

Tween Bridge Solar Farm

Environmental Statement

Appendix 8.2: Geophysical Survey Report – Part 3

Planning Act 2008

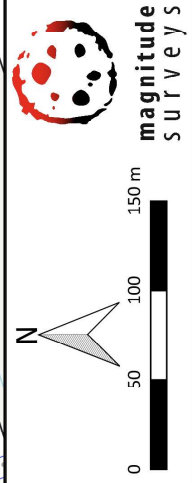
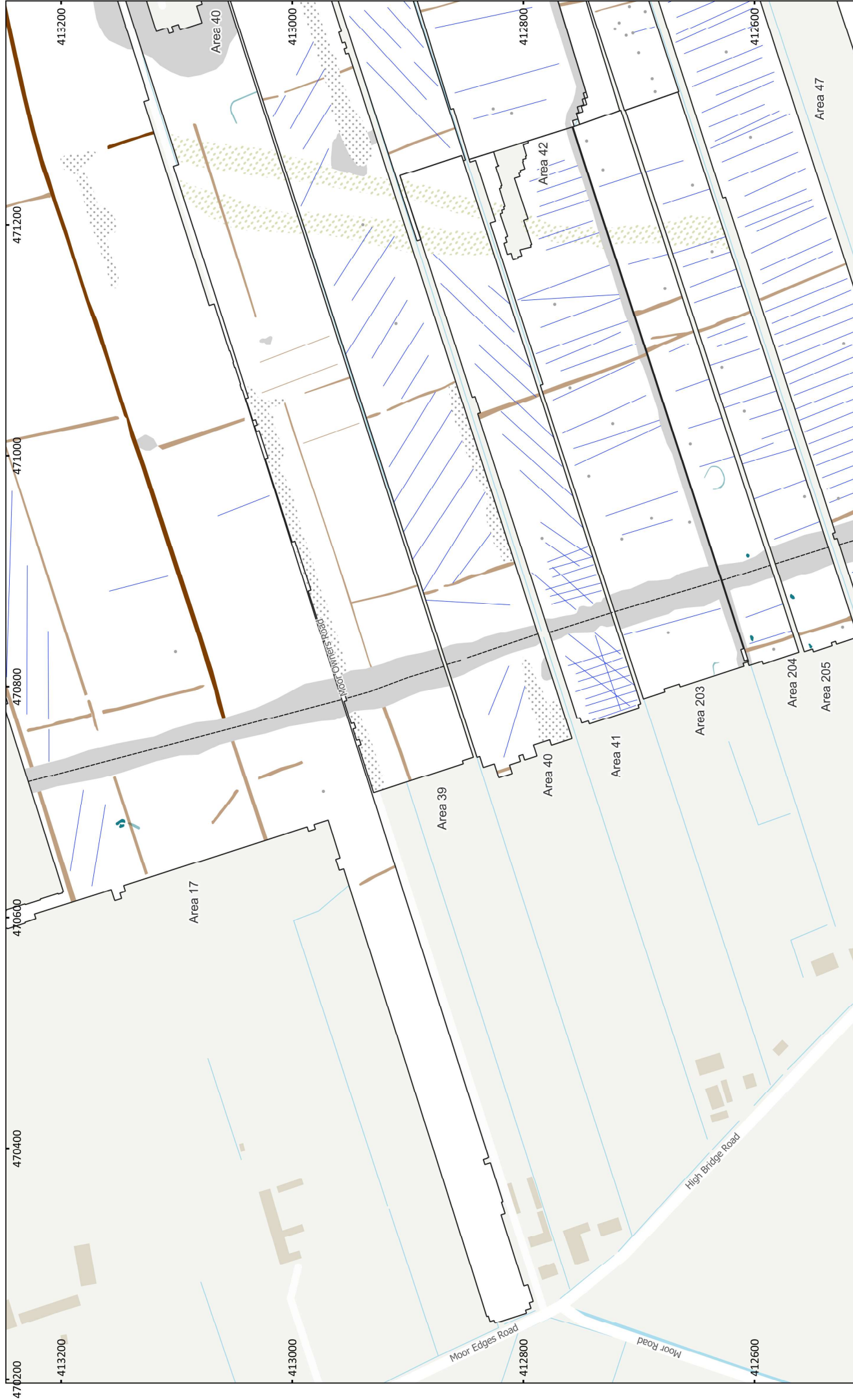
Infrastructure Planning (Applications: Prescribed Forms
and Procedure) Regulations 2009

APFP Regulation 5(2)(a)

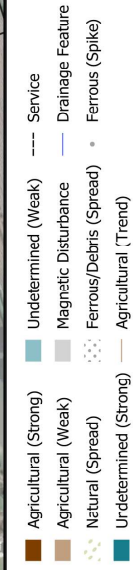
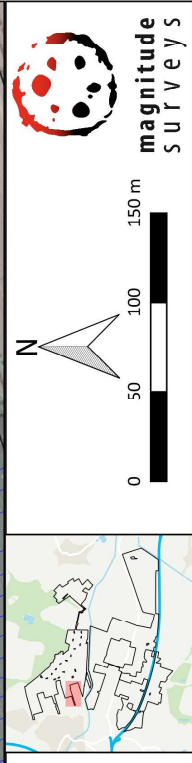
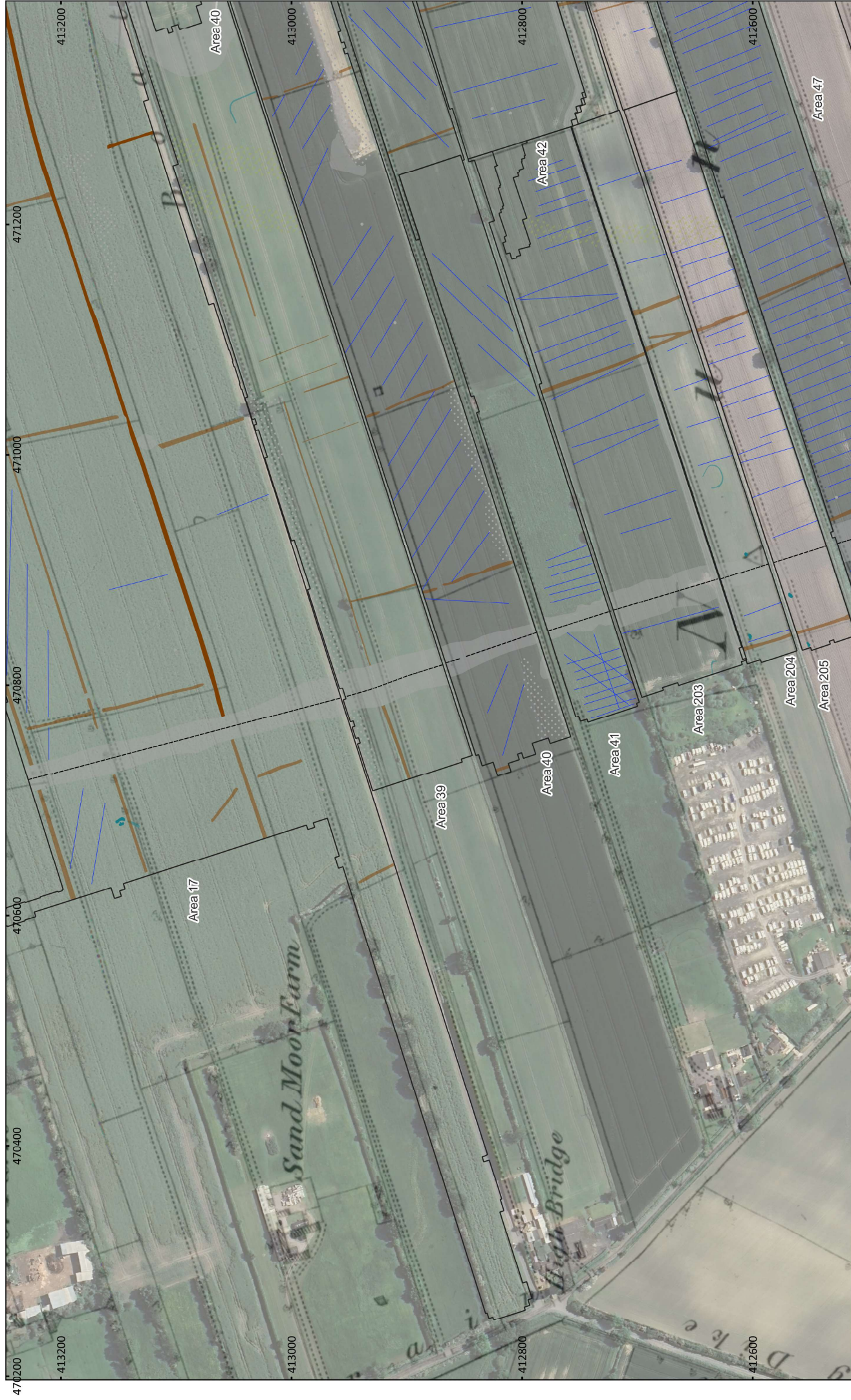
Document Reference: 6.3.8.2

August 2025

Revision 1



MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
North Lincolnshire
Figure 33 - Magnetic Interpretation (Areas 17, 40, 41, 42 & 47)
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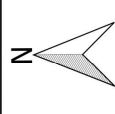


MS15148: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
North Lincolnshire
Figure 34 - Magnetic Interpretation Over Historical Maps and Satellite
Imagery
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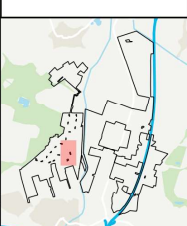




