

Tween Bridge Solar Farm

Environmental Statement

Appendix 8.2: Geophysical Survey Report – Part 4

Planning Act 2008

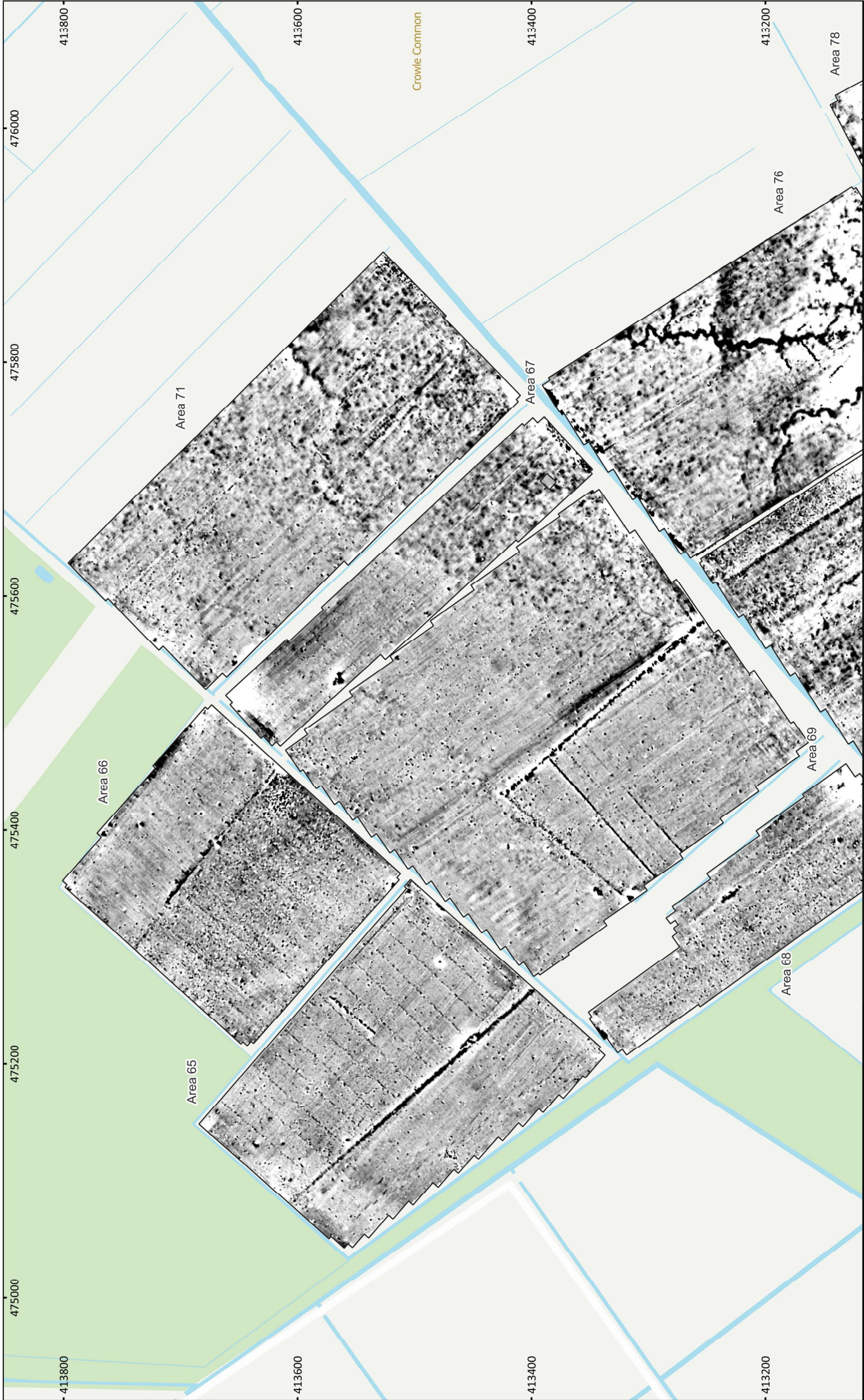
Infrastructure Planning (Applications: Prescribed Forms
and Procedure) Regulations 2009

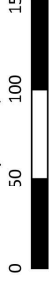
APFP Regulation 5(2)(a)

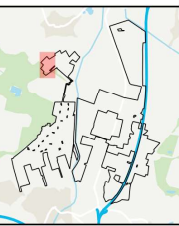
Document Reference: 6.3.8.2

August 2025

Revision 1



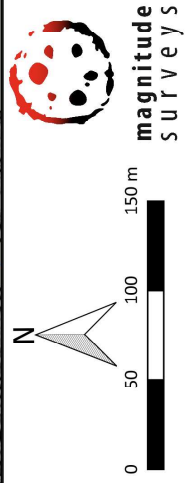




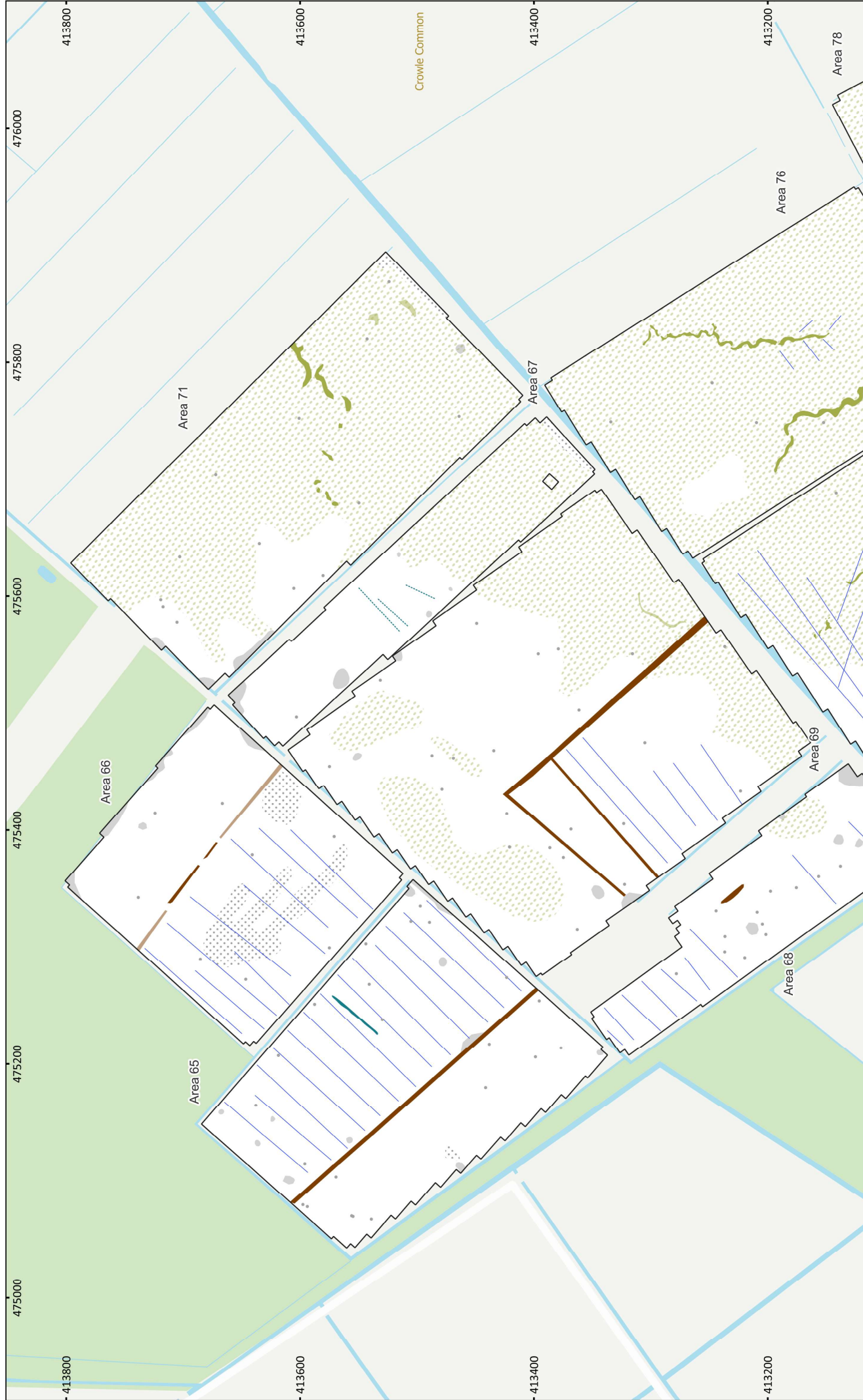
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Crowle Common

