Light Valley Solar

Environmental Statement Volume 3

Appendix 8.3: Geophysical Survey Results Part Cii

Document Reference: EN0110012/APP/LVS/06.03.08.03.02ii

March 2026

Planning Inspectorate Reference: EN0110012
APFP Regulation: 5(2)(a)

Light Valley Solar

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning
(Applications: Prescribed Forms and Procedure) Regulations 2009
(as amended)

Light Valley Solar

Development Consent Order 2025

Appendix 8.3: Geophysical Survey Results Part Cii

Regulation Reference	APFP Regulation 5(2)(a)
Planning Inspectorate Case Reference	EN0110012
Application Document Reference	EN0110012/APP/LVS/06.03.08.03.02ii
Author	Light Valley Solar Limited

Version	Date	Status of Version
1.0	March 2026	DCO Submission

CR247

CR256

CR254

Oaklands Far

4318 00
4316 00
4314 00
4312 00
4566 00
4568 00
4570 00

N

Archaeological Services W Y A S,
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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 19

Fig.66

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

CR247

CR256

CR254

Oaklands Far

4318 00

4316 00

4314 00

4312 00

4566 00

4568 00

4570 00

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XY trace plot of minimally processed greyscale magnetometer data; Sector 19

Fig.67

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

4318 00

4316 00

4314 00

4312 00

4566 00

4568 00

4570 00

CR247

CR256

CR254

Oaklands Far

P7

P6

FB22

FB23

FB24

FB25

A3

U5

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Interpretation of magnetometer data; Sector 19

Fig.68

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- GEOLOGY
- UNCERTAIN
- ARCHAEOLOGY?
- ARCHAEOLOGY

0 50m

1:1500 @ A2

CR259

CR263

CR266

CR280

WHINNY HA'

Town Dike

A63

ETS LANE

4310^{00}

4308^{00}

4306^{00}

4302^{00}

4304^{00}

4306^{00}

4308^{00}

N

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Processed greyscale magnetometer data; Sector 20

Fig.69

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

CR259

CR263

CR266

CR280

WHINNY HA

Town Dike

A63

ETS LANE

4310000

4308000

4306000

4304000

4302000

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XY trace plot of minimally processed greyscale magnetometer data; Sector 20

Fig.70

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

CR259

CR263

CR266

CR280

Town Dike

WHINNY HA'

U5

U6

U7

FB26

FB27

FB28

FB29

FB30

FB31

FB32

FB33

FB34

A63

ETS LANE

N

4310 00

4308 00

4306 00

4562 00

4564 00

4566 00

4568 00

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Interpretation of magnetometer data; Sector 20

Fig.71

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN

0 50m

1:1500 @ A2

N

MORRETS LA

FIELD LANE

MORTON LANE

CR281

CR292

CR285

CR291

CR295

4304 00

4302 00

4560 00

4562 00

4564 00

4566 00

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Processed greyscale magnetometer data; Sector 21

Fig.72

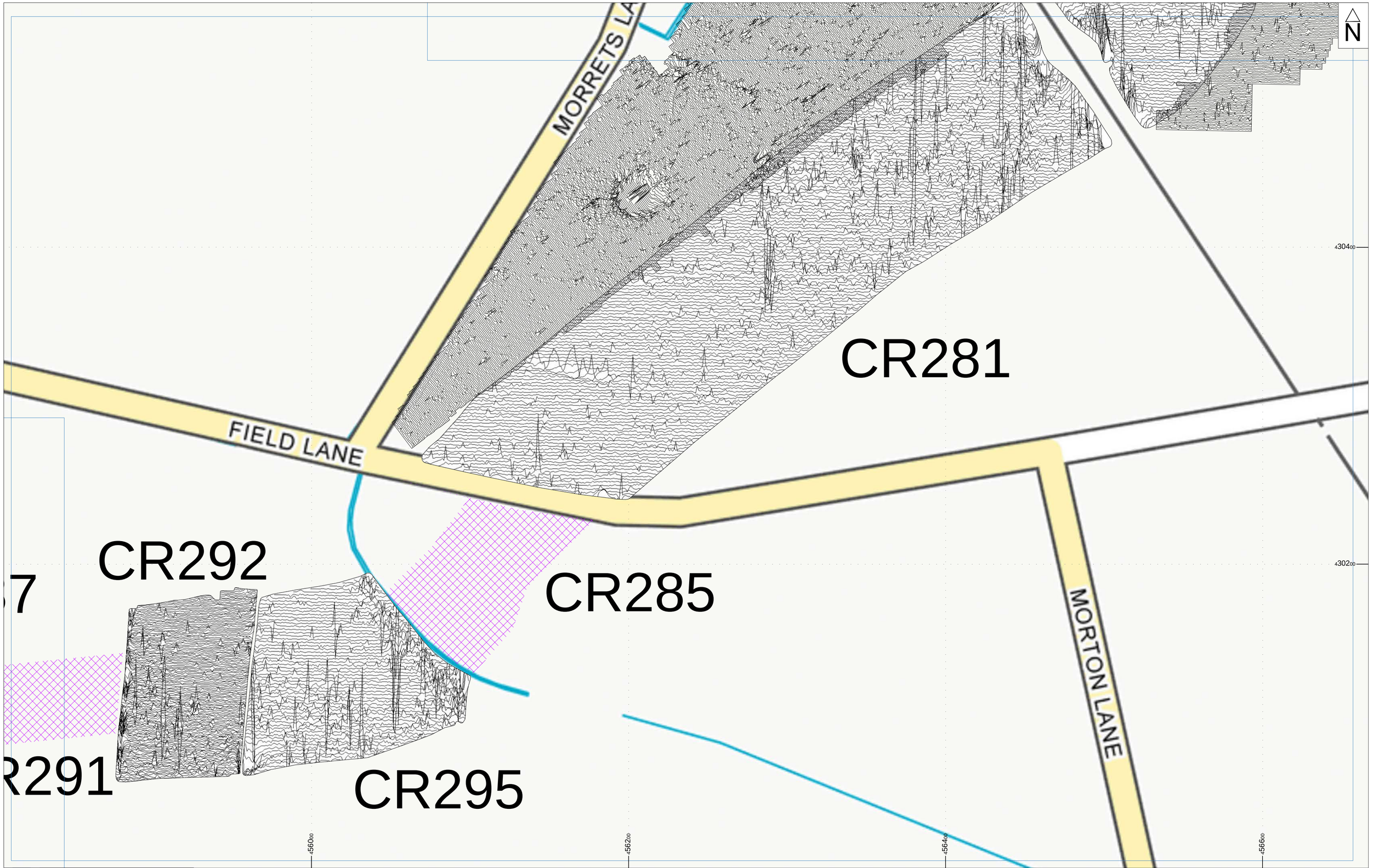
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2



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XY trace plot of minimalyl processed greyscale magnetometer data; Sector 21

Fig.73

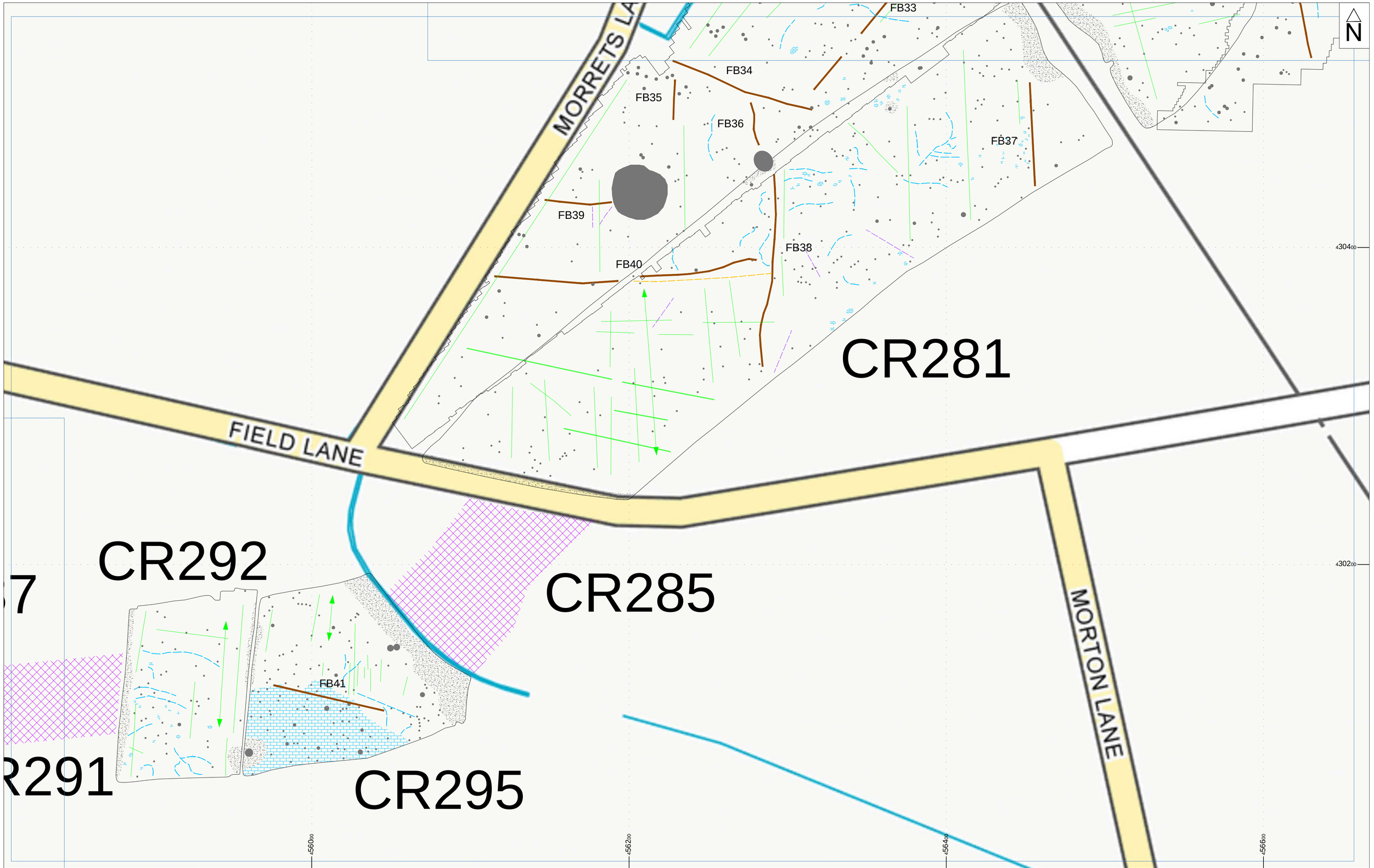
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2



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Interpretation of magnetometer data; Sector 21

Fig.74

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		AGRICULTURAL
	MAGNETIC DISTURBANCE		FORMER FIELD BOUNDARY
	FIELD DRAIN		GEOLOGY
	UNCERTAIN		
	ARCHAEOLOGY?		

0 50m

1:1500 @ A2

N

HAUGH LANE

CR290

CR287

CR289

CR29

CR293

Hambleton Hough

HAUGH LANE

430200

430000

429800

455000

455200

455400

455600

455800

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Processed greyscale magnetometer data; Sector 22

Fig.75

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

HAUGH LANE

CR290

CR287

CR289

CR29

CR293

Hambleton Hough

HAUGH LANE

4302 00

4300 00

4298 00

4550 00

4552 00

4554 00

4556 00

4558 00

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XY trace plot of minimally processed greyscale magnetometer data; Sector 22

Fig.76

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

HAUGH LANE

CR290

CR287

CR289

CR29

CR293

Hambleton Hough

HAUGH LANE

4302^{00}

4300^{00}

4298^{00}

4550^{00}

4552^{00}

4554^{00}

4556^{00}

4558^{00}

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Interpretation of magnetometer data; Sector 22

Fig.77

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		GEOLOGY
	MAGNETIC DISTURBANCE		
	AGRICULTURAL		

0 50m

1:1500 @ A2

CR304

CR309

CR319

4298 00

4296 00

4294 00

4548 00

4550 00

4552 00

4554 00

N

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Processed greyscale magnetometer data; Sector 23

Fig.78

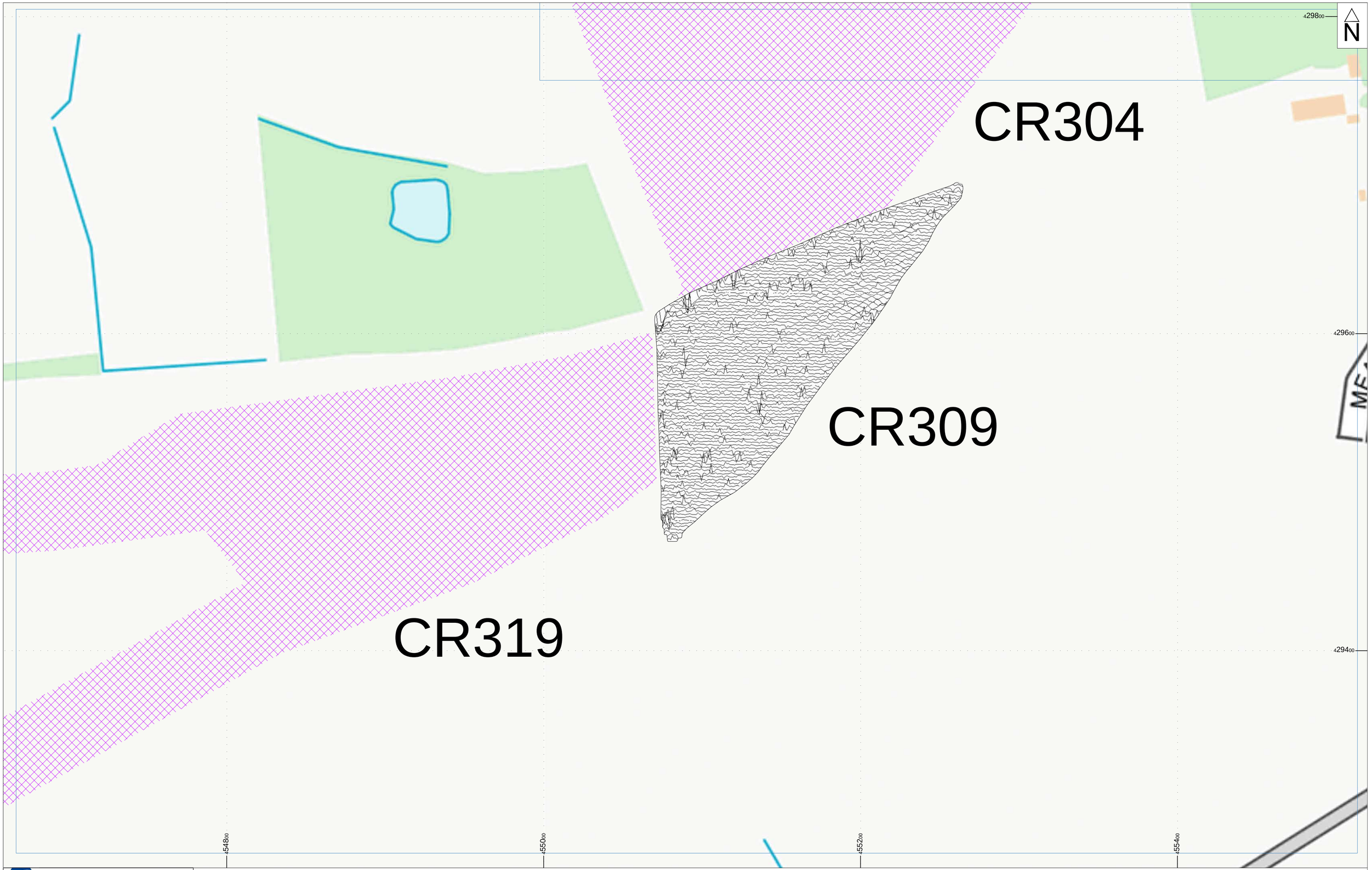
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2



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Xy trace plot of minimally processed greyscale magnetometer data; Sector 23

Fig.79

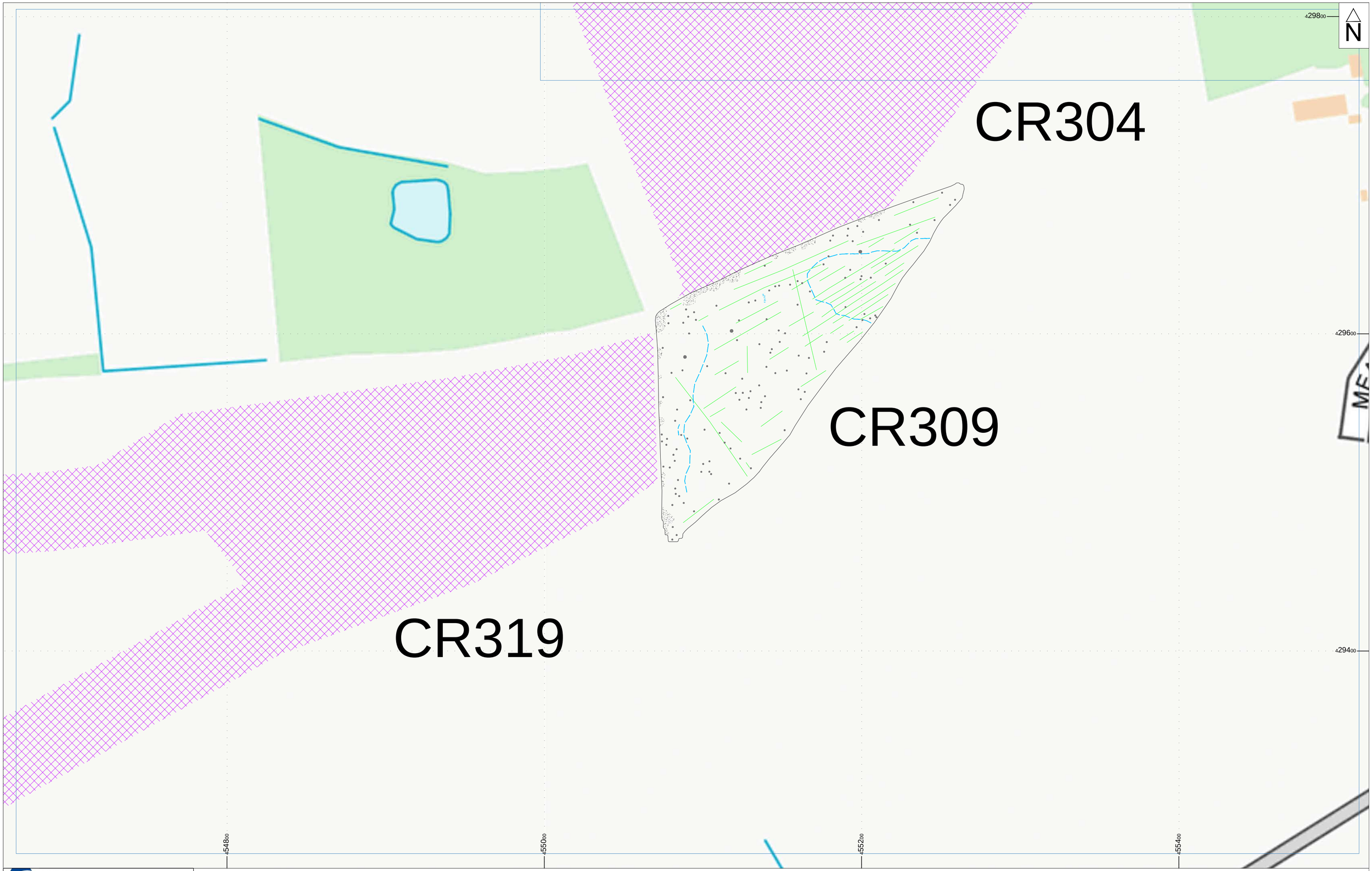
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2



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Interpretation of magnetometer data; Sector 23

Fig.80

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- AGRICULTURAL
- GEOLOGY

0 50m

1:1500 @ A2

N

CR257

CR271

CR270

Old Tythe Barn

Fryston Common

4312 00

4310 00

4308 00

4306 00

4522 00

4524 00

4526 00

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Processed greyscale magnetometer data; Sector 24

Fig.81

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

CR257

CR271

Old Tythe Barn

Fryston Common

CR270

4312 00
4310 00
4308 00
4306 00
4522 00
4524 00
4526 00

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XY trace plot of minimally processed greyscale magnetometer data; Sector 24

Fig.82

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

CR257

Old Tythe Barn

CR271

Fryston Common

CR270

4312 00

4310 00

4308 00

4306 00

4522 00

4524 00

4526 00

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Interpretation of magnetometer data; Sector 24

Fig.83

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

FERROUS	AGRICULTURAL
MAGNETIC DISTURBANCE	FORMER FIELD BOUNDARY
FIELD DRAIN	GEOLOGY

0 50m

1:1500 @ A2

N

COMMON LANE

CR260

CR279

Fox Gr
Lodg

Hambleton
Common

4312 00
4310 00
4308 00
4306 00
4536 00
4538 00
4540 00

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Processed greyscale magnetometer data; Sector 25

Fig.84

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

COMMON LANE

CR279

CR260

Fox Gr
Lodg

Hambleton
Common

4312 00
4310 00
4308 00
4306 00
4536 00
4538 00
4540 00

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XY trace plot of minimally processed greyscale magnetometer data; Sector 25

Fig.85

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

Fox Gr
Lodg

COMMON LANE

CR260

CR279

Hambleton
Common

4312 00
4310 00
4308 00
4306 00
4536 00
4538 00
4540 00

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Interpretation of magnetometer data; Sector 25

Fig.86

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

FERROUS	FIELD DRAIN	GEOLOGY
SERVICE PIPE	AGRICULTURAL	
MAGNETIC DISTURBANCE	RIDGE & FURROW	

0 50m

1:1500 @ A2

N

4306 00

4304 00

4302 00

4300 00

CR282

CR294

FOX LANE

swood

4534 00

4536 00

4538 00

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Processed greycale magnetometer data; Sector 26

Fig.87

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

4306 00

4304 00

4302 00

4300 00

CR282

CR294

FOX LANE

swood

4534 00

4536 00

4538 00

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XY trace plot of minimally processed greycale magnetometer data; Sector 26

Fig.88

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

4306 00

4304 00

4302 00

4300 00

CR282

CR294

FOX LANE

swood

4534 00

4536 00

4538 00

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Interpretation of magnetometer data; Sector 26

Fig.89

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- SERVICE PIPE
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- GEOLOGY

0 50m

1:1500 @ A2

N

A63

Brecksw

way Dike

CR297

Brecks Farm

CR306

430000

429800

429600

429400

453000

453200

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Processed greyscale magnetometer data; Sector 27

Fig.90

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

A63

Brecks Farm

CR297

CR306

430000

429800

429600

429400

453000

453200

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XY trace plot of minimally processed greyscale magnetometer data; Sector 27

Fig.91

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

A63

Brecks Farm

CR297

CR306

N

430000

429800

429600

429400

453000

453200

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Interpretation of magnetometer data; Sector 27

Fig.92

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		AGRICULTURAL
	MAGNETIC DISTURBANCE		
	FIELD DRAIN		

0 50m

1:1500 @ A2

CR323

FOX LANE

CR322

CR326

Maspin Grange Fa

HILLAM COMMON LANE

N

4294 00

4292 00

4290 00

4288 00

4534 00

4536 00

4538 00

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Processed greyscale magnetometer data; Sector 28

Fig.93

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

CR323

FOX LANE

CR322

CR326

Maspin Grange Fa

HILLAM COMMON LANE

N

4294 00

4292 00

4290 00

4288 00

4534 00

4536 00

4538 00

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XY trace plot of minimally processed greyscale magnetometer data; Sector 28

Fig.94

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

CR323

FOX LANE

CR322

U8

U8

U8

U8

CR326

Maspin Grange Fa

HILLAM COMMON LANE

N

4294 00

4292 00

4290 00

4288 00

4534 00

4536 00

4538 00

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Interpretation of magnetometer data; Sector 28

Fig.95

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- AGRICULTURAL
- GEOLOGY
- UNCERTAIN

0 50m

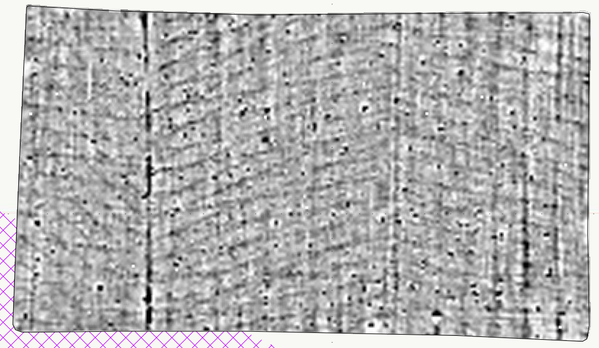
1:1500 @ A2

Fryston
Common Farm

CR464

Fleet Dike

CR465



N

430200

430000

429800

451600

451800

452000

452200

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Processed greyscale magnetometer data; Sector 29

Fig.96

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

Fryston
Common Farm

CR464

Fleet Dike

CR465

N

4302^{00}

4300^{00}

4298^{00}

4516^{00}

4518^{00}

4520^{00}

4522^{00}

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XY trace plot of minimally processed greyscale magnetometer data; Sector 29

Fig.97

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

Fryston
Common Farm

CR464

Fleet Dike

CR465

N

430200

430000

429800

451600

451800

452000

452200

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Interpretation of magnetometer data; Sector 29

Fig.98

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS
	FIELD DRAIN
	AGRICULTURAL

0 50m

1:1500 @ A2

CR405

CR403

ROE LANE

4284 00

4282 00

4522 00

4524 00

4526 00

4528 00

N

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Processed greyscale magnetometer data; Sector 30

Fig.99

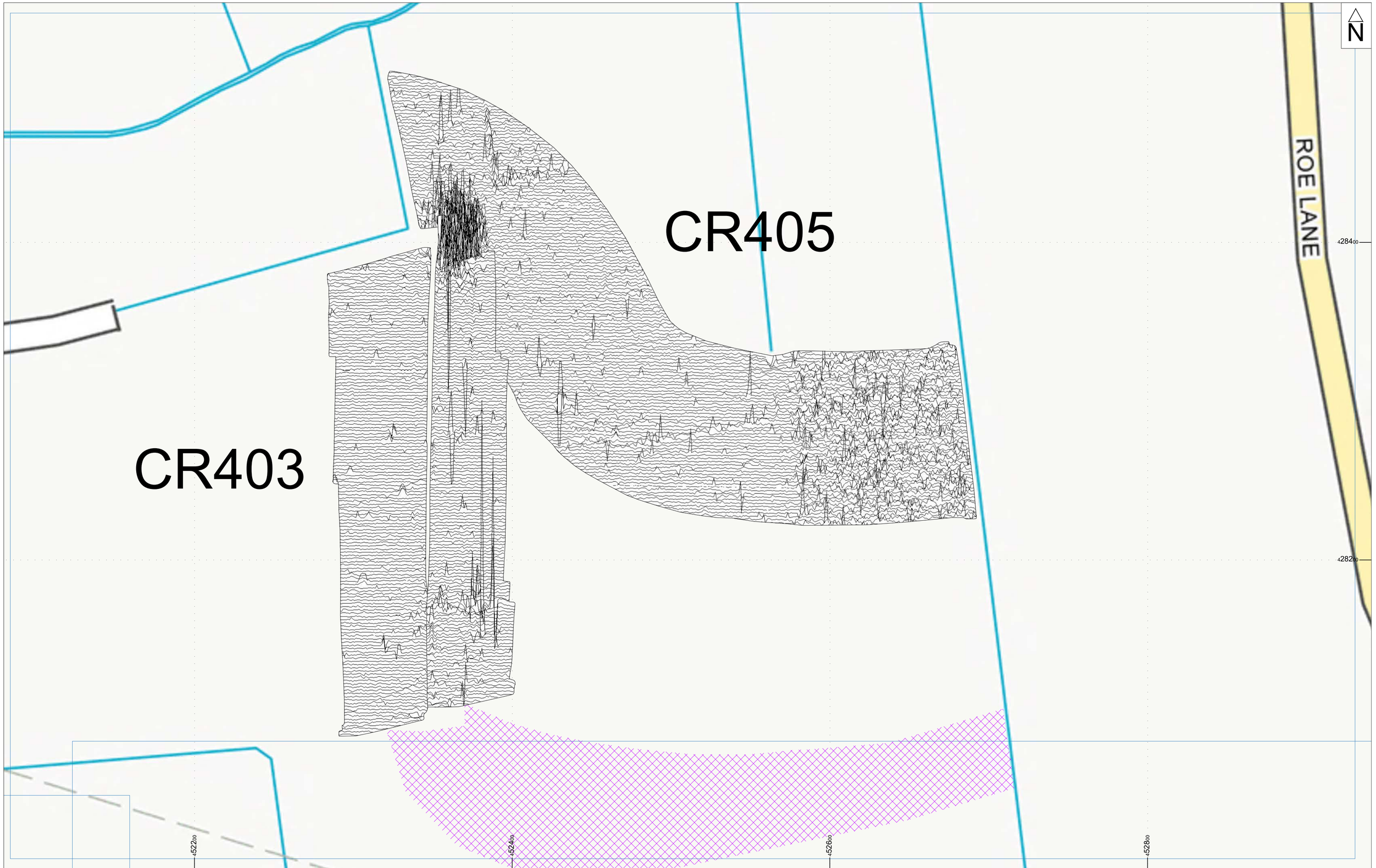
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2



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XY trace plot of minimally processed greyscale magnetometer data; Sector 30

Fig.100

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

ROE LANE

CR405

CR403

FB42

FB43

FB44

FB45

FB46

FB47

FB48

FB49

P8

U9

U9

P8

4284

4282

4522

4524

4526

4528

Archaeological Services W Y A S,
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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 30

Fig.101

Title

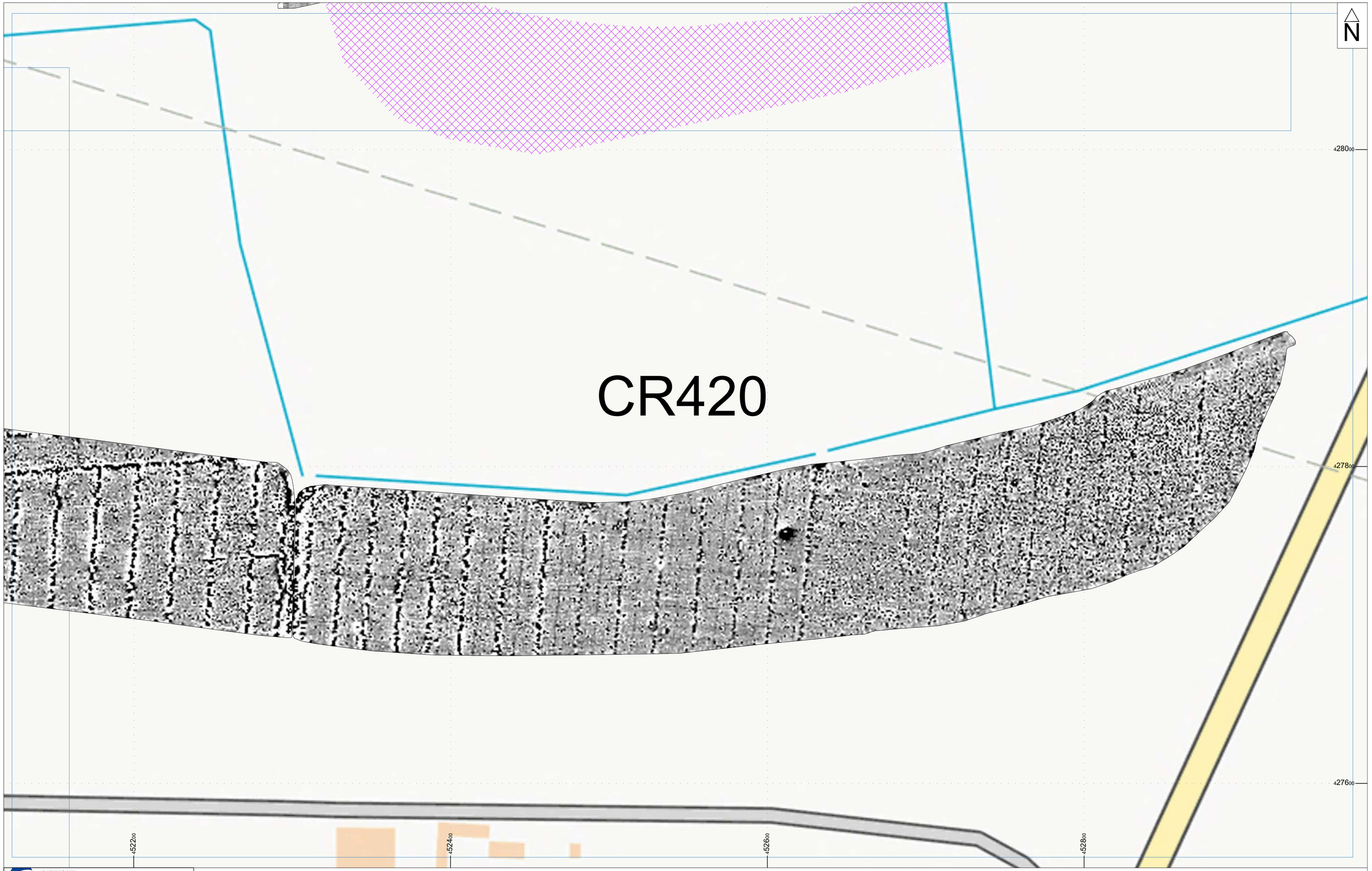
	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

