



Evaluation/monitoring report No. 167

**Castlemervyn Demesne
Trillick
Co. Tyrone**

AE/08/195

Clare McGranaghan

1. Summary - Site Specific Information

Site Name: 63 Castlehill Road.

Townland: Castle Mervin Demesne

SMR No (if applicable): Close to Tyr 049:002 (Trillick Castle)

State Care: Trillick Castle is a scheduled monument.

Grid Ref: H 3354 5748

County: Tyrone

Excavation Licence No: (If applicable) AE/08/195

Planning Ref / No.: K/2008/0578/F

Current land use: Garden attached to residential dwelling

Intended land use: Construction of replacement dwelling on site of current house and part of lawn

Type of Evaluation: Two phases to the evaluation:-

- a. Geophysical survey.
 - b. Test trenches excavated under archaeological supervision.
- a. Geophysical survey information

Dates of Survey: 21st November 2008. 25th-26th November 2008

Archaeological Surveyor(s) Present: Ronan McHugh, Clare McGranaghan and Sapphire Mussen. Centre for Archaeological Fieldwork, Queen's University Belfast.

Size of area surveyed: 10800 m²

Solid Geology: Mudstone and sandstone.

Survey Type	Earth Resistance	Magnetometry
<i>Instrumentation:</i>	Geoscan RM 15 and MPX15 Multiplexer	Bartington Grad601-2 fluxgate gradiometer
<i>Probe configuration</i>	Twin probe	<i>Twin Sensor</i>
<i>Probe spacing:</i>	0.5m	1m
<i>Grid size:</i>	30m x 30m	30m x 30m
<i>Traverse interval:</i>	1m	1m
<i>Sample Interval:</i>	1m	0.25m
<i>Traverse Pattern:</i>	<i>Zig-zag</i>	<i>Parallel</i>
<i>Spatial Accuracy:</i>	Grids set out using TPS 705 series Total Station	Grids set out using TPS 705 series Total Station

- b. Test trenching information

Methodology: Excavation of two test trenches by mechanical excavator equipped with a toothless `sheugh` bucket under archaeological supervision.

Archaeologist present: Clare Mc Granaghan.

Date of Evaluation: 3rd December 2008

Size of area opened:

Trench 1: 11m long by 1.5m wide.

Trench 2: 8m long by 1.5m wide.

Brief Account of the evaluation:

As part of a planning application for a replacement dwellinghouse at No. 63 a Castlehill Road, Castlemervyn Demense, Trillick Co. Tyrone, an archaeological evaluation of the site involving geophysical survey and the excavation of test trenches was carried out. The replacement dwellinghouse will largely occupy the site of the existing house, but will encroach on an area of lawn to the north of the house, which is in close proximity to the remains of Trillick Castle, a 17th century plantation house. Geophysical survey was undertaken across the whole of the lawn area attached to the existing dwellinghouse. A number of anomalies were detected that were probably associated with landscaping activity dating at least to the mid nineteenth century, but no indication of buildings or a bawn that could definitively be associated with the plantation house were identified.

Two anomalies of possible archaeological significance were detected on the site of the replacement dwellinghouse. The two test trenches were positioned across these anomalies, but neither trench contained material or artefacts of archaeological significance. No further fieldwork is recommended as part of this planning application.

2. Introduction

It is proposed to construct a replacement dwellinghouse at 63 Castlehill Road, Castlemervyn Demesne, Trillick, Co Tyrone, approximately 1.5km north of the village of Trillick, Co. Tyrone (Figs. 1 and 2). This site is located immediately to the south of Trillick Castle, a 17th century fortified house, reportedly built by Captain James Mervyn between 1622 – 1630 (M'Enery 1910, 58; Treadwell 1964, 143). The replacement dwelling will largely occupy the site of the existing dwellinghouse, but it is proposed that it will extend northwards into an area between the existing house and the remains of Trillick castle. The proposed site of the replacement dwelling is marked in blue on figure 3 and is referred to in this report as “the house site”. As part of the planning application, an archaeological evaluation involving the excavation of test trenches on the house site was requested by Paul Devlin, Caseworker for Northern Ireland Environment Agency: Historic Monuments Unit. In advance of this excavation, it was decided to undertake, geophysical survey at the site, both to inform the location of test trenches and to determine whether there are buried remains of archaeological significance at the site which might be associated with the 17th century house.

3. Geophysical Survey

The geophysical survey was extended to cover the whole of the lawn area between the existing house and the 17th century remains as it was felt that, to confine it to the area of the house site would constrain the use of the survey.

No detailed background or historical information was available prior to the survey, but the castle was denoted as “old castle” on the first edition Ordnance Survey map from 1833 and two outbuildings were shown immediately to the west. It was subsequently shown as “Trillick Castle in ruins”, on the 1908 and 1939 editions, although the outbuildings were no longer visible. The first edition also notes two subrectangular features marked as “ponds” to the south-east of the ruin in the area corresponding with the survey area, and these features were also depicted on the later editions, although they were not marked as ponds. The area to the south-east of the castle is also shown landscaped with trees and pathways on all three maps examined (Figures 4 a – c).

The current landowner Mr. Norman Kee, confirmed that he witnessed the infilling of the pond in the 1950's and he also recalls the removal of two massive iron gates, possibly associated with the fortified house, from the entrance to the current access laneway. These gates were too heavy to remove far from their former location, and they were buried immediately to the south-west of the gateway, in the area now occupied by the lawn. Mr. Kee also recalled that what appeared to be a cave was unearthed in the area to the south-west of the gateway during this work (N. Kee pers. comm. 2008).

The Survey Area

The survey area currently serves as a lawn for the existing house (Figure 3). It area was bounded on the north by a wooden fence which divides the lawn from the scheduled area around Trillick Castle. The field in which Trillick Castle was located was not surveyed as it was overgrown with vegetation at the time of the survey. The northern boundary of the survey area was defined by the modern Castlehill road, while the eastern and southern limits of the survey were delimited by the access laneway serving the existing house. The western boundary was

formed by a line of bushes and a barbed wire fence, which separate the domestic plot from a field of grazing land to the west, which is also owned by the Kee family.

The OS maps from 1833 through to 1939 show evidence of landscaping to the south-east of Trillick Castle and elements of this earlier ornamental landscape are visible in the modern topography. The western portion of the survey area is elevated slightly, with the north-eastern boundary of this elevated area being defined by the overgrown footings of a flagstone wall which extends from the western boundary of the survey area, broadly perpendicular to that boundary. The remaining portion of the wall is approximately 22m in length and it appears to terminate abruptly, although a faint ridge extending south-westwards from the eastern end of the wall might represent the remnants of a corner or return. A row of mature trees marks the surviving extent of this wall (Plate 3) and deposits of old farm machinery and cut-down vegetation were visible in the field in this area. A grassy laneway runs along the base of the wall on the north-eastern side and runs into the field to the west of the survey area. The remains of the fortified house are immediately to the north of this laneway (Plate 1), in a field delineated by a modern wooden fence, which extends along the line of the laneway for 15m before turning northwards towards the Castlehill Road.