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0 50 100 150 m



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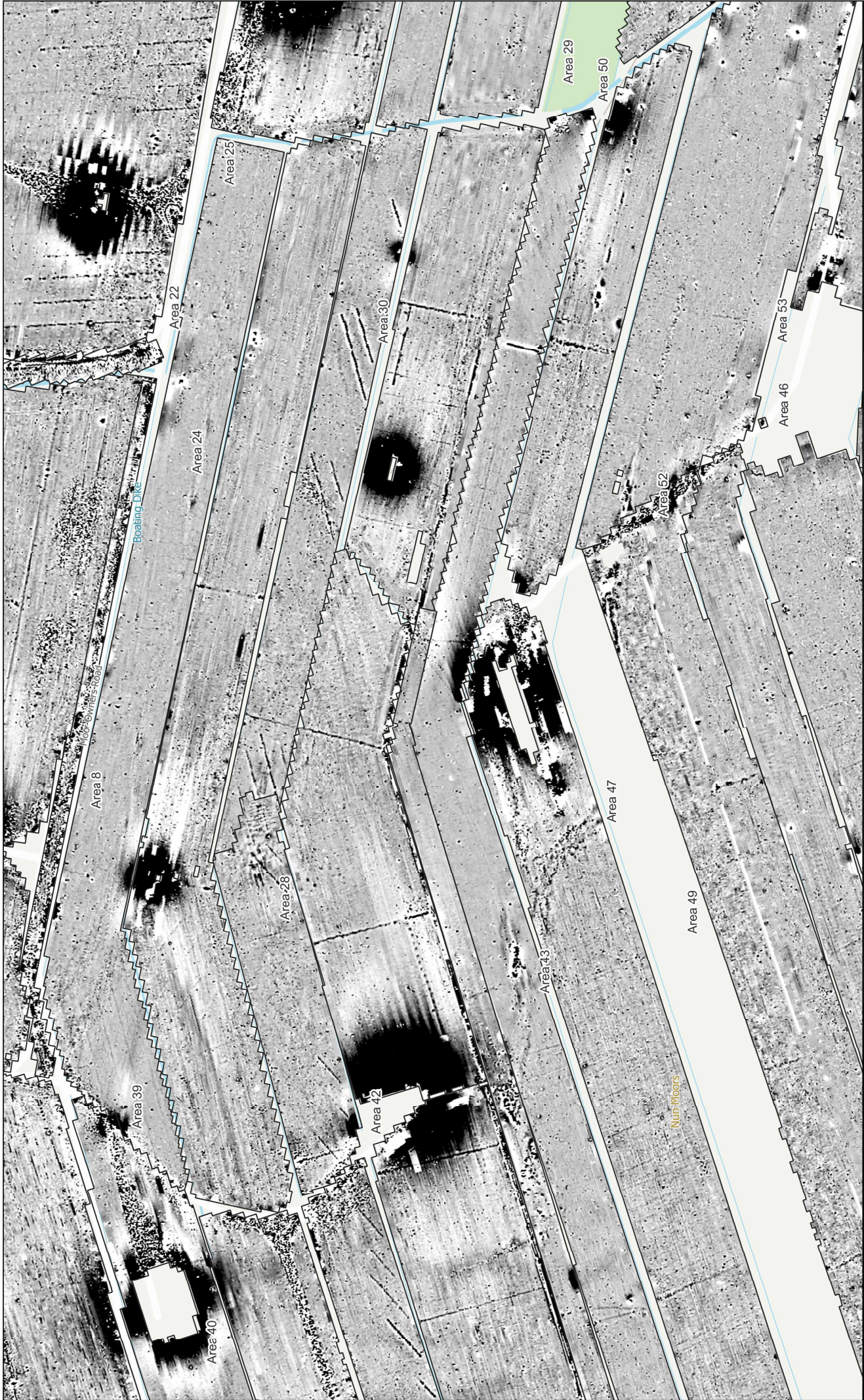
Figure 35 - Magnetic Total Field (Lower Sensor) (Areas 8, 24, 25, 27, 28, 29, 30, 40, 42, 43, 46, 49, 50, 52 & 53)

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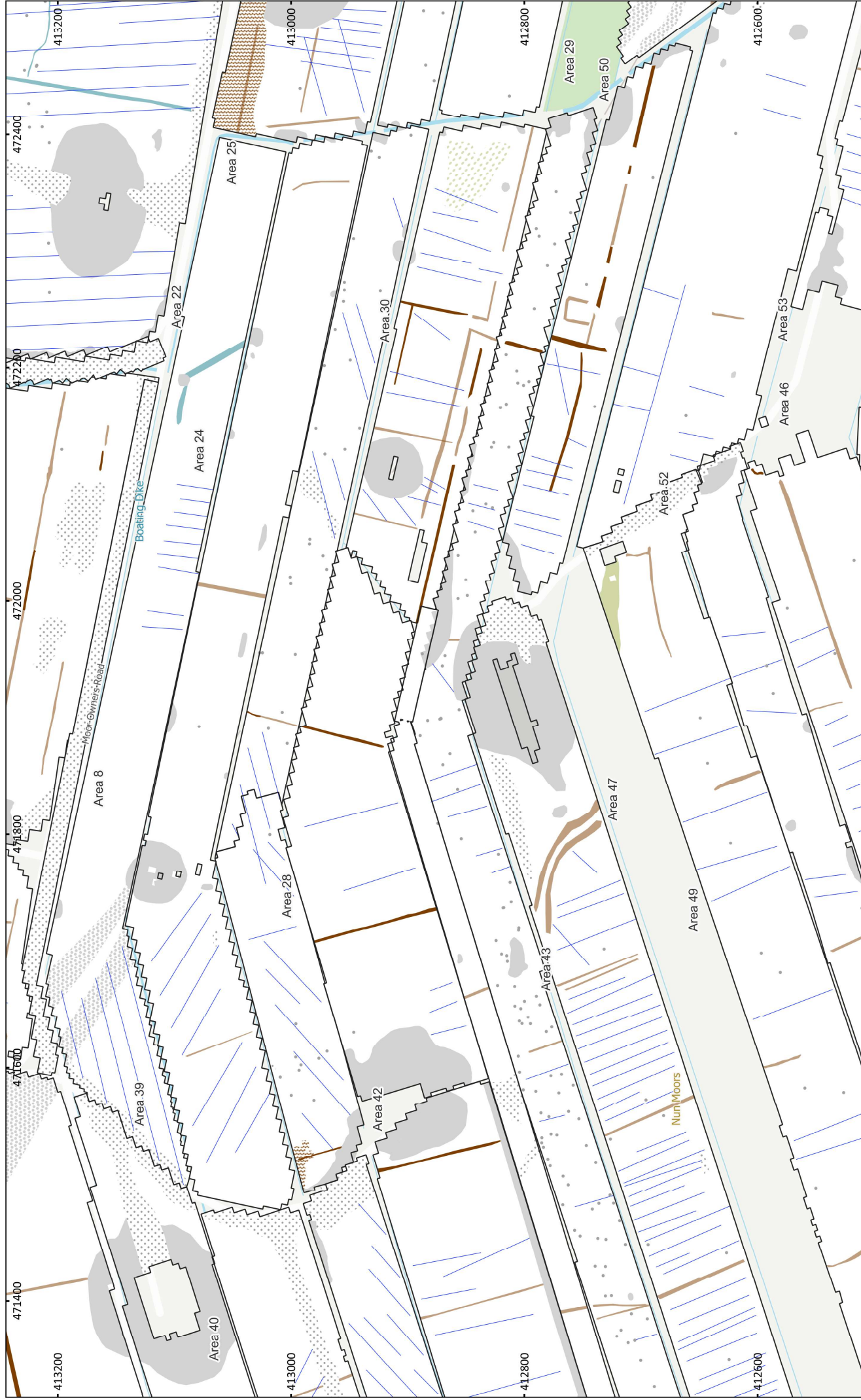
Figure 36 - Magnetic Gradient (Areas 8, 24, 25, 27, 28, 29, 30, 40, 42, 43, 46, 49, 50, 52 & 53)

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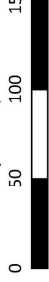




