

APPENDIX II

SITE SURVEY LOGS

240732 Flivalds, Wootton Bassett																														
No.	Depth (cm)	Texture	Stones	Mottling	Structure	Depth (cm)	Texture	Stones	Mottling	Structure	Depth (cm)	Texture	Stones	Mottling	Structure	Depth (cm)	Texture	Stones	Mottling	Structure	Depth (cm)	Texture	Stones	Mottling	Structure	Depth (cm)	Texture	Stones	Mottling	Structure
1	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
2	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
3	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
4	0-20	ZC	S	*	SAB	20-120	C	S O	CP																					
5	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
6	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
7	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
8	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
9	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
10	0-30	MZCL	S	*	SAB	30+	Refusal																							
11	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
12	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
13	0-20	ZC	S	*	SAB	20-120	C	S O	CP																					
14	0-20	ZC	S	*	SAB	20-120	C	S O	CP																					
15	0-20	ZC	S	*	SAB	20-120	C	S O	CP																					
16	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
17	0-30	MZCL	S	*	SAB	30+	Refusal																							
18	0-30	MZCL	S	*	SAB	30+	Refusal																							
19	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
20	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
21	0-25	HZC	S	FO	SAB	25-60	ZC	S O	CP	60-120	C		S O	CP																
22	0-25	HZC	S	FO	SAB	25-65	ZC	S O	CP	65-120	C		S O	CP																
23	0-25	HZC	S	FO	SAB	25-60	ZC	S O	CP	60-120	C		S O	CP																
24	0-25	HZC	S	FO	SAB	25-60	ZC	S O	CP	60-120	C		S O	CP																
25	0-25	HZC	S	FO	SAB	25-70	ZC	S O	CP	70-120	ZC		S O	CP																
26	0-25	HZC	S	FO	SAB	25-70	ZC	S O	CP	70-120	ZC		S O	CP																
27	0-30	HZC	S	FO	SAB	30+	Refusal																							
28	0-25	HZC	S	FO	SAB	25+	Refusal																							
29	0-25	HZC	S	FO	SAB	25+	Refusal																							
30	0-20	HZC	S	FO	SAB	20+	Refusal																							
31	0-20	HZC	S	FO	SAB	20+	Refusal																							
32	0-20	HZC	S	FO	SAB	20-35	MZC	S O	CP	35-120	C		S O	CP																
33	0-20	HZC	S	FO	SAB	20-35	ZC	S O	CP	35-120	C		S O	CP																
34	0-25	HZC	S	*	SAB	25-60	C	S O	CP	60-120	C		S FOX	CP																
35	0-25	HZC	S	*	SAB	25-90	C	S O	CP	90-120	C		S FOX	CP																
36	0-25	HZC	S	*	SAB	25-100	C	S O	CP	100-120	C		S FOX	CP																
37	0-25	MZC	S	FO	SAB	25-60	MZC	S O	CP	60-120	C		S OX	CP																
38	0-25	MZCL	S	FO	SAB	25-60	MZC	S O	CP	60-120	C		S OX	CP																
39	0-25	MZCL	S	FO	SAB	25-60	MZC	S O	CP	60-120	C		S OX	CP																
40	0-25	MZC	S	FO	SAB	25-35	MZCL	S O	SAB	35+	Refusal																			
41	0-25	MZC	S	FO	SAB	25-60	MZC	S O	CP	60-120	C		S O	CP																
42	0-25	MZC	S	FO	SAB	25-60	MZC	S O	CP	60-120	C		S O	CP																
43	0-30	MZCL	S	O	SAB	20+	Refusal																							
44	0-25	MZCL	S	FO	SAB	25-60	MZC	S O	CP	60-120	C		S O	CP																
45	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
46	0-30	MZCL	S	O	SAB	30+	Refusal																							
47	0-25	ZC	S	*	SAB	25+	Refusal																							
48	0-20	ZC	S	*	SAB	20+	Refusal																							
49	0-30	HZC	S	FO	SAB	20-60	HZC	S O	CP	40-100	C		S OX	CP																
50	0-25	MZCL	S	*	SAB	25-80	ZC	S O	CP	80-120	ZC		35 X	CP																
51	0-25	MZCL	S	*	SAB	25-90	ZC	S O	CP	90-120	ZC		35 X	CP																
52	0-25	MZCL	S	O	SAB	25-90	ZC	S O	CP	90-120	ZC		35 X	CP																
53	0-25	MZCL	S	O	SAB	25+	Refusal																							
54	0-20	MZCL	S	O	SAB	20-45	MZCL	S O	SAB	45+	Refusal																			
55	0-25	ZC	S	*	SAB	25-50	C	S O	CP	50+	Refusal																			
56	0-25	MZCL	S	S	SAB	25+	Refusal																							
57	0-25	MZCL	S	FO	SAB	25-85	C	10 O	CP	85-120	C		S X	CP																
58	0-25	HZC	S	FO	SAB	25-70	HZC	S O	CP	70-120	C		S OX	CP																
59	0-20	ZC	S	*	SAB	20-60	HZCL	15 X	SAB	60-120	C		S X	CP																
60	0-25	ZC	S	*	SAB	25-60	ZC	S O	CP	60+	Refusal																			
61	0-25	MZCL	S	*	SAB	25-60	ZC	S FOX	CP	60+	C		S X	CP																
62	0-25	MZCL	S	O	SAB	25-80	C	S OX	CP	80-120	C		S OX	CP																
63	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
64	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
65	0-20	ZC	S	*	SAB	20-70	C	S X	CP	70-120	C		S O	CP																
66	0-30	ZC	S	*	SAB	30+	Refusal																							
67	0-25	ZC	S	*	SAB	25-120	C	S X	CP																					
68	0-25	ZC	S	*	SAB	25-120	C	S X	CP																					
69	0-10	ZC	S	*	SAB	10-70	C	S X	CP	70-120	C		S O	CP																
70	0-30	ZC	S	*	SAB	30-80	C	S X	CP	80-120	C		S O	CP																
71	0-30	ZC	S	*	SAB	30-80	C	S X	CP	80-120	C		S O	CP																
72	0-30	ZC	S	*	SAB	30-80	C	S X	CP	80-120	C		S O	CP																
73	0-30	ZC	S	*	SAB	30-80	C	S X	CP	80-120	C		S O	CP																
74	0-30	ZC	S	*	SAB	30-80																								

