

CMF Reference Code: CMF24-2-GA004

ITM: 561495/749019

SMR Nos: GA045-029001- (Castle - hall-house) & GA045-029002-
(Enclosure).

ÆGIS Ref.: 825-1

Conservation Management Plan for Moylough Castle, Moylough townland, Co. Galway.



ÆGIS ARCHAEOLOGY LIMITED

086 8293220

info@aegisarc.com

www.aegisarchaeology.com



Report lead author: Frank Coyne MA MIAI

Report Status: Final

Date: 15 November 2024

This report has been presented by ÆGIS to:

Client: Moylough Community Resource Cultural and Heritage Centre
Galway County Council
National Monuments Service

Please note...

That the archaeological and other recommendations, mitigation proposals and methodology followed in this report are similar to those used on previous similar projects. The report follows most recent best practice in the compilation of Conservation and Management Plans and references are listed in section 8.

Any possible future intrusive works to the monument may require licences and other permissions.

Contributors

Project Lead Frank Coyne, archaeologist, MA in Historic Building Conservation

The following individuals have contributed to the final report:

John Deaton, Architect, Grade 1 conservation,
Kevin Dodd, Surveyor, KGSS Surveys
Paddy Coleman, Engineer, P. Coleman and Associates
Ruth Minogue, Ecologist, Minogue and Associates
.

Acknowledgements

The information supplied by the client and information gathered from the RMP and SMR maintained by the ASI and NMS are kindly acknowledged. Third party information and images are acknowledged individually in the text. The landowner of the monument is thanked for permitting access which allowed this project to be undertaken.

Report Design and Template

ÆGIS Archaeology Limited 2024.

Copyright Note

Please note that the entirety of this report, including any original drawings and photographs, remain the property of the author(s) and ÆGIS ARCHAEOLOGY LIMITED. Any reproduction of the said report requires the written permission of ÆGIS ARCHAEOLOGY LTD. Images and drawings supplied by third parties are acknowledged individually.

Ordnance Survey of Ireland Licence

Where National Mapping Division of Tailte Éireann material has been reproduced in this report it has been done so under licence CYAL50322695.

Cover Image

Aerial view of site, from N (F. Coyne).

Contents

	page
I. Executive Summary	5
II. List of Figures and Tables	7
III. Abbreviations and Terms Used	9
1. Introduction	10
1.1 Aims and Structure	10
1.2 Statutory Protection and Policy	11
1.3 Methodologies	14
1.4 Limitations	14
2. Understanding the Monument	15
2.1 Description of Place, Topography, and Setting	21
2.1.1 Description from Moynlough Heritage Society	16
2.2 Cartographic Review	19
2.3 Monument Type, Elements, and Chronology	29
2.3.1 Moynlough Village	30
2.3.2 The Anglo-Norman Invasion	30
2.3.3 The Development of Castles in Ireland	31
2.3.4 Hall Houses	32
2.3.5 Hall Houses or Chambered Towers?	34
2.3.6 The De Berminghams	36
2.3.6 Key Site Elements	37
2.3.7 Phasing	44
2.3.8 Differentiation of Interior Space	46
2.4 Associated Heritage Assets	48
2.4.1 Natural heritage <i>by Ruth Minogue</i>	48
2.4.2 Associated archives and collections	56
2.4.3 Placename evidence	56
2.4.4 Folklore	57
2.5 Surviving Remains	60
2.5.1 Description	60
2.5.2 Current management information	79
2.5.3 Condition survey	79
3. Statement of Significance	81
3.1 Key Values: Assessment of Significance	81
3.2 Statement of Significance	83
4. Risk: Defining Management Issues and Assessing Vulnerability	84
4.1 Strengths, Weaknesses, Opportunities and Threats	85
4.2 Gap Analysis	85
5. Conservation Management Policy Aims	86
5.1 Policy Context	86
5.2 Vision	86
5.3 Future Options and Appraisal	87

5.4 Management Policies	87
6. Action Plan: Future Implementation	90
6.1 Detail of short term works	90
6.1.1 Vegetation Clearance	90
6.1.2 Repair and Consolidation of upstanding walls	91
6.2 Extract from Conservation Architects report	92
6.3 Extract from Conservation Engineer's report	95
6.4 Indicative Costs	96
7. Conclusion	97
8. Bibliography	98
9. Signing-Off Statement	100
10. Appendices	<i>after 101</i>
Specialist Reports	

I. Executive Summary

This report is a conservation management plan and statement of heritage significance for Moylough Castle. A record of the upstanding remains and a condition survey was carried out as part of this report, and a detailed inventory of the features and issues compiled. Structural issues, such as falling masonry were identified. The condition survey has identified a number of issues and has made recommendations as to how to remedy these.



Frontispiece: Moylough Castle, from SW (Frank Coyne).

II. List of Figures and Tables

FIGURES:	page
1.1. Location map, subject site indicated in red.	12
1.2. General location map of site within townland, subject site indicated in red.	13
1.3. Detailed location map, subject site indicated in red.	13
2.1. Discovery Series map (1 box = 1km). North to top.	15
2.2. EPA map showing location of the subject site in relation to nearby water courses and protected areas.	16
2.3. View NW towards Summerville Lough (F. Coyne).	18
2.4. Location of Polladirk swallow hole to the N of the castle (F. Coyne).	18
2.5. Extract from the Down Survey map of 'The County of Galway'.	19
2.6. Extract from Taylor & Skinner Road maps of Ireland	20
2.7. Grand Jury map for Galway dated from 1819.	21
2.8. Lewis Topographical Dictionary 1837.	21
2.9. 1838 Society for the Diffusion of Useful Knowledge.	22
2.10. Extract of the First edition Ordnance Survey six-inch map sheet GA-44, surveyed 1839.	23
2.11. Extract of the First edition Ordnance Survey six-inch map sheet GA-44 c. 1840.	23
2.12. Extract of the First edition Ordnance Survey six-inch map sheet GA-44, resurveyed 1892.	24
2.13. Detail of the First edition Ordnance Survey six-inch map sheet GA-44 resurveyed 1892.	24
2.14. Griffiths Valuation map.	25
2.15. 1867 Map of Ireland.	26
2.16. 1867 Map of Ireland.	27
2.17. Extract from the twenty-five-inch Ordnance Survey map surveyed 1891.	27
2.18. Extract from the Ordnance Survey six-inch map revised 1912.	28
2.19. RMP map extract, sheet GA45, SMR detail 1997 on 1931 map	29
2.20. Hall houses in Galway	33
2.21. Example of a hall house from Tomdeely, Co. Limerick	33
2.22. Moylough Castle, from N, note rectangular earthworks	35
2.23. Aerial view of Moylough Castle	37
2.24. Aerial view of Moylough Castle from N	38
2.25. Moylough Castle from N showing earthwork	38
2.26. Moylough Castle showing glacial ridge extending to rear	39
2.27. Boulder clay in eroded part of knoll, from W	39
2.28. Collapsed SW wall, from SW	40
2.29. Vertical view of Moylough Castle	41
2.30. Earthworks adjacent to castle, from NW	42
2.31. Aerial view of Moylough Castle showing earthworks on right SE	42
2.32. Earthworks, grass-covered, from N	43
2.33. Earthworks, grass-covered, castle to rear, from SE	43
2.34. Scar for possible vault indicated, from SW	44
2.35. Scar in masonry and beam sockets, from W	45
2.36. National Bat Database	45
2.36. Conjectural reconstruction by John Deaton on KGSS survey drawing	47
2.37. Bat Landscapes	53
2.38. National Bat Database	53
2.39. Robbed out base batter on NW wall	61
2.40. Robbed out base batter on NE wall. Note intact batter to rear	61
2.41. Plan of ground floor/basement	62
2.42. View of ground floor, from SW	62
2.43. Window 1, partially collapsed	63
2.44. Window 2, note slot for timber lintel	63
2.45. Window 2, mostly intact external window	64

2.46. Window 3, note slot for timber lintel	64
2.47. Window 4, note slot for timber lintel	65
2.48. Window 5, note slot for timber lintel and robbed out flat arch	65
2.49. Window 6, note robbed out flat arch and jambs	66
2.50. Window 7, only portion of the embrasure is visible	66
2.51. Plan of first floor	67
2.52. The slots for timber beams (likely oak)	68
2.53. Window 1.1, only left side of embrasure remaining	68
2.54. Window 1.2, from SW	69
2.55. Window 1.2, plaster in underside of window embrasure	69
2.56. Door ope 1.3, from NW	70
2.57. Door ope 1.3, from W. Note drawbar socket	70
2.58. External view of door ope 1.3, from SE	71
2.59. Window 1.4, plaster in underside of window embrasure	71
2.60. Squinch to allow access to stairs 1.5, from S	72
2.61. Window 1.6, plaster in underside of window embrasure	72
2.62. View of stairs, from above	73
2.63. Access from stairs to parapet, view from above	73
2.64. Loop 2.1 in stairwell on 2 nd floor, from SW	74
2.65. Loop in stairwell on 2 nd floor, window ope 2.2 on right	74
2.66. Window ope 2.3, from NW	75
2.67. Window 2.4, from S5	75
2.68. Google Earth image 18 March 2009	76
2.69. Google Earth image 18 March 2009	77
2.70. Map Genie 2011-2013 showing earthworks	77
2.71. Castle with visible earthworks to right, from W	78
2.72. Fallen masonry, from W	79
2.73. Castle with fallen masonry in immediate foreground, from S	80
3.1. Chart illustrating values in an assessment of significance	81
3.2. Moylough Castle, from E	83