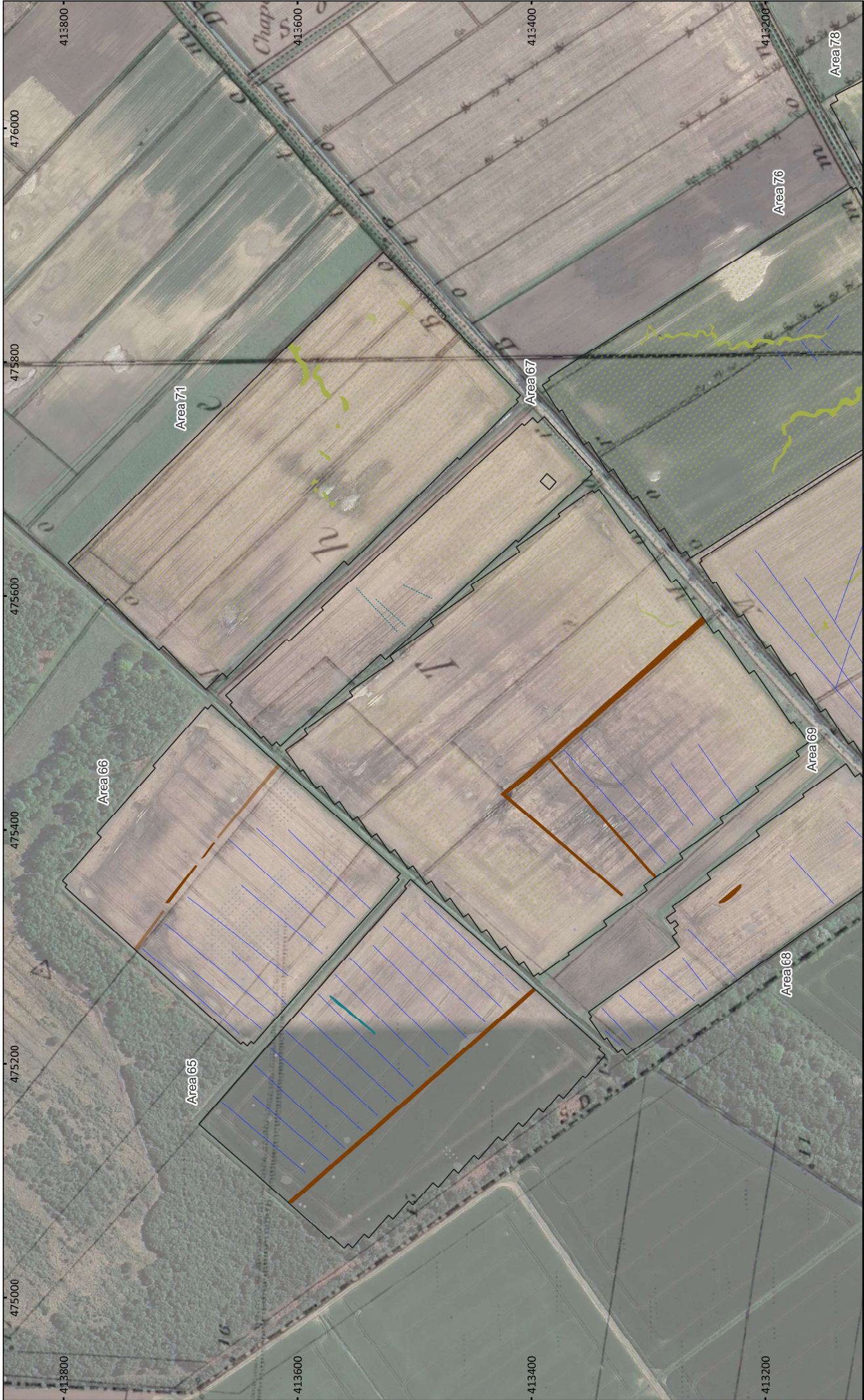


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 64 - Magnetic Gradient (Areas 65, 66, 67, 68, 69, 71, 75 & 76)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
 Figure 65 - Magnetic Interpretation (Areas 65, 66, 67, 68, 69, 71, 75 & 76)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 66 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Legend

	Agricultural (Strong)		Undetermined (Trend)
	Agricultural (Weak)		Drainage Feature
	Natural (Strong)		Magnetic Disturbance
	Natural (Weak)		Ferrous (Spike)
	Undetermined (Strong)		Ferrous (Spread)
	Undetermined (Weak)		

Scale

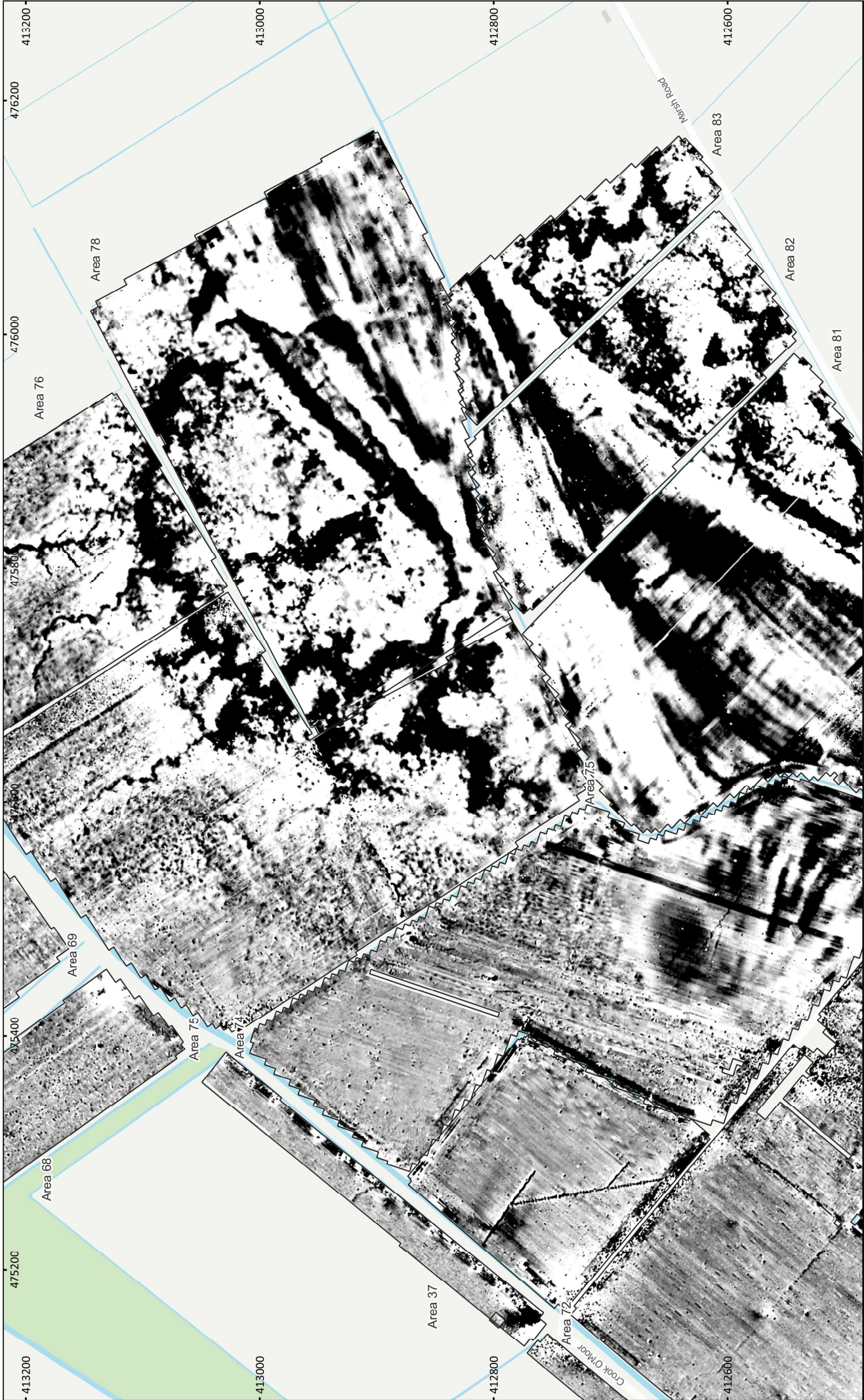
0 50 100 150 m

North Arrow

N

Inset Map

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

Figure 67 - Magnetic Total Field (Lower Sensor) (Areas 36, 37, 68, 69, 74, 75, 76, 78, 81, 82 & 83)

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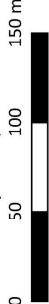
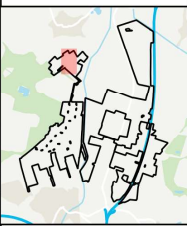
48997 nT 49005

0 50 100 150 m

N

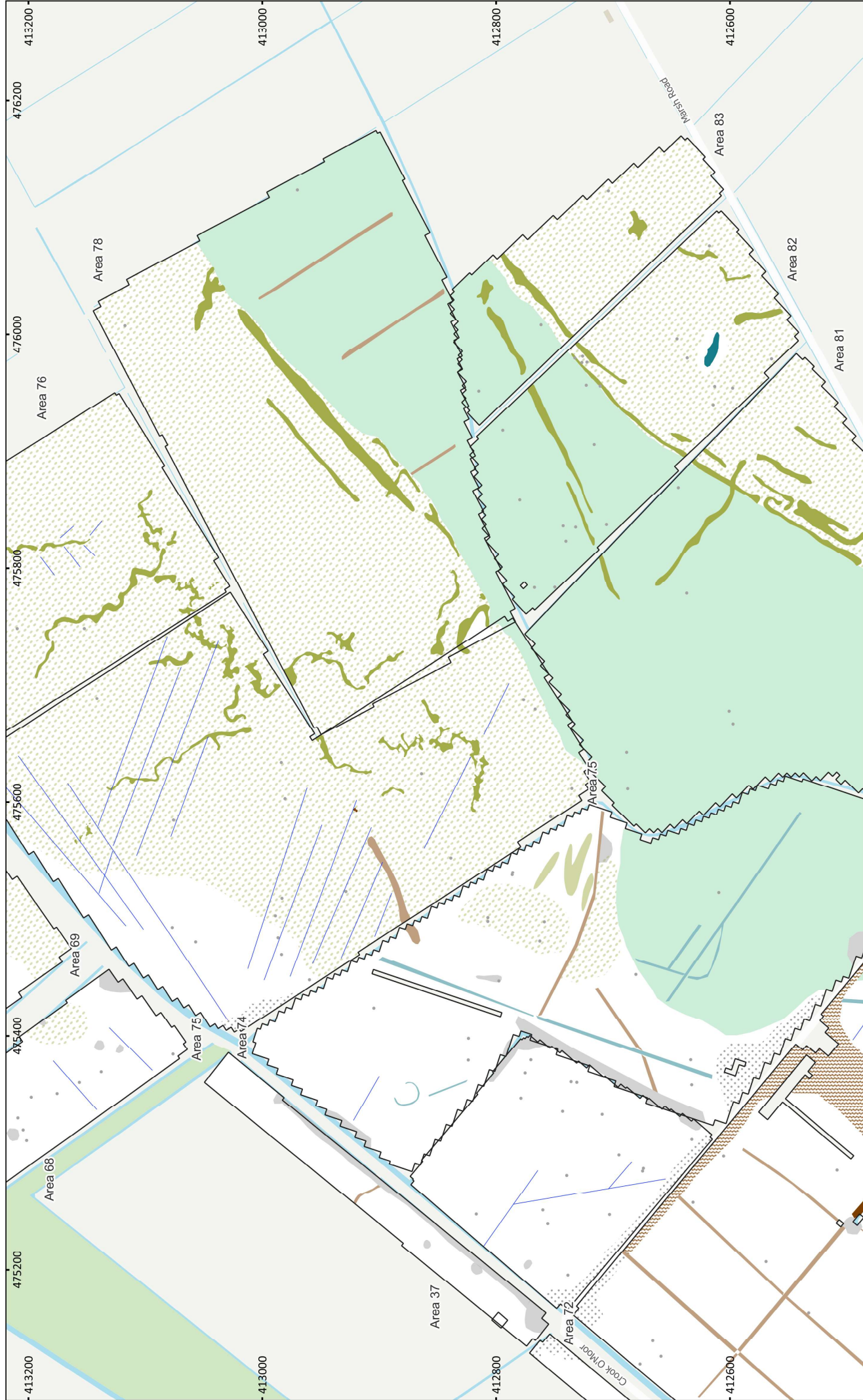
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MSS1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
North Lincolnshire
Figure 68 - Magnetic Gradient (Areas 36, 37, 68, 69, 74, 75, 76, 78, 81, 82 &
83)
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050100150 m