Structure	
MSAB	Medium Subangular Blocky
AB	Angular Blocky
CP	Coarse Prismatic
MSAB	Massive
SAB	Subangular Blocky
CP	Coarse
W	Weak

Stones	
5	Very Slightly Stony
15	Slightly Stony
35	Moderately Stony

Texture	
C	Clay
ZC	Silty Clay
SC	Sandy Clay
CL	Clay Loam
ZCL	Silty Clay Loam
SCL	Sandy Clay Loam
SZL	Sandy Silty Loam
SL	Sandy Loam
LS	Loamy Sand
S	Sand
ZS	Silty Sand
MG	Made Ground
F (sand)	Fine
M (sand)	Medium
C (sand)	Coarse
H (clay)	Heavy
M (clay)	Medium

Rock Type	
Ca	Calcareous

Mottling	
*	No Mottling
X	Fine Grey
O	Fine Ochreous
N	Numerous Mottles
F	Few Mottles
D	Fine Brown

Cell Colours	Reason
	Livestock in field - not accessed
	Woodland/Made Ground/Urban
	Inaccessible areas
	N/A

APPENDIX III

SITE SURVEY PHOTOGRAPHS

Photograph Number	Photograph Description	Photograph
1.	Land at Flaxlands, Wootton Bassett: Soil Type 1.	
2.	Land at Flaxlands, Wootton Bassett: Soil Type 2.	