TABLES:

1.1. Heritage asset information	11
1.2. List of pertinent international charters consulted in this study.	11
2.1. List of element types comprising the subject site at Moylough	29
2.2. Roost Suitability Potential Buildings	51
2.3. Bat records within 2km 2014-2024.	52
2.4. Static detector results, calls within 250m of the structure	54
2.5. Historical references to the placename Moylough	56
2.6. List of recorded features and labelled as part of this study	60
3.1. Assessment of Significance	82
4.1. List of risks and vulnerabilities to Moylough Castle	84
4.2. Results of SWOT analysis.	85
5.1. Options and individual appraisal matrix.	87
5.2 Conservation Management Plan policies.	88
6.1 Conservation management plan actions	90
6.2. Indicative costs.	96

64
65
65

III. Abbreviations and Terms Used

ASI	Archaeological Survey of Ireland, a division of the DHLGH.
Barony, Parish,	These terms refer to land divisions in Ireland. The barony is the largest land division in a county, which is formed
Townland	from a number of parishes. These parishes are in turn made up of several townlands, which are the smallest land division in the country. The origins of these divisions are believed to be in the Early Medieval/Christian period (AD500-AD1000), or may date earlier in the Iron Age (500BC-AD500).
CMP	Conservation and Management Plan.
DHLGH	Department of Housing, Local Government and Heritage.
E	East.
F	Feature.
First Edition	This relates to editions of the OS 6-inch maps for each county. The first edition map completed for the area dates to the early 1840s and this is referred to in the text as the 'First Edition'.
HEV	Historic Environment Viewer available at https://maps.archaeology.ie/HistoricEnvironment/ or through links on https://archaeology.ie/ .
KCC	Galway County Council.
Km	Kilometre(s).
M	Metres, all dimensions are given in metres or part of a metre, unless otherwise stated.
Monitoring	Archaeological Monitoring refers to the requirement to have an archaeologist(s) on site during the earth moving/construction works to undertake a watching brief in case archaeological material is revealed.
N	North.
NGR	National Grid Reference.
NIAH	National Inventory of Architectural Heritage, see www.buildingsofireland.ie .
NMI	National Museum of Ireland.
NMS	National Monuments Service. Regulatory body with responsibility for archaeological heritage. A division of the DHLGH.
NPM	Natural parent material (subsoil).
OD	Ordnance Datum (height above sea level).
OS	Ordnance Survey.
OSI	Ordnance Survey of Ireland.
Pers. Comm.	Personal Communication.
Plinth	The projecting base of a wall.
PO	Preservation Order.
PS	Protected Structure.
Quoin	The dressed stone at the corner of a building.
Recessed	Architectural term for a section of a wall or side of a building that is set back from the front.
Refs	References.
RMP	Record of Monuments and Places. A paper record on which all known archaeological sites at the time of the record are marked and listed in an accompanying list. The sites marked are afforded legal protection under the National Monuments Acts 1930–2014. The record is based on the 6-inch map series for the country and is recorded on a county basis. Each archaeological monument on the RMP has a unique code known as the RMP number prefixed by GA for Galway.
RMP Number	This code is the number of the site on the RMP constraint map. It begins with the county code, for example, KE, the 6-inch sheet number, followed by the number of the archaeological monument on that sheet.
RPS	Record of Protected Structures.
S	South.
Sheet	This relates to the 6-inch map for each county, which is divided into sheets.
SMR	Sites and Monuments Record. It relates to the archive files and on-line database relating to all currently known archaeological monuments, maintained by the Archaeological Survey of Ireland (ASI). It is regularly updated. It can be viewed at http://webgis.archaeology.ie/historicenvironment/ .
TB	Townland Boundary.
W	West. Width; where used with dimensions.

1. Introduction

1.1 Aims and Structure

The aims of this report are three-fold: first, a baseline description and record of Moylough Castle, which can support potential future funding applications; second, a statement of heritage significance; and third, a conservation and management plan with policies for the castle and associated enclosure. In addition to these main aims, an appraisal of options for the sustainable enhancement of the monument is also outlined.

The structure of this conservation and management plan report (CMP) is as follows: this section provides an introduction to the project including its genesis, scope, and purpose. An overview of the current statutory protections of the complex is provided, and guiding philosophical approaches are outlined. Methodologies used in the gathering of the data and the compilation of the report is provided. Section 2 provides background to the church in order to understand it and place it in its broader archaeological context. A brief cartographic review, which traces the place over time is included. The church as a monument and associated feature types represented, and chronology, are discussed. A summary of heritage assets of the location is provided. A description of the current remains is given. Section 3 includes an assessment of key heritage values leading to a statement of significance. Section 4 lists and defines the current management issues and vulnerabilities of the complex. Risks and opportunities for the ecclesiastical complex are outlined; while section 5 outlines future management policy aims that will assist in mitigating these vulnerabilities and includes an appraisal of options for future re-use. Section 6 is an action plan for the policies outlined in section 5. Section 7 provides a brief summary and concluding remarks. Section 8 is the bibliography, section 9 a signing-off statement, and section 10 includes supporting information set out in a series of appendices.

1.2 Statutory Protection and Policy

There is a range of existing statutory and regulatory policies upon which this report is based. Archaeological heritage is protected under the National Monuments (amendment) Act 1930–2014. Further protection is provided by the following legislation: Heritage Act, 1985; Architectural Heritage (national inventory) and Historic Monuments (miscellaneous provisions) Act, 1999; Planning and Development Act, 2000 (plus amendments); and Planning and Development Regulations, 2001. This legislation is endorsed by Galway County Council in its county development plan (Galway County Council 2022-2028). A summary of protections afforded to the castle at Moylough is provided in Table 1.1. A list of pertinent international charters that apply to this study is in Table 1.2.

Table 1.1. Heritage asset information.

Common name	
Townland	Moylough
Civil Parish	Moylough
Barony	Tiaquin
County	Galway
Six-inch map sheet	GA 045
Protected Structure	N/a
National Inventory of Architectural Heritage	N/a
Structural elements	Hall House
RMP/SMR Nos	GA045-029001- (Castle - hall-house) & GA045-029002- (Enclosure).
Archaeological Classification	Castle-hall house and enclosure
Development & Other Plans	N/a
Ownership	Private ownership
Other designations	N/a

Table 1.2. List of pertinent international charters consulted in this study.

Common name	Date	Charter Title
-	1972	UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage
Venice Charter	1964	International charter for the conservation and restoration of monuments and sites
-	1975	The Congress on European Architectural Heritage
Burra Charter	1979 (revised 1981, 1988, 1999 & 2013)	The Australia ICOMOS Charter for Places of Cultural Significance
Granada	1985	Council of Europe Convention for the Protection of the Architectural Heritage of Europe
Valetta Charter	1992	Convention on the Protection of the Archaeological Heritage

The philosophical approach underlying the understanding of conservation management plans is that an understanding of the monument and its significance is first established, followed by an assessment of how this significance might be threatened or impaired in the future. Once these issues have been clearly outlined a set of measures and policies can be adopted to avoid or mitigate these potential impairments and safeguard and enhance significance for future generations (e.g. Aygen, 2012; CPRE, 2004; Forsyth, 2007; Historic Scotland, 2000; Semple Kerr, 1996).



Figure 1.1. Location map, subject site indicated in red (www.osi.ie). North to top.



Figure 1.2. General location map of site within townland, subject site indicated in red (www.archaeology.ie). North to top.



Figure 1.3. Detailed location map, subject site indicated in red (www.archaeology.ie). North to top.

1.3 Methodologies

The following resources and methods of establishing the status of the castle at Moylough were used:

- The castle was inspected, photographed, recorded and a condition assessment was made during several visits;
- The castle and earthwork was surveyed (appendix);
- A baseline natural heritage survey was undertaken (section 2.5.1);
- Web-based assessment: Historic mapping and photographs (section 2); placename and folklore records (section 2.4.5);
- Desk-based assessment: A wide range of historical records relevant to the castle its type and associated examples; The Record of Monuments and Places (RMP) constraint maps and list (section 2); The topographical files housed in the National Museum of Ireland ;

1.4 Limitations

There is no safe access to the upper levels of the castle, which restricts a detailed survey of the first second floors.

2. Understanding the Monument

2.1 Description of Place, Topography, and Setting

Moylough is an excellent example of a medieval hall house, located on the western side of Moylough village, in northeast County Galway (Figure 2.1). It is situated in the townland of Moylough, the barony of Tiaquin and the civil parish of Moylough.

The underlying geology is Visean Limestones (undifferentiated) (<https://gis.epa.ie/EPAMaps/SEA>). A stream rises in a swallow hole Polladirik on the north side of the castle, and flows northwards, then eastwards before emptying into Summerville Lough. Summerville Lough is a proposed natural Heritage Area (NHA)(Figure 2.2).



Figure 2.1. Discovery Series map (1 box = 1km). North to top. Site indicated by red box.



Figure 2.2. EPA map showing location of the subject site in relation to nearby water courses and protected areas (<https://gis.epa.ie/EPAMaps/SEA>). North to top. Site indicated by red box.

The castle is situated on a slight elevation about half a mile west of Moylough village, overlooking the low marshy lands bordering Summerville Lough to the north. It is a fine example of an early thirteenth century monument known as a hall house, dating to the early years of the Norman invasion. It is one of only eleven such monuments known from county Galway. It is partially surrounded by rectangular earthworks which appear to be contemporary with the hall house. The site is worthy of conservation and archaeological investigation in its own right, apart from potential economic and social value.