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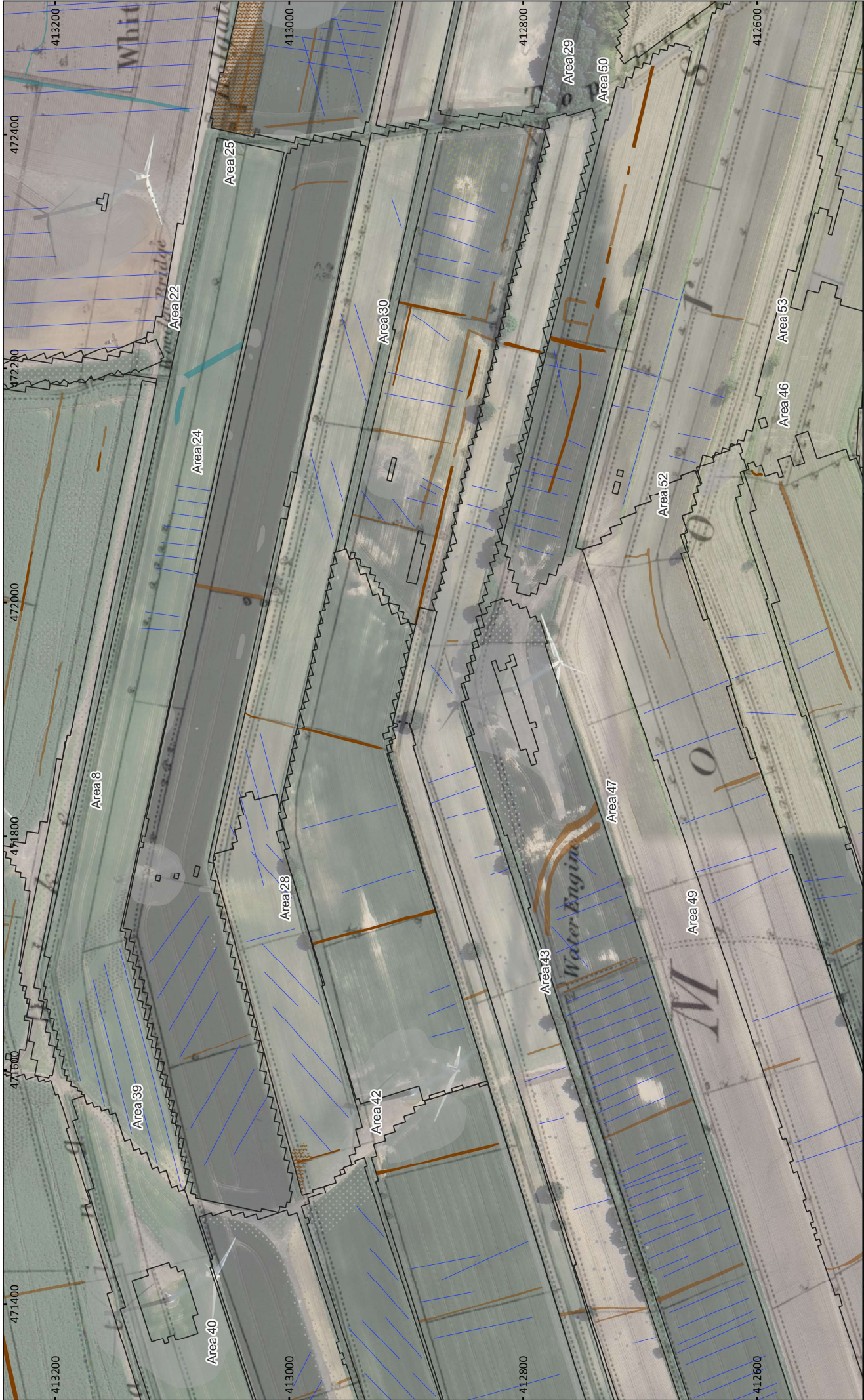
MSSE1548: Twicken Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 37 - Magnetic Interpretation (Areas 8, 24, 25, 27, 28, 29, 30, 40, 42, 43, 46, 49, 50, 52 & 53)

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 38 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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0 50 100 150 m

N

Area 8
Area 22
Area 24
Area 25
Area 28
Area 30
Area 39
Area 40
Area 42
Area 43
Area 47
Area 49
Area 50
Area 52
Area 53
Area 54

— Drainage Feature
• Ferrous (Spike)
■ Agricultural (Strong)
■ Agricultural (Weak)
■ Agricultural (Spread)
■ Natural (Spread)
■ Undetermined (Weak)
■ Magnetic Disturbance
■ Ferrous/Debris (Spread)
■ Overhead Cables



MSS1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 39 - Magnetic Total Field (Lower Sensor) (Areas 13, 14, 22, 25, 27, 29, 31, 50, 58 & 61)

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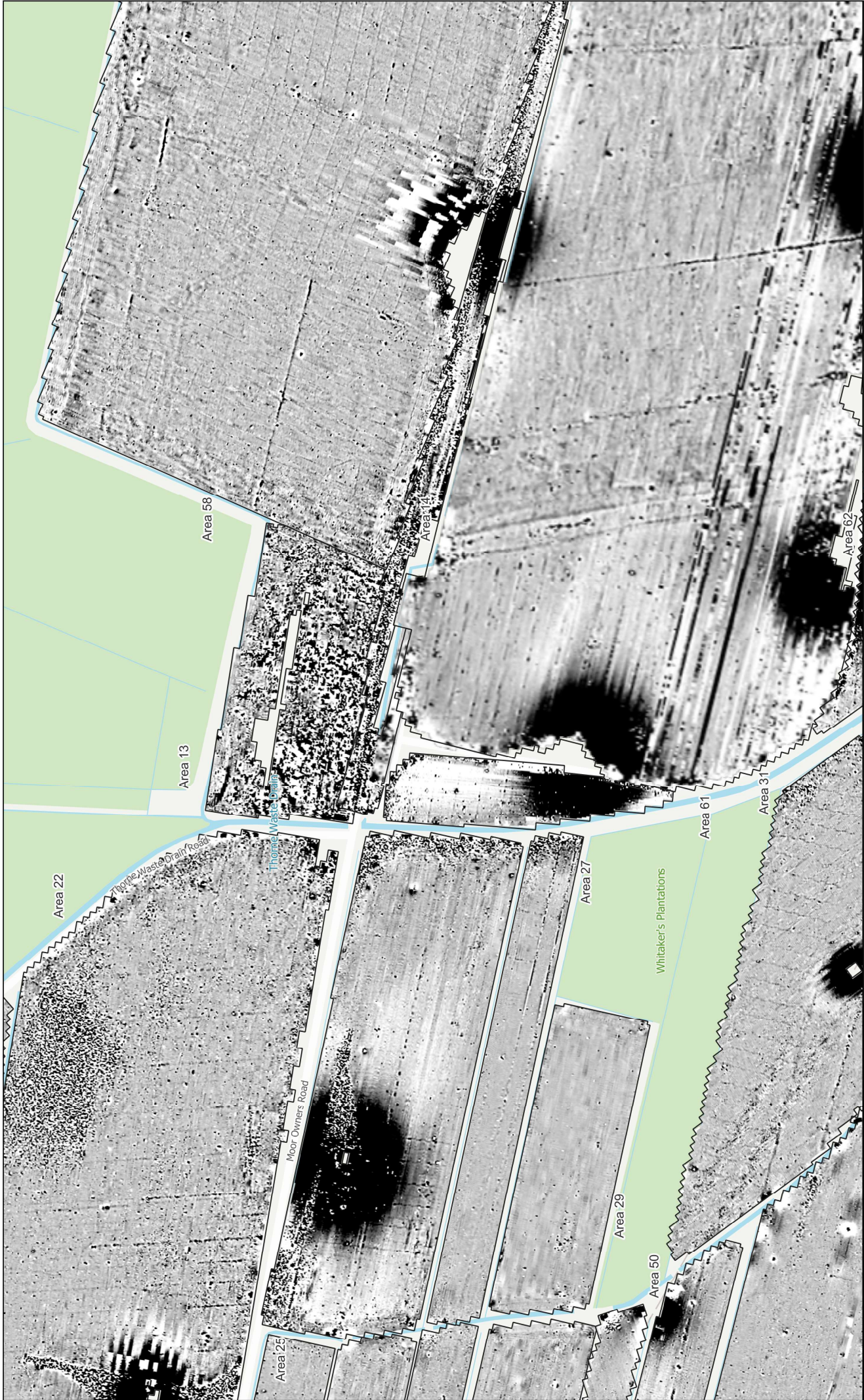
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0 50 100 150 m

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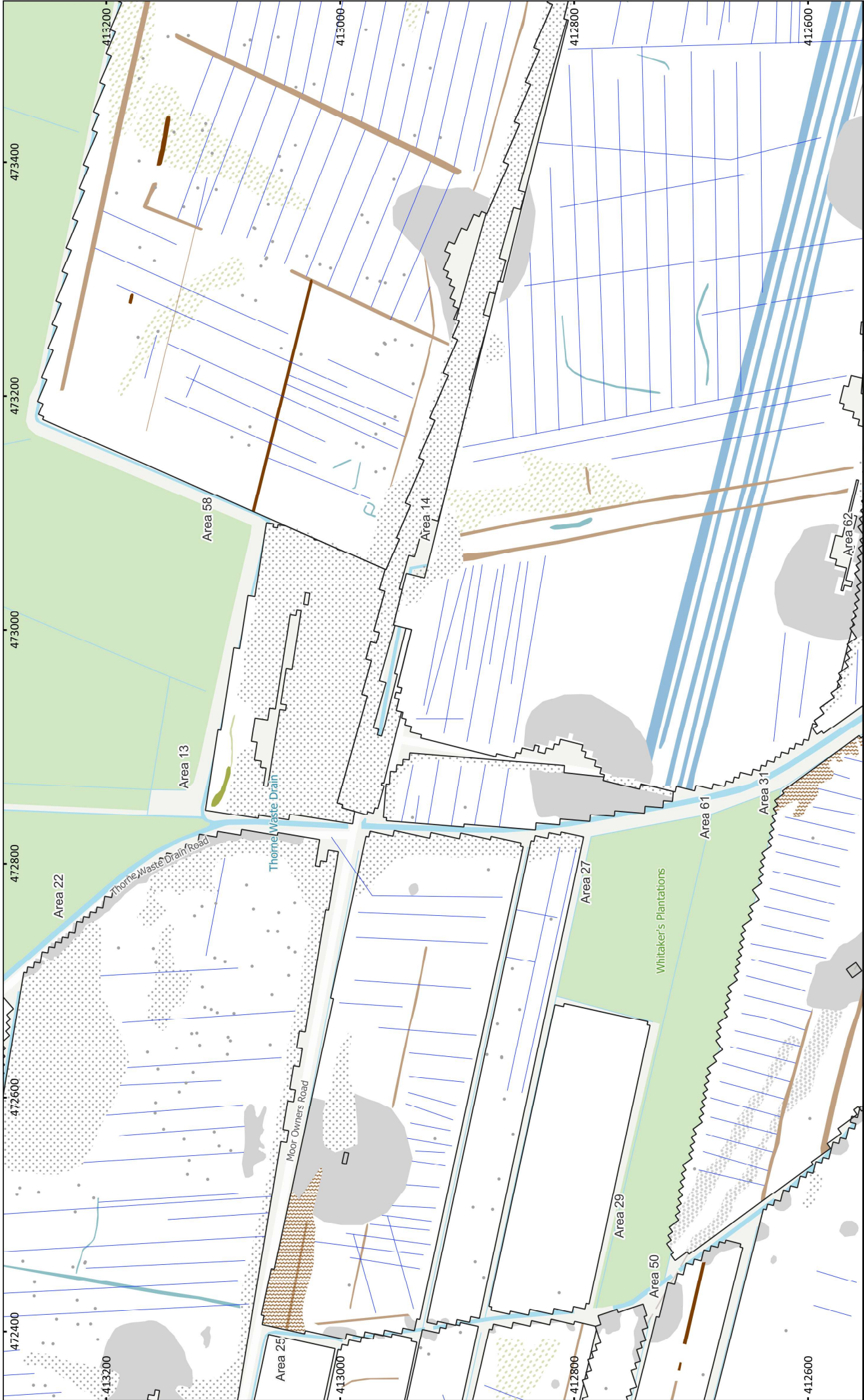
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0 50 100 150 m