APPENDIX IV

SUMMARY OF FINDINGS

Job Name:	Land at Flaxlands Farm
Job Number:	240732
Date:	15/10/2024
Completed By:	JN

Site Altitude:	129
Centre Grid Ref:	406609 185082

AAR	726.42
ATO	1384.66
FCD	161.84
MDMWHT	102.25
MDMPOT	92.50

	Soil Type 1	Soil Type 2
AP WHT	131.45	136.68
MB WHT	29.20	34.43
AP POT	108.65	113.875
MB POT	16.15	21.37



Site Limitations Summary		
	Soil Type 1	Soil Type 2
Wetness Class	II	III
Wetness Grading	3b	3a
Droughtiness Wheat	2	1
Droughtiness Potato	1	1
Gradient Limitation	1	1
Soil Depth Limitation	1	1
Stoniness Limitation	1	1
	Overall	
Site Climatic Limitation	1	1
Flooding Limitation	1	3a*
Overall Grade	3b	3a

* For part of the site

Agricultural Land Classification (ALC)

The Agricultural Land Classification (ALC) provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The limitations can operate in one or more of four principal ways: they may affect the range of crops which can be grown; the level of yield; the consistency of yield and the cost of obtaining it. The classification system gives considerable weight to flexibility of cropping, whether actual or potential, but the ability of some land to produce consistently high yields of a somewhat narrower range of crops is also taken into account.

These factors form the basis for classifying agricultural land into one of five grades (with Grade 3 land divided into Subgrades 3a and 3b since the guidelines were revised in 1988), ranked from Excellent (Grade 1) to Very Poor (Grade 5). ALC grading is determined using the Ministry of Agriculture Food and Fisheries (MAFF) '*Agricultural Land Classification of England and Wales – Revised guidelines and criteria for grading the quality of agricultural land*'.

Definition of Agricultural Land Classification Grades

ALC Grade	Description
Grade 1	Excellent quality agricultural land No or very minor limitations to agricultural use.
Grade 2	Very good quality agricultural land Minor limitation which affect crop yield, cultivation or harvesting.
Subgrade 3a (pre-1988 Grade 3)	Good quality agricultural land Capable of producing moderate to high yields of a narrow range of arable crops or moderate yields of a wider range of crops.
Subgrade 3b (pre-1988 Grade 3)	Moderate quality agricultural land Capable of producing moderate yields of a narrow range of arable crops and/or lower yields of a wider range of crops.
Grade 4	Poor quality agricultural land Severe limitations which significantly restrict the range of crops and/or levels of yield.
Grade 5	Very poor quality agricultural land Very severe limitations which restrict use to permanent pasture or rough grazing.

Best and Most Versatile (BMV) Agricultural Land

The National Planning Policy Framework (NPPF) (Department for Communities and Local Government, 2012) defines Best and Most Versatile (BMV) agricultural land as land of Excellent (ALC Grade 1), Very Good (Grade 2) and Good (Grade 3a) agricultural quality. BMV land is provided a degree of protection against development within planning policy, with most Local Plans including specific policies which refer to the protection of BMV agricultural land.

Non-BMV agricultural land, i.e. Moderate, Poor and Very Poor quality agricultural land is designated subgrade 3b or Grades 4 and 5 respectively, and is restricted to a narrower range of agricultural uses. Limited to no protection is provided against development on this grade land within planning policy.