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MSS1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 69 - Magnetic Interpretation (Areas 36, 37, 68, 69, 74, 75, 76, 78, 81, 82 & 83)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 70 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Legend

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

Scale

0 50 100 150 m

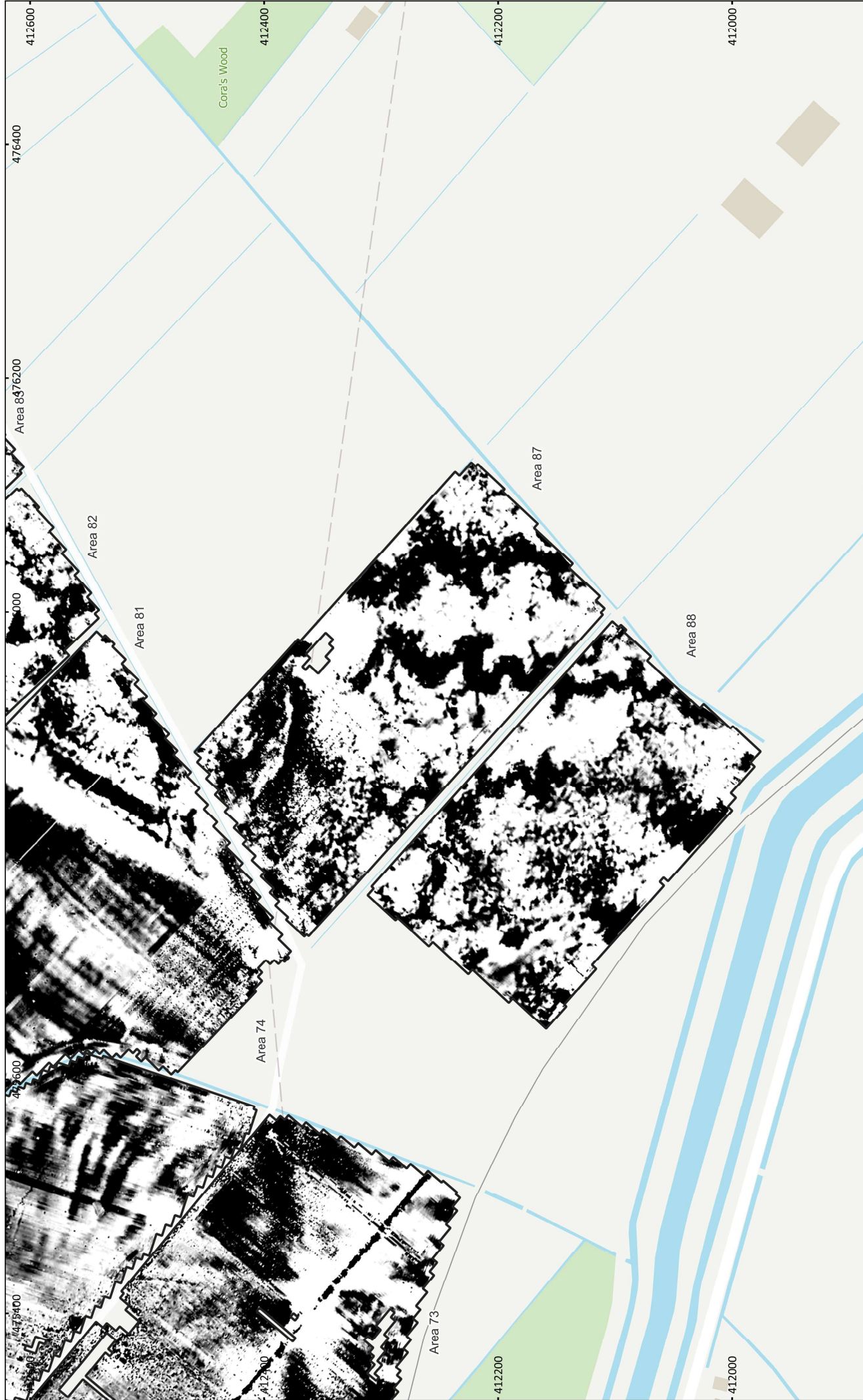
North Arrow

N

Inset Map

Map of the region showing the location of the study area in red.

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 71 - Magnetic Total Field (Lower Sensor) (Areas 73, 74, 81, 82, 83, 87 & 88)
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48997 nT 49005

0 50 100 150 m

N

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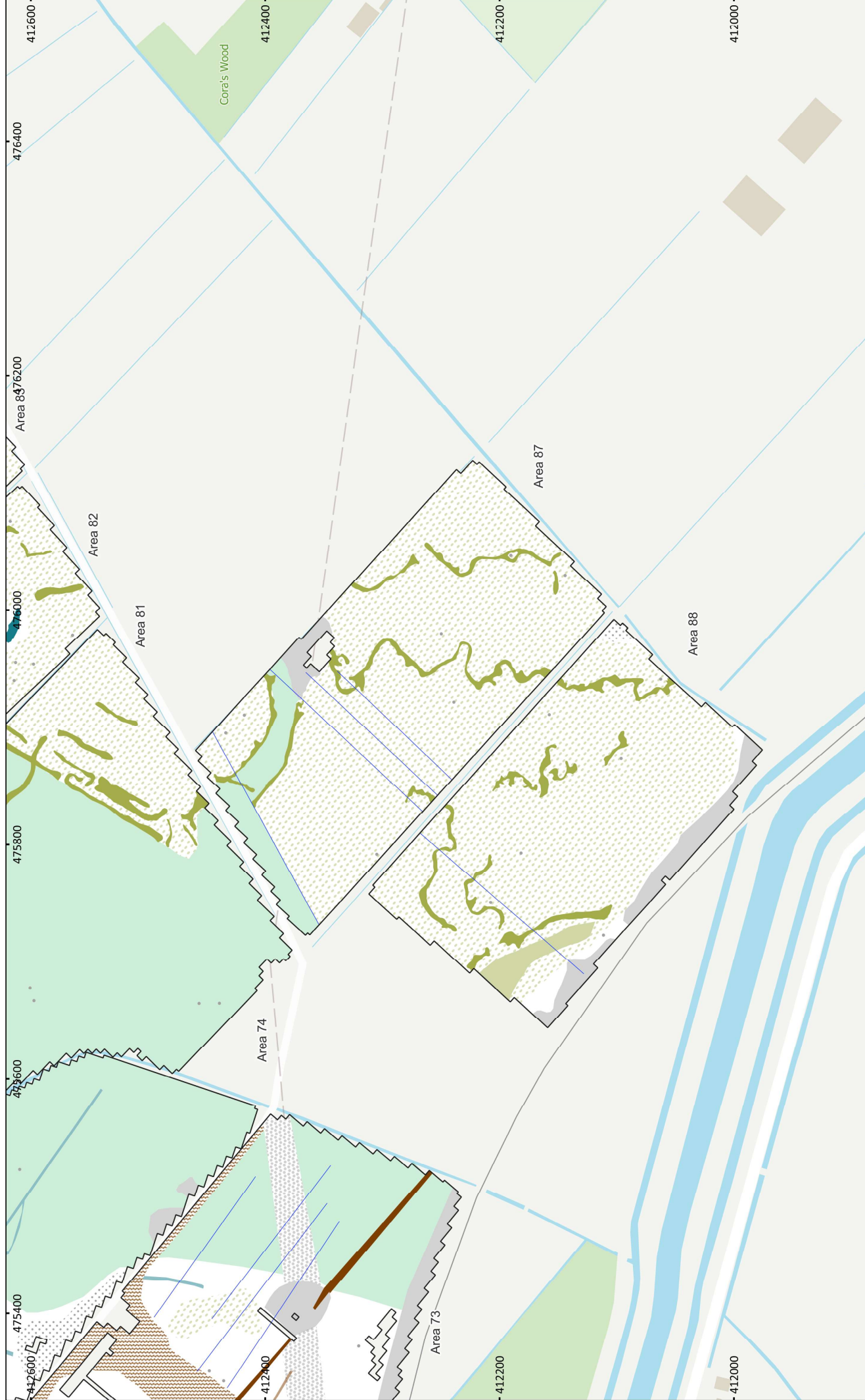


MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 72 - Magnetic Gradient (Areas 73, 74, 81, 82, 83, 87 & 88)
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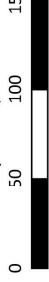
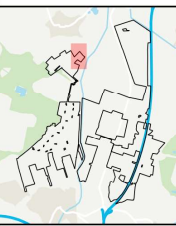
0 50 100 150 m

N

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 73 - Magnetic Interpretation (Areas 73, 74, 81, 82, 83, 87 & 88;
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MSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire

Figure 74 - Magnetic Interpretation Over Historical Maps and Satellite Imagery

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0 50 100 150 m

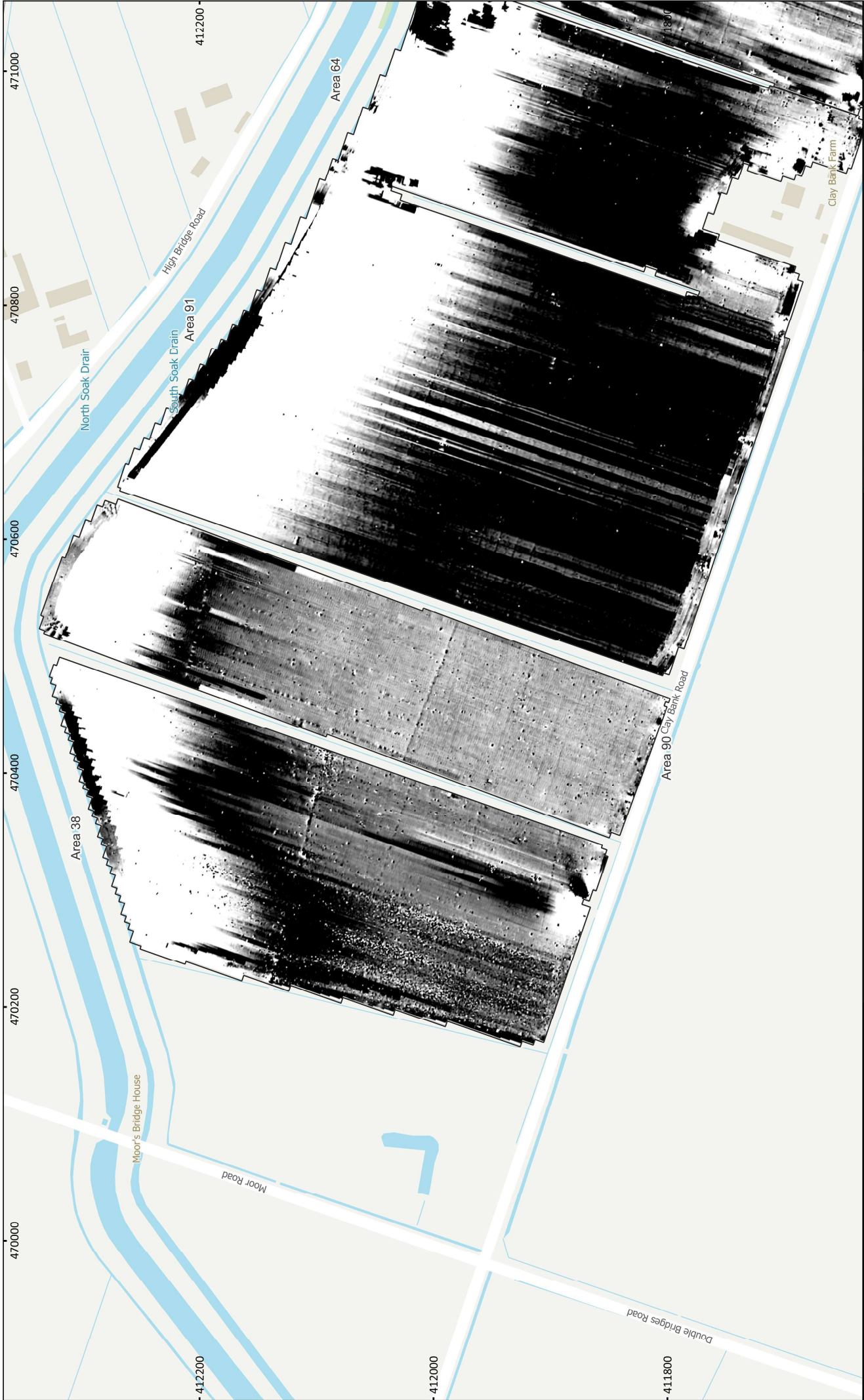
Agricultural (Strong) Natural (Spread) Ferrous/Debris (Spread)

Agricultural (Weak) Palaeochannel Overhead Cables

Agricultural (Spread) Undetermined (Strong) Drainage Feature

Natural (Strong) Undetermined (Weak) Ferrous (Spike)

Natural (Weak) Magnetic Disturbance



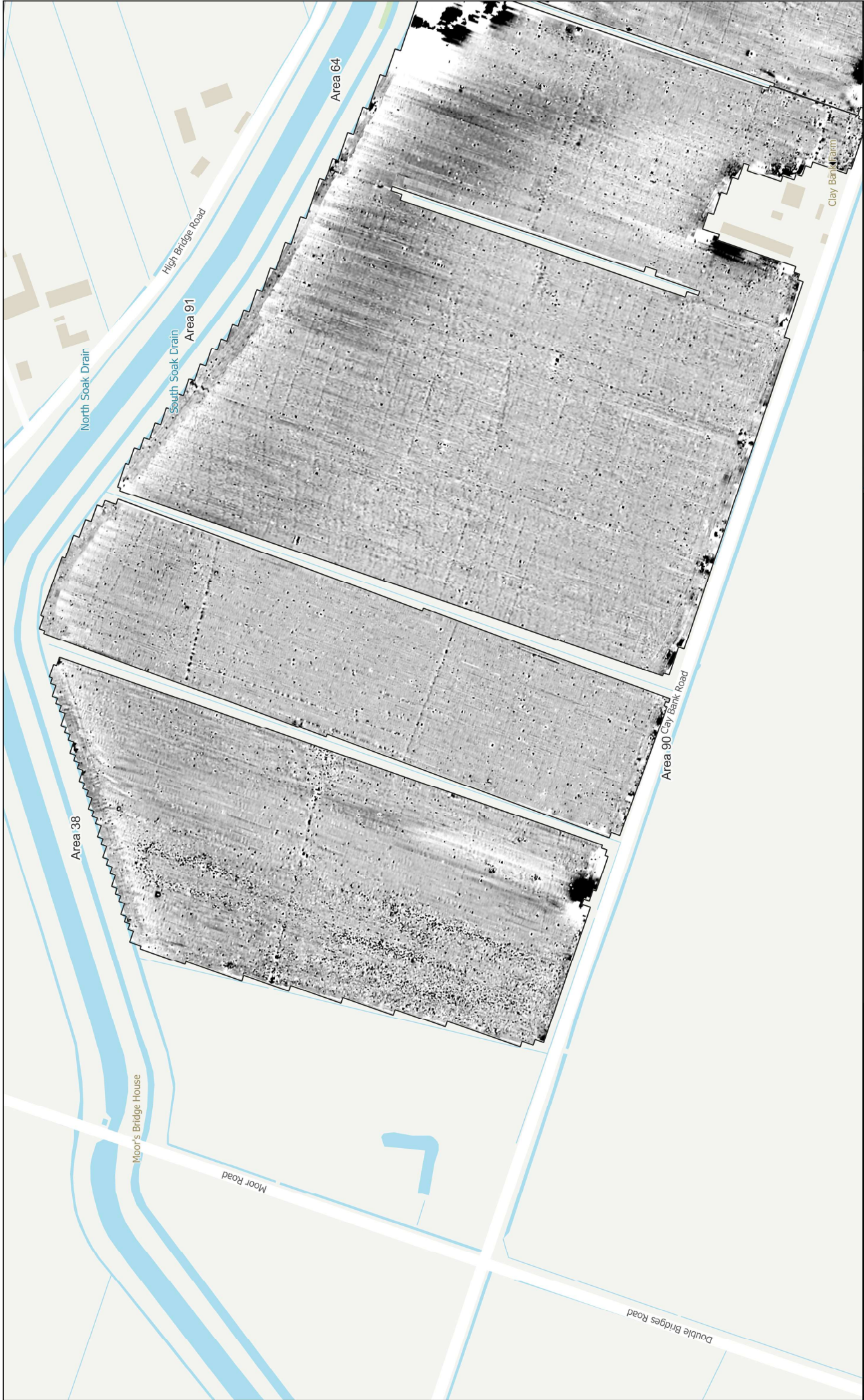
MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 75 - Magnetic Total Field (Lower Sensor) (Areas 38, 64, 90, 91 & 92)
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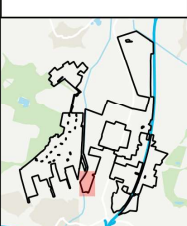
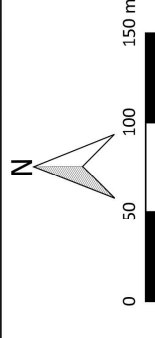
48997 nT 49005