FERROUS	AGRICULTURAL	UNCERTAIN
MAGNETIC DISTURBANCE	FORMER FIELD BOUNDARY	ARCHAEOLOGY?
FIELD DRAIN	GEOLOGY	GREEN WASTE

0 50m

1:1500 @ A2



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Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 31

Fig.102

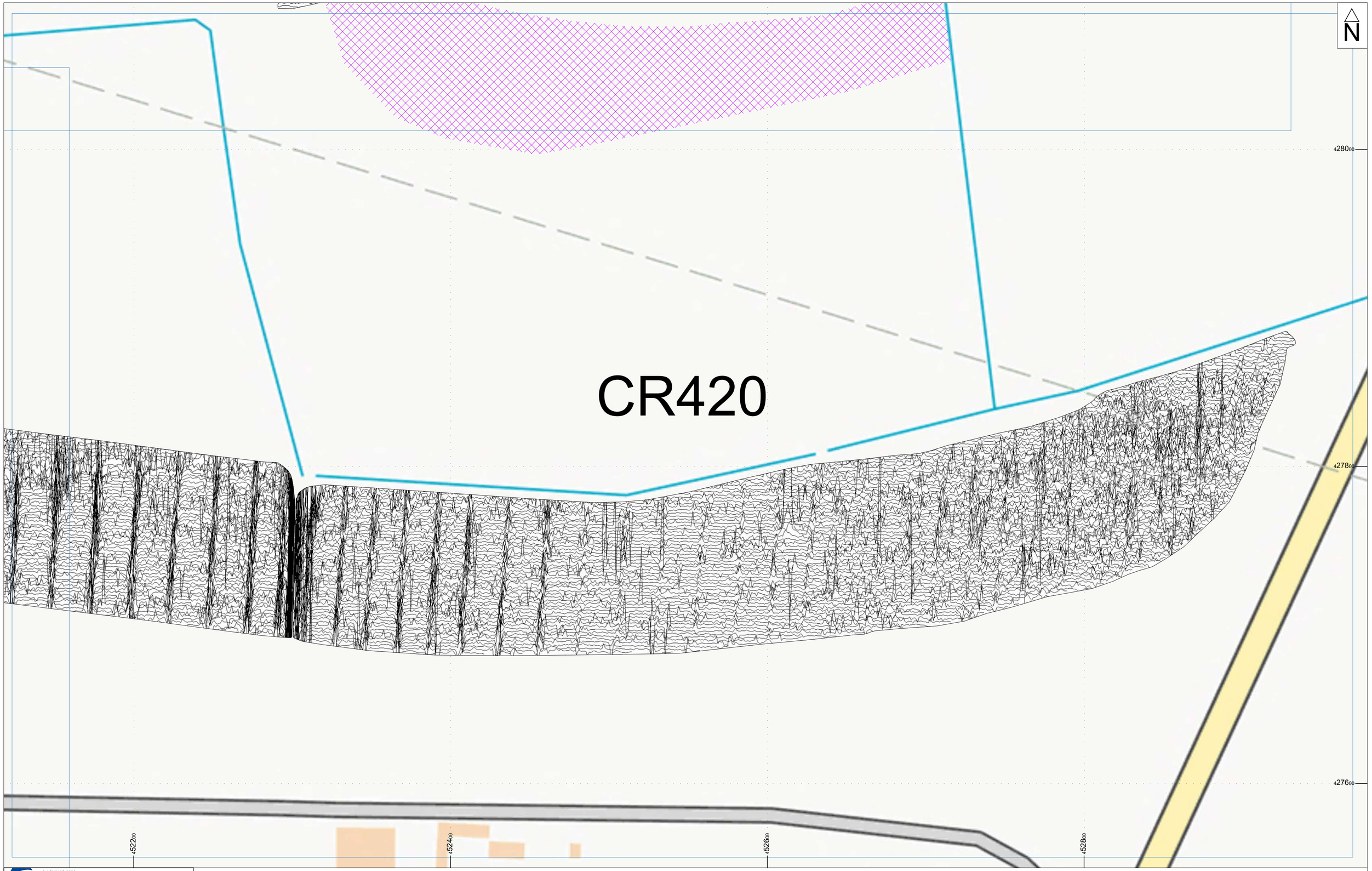
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2



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Project ID: XS05_LOW25

XY trace plot of minimally processed greyscale magnetometer data; Sector 31

Fig.103

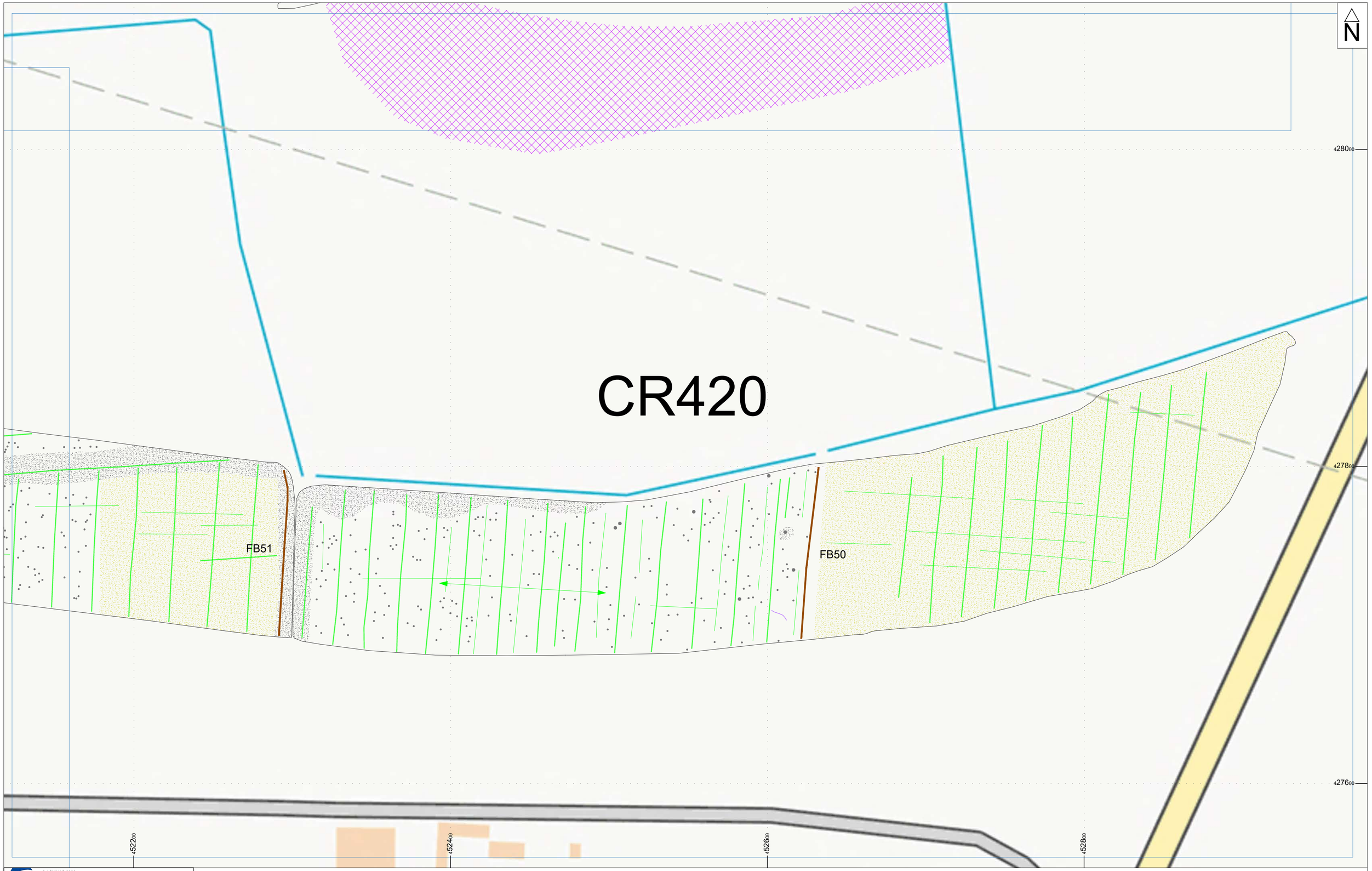
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2



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Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 31

Fig.104

Title

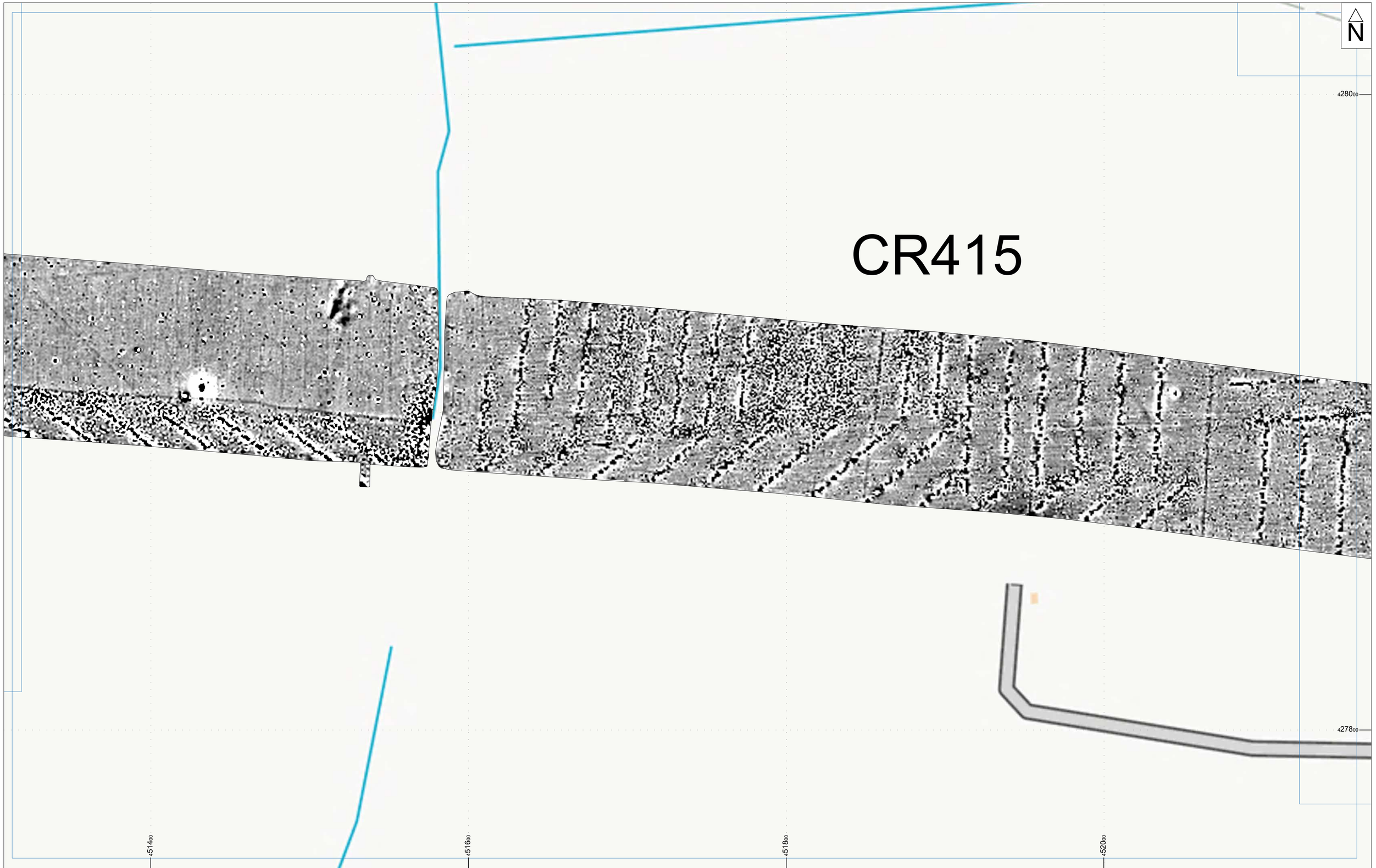
	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		AGRICULTURAL
	MAGNETIC DISTURBANCE		FORMER FIELD BOUNDARY
	FIELD DRAIN		GREEN WASTE

0 50m

1:1500 @ A2



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Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 32

Fig.105

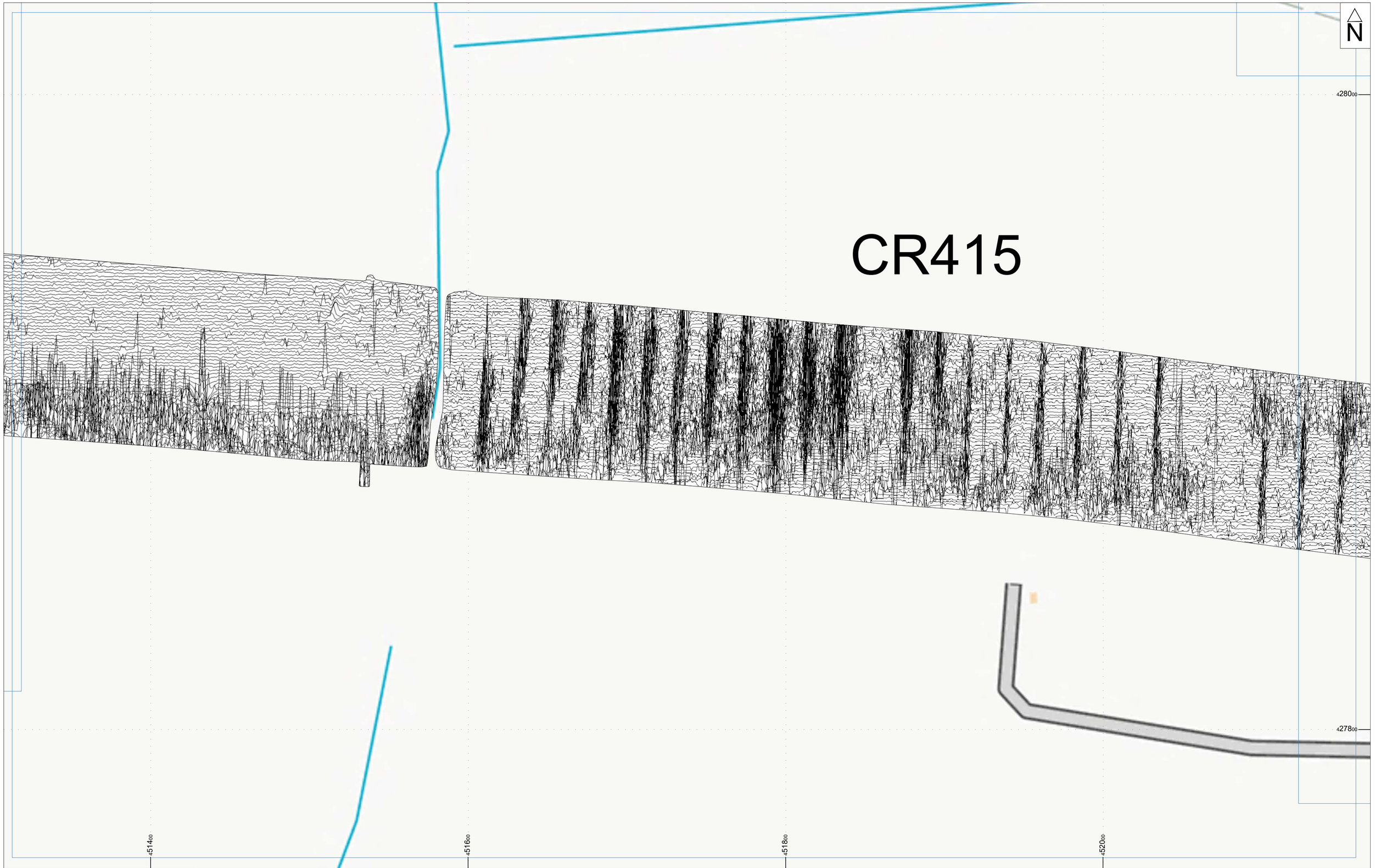
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2



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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

XY trace plot of minimally processed greyscale magnetometer data; Sector 32

Fig.106

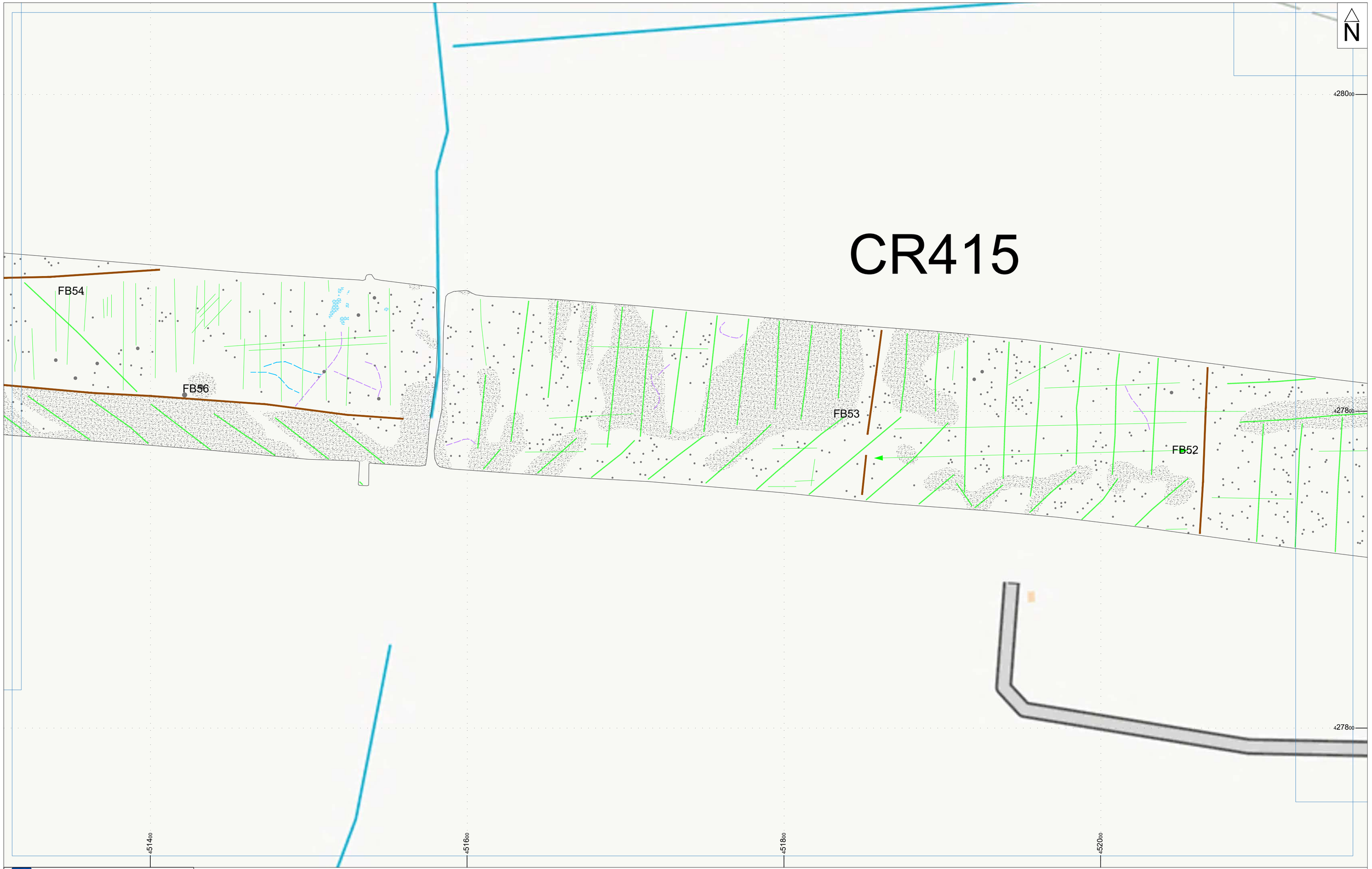
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2



Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 32

Fig.107

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		AGRICULTURAL		UNCERTAIN
	MAGNETIC DISTURBANCE		FORMER FIELD BOUNDARY		
	FIELD DRAIN		GEOLOGY		

0 50m

1:1500 @ A2

N

CR414

FAIRFIELD LANE

CR413

4280 00

2760

Bywater Wood

Burton
Common Farm

4506 00

4508 00

4510 00

4512 00

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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 33

Fig.108

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

N

CR414

FAIRFIELD LANE

CR413

4280^{00}

Bywater Wood

Burton
Common Farm

4506^{00} 4508^{00} 4510^{00} 4512^{00}

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

XY trace plot of minimally processed greyscale magnetometer data; Sector 33

Fig.109

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

N

CR414

CR413

FAIRFIELD LANE

F3

FB61

FB60

FB59

F3

FB58

FB57

FB56

FB55

Bywater Wood

Burton
Common Farm

4280 00

4278 00

4506 00

4508 00

4510 00

4512 00

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 33

Fig.110

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		RIDGE & FURROW		GEOLOGY
	MAGNETIC DISTURBANCE		AGRICULTURAL		UNCERTAIN
	FIELD DRAIN		FORMER FIELD BOUNDARY		

0 50m

1:1500 @ A2

CR411

CR416

CR418

M

N

4280^{00}

4278^{00}

4498^{00}

4500^{00}

4502^{00}

4504^{00}

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 34

Fig.111

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

CR411

CR416

CR418

M

N

4280$_{00}$

4278$_{00}$

4498$_{00}$

4500$_{00}$

4502$_{00}$

4504$_{00}$

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

XY trace plot of minimally processed greyscale magnetometer data; Sector 34

Fig.112

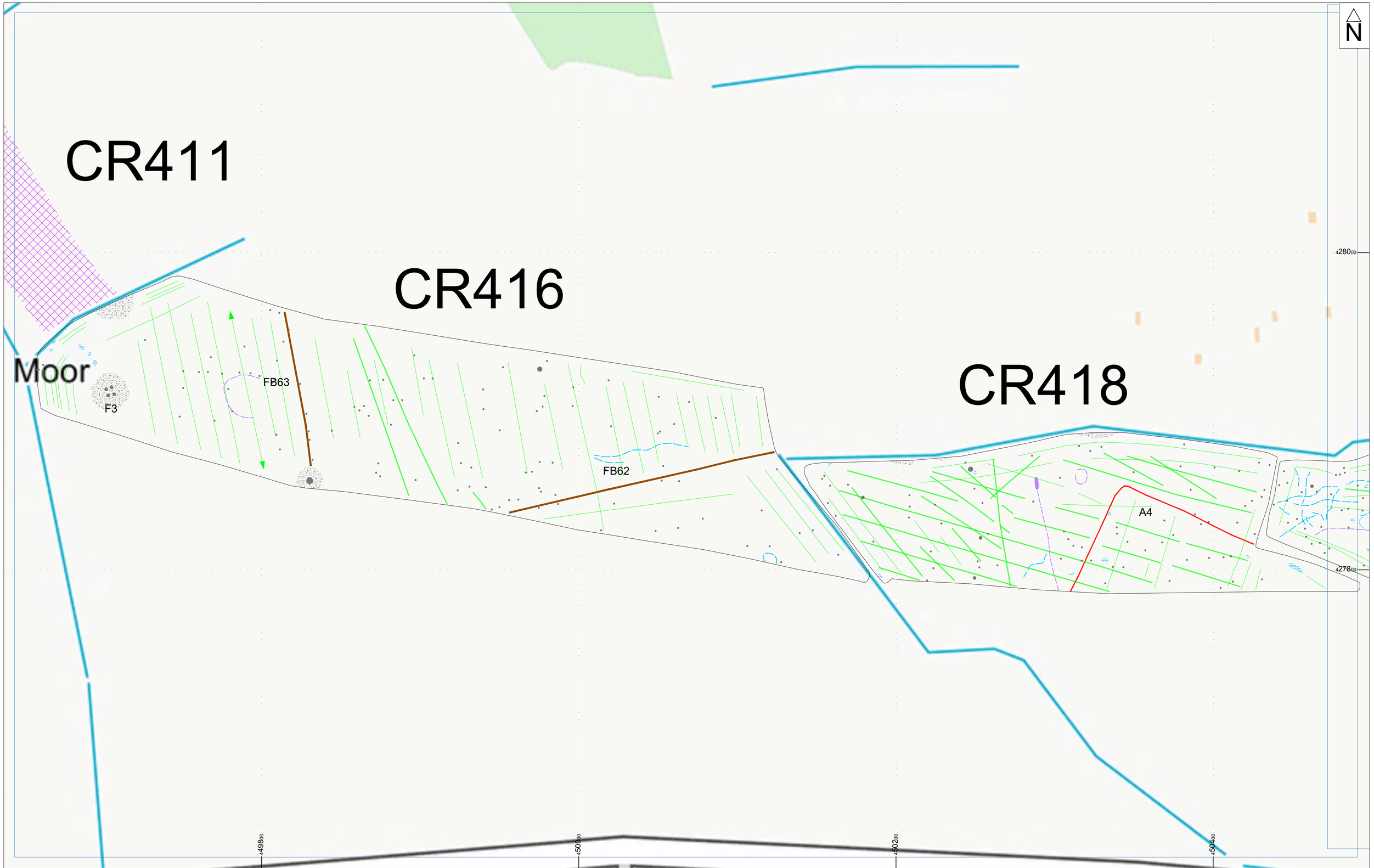
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2



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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 34

Fig.113

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

Interpretation

	FERROUS		AGRICULTURAL		UNCERTAIN
	MAGNETIC DISTURBANCE		FORMER FIELD BOUNDARY		ARCHAEOLOGY
	FIELD DRAIN		GEOLOGY		

0 50m

1:1500 @ A2

N

CR387

A162

CR397

HILLAM LANE

CR407

4286^{00}

4284^{00}

4282^{00}

4488^{00}

4490^{00}

4492^{00}

4494^{00}

4496^{00}

Archaeological Services W Y A S,
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Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 35

Fig.114

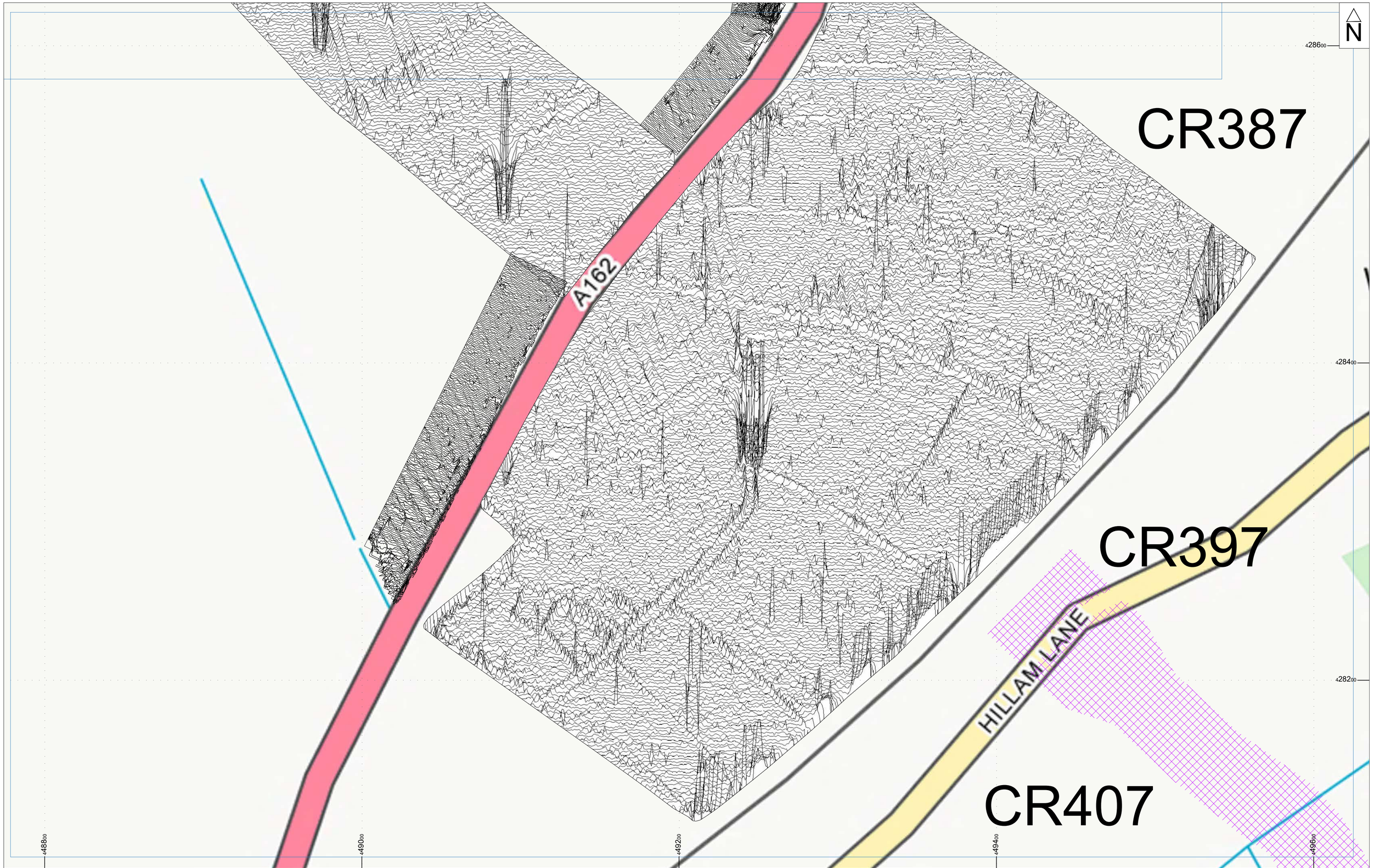
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2



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Project ID: XS05_LOW25

XY trace plot of minimally processed greyscale magnetometer data; Sector 35

Fig.115

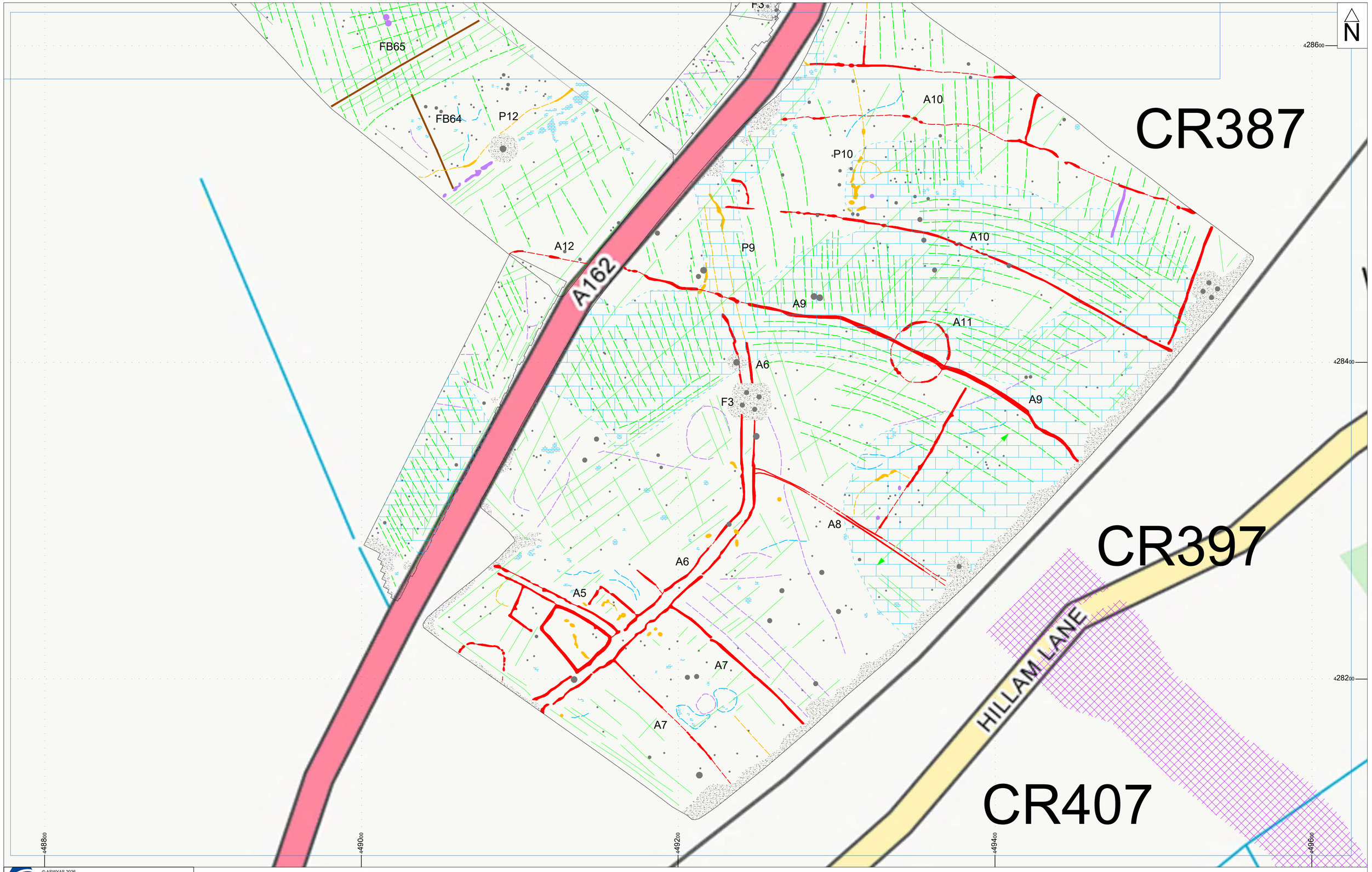
Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2



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Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 35

Fig.116

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- MAGNETIC DISTURBANCE
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ARCHAEOLOGY?
- ARCHAEOLOGY

0 50m

1:1500 @ A2

8

334

CR365

N

4290^{00}

4288^{00}

4286^{00}

4488^{00}

4490^{00}

4492^{00}

4494^{00}

Project ID: XS05_LOW25

Processed greyscale magnetometer data; Sector 36

Fig.117

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

nT -1.0 2.0

0 50m

1:1500 @ A2

8

334

N

4290$_{00}$

4288$_{00}$

4286$_{00}$

CR365

4488$_{00}$

4490$_{00}$

4492$_{00}$

4494$_{00}$

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

XY trace plot of minimally processed greyscale magnetometer data; Sector 36

Fig.118

Title

	SECTOR BOUNDARY
CR100	FIELD NUMBERS
	NOT AVAILABLE

15.0 nT/cm

0 50m

1:1500 @ A2

8

334

CR365

N

P14

P13

U11

U10

P11

F3

FB65

4290$_{00}$

4288$_{00}$

4286$_{00}$

4488$_{00}$

4490$_{00}$

4492$_{00}$

4494$_{00}$

Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 3007 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XS05_LOW25

Interpretation of magnetometer data; Sector 36

Fig.119

Title

- SECTOR BOUNDARY
- CR100 FIELD NUMBERS
- NOT AVAILABLE

Interpretation

- FERROUS
- OVERHEAD CABLE
- MAGNETIC DISTURBANCE
- FIELD DRAIN
- RIDGE & FURROW
- AGRICULTURAL
- FORMER FIELD BOUNDARY
- GEOLOGY
- UNCERTAIN
- ARCHAEOLOGY?
- ARCHAEOLOGY

0 50m

1:1500 @ A2

Appendix 1: Magnetic survey - technical information

Magnetic Susceptibility and Soil Magnetism

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haemetite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms. Areas of human occupation or settlement can then be identified by measuring the magnetic susceptibility of the topsoil because of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoils, subsoils and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected. The magnetic susceptibility of a soil can also be enhanced by the application of heat and the fermentation and bacterial effects associated with rubbish decomposition. The area of enhancement is usually quite large, mainly due to the tendency of discard areas to extend beyond the limit of the occupation site itself, and spreading by the plough.