Towards the centre of the survey area, the terrain falls away appreciably to the base of a sub-rectangular, north-north-east/south-south-west aligned basin or hollow, that is approximately 1.5m below the level of the ground to the west (Plate 4). The sharp definition of this feature and the regularity of its slopes suggest that it is at least partly the product of artificial landscaping. From the base of this hollow, the ground rises steeply to the east, south, and north-west, and more gradually to the north, where four mature trees set opposite each other in two rows might define the edges of an avenue or entrance feature (Plate 5). From the northwest, the ground falls away sharply to the road which dips down to follow the base of the hill where the castle is located.

The Survey

Geophysical survey was undertaken at the survey site on the 25th and 26th November 2008, by Ronan McHugh and Sapphire Mussen of the CAF. Two techniques were employed: magnetometry on the 25th November and earth resistance on the 26th.

The earth resistance survey was carried out using a Geoscan RM15 metre and MPX15 multiplexer. A number of factors, including the evaluative nature of the survey and the largely obstacle-free nature of the terrain, dictated that the most suitable and efficient methodology for this survey was a parallel twin-probe array utilising a traverse and sampling interval of 1m. The survey area was divided into 12 x 30 m grids to facilitate the survey. Relatively high background readings, greater than 100ohm and probably indicative of a thin soil cover, necessitated the adjustment of the range of the survey from x10 to x1, potentially reducing the detail of the survey. The magnetometry survey was undertaken across the same area using a Bartington Grad 601-2 fluxgate gradiometer.

The results of the survey are graphically presented in Figures 5 - 7. Figures 5 and 6 depict the results of the magnetometry survey while figure 7 displays the earth resistance survey results. A provisional interpretation of the most significant anomalies from the magnetometry survey is

presented in tabular form in Table 1, which should be read in association with Figure 8, which contains a simplified illustration of the magnetometry survey interpretation. Similarly, a provisional interpretation of the most significant anomalies from the earth resistance survey is presented in tabular form in Table 2, which should be read in association with Figure 9, which contains a simplified illustration of the earth resistance survey interpretation.

Table 1: Description and Interpretation of magnetometry survey results (To be read in conjunction with Figure 8).

Anomaly	Description	Interpretation
m1	Linear positive anomaly extending for approximately 10m north-east/south-west from the corner of an existing wall foundation.	This anomaly represents a return of the visible wall foundation. A faint ridge is visible on the ground in this location.
m2	Subrectangular positive anomaly at the extreme eastern edge of the survey area.	Probably representative of underlying geology or masonry. The location of the anomaly, immediately adjacent to the gateway, suggests this might be representative of non-ferrous rubble that was buried when the iron gates were removed. However, because the anomaly appears to extend beyond the edge of the survey area, it is not possible to be more certain.
m3	Linear negative anomaly that extends northwards from an area of magnetic disturbance immediately north of the modern house. The anomaly is approximately 20m long and 1m wide.	Anomaly coincides with the location of an old, salt-glazed ceramic sewer pipe indicated by the landowner prior to the survey. The nature of the anomaly is consistent with such a feature.
m4	Linear dipolar anomaly which extends north-west/south-east across the northern part of the survey area from the edge of the scheduled area. Superimposed on a strongly dipolar background.	Position of this anomaly is broadly coincidental with a high resistance linear anomaly (r 5). OS maps dating 1833 - 1939 depict a field boundary in this location. The highly magnetic nature of the response suggests that the boundary incorporated quantities of iron wire or fittings, the remnants of which have been deposited along the line of the boundary.
m5	Concentrated, linear dipolar anomaly that is visible for 40m extending north-east across the survey area from the southern edge of the survey.	The response is consistent with a metal pipe or conduit. It is most visible in the centre of the survey area, where the background magnetic readings are most stable and where the pond was shown on the OS maps.
m6	Zones of intensive magnetic disturbance indicated by strongly dipolar readings.	Responses to ferrous metal features

m6a	Area of dipolar disturbance along the south of the survey area.	Response to the existing dwellinghouse and attendant services
m6b	Area of disturbance at the north-west of the survey area.	Response to barbed wire fence and dumped farm machinery at the north-west of the survey area.
m6c	Linear area of lower readings around the better defined anomaly m4.	Probable remnants of old field boundary, but concentration of debris is less than on the line of the actual boundary (see interpretation of anomaly m4).
m6d	Zone of very strong dipolar responses	Corresponds with a prominent south-west facing slope down from the gateway. This corresponds with the location identified by the landowner as the area the iron gates were buried. The readings are consistent with the presence of large iron objects.
m6e	Zone of dipolar readings at the south-west of the survey area.	Coincides with the edge of the pond shown on the OS maps. Possibly buried metal pipe.
m6f	Spikes of highly fluctuating gradient.	Metal objects scattered in the centre of the field.

Table 2: Description and Interpretation of earth resistance survey results (To be read in conjunction with Figure 9).

Anomaly	Description	Interpretation
r1	Amorphous areas of relatively high resistance across the site.	Probably response to the underlying geology, where the overlying garden soil is shallow.
r2	Well defined angular anomaly. Resistance values lower than the probable natural background readings. A linear arm extends approximately 25m north-north-eastwards, perpendicular to a second, north-west/south-east aligned element of the anomaly which extended southwards beyond the survey area.	The regular nature of the anomaly suggests this is man-made. It is also broadly parallel with the alignment of the pond as depicted on the 1833 to 1939 OS maps. This is probably a remnant of a lane or pathway contemporary with or post-dating the pond. This extends across the site of the replacement dwelling and is likely to be investigated in test trenching.
r3	Well defined angular anomaly. Resistance values lower than the probable natural background readings. The dimensions, alignment and resistance values are similar to the adjacent anomaly r2.	This is probably the remnant of a lane or pathway. It might have been associated with the neighbouring anomaly r2, or might represent a different period of activity at the site. This extends close to the site of the replacement dwelling and is likely to be investigated in test trenching.
r4	Regular area of low resistance values, measuring approximately 15m north-east/south west by 10m north-west/south-east.	Coincides with localised area of standing water in a position the landowner indicated was the site of an old septic tank. The anomaly is not inconsistent with a response to this feature. This extends close to the site of the replacement dwelling and is likely to be investigated in test trenching.
r5	Narrow, linear anomaly of relatively high resistance, measuring approximately 28m long by 1m wide.	Coincides with the location of a field boundary shown on the 1833 to 1939 OS maps and the positive magnetic anomaly m4 . Probably a response to buried remnants of this boundary, possibly wall foundations.
r6	Zone of low resistance coinciding with the low-lying part of the survey area. The zone is at the centre of the site and is sharply defined, particularly on the northern and western sides.	This anomaly coincides with the location of the pond on the 1833 to 1939 OS maps. The eastern boundary is less clearly defined than the others, possibly due to episodes of landfilling and levelling in this area mentioned by the landowner.