0 50 100 150 m

N

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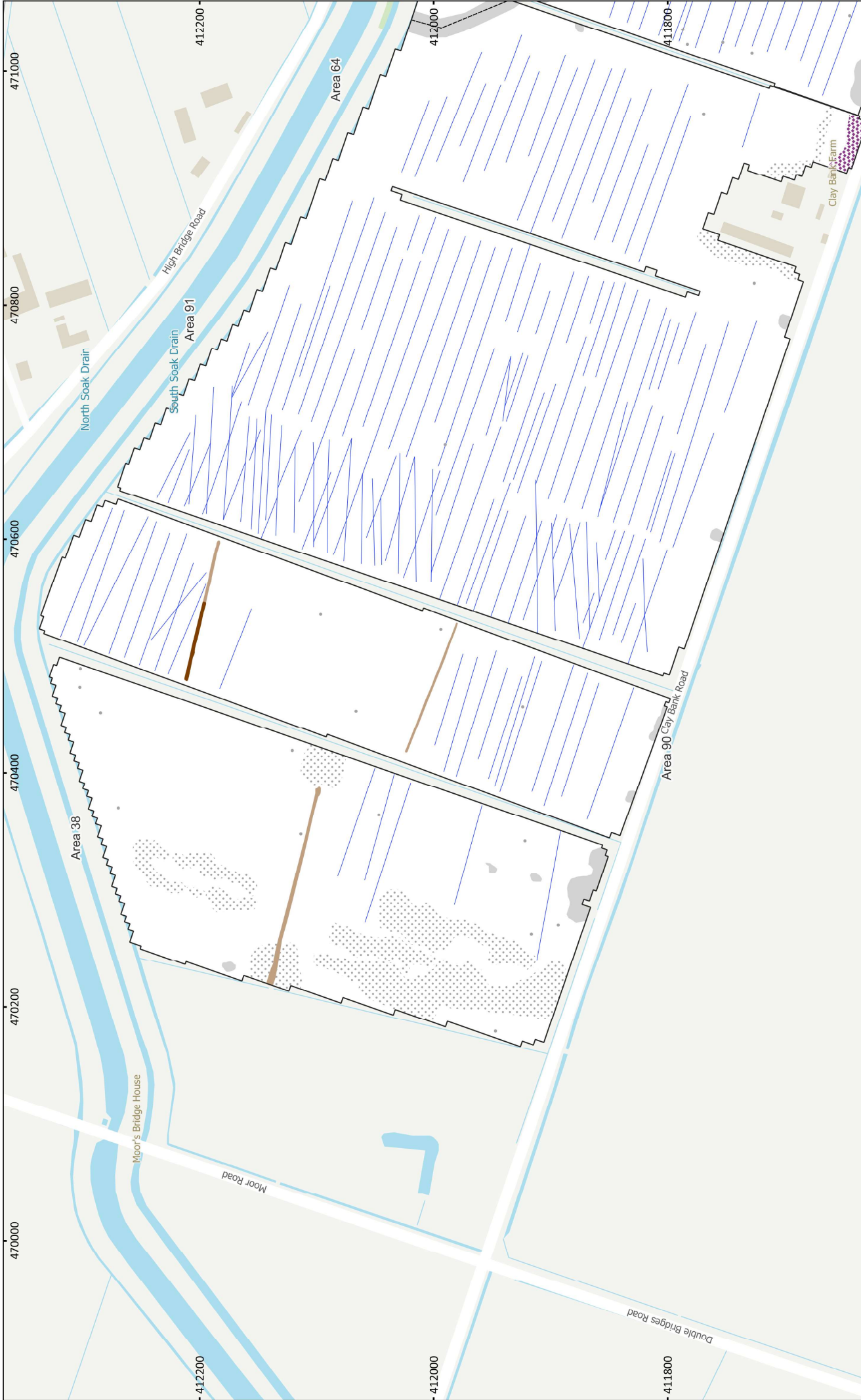


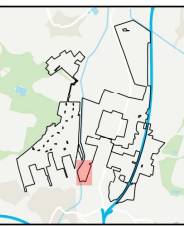
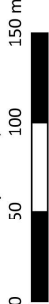
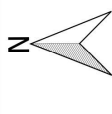




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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
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Figure 76 - Magnetic Gradient (Areas 38, 64, 90, 91 & 92)
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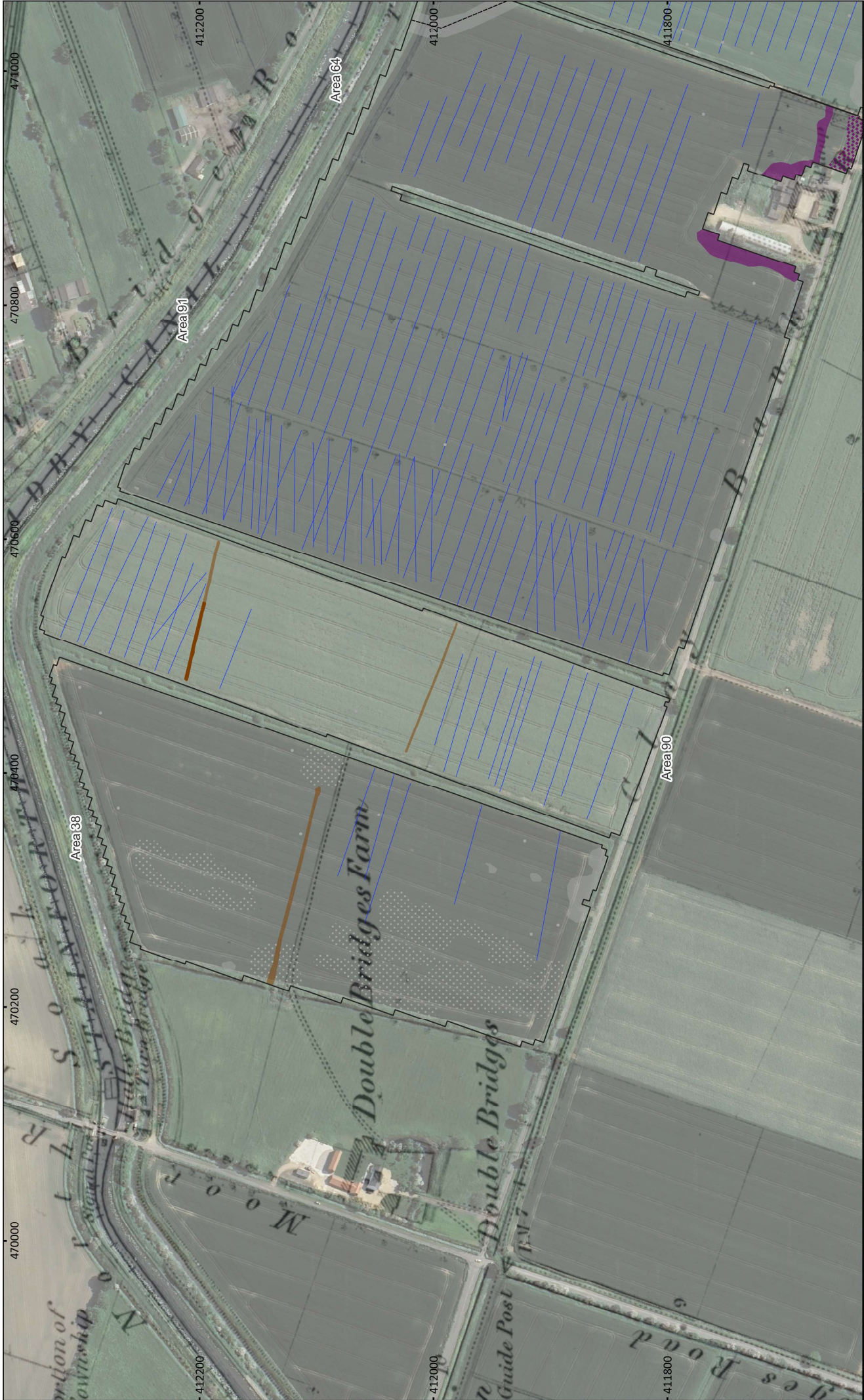






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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle,
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Figure 77 - Magnetic Interpretation (Areas 38, 64, 90, 91 & 92)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 78 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Legend