N

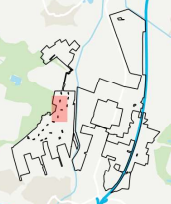
-1 nT 2

MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 40 - Magnetic Gradient (Areas 13, 14, 22, 25, 27, 29, 31, 50, 58 & 61)
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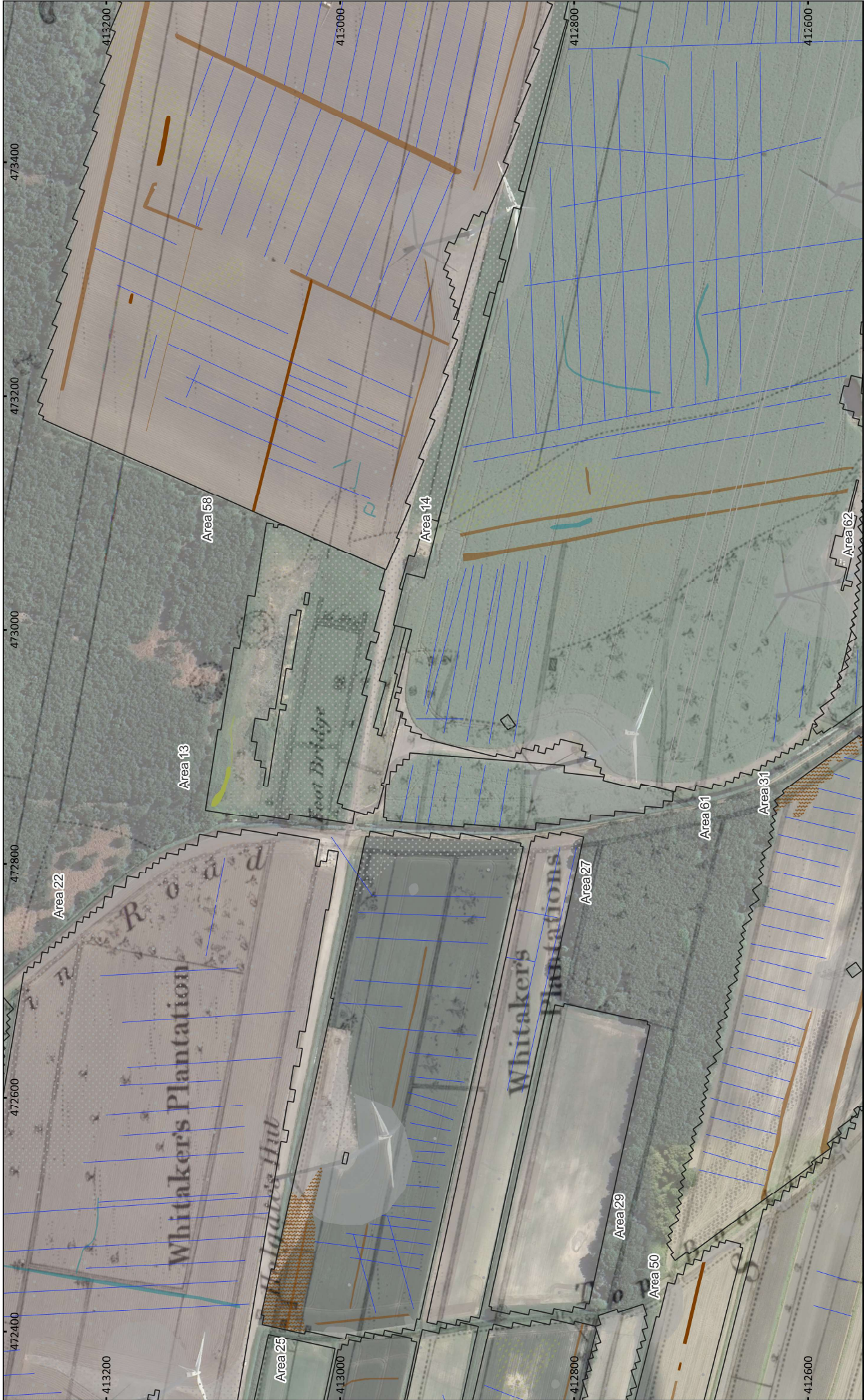
050100150 m





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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 41 - Magnetic Interpretation (Areas 13, 14, 22, 25, 27, 29, 31, 50, 58 & 61)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 42 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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N

0 50 100 150 m

Area 13

Area 22

Area 25

Area 27

Area 29

Area 31

Area 58

Area 60

Area 61

Area 62

Whitaker's Plantations

Foot Bridge

Whitaker's Hub

Agricultural (Strong)

Agricultural (Weak)

Agricultural (Spread)

Natural (Strong)

Natural (Weak)

Natural (Spread)

Undetermined (Weak)

Magnetic Disturbance

Ferrous/Debris (Spread)

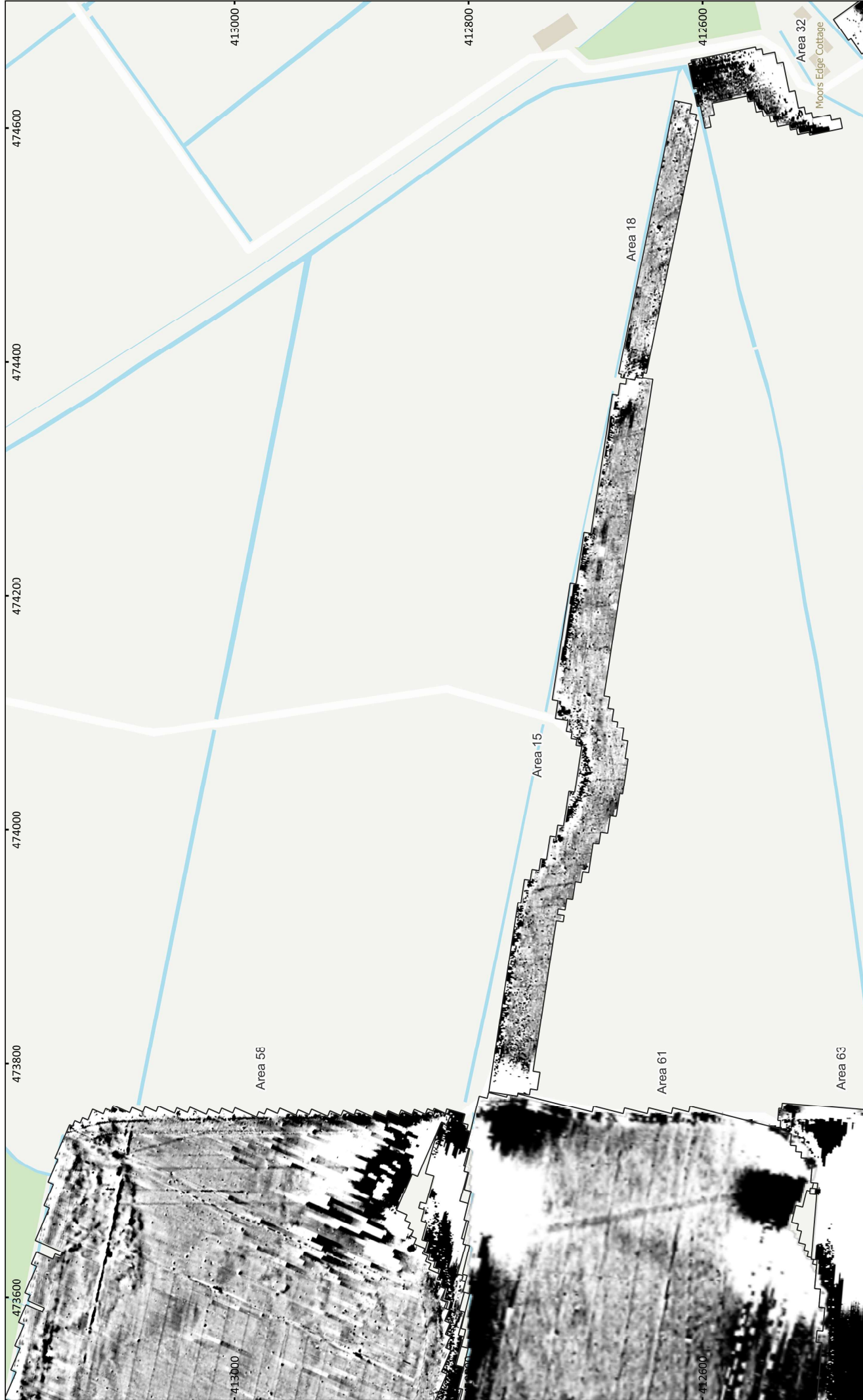
Overhead Cables

Agricultural (Trend)

Data Artefact

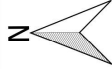
Drainage Feature

Ferrous (Spike)