r7	Concentric, sub-circular anomalies in the heart of anomaly r8, with a maximum diameter of approximately 12m.	The location of these anomalies suggests they were associated with the pond. The low resistance values and relatively geometric form of the anomalies suggests they might represent the location of a water feature such as a fountain.
r8	Scatter of very high resistance anomalies forming a crude arc superimposed on natural geology at the east of the survey area.	Strength of these readings suggests they might be areas of bedrock relatively close to the ground surface. However, the arrangement of these features is relatively regular and the landowner reported that a “cave” was unearthed in this area during landscaping work in the 1950’s. The anomaly is not inconsistent with a buried, stone built structure such as a souterrain which has suffered disturbance in the past.
r9	Possible circular trend around centre of the site.	Possible remnant of a circular structure or feature.. However, location around the periphery of the survey area suggests this is most likely to be a residual effect of the data processing.

Conclusions

The only anomalies of possible archaeological significance which coincided with the location of the proposed replacement house were the resistance anomalies r2 and r3. It was recommended that the test trenches be positioned across these anomalies in order to resolve their nature. A number of the other anomalies detected appear to be associated with the landscaping of the area to the south-east of the castle remains. With the paucity of sources available for this report, it is not possible to determine the antiquity of the landscaping or its association with the castle, although it dates at least to 1833. None of the anomalies can be definitively associated with the early development of the fortified house, but it is recommended that time be allocated for a full examination of the historical documentation relating to Trillick Castle so that the full benefit of the geophysical survey can be realised and the results put in proper context. Future investigation at the site could include geophysical survey of the field to the west of the survey area, together with consultation with the landowner, who might be able both to recall now removed elements of the site and to provide explanations for the geophysical anomalies.

4. The Excavation

Due to the abundance of underlying cables and pipes, along with the fact that the majority of the replacement dwelling will be situated on the footprint of the existing house, it was decided that only two test trenches were necessary within the proposed development site (Plates 6 & 7). The evaluation consisted of the supervision of two mechanically-excavated test trenches placed over anomalies (r2 & r3) which were shown on resistivity survey (Figures 7 & 9). The trenches measured 1.5m wide varying in length between 8-11m. Both test trenches were excavated to the natural bedrock.

Trench One

Trench One was located along the north boundary of the existing dwelling. Trench One was approximately 1.5m wide and 11m long, and was aligned east-west (Figure 3).

The sod layer, C.101, in Trench One was extremely thin (0.05m) due to the area being a well maintained garden. Below this layer was a topsoil layer (C.202); a dark brown silt loam measuring 0.20-0.35m deep. Following the removal of the topsoil layer (C.102) the natural subsoil (a pink boulder clay C.103) was exposed. At the eastern end of the trench 0.50m of stone and brick were uncovered (C. 104). Mr. Norman Kee provided information that dated this deposit to the earlier half of the 20th century, when his father constructed a temporary pathway extending from the house, north to the edge of a line of mature tress (Plate 3). There was no associated cut.

No archaeological features were located in this trench.

Trench Two

Trench two was located 5m north of Trench One. Trench Two was approximately 1.5m wide and 8m in length and was aligned east-west (Plate 8 & Figure 3).

As with Trench One the sod, C.201, was extremely thin (0.04m) due to the area being a well maintained garden. Below this layer was a topsoil layer (C.202); a dark brown silt loam measuring 0.20-0.35m deep. Following the removal of cultivation layer (C.202) the natural subsoil, (pink boulder clay with decayed stone C.203) was exposed. At the eastern end of the trench 0.40m of stone and brick were uncovered (C. 204). Mr. Norman Kee provided information that dated this deposit to the earlier half of the 20th century, when his father constructed a temporary pathway extending from the house, north to the edge of a line of mature tress (Plate 3). There was no associated cut.

C.104 & 204 may account for the presence of geophysical anomaly r2.

No archaeological features were located in this trench.

5. Archive

Context Register :

Trench 1

Context Num#	Description
101	Sod layer
102	Topsoil layer
103	Natural subsoil/ bedrock
104	20 th century path

Trench 2

Context Num#	Description
201	Sod layer
202	Topsoil layer
203	Natural subsoil/ bedrock
204	20 th century path

Finds:

Trench	Context	Find
1	102	Glass
1	102	Slate
1	102	Glazed pottery
1	102	Hand-made brick
2	202	Hand-made brick

Finds are archived within the Centre for Archaeological Fieldwork, School of Geography, Archaeology, and Palaeoecology, Queen's University Belfast.

Photographs:

Due to a fault in the camera a number of digital images were lost. The remaining digital images taken during the evaluation are archived within the Centre for Archaeological Fieldwork, School of Geography, Archaeology, and Palaeoecology, Queen's University Belfast.

