

HEPPLER WHITEFIELD ESTATE
PROPOSED CATTLE SHELTER, LAND TO THE EAST OF BICKERTON
FLOOD RISK ASSESSMENT

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HEPPLE WHITEFIELD ESTATE
 PROPOSED CATTLE SHELTER, LAND TO THE EAST OF BICKERTON NE65 7LW
 FLOOD RISK ASSESSMENT

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1.0 INTRODUCTION

1.1 General

This Consultancy received instructions from Mrs Lucy Riddell, Whitefield Hall, Whitefield, Hepple, Northumberland NE65 7LN, the Applicant, to carry out a Flood Risk Assessment of the Proposed Site, a development of a cattle shelter on land to the east of Bickerton, Hepple NE65 7LW, in support of an Application for Planning Approval, and to the requirements of the National Planning Policy Framework.

The Study has been undertaken with due regards to the Environment Agency's National Standing Advice on Development and Flood Risk.

It is known that part of the land in which the site is to be located is susceptible to flooding and the aim of this report is to assess the risks present to enable approval of the development.

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2.0 DESCRIPTION OF THE APPLICATION AREA

2.1 Site Location

The Application Site of 0.04ha, edged red on the Site Location Plan at Appendix 5.1.1 is situated to the east of Bickerton, within an agricultural field of some 2.1ha, and will be located as shown on the Site Location Plan.

The area is bounded by agricultural land.

2.2 Existing Development

There is no existing development within the subject application site.

An Existing Site Plan is at Appendix 5.2.2

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3.0 FLOOD RISK

3.1 Potential Sources of Flooding – Level 1 Screening Study

All potential sources of flooding must be considered for any proposed development. A summary of the potential sources of flooding and a review of the potential risk posed by each source at the application site is presented in Table 4-1.

Table 4-1

Potential Risk Posed by Flooding Sources

(i)	Fluvial flooding	Yes
(ii)	Tidal flooding	No
(iii)	Flooding from rising/high groundwater	No
(iv)	Overland flow flooding	No
(v)	Flooding from artificial drainage systems	No
(vi)	Flooding due to infrastructure failure	No
(vii)	Contributing to flooding elsewhere	No

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3.0 FLOOD RISK [contd.]

3.2 Site Specific Flood Risk Assessment.

3.2.1 Fluvial flooding

The nearest relevant watercourse is the Whitefield Burn identified on the Site Location Plan at Appendix 5.1.1, annotated on the Proposed Site Plan with Flood Map Underlay at Appendix 5.1.4, and on the Annotated Aerial Photograph at Appendix 5.2.1.

The EA Flood Map shows that the subject area is partly in Zones 3, and is at risk from flooding from fluvial flooding.

A survey grid of the subject site to Ordnance Datum, annotated on drawing N 04 Flood Map under OS Plan Best Fit, at Appendix 5.1.4, shows, however, that the downstream constriction of the bridge over the B63431 County Road has a road level of 98.42 AOD with the road falling east at 1:20. This precludes a buildup of flood water above the bridge road level as the flood water would flow round the bridge parapet to the east and into the lower field to the north of the bridge. The extreme Zone 3 level within the subject development being 99.5m, some 1.00m above the bridge road level.

3.2.2 Coastal/Tidal flooding

There is no Coastal/Tidal Flooding identified on the Environment Agency's Flood Map for Planning at Appendix 5.1.4.

3.2.3 Flooding from rising /high ground water

There is no flooding risk from rising/high ground water.

3.2.4 Overland flow flooding

The Environment Agency Surface Water Flood Risk Plan shows no flood risk within the subject area.

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3.0 FLOOD RISK [contd.]

3.2 Site Specific Flood Risk Assessment [contd].

3.2.5 Flooding from artificial drainage systems

The only artificial drainage systems within the subject area are agricultural land drains. The subject area is not at risk from flooding from artificial drainage systems.

3.2.6 Flooding due to infrastructure failure

The subject area is not at risk from flooding due to infrastructure failure.