2.1.1 Description of the monument from Moylough Heritage Society

Moylough Castle is described as a rectangular keep or hall house dating most probably from the first half of the thirteenth century – between 1235 – 1240. While detailed manorial records are rare, we have identified two English landowners by the names of de Cotterals and de Cogeshales who in all probability may have built or were tenants of the Castle. Around this time the area around Moylough was known as Ui Diarmada and had been ruled by the O'Concannons. Richard de Bermingham held the area during the invasion.

The Castle is situated on a slight elevation about half a mile west of Moylough village, overlooking the low marshy lands bordering Summerville Lough. It comprises three stories built throughout of local limestone rubble set in hard whitish lime mortar. Gravel from nearby esker ridges would have been used as the core. It measures 12meters in length 6.6 meters in width. The walls are 2meters thick and rise to a height of 14 meters and strengthened by a base batter which is the outward slope on the wall which adds stability to the castle. It survives to roof level on three sides but the south west wall has now collapsed. The entrance is at first floor level and a timber stairs probably gave access to the door. The ground floor was probably used for storage and maybe as servants' quarters. Seven narrow vertical loop windows lit the room. The first floor is lighted by narrow windows with semi-circular heads; the best preserved one on the North West wall. Their size indicates they were constructed for light rather than defensive purposes. No evidence of a stone stairs leading to the first floor survives but it can be assumed that the first floor was accessed by a timber ladder through a hole in the floor. Strong timber beams built into the long side walls supported the timber floor overhead. The slots are still visible today. Holes for draw – bars are still evident, presumably to secure shutters. The second story had a timber floor also. A steep spiral stairs led to the wall walk and battlements. The roof would probably have been made of thatch or wooden shingles. Most doors had a single leaf and opened inwards but in Moylough an interesting feature on the north east wall is a recess which accommodated the door when fully opened.

There are no indications of fireplaces within the building as it survives today and in similar rectangular hall houses elsewhere these may never have existed as permanent architectural features. Latrine accommodation is also lacking but if you compare it to hall houses in Athenry & Green Castle Co. Down, it could have been situated at first floor level diagonally opposite the entrance, in the now collapsed west angle. The time needed to construct these halls varies. The quarrying of rubble, preparation of wooden frame works, floor beams and other materials required time, as did the necessity to allow each course to dry before starting the next. The optimum height per building season for church towers and castle keeps was 10 to 12 feet so a structure as large as Moylough or Athenry would have taken several seasons to build (

The presence of good architectural detail in Athenry indicates a date of c.1250 but based on structural evidence alone, its estimated that Moylough may have been erected nearer the beginning rather the middle of the thirteenth century (Mannion A. & O'Sullivan N).



Figure 2.3. View NW towards Summerville Lough (F. Coyne).



Figure 2.4. Location of Polladirk swallow hole to the N of the castle (F. Coyne).

2.2 Cartographic Review

A review of all available map material was undertaken for Moylough, the earliest of which is the Down Survey dating to the seventeenth century (Fig 2.5). The Down Survey was a national land survey, managed by Sir William Petty, then surgeon-general of the English army. Its purpose was to measure the land that was to be forfeited by Irish Catholics, so that it could be redistributed by the Crown as payment to adventurers and soldiers of the Protestant faith for services rendered. The survey was undertaken from 1656–1658. The Down Survey generated an all-island map, and more detailed maps on a county, barony, and civil parish basis. The Barony map for this area was destroyed in 1711.



Figure 2.5. Extract from the Down Survey map of 'The County of Galway' (<https://downsurvey.tchpc.tcd.ie/down-survey-maps.php#c=Galway>).



Figure 2.6. Extract from Taylor & Skinner Road maps of Ireland, Map 80 - Road from Dublin to Dunmore / from Ahascragh to Newtown Bellew, dated 1777 (<https://www.swilson.info/tandsdets.php?pg=80>). Note, North to right of image.

Moylough (or Newtown Bellew as it was known for a time) is marked on various subsequent county maps of Galway. The parish of Moylough is depicted on the Grand Jury map for Galway, produced by William Larkin in 1819 (Fig. 2.7). The church of Moylough is depicted to the west of the village of Newtown Bellew, but the castle is not indicated. In the 1837 Lewis Topographical Dictionary of Ireland map 'Newtown Bellew is annotated, (Fig. 2.8), but no detail is indicated.



Figure 2.7. Grand Jury map for Galway dated from 1819 (<https://www.lbrowncollection.com/ireland-grand-jury-maps-galway/>)

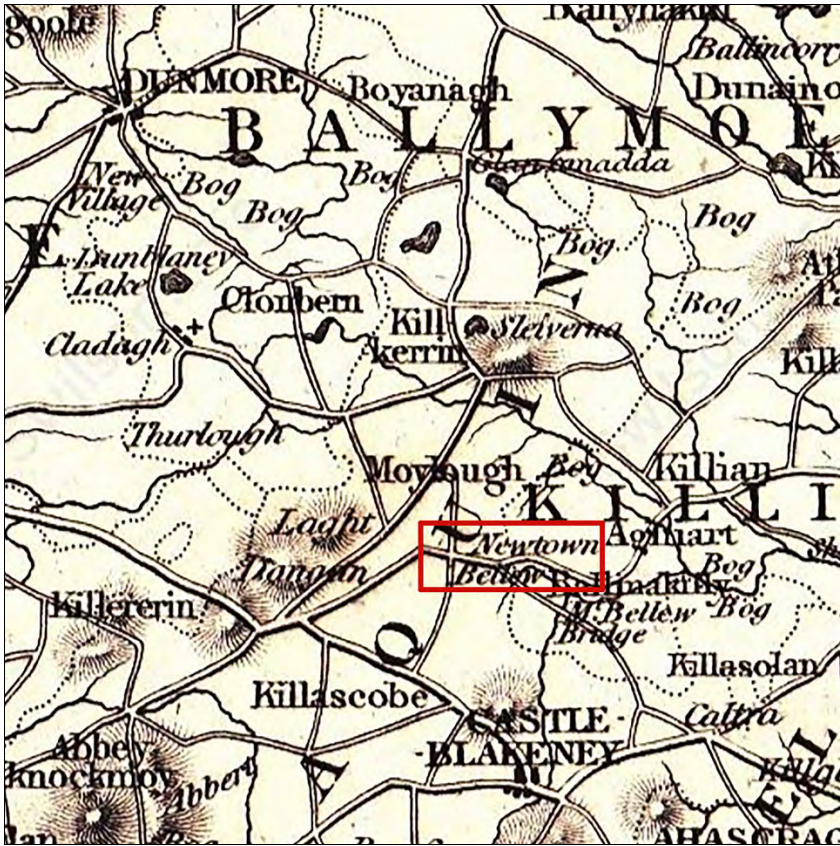


Figure 2.8. Lewis Topographical Dictionary 1837 (<https://www.swilson.info/lewismaps37.php?coid=11>).

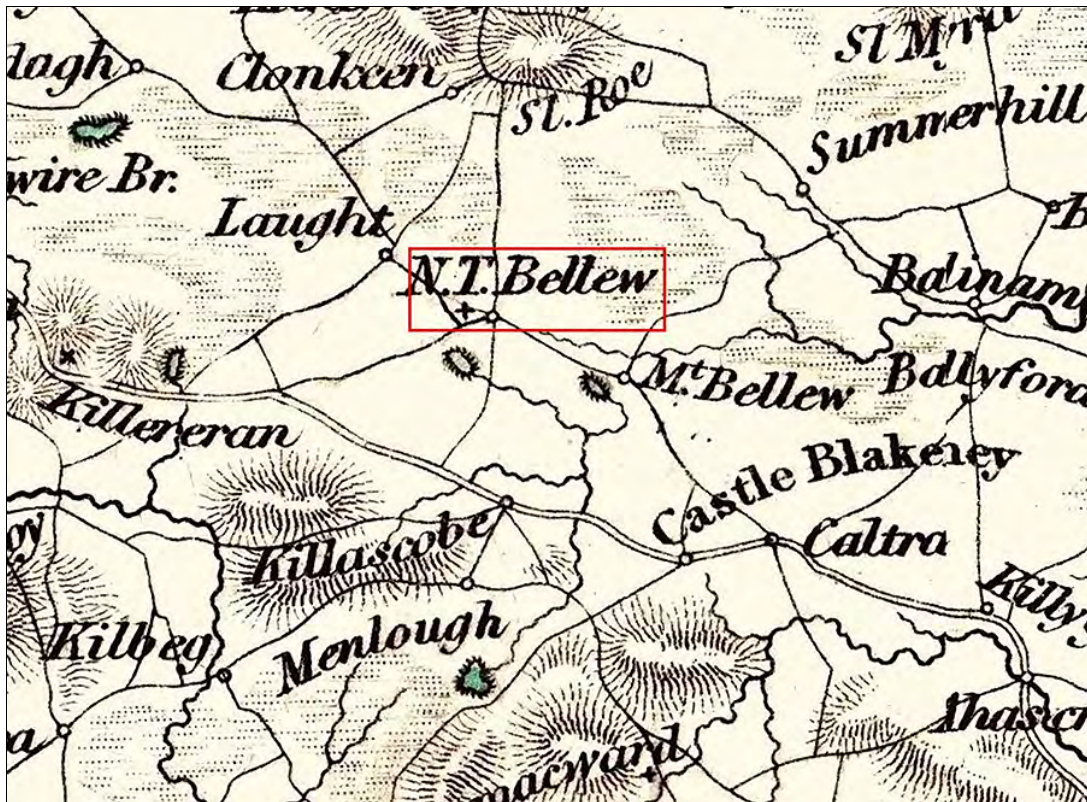


Figure 2.9. 1838 Society for the Diffusion of Useful Knowledge map(<https://www.swilson.info/maps/sduk1838.php>).