Types of Magnetic Anomaly

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

Isolated dipolar anomalies (iron spikes)

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

Areas of magnetic disturbance

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Linear trend

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

Areas of magnetic enhancement/positive isolated anomalies

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

Linear and curvilinear anomalies

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

Methodology: Gradiometer Survey

The main method of using the fluxgate gradiometer for commercial evaluations is referred to as ***detailed survey*** and requires the surveyor to walk at an even pace carrying the instrument within a grid system. A sample trigger automatically takes readings at predetermined points, typically at 0.25m intervals, on traverses 1m apart. These readings are stored in the memory of the instrument and are later dumped to computer for processing and interpretation.

During this survey a Bartington Grad601 magnetic gradiometer was used taking readings on the 0.1nT range, at 0.25m intervals on zig-zag traverses 0.5m apart within 30m by 30m square grids. The instrument was checked for electronic and mechanical drift at a common point and calibrated as necessary. The drift from zero was not logged.

During this survey an eight channel Sensys MX V3 system was also used containing eight FGM650 sensors was also used which was towed across the area using an ATV. Readings were taken every 20MHz (between 0.05 and 0.1m). Data was be recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation.

The gradiometer data have been presented in this report in processed greyscale format. The data in the greyscale images have been interpolated and selectively filtered to remove the effects of drift in instrument calibration and other artificial data constructs and to maximise the clarity and interpretability of the archaeological anomalies.

Appendix 2: Survey location information

An initial survey station was established using a Trimble VRS differential Global Positioning System (Trimble R6 model). The data was geo-referenced using the geo-referenced survey station with a Trimble RTK differential Global Positioning System (Trimble R6 model). The accuracy of this equipment is better than 0.01m.

For cart-based survey, data was recorded onto a device, using a Carlson GNSS BRx7 Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. The accuracy of the BRx7 is between 0.15cm – 0.8cm. The BRx7 has a built-in tilt sensor to correct collected point coordinates to within 2cm.

The survey grids/data were then super-imposed onto a base map provided by the client to produce the displayed block locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if co-ordinates are measured off hard copies of the mapping rather than using the digital co-ordinates.

Archaeological Services WYAS cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

Appendix 3: Geophysical archive and metadata

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2003), and graphics files (Adobe Illustrator CS6 and AutoCAD 2017) files; and
- a full copy of the report.

At present the archive is held by Archaeological Services WYAS although it is anticipated that it may eventually be lodged with the Archaeology Data Service (ADS). Brief details may also be forwarded for inclusion on the English Heritage Geophysical Survey Database after the contents of the report are deemed to be in the public domain (i.e. available for consultation in the North Yorkshire Historic Environment Record.

Appendix 4: Oasis form

OASIS Summary for archaeol11-539602

OASIS ID (UID)	archaeol11-539602
Project Name	Geophysical Survey at Light Valley Solar, Cable Route
Sitename	Light Valley Solar, Cable Route
Sitecode	LOW 25
Project Identifier(s)	
Activity type	Geophysical Survey, MAGNETOMETRY SURVEY
Planning Id	
Reason For Investigation	Planning: Pre application
Organisation Responsible for work	Archaeological Services WYAS
Project Dates	21-Apr-2025 - 12-Dec-2025
Location	Light Valley Solar, Cable Route NGR : SE 48440 29220 LL : 53.75709658875229, -1.26678271781267 12 Fig : 448440,429220
Administrative Areas	Country : England County/Local Authority : North Yorkshire Local Authority District : North Yorkshire Parish : Monk Fryston
Project Methodology	The cart-based survey was undertaken using an eight channel SenSYS MX V3 system containing eight FGM650 sensors. Readings are taken every 20MHz (between 0.05 and 0.1m). Data were recorded onto a device, using a Carlson GNSS Smart antenna, for centimetre accuracy. These readings were stored in the memory of the instrument and downloaded for processing and interpretation. DLMGPS and MAGNETO software, alongside bespoke in-house software was used to process and present the data. For hand-held data, the Site grid was laid out using a Trimble VRS differential Global Positioning System (Trimble R6 model). The survey was undertaken using Bartington Grad601 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1.0m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Bespoke in-house software was used to process and present the data.
Project Results	A geophysical (gradiometer) survey was undertaken within the cable route corridor of the Light Valley Solar Park, North Yorkshire. The cable route totals approximately 328 ha in which 295 ha has been surveyed. Archaeological and possible archaeological responses have been recorded. These comprise rectilinear enclosures, linear and ring ditches and pits. Uncertain anomalies recorded within the data generally appear to be agricultural or geological in origin. Former field boundaries have been recorded along with medieval/post-medieval ridge and furrow cultivation, modern ploughing and land drains. Magnetic disturbance within the dataset can be attributed to adjacent tracks, metal fencing within field boundaries, electricity pylons, overhead cables, and service pipes. Geological responses seen within the dataset reflect either the topography of the site, discrete pockets of natural variations, or former watercourses. Based on the geophysical survey, the archaeological potential of this Site is deemed to be high where there are areas of activity and low elsewhere.

Keywords	Ring Ditch - LATER PREHISTORIC - FISH Thesaurus of Monument Types Rectilinear Enclosure - UNCERTAIN - FISH Thesaurus of Monument Types Field System - LATER PREHISTORIC - FISH Thesaurus of Monument Types
Funder	Private or public corporation Island Green Power
HER	North Yorkshire HER - unRev - STANDARD
Person Responsible for work	Emma Brunning, Jake Freeman
HER Identifiers	
Archives	

Report generated on: 07 Jan 2026, 15:01

Bibliography

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Annex I Cable Route Corridor Part 2 Geophysical Survey Report (AOC Archaeology)

Light Valley Cable Route
North Yorkshire

Archaeological Geophysical Survey

National Grid Reference: SE 57981 32544
AOC Project No: 40920
Date: 21 January 2026

AOC Archaeology Group

ARCHAEOLOGY | HERITAGE | CONSERVATION

Light Valley Cable Route, North Yorkshire

Archaeological Geophysical Survey

On Behalf of:	**Lanpro Services Ltd.** **The Chocolate Works** **Stanley Harrison House** **York** **YO23 1DE**
National Grid Reference (NGR):	**SE 57981 32544**
AOC Project No:	**40920**
OASIS ID	**aocarcha1-539916**
Prepared by:	**Joel Goodchild, Rob Legg, Thomas Currie**
Illustrations by:	**Joel Goodchild**
Date of survey:	**22nd April to 21st November 2025**
Surveyors:	**Joel Goodchild, Marguerite Hall, Victoria Huggett, John Conran, Dan Shiel, Rob Legg**

This document has been prepared in accordance with AOC standard operating procedures.

Author: Joel Goodchild	**Date: 21 January 2026**
Quality Checked by: Hannah Brown	**Date: 21 January 2026**
Report Stage: Initial Draft	**Date: 21 January 2026**

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Contents

List of Plates

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Non-Technical Summary

AOC Archaeology Group was commissioned by Lanpro Services on behalf of Arup to undertake an archaeological geophysical survey, using the magnetic gradiometry method to investigate the potential for buried archaeological remains prior to a proposed development along the Light Valley Cable Route, North Yorkshire, nominally centred at NGR SE 57981 32544.

The red line boundary is located in the District of Selby, between Ferrybridge and Thorganby. It covers a linear route comprising 288ha, which passes 1.5km north of Selby. Located in the Vale of York, the landscape is flat and mostly made up of large arable fields interspersed with villages such as Hambleton and Wistow. Field boundaries and roads in the area preserve elements of the historic landscape such as common land and strip fields. The site can be split into three red line boundaries: the western red line boundary contains ten field packages located between the A1 motorway in the west and the York-Selby rail line; the central red line boundary is a continuous route between the York-Selby rail line and the River Ouse; the eastern red line boundary is a continuous route between the River Ouse and River Derwent.

Of the 288ha that comprises the route, 35.92ha was completed by AOC Archaeology Group. Some areas could not be surveyed due to dense vegetation/crop cover and unsuitable ground conditions.

The results of the survey are largely consistent with agricultural remains such as former field boundaries, ridge and furrow and drainage. The soil and geological environment of the red line boundary were generally conducive to the survey and yielded good results. Features that have the potential to be more significant have been identified and consist of a possible rectilinear enclosure and a ring ditch. These have the potential to relate to evidence for prehistoric, Roman and medieval settlement identified in the vicinity of the red line boundary.

1 Introduction

1.1 AOC Archaeology Group was commissioned by Lanpro Services on behalf of Arup to undertake an archaeological geophysical survey using magnetic gradiometry of Light Valley Cable Route, North Yorkshire. The survey was commenced on 22nd April 2025 and completed on 21st November 2025 as part of a wider scheme of archaeological assessment in association with the proposed development of the site. The planned survey area was 288ha, of which 35.92ha was completed by AOC Archaeology Group. 14.2ha were unsuitable for survey due to fields having recently been ploughed and long vegetation. A total of 2.7ha were not surveyed due to changes in the the red line boundary in areas which had already been subject to survey.

1.2 Archaeological geophysical survey uses non-intrusive and non-destructive techniques to determine the presence or absence of anomalies likely to be caused by archaeological features, structures or deposits, as far as is reasonably possible (CIfA 2014, updated 2020). It is therefore a common component of the process of evaluating the impact of development on the historic environment. It is also a key tool in archaeological research as it is non-destructive and able to cover large areas, to allow below ground interventions to be appropriately targeted.

1.3 This survey was carried out to provide information on the presence, character and extent of potential buried archaeological remains within the proposed development site. The significance of any such remains can only be determied with reference to further information; this report may therfore form part of an assessment of significance, but cannot stand alone as such.

2 Red line boundary Location and Description

2.1 The proposed development site (hereafter ‘the red line boundary’) is located in the District of Selby, between Ferrybridge and Thorganby, nominally centred at SE 57981 32544.

2.2 The red line boundary covers 288ha across 179 fields consisting mostly of arable land and spans the lower reaches of the Aire and Ouse river valleys (Figure 2). The survey area is generally flat and lies between 3m and 12m above Ordnance Datum (aOD).

2.3 The solid geology underlying the majority of the red line boundary consists of sandstone of the Sherwood Sandstone Group. At the western end of the route (west of Field 405), Roxby Formation calcareous mudstone is present, with Brotherton Formation dolomitic limestone across Fields 311-413.

2.4 The bedrock is overlain by superficial deposits of glacigenic origin, comprising broad bands of Hemingbrough Glaciolacustrine Formation silty clay, Breighton Sand Formation and Skipwith Sand Member gravelly clayey sand, with alluvium associated with the River Ouse (BGS 2026). The soils within the red line boundary consist of freely draining and naturally wet loamy and clayey soils and in the west (Soilscape 5, 18, 22) and naturally wet loamy, clayey and sandy soils in the east (Soilscapes 15, 18 and 21) (Soilscapes 2025).

2.5 Magnetic gradiometry typically provides good results over sedimentary geology, average-poor results over sandstone geology and variable results over mudstone/clays (David *et al.* 2008). In this instance,

the soil and geological environment of the red line boundary were generally conducive to the survey and yielded good results.

3 Archaeological Background

3.1 The archaeological background below is drawn from information contained in the Light Valley Solar - Preliminary Environmental Information Report (2025) produced by Ove Arup & Partners.

Prehistoric (500,000 BC – AD 43)

3.2 The beginning of this period was characterised by brief and intermittent occupations by small groups of hunter-gatherers who relied on flint, bone, and antler tools for subsistence (Noort & Davies, 1993; Research Frameworks Network, 2025). During the Last Glacial Maximum, around 27,000 years BP, the British-Irish ice sheet extended into the northern portion of the Study Area, likely passing through what is now Escrick (The University of Sheffield, 2017). Evidence from this time is scarce, limited to a single hollow containing burnt material with possible early prehistoric origins discovered within cable corridor 1F Section A during the Yorkshire Derwent Aqueduct Duplication Main mitigation works [MNY24076], though this feature was not definitively dated.

3.3 Following glacial retreat, the landscape transitioned from tundra to woodland, offering increased plant and animal resources which supported seasonal, migratory human activity along river corridors (Noort & Davies, 1993). Archaeological material from this phase is typically limited to lithic artefacts and palaeoenvironmental deposits, often exposed through soil erosion resulting from intensive agriculture (Research Frameworks Network, 2025). The British Geological Survey has recorded superficial alluvial deposits of Mesolithic date onwards across the Ouse and Aire valleys, which have the potential to preserve stratified archaeological remains including stone tools and organic matter. No confirmed Mesolithic sites exist within the Study Area, although a small scatter of flint and fire-cracked stones of uncertain date was recorded south-east of Lennerton Farm, Sherburn-in-Elmet [MNY37227]. The presence of woodland-supporting soils and waterlogged river valleys suggests a landscape suitable for transient activity.

3.4 With the gradual introduction of farming and animal domestication, land use within the study area changed. The lighter soils at the northern extent of the Study Area were extensively cleared of woodland for small-scale pastoral farming, while further south, the early landscape was marshy with a complex system of rivers and creeks (Natural England, 2025). As a result, the southern area is believed to have remained largely unpopulated. Neolithic evidence remains limited, partly due to the absence of natural flint or chert sources, which reduced both the quantity and size of lithic implements compared to other regions (Research Frameworks Network, 2025). A small scatter of flint was recorded in 1980 during field walking associated with the British Rail East Coast Main Line Diversion [MNY10410] but no artefacts were retained. Two stone hand axes were recovered from the Riccall area in the early 20th century [MNY12169], although their exact findspot was not recorded. A further Neolithic findspot is noted roughly 330 metres northwest of Gateforth Wood [MNY9915]. While no settlements have been definitively identified, the density of cropmarks of potential prehistoric date across the Study Area may indicate early agricultural and domestic activity.

3.5 Evidence for Bronze Age activity is also sparse, perhaps because of persistent wetland conditions which discouraged widespread settlement in the area (Historic England, 2020). Settlement is likely to have been confined to the west and north, where elevated ground offered more suitable conditions. A hand axe findspot approximately 850 metres to the west [MNY17660] and a ring ditch to the east of cable corridor 1F Section A are the only features recorded in the NYHER for this period.

3.6 The Bronze Age is marked by a significant shift in burial traditions, moving from collective inhumation and cremation towards single burials beneath barrows. When barrows are completely ploughed out, they often present as ring ditches, with the infilled former quarry ditch presenting as a circular or sub-circular feature. Several ring ditches have been identified around the cable corridor [MNY17137; MNY17140; MNY17143;

MNY17144] and along it [MNY9901; MNY9902; MNY9903]. The location of these features on slightly higher ground near the interface of mudstone and limestone increases the likelihood that these could be prehistoric in date.

Romano-British (AD 43 – AD 410)

3.7 Although the Humberhead Levels remained relatively sparsely populated into the Iron Age and Roman periods, evidence of agriculture, settlement, and funerary activity has emerged across the Study Area. Much of this data is derived from remote sensing techniques, particularly aerial photography and satellite imagery.

3.8 The region was once under the control of the Brigantes tribal group during the late Iron Age, until Roman forces annexed the territory around 70 CE. Subsequently, the Romans established a network of forts between the mid-1st and 2nd centuries CE to secure their presence in Britannia. Examples of Roman forts within the Study Area have been identified at 1km south-east of Roall Road [SM1017822] and at Castleford (Lagentium), roughly 6.5 km west of the Proposed Development.

3.9 Settlement during these periods typically favoured higher ground to the north and areas of higher ground made up of fluvio-glacial deposits within the mashes and wetlands. Two potential Iron Age roundhouses have been tentatively identified on aerial photography north-west of Skipwith [MNY37048] with likely contemporary field systems visible as cropmarks [MNY17704; MYO3546] and earthworks [MNY37386; MNY40274] to the east, within the Study Area. Geophysical survey at the north-east extent of the study area has identified a number of potential archaeological features which may be indicative of later prehistoric settlement (SUMO Geosurveys, 2024a).

3.10 Further west, another complex of enclosures and field systems has been recorded [MNY37043; MNY37044; MNY37045; MNY37047]. The rectangular or ‘co-axial’ field system layouts common to the later prehistoric and Romano-British periods are characterised by uniformly small, conjoined, square/rectangular, field plots and an adherence to a particular axial symmetry, however the longevity of this style of agriculture makes attributing a precise period to these features challenging (Historic England, 2018a).

3.11 Excavation along the Yorkshire Derwent Aqueduct Duplication Main identified two boundary ditches [MNY24078; MNY24079] that yielded Roman pottery. Similar features uncovered at Charity Plantation also suggest Romano-British origins [MNY12093].

3.12 To the south-east of Riccall, excavation has identified an Iron Age and Romano-British settlement [ENY6435] near a possible square barrow [MNY17704] to its immediate east. Investigations into a suspected Roman villa [MNY12173] yielded stone blocks, possibly foundation stones, and Romano-British pottery sherds, although no definitive structure was confirmed.

3.13 To the east of Solar Development Site 8, historic settlement features [MNY17258] and nearby enclosures, visible as cropmarks, may be of Iron Age or Romano-British date [MNY10344; MNY110345].

3.14 Geophysical surveys of Solar Development Site 4 have identified two possible farmsteads within another surveyed field [Feature 6], consisting of ring ditches indicative of roundhouse settlement. Additional anomalies—including pits and ditches—were recorded nearby [Feature 5]. A Roman gritstone coffin recovered from this general area was relocated to St Mary’s Church, Birkin [LB1167351]. While cremation dominated early Roman burial practices, inhumation became more common from the 2nd century CE, often occurring on settlement fringes beside roads (Historic England, 2018b).

3.15 Finally, a geophysical survey identified a previously undocumented concentration of features consisting of enclosures, trackways, ditches, pits, and a ring ditch within Solar Development Site 2 whose alignment

suggests settlement activity. Though the characteristics point to later prehistoric or Romano-British origins, an early medieval or medieval interpretation remains possible.

Medieval (AD 410 – AD 1540)

3.16 Within the Study Area, only a single findspot, a Saxon copper alloy disc brooch [MNY23523] has been definitively dated to the early medieval period. This was recovered from the area east of Section A of Cable Corridor 1F. The exact findspot location of the spectacular 'Escrick Ring (Accession ref: YORYM-715F42)' has never been confirmed, however, the ring was recovered from a field near Escrick and represents an unusually high-status object. It is believed to have been manufactured in the 5th or 6th century CE.

3.17 Geophysical survey in Solar Development Site 4 confirmed the presence of previously identified moats in Field 4.12 [MNY9907] and Field 4.5 [MNY9905], the latter of which is c.100m in width. Similarly, Site 1 includes a large rectangular enclosure with a clearly defined ditch. Further possible moated sites area recorded across the Study Area [MNY12079; MNY10348; MNY10347; MNY10292].

3.18 Monastic activity is evidenced within the Study Area, to the north of Thorpe Willoughby, c.350 m from the Section C of Cable Corridor 1. The moated monastic grange at Thorpe Willoughby [SM1017460] was originally a grange of the Benedictine abbey at Selby. Monastic granges of unknown affiliation have been tentatively identified using documentary resources only, including Milford Grange, adjacent to Solar Development Site 6 [MNY17151] and c.500 m north of Solar Development Site 4 [MNY9904]. Second edition OS mapping (1908) indicates that the area around Monk Fryston Hall may have been a monastic site [MNY9887], but no other evidence exists to support this. The presence of 'Monk' in the village's name is suggestive of monastic associations.

3.19 Medieval agricultural activity is evidenced through the survival of areas of early ridge and furrow and contemporary field systems. This is particularly well preserved in the north of the Study Area, outside of the wetlands and into the Vale of York, close to or within areas utilised for agriculture since the later prehistoric periods (MYO2515; MYO4876; MYO2468; MYO2469, MYO2470; MYO2490; MYO2491; MYO2515; MNY31990; MNY36985; MNY37357). Within Solar Development Site 1, a small medieval farmstead [MNY17722] was identified from historic mapping in Field 1.40, with geophysical survey detecting possible undated ridge and furrow across much of the Site.

Post medieval – Industrial Period (AD 1540 – 1901)

3.20 Settlement centres across the Study Area were largely defined by the end of the medieval period. Thomas Jeffreys 'Survey of the County of Yorkshire' map of 1775 depicts a highly stylised representation of the Study Area. The high-water table, and later, value of the drained land resulted in limited expansion with all settlements remaining small hamlets or villages. The historic cores of Monk Fryston, Hillam, Hambleton, and Escrick contain numerous nationally important examples of domestic properties from the 17th to 19th centuries.

3.21 Significant drainage activity across the Humberhead levels began in the 1620s when Dutch drainage engineers began large-scale river diversions and land drainage. They introduced the practice of 'warping' where farmland was inundated with seasonally impounded tidal waters to deposit fertile alluvial silt.

3.22 Drainage and warping continued into the 18th century and created today's characteristic flat treeless landscape drained by a network of drains and dykes. Land drains and drainage dykes are present within the Study Area [MNY37290; MNY37289; MNY26157; MNY26302; MNY26198; MNY26303; MNY26199] as well as a number of undated features with a potential drainage function [MNY12112; MNY10346]. A large number of ponds are also recorded across the Study Area (documented from early OS mapping), most notably across Solar Development Site 1 and its immediate environs.

3.23 1850 Ordnance Survey mapping records numerous farmsteads across the Study Area including several, now demolished, farm complexes and cottages within Solar Development Sites 1, 4 and 8. Within Solar Development Site 1, Pallion Farm was formerly situated in Fields 1.37 and 1.38. Two farm cottages, Low Cottage [MNY9906] and Middle Cottage were also recorded within Solar Development Site 4, demolished during the first half of the 20th century and, within Solar Development Site 8, the 'Ruddings' is located in Field 8.1.

Modern (1901 – present)

3.24 Military remains are a key feature of the Study Area and wider North Yorkshire region, through a long-established connection with the Royal Air Force. World War II bombing decoy control building 270m south of Scalm Park Cottages Immediately outside of the Study Area, the RAF had sites at Church Fenton and Burn including bomb storage, aircraft pens, barracks and hangers. An airfield [MNY10281] with adjacent aircraft factory was located at Sherburn-in-Elmet.

4 Aims

4.1 The aim of the geophysical survey was to identify anomalies that suggest the presence of archaeological remains in order to enhance the current understanding of the historical environment within the red line boundary.

4.2 Specifically, the aims of the gradiometer survey were:

- To locate, record and characterise any potential surviving sub-surface archaeological remains within the red line boundary, as part of a broader archaeological evaluation of the proposed cable route
- To help determine the next stage of works as per the client's instruction
- To produce a comprehensive site archive (Appendix 1) and report

5 Methodology

5.1 The geophysical survey was undertaken between 22/04/2025 and 23/11/2025.

5.2 All geophysical survey work was carried out in accordance with current good practice specified in the EAC guidelines document (Schmidt *et al.* 2015), as recommended by Historic England, and in the Chartered Institute for Archaeologists' *Standard and Guidance for Archaeological Geophysical Survey* (2014, updated 2020).

5.3 Parameters and survey methods were selected that were suitable for the prospective aims of the survey and in accordance with recommended professional good practice (Schmidt *et al*. 2015).

5.4 Digital photographs of every survey parcel were taken before, during and after geophysical survey to show any changes to field conditions following the programme of works. The photos were downloaded and stored off site, and relevant examples are included as Plates 1 to 19 in this report.

5.5 The gradiometer survey was carried out using survey methodologies including Bartington Grad601-2 fluxgate gradiometers (handheld and cart-mounted, see Appendix 2) and a Sensys MAGNETO® MXPDA push-cart magnetometer system.

Bartington Grad601-2 fluxgate gradiometer

5.6 The Bartington Grad601-2 fluxgate gradiometer (handheld) survey was conducted within a grid system, across grids measuring 30m by 30m, which were marked out using temporary markers at each grid node.

5.7 Grid nodes were set out and recorded using a Trimble R10 dGPS with an error no greater than +/- 0.05m. The GPS system uses the Trimble "VRS Now" service to provide instant access to real-time kinematic (RTK) corrections enabling an accuracy of < 2cm. It was connected via a SIM card run on the Vodafone network with good cellular signal in the red line boundarys, meaning a repeater was not required.

5.8 Data was collected in the field using zig-zag traverses, with a sample interval of 0.25m and a traverse interval of 1m.

5.9 A total of 11.19ha were surveyed using the Bartington Grad601-2 fluxgate gradiometer.

5.10 Before each session of use, each gradiometer was balanced around a single set up point within the red line boundary specifically chosen for use by all instruments used in the survey. This point is magnetically quiet and balancing the machine around this point, produces a more uniform dataset throughout and allows all data to be plotted with ease within a standard range as appropriate to the survey environment. Striping of the data may occur due to instrument drift; it is decided in the field if this is within a sensible and acceptable limit; if it is not, the grid(s) in question are re-collected.

5.11 Care was also taken to attempt to avoid metal obstacles present within the red line boundary, such as metal objects within and adjacent to the red line boundary as gradiometer survey is affected by 'above-ground ferrous disturbance' and avoiding these improves the overall data quality and results obtained.

5.12 The gradiometer data were downloaded using Bartington Grad601 PC Software v313 and processed using Geoscan Geoplot v4.0, the details of which can be found in Appendices 2 and 3. Data processing, storage and documentation were carried out in accordance with the good practice specifications detailed in the guidelines issued by the Archaeology Data Service (Schmidt and Ernenwein 2009).

5.13 Interpretations of the data were created as layers in ArcGIS Pro and the technical terminology used to describe the identified features can be found in Appendix 4.

Bartington Non-Magnetic Cart

5.14 Where a hand-pushed cart was most suitable for survey, a Bartington Non-Magnetic Cart was used. The cart system utilises six Grad-01 fluxgate gradiometer sensors mounted upon a carbon fibre frame at 1m intervals, along with data logging equipment and batteries (see Appendix 2). Before each session of use, the cart system was balanced around a single set up point within the red line boundary, specifically chosen for being magnetically quiet. Balancing the machine around this point produces a more uniform dataset throughout and allows all data to be plotted with ease on the same palette.

5.15 Data was collected using zig-zag traverses alongside a constant stream of GPS data collected through a Trimble R10 GPS, enabling the collected data to be spatially georeferenced without the need for a pre-determined grid system. The data was logged on a laptop mounted to the cart using Geomar MLGrad601 software.

5.16 A total of 17.2ha were surveyed using the Bartington cart.

5.17 Care was also taken to attempt to avoid metal obstacles present within the red line boundary, such as metal objects within and adjacent to the red line boundary as gradiometer survey is affected by 'above-ground ferrous disturbance' and avoiding these improves the overall data quality and results obtained.

5.18 The data was downloaded from MLGrad601 and converted into a .xyz file in Geomar MultiGrad601 before being processed in TerraSurveyor 4.0. The details of these processes can be found in Appendices 2 and 3.

5.19 Interpretations of the data were created in ArcGIS Pro and the technical terminology used to describe the identified features can be found in Appendix 4.

Sensys MAGNETO® MXPDA push-cart magnetometer system

5.20 The survey was carried out using a Sensys MAGNETO® MXPDA push-cart and ATV mounted magnetometer system. The cart utilises five/eight FGM650/3 fluxgate gradiometer sensors mounted 1m apart upon a frame along with data logging equipment and batteries (see Appendix 2).

5.21 Data was collected using zig-zag traverses alongside a constant stream of GPS data collected through a Trimble R10 GPS, enabling the collected data to be spatially georeferenced without the need for a pre-determined grid system. The data and measured tracks were collected through the data acquisition unit MXPDA and visualised through a tablet PC mounted to the cart.

5.22 A total of 6.82ha were surveyed using the Sensys cart.

5.23 Care was taken to attempt to avoid metal obstacles present within the red line boundary, such as metal objects within and adjacent to the red line boundary as gradiometer survey is affected by 'above-ground ferrous disturbance' and avoiding these improves the overall data quality and results obtained.

5.24 The data was downloaded via USB and converted using DLMGPS before being processed using Terrasurveyor 4.0 software. The details of these processed can be found in Appendices 2 and 3.

5.25 Interpretations of the data were created as layers in ArcGIS Pro and the technical terminology used to describe the identified features can be found in Appendix 4.

6 Results and Interpretation

6.1 The gradiometer survey results have been visualised as greyscale plots, with the processed data plotted at -1nT to 2nT as seen in Figures 5.1 - 5.49. An interpretation of the data can be seen in Figures 6.1 - 6.49 and an individual characterisation of the numbered identified anomalies of interest is given below.

6.2 Appendix 4 contains a guide to the interpretation categories employed and the logic used to assign anomalies to specific classes, as well as a short discussion of how past human activity results in these anomalies, however, some important points are noted below:

6.3 The classes have three sub-types (generally): anomalies (typically indicated by a solid colour polygon), spreads (a stippled polygon) and trends (a line with a colour matching the polygon colour). *Anomalies* refer to distinct changes in the survey data which suggest an abrupt boundary between materials below ground, such as a cut feature with a magnetically contrasting fill. *Spreads* of enhanced material refer to diffuse areas of altered magnetic contrast which suggest a localised spread of material with a magnetic contrast within the topsoil or ploughzone. Linear *trends* are less distinct and are typically visible as linear patterning in the overall texture of the data. A common example of these is the striping effect caused by recent ploughing.

6.4 Anomalies placed in the '*Uncertain'* class may have an archaeological origin, but other explanations are equally likely. Where any particular interpretation is *more* likely than others, the anomaly is assigned to that class.

6.5 The definite '*Archaeology'* class is only used for anomalies with no other possible explanation, either due to their diagnostic characteristics or because they are corroborated by other sources such as previous interventions within the red line boundary. Anomalies with magnetic characteristics or morphologies that suggest an archaeological origin will generally be assigned to the '*Possible Archaeology'* class.

6.6 The anomaly type '*Ferrous Spike'* is assigned to strong dipolar anomalies which cover a small spatial area and have a characteristic appearance in the XY traces of the survey data. These are strongly likely to be of recent origin in the form of magnetic or ferrous debris within the topsoil; 'spikes' of other origin will be assigned to their appropriate classification.