3.2.7 Contributing to flooding elsewhere

The subject sit will have no positive surface water drainage, with the roof draining to ground.

The subject area will not contribute to flooding elsewhere

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4.0 SUMMARY AND CONCLUSION

From the detailed information at 3.2.1, it is extremely unlikely that flooding will endanger the subject building.

Notwithstanding this, the building will be constructed with the floor level at the level of the existing ground at the east gable which is outwith both Flood Zones 2 & 3.

The development is in any event, as an agricultural building, is in the Less Vulnerable Category of Table D.2: Flood Risk Vulnerability Classification of PPS 25.

The Application Site is therefore not at risk from flooding.

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5.0 APPENDICES

5.1 PLANS

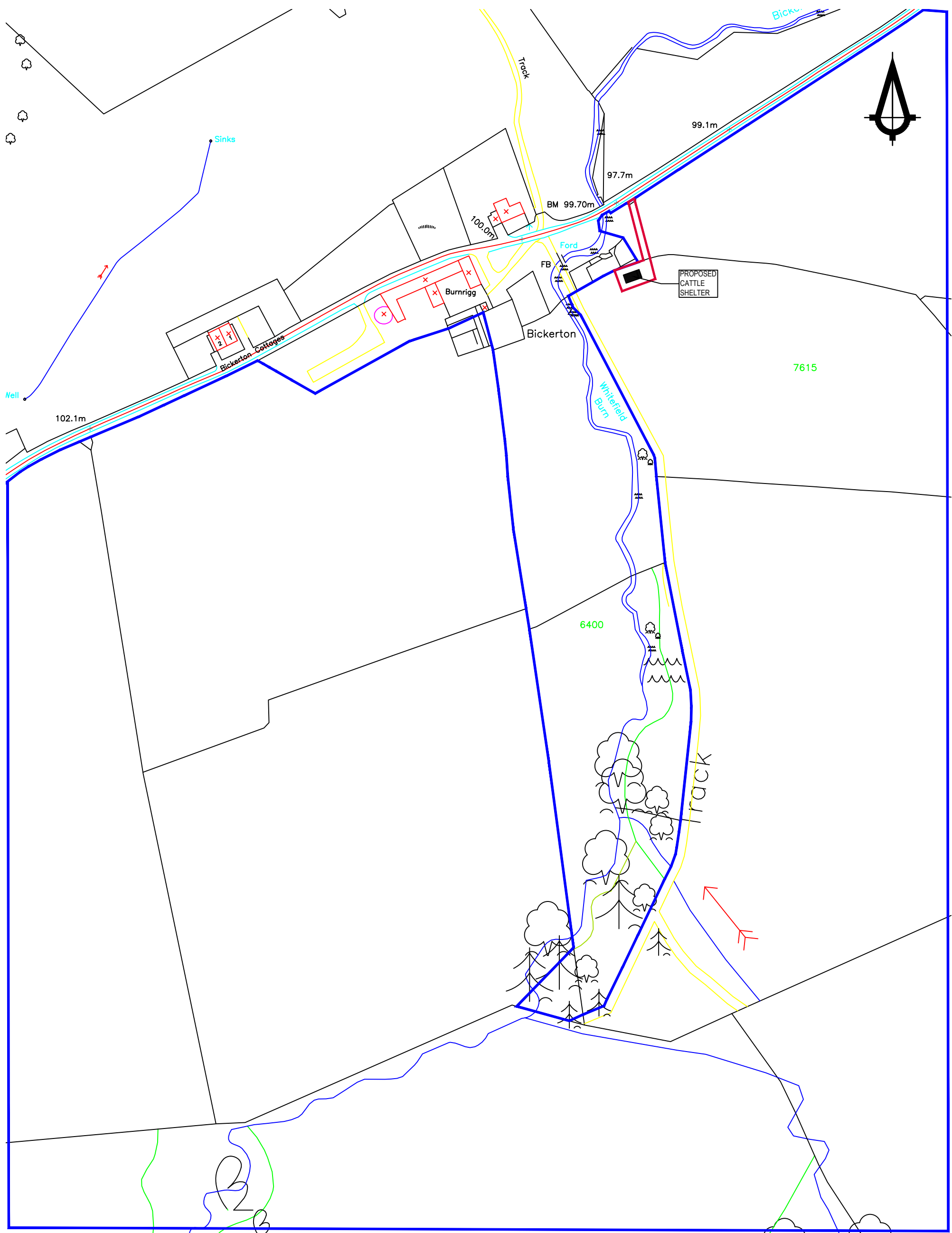
5.1.1 Site Location Plan

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Hepple Whitefield Estate
Whitefield Hall
Whitfield
Morpeth
NE65 7LN

14 Brenkley Way
Blezard Business Park
Seaton Burn
Newcastle upon Tyne
NE13 6DS



Drawn
DW
Checked
LR
Scale
1:2000
Date Drawn
14/12/2020

Client
HEPPLE WHITEFIELD ESTATE
Project Title
PROPOSED CATTLE SHELTER
BICKERTON
Drawing Title
SITE LOCATION PLAN

Project No.
2020/01
Drawing No.
N01
Revision
0
Sheet Size
A3

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PROPOSED CATTLE SHELTER, LAND TO THE EAST OF BICKERTON NE65 7LW
FLOOD RISK ASSESSMENT