The first detailed map to show Moylough Castle is the Ordnance Survey first edition six-inch map which dates to c. 1840 (Fig. 2.9). It depicts the site, and is annotated 'Moylough Castle-in ruins' and 'graveyard'. The source of the stream which flows towards Summerville Lough rises to the north of the castle and is annotated as 'Polladirk'. It seems to be one of several springs or swallow holes in the area, but is the only one named.

At this time Moylough is still named Newtown Bellew.



Figure 2.10. Extract of the First edition Ordnance Survey six-inch map sheet GA-44, surveyed 1839, published 1840 (reproduced courtesy of the National Library of Scotland).



Figure 2.11. Detail of the First edition Ordnance Survey six-inch map sheet GA-44 c. 1840 (reproduced courtesy of the National Library of Scotland).



Figure 2.12. Extract of the First edition Ordnance Survey six-inch map sheet GA-44, resurveyed 1892, published 1894 (reproduced courtesy of the National Library of Scotland).



Figure 2.13. Detail of the First edition Ordnance Survey six-inch map sheet GA-44 resurveyed 1892, published 1894 (reproduced courtesy of the National Library of Scotland).

The revised map of 1894 (Fig. 2.10) shows a hachured area around the castle, indicating the knoll on which it stands, although it does have a rectangular shape.

The later twenty-five inch map (Fig. 2.11) and the revised 1913 six inch map (Fig. 2.12) show the same layout. The field boundaries and trackway which define the early ecclesiastical enclosure are depicted.

The landowner of the time of the Griffith's Valuation in the mid-1800s (see plot 1 in map below) is listed as Repts. Daniel M. Kilkelly, who holds the land 'in fee' i.e. in absolute ownership (c. 1855).



Figure 2.14. Griffiths Valuation map (www.askaboutireland.ie).

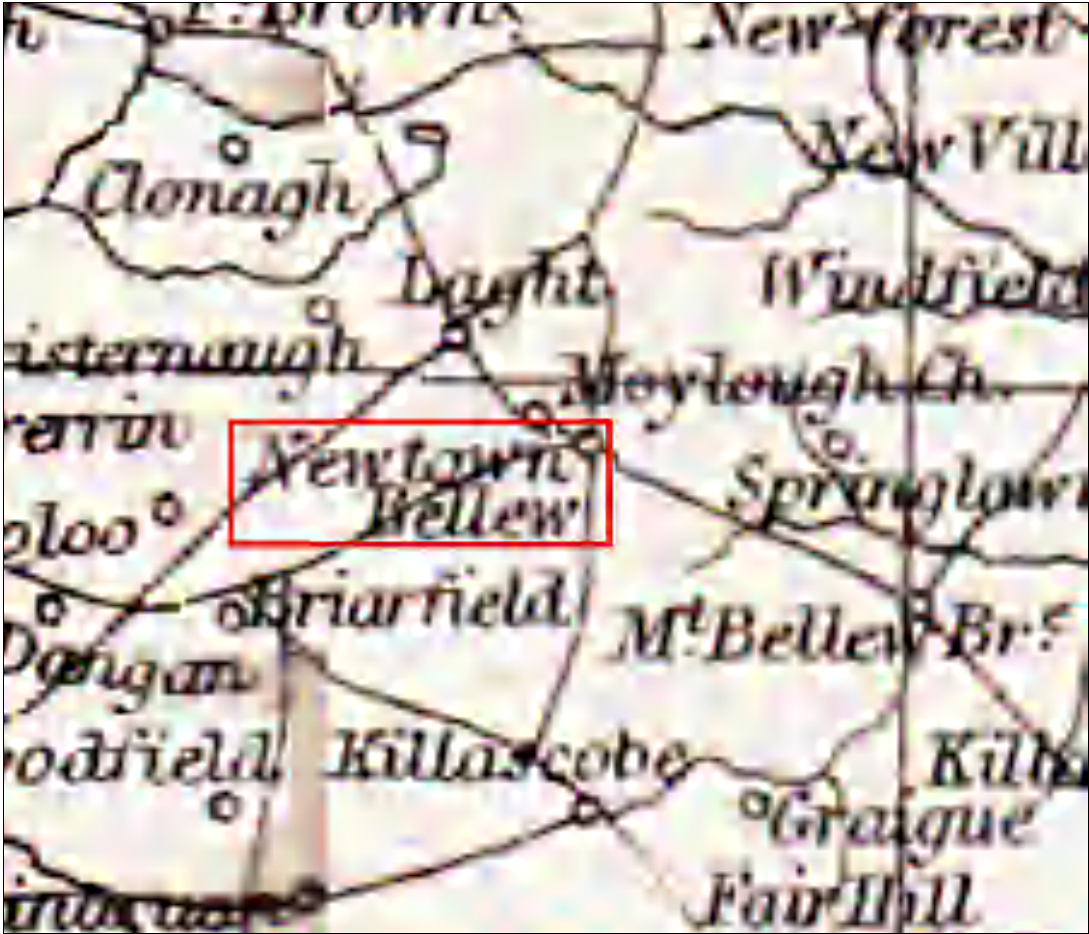


Figure 2.15. 1867 Map of Ireland (<https://www.swilson.info/maps/ireland1867.php>).

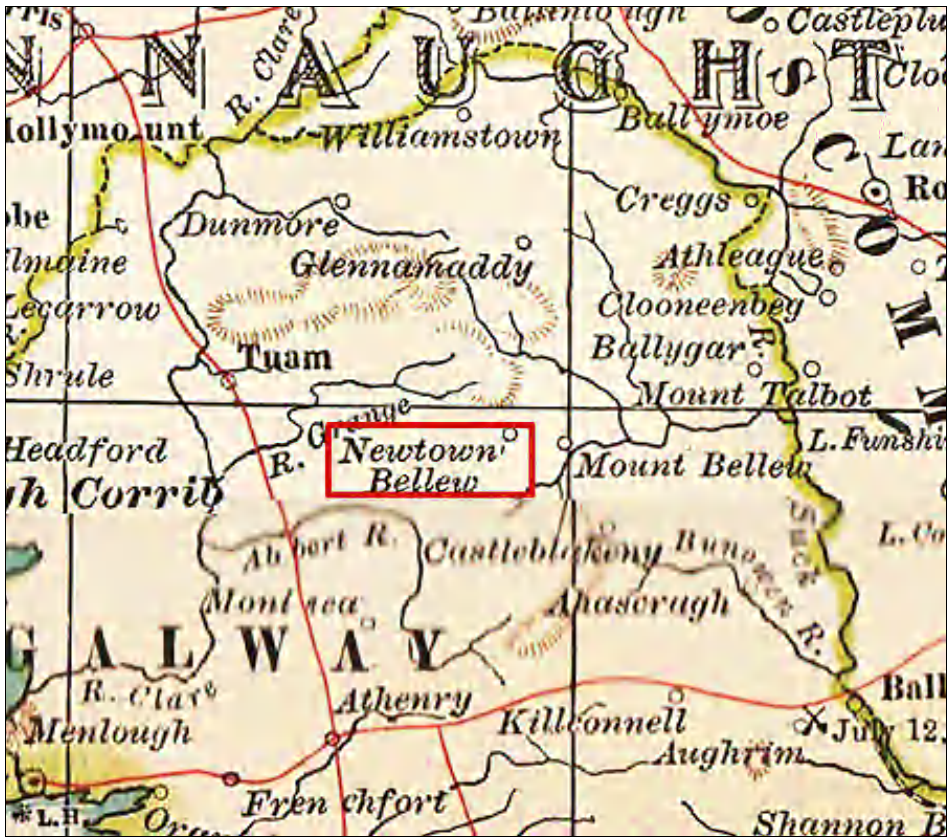


Figure 2.16. 1867 Map of Ireland (<https://www.swilson.info/maps/Ireland1897a.php>).

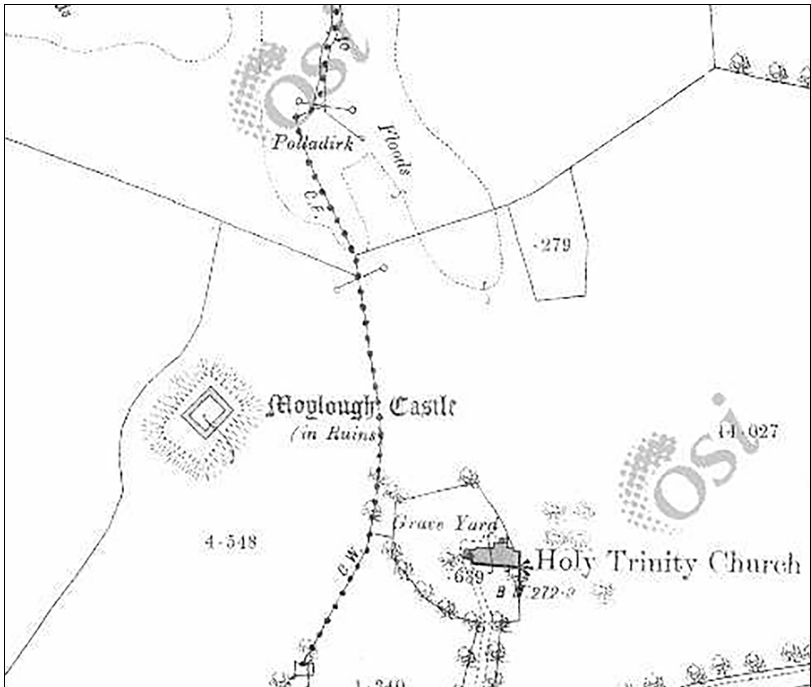


Figure 2.17. Extract from the twenty-five-inch Ordnance Survey map surveyed 1891, published 1893 (after www.archaeology.ie).



