M		Y	CH= ALGAL MARL
	75-90	p1	05Y 21 00					Y	0	0		0			M		Y	
36	0-25	omzc1	10YR21 00						0	0		0					Y	
	25-45	p1	10YR46 00					Y	0	0		0			M		Y	
	45-120	lp	10YR42 31					Y	0	0		0			M			
36A	0-25	mzc1	10YR21 00	10YR46	00	F			0	0		0					Y	
	25-120	lp	10YR42 31					Y	0	0		0			M			
37	0-25	mzc1	10YR42 00						0	0	CH	15					Y	Q ORGANIC TS
	25-60	msz1	10YR52 85	10YR56	00	F			0	0	CH	65			M		Y	CH= ALGAL MARL
	60-110	hp	05Y 21 00					Y	0	0		0			M			INTERB'D A.M.
39	0-28	mzc1	10YR32 00						0	0	CH	1					Y	Q ORGANIC TS
	28-55	msz1	10YR52 00	10YR56	00	C		Y	0	0	CH	30			M		Y	CH= ALGAL MARL
	55-65	z1	10YR43 00	10YR56	00	C		Y	0	0	CH	10			M		Y	CH= ALGAL MARL
	65-120	hp	05Y 21 00					Y	0	0		0			M			

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			CALC		
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP	SPL
40	0-25	omzc1	05Y 21 00	75YR46	00	F			0	0	0					Y		
	25-33	omzc1	05Y 21 32	75YR46	00	C		Y	0	0	CH	15		M		Y	CH= ALGAL MARL	
	33-40	z1	10YR32	41	75YR46	00	C		Y	0	0	0		M		Y		
	40-70	p1	10YR81	00	10YR56	00	C		Y	0	0	0		M		Y	IMPEN 70	
41	0-25	mzc1	10YR31	00					0	0	0					Y	Q ORGANIC TS	
	25-45	mzc1	10YR31	00	10YR56	00	F		0	0	CH	1		M		Y	CH= ALGAL MARL	
	45-60	mc1	10YR62	00	10YR56	00	C		Y	0	0	0		M		Y		
	60-75	mc1	10YR62	00	10YR56	00	C		Y	0	0	HR	10		M		Y	CH= ALGAL MARL
	75-110	mc1	10YR62	00	10YR56	68	C		Y	0	0	0		M		Y	IMPEN 110	
42	0-20	omzc1	10YR31	00					0	0	CH	1				Y		
	20-30	msz1	10YR32	00					0	0	CH	15		M		Y	CH= ALGAL MARL	
	30-120	hp	05Y 21	00				Y	0	0	0			M				
42A	0-20	mzc1	10YR31	00					0	0	0					Y	Q ORGANIC TS	
	20-30	msz1	10YR31	21					0	0	CH	15		M		Y	CH= ALGAL MARL	
	30-60	msz1	10YR52	82					0	0	CH	30		M		Y	BANDS PEAT/A.M.	
	60-100	msz1	10YR52	82					0	0	CH	65		M		Y	ALGL MARL/PEAT	
	100-120	msz1	10YR42	00					0	0	CH	5		M		Y	CH= ALGAL MARL	
43	0-30	mzc1	10YR32	00					0	0	CH	1				Y	Q ORGANIC TS	
	30-60	hzc1	10YR32	00					0	0	CH	1		M		Y		
	60-90	z1	10YR31	00	75YR46	00	C		Y	0	0	0		M		Y	IMPEN 90	
44	0-20	mzc1	10YR31	00					0	0	CH	2				Y	Q ORGANIC TS	
	20-65	msz1	10YR53	82	10YR56	00	C		Y	0	0	CH	65		M		Y	CH= ALGAL MARL
	65-110	z1	10YR53	82	10YR56	00	C		Y	0	0	CH	50		M		Y	CH= ALGAL MARL
45	0-20	mzc1	10YR32	00					0	0	CH	3				Y	Q ORGANIC TS	
	20-60	msz1	10YR62	53	10YR58	00	M		Y	0	0	CH	50		M		Y	CH= ALGAL MARL
	60-80	1p	05Y 21	00	75YR46	00	C		Y	0	0	0		M				
	80-110	fsz1	25Y 71	00					0	0	0			M		Y		
45A	0-35	mzc1	10YR31	00					0	0	0					Y	Q ORGANIC TS	
	35-50	ohzc1	10YR32	00	75YR68	00	C		Y	0	0	0		M		Y		
	50-70	msz1	10YR53	00	10YR56	00	C		Y	0	0	CH	10		M		CH= ALGAL MARL	
46	0-35	omsz1	10YR31	00					0	0	0					Y		
	35-60	1p	75YR31	00					Y	0	0	0		M				
	60-115	hp	05Y 21	00					Y	0	0	0		M				
47	0-25	1p	05Y 21	00					Y	0	0	0				Y		
	25-65	1p	05Y 21	00					Y	0	0	0		M				
	65-100	cs1	10YR52	82					Y	0	0	0		M		Y	CSL=ALGAL MARL	
	100-120	1p	05Y 21	00					Y	0	0	0		M				
48	0-25	msz1	10YR42	00					0	0	CH	20				Y	Q ORGANIC TS	
	25-45	cs1	10YR73	64	10YR56	00	F		0	0	0		M		Y	CSL=ALGAL MARL		
	45-120	cs1	10YR62	61					0	0	0		M		Y	CSL=ALGAL MARL		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			
				COL	ABUN	CONT	COL.	GLEYS	>2	>6	LITH		TOT	STR	POR	IMP
48A	0-25	mzc1	10YR32 00						0	0	CH	2			Y	Q ORGANIC TS
	25-35	msz1	10YR53 82						0	0	CH	65	M		Y	CH= ALGAL MARL
	35-80	p1	05Y 21 00					Y	0	0		0	M			
	80-110	p1	75YR44 00	05Y 21 00	M			Y	0	0		0	M			
49	0-30	msz1	10YR31 00						0	0	CH	2			Y	Q ORGANIC TS
	30-40	msz1	10YR32 82						0	0	CH	60	M		Y	CH= ALGAL MARL
	40-65	lp	10YR32 82	75YR46 00	C			Y	0	0	CH	10	M		Y	CH= ALGAL MARL
	65-80	hp	05Y 21 00					Y	0	0		0	M			
	80-100	lp	10YR31 00	75YR46 00	C			Y	0	0		0	M		Y	
	100-120	lp	10YR32 82					Y	0	0	CH	40	M		Y	CH= ALGAL MARL