Limiting Factors

Main Factor	Sub Factor	Explanation
Climatic Limitations	Overall Climatic Limitation	Using a dataset of five parameters, as set on a 5km grid for the whole of the UK, the site climatic values are used to determine if there is an overriding limiting factor for the site with regard to the wider climate.
	Local Climatic Factors	Where the above climatic factors are liable to be modified by local factors such as aspect, gradient and elevation then one or more of these factors may become a limiting factor for the site.
Site Limitations	Gradient	Gradient may have an impact on mechanised farm operations and also on soil erosion. The ALC grade limitations with reference to gradient are given in Table 1 of the MAFF guidance.
	Microrelief	Complex changes in slope angle and direction over short distances may have an impact on agricultural machinery. The effect of microrelief is considered in conjunction with overall gradient.
	Flooding	The extent, duration, frequency and timing of flooding may have an influence over the ALC Grade and could become the limiting site factor. The ALC grade limitations with reference to flooding are given in Tables 2 and 3 of the MAFF guidance.
Soil Limitations	Soil Texture and Structure	Soil texture and structure can influence the water retention, water movement and aeration of the soil and therefore affect the workability, trafficability, poaching risk and suitability for plant growth. Soil texture is determined by the proportions of sand, silt and clay and is used to assess the wetness class of the soil.
	Soil Depth	Soil depth can influence the available water capacity of the soil, restrict nutrient uptake, root growth and root anchorage. The ALC grade limitations with reference to soil depth are given in Table 4 of the MAFF guidance.
	Stoniness	Stone content can influence the cultivation, harvesting and crop growth and may negatively impact machinery. The ALC grade limitations with reference to stoniness are given in Table 5 of the MAFF guidance.
	Chemical Limitations	Certain physical limitations may limit soil chemical properties, such as saline conditions, organic matter and toxic elements.
Interactive Limitations	Soil Wetness	Soil wetness is assessed using a combination of factors including climate, soil water regime and soil texture. The ALC grade limitations with reference to soil wetness are given in Tables 6 and 7 of the MAFF guidance.
	Droughtiness	Soil droughtiness is assessed using a combination of factors including available water capacity, moisture deficit, moisture balance and irrigation. The ALC grade limitations with reference to droughtiness are given in Table 8 of the MAFF guidance.
	Soil Erosion	Soil erosion may be caused by wind or water action and is determined by interactions between weather, soil type, topography and vegetation cover.

Soil Series

Soil series is the lowest categorical level used for classifying soils in England and Wales. According to the Soil Survey of England and Wales 1984:

"Soil series are defined using a combination of three main properties, the broad type of parent material present (substrate type), the texture of the soil material (textural grouping) and the presence or absence of material with a distinctive mineralogy."

Higher categories are: Major Soil Group, Soil Group, and Soil Subgroup, which are not explicitly used in this report.

Soil Association

A soil association is a geographic grouping of soils identified by the name of the most frequently occurring soil series and by the combination of additional soil series.

Gleying

Gleying is the process of iron reduction (opposite to oxidation) in soils from ferric (reddish in colour) to ferrous compounds (grey or colourless), by microorganisms or by-products of decomposing organic matter. Gleying occurs in areas devoid of oxygen when the soil is waterlogged. The resulting mottling (spots or blotches of colour) can therefore be used to identify the existence of a Slowly Permeable Layer (SPL); as defined within the MAFF ALC guidance.