Figure 2.18. Extract from the Ordnance Survey six-inch map revised 1912, published 1916 (reproduced courtesy of the National Library of Scotland).

2.3 Monument Type, Elements, and Chronology

Moylough Castle is a ruinous example of a thirteenth century castle, known as a hall house, or more recently it has been suggested that these structures should more accurately be called ‘chambered towers’.

Table 2.1. List of element types comprising the subject site at Moylough.

Section	Element type
2.3.1	Castle - hall-house
2.3.2	Enclosure
2.3.3	Earthwork

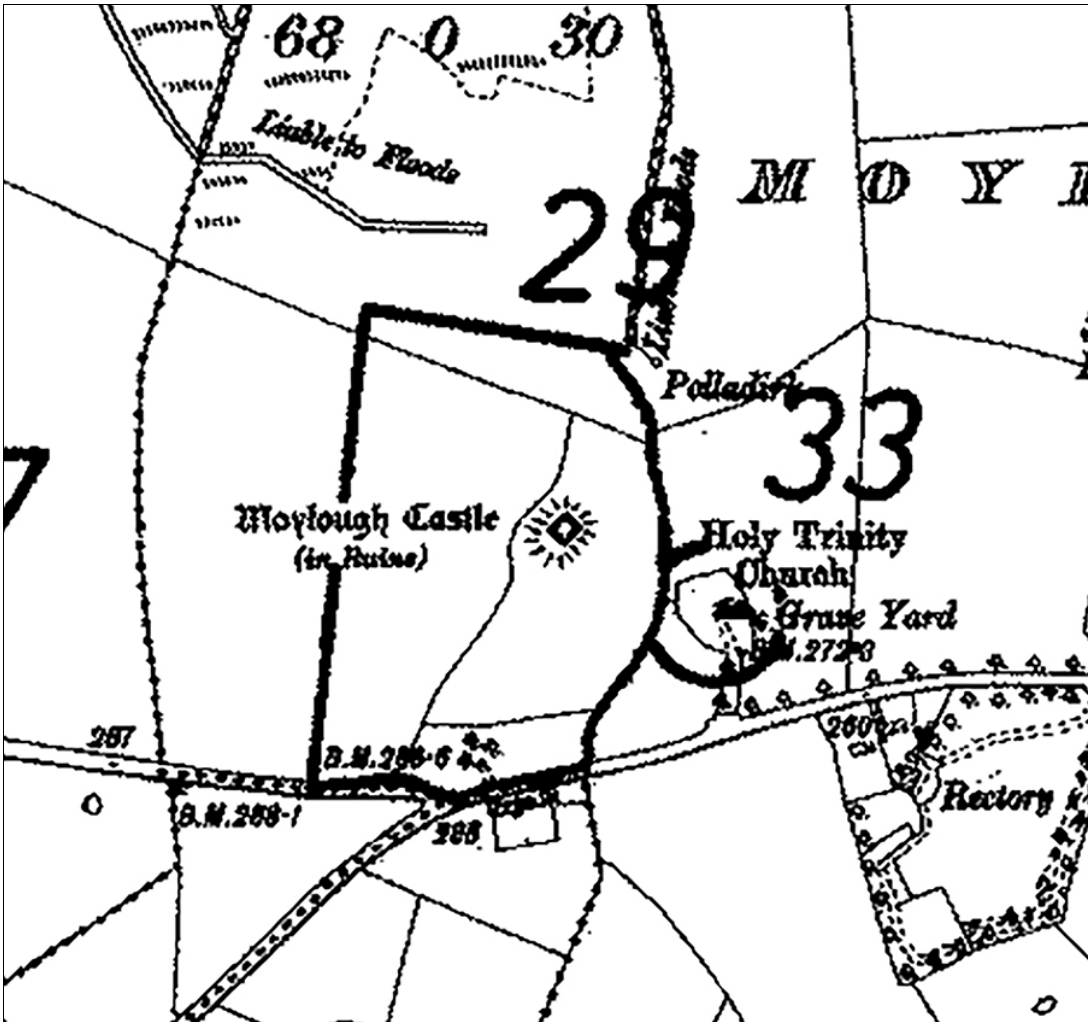


Figure 2.19. RMP map extract, sheet GA45, SMR detail 1997 on 1931 map. Site indicated by No. 29 (Archaeological Survey of Ireland 1996).

2.3.1 Moylough Village

The village, which is also called Newtown-Bellew, contains about 500 inhabitants: it is situated nearly in the centre of the parish, and has a daily post to Castle-Blakeney. Fairs are held on May. 28th, June 21st, Aug. 10th, Oct. 11th, and Nov. 8th, for cattle and pigs, and for linen, linen-yarn, and wool. Petty sessions are held once a fortnight at Mount-Bellew-Bridge; at which place is also held, on the first Monday in every month, the court for the manor of Castle Bellew, which was granted by patent to the Bellew family bearing date the 36th of Chas. II. A coach from Tuam to Dublin, and a car to Ballinasloe. pass through the parish daily (Lewis 1837, 403-404).

2.3.2 The Anglo-Norman Invasion

There was no single large-scale invasion of Ireland by the Anglo-Normans such as occurred in England in 1066. The first group arrived as mercenaries in the returning party of the exiled King of Leinster, Dermot MacMurrough in 1167., augmented by additional recruits in 1169 and 1170. The most notable of these was Strongbow, to whom Diarmuid offered his daughter Aoife in marriage. Until Diarmuid's death in 1171, the incomers were under his command. The traditional date of 1169 for the Anglo-Norman 'invasion' derives from the account of Giraldus Cambrensis (Gerald of Wales), who accorded a leading role to his relatives, and in particular his uncle Robert Fitz Stephen who landed in May 1169. With the help of these overseas recruits, MacMurrough recovered Dublin and Waterford before his death in 1171. In September 1171 the character of the Anglo-Norman intervention changed dramatically with the military expedition to Ireland of Henry II. He had received a Papal privilege authorizing a conquest of Ireland in 1155 but had not acted on it until 1171, when the destabilizing threat that Strongbow posed to Henry's kingdom. He did not need to and military engagements in Ireland however as a substantial number of Irish kings submitted to him voluntarily. The Irish bishops endorsed Henry's intervention as a means of restoring political stability and promoting church reform (Flanagan 2003, 31-32). Over the next forty years much of southern and eastern Ireland was seized by English lords. King John, king of England since 1199 returned to Ireland. And went a long way to making royal power effective in Ireland. In forty years, the Anglo-Normans had occupied a much greater area of land than they had conquered in a century of warfare in Wales. There is sign of a planned programme of conquest or of any long-term resistance by the Irish, after an initial battle, or battles for each kingdom (Macneil 1997, 17-20).

2.3.3 Development of Castles in Ireland

The Anglo-Normans constructed ringwork castles, of which approximately sixty are known. They appear today as a circular area between 30-60m in diameter defined by a steep sided bank and a wide, deep ditch. Some of the larger examples may have acted as campaign fortresses. They could be erected swiftly, and in some cases, such as at Limerick acted as the precursors of large Anglo-Norman stone castles. This implies that, on occasion ringworks were planned only as temporary castles, giving almost immediate protection to their occupants and thus allowing space time and security to put the materials and resources in position to erect large stone castles (O'Connor 2014, 334-5). Ringwork castles were susceptible to attack. The wooden palisades were vulnerable to fire and decay, and the earthen ramparts, while effective against small-scale assaults, offered limited protection against more sophisticated siege tactics. As a result, many ringwork castles were eventually replaced or supplemented by more robust stone fortifications.

All the early Anglo-Norman stone castles in Ireland are fortresses and are built in strategic positions to control and dominate the newly acquired territories (Sweetman 1999, 41). The principal Anglo-Norman stone-built fortresses, without the modern development which now surrounds most of them must have been an awe-inspiring site. The great period of castle building was from c. AD 1190-1310, with the size and layout of castles varying considerably (Sweetman 1995, 8). At least 4,000 stone castles of different types were built in Ireland between c. 1170 and the mid seventeenth century., and the island of Ireland was one of the most castellated parts of Europe by the mid-sixteenth century. Most castles were the defended residences of people of lordly status, ranging from kings to, in later periods, local gentry. Castles had a number of roles, and were the administrative and political centers of their owner's estates. Associated agricultural and administrative buildings once lay within and around castles. Therefore, masonry castles were not structures whose sole purpose was to protect their owners from attack. Instead, they were built to impress, and were bustling with life. Different types of castles were built. Great masonry castles, some up to several acres in extent were built by the Anglo-Normans and the Crown from the 1170s until the early fourteenth century (Moss 2014, 341). The arrival of the Anglo-Normans coincided with a period of change in the design of castles across Europe. Up to this point the main defensive and residential element was the keep, with the area around the keep (called the ward) defended by a curtain wall. By the end of the twelfth century there was a move in defensive emphasis towards the curtain wall, and between c. 1200-1100 curtain walls tended to be higher and straighter, with mural

and angle towers and twin-towered gatehouses, although old fashioned two storey keeps continued to be built e.g. Athenry, Co. Galway.