5.0 APPENDICES

5.1 PLANS

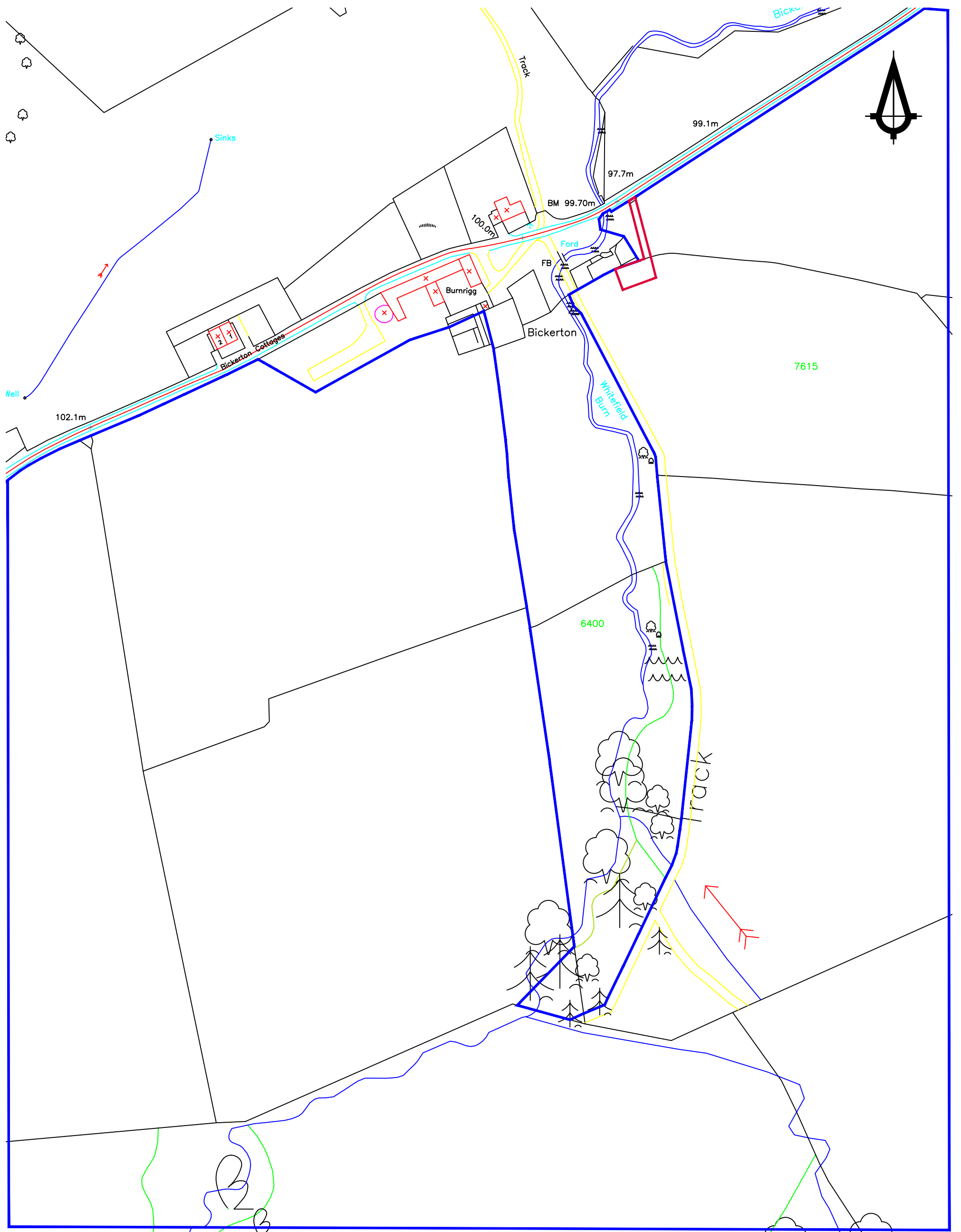
5.1.2 Existing Plan

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Drawn	DW
Checked	LR
Scales	1:2000
Date Drawn	14/12/2020

Client	HEPPLE WHITEFIELD ESTATE
Project Title	PROPOSED CATTLE SHELTER
Drawing Title	LAND TO THE EAST OF BICKERTON NE65 7LW
Drawing Title	EXISTING SITE PLAN