6.7 A distinction is made between modern *disturbance* from strongly ferrous materials within or adjacent to the red line boundary, such as the strong dipolar 'halos' produced by services like gas mains, and spreads of material within the topsoil causing noise that is assumed to have a recent origin. Generally speaking, '*Modern Disturbance'* occurs at a distance from a magnetic source, whereas *modern magnetic spreads/debris* are related to material directly at that location.

6.8 Generally, only anomalies (or groups thereof) of a likely archaeological or historical origin have been assigned an anomaly identifier on the interpretation figures. However, anomalies interpreted as resulting from other processes that are integral to the discussion of the results have also been assigned anomaly numbers.

6.9 In general, the superficial deposits across the majority of the survey are made up of sands, silty clays and alluvial deposits that provide mixed results in terms of their conduciveness for magnetic gradiometry. Across the scheme as a whole, relatively few anomalies relating to possible/probable archaeological features have been identified, with the majority of features likely relating to agricultural activity.

Definite/Probable Archaeology

6.10 Across the scheme, only one group of features have been confidently interpretated as being archaeological in origin.

6.11 A large rectilinear linear anomaly [**418A**], identified at the south-eastern extent of Field 418, is interpreted as a large enclosure or a field boundary.

Possible Archaeology

6.12 Anomalies relating to possible archaeological features have been identified in several fields across the scheme.

6.13 Ditches associated with possible field systems have been identified in fields 464, 324 and 93 [**464A, 324C**, **93A**].

6.14 Running south-southeast to north-northeast across the centre of Field 405 are parallel linear anomalies [**405A**] which may be caused by infilled ditches.

6.15 A circular group of discrete positive anomalies [**324A**] have been identified at the north-eastern extent of Field 324 may be indicative of infilled features.

6.16 A spread of discrete positive anomalies [**324B**] are visible at the north-eastern extent of the red line boundary in Field 324 which have been tentatively identified as having a possible archaeological origin. These are in close proximity to the circular group of anomalies [**324A**] and may be associated.

6.17 A positive linear anomaly [**324C**] is visible at the south-eastern extent of Field 324 which may be indicative of an infilled feature such as a ditch. While it appears on the same alignment as the parallel ditches in Field 405 [405A] and so may relate to the same feature. It should be noted that these anomalies exhibit a weaker magnetic response and as such have a more tentative interpretation.

Unclear Origins

6.18 Anomalies of unclear origin have been identified in fields across the scheme.

6.19 A positive linear anomaly [**407B**] is visible at the northern extent of the Field 407 outside the red line boundary.

6.20 Three discrete positive linear anomalies [**412A**] are visible outside the northern extent of the red line boundary in Field 412 and may relate to variation in the superficial geology.

6.21 A series of weak positive linear trends [**464B**] are visible running across the northern part of Field 464 the origin of which are unclear.

6.22 Two discrete linear anomalies [**323A**] of unknown origin have been identified in the southern portion of the field.

6.23 A discrete curvilinear anomaly [**93B**] has been identified in the northern extent of Field 93.

Historical Features

6.24 Anomalies relating to historical features have been identified in fields across the scheme. These relate to magnetic responses associated with former field boundaries that are depicted on historical Ordnance Survey mapping [**464D, 405B, 405C, 403A, 403B, 324D, 306A, 172C, 103A**].

Agricultural

6.25 Anomalies relating to probable field boundaries have been identified in several fields across the scheme. These primarily relate to probable ditches associated with these boundaries [**172A, 172B, 407A**, **418B, 418C, 464B, 464C, 324A, 324C**, **93A, 93B**].

6.26 Linear anomalies representing historic ploughing have been identified across the red line boundary. These anomalies are primarily indicative of ridge-and-furrow, the orientation of which varies across is generally consistent with the limits of former fields depicted on historical mapping.

Non – Archaeology

6.27 Strong magnetic disturbance due to the presence of services, and above-ground and below-ground electrical infrastructure, is evident in many of the red line boundaries. This is particularly noticeable in the case of the disturbance associated with high voltage power lines, pylons and below-ground services running through fields 103, 306, 282 and 93.

6.28 Magnetic anomalies likely relating to variation in superficial geology are visible in fields 412, 418, 414, 250, and 324.

Detailed Discussion of Results

The detailed results below are set out by field, from southwest to northeast. Some of the numbered parcels have not been selected for survey as they coincide with hedges, ditches, waterways, etc.

The figure numbers referred to in Table 1 and 2 below refer to the 1:1250 detailed plots Figures 5.1 to 5.49 and 6.1 to 6.49. The anomaly IDs are displayed on the detailed interpretation Figures 6.1 to 6.49.

Table 1 Detailed Results of Geophysical Survey: Indicative Cable Route

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
397 **Figures:** **5.1** **6.1**	None identified.	None identified.	None identified.	None identified.	The red line boundary is characterised by a spread of magnetic disturbance and isolated ferrous anomalies.
407 **Figures:** **5.2** **6.2**	None identified.	None identified.	A positive linear anomaly [**407B**] is visible at the northern extent of the field outside the red line boundary.	A series of positive linear anomalies [**407A]** are visible at the southern extent of the field outside of the red line boundary. This may indicate a former trackway or boundary feature Positive linear anomalies indicative of ridge and furrow ploughing are visible	Spreads of magnetic disturbance and ferrous anomalies are visible within the red line boundary. Isolated ferrous anomalies are also apparent in the southern portion of the field.

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				aligned northwest-southeast within the red line boundary.	
411 **Figures:** **5.3** **6.3**	None identified.	None identified.	None identified.	Positive linear anomalies likely indicative of ridge and furrow cultivation are visible aligned northwest-southeast within the red line boundary. Weak linear trends aligned northwest-southeast and northeast-southwest across the red line boundary are consistent with field drains.	A spread of magnetic disturbance and isolated ferrous anomalies have been identified in the red line boundary.
412 **Figures:** **5.4** **6.4**	None identified.	None identified.	A discrete positive linear anomaly [**412B**] is visible in the northern extent of the red line boundary and may relate to variation in the superficial geology.	Positive linear anomalies indicative of field drains ploughing are visible roughly aligned northwest-southeast and northeast-southwest within the red line boundary.	Isolated ferrous anomalies have been identified in the red line boundary. Variation in superficial geology is visible as magnetic variation at the northern extent of the red line boundary.
418	A rectilinear	None identified.	None identified.	A linear positive	Isolated ferrous anomalies

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
Figures: **5.5** **6.5**	positive anomaly [**418A**] may represent an enclosure or former field boundary.			anomaly **418C**] may represent a former field boundary of unknown date but is not visible on historic OS mapping A discrete positive anomaly [**418B]** may represent the continuation of a field boundary. Weak linear trends aligned broadly NW-SE across the red line boundary are consistent with field drains.	have been identified in the red line boundary. Variation in superficial geology is visible as magnetic variation in the western part of the field.
414 **Figures:** **5.6** **6.6**	None identified.	None identified.	None identified.	Weak linear trends aligned broadly northwest-southeast across the red line boundary are consistent with field drains.	Isolated ferrous anomalies have been identified in the red line boundary. Variation in superficial geology is visible as magnetic variation in the western part of the field.
250 **Figures:** **5.7** **6.7**	None identified.	None identified.	None identified.	None identified.	Isolated ferrous anomalies and areas of magnetic disturbance have been identified in the red line boundary. Variation in superficial

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
					geology is visible as magnetic variation in the north-western extent of the field.
466 **Figures:** **5.8-5.9** **6.8-6.9**	None identified.	None identified.	None identified.	None identified.	Magnetic disturbance associated with a probable service has been identified in the northern extent of the field.
467 **Figures:** **5.8-6.9** **5.8-6.9**	None identified.	None identified.	None identified.	None identified.	Magnetic disturbance associated with a probable service has been identified in the northern extent of the field.
464 **Figures:** **5.10** **6.10**	None identified.	Positive linear anomalies [**464A**] indicative of possible former field boundaries are visible crossing the field.	None identified.	Weak positive linear trends [**464B**] are visible running across the southern part of the field. The origin of these features is unclear. A pair of parallel linear anomalies [**464C**] are visible at the western extent of the red line boundary. These likely relate to ploughing or a field drain. Positive linear	Magnetic disturbance is visible along the northern edge of the field and is likely associated with the fenceline. A discrete ferrous anomaly has been identified at the northern extent of the red line boundary.

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				anomalies likely indicative of ridge and furrow cultivation are visible aligned north-south at the southern extent of the red line boundary. A positive linear anomaly [**464D**] aligns with a former field boundary visible on historic OS mapping running east-west across the red line boundary.	
465 **Figures:** **5.11-5.13** **6.11-6.13**	None identified.	None identified.	None identified.	Positive linear anomalies likely indicative of ridge and furrow cultivation are visible aligned north-south at the southern extent of the red line boundary. Weak linear trends aligned broadly northeast-southwest across the red line boundary are consistent with field drains.	Isolated ferrous anomalies have been identified in the red line boundary.

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				A positive linear anomalies [**465A**] is visible in the red line boundary and is aligned with a former field boundary visible on historical OS mapping.	
405 **Figures:** **5.14-5.16** **6.14-6.16**	None identified.	Running south-southeast to north-northwest across the centre of the red line boundary are parallel linear anomalies [**405A**] that may be consistent with the presence of infilled ditches.	None identified.	Positive linear anomalies [**405B, 405C**] are visible in the red line boundary and are aligned with former field boundaries visible on historical OS mapping. Weak linear trends aligned broadly northeast-southwest across the red line boundary are consistent with field drains.	Isolated ferrous anomalies have been identified across the red line boundary. A ferrous spread has been identified at the eastern extent of the red line boundary. Several linear striations across most of the red line boundaries are likely to relate to modern ploughing.
403 **Figures:** **5.17-5.18** **6.17-6.18**	None identified.	None identified.	None identified.	Positive linear anomalies [**403A, 403B**] are visible in the red line boundary and are aligned with former field boundaries visible on historical OS mapping. Weak linear trends at	Isolated ferrous anomalies have been identified in the red line boundary. A small ferrous spread has been identified in the south of the red line boundary and part of a more extensive spread is present across the northern

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				the southern extent of the red line boundary are consistent with field drains.	tip of this area.
282 **Figures:** **5.19** **6.19**	None identified.	None identified.	None identified.	Positive linear anomalies are aligned northeast-southwest and are likely associated with cultivation.	A buried service has been detected along the northern edge of the field, with surrounding magnetic disturbance. Magnetic disturbance also occurs surrounding an extant pylon. The strength of the magnetic readings alongside these features has introduced some data artefacts in the surrounding area.
306 **Figures:** **5.20-5.24** **6.20-6.24**	None identified.	None identified.	None identified.	A positive linear anomaly [**306A**] is visible in the red line boundary and is aligned with a former field boundary visible on historical OS mapping. Weak linear trends aligned on several orientations broadly north-south across the red line boundary are consistent with field	Magnetic disturbance has been identified in the north of the red line boundary associated with a pylon. A series of strong, localized ferrous anomalies are most likely to be caused by modern debris in the topsoil.

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				drains.	
323 **Figures:** **5.25-5.28** **6.25-6.28**	None identified.	None identified.	Discrete anomalies [**323A**] have been identified in the southern part of the red line boundary.	Weak linear trends aligned broadly northeast-southwest across the red line boundary are consistent with field drains.	Isolated ferrous anomalies have been identified in the red line boundary.
325, 326 **Figures:** **5.29-5.32** **6.29-6.32**	None identified.	None identified.	None identified.	Weak linear trends aligned broadly east-west across the red line boundary are consistent with field drains.	Isolated ferrous anomalies have been identified across both fields along with areas of magnetic disturbance.
324 **Figures:** **5.33-5.37** **6.33-6.37**	None identified.	A circular group of discrete positive anomalies [**324A**] have been identified at the north-eastern extent of the red line boundary that may be indicative of infilled features. A spread of discrete positive anomalies [**324B**] are visible at the north-eastern extent of the red line boundary.	None identified.	Positive linear anomalies indicative of cultivation are visible aligned north-south in the northern extent of the red line boundary. A positive linear anomaly [**324C**] is visible at the south-eastern extent of the red line boundary which may be indicative of an infilled feature such as a ditch. A positive linear anomaly [**324D**] is visible in the red line	Isolated ferrous anomalies have been identified in the red line boundary. An area of magnetic disturbance has been identified at the north-eastern extent of the red line boundary associated with an entrance to the field. Positive anomalies in the south-eastern extent of the red line boundary relate to changes in the superficial geology.

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				boundary and is aligned with a former field boundary visible on historical OS mapping. Weak linear trends aligned broadly north-south are visible in the northern extent of the red line boundary. These are consistent with field drains.	
230 Figures: 5.38-5.39 6.38-6.39	None identified.	None identified.	None identified.	None identified.	Isolated ferrous anomalies have been identified in the red line boundary.
172 Figures: 5.40-5.41 6.40-6.41	None identified.	None identified.	None identified.	Positive linear and rectilinear anomalies [**172A**] indicative of infilled features such as ditches are visible in the red line boundary and may represent former field boundaries. This interpretation is supported by the similarity in form of these anomalies and those interpreted as a	Discrete ferrous anomalies have been identified in the red line boundary. Areas of magnetic disturbance have been identified at the eastern and western extents of the red line boundary and are likely associated with metal fencing.

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
				former post-medieval field boundary based on supporting evidence. Three parallel positive linear anomalies [**172B**] indicative of infilled features such as ditches are visible outside the northern side of the RLB but appear to continue red line boundary within it. A positive discontinuous linear anomaly [**172C**] is visible in the red line boundary and is aligned with a former field boundary visible on historical OS mapping.	
129 **Figures:** **5.42-5.44** **6.42-6.44**	None identified.	None identified.	None identified.	Weak linear trends aligned broadly northwest-southeast in the southern extent of the red line boundary are consistent with field drains.	Isolated ferrous anomalies have been identified in the red line boundary, along with some broader spreads of ferrous material.
103 **Figures:**	None identified.	None identified.	None identified.	A positive linear anomaly [**103A**] is	Spreads of ferrous material and magnetic disturbance

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
5.45 **6.45**				visible in the red line boundaries and is aligned with a former field boundary visible on historical OS mapping.	have been detected across the red line boundary. Magnetic disturbance was encountered across the southern edge of the area and may be associated with a buried service located beyond the extent of the red line boundary
98 **Figures:** **5.46** **6.46**	None identified.	None identified.	None identified.	None identified.	Spreads of ferrous material and magnetic disturbance have been detected across the red line boundary. A buried service has been detected running northwest-southeast across it.
96 **Figures:** **5.47** **6.47**	None identified.	None identified.	None identified.	None identified.	Isolated ferrous anomalies have been identified across the red line boundary. A spread of magnetic disturbance is visible in the west of the red line boundary.
93, 94 **Figures:** **5.48-5.49** **6.48-6.49**	None identified.	None identified.	A discrete positive curvilinear anomaly [**93B**] is visible in the northern extent of the red line	Weak linear trends aligned broadly northwest-southeast and east-west across	Magnetic disturbance associated with a probable service has been identified running along the eastern

Field No	Definite / Probable Archaeology	Possible Archaeology	Unclear Origin	Agricultural & Historical	Non-Archaeological
			boundary.	the red line boundary are consistent with field drains. A positive linear anomaly [**93A**] is visible running across the center of the red line boundary, which may be indicative of an infilled feature such as a ditch.	edge of the red line boundary (beyond the RLB). Isolated ferrous anomalies have been identified across the red line boundary.

7 Conclusion

7.1 This report covers 35.92ha of gradiometer survey across land comprising the Light Valley Cable Route. The magnetic background of the red line boundary was generally quiet and provided sufficient contrast for anomalies that exhibit strong to medium enhancement to be detected across each of the red line boundaries.

7.2 The results of the survey predominantly relate to probable agricultural features, reflecting the rural character of the red line boundary over a long period of time. The large rectilinear anomaly identified in Field 418 is of probable archaeological origin and likely denotes a Roman-period enclosure. Several other anomalies were identified as having a possible archaeology origin, though many of these lack the magnetic signature or patterning to be conclusively identified as probable archaeological features. As such, it is possible that that these are caused by geological changes in the substrata or agricultural activity.

7.3 In assessing the results of the geophysical survey against the specific aims set out in Section 4:

- The survey has succeeded in locating, recording and characterising surviving sub-surface remains within the Site, though more remains may be present that are not suitable for detection using magnetic gradiometry.
- The survey will help in determining the next stage of works; it has provided evidence that remains of an uncertain origin are most likely present on site, and has provided a number of targets for further investigation.
- The survey has resulted in a comprehensive report and archive.

8 Statement of Indemnity

8.1 Although the results and interpretation detailed in this report have been produced as accurately as possible, it should be noted that the conclusions offered are a subjective assessment of collected datasets.

8.2 The success of a geophysical survey in identifying archaeological remains can be heavily influenced by several factors, including geology, seasonality, field conditions and the properties of the features being detected. Therefore, the geophysical interpretation may only reveal certain archaeological features and not produce a complete plan of all the archaeological remains within a red line boundary.

9 Archive Deposition

9.1 In accordance with professional standard practice an online OASIS database record will be completed for submission to the HER and Archaeological Data Service (ADS) (Appendix 2).

9.2 One digital and hard copy of the report and data will be submitted to the relevant Historic Environment Record (HER) at the Client's discretion.

9.3 A digital copy of the report and data will also be submitted to the ADS at the Client's discretion.

10 Bibliography

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*denotes a reference that occurs in Appendix 2 rather than the main body of this report.

11 Plates

Plate 1: North-east facing photograph of Field 98 prior to survey

Plate 2: North facing photograph of Field 98 during survey

Plate 3: North facing photograph of Field 324 prior to survey

Plate 4: North-east facing photograph of Field 103 prior to survey

Plate 5: North facing photograph of Field 326 prior to survey

Plate 6: East facing photograph of Field 306 during survey

Plate 7: East facing photograph of Field 172 during survey

Plate 8: East facing photograph of Field 405 during survey

Plate 9: North facing photograph of Field 129 prior to survey

Plate 10: South-west facing photograph of Field 172 during survey

Plate 11: South-west facing photograph of Field 282 prior to survey

Plate 12: South facing photograph of Field 414 prior to survey

Plate 13: South facing photograph of Field 412 prior to survey

Plate 14: South-east facing photograph of Field 98 prior to survey

Plate 15: North facing photograph of Field 466 prior to survey

Plate 16: North facing photograph of Field 467 prior to survey

Plate 17: North facing photograph of Field 468 prior to survey

Plate 18: North-east facing photograph of Field 468 during survey

Plate 19: North facing photograph of Field 323 during survey

12 Figures

LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure	Location Overview
1	

Legend

Light Valley Cable Route

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Projection: Transverse Mercator
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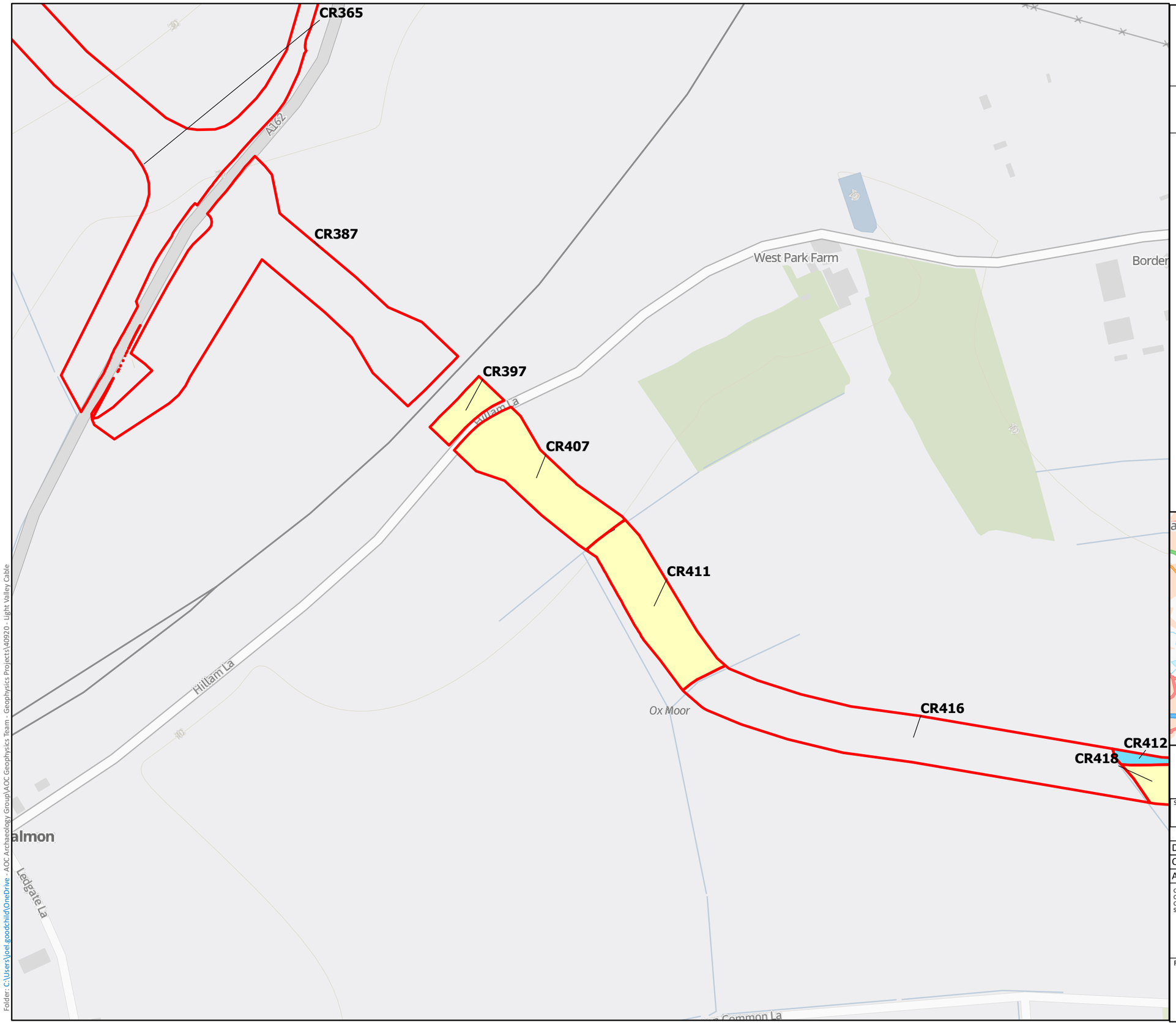
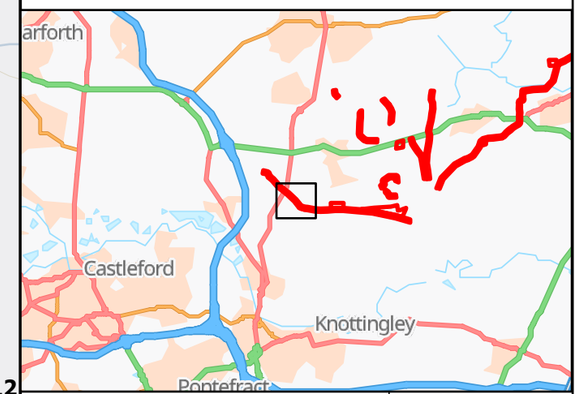
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.1 — **Location of Survey Areas**

Legend

- Light Valley Cable Route
- Bartington Cart
- Bartington 601-2





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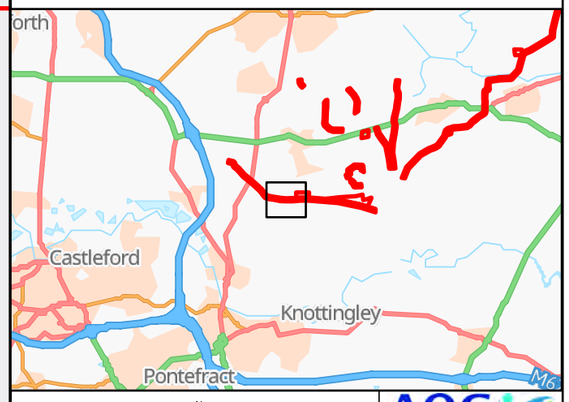
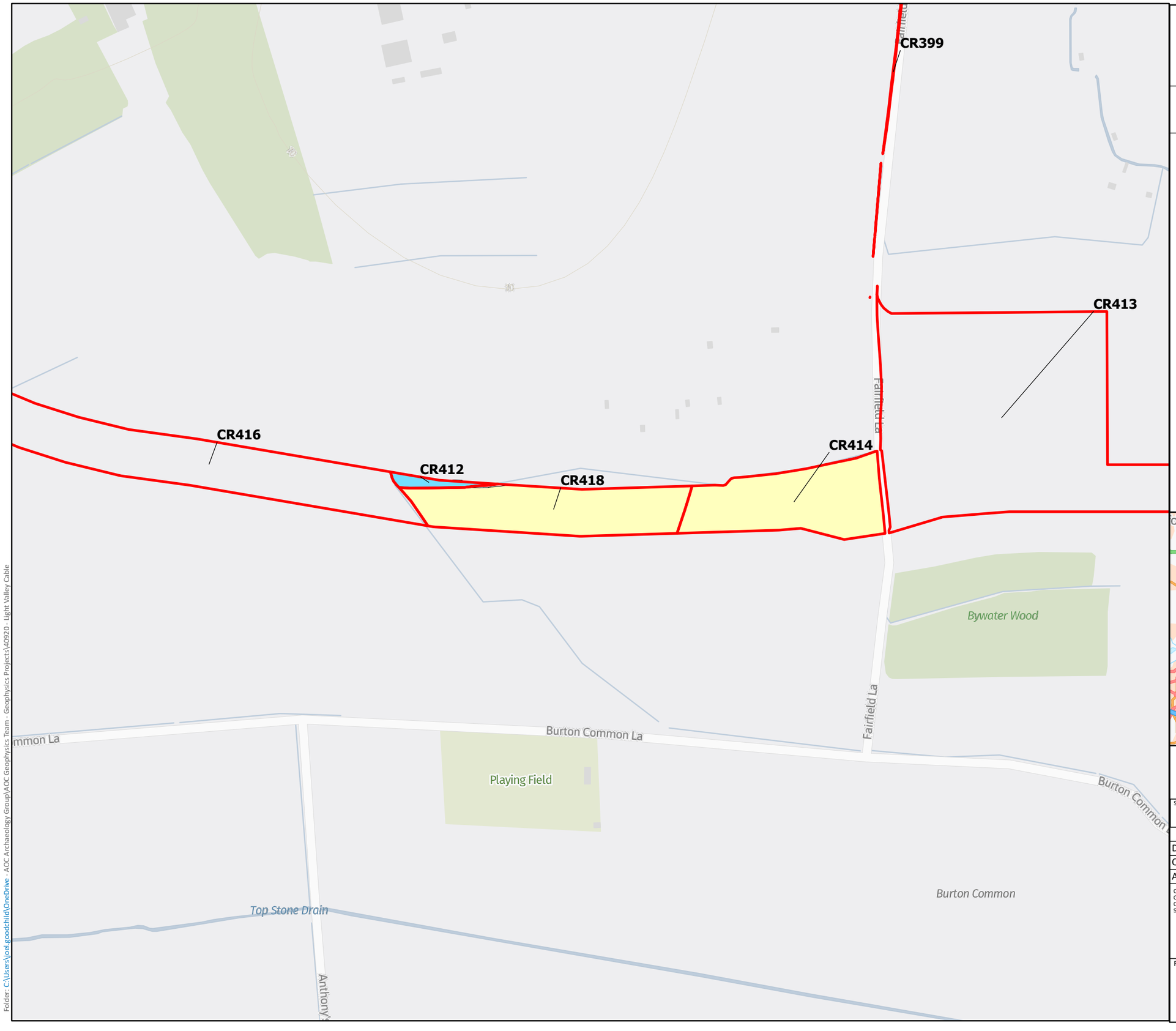
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.2	Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington Cart
- Bartington 601-2





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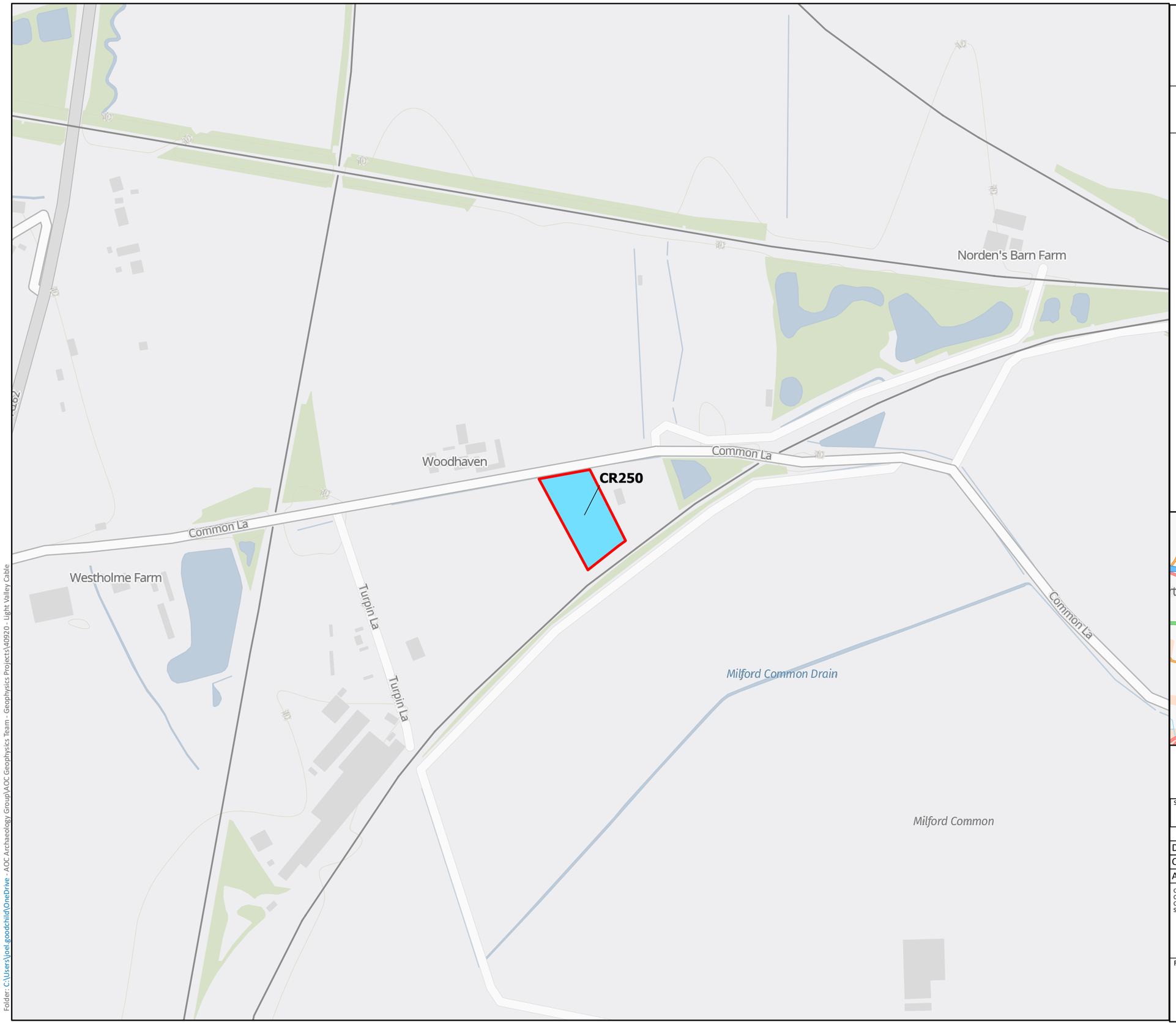
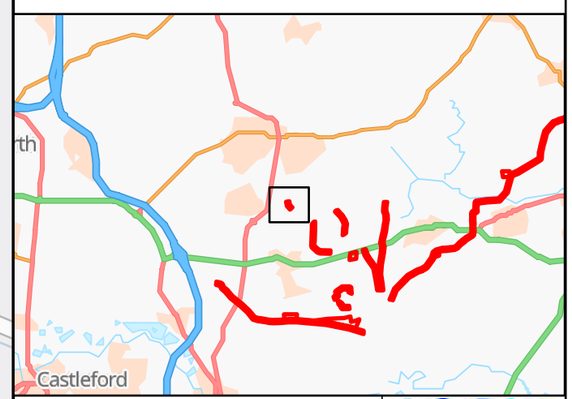
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.3	Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington 601-2