2.3.4 Hall Houses

A public or semi-public hall lay at the heart of most castles, but in Ireland the term hall house has been applied to two storey masonry structures of rectangular plan that have a hall at first floor level and are not part of an extensive fortified complex. A typical hall house, such as at Tomdeely in co. limerick has a rectangular plan and a first floor entrance accessed via an external stair, although many has a later door inserted at basement level. A mural latrine chamber is common at first floor level . The upper hall was carried on timber a timber floor, lit by large windows, although fireplaces are rare. It is likely that they were heated by means of a hearth carried on a pillar. They were probably open to the roof space above, and may have been divided by timber screens. Some hall houses, such as at Dunmore and Moylough are taller than average, and some have accommodation at second floor level., although in may cases this represents a later addition. At Tomdeely, co. limerick the timber floor was later replaced by a vault. Hall Houses are most commonly found in the west of Ireland, with many examples in Galway and north Ti, with other examples known from Cork to Sligo. Generally dated to the early/mid thirteenth century, they are thought to have served as manorial centres and represent the efforts of minor lords to expand and consolidate the Anglo-Norman colony at this time. The simplicity of hall houses, compared to other houses of the time is indicative of their function. They are free standing halls with storage underneath. They were multi-functional spaces, serving as communal dining spaces and as manorial administrative centres. Less than 100 hall houses are currently known (Sherlock 2014, 352-4).

In 2008 Terry Barry wrote that there was a growing recognition that the medieval landscape contained other types of stone fortification such as hall houses, first identified in significant numbers by O'Brien and Sweetman. Usually two storeys, with the entrance on the first floor probably accessed by a removable wooden staircase. This made a forced entry much more difficult and thus part of their defensive characteristic (Barry 2008, 129). Sweetman defines hall houses as two-storey, rectangular-shaped buildings with a first-floor entrance They have a defensive ground floor having only slit-opes, while the timbered first floor contained the hall and more open windows. Because of their lack of defensive features it is possible that they should not be classified as castles. However, since most of them date to the early thirteenth century and are virtually indistinguishable from hall keeps they are included here as castles (1999, 80).

The archaeological survey of Ireland records 11 hall houses from county Galway.

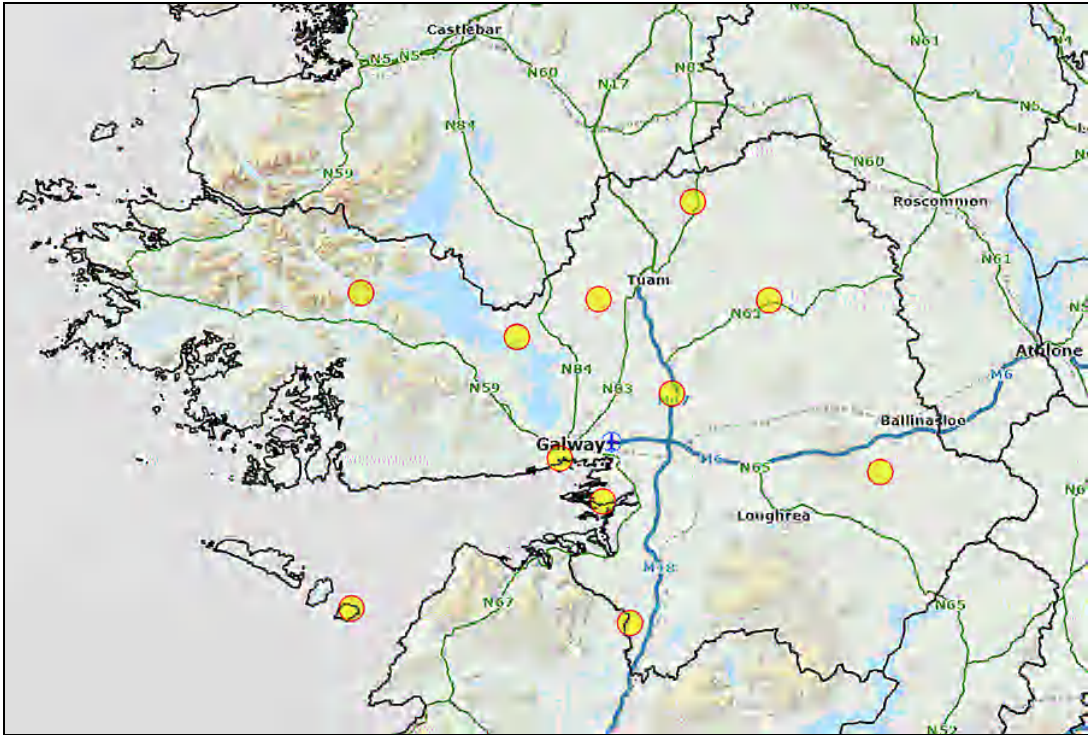


Figure 2.20. Hall houses in Galway (after www.archaeology.ie)



Figure 2.21. Example of a hall house from Tomdeely, Co. Limerick (F. Coyne).

2.3.5 Hall Houses or Chambered Towers?

In the last decade or so, the notion that the hall house existed has been challenged by scholars. O’Keeffe (2014, 258) has challenged the use of the term ‘hall house’ and the assumption that the upper rooms of ‘hall-houses’ were indeed halls, and therefore spaces more ‘public’ than ‘private’. These upper rooms lack the order, the sense of an architecture equipped for ceremony, for showing-off, that one recognises repeatedly in indisputable castle halls in England and France. Their windows are generally relatively small (and single-light), are sometimes asymmetrically-placed, and are few in number; by the standards of thirteenth-century halls outside Ireland.

More recently Karen Dempsey (2016, 118).) states that ‘ these castle-buildings mistakenly described as “hall-houses” were parts of complexes of buildings, and we see evidence that detached halls – probably ground-floor – were present within those complexes’. She draws on the work of Dr John Blair in England, who believed that that the first-floor hall was an inappropriate model of interpretation for domestic manorial buildings and that the extant structures were actually chamber-blocks which had once been accompanied by wooden ground-floor halls. This theory was corroborated by work carried out by Edward Impey and Roland Harris at Boothby-Pagnall in Lincolnshire. Geophysical surveys and subsequent excavation revealed the presence of an associated ground floor hall. Therefore it is now believed by Karen Dempsey that that the majority of ‘hall-houses’ in Ireland were in fact chamber-towers – the ‘private’ residences of lords. Geophysical survey carried out at Shrule and Ballisnahyny, in Co. Mayo, Annaghkeen, Co. Galway and Castlemore and Castlesampson in county Roscommon all revealed there was one sub-surface dominant rectangular structure revealed. These were located either at a right-angle, on a similar axis or adjacent to the upstanding masonry structure at the site ((Dempsey 2016, 114). The hall and chamber shaped the public and private lives of medieval people and though their architectural relationship was complex, by the thirteenth-century their separation became increasingly important. The hall was *one* part of a suite of buildings which also included a private chamber with a raised entrance. The hall had a unique architectural signature, usually ground floor with a central hearth or prominent fireplace. It contained opposing entrances typically in the long walls with a significant emphasis on fenestration. A services area or ‘low end’ developed which contrasted with the area where the lord sat, the raised dais or ‘high end. The hall was a venue for ceremony and fealty which included sharing meals, administering justice, and estate management. The chamber was almost opposite to this; a private residential structure (Dempsey, n.d). A medieval hall typically operated as the administrative and social centre of a lord’s estate. It facilitated the public side of the lord and lady’s life where they carried out the duties that their position commanded. In other words, it acted

as a venue where the public rituals of the lord and lady's role could be acted out. The hall was a venue for ceremony and fealty (the act of showing allegiance) which included sharing meals, administering justice, and estate management. The medieval chamber, its partner, functioned as a private residential space where the lord and lady could retreat from the medieval halls to be alone (in the medieval sense) or with a selected few from their household. The re-interpretation of previous information plus this new survey work suggests that like in England, these castles formerly understood as 'hall-houses' are in fact chambers or chamber-towers which functioned as the private residential accommodation of the lord and lady (K. Dempsey blog at <https://www.thestandingstone.ie/2015/08/guest-post-chamber-towers-not-hall.html>).



Figure 2.22. Moylough Castle, from N, note rectangular earthworks on left of photo. (F. Coyne).

At Moylough Castle, the rectangular earthworks at the SE side of the castle may indeed contain the remains of a great hall, and is an excellent location for a research project test the above hypothesis in the future.

2.3.6 The De Berminghams

The de Bermingham family (or de Birmingham) held the lordship of the manor of Birmingham in England for four hundred years and managed its growth from a small village into a thriving market town. They were stripped of most of their lands in England by the notorious John Dudley, Duke of Northumberland, who held sway over the young King Edward VI (1547–1553).

They also assisted in the invasion of Ireland and were rewarded with the Barony of Athenry. Following King Henry II's invasion of Ireland in 1171, separate branches the de Bermingham family became firmly established in Leinster. Soon thereafter, members of the clan headed west, and through force of arms reached deep into O'Connor territory in Connacht, establishing their main base at Athenry. By the 15th century, 'Bermingham Country' had grown to embrace much of present-day north Co. Galway, south Co. Mayo and western Co. Roscommon. Yet little more than a century later, the renowned Elizabethan historian William Camden was to write in his *Brittania* : "These Berminghams are now so degenerate that they hardly own themselves to be English". It been an injudicious lack of enthusiasm for the Henrician and Elizabethan Reformation by the now more-Irish-than-the-Irish de Berminghams in the West of Ireland, that led to dispossession and dispersal, further exacerbated through Penal times (Mohr 2015, 49).