Project No.	2020/01
Drawing No.	N05
Revision	0
Sheet Size	A3

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FLOOD RISK ASSESSMENT

5.0 APPENDICES

5.1 PLANS

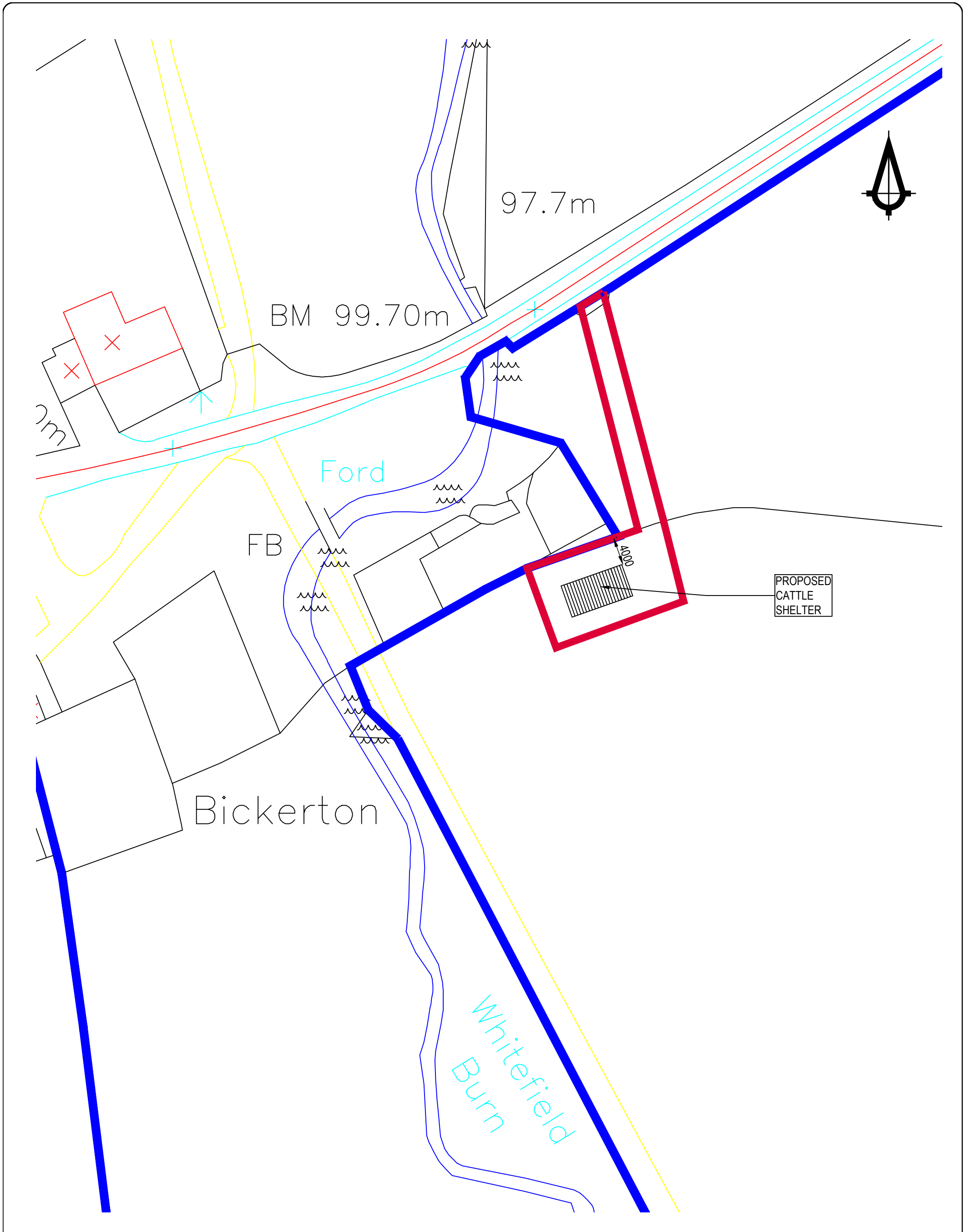
5.1.3 Proposed Plan

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Drawn	DW
Checked	LR
Scales	1:500
Date Drawn	14/12/2020

Client	HEPPLE WHITEFIELD ESTATE
Project Title	PROPOSED CATTLE SHELTER
Drawing Title	BLOCK PLAN

Project No.	2020/01
Drawing No.	N02
Revision	0
Sheet Size	A3

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PROPOSED CATTLE SHELTER, LAND TO THE EAST OF BICKERTON NE65 7LW
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5.0 APPENDICES