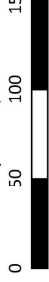




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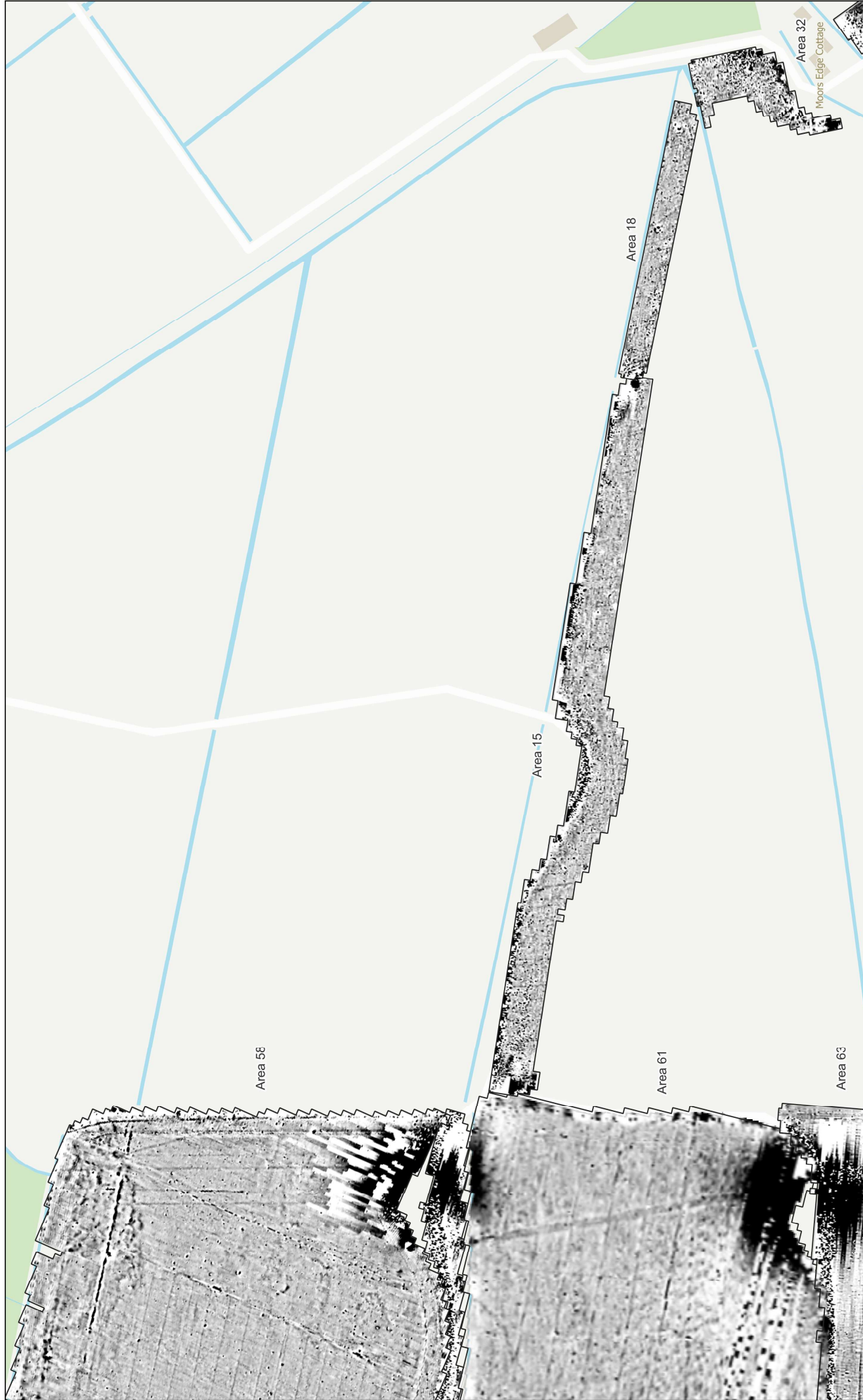
MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 43 - Magnetic Total Field (Lower Sensor) (Areas 15, 58, 61 & 63)

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0 50 100 150 m

-1 0 1 2 nT

MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 44 - Magnetic Gradient (Areas 15, 58, 61 & 63)

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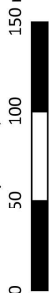
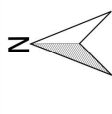
MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 45 - Magnetic Interpretation (Areas 15, 58, 61 & 63)

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 46 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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N

0 50 100 150 m

Area 58

Area 15

Area 18

Area 61

Area 63

Area 32

— Data Artefact

--- Service

— Drainage Feature

• Ferrous (Spike)

■ Agricultural (Strong)

■ Agricultural (Weak)

■ Agricultural (Spread)

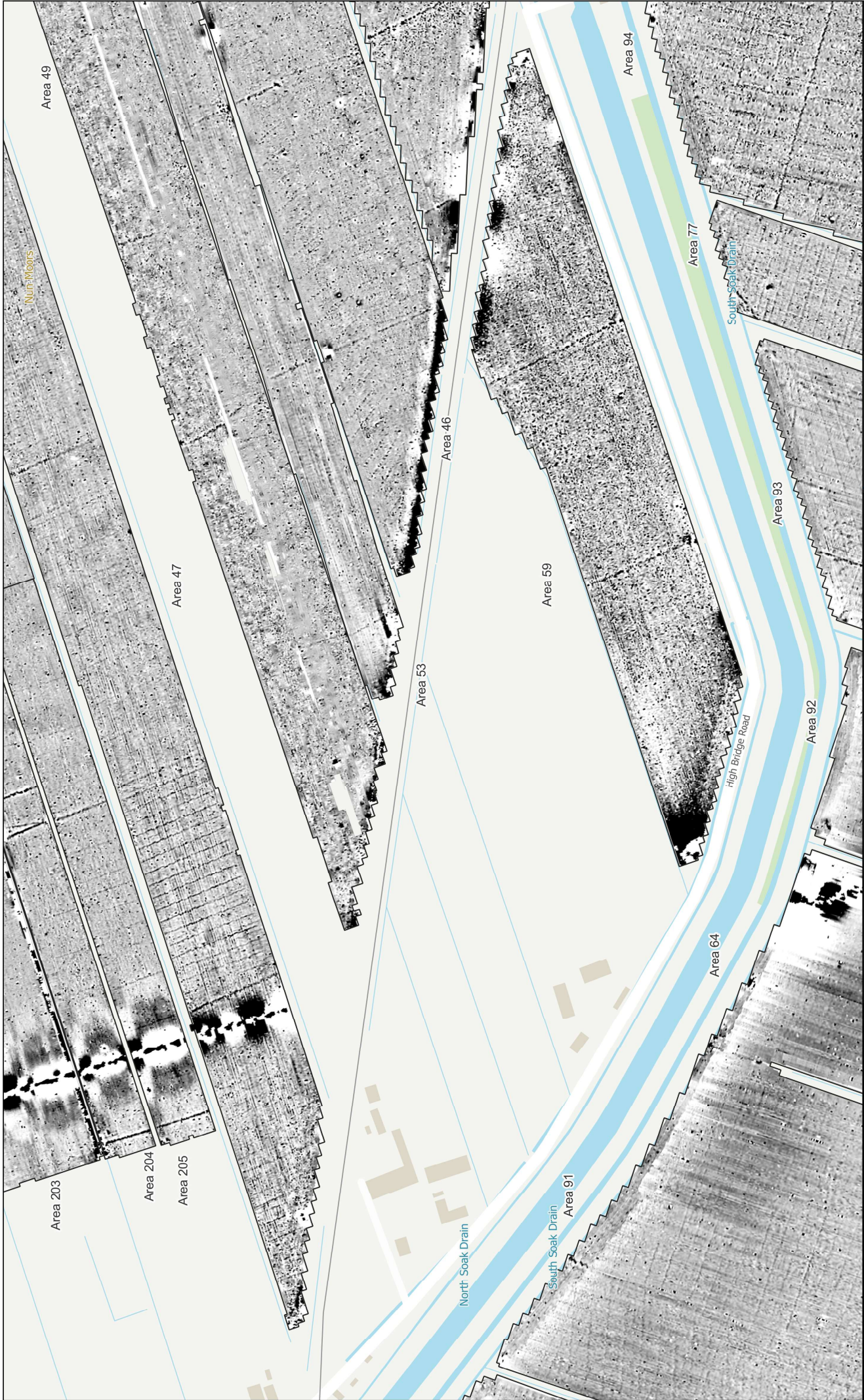
■ Natural (Spread)

■ Undetermined (Weak)

■ Magnetic Disturbance

■ Ferrous/Debris (Spread)

■ Agricultural (Trend)



MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 48 - Magnetic Gradient (Areas 38, 46, 47, 49, 53, 59, 64, 77, 91, 92, 93 & 94)
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0 50 100 150 m