SOIL PIT AND SOIL BORING DESCRIPTIONS

**NEWBURY LOCAL PLAN
SITE 58E**

Contents:

Soil Pit Descriptions

Database Printout - Boring Level Information

Database Printout - Horizon Level Information

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58E Pit Number : 1P

Grid Reference: SU45306830 Average Annual Rainfall : 702 mm
Accumulated Temperature : 1422 degree days
Field Capacity Level : 156 days
Land Use : Set-aside
Slope and Aspect : 02 degrees NW

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 33	HCL	10YR42 00	3	20	HR					
33- 65	C	10YR53 00	0	5	HR	M	MDCAB	FM	P	

Wetness Grade : 3B Wetness Class : IV
Gleying : 033 cm
SPL : 033 cm

Drought Grade : APW : mm MBW : 0 mm
APP : mm MBP : 0 mm

FINAL ALC GRADE : 3B
MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : NEWBURY LOCAL PLAN 58E Pit Number : 2P

Grid Reference: SU45206841 Average Annual Rainfall : 702 mm
 Accumulated Temperature : 1422 degree days
 Field Capacity Level : 156 days
 Land Use : Set-aside
 Slope and Aspect : 02 degrees NE

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 25	MCL	10YR43 00	13	25	HR					
25- 47	C	75YR46 00	0	43	HR	M	MDCSAB	FM	M	
47-120	C	10YR54 00	0	62	HR	F		2/3 FM	M	

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : No SPL

Drought Grade : 3B APW : 81 mm MBW : -23 mm
 APP : 71 mm MBP : -25 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Droughtiness