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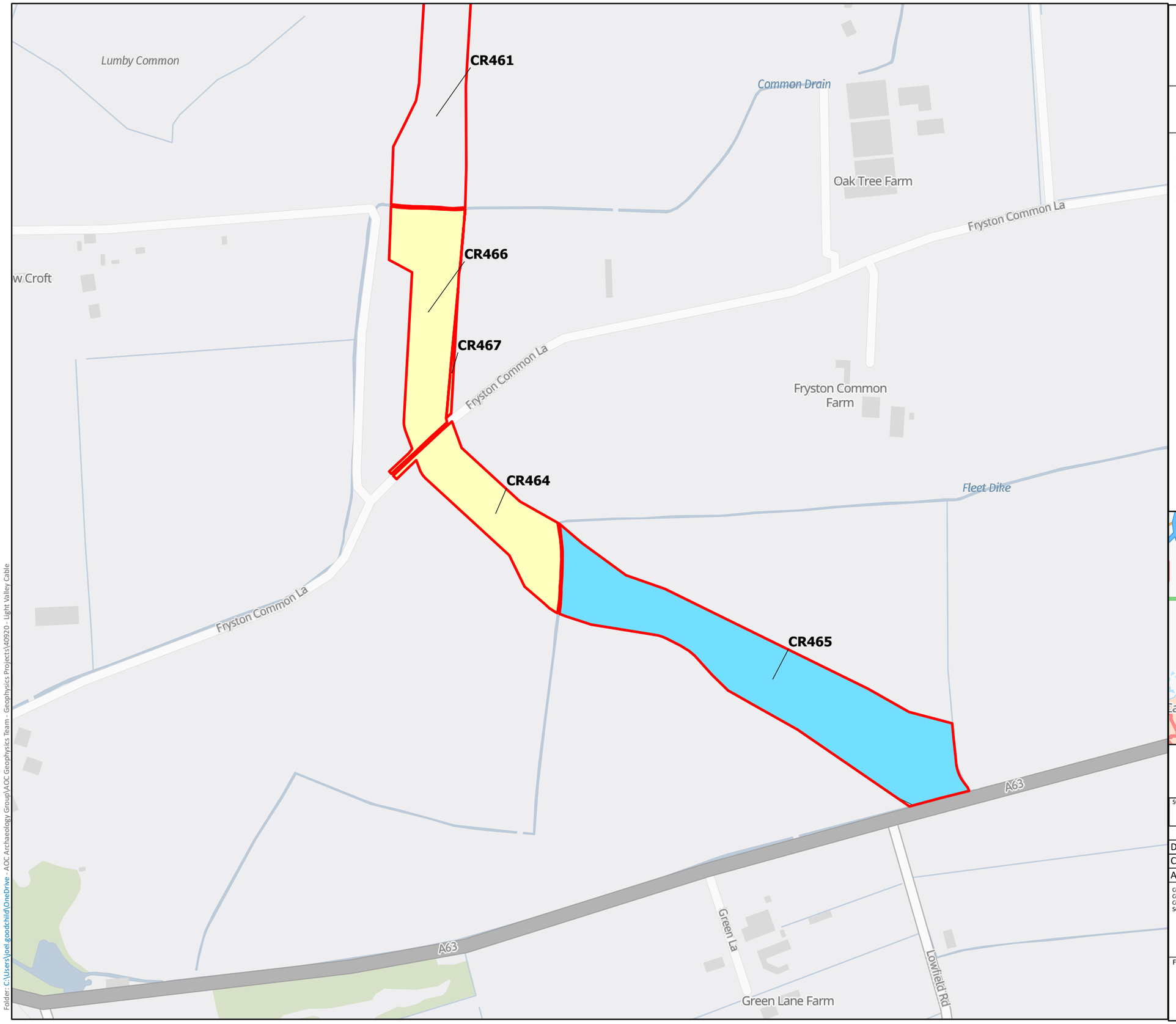
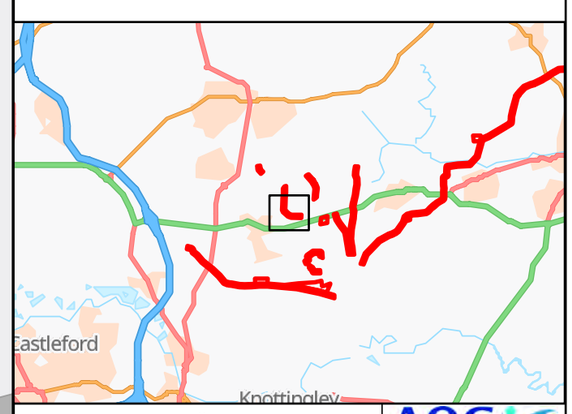
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.4	Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington Cart
- Bartington 601-2





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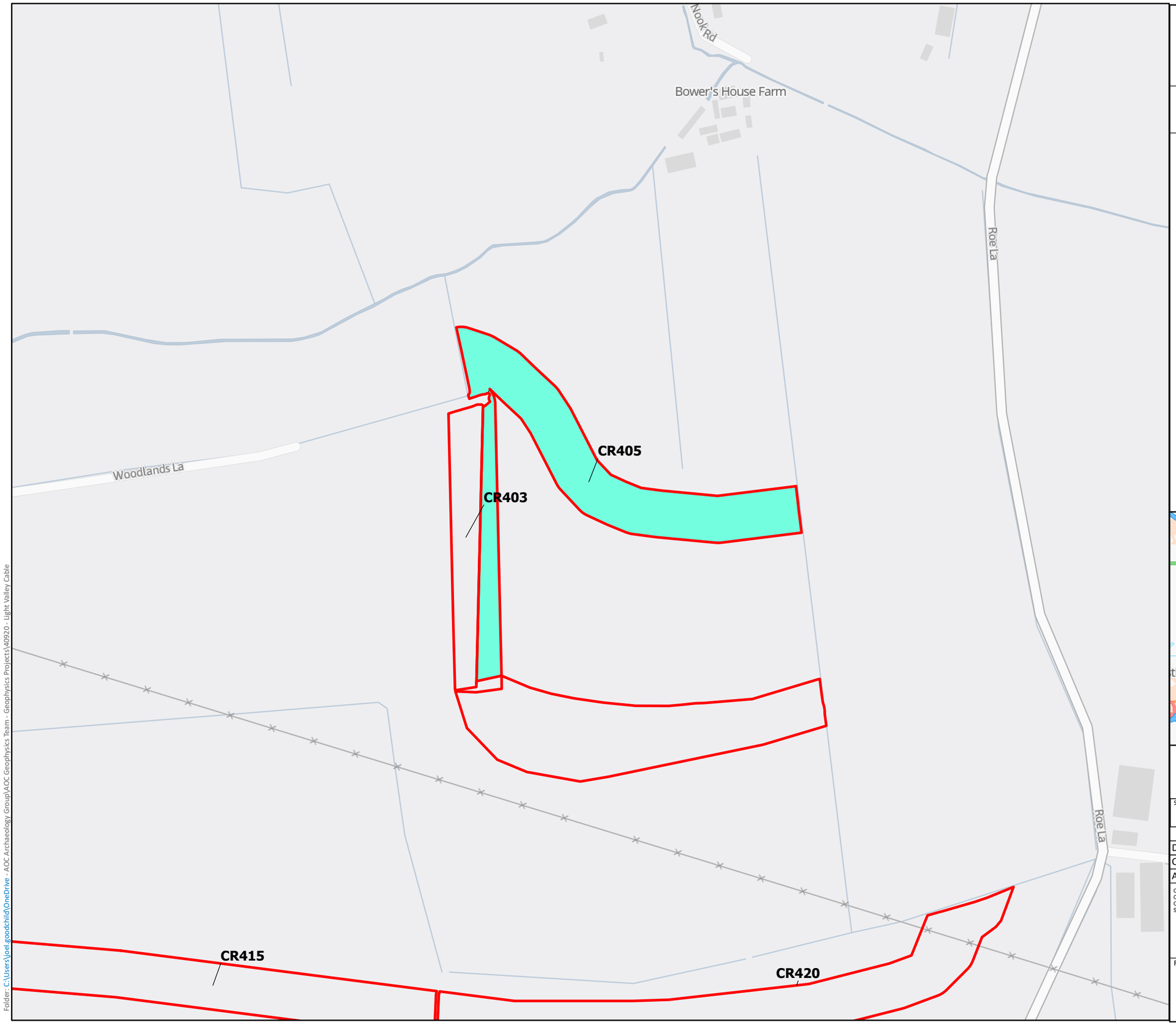
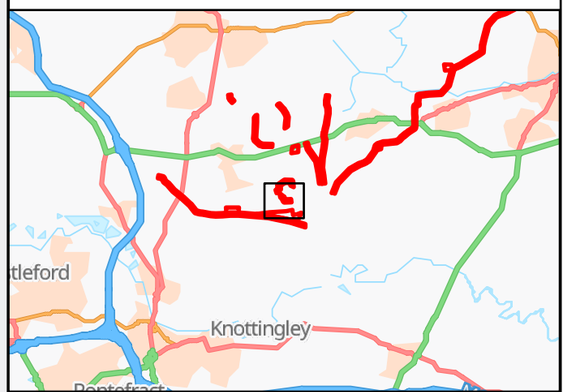
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.5 — **Location of Survey Areas**



Legend

- Light Valley Cable Route
- Sensys Cart



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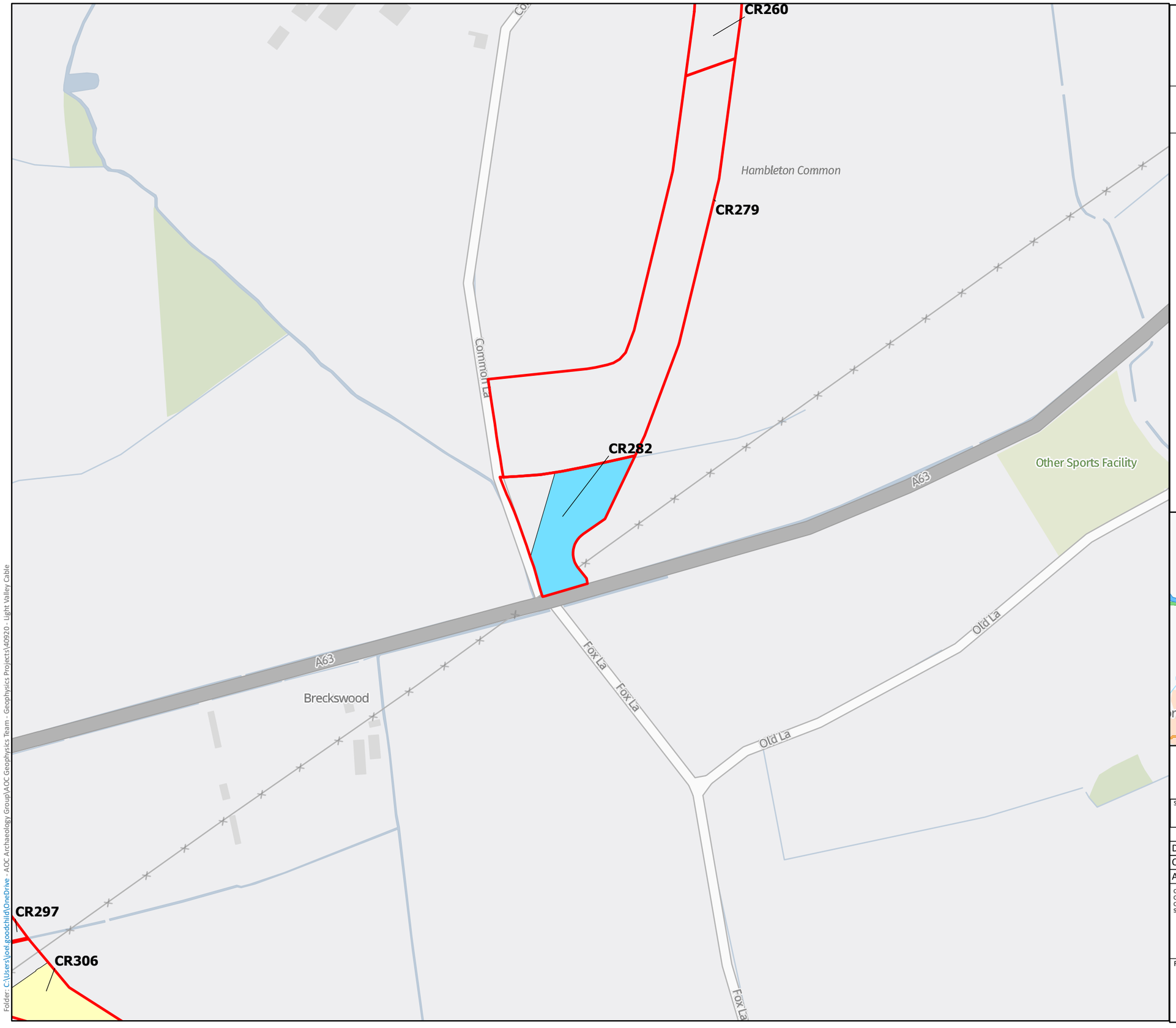
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

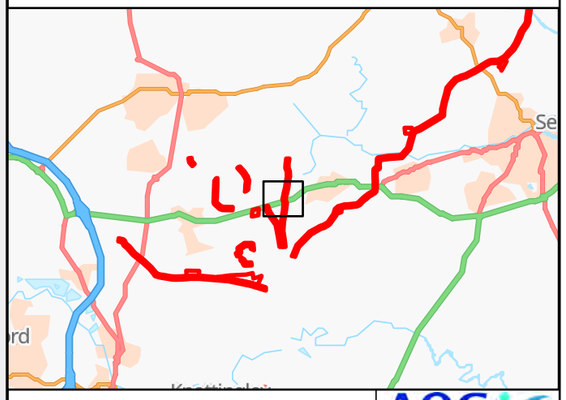
Figure 2.6

Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington Cart
- Bartington 601-2





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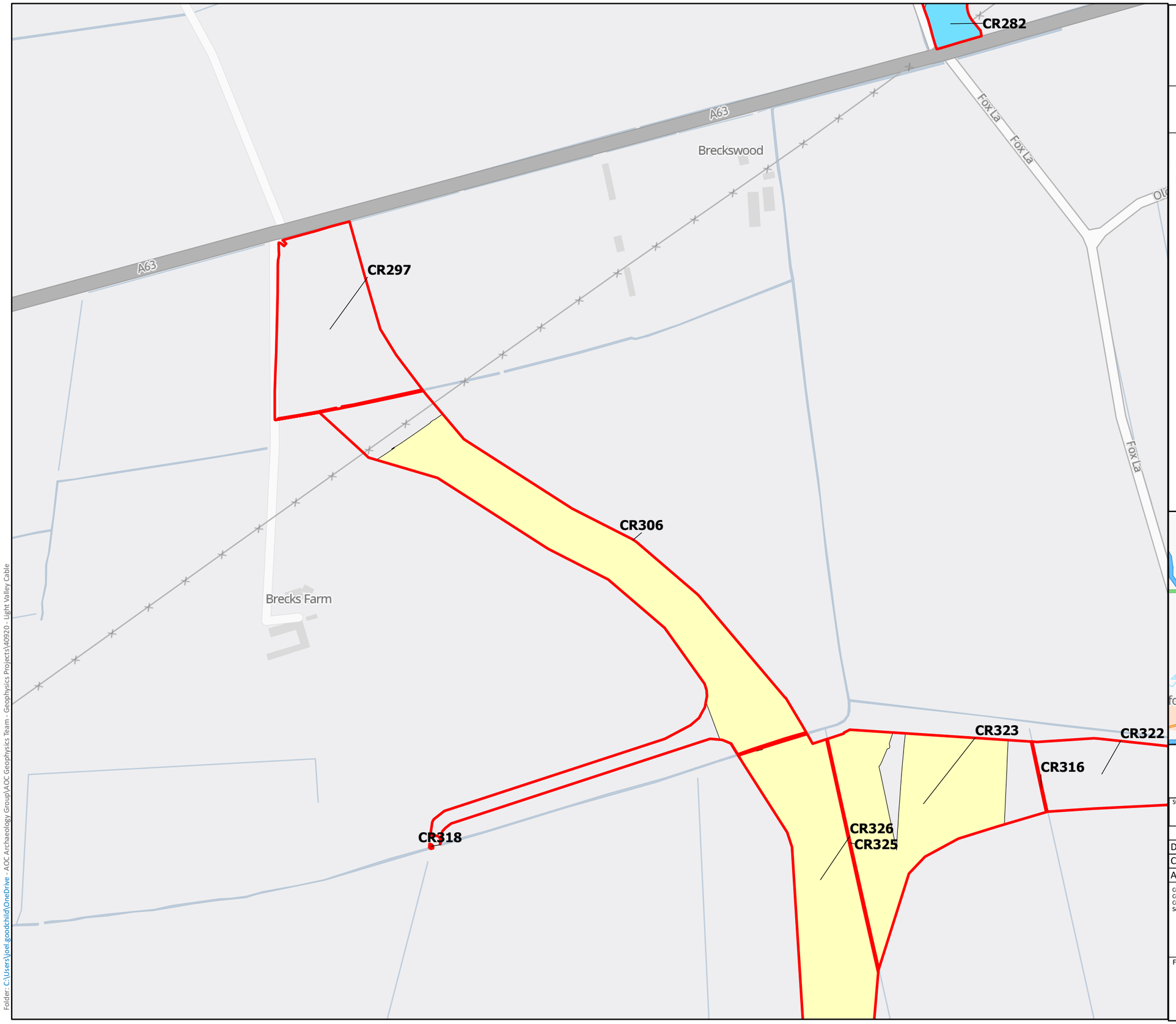
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

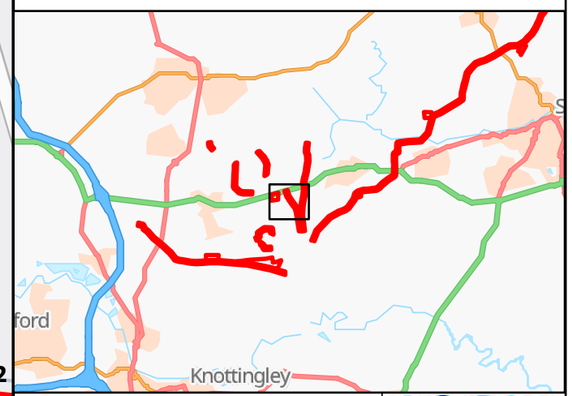
Figure 2.7

Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington Cart
- Bartington 601-2





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Approved by:	CS	Date:	12/01/2026 15:21	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.8

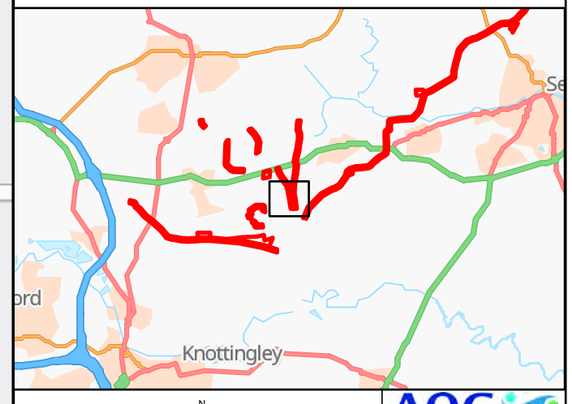
Location of Survey Areas

Legend

- Light Valley Cable Route
- Sensys Cart
- Bartington Cart

CR306
CR323
CR322
CR324
CR316
CR325
CR318
CR326
CR336 CR345
CR338

Brecks Farm
Sandkim Farm
Maspin Grange Farm
Hillam Common La
Hillam Common La
Fox La
Roe La
Maspin Moor
Knottingley



0 200 m

N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	12/01/2026 15:21	Version:	1.0
Checked by:	CS	Date:	12/01/2026 15:21	Status:	DRAFT
Approved by:	CS	Date:	12/01/2026 15:21	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.9

Location of Survey Areas

Legend

- Light Valley Cable Route
- Sensys Cart
- Bartington Cart

0 200 m

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	12/01/2026 15:21	Version:	1.0
Checked by:	CS	Date:	12/01/2026 15:21	Status:	DRAFT
Approved by:	CS	Date:	12/01/2026 15:21	AOC Project No:	40920

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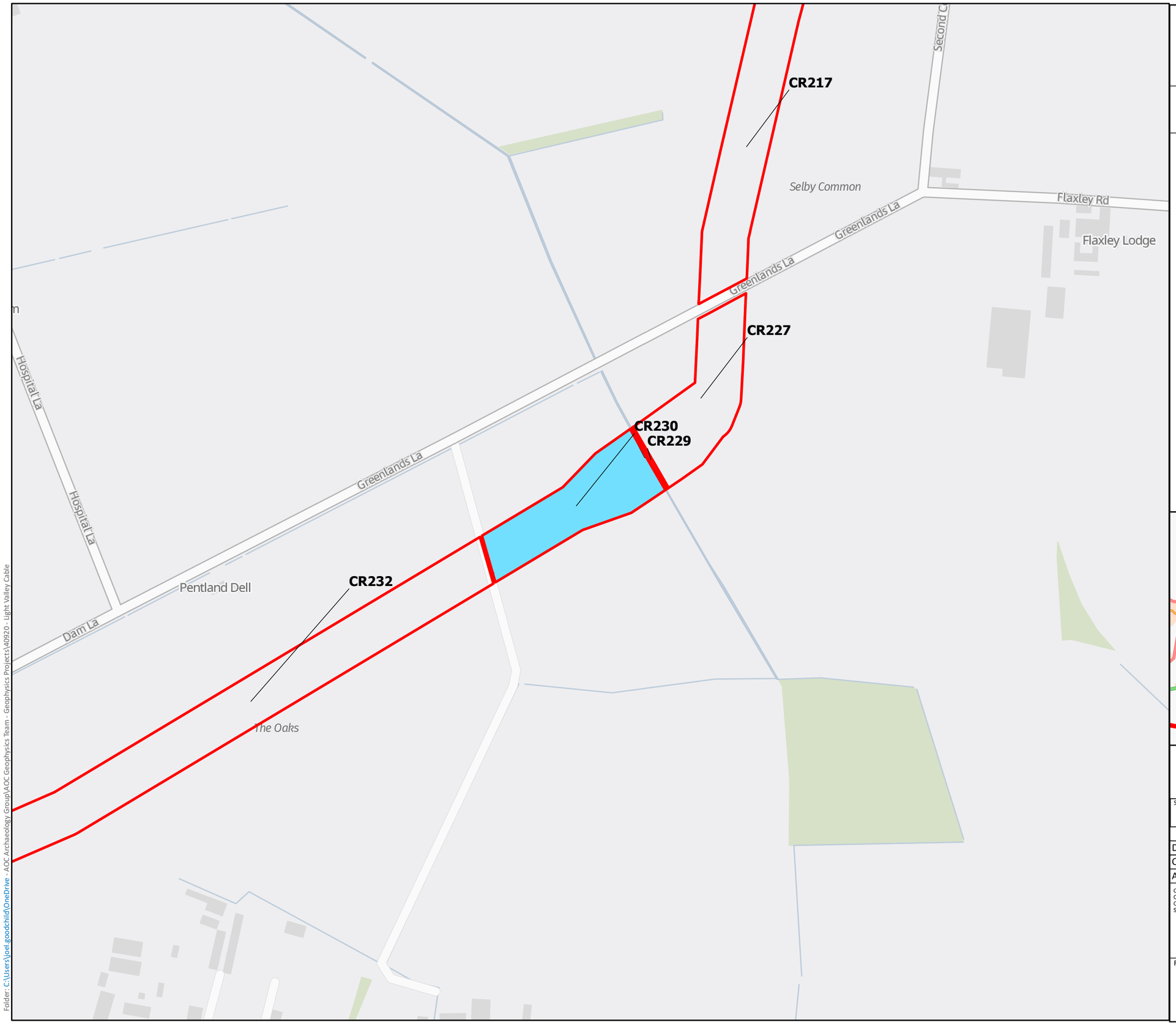
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

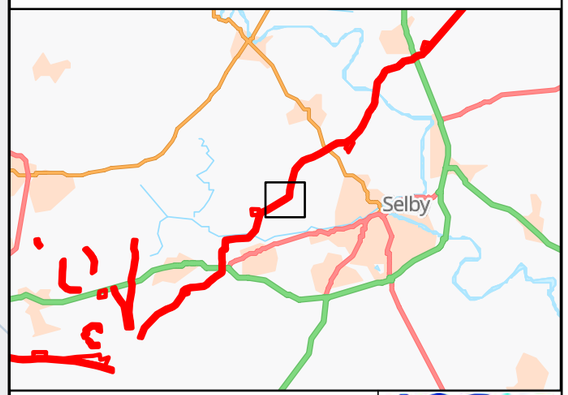
Figure 2.10

Location of Survey Areas



Legend

- Light Valley Cable Route
- Bartington 601-2



0 200 m

N

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936
Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

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Checked by:	**CS**	Date:	**12/01/2026 15:21**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**12/01/2026 15:21**	AOC Project No:	**40920**

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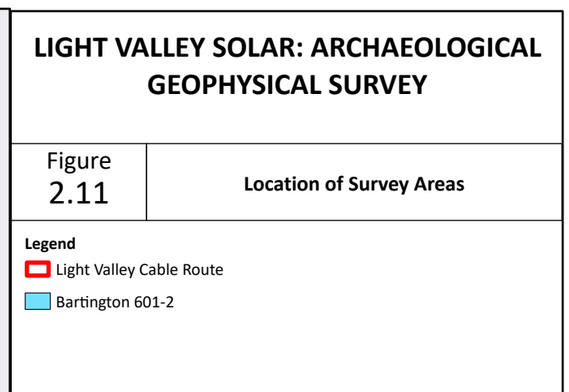
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.11

Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington 601-2



0 200 m N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	CS	Date:	12/01/2026 15:21	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 2.12

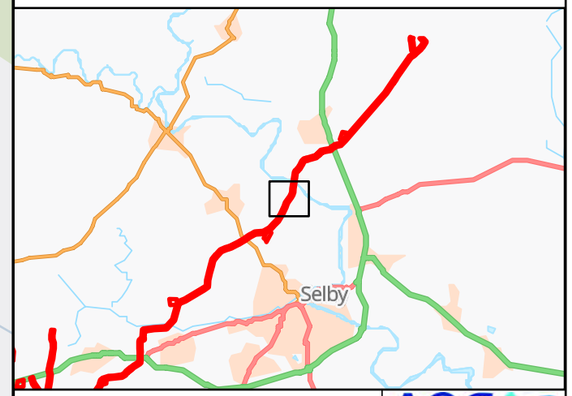
Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington Cart

CR133
CR126
CR142
CR130
CR129
CR135
CR140
CR137
CR143
CR145
CR146
CR152
CR157
CR164

Lordship La
Mulberry Farm
Lordship La
Carman Carr La



0 200 m N

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	12/01/2026 15:21	Version:	1.0
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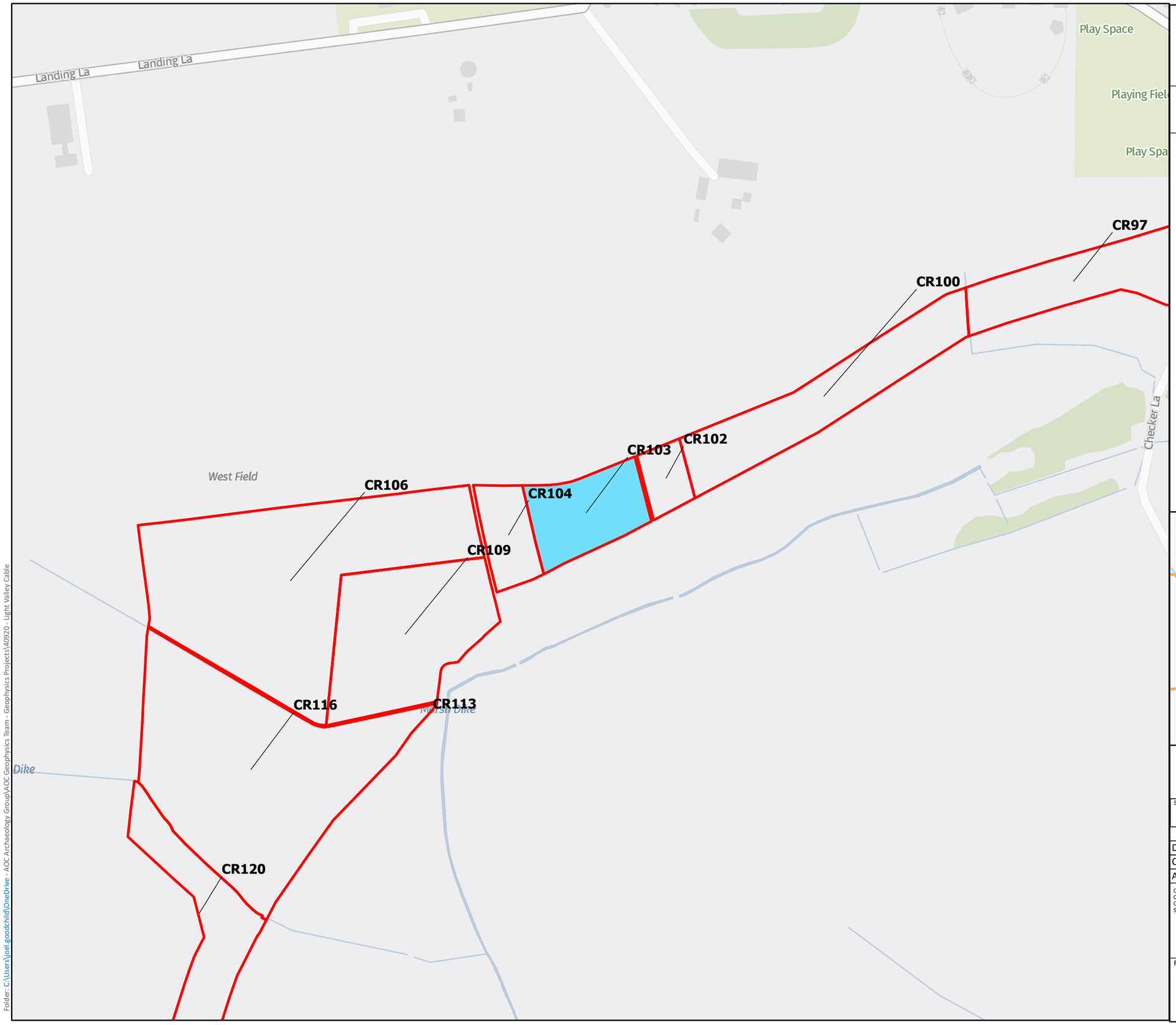
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

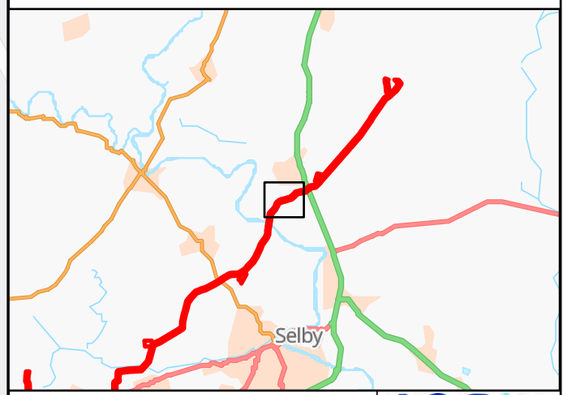
Figure 2.13

Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington 601-2





0 200 m N

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System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	12/01/2026 15:21	Version:	1.0
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Approved by:	CS	Date:	12/01/2026 15:21	AOC Project No:	40920

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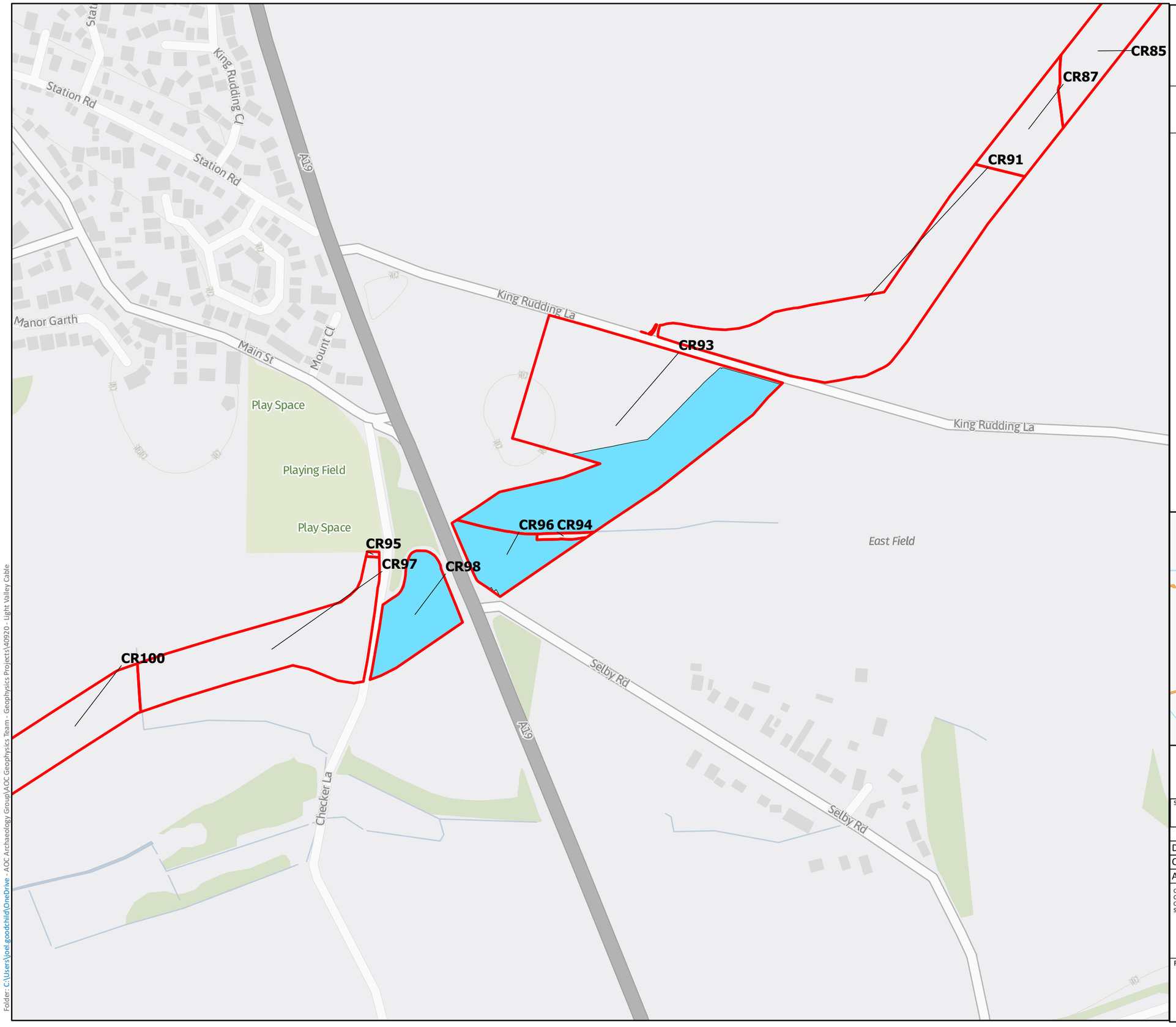
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