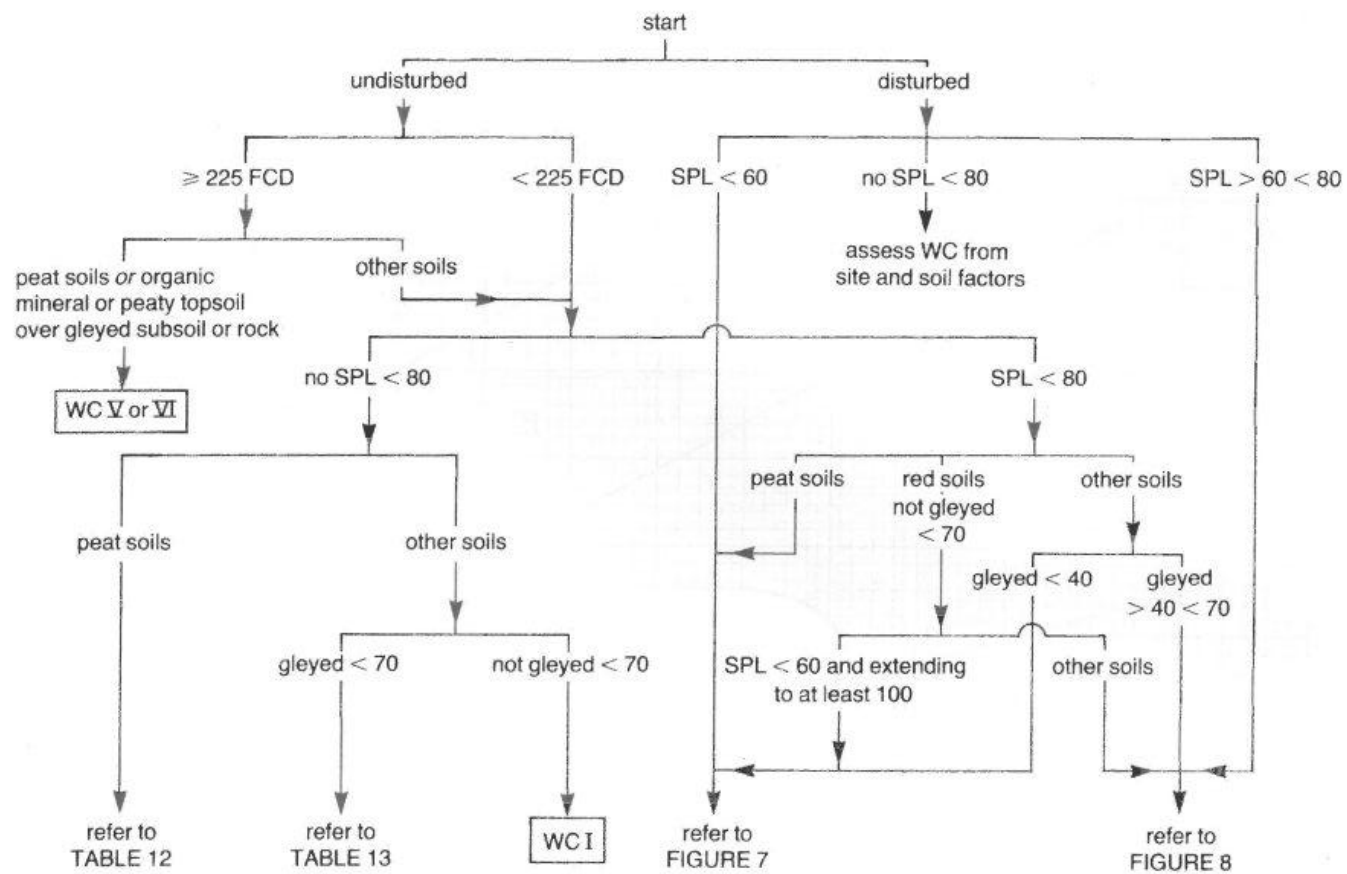


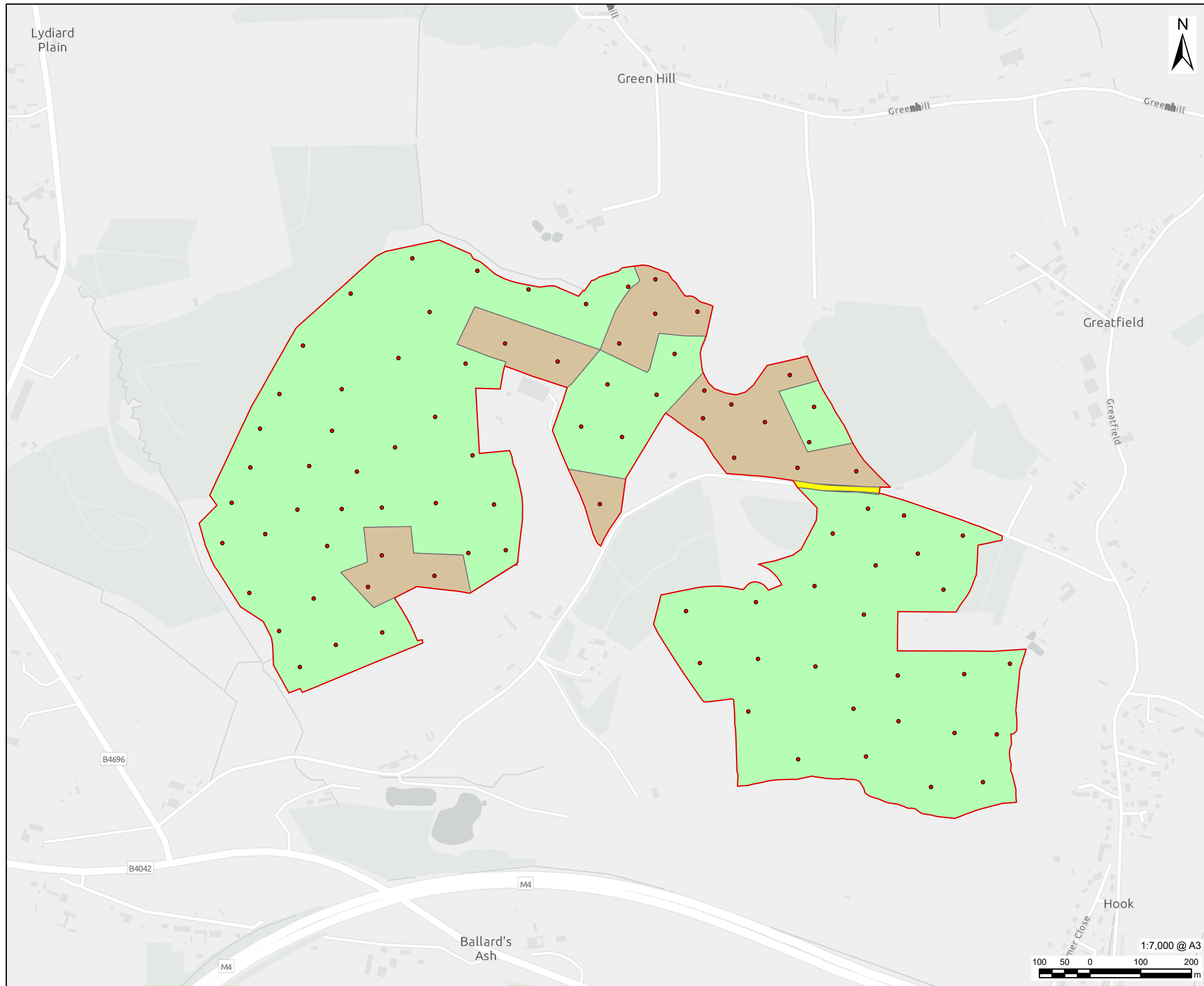
Figure 6. Flow diagram for assessing soil wetness class (WC) from field capacity days (FCD), depth to gleying (in cm) and depth to a slowly permeable layer (SPL, in cm)

Figure 6

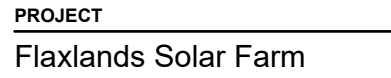
Appendix B Figures

Figure 1: Soil types and sample points

Figure 2: Agricultural Land Classification



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. All measurements must be obtained from the staked dimensions. This drawing is not to scale.



CLIENT

Ampyr Solar Europe

CONSULTANT

AECOM Limited
One Temple Quay,
Temple Back East
Bristol, BS1 6DZ
www.aecom.com

LEGEND

-  Site Boundary
 Soil Auger Survey Points
 Urban
 Soil Type 1
 Soil Type 2

NOTES

Esri Community Maps Contributors, Esri UK,
Esri, TomTom, Garmin, Foursquare,
GeoTechnologies, Inc, METI/NASA, USGS