SAMPLE NO.	GRID REF	ASPECT USE	GRDNT	--WETNESS--		-WHEAT-		-POTS-		M. REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
				GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB					
1	SU45306850	SAS N	01		1	1	74	-30	82	-14	3B			DR	3B	IMP 65: RE 2P
1A	SU45356859	SAS N	01		1	1	57	-47	57	-39	3B			DR	3B	IMP 45: RE 2P
1P	SU45306830	SAS NW	02	033	033	4	3B		0	0				WE	3B	Q MCL TS
2	SU45206840	SAS NE	02	025		2	2	73	-31	76	-20	3B		DR	3B	IMP 55: RE 2P
2A	SU45206841	SAS NE	04			1	1	58	-46	58	-38	3B		DR	3B	IMPEN 45
2P	SU45206841	SAS NE	02			1	1	81	-23	71	-25	3B		DR	3B	PIT70;ROOTS 59
3	SU45306840	SAS NW	04	030	030	4	3B		0	0				WE	3B	NEAR SPRNG
3A	SU45336840	SAS NW	03	038	070	2	2	109	5	103	7	2		ST	3A	TOPSOIL STONE
4	SU45406840	SAS NE	04	070	070	2	2	92	-12	91	-5	3A		ST	3A	TOPSOIL STONE
4A	SU45366847	SAS NW	02			1	1	77	-27	81	-15	3B		DR	3B	IMP 60: RE 2P
5	SU45506840	SAS NE	02			1	1	78	-26	85	-11	3B		DR	3B	IMP 60: RE 2P
6	SU45306830	SAS NE	02	030	030	4	3B		0	0				WE	3B	
6A	SU45356832	SAS NE	02	025	025	4	3B		0	0				WE	3B	POSS PIT
7	SU45406830	SAS NE	03			1	1	46	-58	46	-50	4		DR	3B	IMP 35: RE 2P
8	SU45506830	SAS NE	04	075	075	2	2	87	-17	78	-18	3A		ST	3A	IMP90; SL GLEY
9	SU45586832	SAS NE	04	050	050	3	3A		0	0				WE	3A	NEAR DRAIN
10	SU45106820	SAS NW	02	025	033	4	3B		0	0				WE	3B	
11	SU45206820	SAS NW	04	028	028	4	3B		0	0				WE	3B	SANDY LENS 48
12	SU45106810	SAS		030		2	2	52	-52	52	-44	4		DR	3B	IMP 40: RE 2P
12A	SU45106816	SAS		030		2	2	61	-43	61	-35	3B		DR	3B	IMP 48: RE 2P
13A	SU45336820	SAS		028	028	4	3B		0	0				WE	3B	
14A	SU45156829	SAS NE	03	028		2	2	054	-50	054	-42	3B		DR	3B	IMP45: RE 2P
15A	SU45256842	SAS NE	04	038	038	4	3B		0	0				WE	3B	NEAR SPRING

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES-----			STRUCT/ CONSIST	SUBS							
				COL	ABUN	CONT	COL.	GLEYS	>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC		
1	0-28	mc1	10YR42 00						11	0	HR	20							TOPSOIL SIEVED, 2CM	
	28-45	mc1	10YR54 00						0	0	HR	30			M				PROB STONIER (2P)	
	45-65	c	10YR56 00	00MN00	00	C.			0	0	HR	35			M				PROB STONIER (2P)	
1A	0-25	mc1	10YR42 00						13	0	HR	25							TOPSOIL SIEVED, 2CM	
	25-35	mc1	10YR44 00						0	0	HR	30			M				PROB STONIER (2P)	
	35-45	mc1	10YR44 00						0	0	HR	35			M				PROB STONIER (2P)	
1P	0-33	hc1	10YR42 00						3	0	HR	20							TOPSOIL SIEVED, 2CM	
	33-65	c	10YR53 00	75YR56	00	M	00MN00	00	Y	0	0	HR	5	MDCAB	FM	P	Y	Y		
2	0-25	mc1	10YR42 00	10YR58	00	C			3	0	HR	10								
	25-48	c	10YR53 52	75YR68	00	M			Y	0	0	HR	8			P	Y			
	48-55	c	10YR53 52	75YR68	00	M			Y	0	0	HR	20			P	Y		STONIER AT 70	
2A	0-28	mc1	10YR42 00						13	0	HR	25							TOPSOIL SIEVED, 2CM	
	28-45	c	75YR46 00	00MN00	00	F			0	0	HR	30			M				PROB 43% HR (2P)	
2P	0-25	mc1	10YR43 00						13	0	HR	25							TOPSOIL SIEVED, 2CM	
	25-47	c	75YR46 00	75YR56	00	M			0	0	HR	43	MDCSAB	FM	M					
	47-120	c	10YR54 00	10YR56	00	F			0	0	HR	62			FM	M				
3	0-30	mc1	10YR42 00						12	0	HR	25								
	30-40	c	10YR53 63	75YR58	52	M			Y	0	0	HR	10			P	Y	Y		
	40-60	c	10YR53 63	75YR58	52	M			Y	0	0	HR	0			P	Y	Y		
3A	0-27	mc1	10YR42 00						10	0	HR	20								
	27-38	sc1	10YR56 00	10YR68	00	F			0	0	HR	2			M					
	38-58	ms1	10YR54 00	75YR56	00	M			Y	0	0	HR	0			M				
	58-70	ms1	10YR53 00	75YR56	00	M			Y	0	0	HR	1			M				
	70-90	c	10YR53 00	75YR56	68	M			Y	0	0	HR	2			P	Y	Y		
4	0-29	mc1	10YR43 00						12	0	HR	22								
	29-45	hc1	75YR46 00	75YR56	00	F	00MN00	00		0	0	HR	30			M				PROB STONIER (2P)
	45-50	c	75YR46 00	75YR56	00	F	00MN00	00		0	0	HR	32			M				PROB STONIER (2P)
	50-70	c	75YR56 00	10YR63	00	F	00MN00	00		0	0	HR	20			M				
	70-90	c	75YR56 00	10YR63	00	C			Y	0	0	HR	5			P	Y	Y		
4A	0-26	mc1	10YR42 00						11	0	HR	25							TOPSOIL SIEVED, 2CM	
	26-35	mc1	10YR44 00						0	0	HR	20			M				PROB STONIER (2P)	
	35-50	c	10YR56 00						0	0	HR	10			M					
	50-60	hc1	10YR46 00						0	0	HR	25			M				PROB STONIER (2P)	
5	0-27	mc1	10YR42 00						8	0	HR	20							TOPSOIL SIEVED, 2CM	
	27-45	mc1	10YR54 00	10YR56	00	F			0	0	HR	15			M					
	45-60	c	10YR54 00						0	0	HR	12			M					
6	0-30	mc1	10YR43 00						5	0	HR	15								
	30-55	c	10YR53 00	75YR56	00	M	00MN00	00	Y	0	0	HR	2			P	Y	Y		
	55-70	c	10YR53 00	75YR56	52	M	00MN00	00	Y	0	0	HR	1			P	Y	Y		