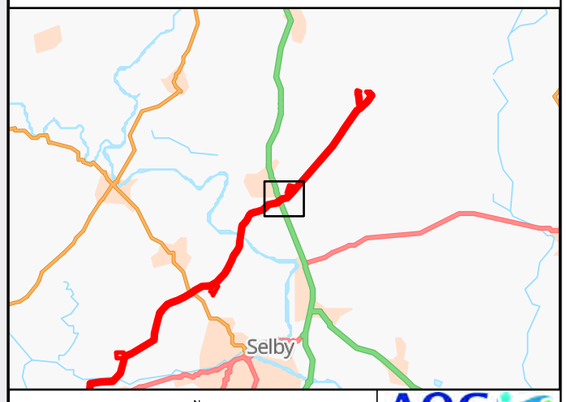
Figure 2.14

Location of Survey Areas

Legend

- Light Valley Cable Route
- Bartington 601-2





0 200 m N

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System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**12/01/2026 15:21**	Version:	**1.0**
Checked by:	**CS**	Date:	**12/01/2026 15:21**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**12/01/2026 15:21**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

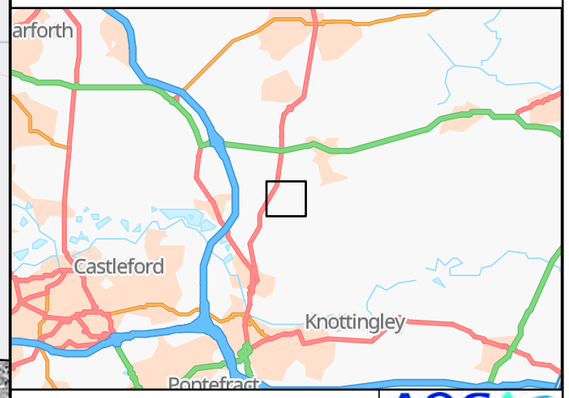
Figure 3.1	Summary Greyscale Images

Legend

- Light Valley Cable Route
- Surveyed
- Unsuitable

2nT

-1nT



CR365
CR387
CR397
CR407
CR411
CR416
CR412
CR418
West Park Farm
Border
Hillam La
Ox Moor
almon
Ledgate La
Common La
A162

0 N 200 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
Checked by:	CS	Date:	21/01/2026 18:40	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.2

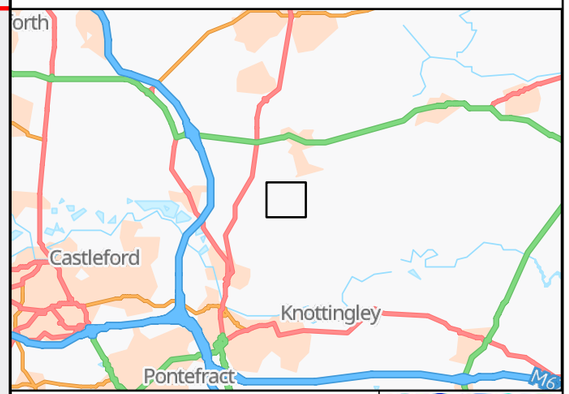
Summary Greyscale Images

Legend

- Light Valley Cable Route
- Surveyed
- Unsuitable

2nT

-1nT



0 N 200 m

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:40**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:40**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**21/01/2026 18:40**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

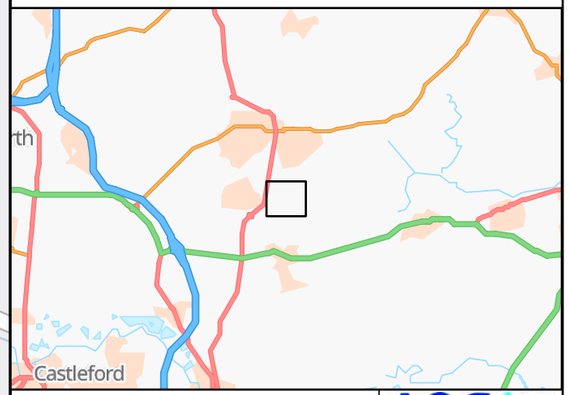
Figure 3.3	Summary Greyscale Images

Legend

Light Valley Cable Route

2nT

-1nT



0 200 m

N

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:40**	Version:	**1.0**
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Approved by:	**CS**	Date:	**21/01/2026 18:40**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.4

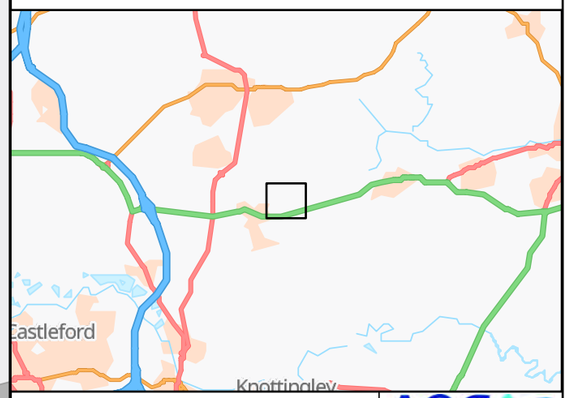
Summary Greyscale Images

Legend

- Light Valley Cable Route
- Unsuitable

2nT

-1nT



0 200 m

N

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System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
Checked by:	CS	Date:	21/01/2026 18:40	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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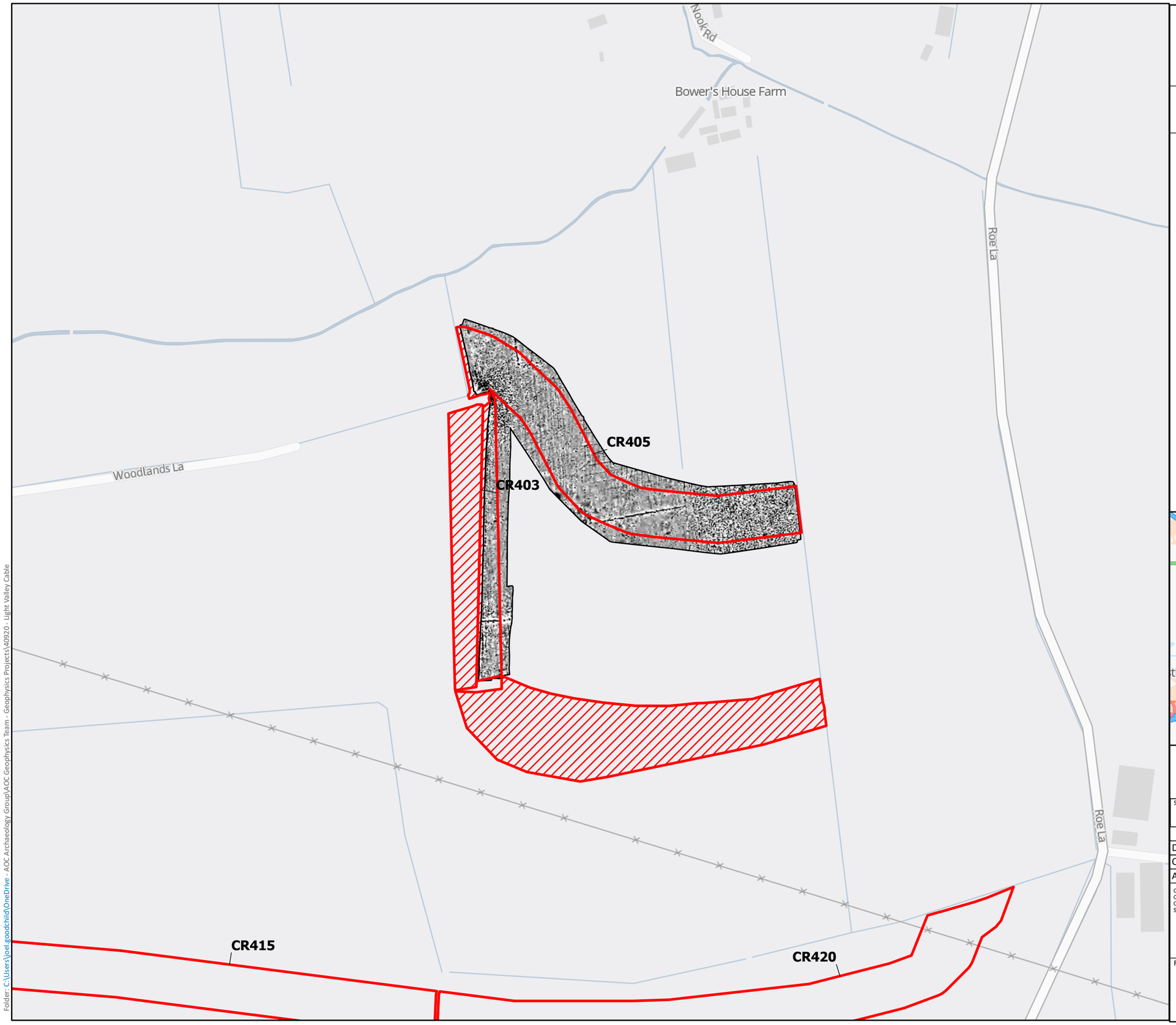
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.5

Summary Greyscale Images

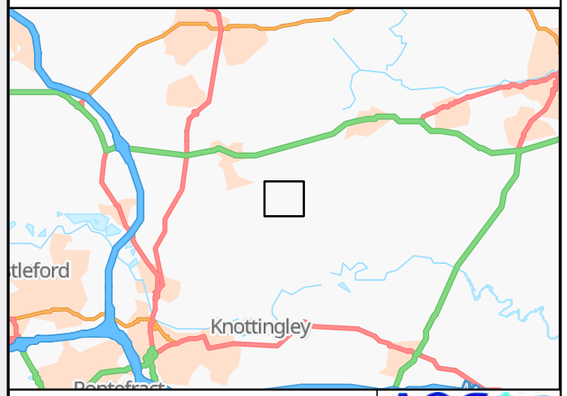


Legend

- Light Valley Cable Route
- Unsuitable

2nT

-1nT



0 200 m

N

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936
Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.6

Summary Greyscale Images

Legend

- Light Valley Cable Route
- Outstanding
- Unsuitable

2nT

-1nT

CR260

CR279

CR282

CR297

CR306

Hambleton Common

Common La

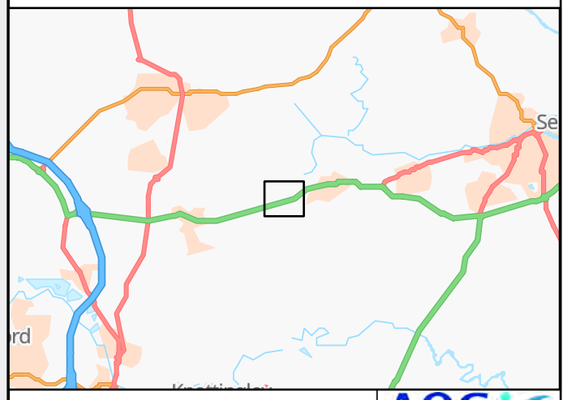
A63

Brecksewood

Fox La

Old La

Other Sports Facility



0 200 m

N

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System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
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Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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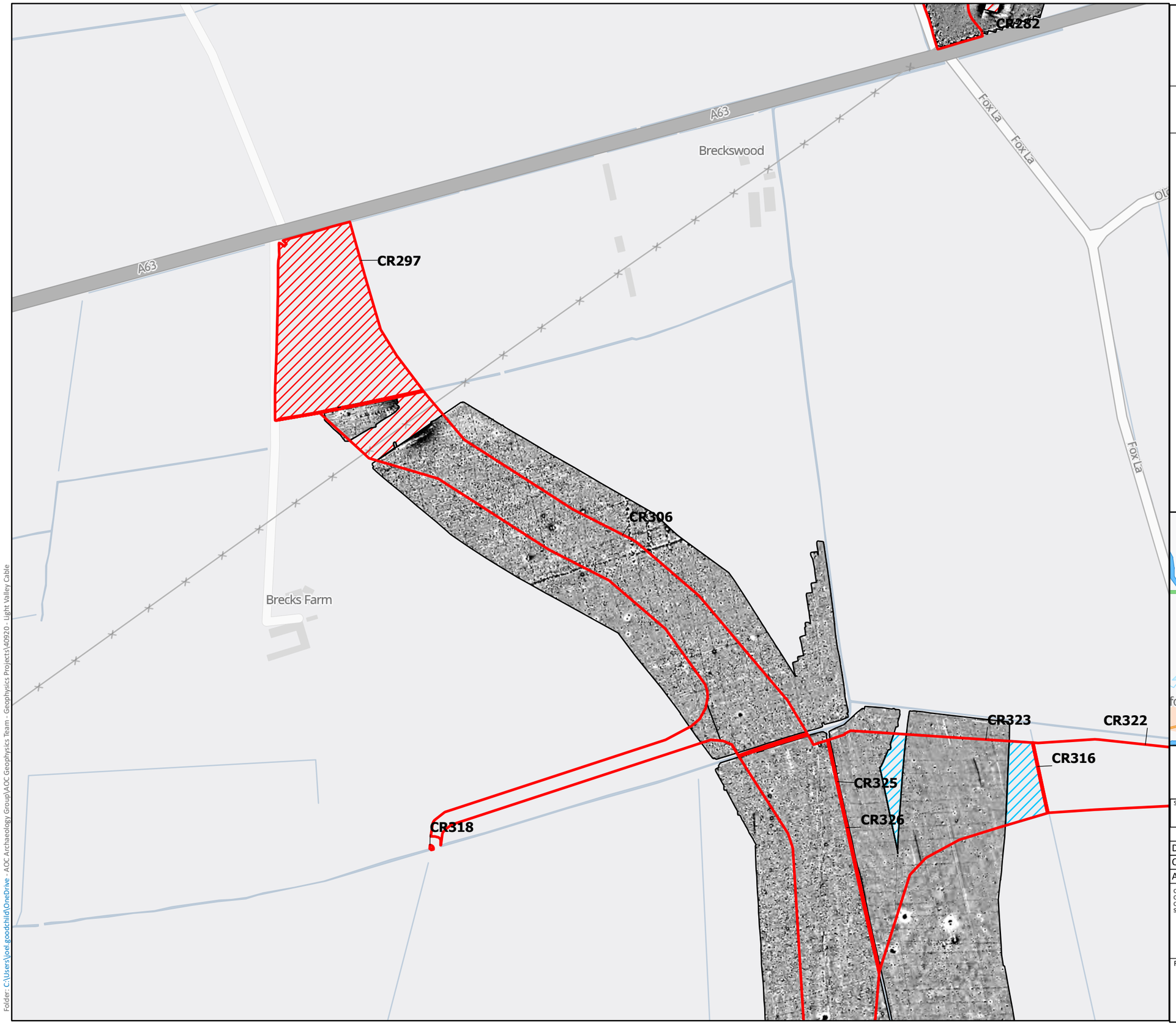
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.7

Summary Greyscale Images

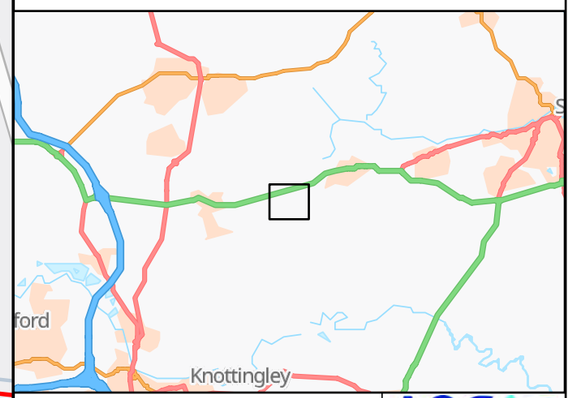


Legend

- Light Valley Cable Route
- Outstanding
- Unsuitable

2nT

-1nT



0 N 200 m

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System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936
Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
Checked by:	CS	Date:	21/01/2026 18:40	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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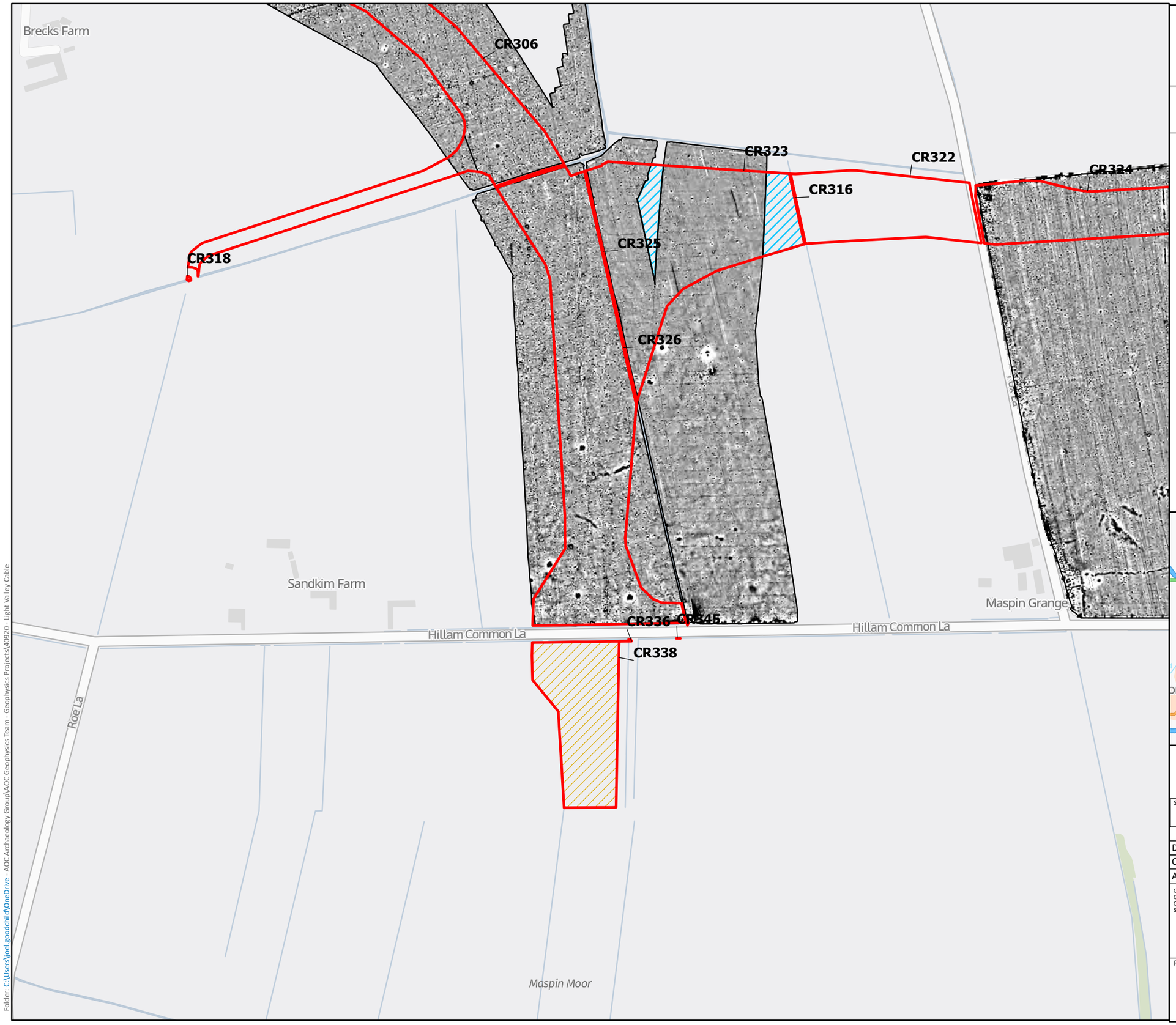
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.8

Summary Greyscale Images

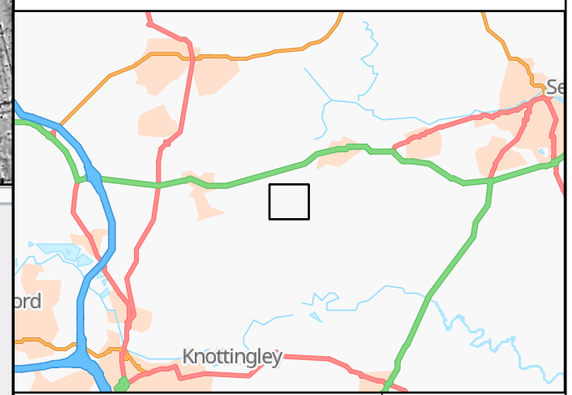


Legend

- Light Valley Cable Route
- No Access
- Outstanding

2nT

-1nT



0 N 200 m

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Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.9

Summary Greyscale Images

Legend

- Light Valley Cable Route
- Outstanding

2nT

-1nT

CR319

CR323

CR322

CR316

CR324

CR317

CR344

Whiteland

Hagg House

Maspin Grange

Hillam Common La

Hillam Rd

Hillam Rd

Selby

Knottingley

0 200 m

N

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System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
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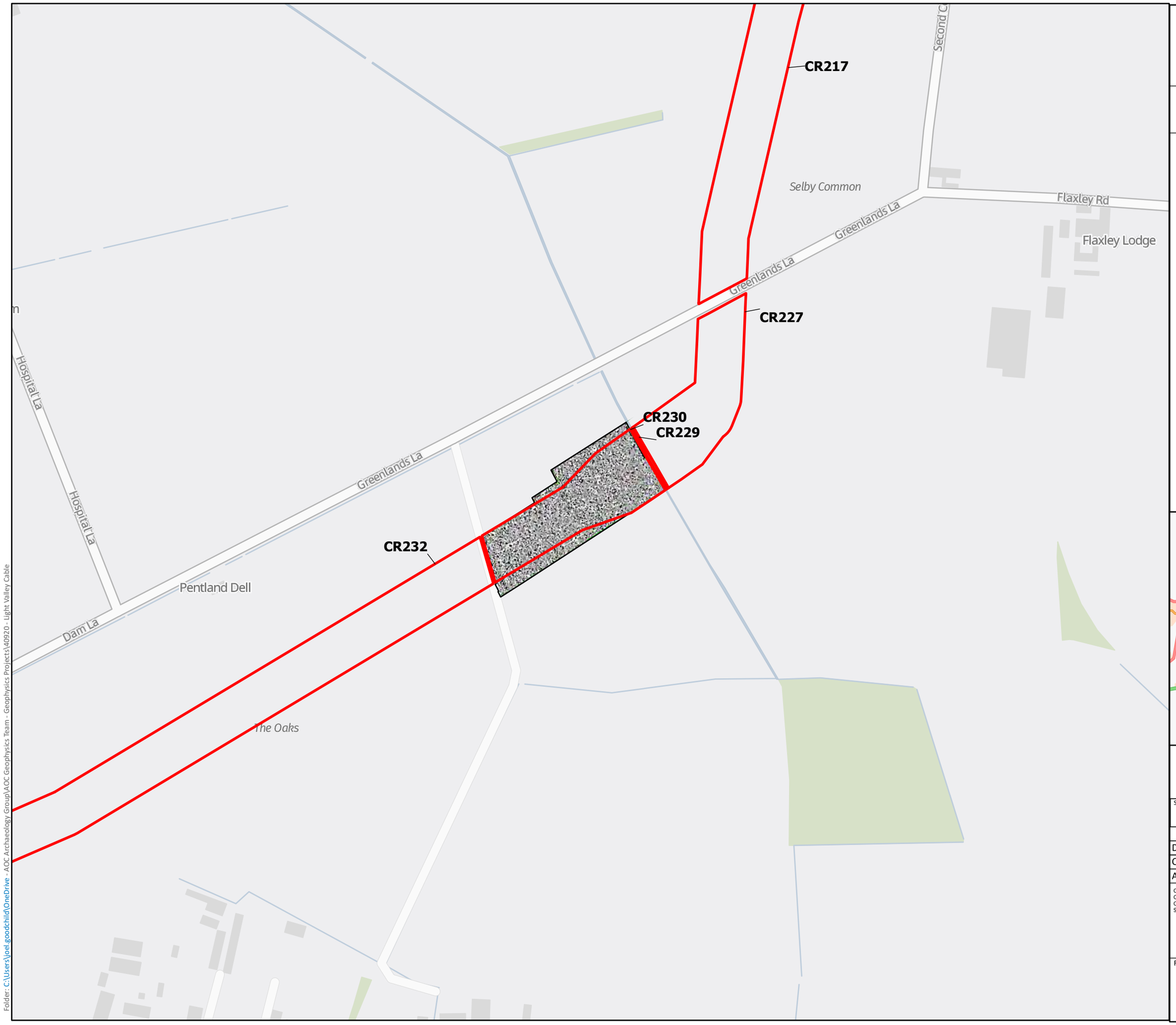
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.10

Summary Greyscale Images

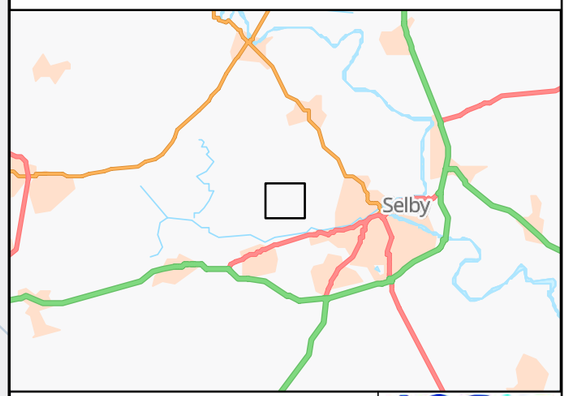


Legend

Light Valley Cable Route

2nT

-1nT



0 N 200 m

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:40**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:40**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**21/01/2026 18:40**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.11

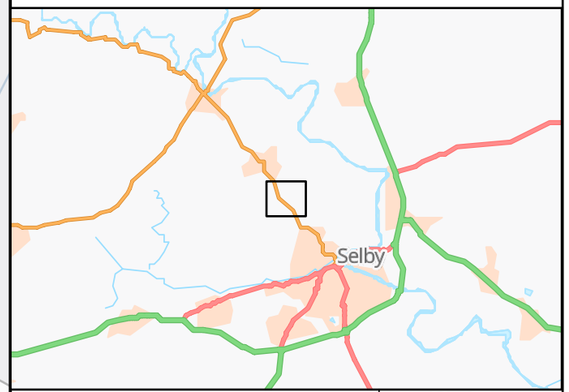
Summary Greyscale Images

Legend

Light Valley Cable Route

2nT

-1nT



0 N 200 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.12

Summary Greyscale Images

Legend

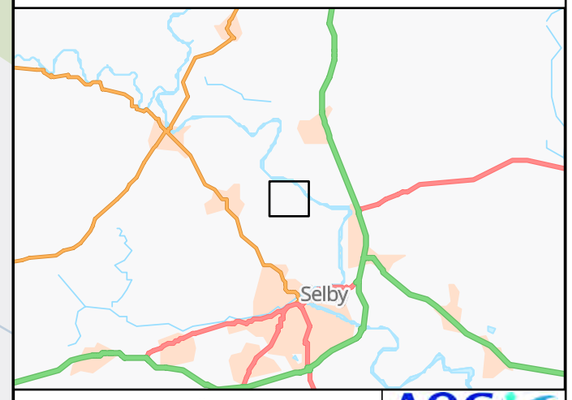
Light Valley Cable Route

2nT

-1nT

CR133
CR142
CR126
CR130
CR129
CR135
CR140
CR137
CR143
CR145
CR146
CR152
CR164
CR157

Lordship La
Mulberry Farm
Lordship La
Carman Carr La



0 200 m N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
Checked by:	CS	Date:	21/01/2026 18:40	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.13

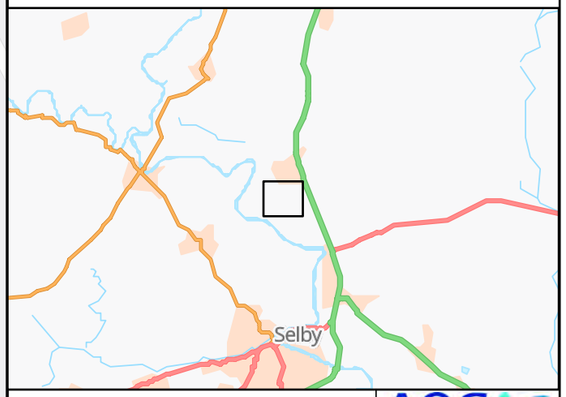
Summary Greyscale Images

Legend

Light Valley Cable Route

2nT

-1nT



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AOC Archaeology Group

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Projection: Transverse Mercator
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Checked by:	CS	Date:	21/01/2026 18:40	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 3.14

Summary Greyscale Images

Legend

- Light Valley Cable Route
- Outstanding
- Unsuitable

2nT

-1nT

CR87 CR85 CR91 CR93 CR96 CR94 CR95 CR97 CR98 CR100

Station Rd King Rudding Cl Station Rd A19 King Rudding La Manor Garth Main St Mount Cl Play Space Playing Field Play Space East Field King Rudding La Selby Rd A19 Selby Rd Checker La Selby Rd

Selby

0 N 200 m

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:40	Version:	1.0
Checked by:	CS	Date:	21/01/2026 18:40	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:40	AOC Project No:	40920

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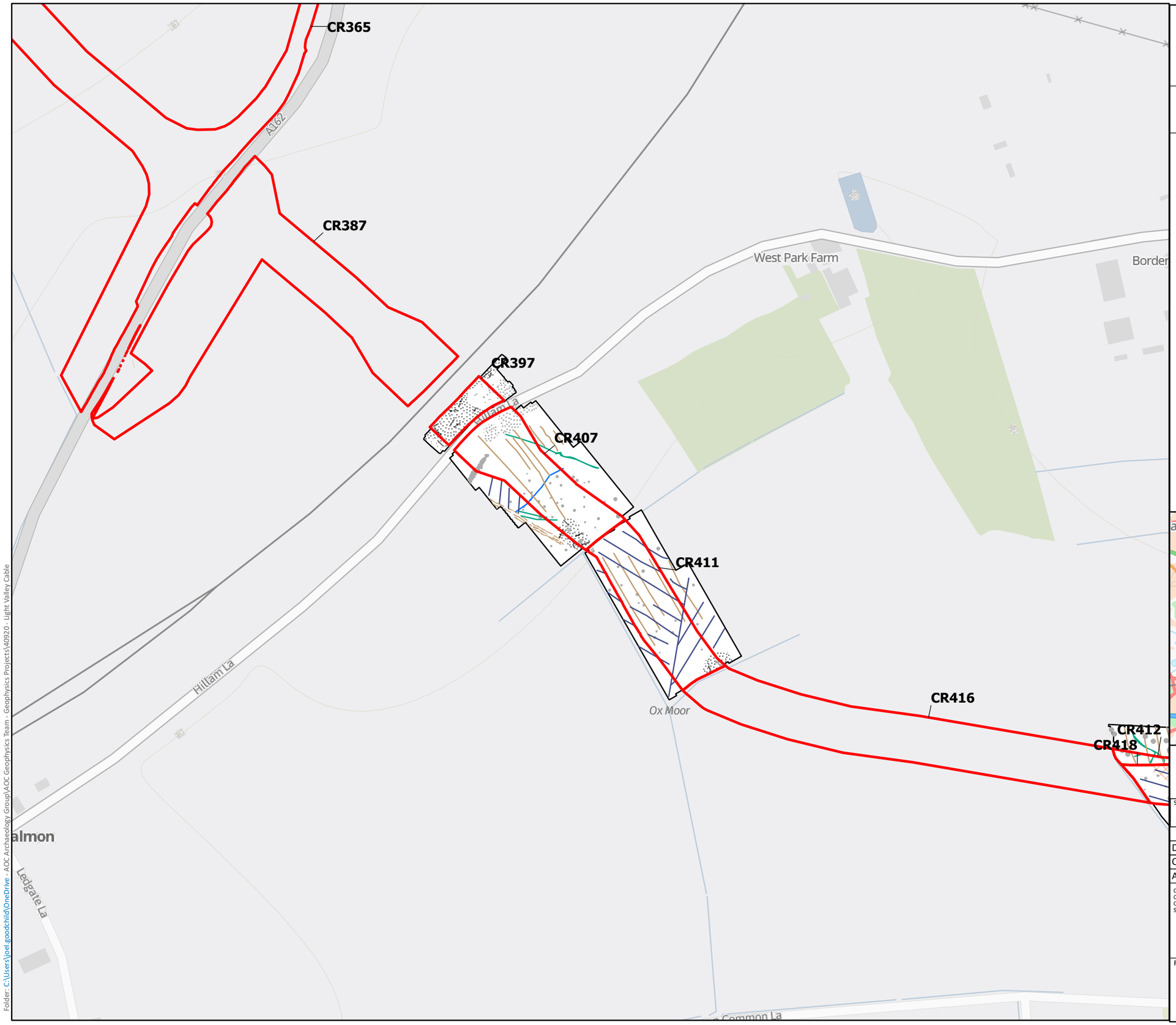
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