N

High Bridge Road

North Soak Drain

South Soak Drain

Area 203

Area 204

Area 205

Area 47

Area 49

Area 53

Area 46

Area 59

Area 64

Area 91

Area 92

Area 93

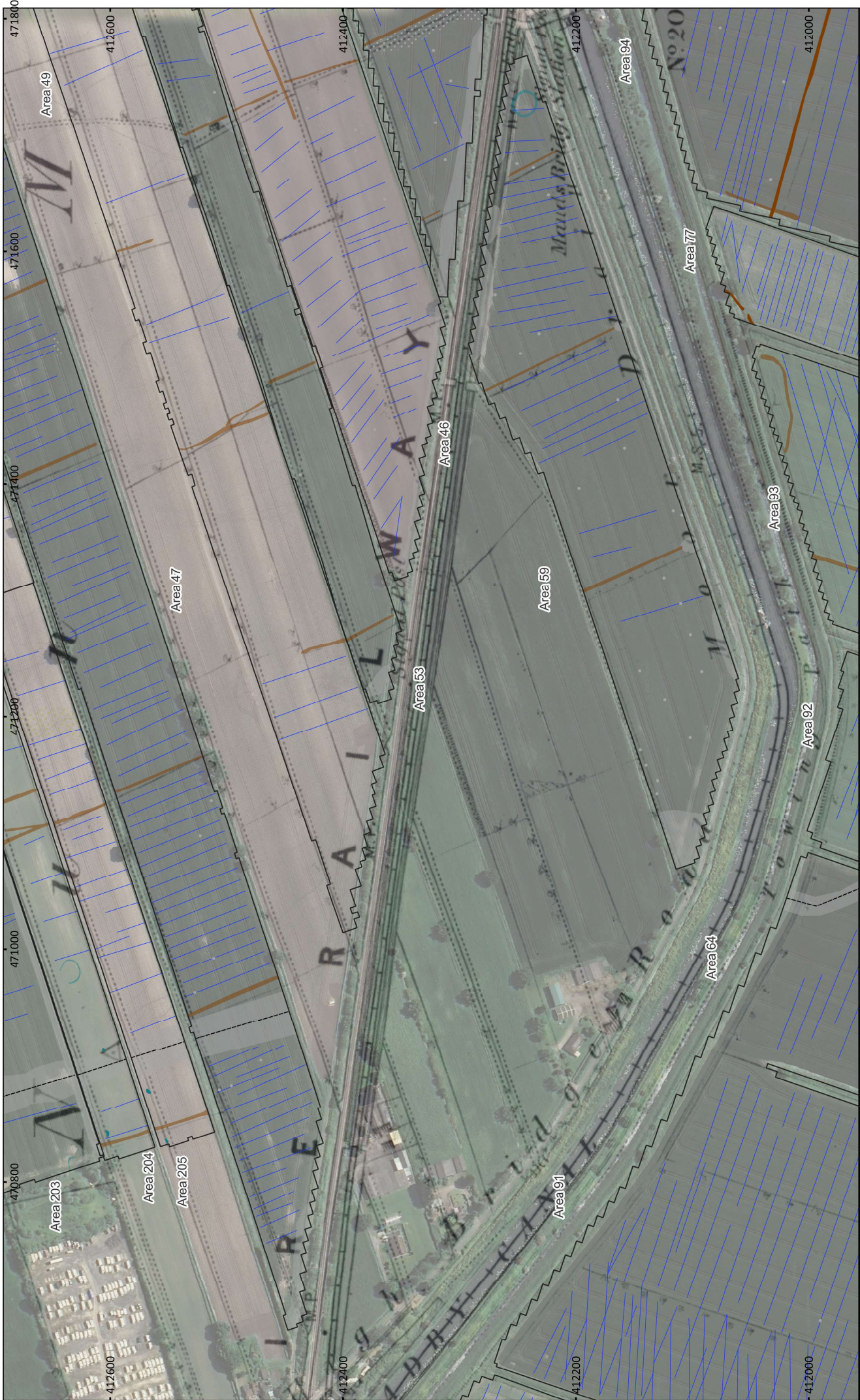
Area 77

Area 94

Nunthorpe

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-1 0 1 2 nT



MSSE1548: Treen Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 50 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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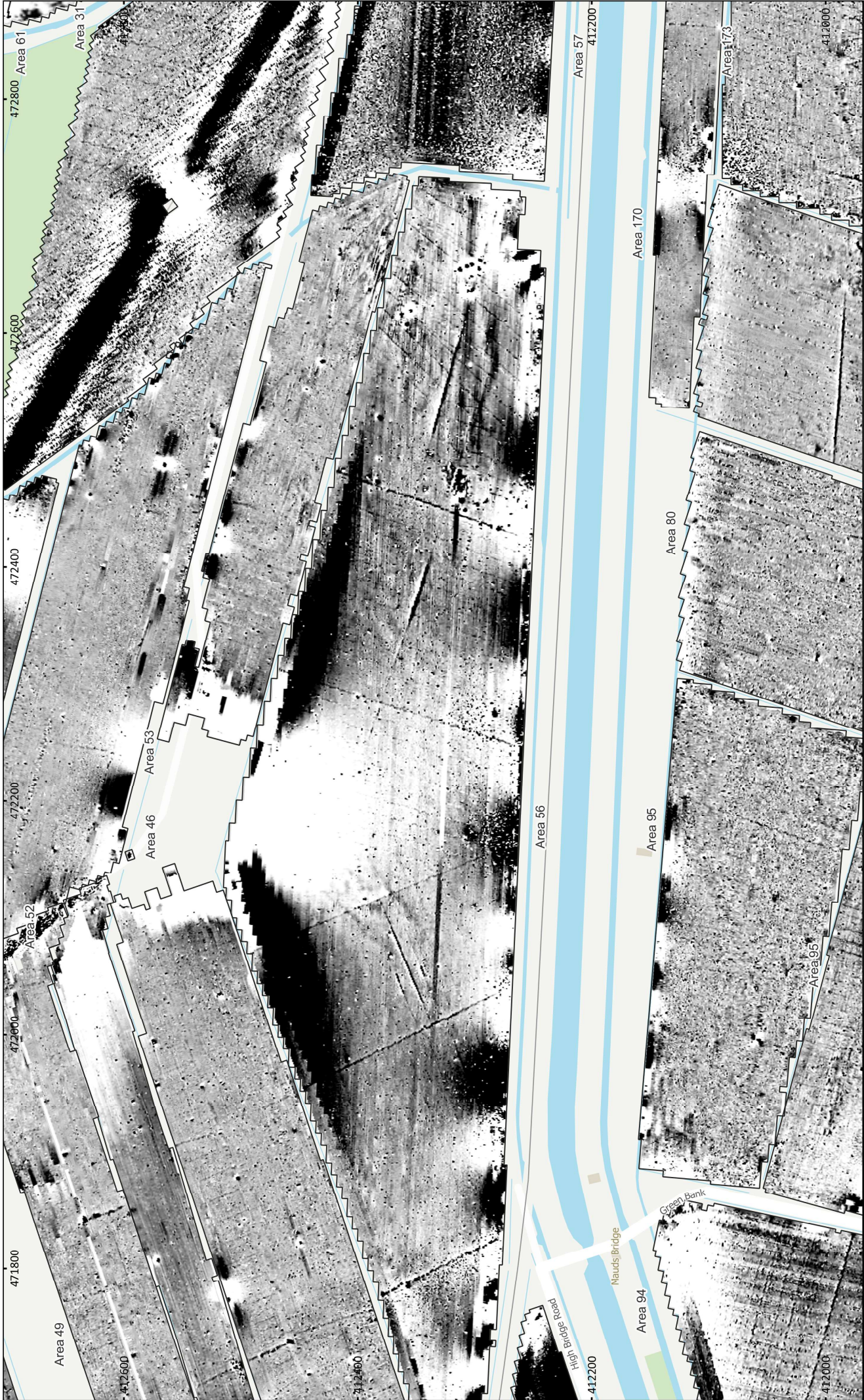
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N

0 50 100 150 m

Legend:

- Agricultural (Strong)
- Agricultural (Weak)
- Natural (Spread)
- Undetermined (Strong)
- Undetermined (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Ferrous (Spike)
- Drainage Feature
- Service



MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 51 - Magnetic Total Field (Lower Sensor) (Areas 31, 46, 49, 50, 52, 53, 56, 57, 80, 94, 95 & 96)

1:3,000 @ A3

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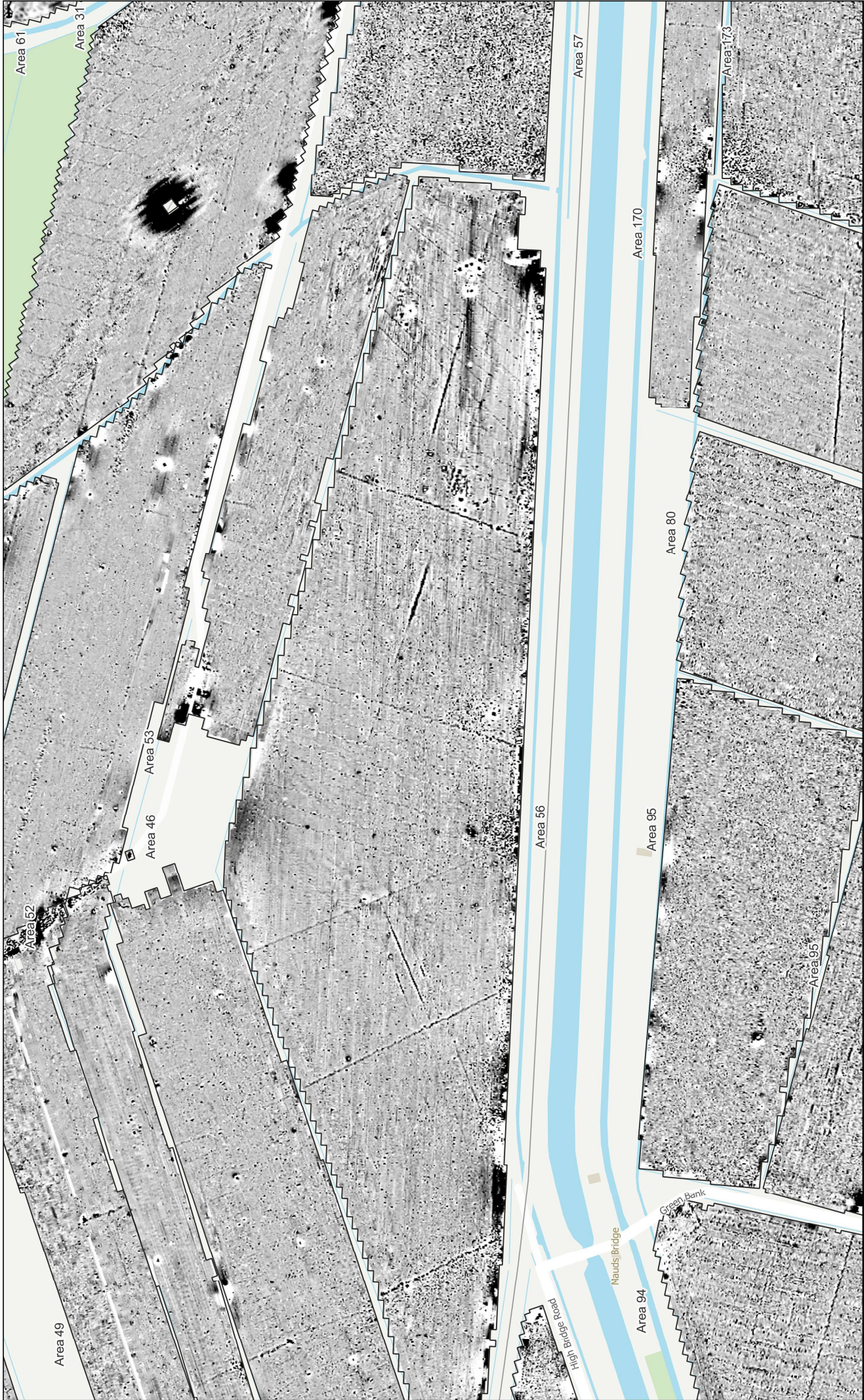
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0 50 100 150 m