5.1 PLANS

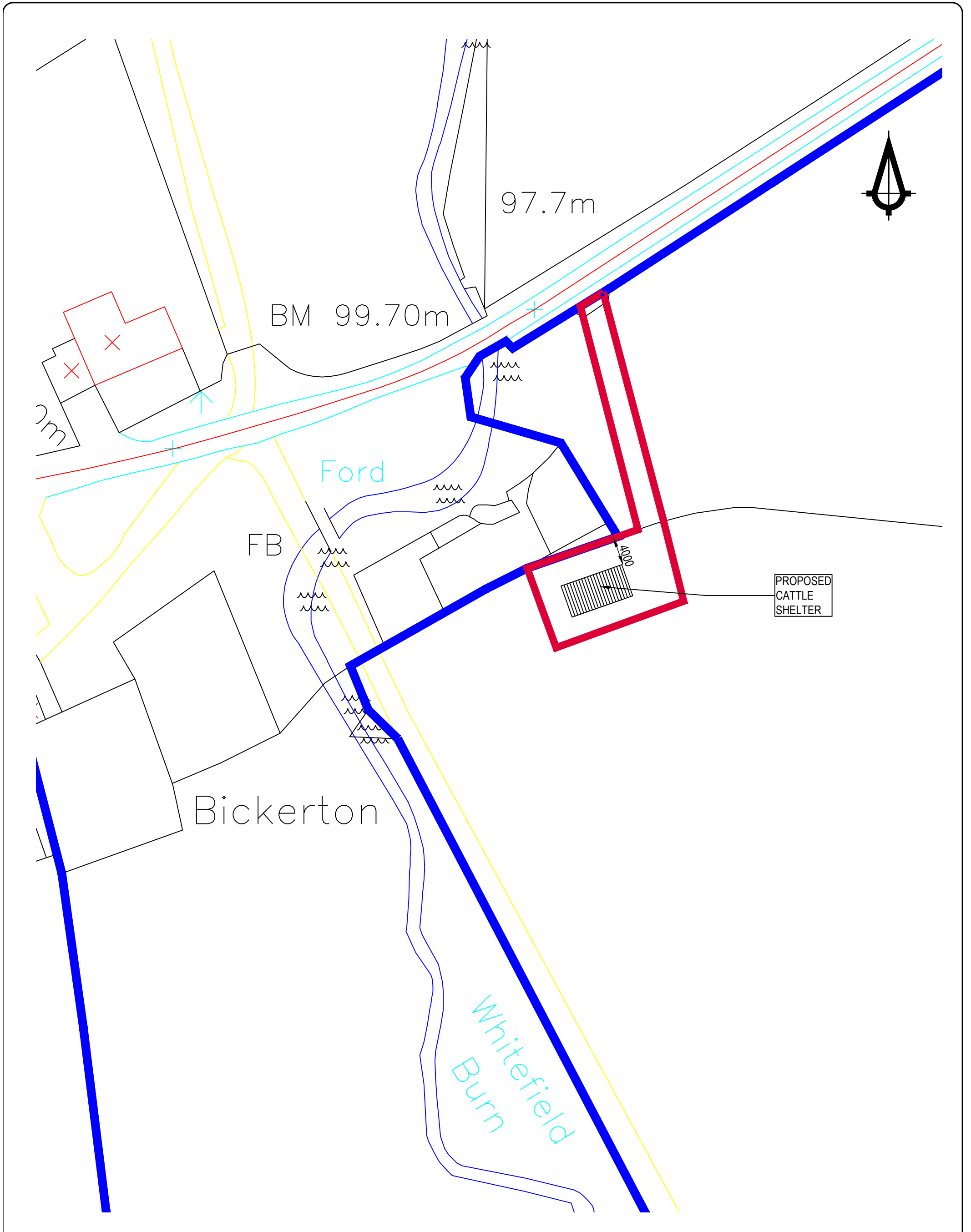
5.1.4 Building Block Plan

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Drawn	DW
Checked	LR
Scales	1:500
Date Drawn	14/12/2020

Client	HEPPLE WHITEFIELD ESTATE
Project Title	PROPOSED CATTLE SHELTER
Drawing Title	BLOCK PLAN