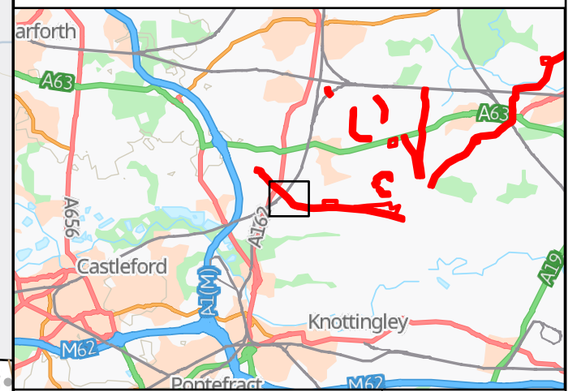
Figure 4.1

Summary Interpretation



Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Historic Feature)
- Linear Trend (Unclear Origin)
- Linear Trend (Agricultural, Ridge and Furrow)
- Linear Trend (Drainage)
- Anomaly (Unclear Origin)
- Anomaly (Agricultural)
- Spread (Geology/Natural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- Surveyed
- Unsuitable



0 200 m N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Checked by:	CS	Date:	20/01/2026 18:52	Status:	DRAFT
Approved by:	CS	Date:	20/01/2026 18:52	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

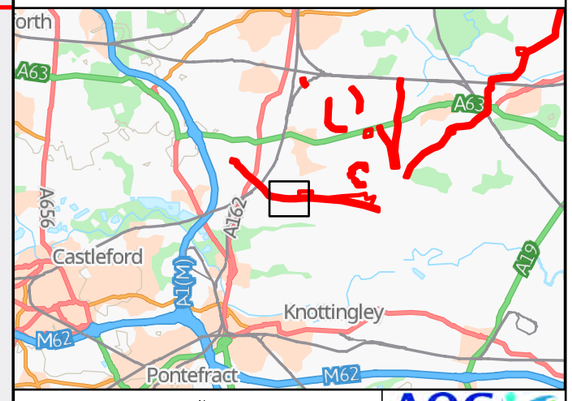
Figure 4.2

Summary Interpretation

Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Possible Archaeology)
- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Agricultural, Ridge and Furrow)
- Linear Trend (Drainage)
- Anomaly (Probable Archaeology)
- Anomaly (Possible Archaeology)
- Anomaly (Unclear Origin)
- Anomaly (Agricultural)
- Anomaly (Geology/Natural)
- Spread (Geology/Natural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Survey Outline
- Surveyed
- Unsuitable

CR399
CR413
CR414
CR416
CR412
CR418
Fairfield La
Bywater Wood
Burton Common La
Playing Field
Burton Common
Top Stone Drain
Anthony's



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AOC Archaeology Group

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Projection: Transverse Mercator
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Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Checked by:	CS	Date:	20/01/2026 18:52	Status:	DRAFT
Approved by:	CS	Date:	20/01/2026 18:52	AOC Project No:	40920

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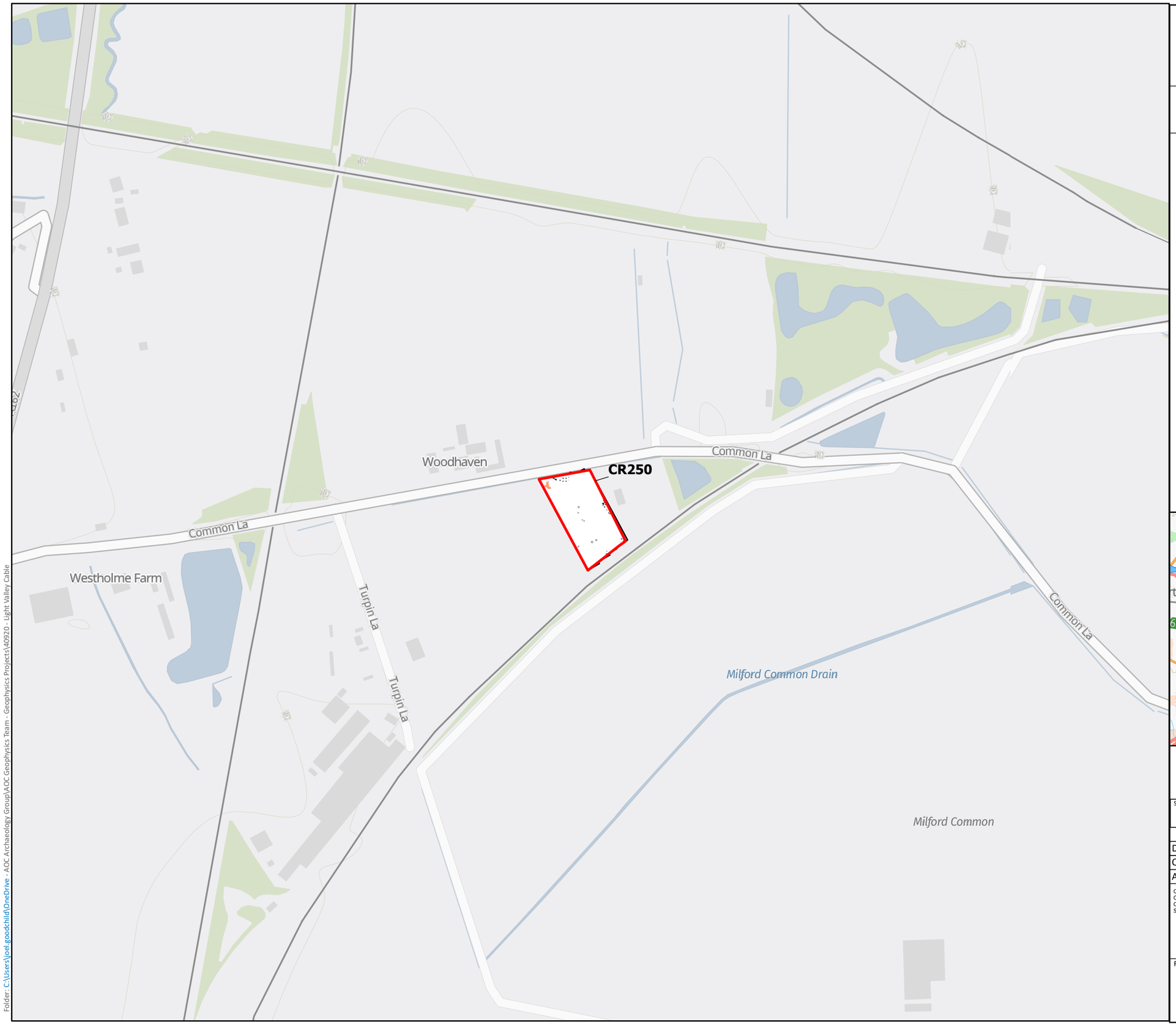
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

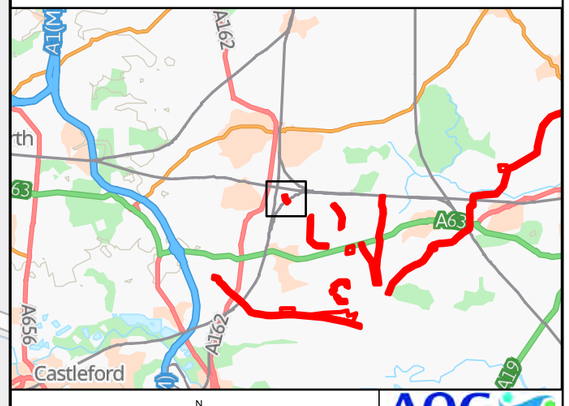
Figure 4.3

Summary Interpretation

Legend

- Light Valley Cable Route
- Anomaly (Geology/Natural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Survey Outline





0 N 200 m

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Checked by:	**CS**	Date:	**20/01/2026 18:52**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**20/01/2026 18:52**	AOC Project No:	**40920**

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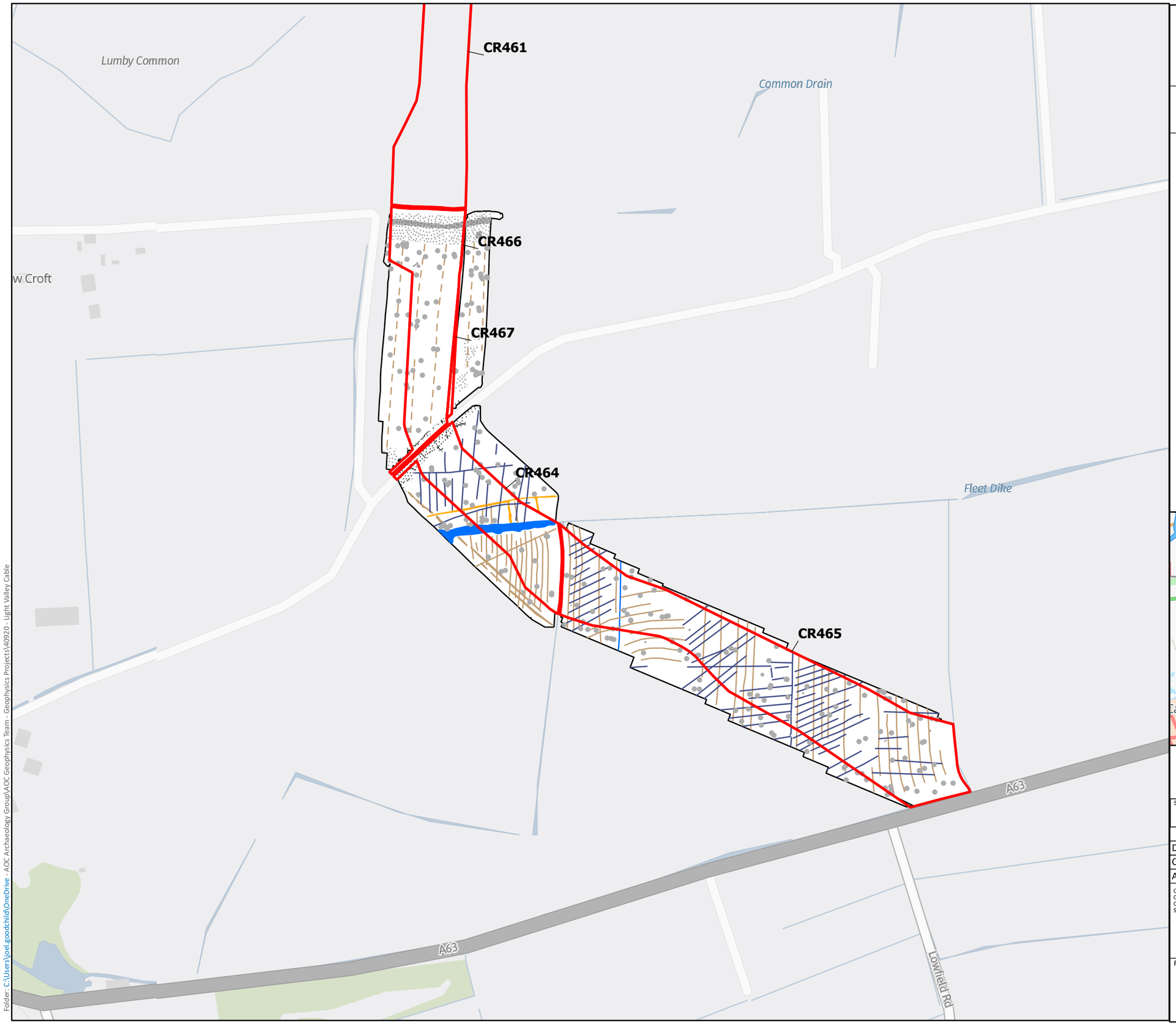
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

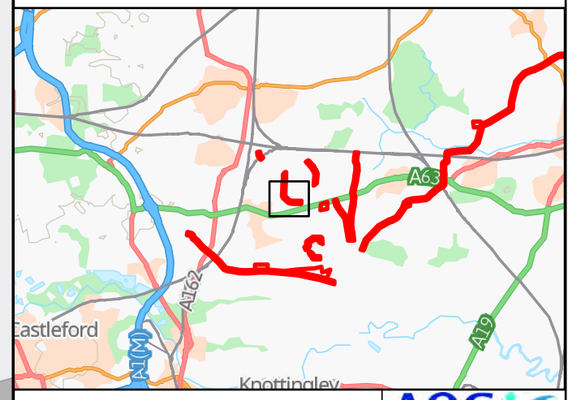
Figure 4.4

Summary Interpretation



Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Historic Feature)
- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Agricultural, Ridge and Furrow)
- Linear Trend (Drainage)
- Anomaly (Possible Archaeology)
- Anomaly (Historic Feature)
- Anomaly (Agricultural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- Unsuitable



0 — N — 200 m

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Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**20/01/2026 18:52**	Version:	**1.0**
Checked by:	**CS**	Date:	**20/01/2026 18:52**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**20/01/2026 18:52**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 4.5

Summary Interpretation

Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Drainage)
- Anomaly (Possible Archaeology)
- Anomaly (Historic Feature)
- Spread (Geology/Natural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- Unsuitable

CR405

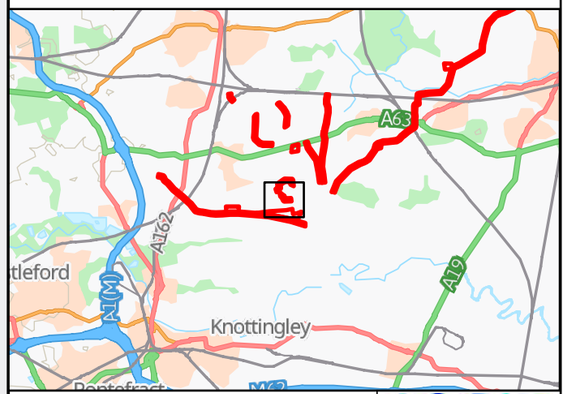
CR403

CR415

CR420

Roe La

Roe La



0 200 m

N

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936			Scale:	1:4,000
				Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

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Checked by:	**CS**	Date:	**20/01/2026 18:52**	Status:	**DRAFT**
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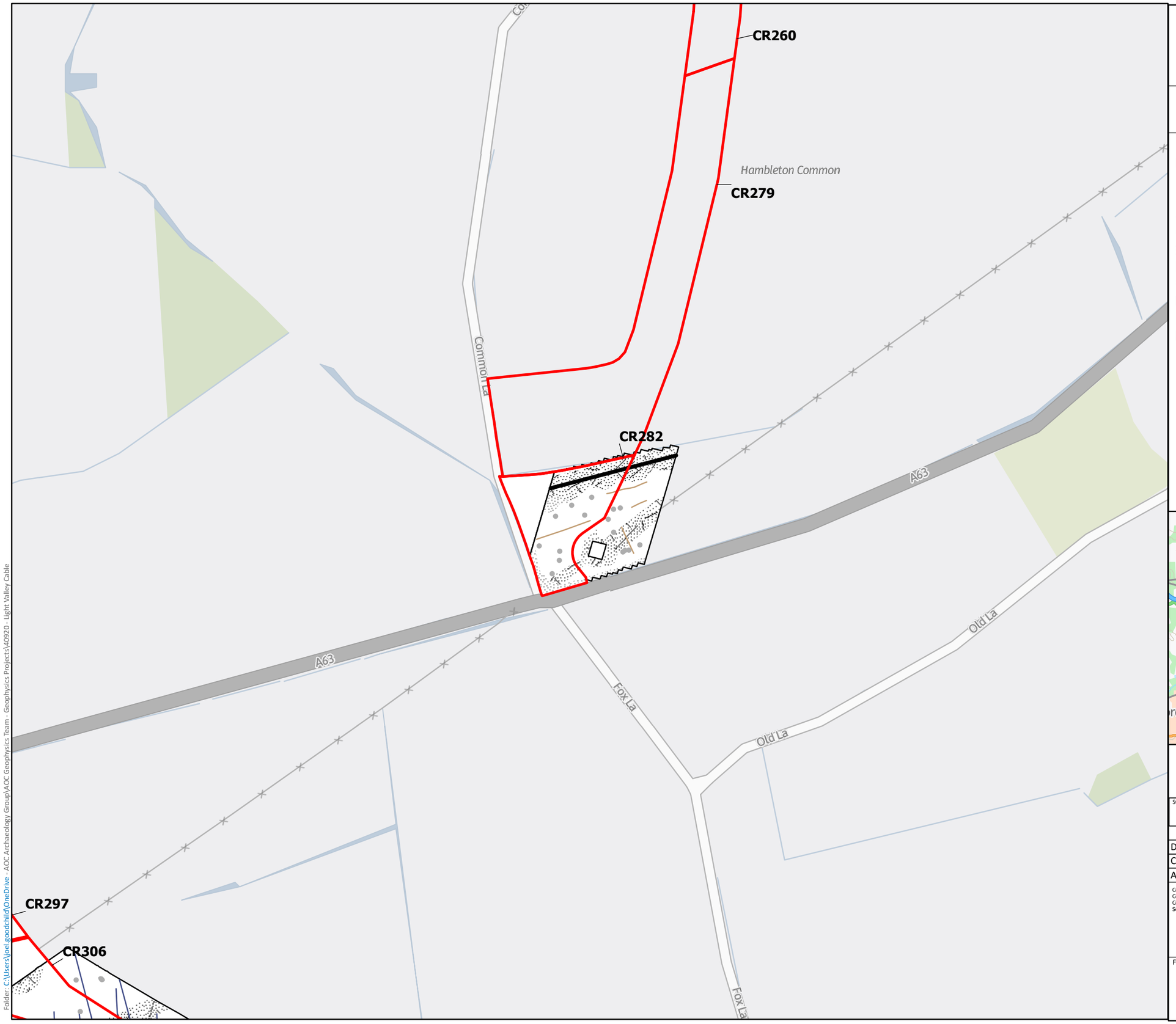
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

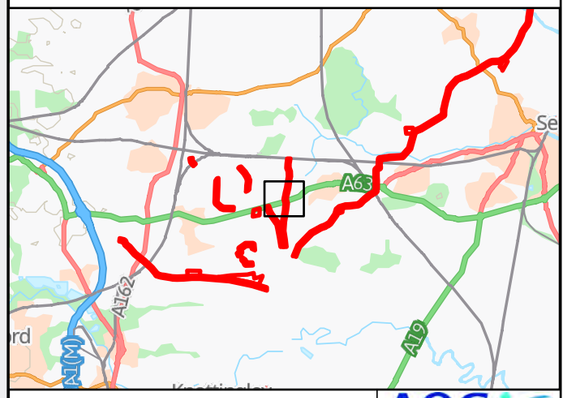
Figure 4.6

Summary Interpretation



Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Agricultural, Ridge and Furrow)
- Linear Trend (Drainage)
- Linear Trend (Service)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- Outstanding
- Unsuitable



0 N 200 m

AOC Archaeology Group

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936	Scale:	1:4,000
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Drawing Number: 05/40920/GEO/P8/

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Approved by:	**CS**	Date:	**20/01/2026 18:52**	AOC Project No:	**40920**

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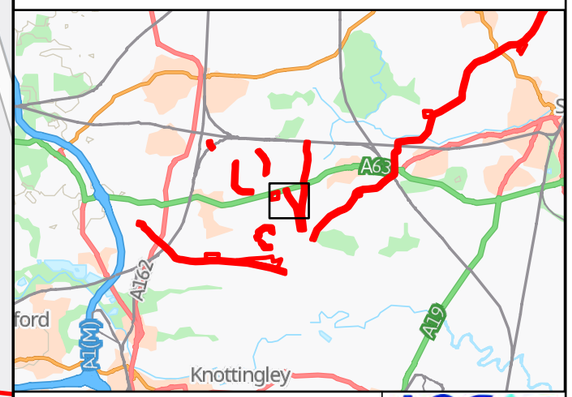
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 4.7

Summary Interpretation

Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Historic Feature)
- Linear Trend (Unclear Origin)
- Linear Trend (Agricultural, Ridge and Furrow)
- Linear Trend (Drainage)
- Linear Trend (Magnetic Distrubance)
- Anomaly (Historic Feature)
- Anomaly (Unclear Origin)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- Outstanding
- Unsuitable



0 200 m N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	CS	Date:	20/01/2026 18:52	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 4.8

Summary Interpretation

Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Drainage)
- Anomaly (Possible Archaeology)
- Anomaly (Historic Feature)
- Anomaly (Unclear Origin)
- Anomaly (Geology/Natural)
- Spread (Geology/Natural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- No Access
- Outstanding

CR306
CR318
CR323
CR322
CR324
CR316
CR325
CR326
CR336
CR345
CR338
Hillam Common La
Roe La
Fox La
Maspin Moor

0 200 m N

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	20/01/2026 18:52	Version:	1.0
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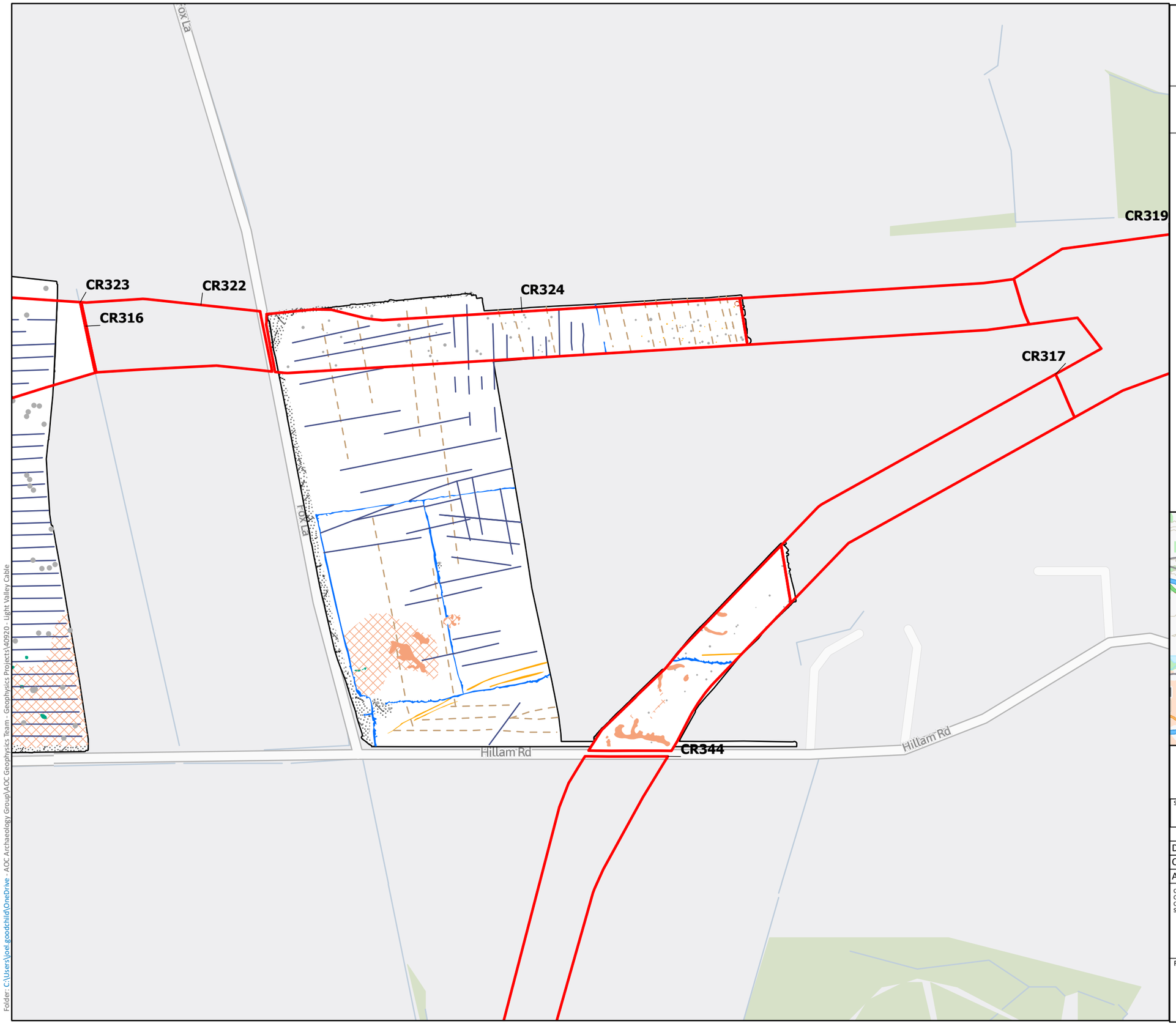
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

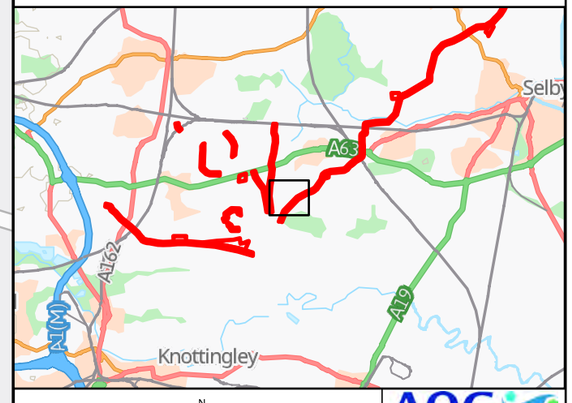
Figure 4.9

Summary Interpretation



Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Possible Archaeology)
- Linear Trend (Agricultural, Ploughing)
- Linear Trend (Drainage)
- Anomaly (Probable Archaeology)
- Anomaly (Possible Archaeology)
- Anomaly (Historic Feature)
- Anomaly (Unclear Origin)
- Anomaly (Geology/Natural)
- Spread (Geology/Natural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Survey Outline
- Outstanding



0 200 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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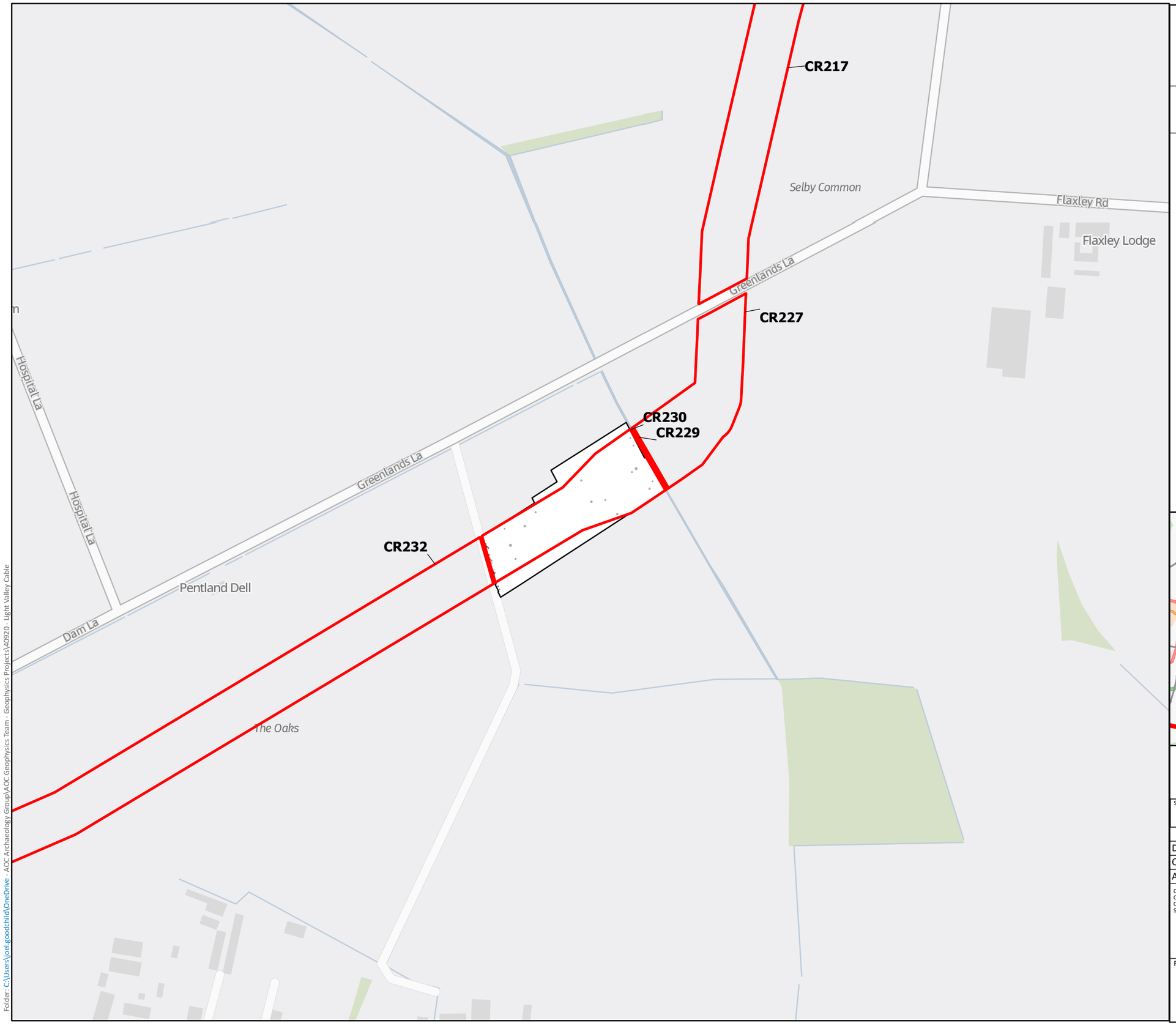


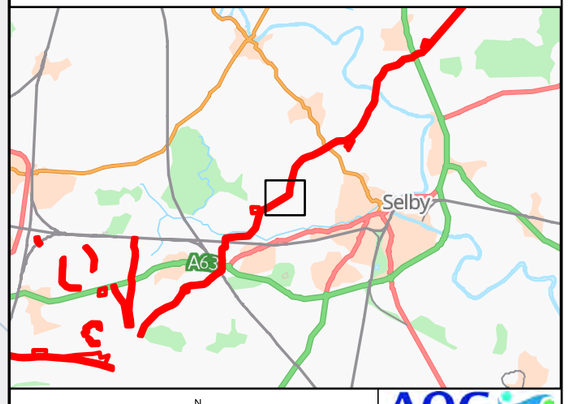
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 4.10

Summary Interpretation

Legend

- Light Valley Cable Route
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Survey Outline



0 200 m N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	**CS**	Date:	**20/01/2026 18:52**	AOC Project No:	**40920**