N

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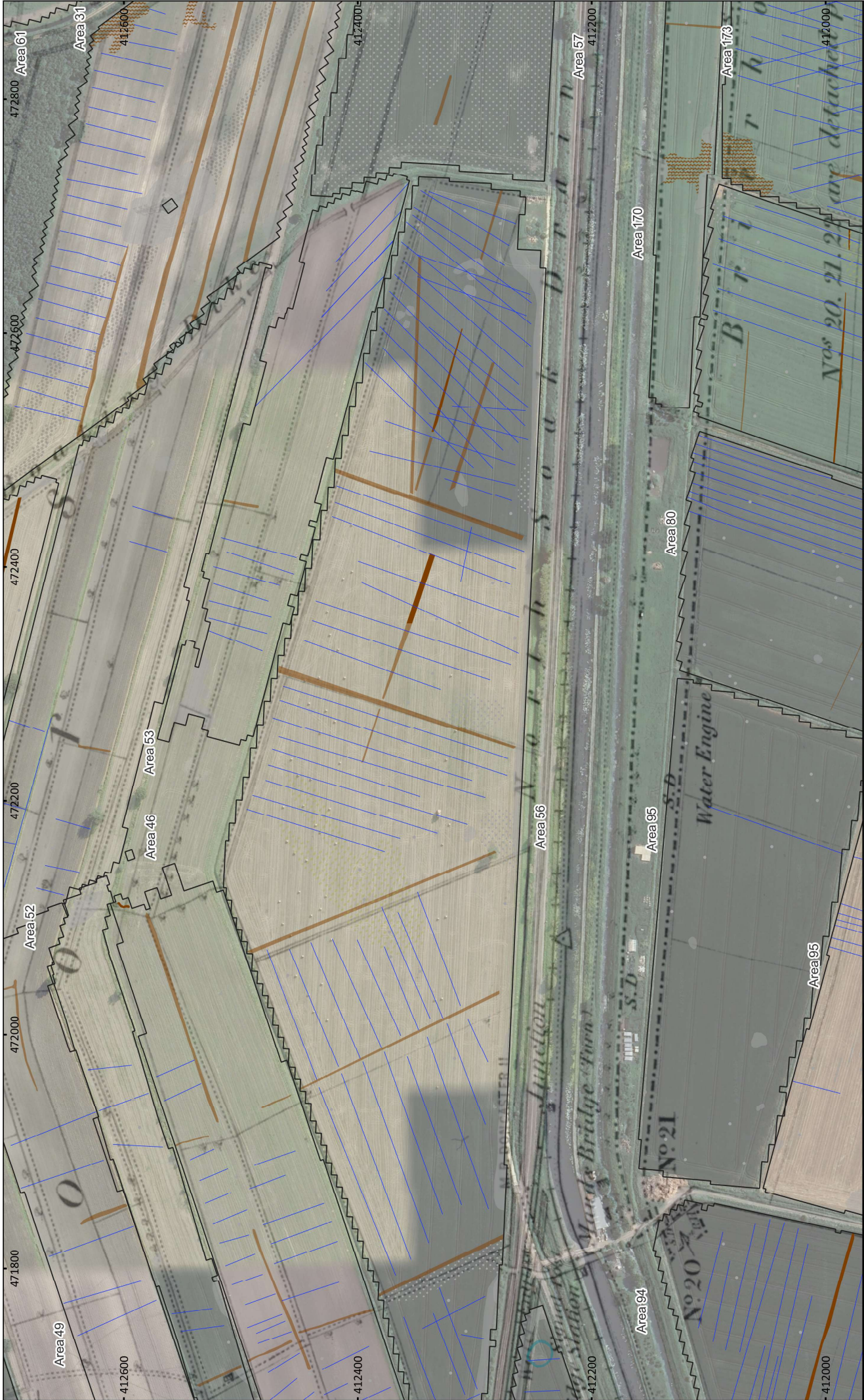


MSSE1548: Twicken Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 52 - Magnetic Gradient (Areas 31, 46, 49, 50, 52, 53, 56, 57, 80, 94, 95 & 96)
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0 50 100 150 m

N

-1 0 1 2 nT



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Figure 54 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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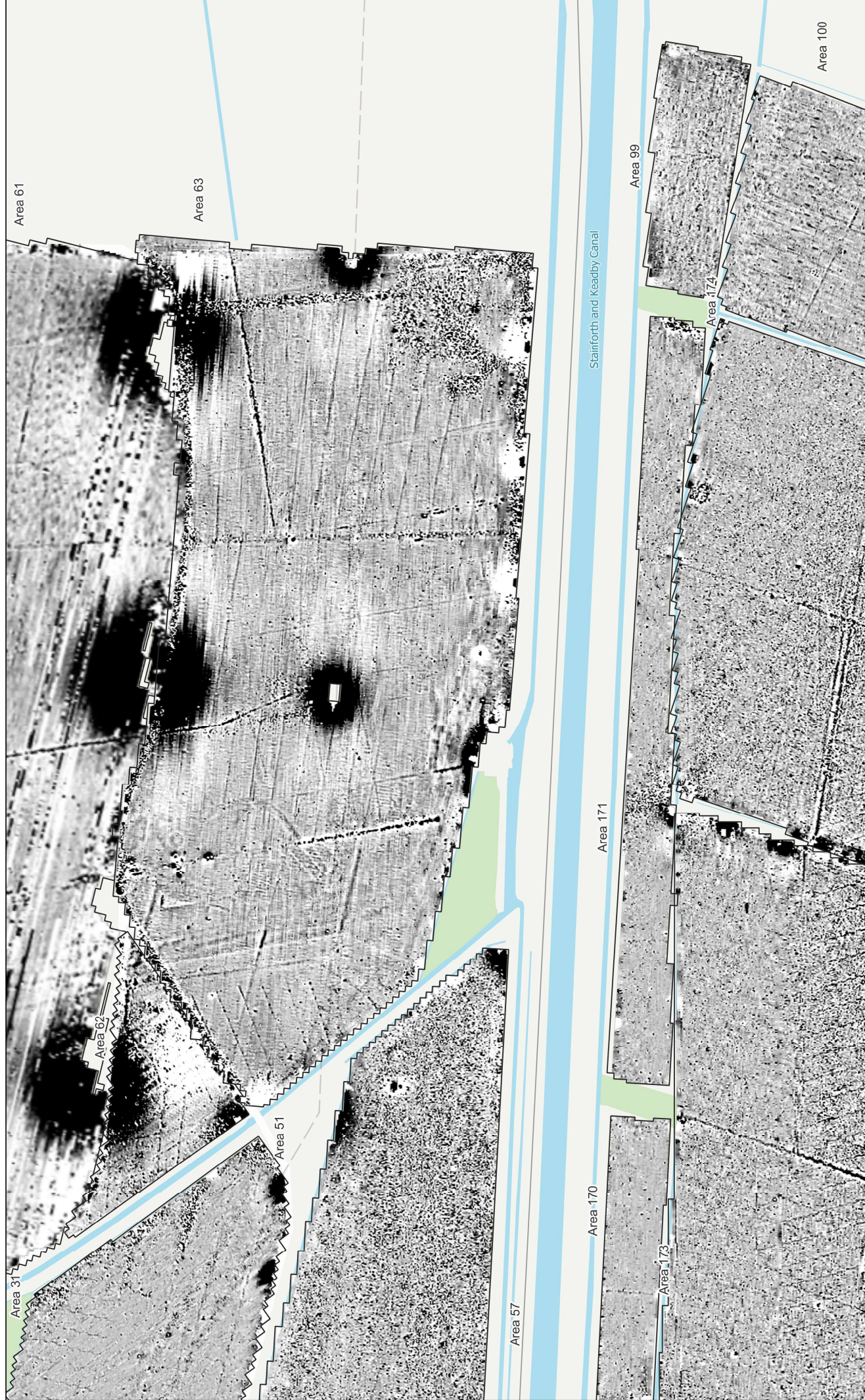
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0 50 100 150 m

N

Area 49 Area 52 Area 53 Area 56 Area 80 Area 94 Area 95 Area 170 Area 173 Area 61 Area 31 Area 67

Agricultural (Strong) Agricultural (Weak) Agricultural (Spread) Natural (Spread) Undetermined (Weak) Magnetic Disturbance Agricultural (Trend) Data Artefact Ferrous/Debris (Spread) Drainage Feature Ferrous (Spike) Overhead Cables



MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 56 - Magnetic Gradient (Areas 31, 57, 62, 63, 99, 170, 171, & 173)
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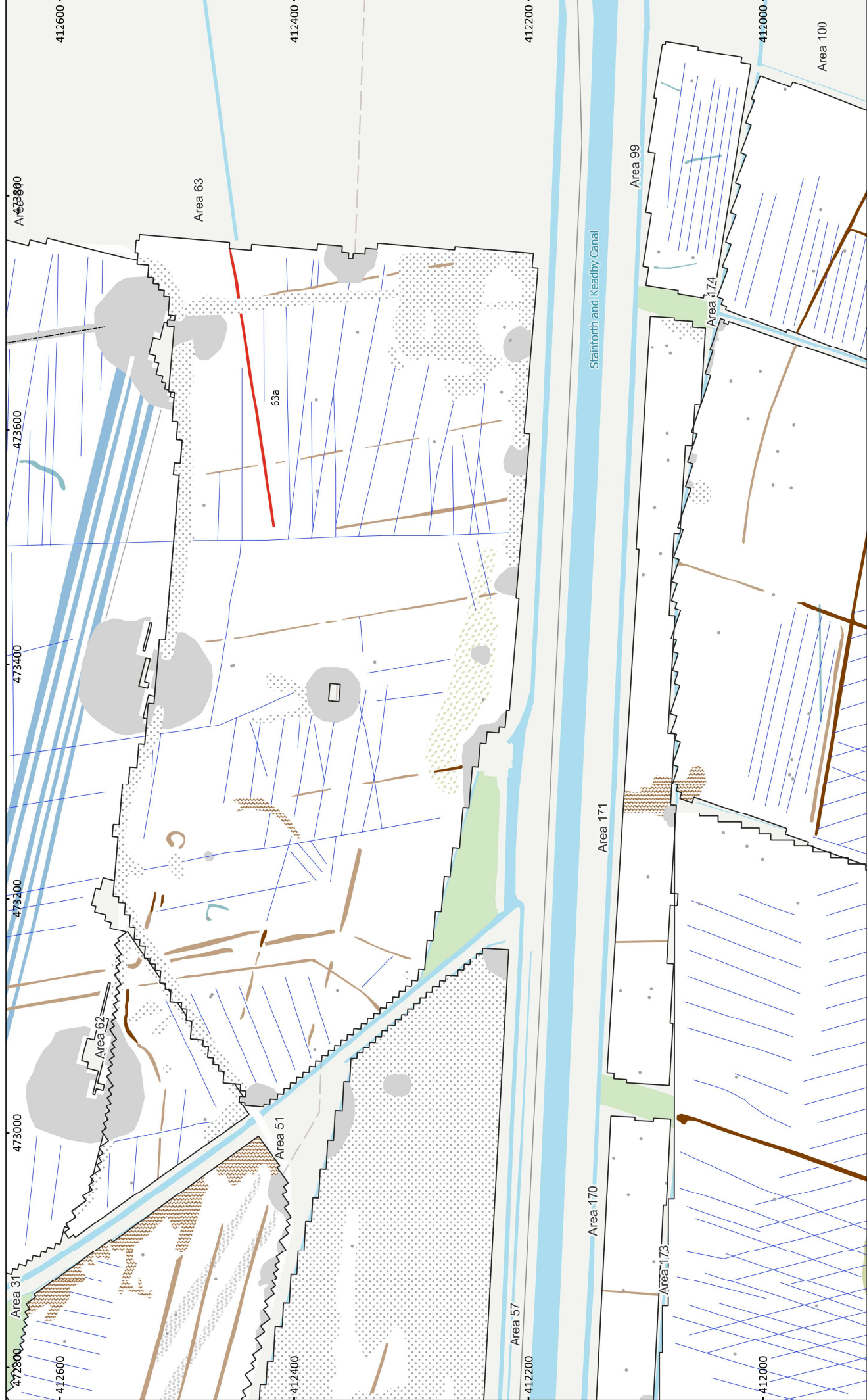
Area 31
Area 51
Area 57
Area 61
Area 62
Area 63
Area 99
Area 100
Area 170
Area 171
Area 173
Area 174
Stainforth and Keadby Canal

0 50 100 150 m

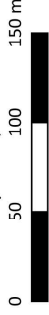
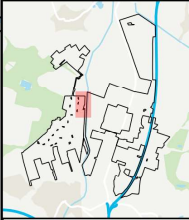
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 57 - Magnetic Interpretation (Areas 31, 57, 62, 63, 99, 170, 171, & 173)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 58 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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■ Archaeology Probable (Strong)
 ■ Agricultural (Strong)
 ■ Agricultural (Weak)
 ■ Agricultural (Spread)
 ■ Natural (Weak)

■ Natural (Spread)
 ■ Undetermined (Weak)
 ■ Magnetic Disturbance
 ■ Ferrous/Debris (Spread)
 ■ Overhead Cables

— Data Artefact
 --- Service
 — Drainage Feature
 • Ferrous (Spike)

N

0 50 100 150 m

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Figure 59 - Magnetic Tctal Field (Lower Sensor) (Areas 32, 35, 36, 37, 72, 73 & 74)

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Figure 60 - Magnetic Gradient (Areas 32, 35, 36, 37, 72, 73 & 74)

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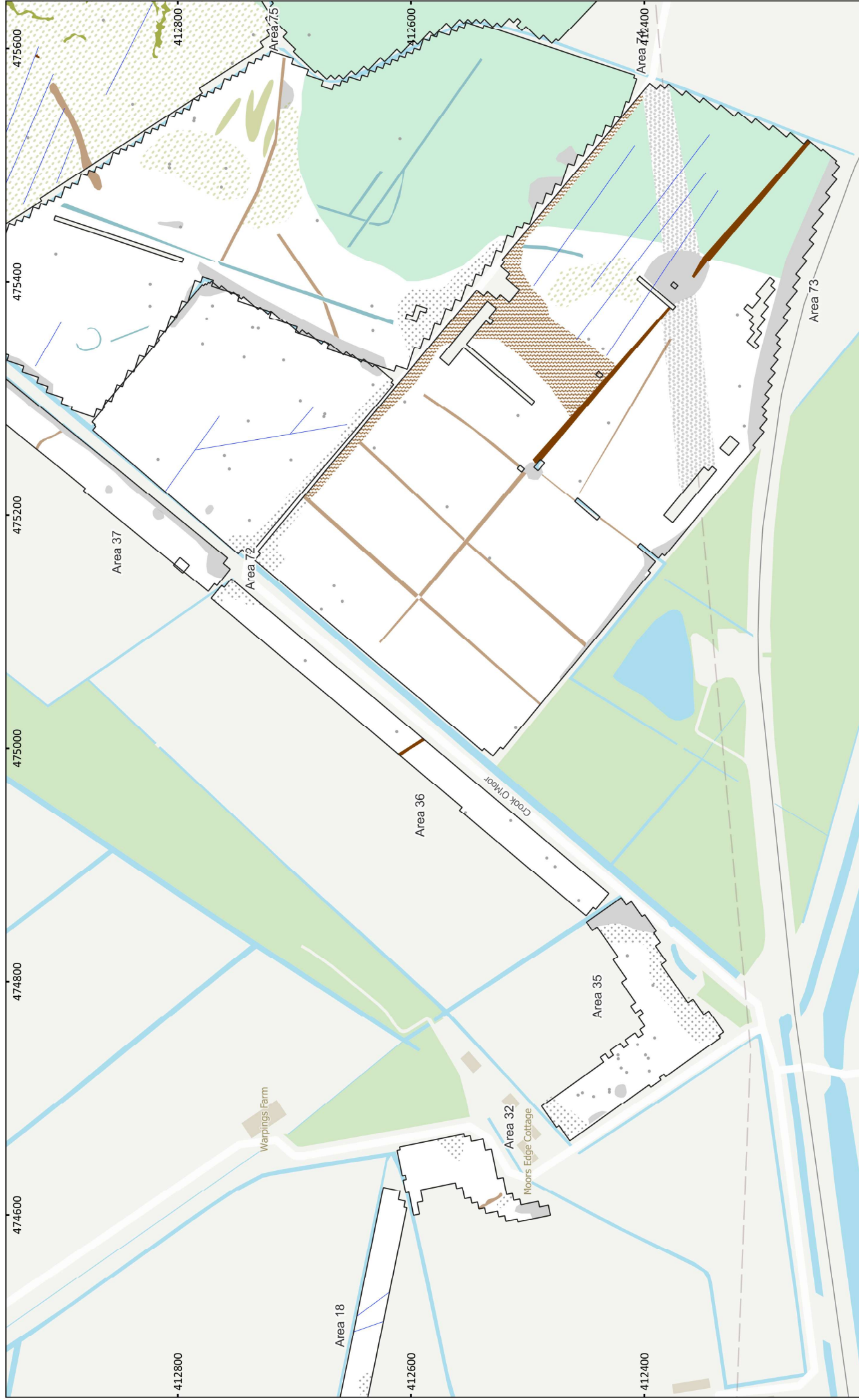


0 50 100 150 m





-1 nT 2





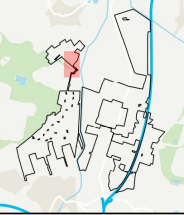
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N



0 50 100 150 m



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Figure 61 - Magnetic Interpretation (Areas 32, 35, 36, 37, 72, 73 & 74)

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Figure 62 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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Legend

	Agricultural (Strong)		Natural (Spread)		Ferrous/Debris (Spread)
	Agricultural (Weak)		Palaeochannel		Overhead Cables
	Agricultural (Spread)		Industrial/Modern		Drainage Feature
	Natural (Strong)		Undetermined (Weak)		Ferrous (Spike)
	Natural (Weak)		Magnetic Disturbance		

Scale

0 50 100 150 m

North Arrow

N

Inset Map

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