Both Sir William de Birmingham and one of his youngest sons, Robert de Birmingham, are listed as being among the Normans sent in Henry II's invasion in 1172. Robert was later styled the 1st Baron Athenry. Meyler de Bermingham took part in the invasion of Connacht in the 1230s and started to build the town of Athenry c. 1240. According to local information, the Cotterals and de Cogeshales may have built or were tenants of Moylough Castle. Around this time the area around Moylough was known as *Ui Diarmada* and had been ruled by the O'Concannons. Meiler de Bermingham built a small castle at Athenry in 1238. As Moylough Castle probably dates to the first half of the 13th century, it is likely that he held the land around Moylough at this time. Piers (Peter) de Bermingham, son of Meiler enlarged Athenry Castle. He accompanied Richard de Burgo in the further subjugation of Connacht, and was rewarded with the granting of the cantred of Dunmore, and extensive lands as far north as Sligo (Mohr 2015, 50).

2.3.7 Key Site Elements

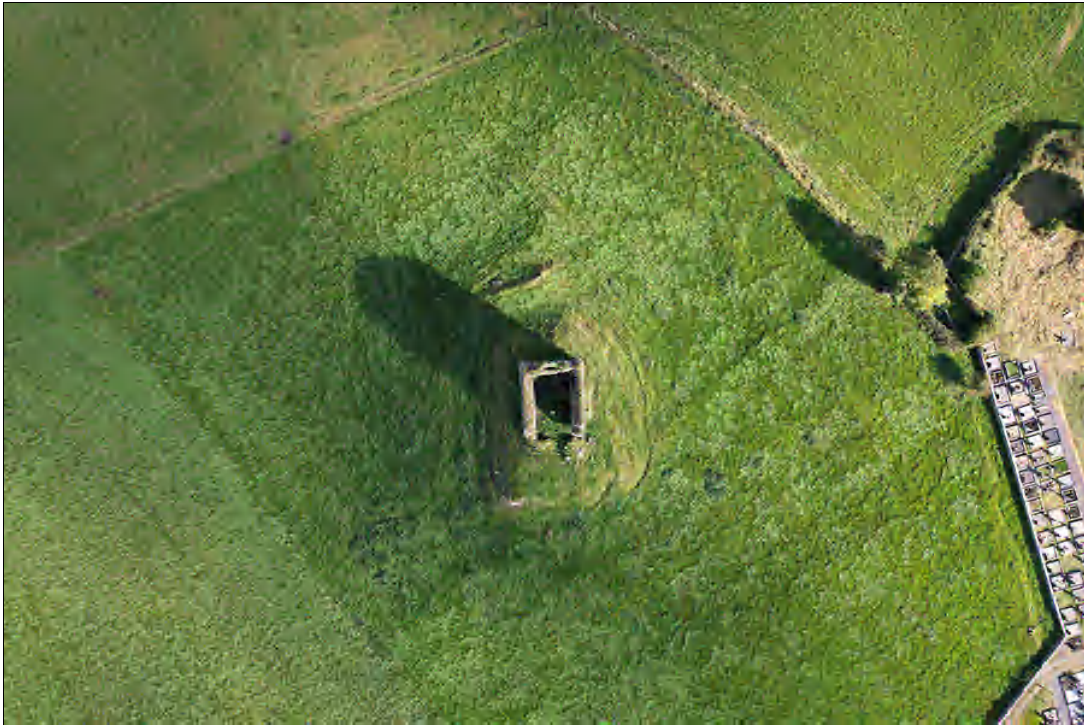


Figure 2.23. Aerial view of Moylough Castle (F. Coyne).

The site consists of a thirteenth century castle known as a hall house (or chambered tower). It is three storeys in height, constructed of undressed limestone rubble, set in a hard gritty limestone mortar. This mortar contains occasional small lumps of lime. The building measures approximately 6m by 12m by 15m in height. The walls are an average of 2m in thickness.

It is situated on the western edge of a low ridge, overlooking wet land to the northwest. The surrounding grassland is used for grazing. The knoll on which it stands appears to be a natural moraine, with boulder clay visible where cattle have eroded the ground. However, it is possible that this knoll has been artificially altered at the time of construction. Waterman (1952, 72) mentions ditch that extends across the width of the narrow promontory. A bank feature is visible on aerial photograph on the western side of the knoll. However, a silage pit was constructed here approximately 50 years ago, which has removed all trace of a possible ditch. An earthen bank is located on the western side of the knoll, measuring approximately 1m in height and 1.5m wide, extending in a N-S direction for c. 15m.



Figure 2.24. Aerial view of Moylough Castle from N (F. Coyne).



Figure 2.25. Moylough Castle from N showing earthwork (F. Coyne).



Figure 2.26. Moylough Castle showing glacial ridge extending to rear, from E (F. Coyne).



Figure 2.27. Boulder clay in eroded part of knoll, from W (F. Coyne).

The west wall has collapsed, with only the lower courses standing to a height of approximately 1.5m at the NW and SW corners. The castle has a base batter, which has been robbed out along the length of the N and W walls, and part of the S wall. However the original base batter remains partly along the length of the wall on this side.

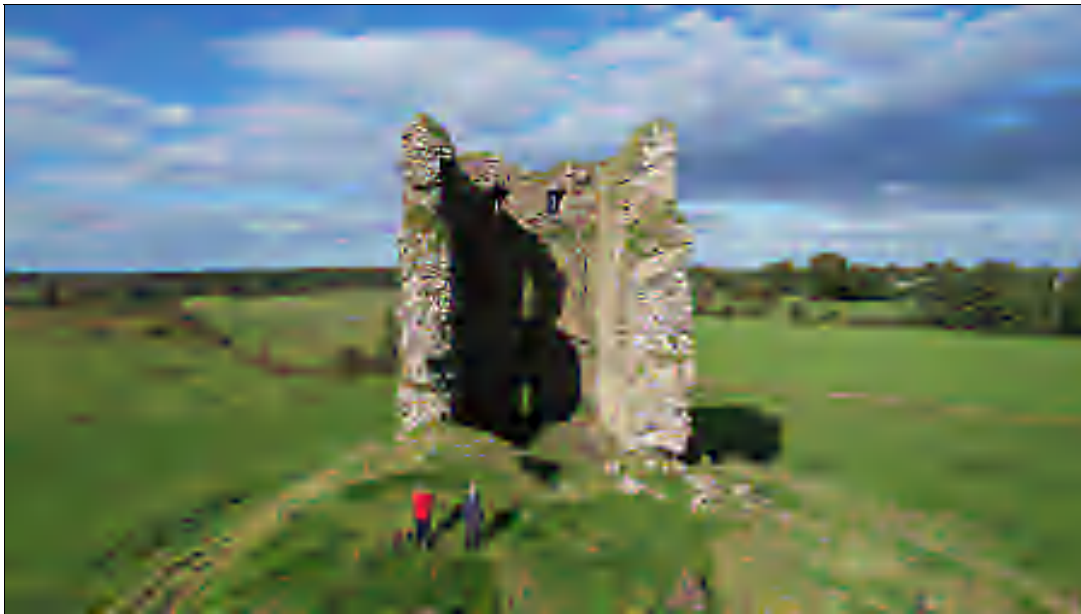


Figure 2.28. Collapsed SW wall, from SW (F. Coyne).

The ground floor/original basement is now accessed through the collapsed W wall, through the location of a window ope as noted by Waterman in 1952. Grass-covered mounds of stone are located at this side of the site.

Here five complete window opes survive, and part of one collapsed ope. The ope in the W wall is not clearly discernible. The window opes been partially robbed out. This was originally the basement of the castle, and it was lit by these embrasures. Only one window, that in the S wall maintains its original form, visible from the outside. They were originally very narrow, and used more for defensive purposed than for light. A series of large

Between the ground floor and the first floor are a series of closely set sockets for cross beams, which would have supported the wooden floor. A scar in the walls directly underneath these sockets, visible on all three remaining wall, may indicate the presence of a later vault, now robbed out.

The first floor contains three large window opes and one partially collapsed ope. The original door, complete with drawbar socket and rebate for the open door is located in the NE corner. This was accessed by means of an external stairs, although no sockets for timbers are visible externally. A squinch in the NW corner allows access to a spiral staircase and an access to the roof. Therefore, there was a wall walk at the roof level.

Window opes are visible in the second floor. Two narrow opes light the stairs on the NE wall, there is a small window with a pointed arch in the SW wall above the door, and a corresponding ope with a flat arch in the NW wall. The wall tops are now grass covered.



Figure 2.29. Vertical view of Moylough Castle (F. Coyne).

Externally a rectangular earthwork is visible at the S side of the castle, with a possible bank extending northwards past the castle. This earthwork has a low ground register, measuring between 0.3m and 0.4m in height, and approximately 1m wide. It appears to be constructed of compact earth and gravel.



Figure 2.30. Earthworks adjacent to castle, from NW (F. Coyne).



Figure 2.31. Aerial view of Moylough Castle showing earthworks on right (F. Coyne).



Figure 2.32. Earthworks, grass-covered, from N (F. Coyne).



Figure 2.33. Earthworks, grass-covered, castle to rear, from SE (F. Coyne).

2.3.8 Phasing

The castle must have been built over several seasons, and possible construction lines are visible, particularly on its NE external face.

On first glance, the castle appears to have only a single phase of use. However, a scar which stretches around the three remaining walls may suggest a collapsed vault, which replaced the earlier timber floor. It is possible that the timbers which spanned the castle rotted where they were inserted into the wall. Later building utilized a series of corbel, on which rested oak beams.