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED		---STONES---			STRUCT/ CONSIST	SUBS			CALC	
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP
6A	0-25	mc1	10YR42 00	10YR56 00	F				5	0	HR	15					
	25-40	c	10YR53 00	75YR56 00	M			00MN00	00	Y	0	0	HR	5	P	Y	Y
	40-60	c	10YR53 00	75YR56 00	M			00MN00	00	Y	0	0	HR	1	P	Y	Y
7	0-29	mc1	10YR42 00								12	0	HR	25			
	29-35	mc1	10YR54 00								0	0	HR	35	M		TOPSOIL SIEVED, 20 PROB STONIER (2P)
8	0-27	mc1	10YR42 00								13	0	HR	25			
	27-45	mc1	10YR44 00								0	0	HR	30	M		PROB STONIER (2P)
	45-60	mc1	10YR42 00	00MN00 00	C						0	0	HR	30	M		PROB STONIER (2P)
	60-75	mc1	10YR43 00	10YR56 00	F			00MN00	00		0	0	HR	25	M		PROB STONIER (2P)
	75-95	c	75YR56 00	10YR63 00	C			00MN00	00	Y	0	0	HR	8	P	Y	Y
9	0-27	mc1	10YR33 00								6	0	HR	12			
	27-45	mc1	10YR54 00								0	0	HR	10	M		
	45-50	c	75YR46 00								0	0	HR	15	M		
	50-80	c	75YR46 00	10YR53 00	C			00MN00	00	Y	0	0	HR	10	P	Y	Y
10	0-25	mc1	10YR42 00								3	0	HR	10			
	25-33	hc1	75YR46 61	10YR61 46	M			00MN00	00	Y	0	0	HR	10	M		
	33-60	c	10YR53 00	75YR56 51	M					Y	0	0		0	P	Y	Y
11	0-28	hc1	10YR42 00								3	0	HR	10			
	28-48	c	10YR63 00	10YR56 51	M					Y	0	0		0	P	Y	Y
	48-70	c	10YR53 00	75YR58 00	M					Y	0	0		0	P	Y	Y
12	0-30	mc1	10YR42 00								12	0	HR	25			
	30-40	mc1	10YR52 42	75YR46 00	C					Y	0	0	HR	35	M		PROB STONIER (2P)
12A	0-30	mc1	10YR42 00								13	0	HR	25			
	30-48	cs1	10YR53 00	75YR58 00	C					Y	0	0	HR	35	M		PROB STONIER (2P)
13A	0-28	mc1	10YR42 00								5	0	HR	15			
	28-40	c	10YR53 00	75YR56 68	M					Y	0	0	HR	3	P	Y	Y
	40-60	c	10YR53 00	75YR68 56	M			00MN00	00	Y	0	0	HR	1	P	Y	Y
14A	0-28	mc1	10YR42 00								14	0	HR	30			
	28-45	c	10YR53 00	75YR56 00	M					Y	0	0	HR	35	M		PROB STONIER (2P)
15A	0-38	mc1	10YR43 00								12	0	HR	25			
	38-55	hc1	10YR53 00	10YR56 00	M					Y	0	0	HR	2	P	Y	Y