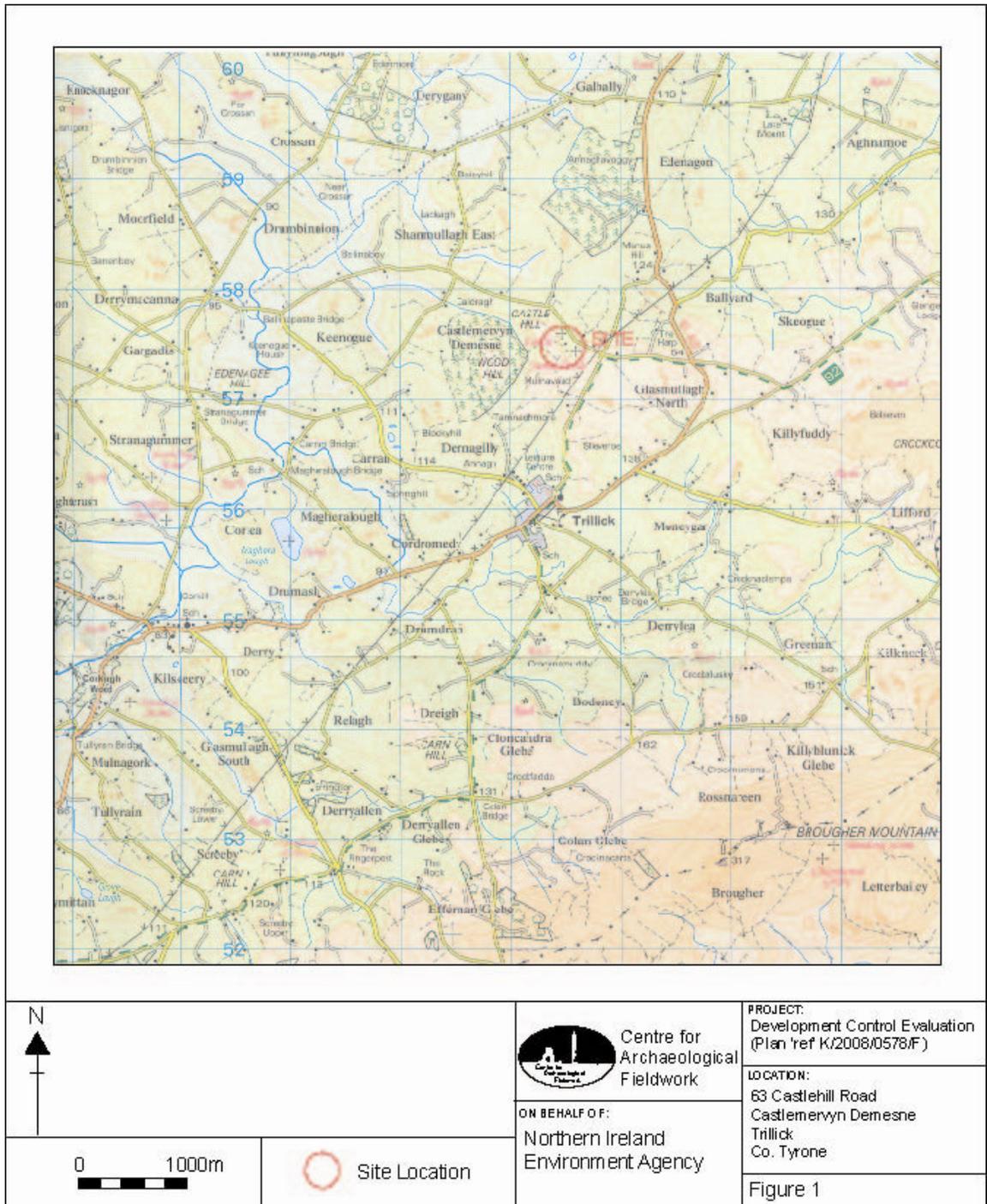
Plans / Drawings: N/A

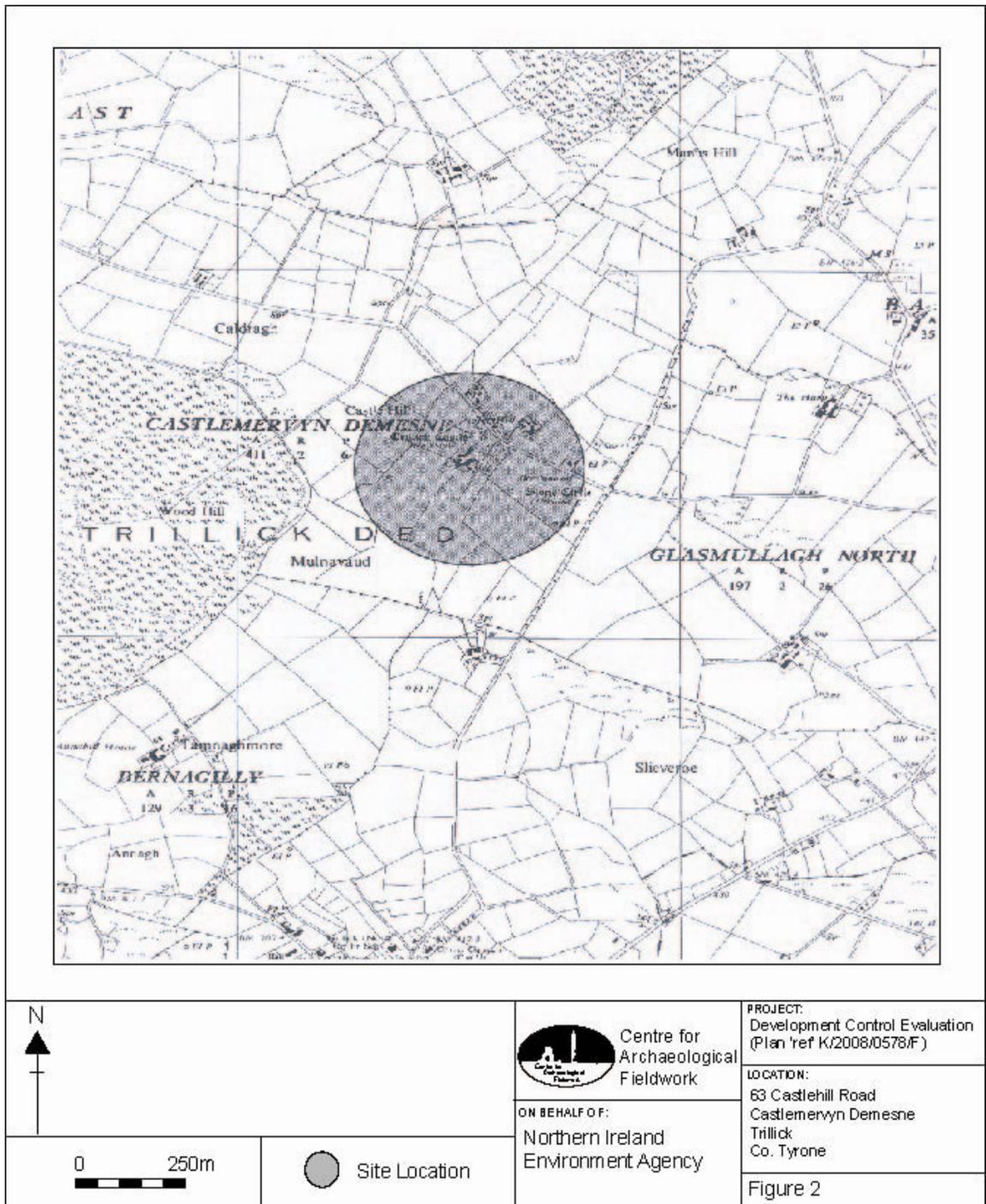
Signed: _____ Date: _____

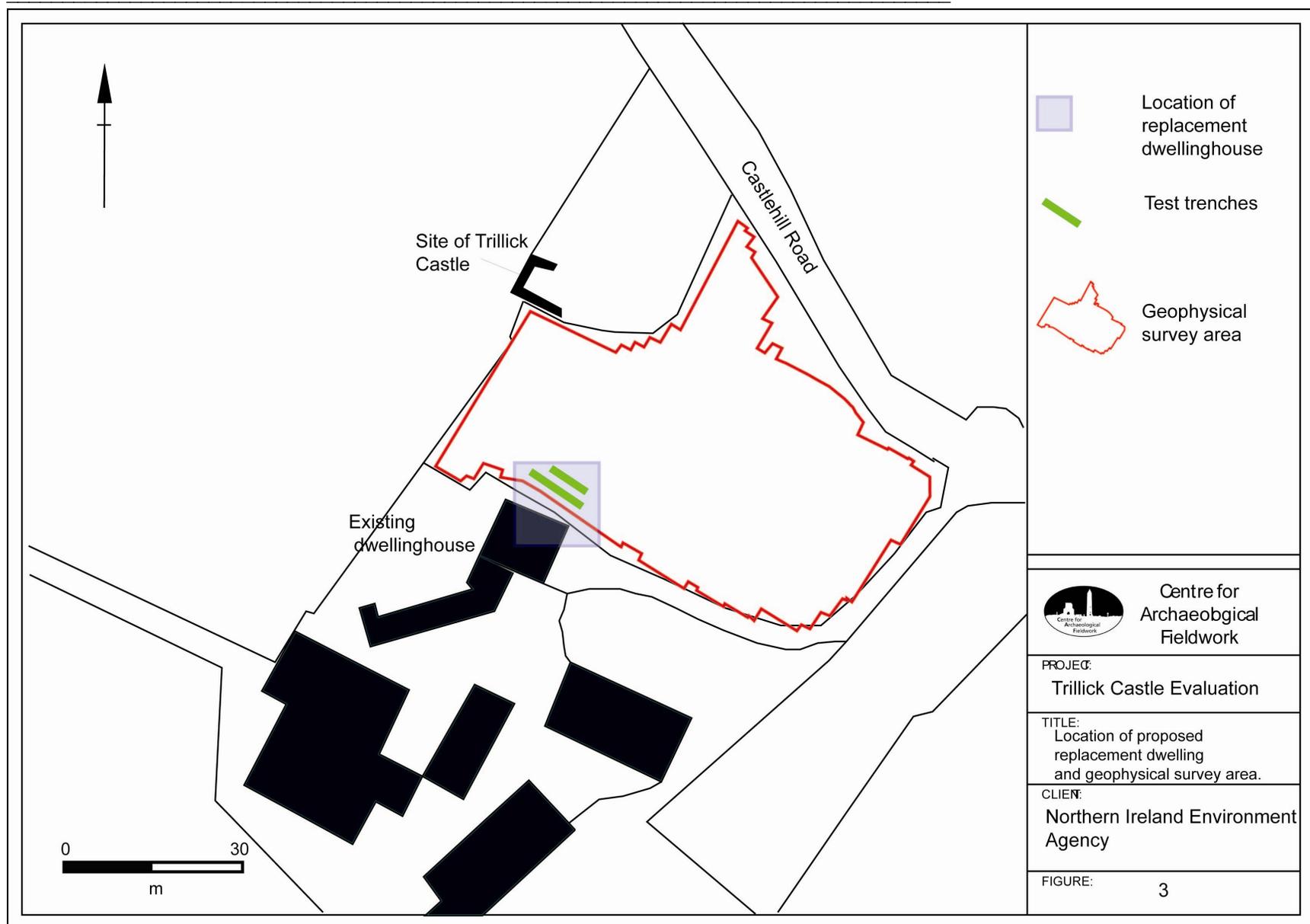
Bibliography

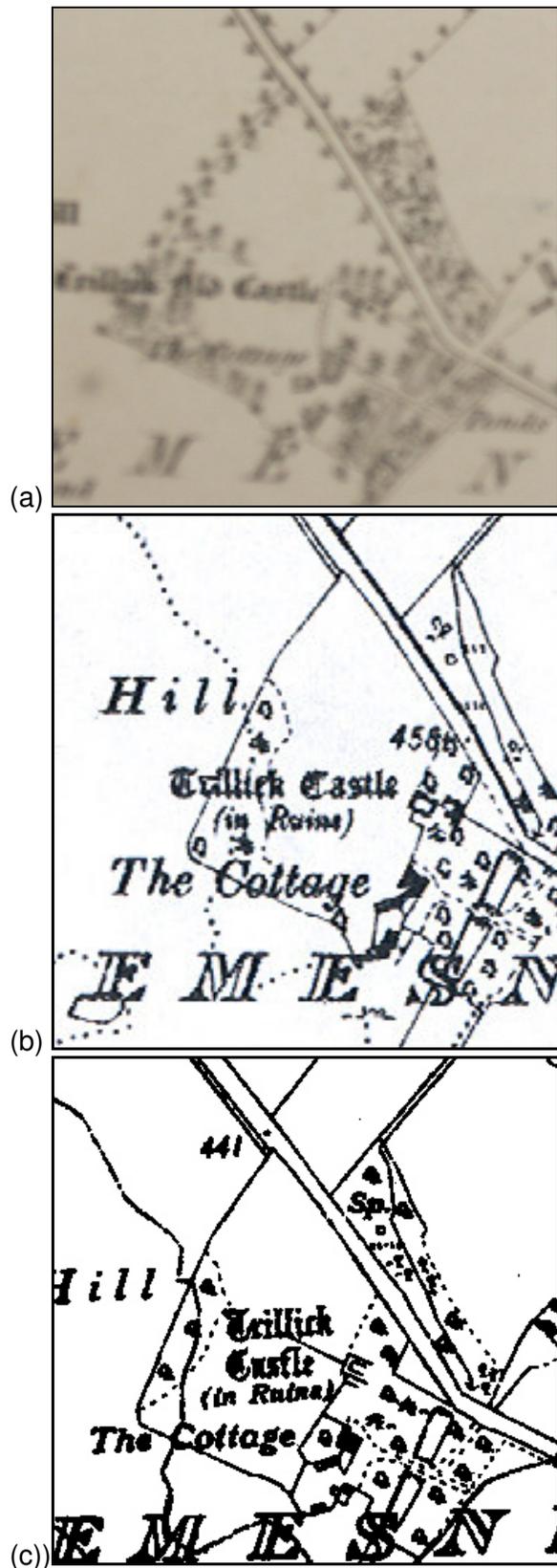
M' Eney, MJ. 1910. "Destruction of castle Mervyn, County Tyrone" *Royal Society Antiquities Ireland* 1910, XL, 58.

Treadwell, V. "The survey of Armagh and Tyrone, 1622 (continued)". *Ulster Journal of Archaeology* 1964, Vol. 27 140-154.