ISSUE PURPOSE

Soil and Agricultural Land Report

PROJECT NUMBER

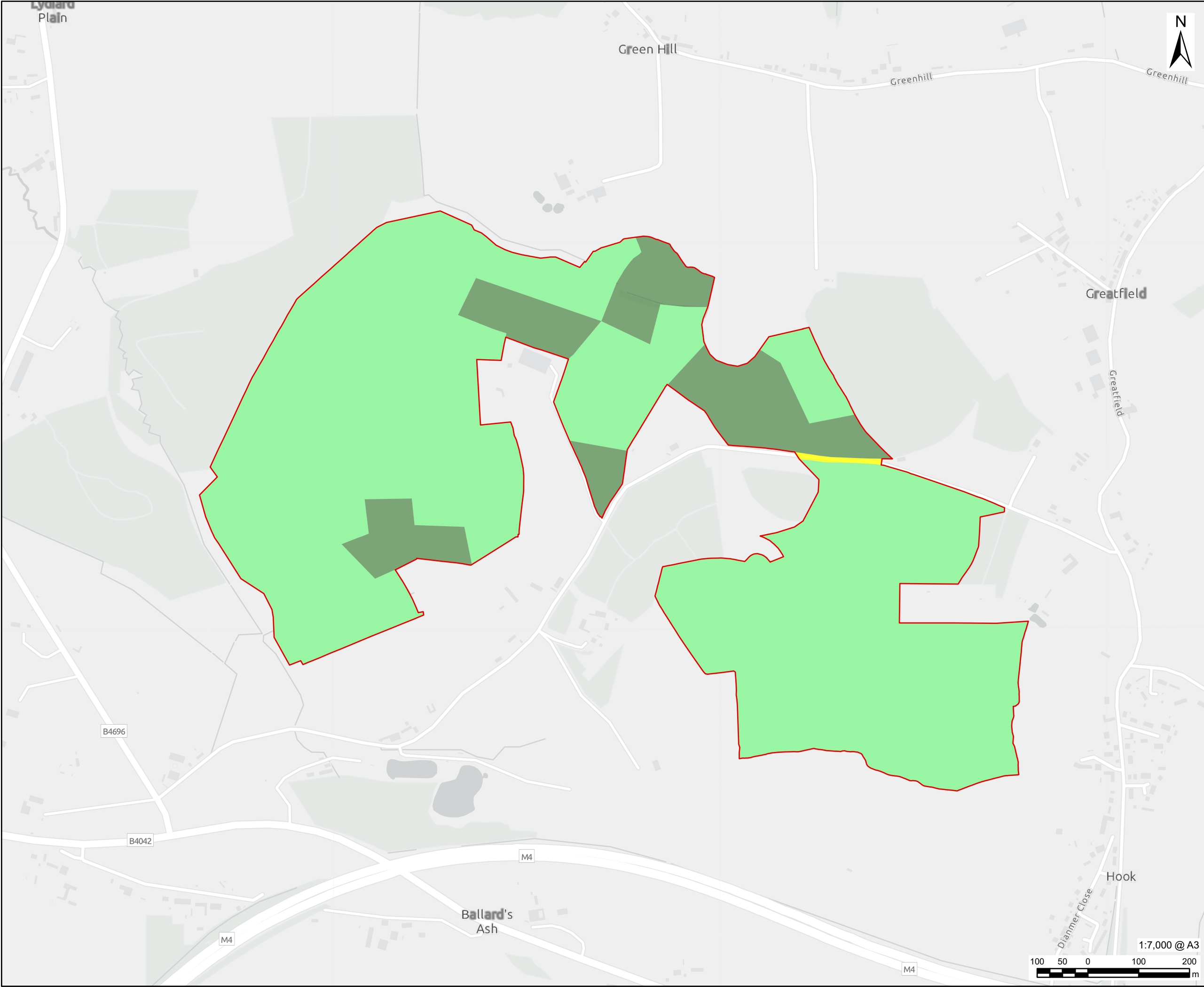
60727989

FIGURE TITLE

Flaxlands Soil Types

FIGURE NUMBER

Figure 1



This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses or relies on this drawing without AECOM's express written consent. Do not scale this document. All measurements must be obtained from the stated dimensions.

AECOM

PROJECT

Flaxlands Solar Farm

CLIENT

Ampyr Solar Europe

CONSULTANT

AECOM Limited
One Temple Quay,
Temple Back East
Bristol, BS1 6DZ
www.aecom.com

LEGEND

- Site Boundary
- Urban
- Subgrade 3b
- Subgrade 3a

NOTES

Esri Community Maps Contributors, Esri UK, Esri, TomTom, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

ISSUE PURPOSE

Soils and Agricultural Land Report

PROJECT NUMBER

60727989

FIGURE TITLE

Agricultural Land Classification

FIGURE NUMBER

Figure 2