Project No.	2020/01
Drawing No.	N02
Revision	0
Sheet Size	A3

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5.0 APPENDICES

5.1 PLANS

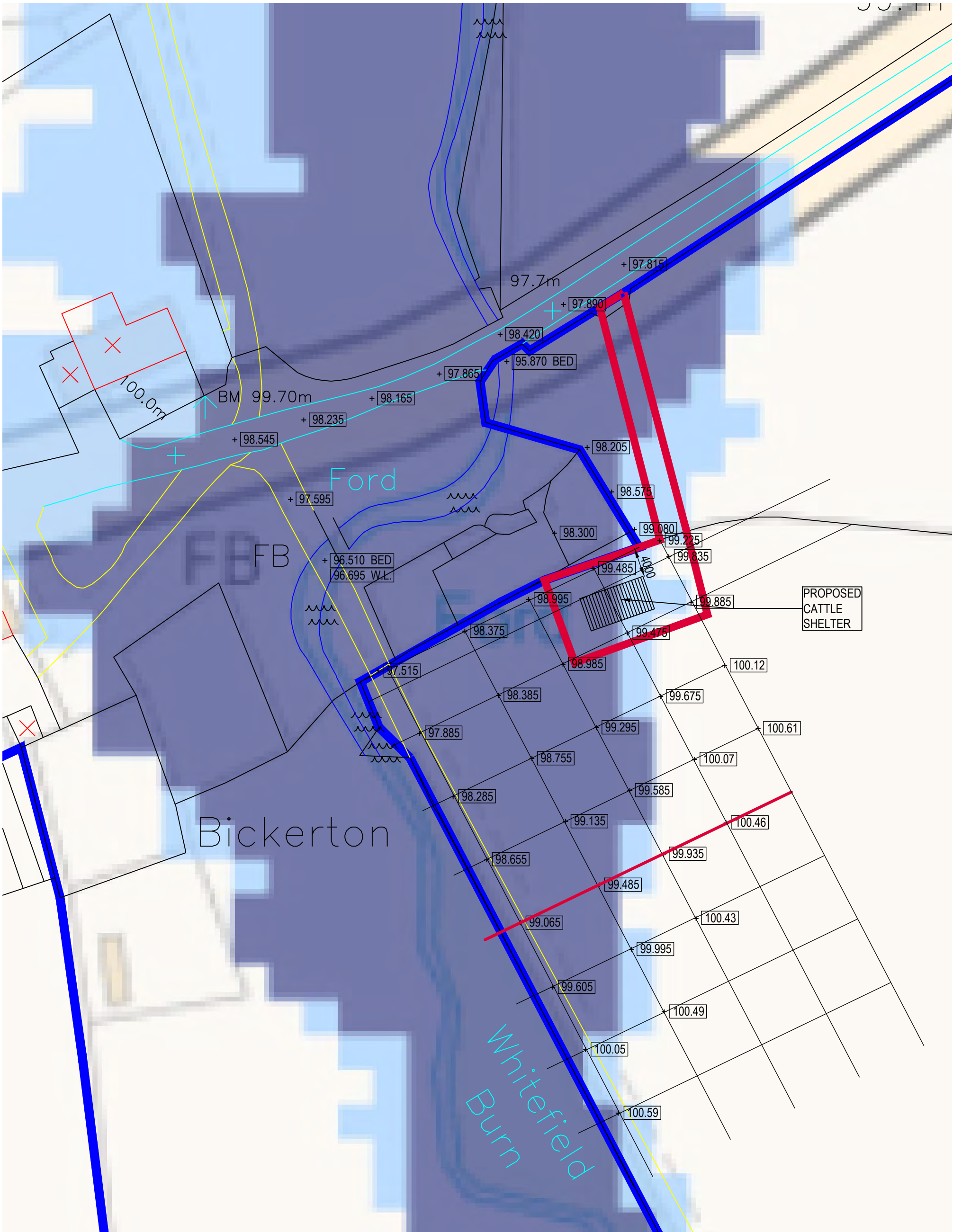
5.1.5 Flood Map Under OS Plan

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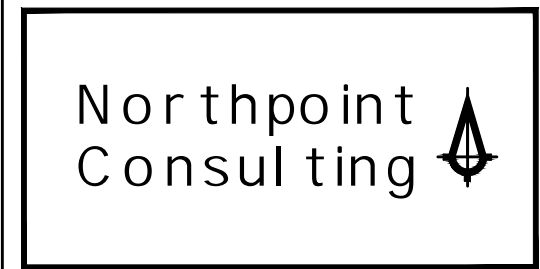


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Drawn
 ABL
 Checked
 Scales
 DW
 Date Drawn
 07/01/21

Client
 HEPPLER WHITEFIELD ESTATE
 Project Title
 PROPOSED CATTLE SHELTER
 LAND EAST OF BICKERTON NE65 7LW
 Drawing Title
 FLOOD MAP UNDER OS PLAN BEST FIT