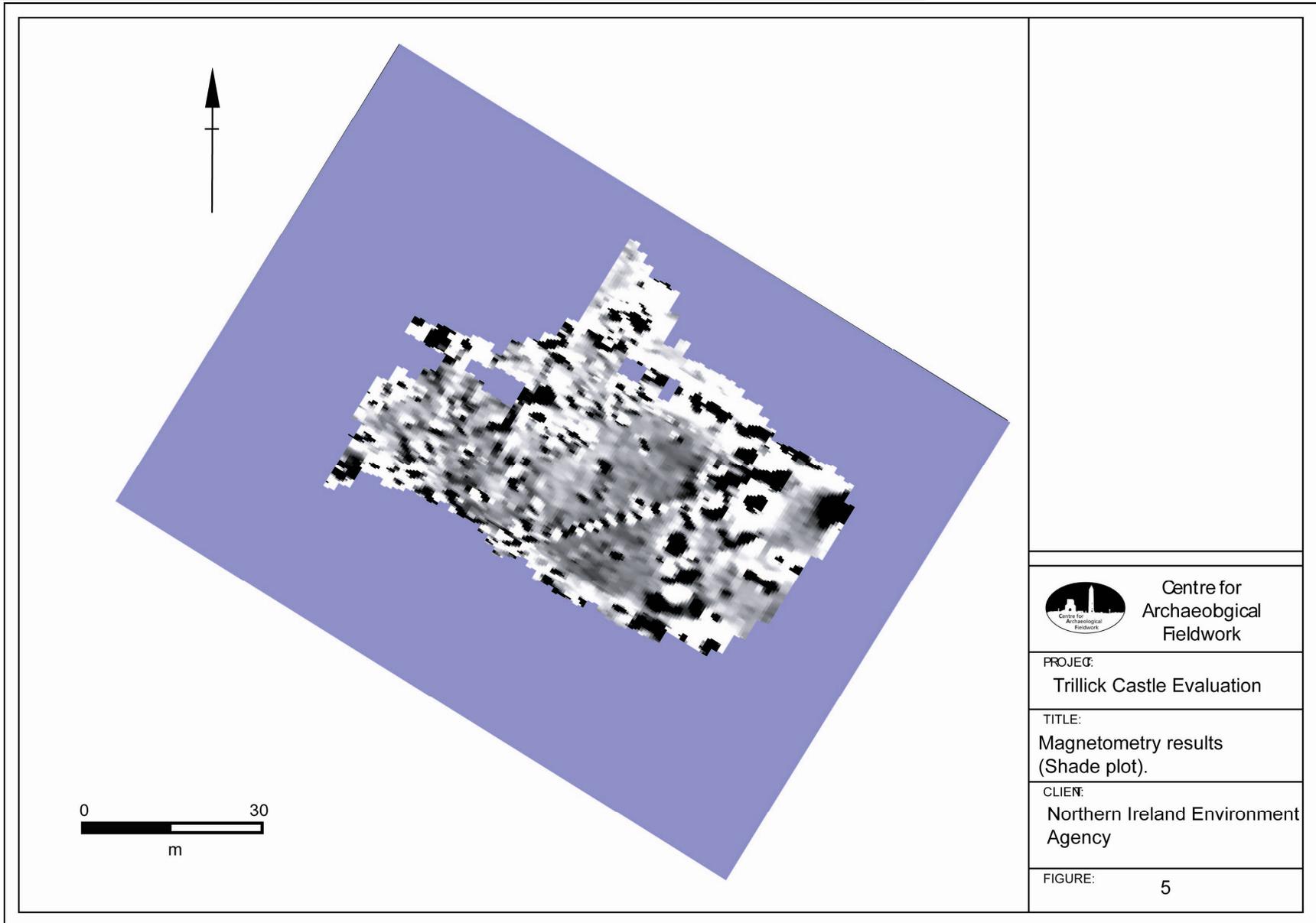


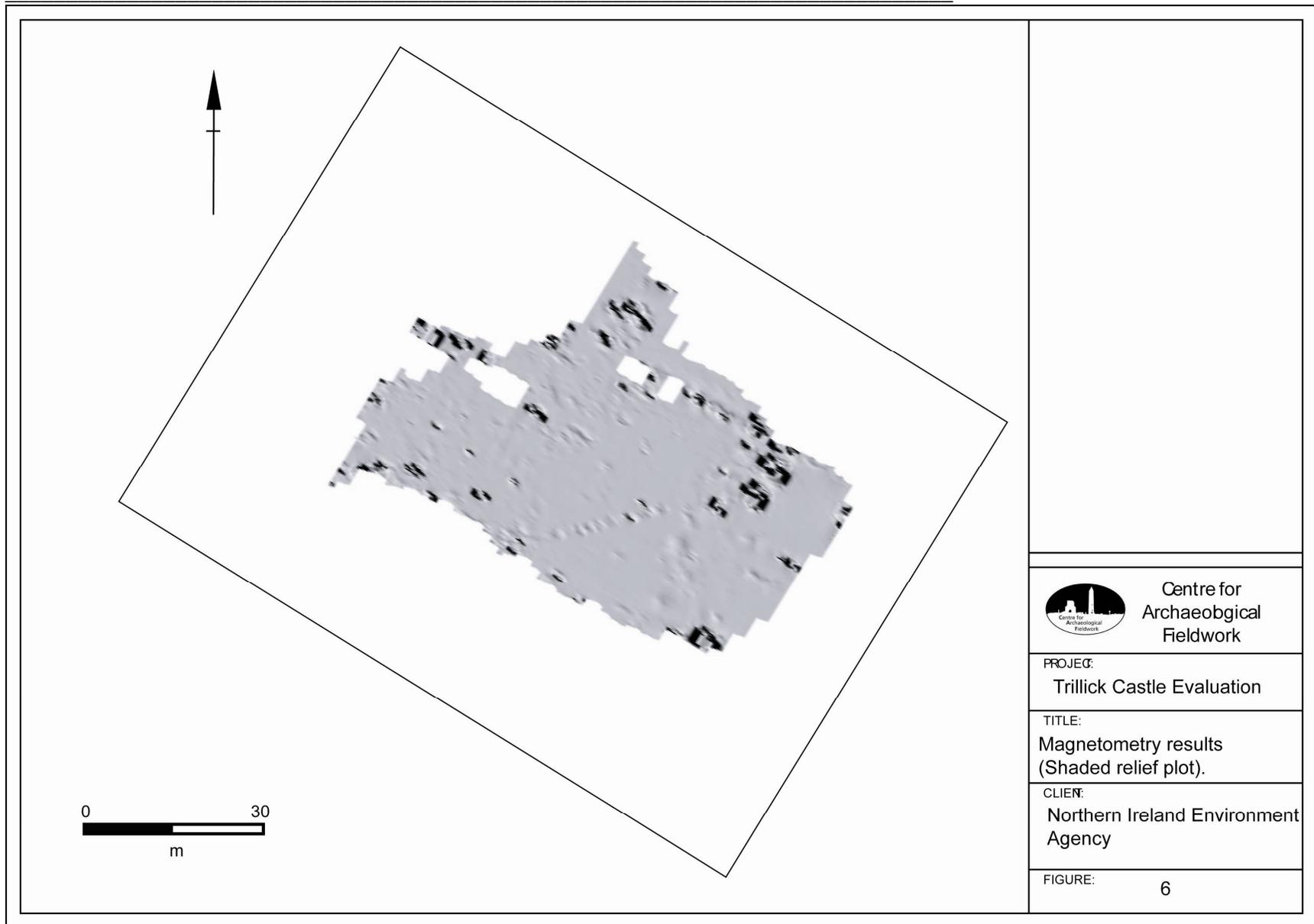


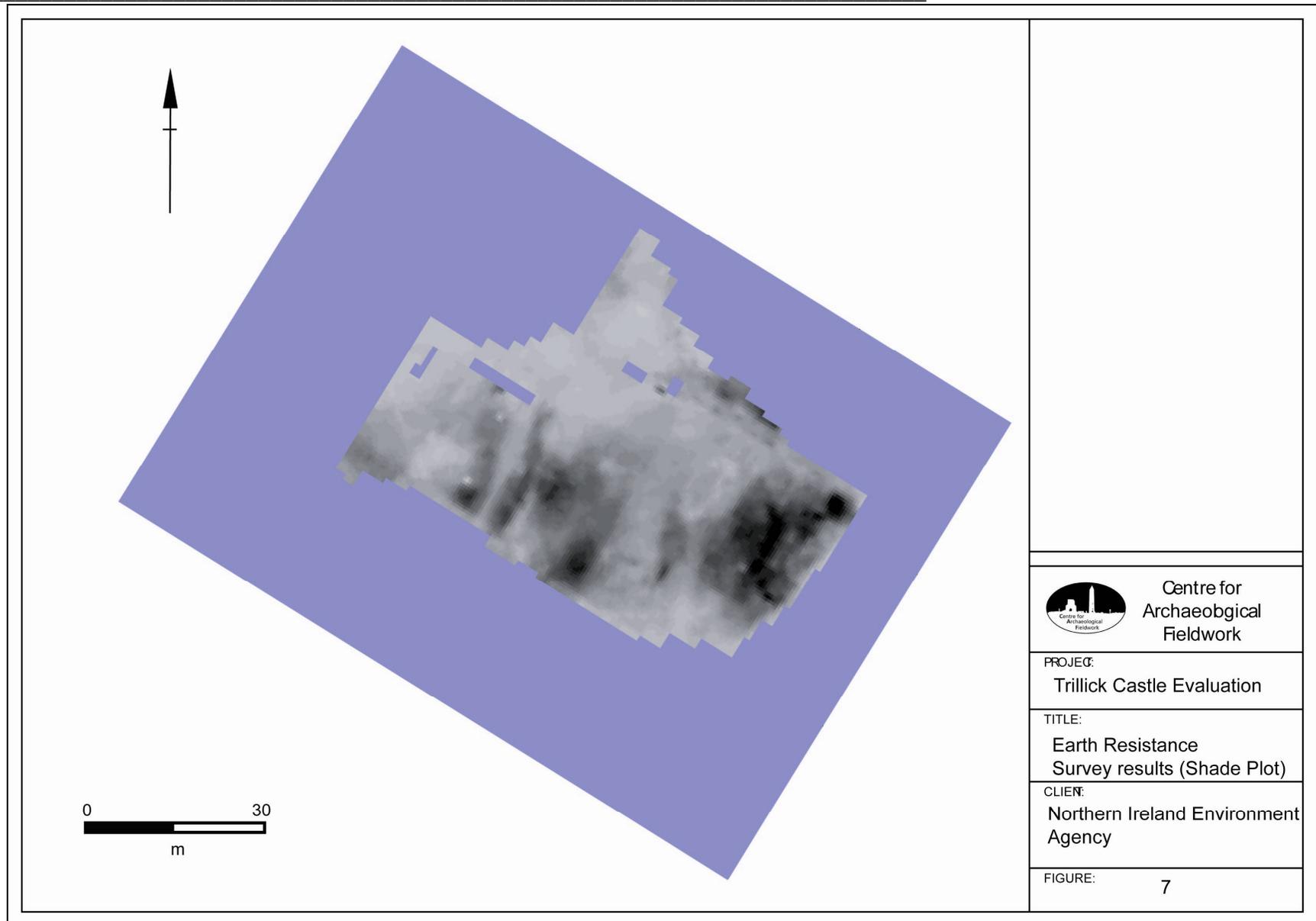


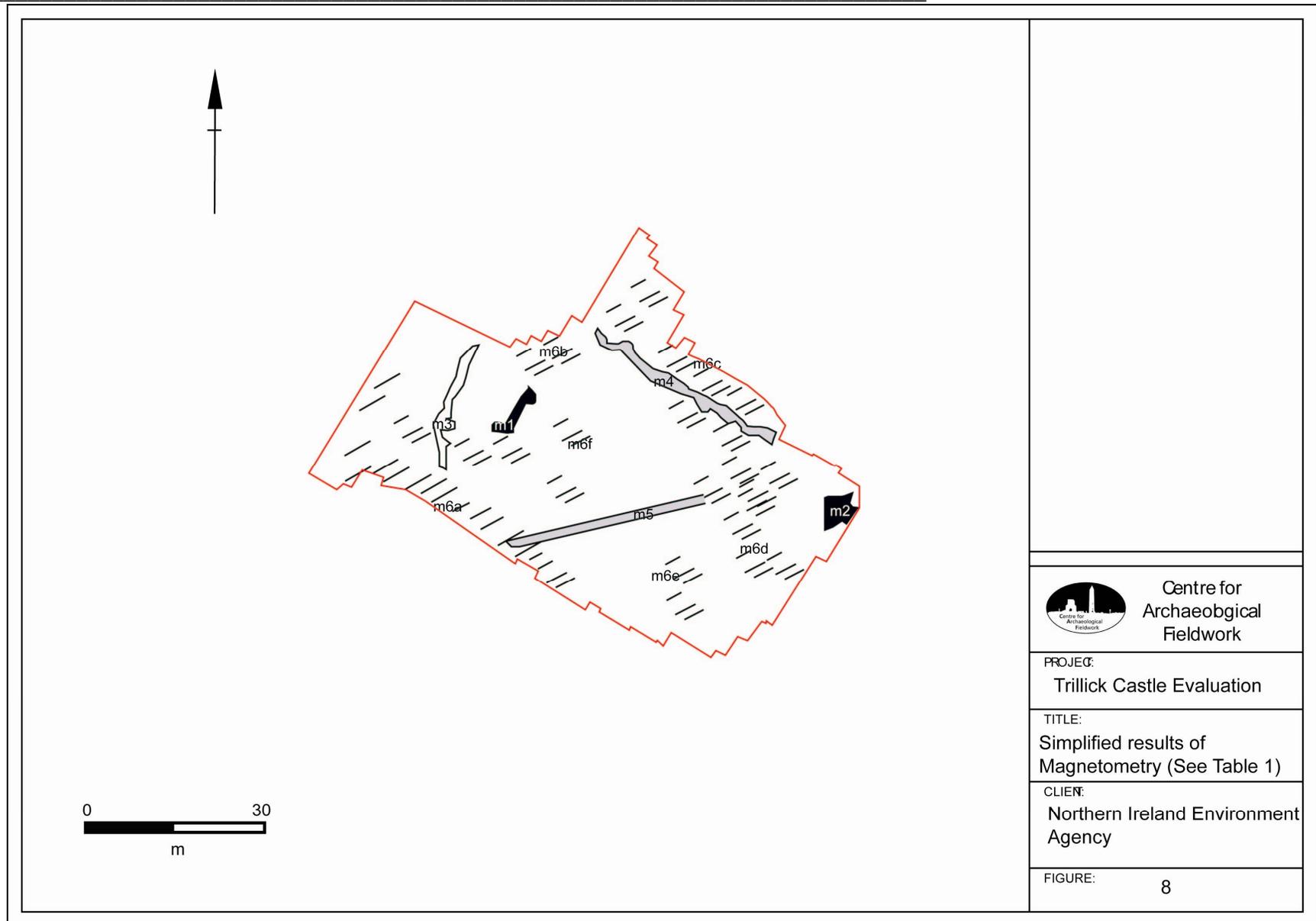


Figures 4 a-c: OS maps depicting the area around Castle Hill; (a) 1833, (b) 1908, and (c) 1939









Centre for
Archaeological
Fieldwork

PROJECT:
Trillick Castle Evaluation

TITLE:
Simplified results of