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

Scale

0 50 100 150 m

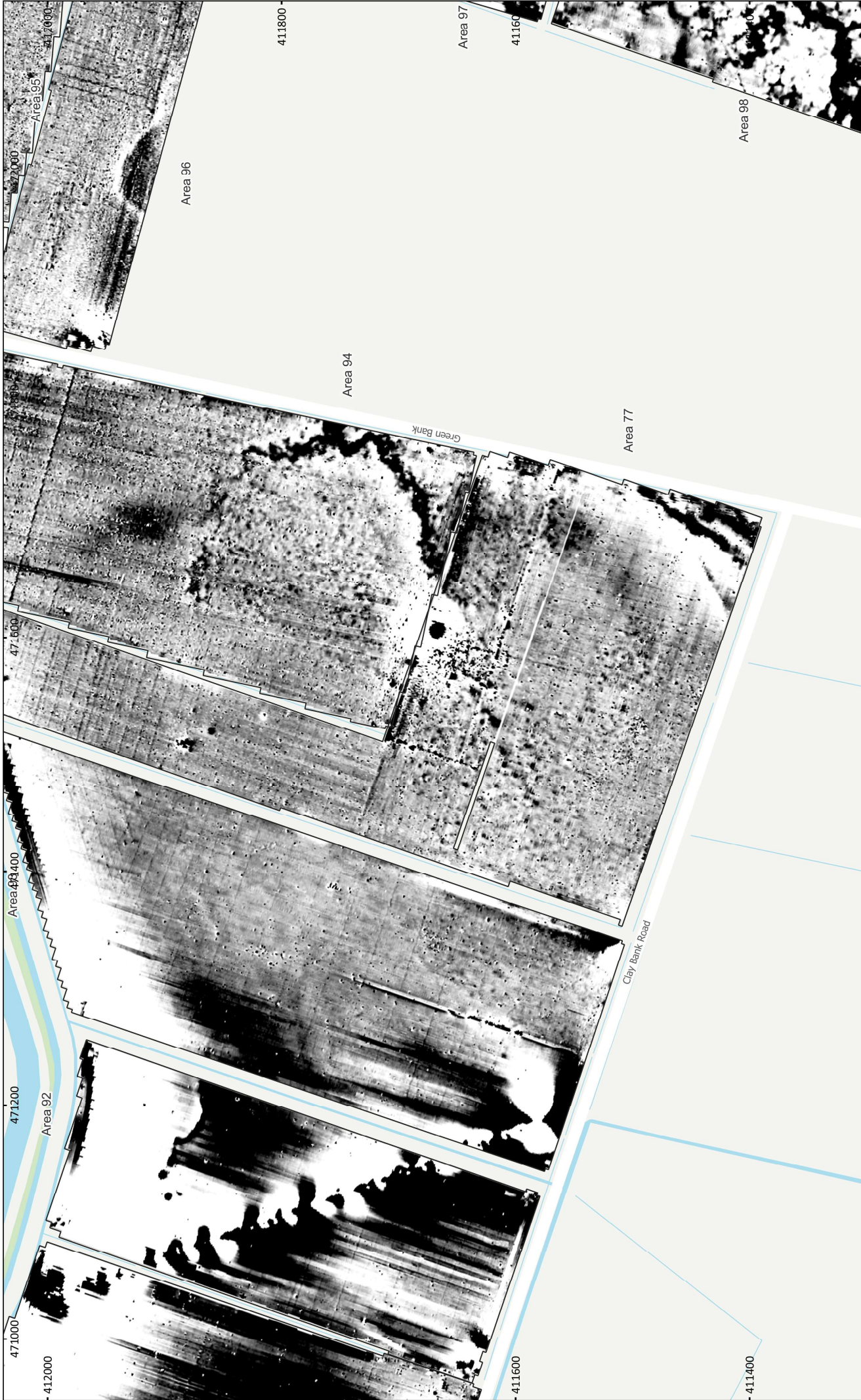
North Arrow

N

Inset Map

Location map showing the study area within the region of North Lincolnshire and South Yorkshire.

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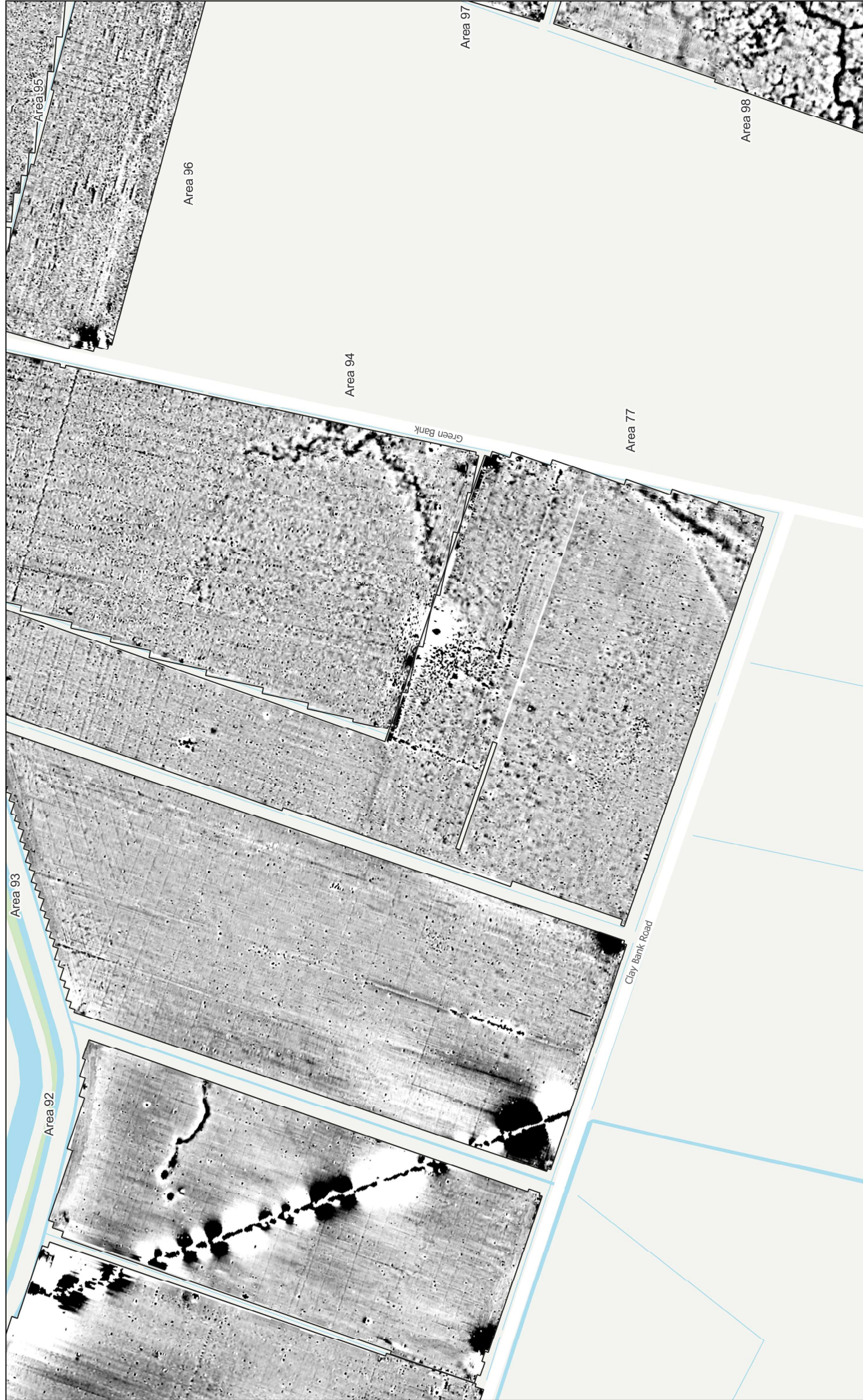
MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 79 - Magnetic Total Field (Lower Sensor) (Areas 64, 77, 92, 93, 94, 95, 96 & 98)
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48997 nT 49005

N

0 50 100 150 m

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

Figure 80 - Magnetic Gradient (Areas 64, 77, 92, 93, 94, 95, 96 & 98)

1:3,000 @ A3

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-1 nT 2

N

0 50 100 150 m

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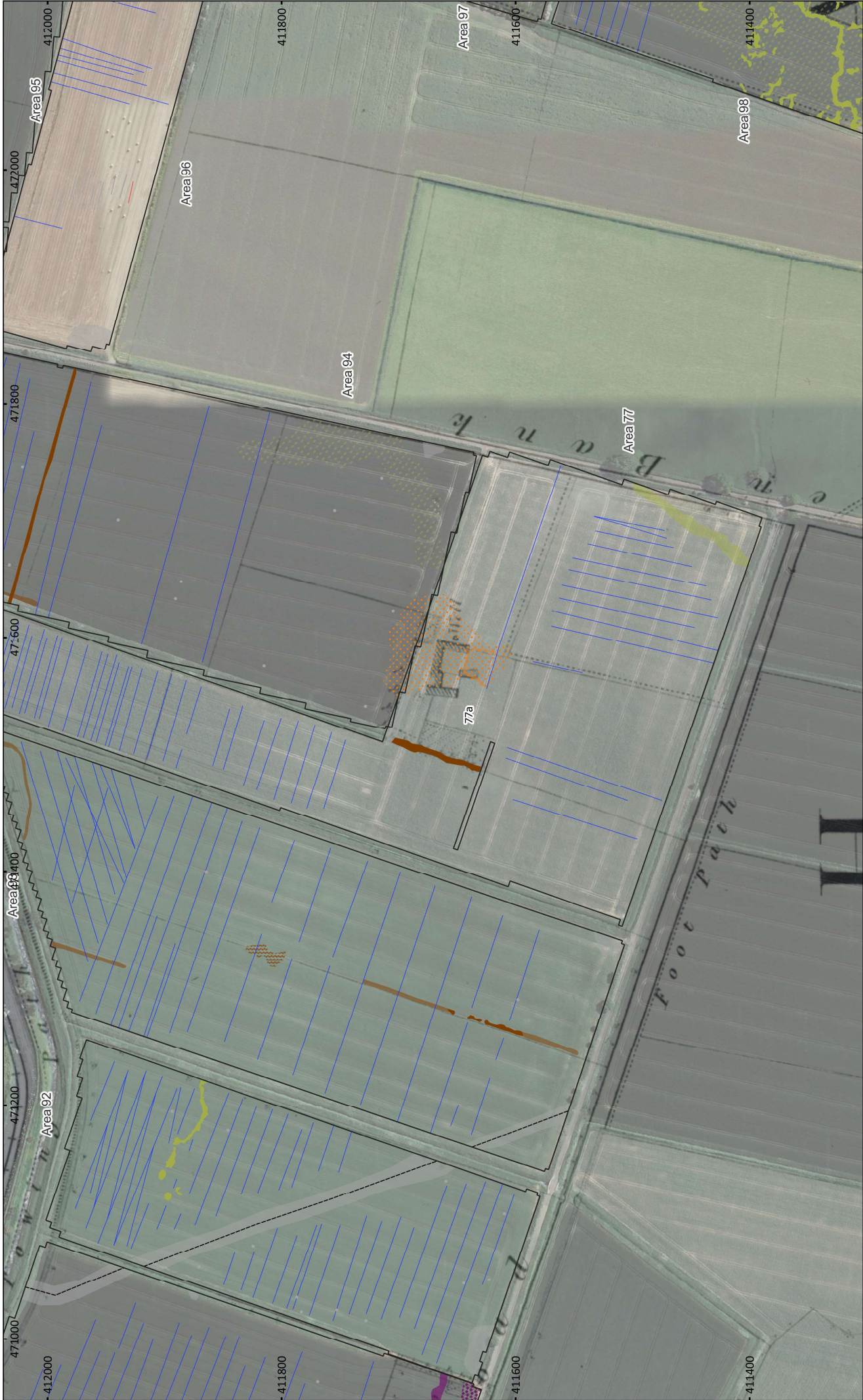