Project No.
 145001/21
 Drawing No.
 N 04
 Revision
 0
 Sheet Size
 A3

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FLOOD RISK ASSESSMENT

5.0 APPENDICES

5.2 DOCUMENTS

5.2.1 Annotated Aerial Photograph and Site Photographs

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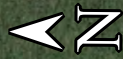
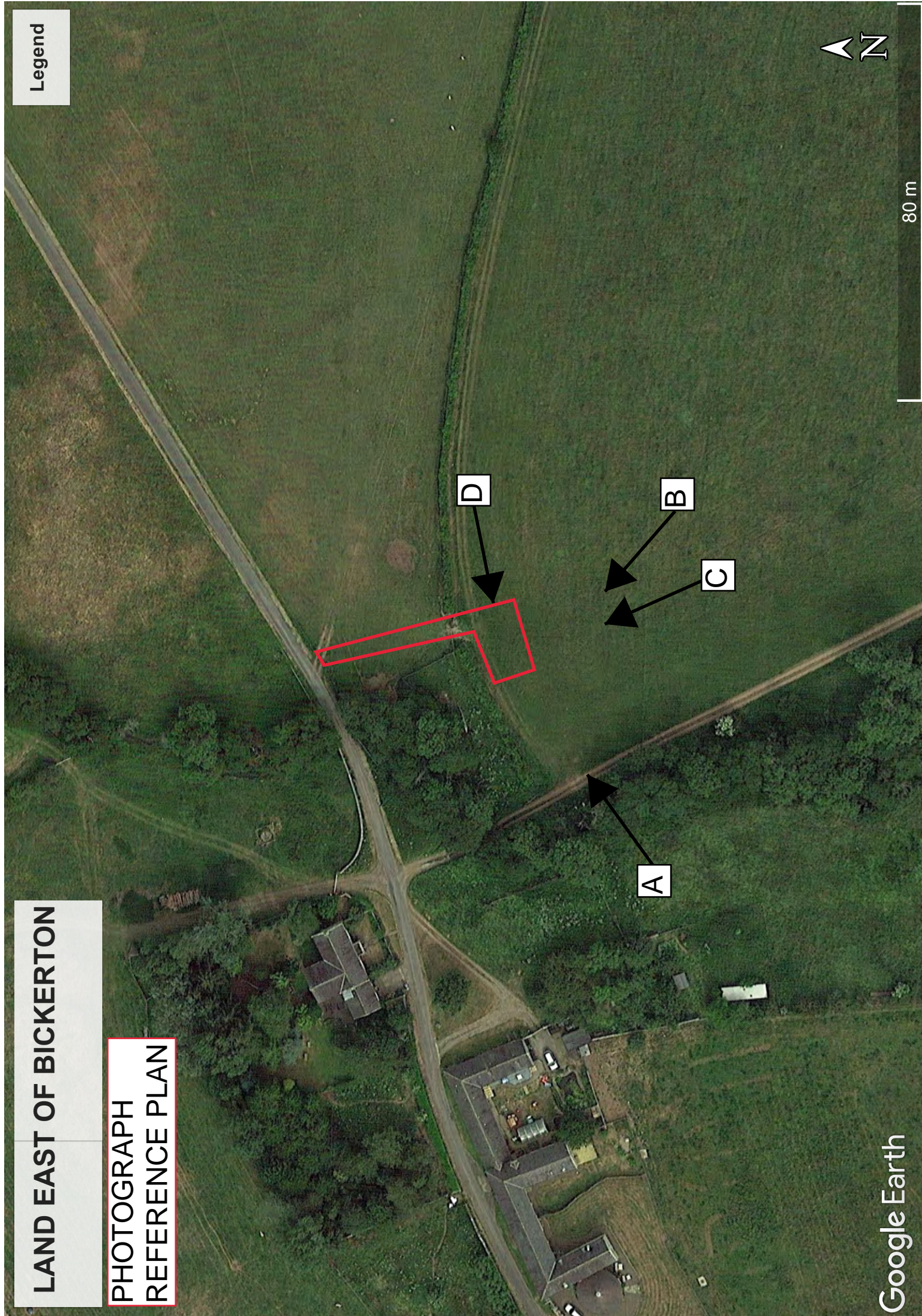
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LAND EAST OF BICKERTON

**PHOTOGRAPH
REFERENCE PLAN**

Legend



80 m

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Photograph A



Photograph B

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PROPOSED CATTLE SHELTER, LAND TO THE EAST OF BICKERTON NE65 7LW
FLOOD RISK ASSESSMENT



Photograph C



Photograph D