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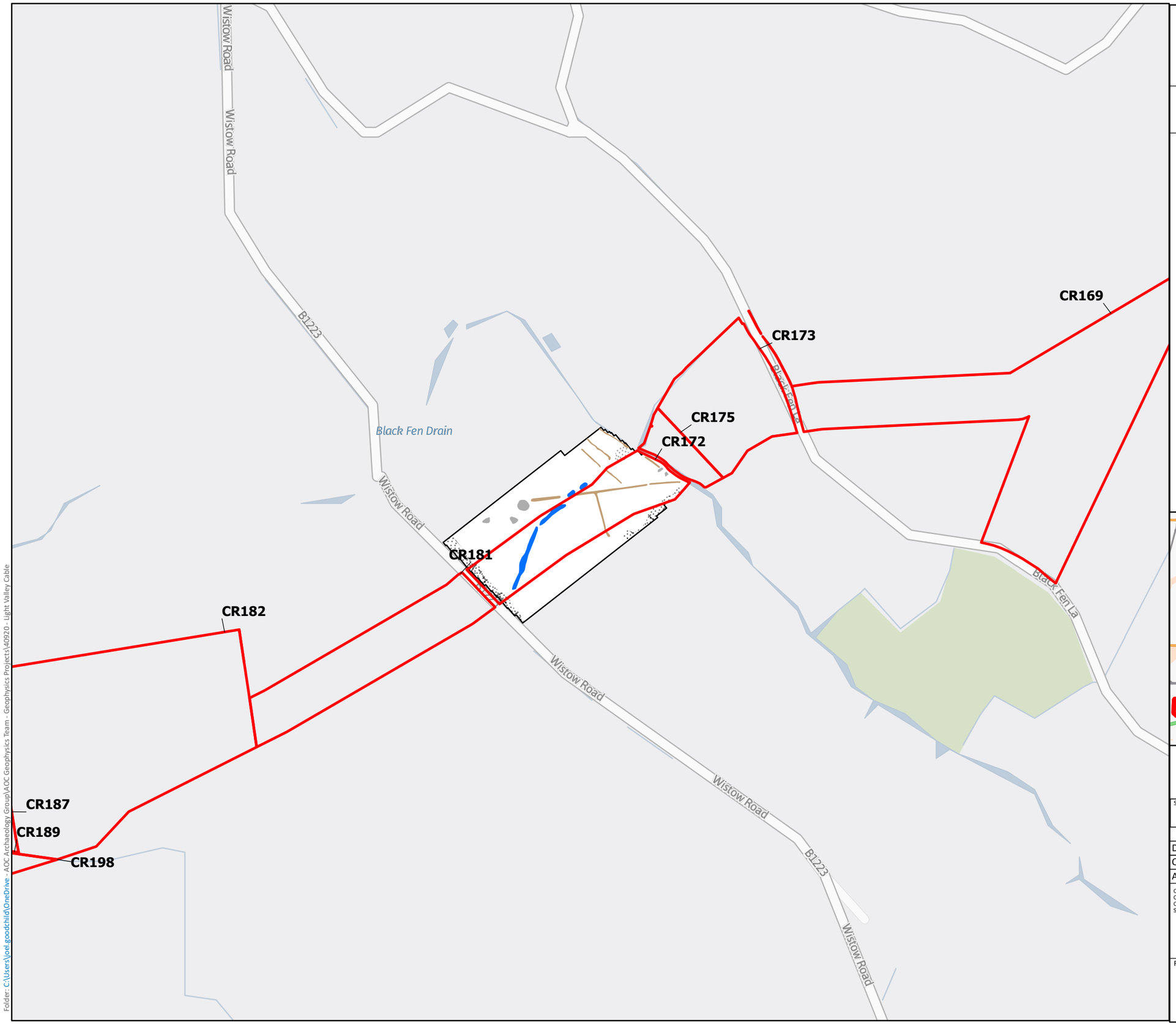
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

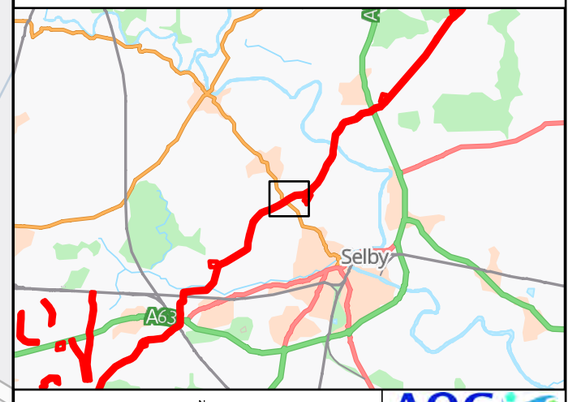
Figure 4.11

Summary Interpretation



Legend

- Light Valley Cable Route
- Anomaly (Historic Feature)
- Anomaly (Agricultural)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline



0 N 200 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Checked by:	CS	Date:	20/01/2026 18:52	Status:	DRAFT
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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

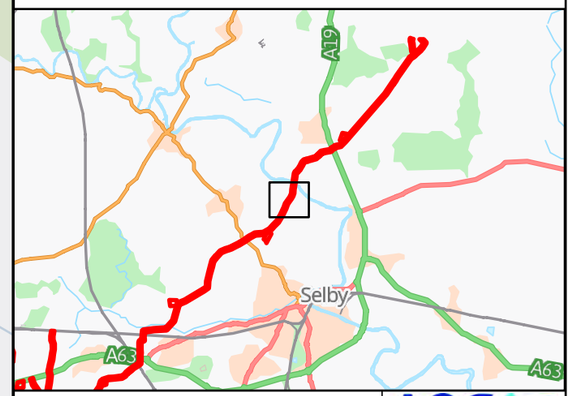
Figure 4.12

Summary Interpretation

Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Drainage)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline

CR133
CR142
CR126
CR130
CR129
CR135
CR140
CR137
CR143
CR145
CR146
CR152
CR164
CR157
Lordship La
Mulberry Farm
Lordship La
arman Carr La



0 200 m N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:4,000

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

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Approved by:	CS	Date:	20/01/2026 18:52	AOC Project No:	40920

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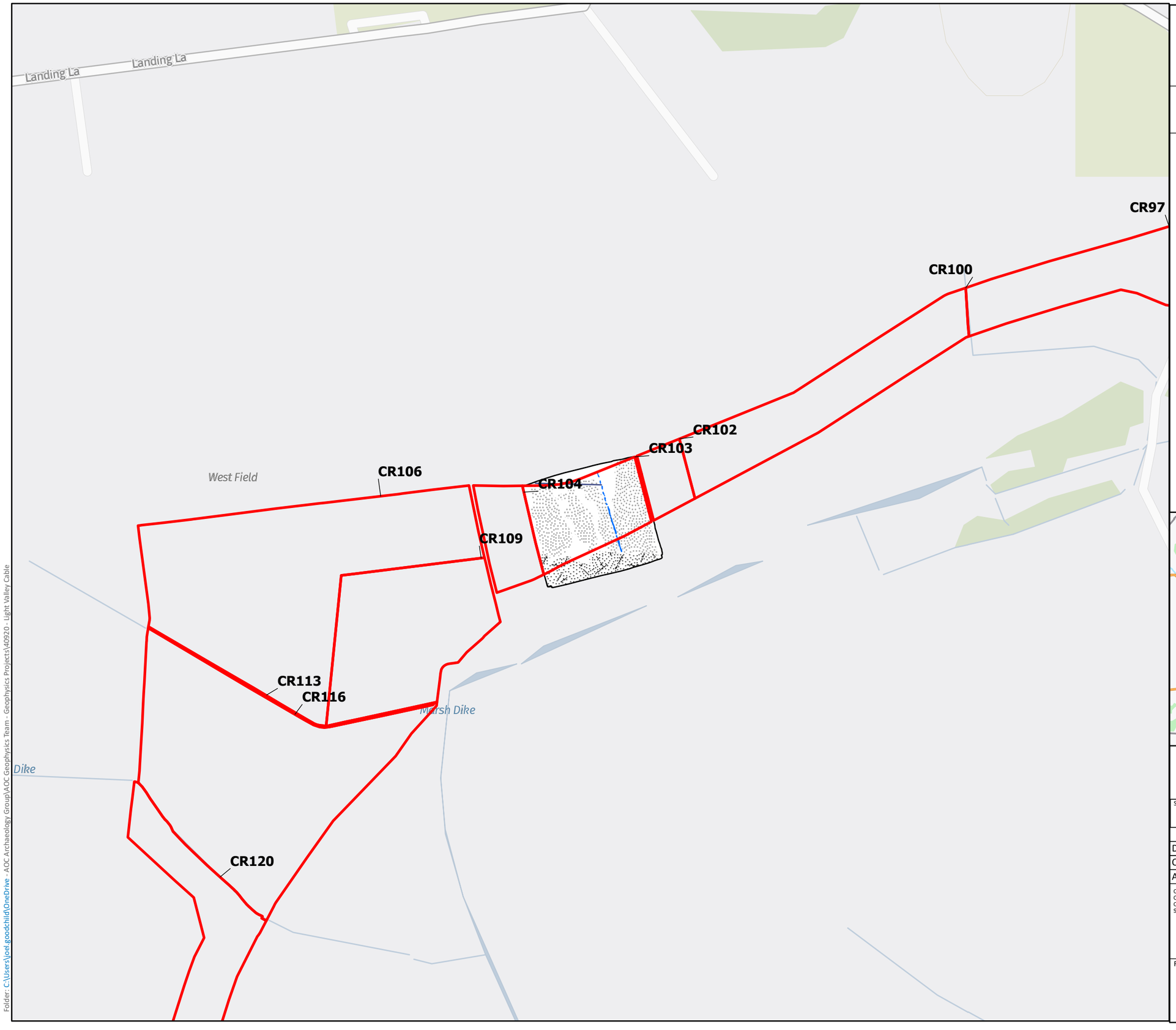
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

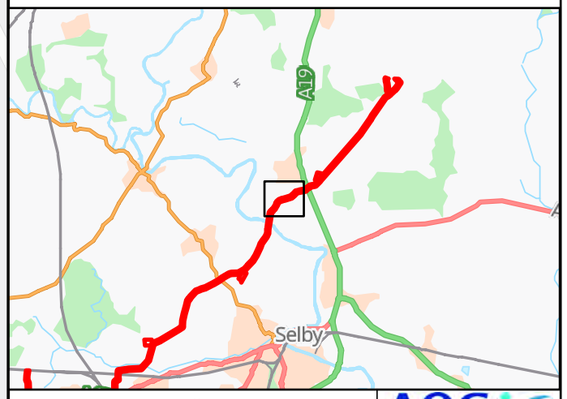
Figure 4.13

Summary Interpretation



Legend

- Light Valley Cable Route
- Linear Trend (Drainage)
- Anomaly (Historic Feature)
- Spread (Magnetic Disturbance)
- Spread (Ferrous/Iron Spike)
- Survey Outline



0 200 m

N

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936
Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	20/01/2026 18:52	Version:	1.0
Checked by:	CS	Date:	20/01/2026 18:52	Status:	DRAFT
Approved by:	CS	Date:	20/01/2026 18:52	AOC Project No:	40920

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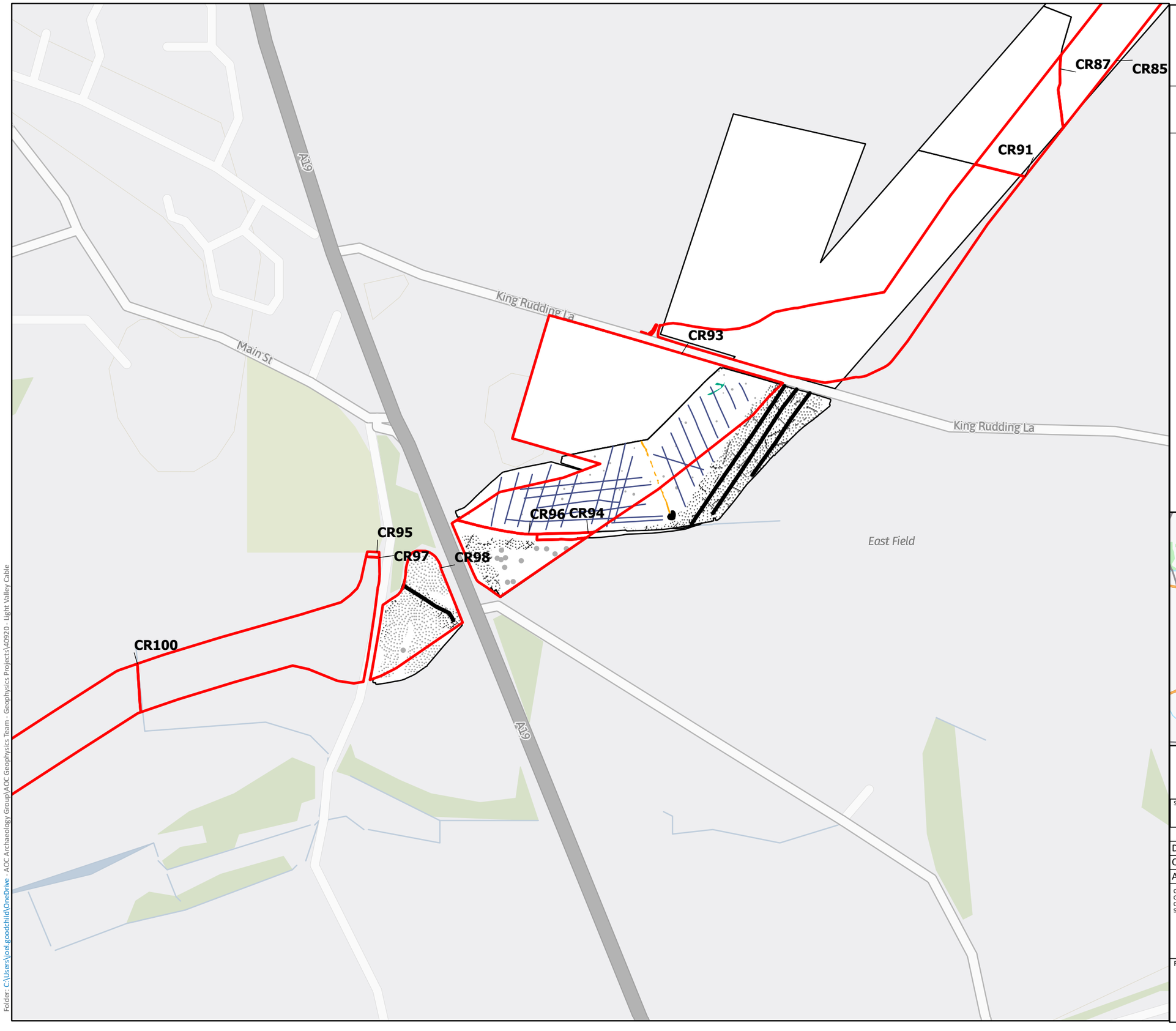
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

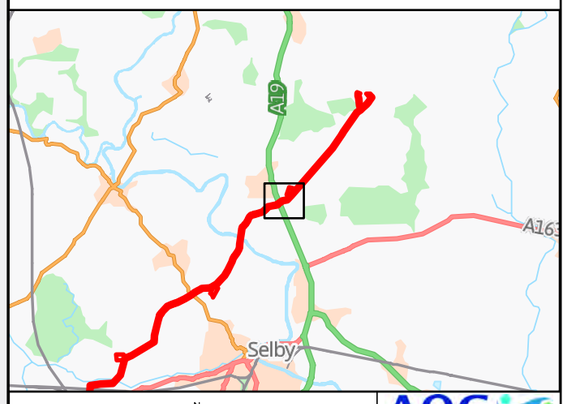
Figure 4.14

Summary Interpretation



Legend

- Light Valley Cable Route
- Ferrous Anomalies/Iron Spike
- Linear Trend (Drainage)
- Linear Trend (Service)
- Anomaly (Possible Archaeology)
- Anomaly (Unclear Origin)
- Anomaly (Magnetic Disturbance)
- Spread (Magnetic Disturbance)
- Anomaly (Ferrous/Iron Spike)
- Spread (Ferrous/Iron Spike)
- Survey Outline
- Outstanding
- Unsuitable



0 N 200 m

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936
Scale:	1:4,000
Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**20/01/2026 18:52**	Version:	**1.0**
Checked by:	**CS**	Date:	**20/01/2026 18:52**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**20/01/2026 18:52**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.1	**Processed Gradiometer Data: Greyscale Image: CR397, CR407**

Legend

Red Line Boundary

Status

Surveyed

449500

CR387

CR397

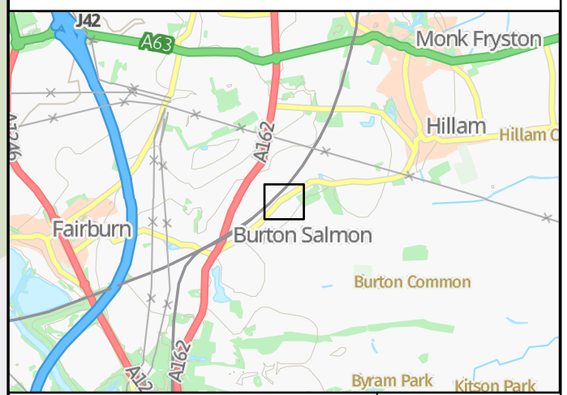
CR407

CR411

Hillam La

2nT

-1nT



0 40 m

N

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:1,250

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:34**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:34**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**21/01/2026 18:34**	AOC Project No:	**40920**

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.2	Processed Gradiometer Data: Greyscale Image: CR397, CR407, CR411

Legend

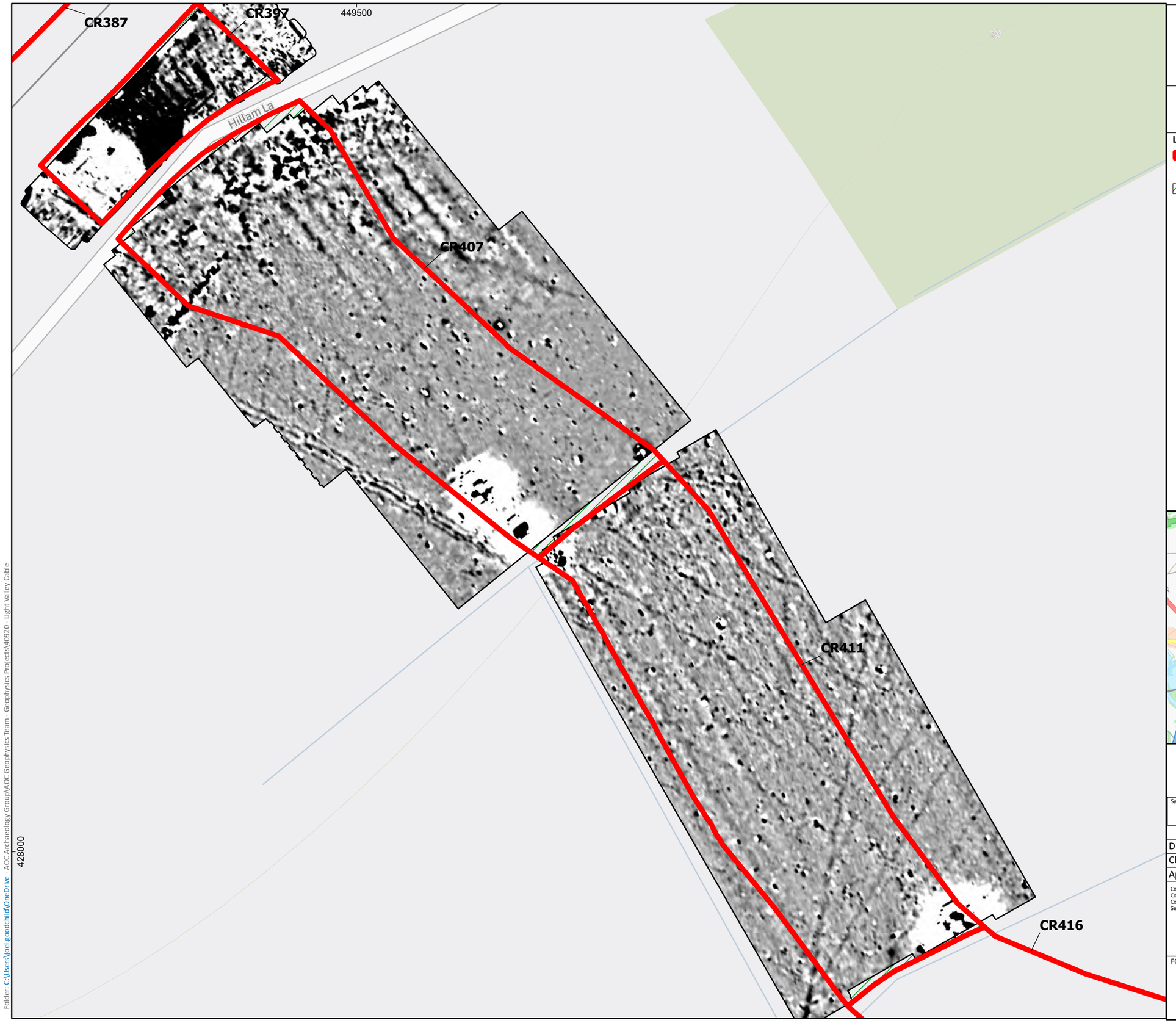
Red Line Boundary

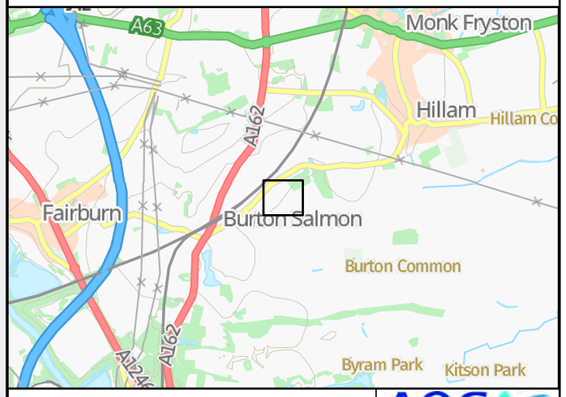
Status

Surveyed

2nT

-1nT





0 40 m

N

AOC Archaeology Group

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936			Scale:	1:1,250
				Page Size:	@ A3
Drawing Number: 05/40920/GEO/P8/					
Drawn by:	**JG**	Date:	**21/01/2026 18:34**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:34**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**21/01/2026 18:34**	AOC Project No:	**40920**

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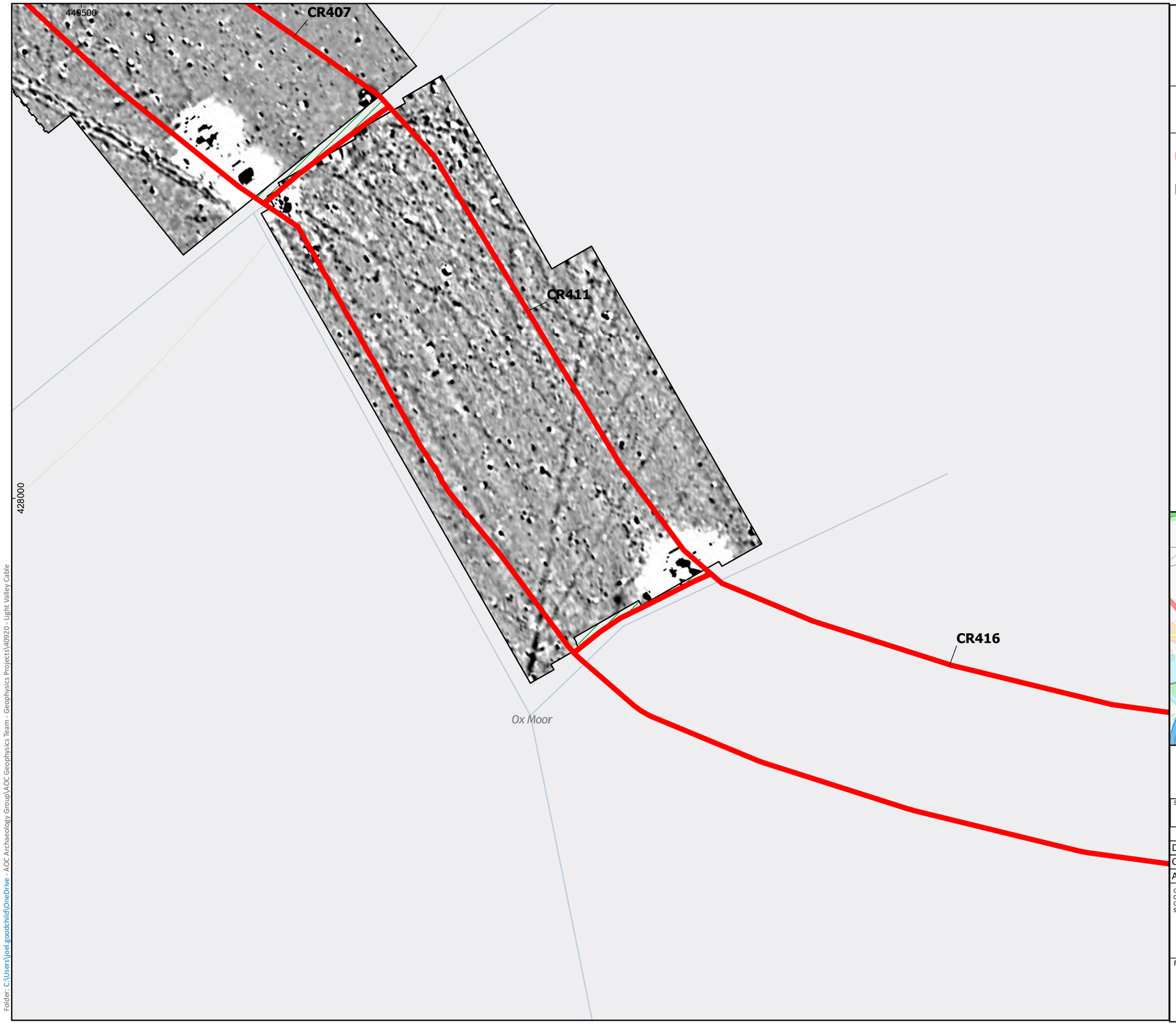
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.3	Processed Gradiometer Data: Greyscale Image: CR407, CR411



Legend

Red Line Boundary

Status

Surveyed

2nT

-1nT

0 N 40 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:1,250

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	JG	Date:	21/01/2026 18:34	Version:	1.0
Checked by:	CS	Date:	21/01/2026 18:34	Status:	DRAFT
Approved by:	CS	Date:	21/01/2026 18:34	AOC Project No:	40920

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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.4	**Processed Gradiometer Data: Greyscale Image: CR407, CR411**

428000

CR416

CR412

CR418

Legend

Red Line Boundary

Status

Surveyed

Unsuitable

2nT

-1nT

0 N 40 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:1,250

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:34**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:34**	Status:	**DRAFT**
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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.5	**Processed Gradiometer Data: Greyscale Image: CR418, CR414**

428000

450500

CR412

CR418

CR414

Legend

Red Line Boundary

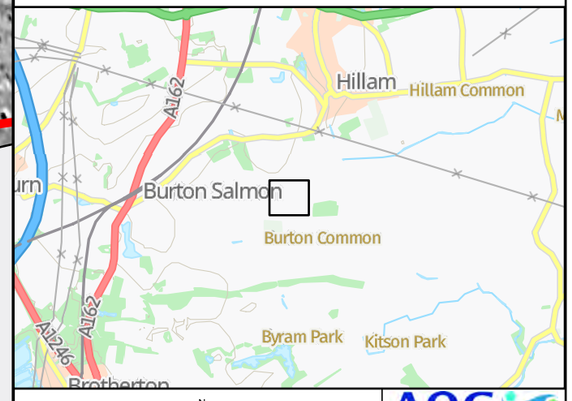
Status

Surveyed

Unsuitable

2nT

-1nT



0 N 40 m

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:1,250

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:34**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:34**	Status:	**DRAFT**
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LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.6	**Processed Gradiometer Data: Greyscale Image: CR418, CR414**

Legend

Red Line Boundary

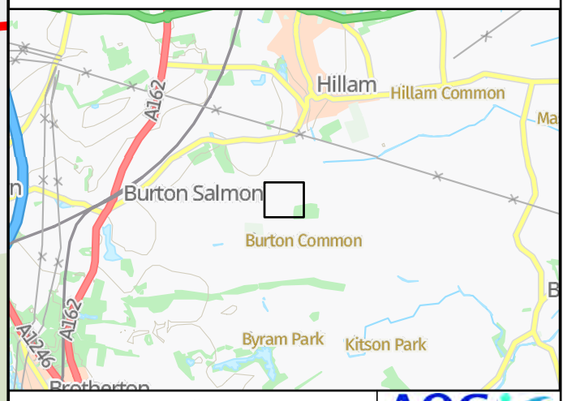
Status

Surveyed

Unsuitable

2nT

-1nT



0 40 m

N

AOC Archaeology Group

System: Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936

Scale: 1:1,250

Page Size: @ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:34**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:34**	Status:	**DRAFT**
Approved by:	**CS**	Date:	**21/01/2026 18:34**	AOC Project No:	**40920**

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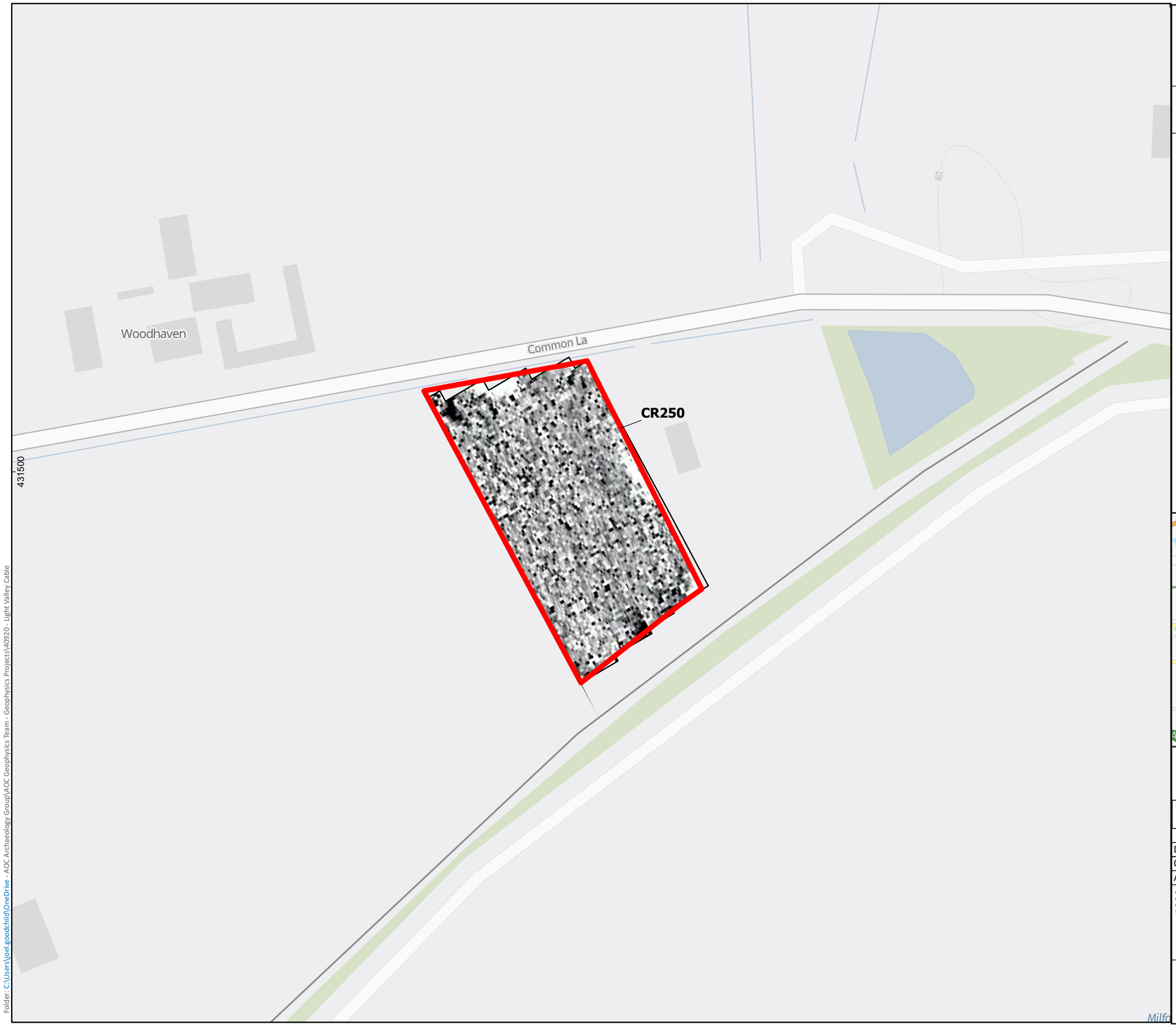
LIGHT VALLEY SOLAR: ARCHAEOLOGICAL GEOPHYSICAL SURVEY

Figure 5.7	**Processed Gradiometer Data: Greyscale Image: CR250**

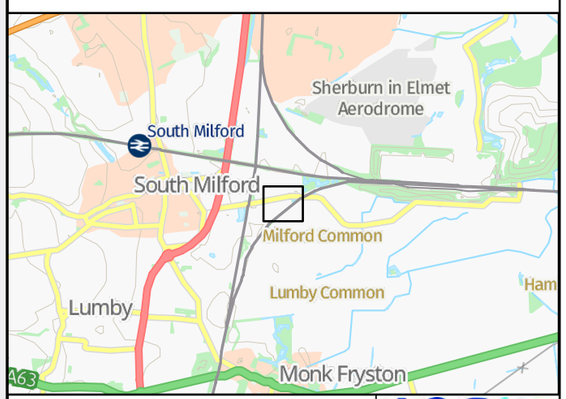
Legend

Red Line Boundary



2nT

-1nT



0 N 40 m

System:	Coordinate System: British National Grid Projection: Transverse Mercator Datum: OSGB 1936	Scale:	1:1,250
		Page Size:	@ A3

Drawing Number: 05/40920/GEO/P8/

Drawn by:	**JG**	Date:	**21/01/2026 18:34**	Version:	**1.0**
Checked by:	**CS**	Date:	**21/01/2026 18:34**	Status:	**DRAFT**
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