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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 81 - Magnetic Interpretation (Areas 64, 77, 92, 93, 94, 95, 96 & 98)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 82 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Archaeology Possible (Weak)
Archaeology Possible (Spread)
Agricultural (Strong)
Agricultural (Weak)
Agricultural (Spread)
Natural (Strong)

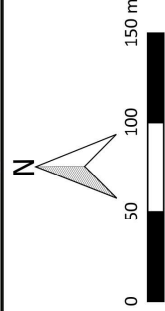
Natural (Weak)
Natural (Spread)
Industrial/Modern
Industrial/Modern (Spread)
Magnetic Disturbance
Ferrus/Debris (Spread)

Archaeology Probable (Trend)
Data Artefact
Service
Drainage Feature
Ferrus (Spike)

0 50 100 150 m

N

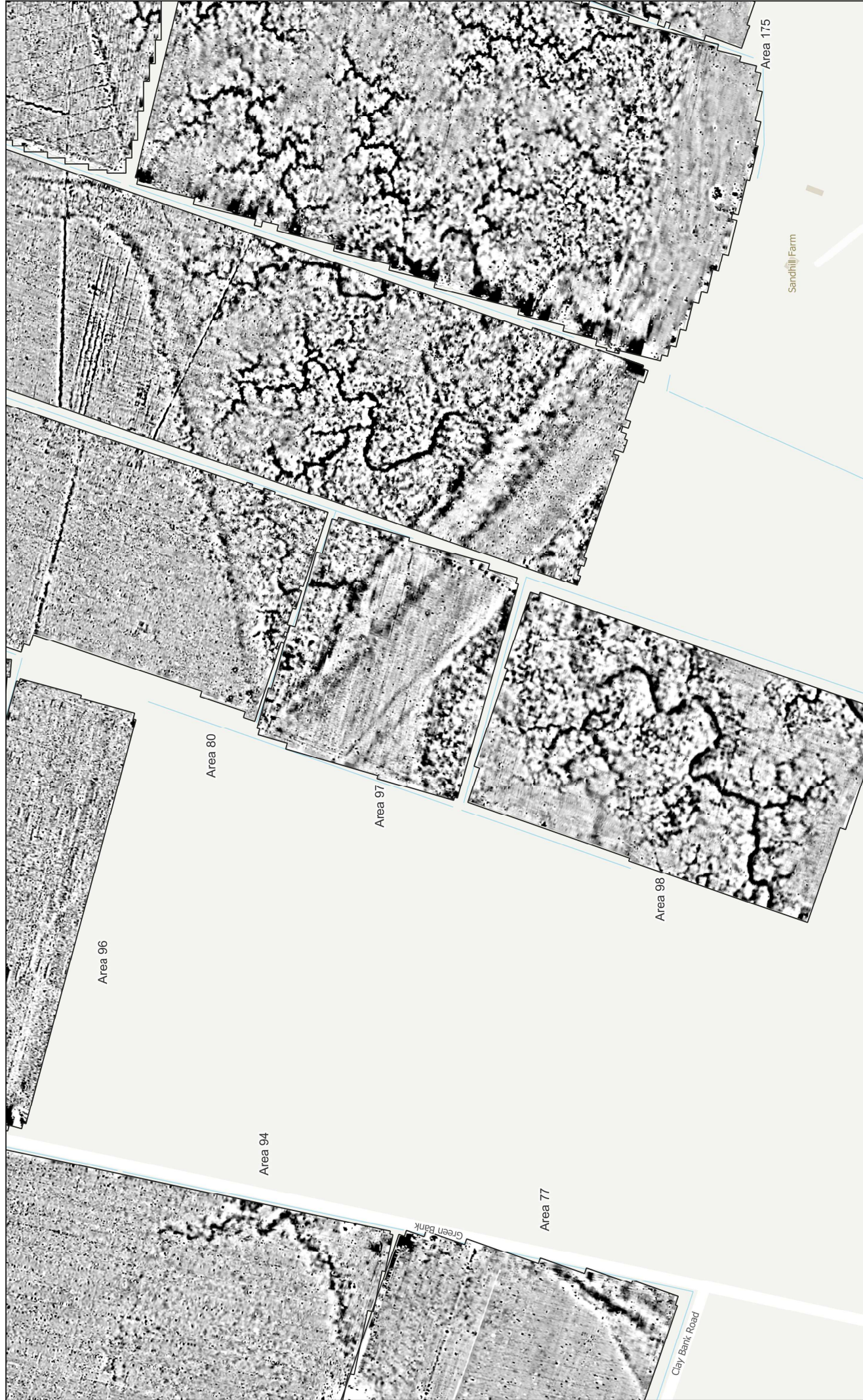
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 83 - Magnetic Total Field (Lower Sensor) (Areas 77, 80, 94, 96, 97, 98, 172, & 175)
1:3,000 @ A3
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 84 - Magnetic Gradient (Areas 77, 80, 94, 96, 97, 98, 172, & 175)
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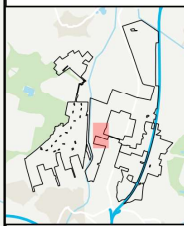
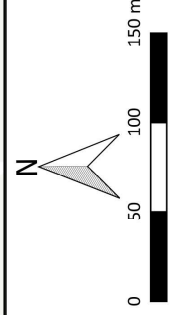
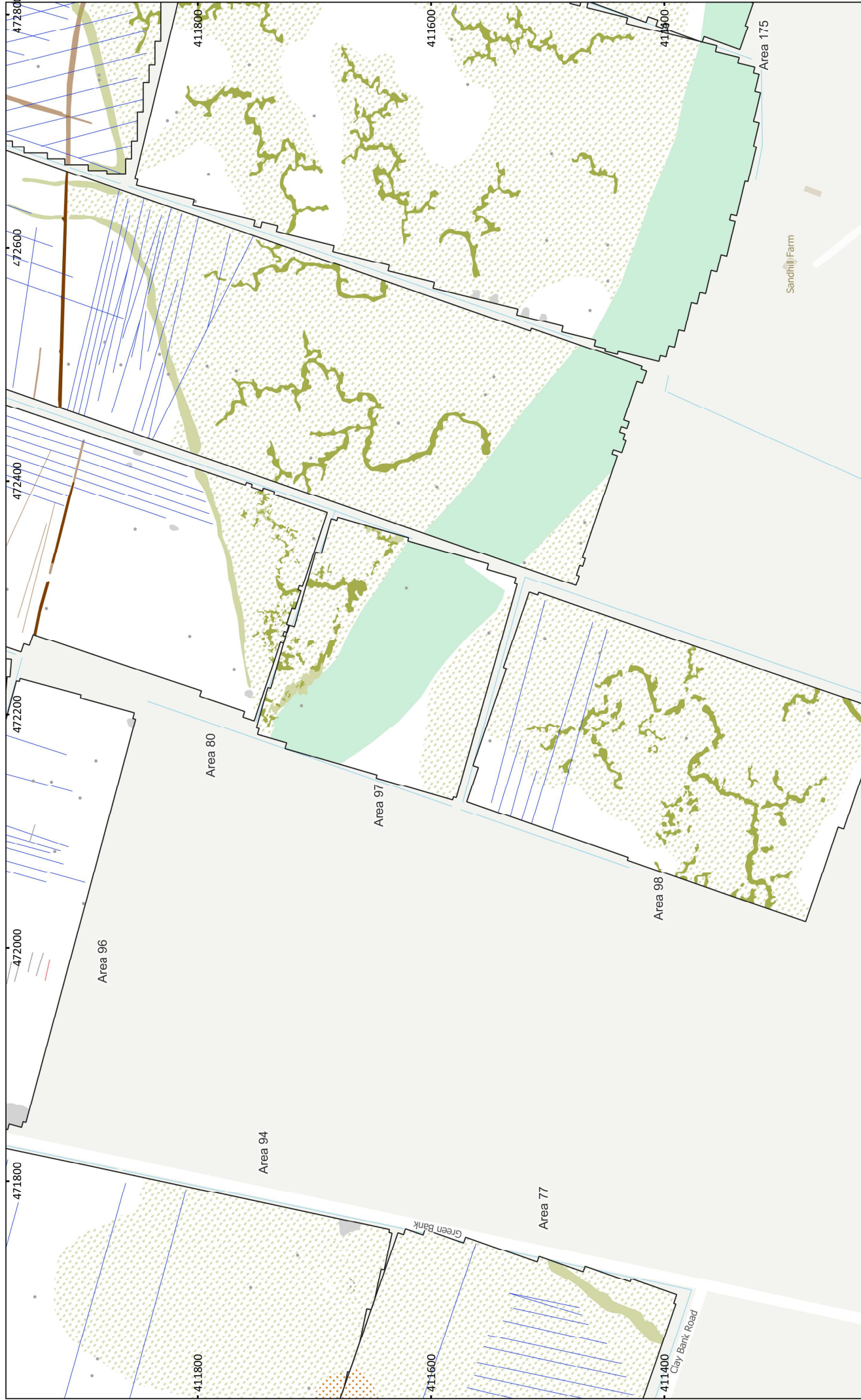
Scale: -1 to 2 nT

Inset map showing the location of the survey area within the region of North Lincolnshire and South Yorkshire.