Magnetometry (See Table 1)

CLIENT:
Northern Ireland Environment
Agency

FIGURE:
8

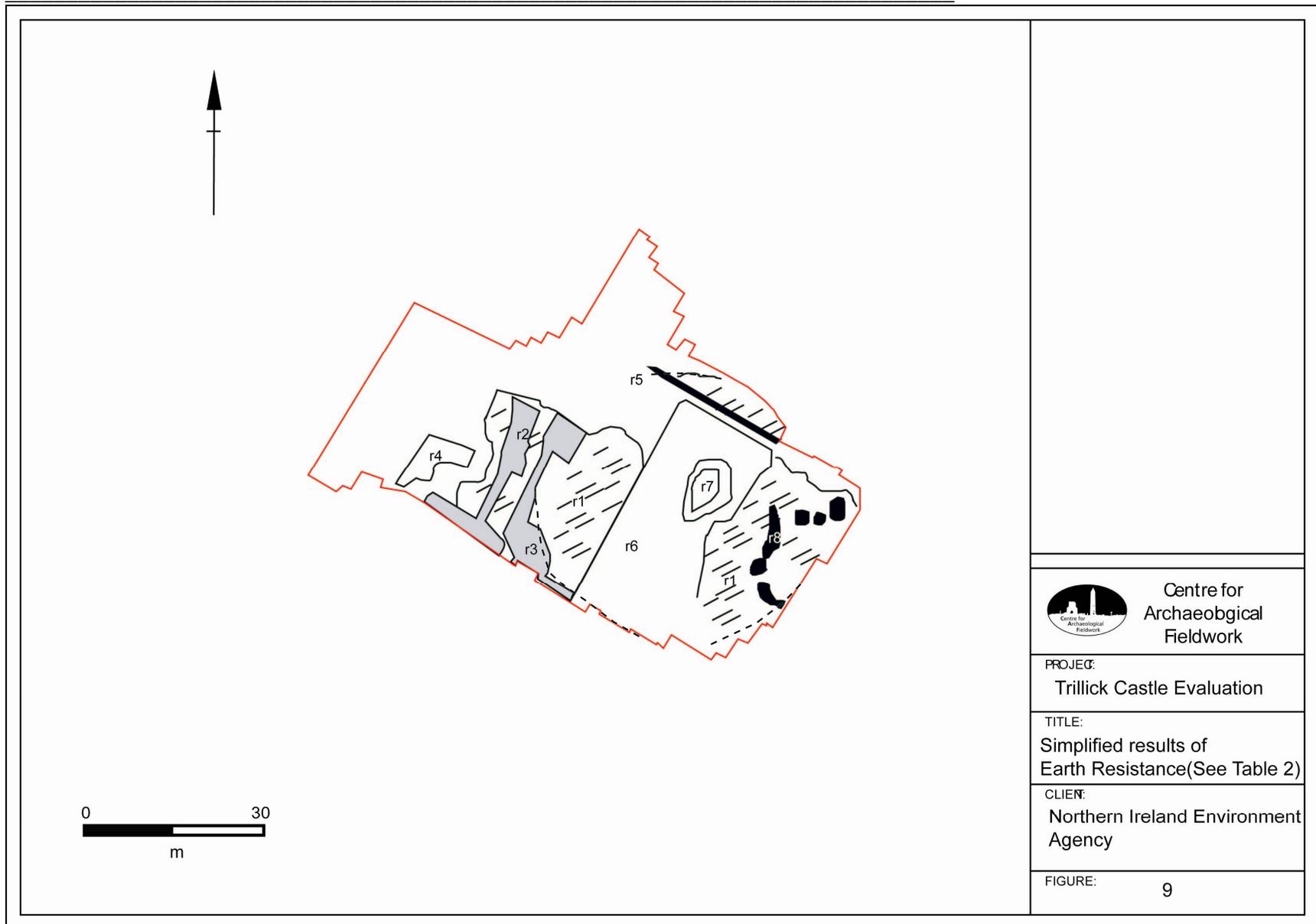




Plate 1: Proximity of Trillick Castle to proposed development site, looking north-west.



Plate 2: West facing gable of fortified house known as Trillick Castle; facing east.



Plate 3: Wall foundation at the north of survey area; facing west.



Plate 4: View of the lower lying portion of the survey area; facing south-east.



Plate 5: Opposing rows of trees, possibly representing remains of an avenue; facing north.



Plate 6: Location of application site; facing west.



Plate 7: Proposed development site; facing east. The area beyond the ranging rod is not under threat from development.



Plate 8: Natural bedrock/ subsoil, C.203; facing east.