North arrow pointing North (N).

Scale bar: 0 to 150 m.

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
 Figure 85 - Magnetic Interpretation (Areas 77, 80, 94, 96, 97, 98, 172, & 175)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 86 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Archaeology Possible (Spread)
Archaeology (Strong)
Archaeology (Weak)
Natural (Strong)
Natural (Weak)

Natural (Spread)
Palaeochannel
Magnetic Disturbance
Ferrus/Debris (Spread)
Archaeology Probable (Trend)

Agricultural (Trend)
Data Artefact
Drainage Feature
Ferroous (Spike)

0 50 100 150 m

N

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 87 - Magnetic Total Field (Lower Sensor) (Areas 84 & 98)
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48997 nT 49005

0 50 100 150 m

N

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 88 - Magnetic Gradient (Areas 84 & 98)
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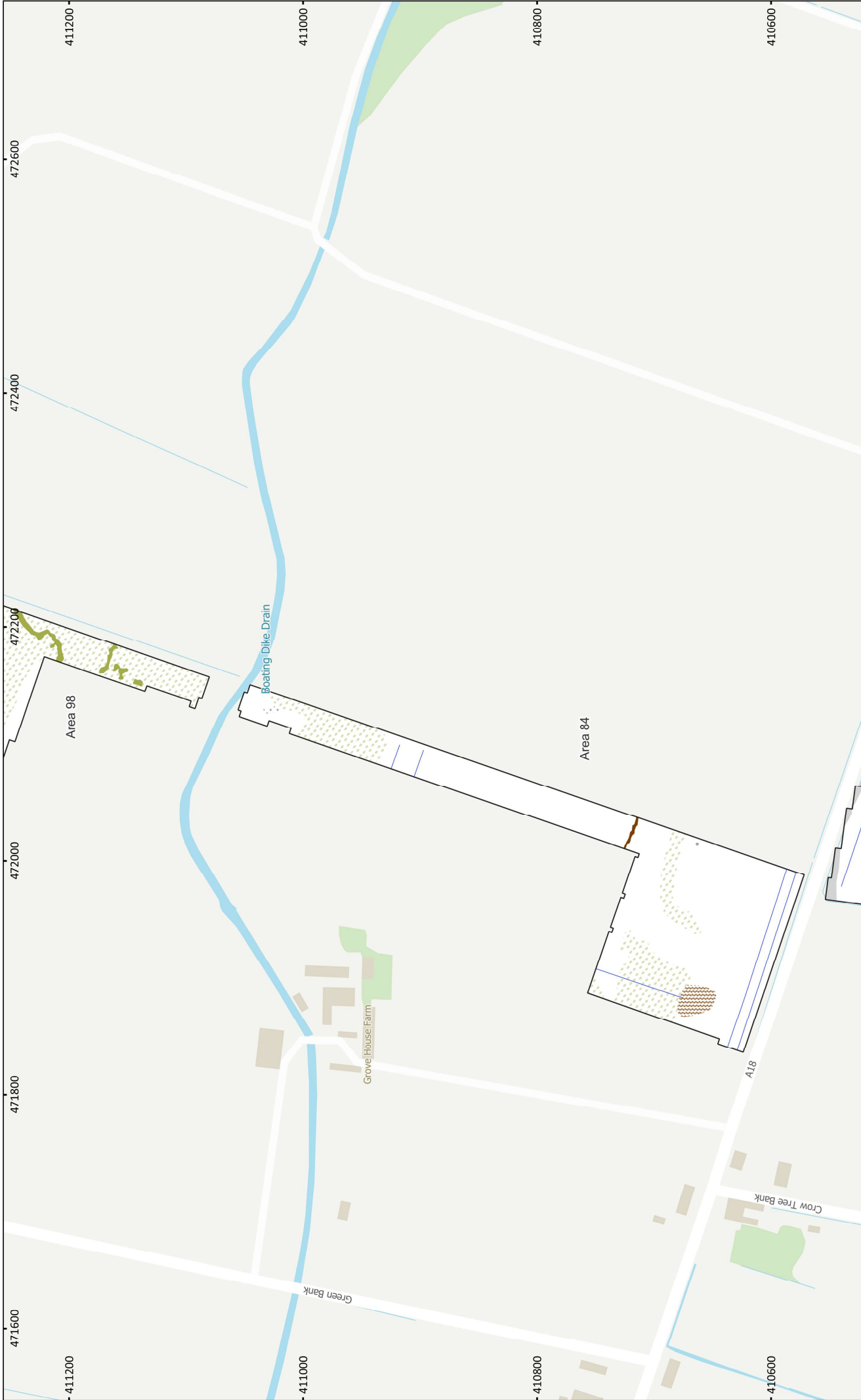
Scale: -1 nT to 2 nT

Inset map showing the location of the survey area within the region of North Lincolnshire and South Yorkshire.

North arrow pointing North (N).

Scale bar: 0, 50, 100, 150 m

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 89 - Magnetic Interpretation (Areas 84 & 98)
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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
Figure 90 - Magnetic Interpretation Over Historical Maps and Satellite Imagery
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Legend

	Agricultural (Strong)		Drainage Feature
	Natural (Spread)		Magnetic Disturbance
	Agricultural (Spread)		Ferrous (Spike)
	Natural (Strong)		Ferrous/Debris (Spread)

Scale

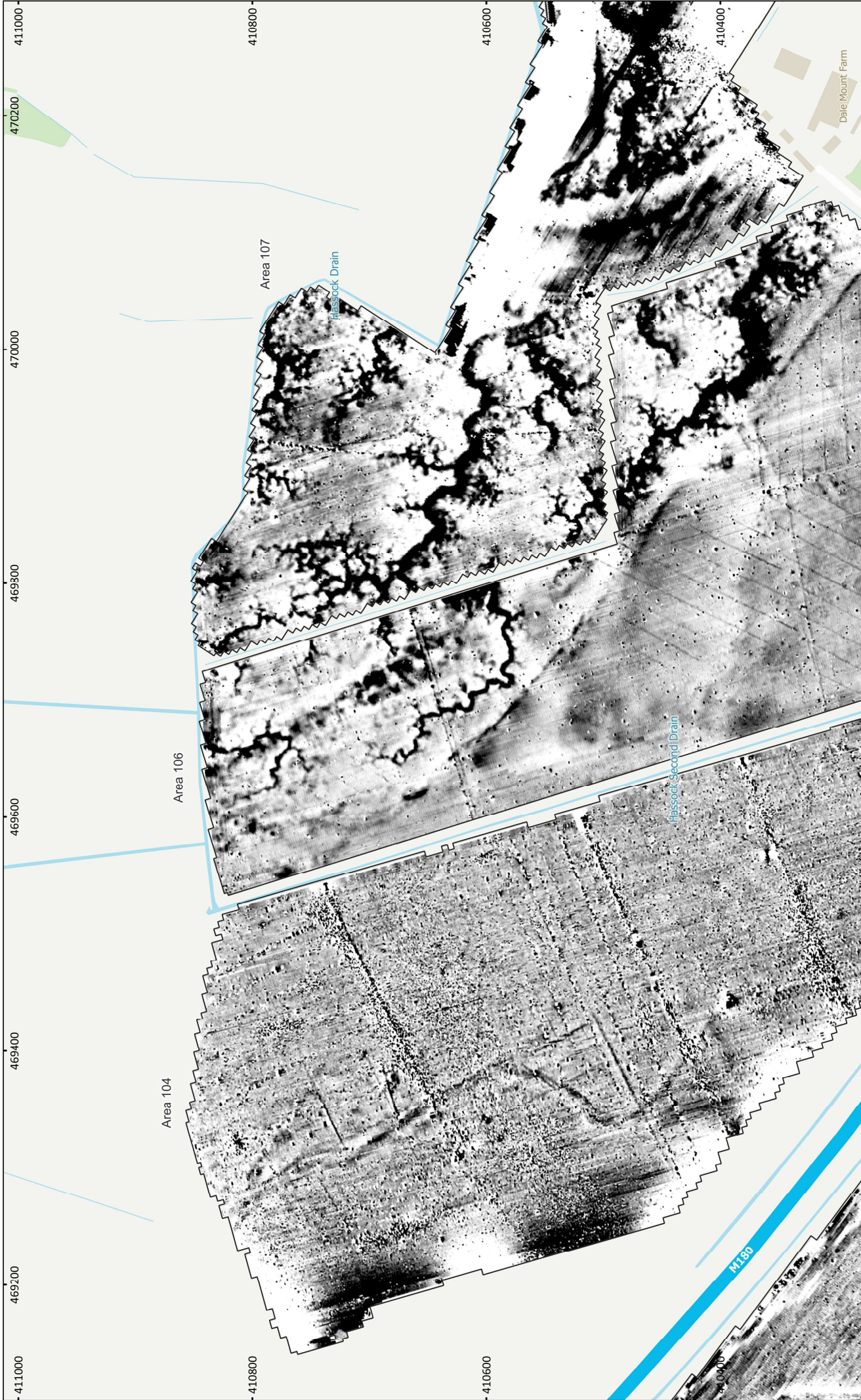
0 50 100 150 m

North Arrow

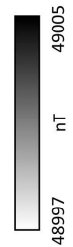
N

Inset Map

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MSSE1548: Tween Bridge - Thorne, Doncaster, South Yorkshire to Crowle, North Lincolnshire
 Figure 91 - Magnetic Total Field (Lower Sensor) (Areas 104, 106, 107 & 117)
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 Figure 92 - Magnetic Gradient (Areas 104, 106, 107 & 117)
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Area 104

Area 106

Area 107

Hassock Drain

Hassock Second Drain

M180

Dale Mount Farm

-1 nT 2