Figure 2.34. Scar for possible vault indicated, from SW (F. Coyne).



Figure 2.35. Scar in masonry and beam sockets, from W (F. Coyne).

2.3.9 Differentiation of Interior Space

It is presumed that the ground floor functioned as a basement, lit by a series of eight narrow lights set in splayed embrasures. There is no evidence for a stairs, so but it can be assumed that the first floor was accessed by a timber ladder through a trapdoor in the floor.

A series of beam holes marks the floor of the first floor. Here was the living quarters, accessed by a door at the W corner. This floor was lit by a series of four wide opes in widely splayed embrasures. Waterman records that there were window seats in these embrasures. However, the current survey allowed drone access, and it appears that no window seats (at least not stone seats) existed. There is no fireplace, and so heating must have been by means of a brazier or fire placed on a hearth stone. It is unclear how the smoke was managed and ventilated from the room.

The half turn stairs accessed via a squinch in the N corner leads onto the wall walk. There must have been a floor between the first and second floors, although its form is unclear. There appears to be a ledge at the level between the ceiling of the second floor and the roof. Here masonry has been removed to form a ledge where the floor beams would have been built in. Some remaining floor beam socket holes remain, most notable in the SE wall. Two small windows are located at this level, one in the NW wall and one in the SW wall, suggesting that light was not a primary concern at this level. Perhaps it was used as an attic space.

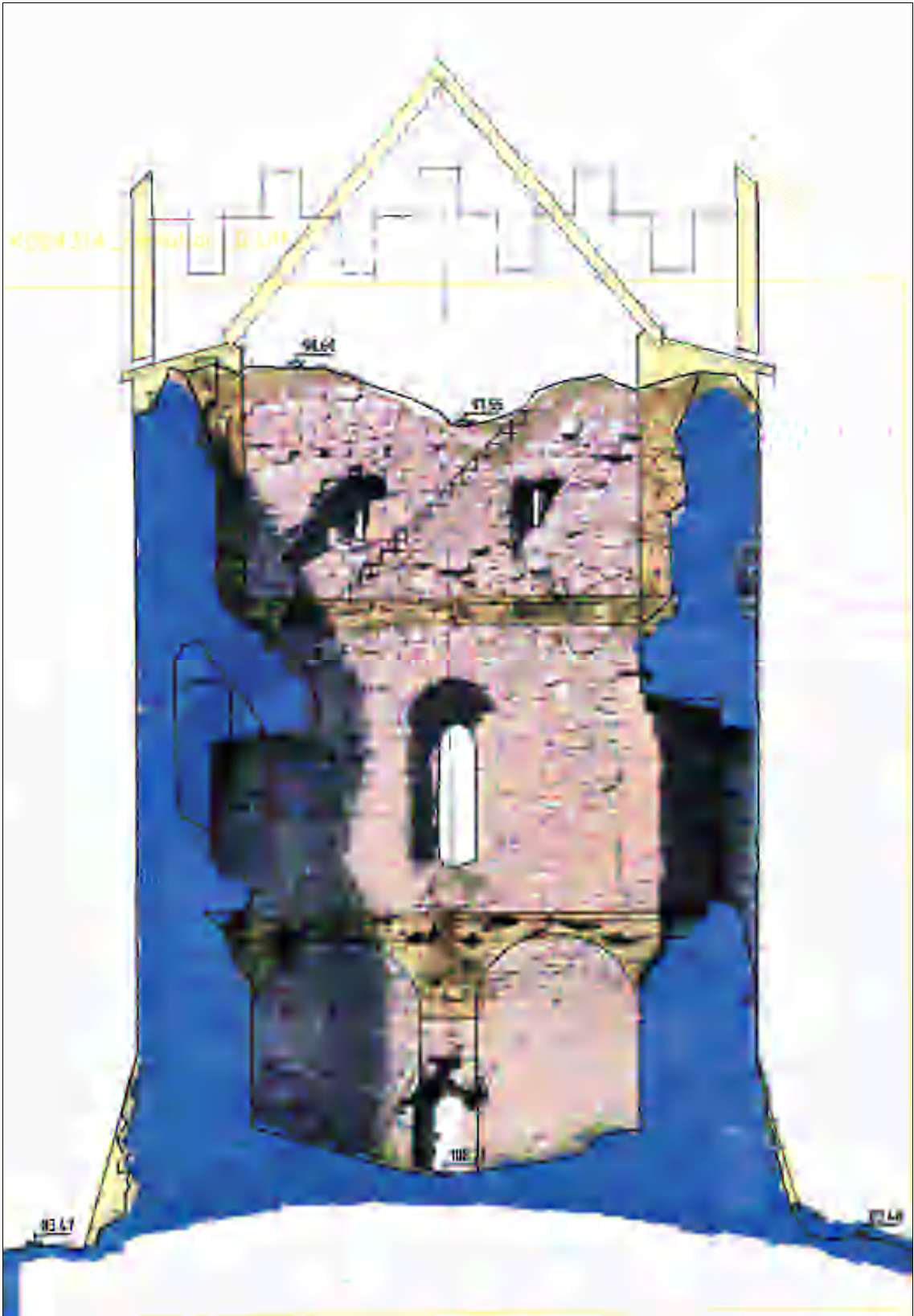


Figure 2.36. conjectural reconstruction by John Deaton on KGSS survey drawing.

2.4 Associated Heritage Assets

2.4.1 Natural heritage by *Ruth Minogue and Associates*

Minogue Environmental Consulting (MEC) Ltd were commissioned by Aegis Archaeology Ltd to prepare the ecological baseline report and make recommendations in relation to ecology as part of the Moylough, County Galway. The purpose of the CMP is to follow best practice and to lay the foundations for future initiatives at the monument and the ecological survey aims to identify main habitats, undertake a bat survey to determine presence or absence of bats, and provide recommendations to enhance the biodiversity value of the site.

Site description

The underlying bedrock is pale grey clean skeletal limestone and Viséan Limestones (undifferentiated) surrounding soils are a mix of Coarse loamy drift with limestones and fine and Fine loamy drift with limestones the subsoils comprise Basic Esker sands and gravels and peat.

The immediate habitats on site comprise the following:

- BL1 stone walls and other stonework (ruins of Church and walls surrounding graveyard)
- GS2 Dry meadows – the lands around the site are well drained with dry meadows
- Trees are largely absent from the site with the notable exception of a mature ash that is split in the trunk located about 50m from the church. A hedge dominated by hawthorn is located to the north east and there is a large Yew tree within the graveyard.

The Moylough More river is the nearest water source to the site approximately 250m north, which flows south to north-west into Summerville Lough. Water quality is good when measured at the Cloonkeen Bridge north of Summerville Lough.

Policy framework

The Galway Heritage plan 2024 -2030 is under preparation but the following objectives from the existing plan are relevant to the Conservation Management Plan for Moylough Castle:

NH1.1. Engage with the community using an inclusive approach.

NH1.2 Promote and facilitate citizen science – encourage and equip groups to take part in national citizen science campaigns e.g. Coastwatch, Butterfly monitoring or Volunteer bat surveys.

NH1.3 Develop Local Biodiversity and Natural Heritage Plans with communities.

NH 1.4 Develop practical conservation and restoration projects and encourage communities to become involved in the management of sites of local biodiversity interest.

NH 1.5: Encourage and support communities to apply for funding through Galway County Council and other agencies for biodiversity and natural heritage projects.

NH1.6: Encourage communities to work in partnership with various agencies on biodiversity and natural heritage projects.

NH 1.7 Highlight, promote and assist the work of community groups through www.galwaycommunityheritage.org, social and other media.

NH 1.8: Produce guidance notes for community groups undertaking biodiversity or natural heritage projects on issues that need to be considered before embarking on a project.

In addition to the relevant policies and objectives in the Galway County Development Plan 2022-2028. There are also useful resources that apply in terms of planting schemes for nocturnal pollinators and community groups, these are listed under the Recommendations Section.

Desktop Research

Protected Sites-

The nearest Spa is River Suck Callows SPA(004097) which is a protected area for many wetland and Waterbirds which lies some approximately 15km to the east of the site. The nearest Sac is Shankill West Bog SAC(000326) which lies approximately 4km north of the site and is an active raised bog.

Woodland habitats-

The NPWS datasets for Ancient and long-established Woodland Inventory (2010) and the National Survey of Native Woodlands 2003 – 2008 were downloaded from the NPWS and reviewed to identify the presence of any such woodlands within or in the immediate vicinity of the project site.

Following this review no ancient and long-established woodlands or native woodlands that have been identified as part of these datasets occur within or adjacent to the project site.

Review of Historical Maps

A review of the historical first edition 6 inch map from 1843; the 25 inch map from 1909; and last edition 6 inch map from 1940 was completed for the project site and surrounding area. The historical maps do not indicate woodland habitat around the site, there has been an increase in residential development to the east of the site over time, and the turlough north west of the castle identified on the historical maps remains.

Species

A 10km (M64) search was undertaken using the National Biodiversity Centre database, see Figure 1.7 below. The following protected mammals under the EU Habitats Directive and/or Wildlife Act are recorded within 10km of the site:

Species name

- Brown Long-eared Bat (*Plecotus auritus*)
- Daubenton's Bat (*Myotis daubentonii*)
- Eurasian Badger (*Meles meles*)
- Eurasian Red Squirrel (*Sciurus vulgaris*)
- European Otter (*Lutra lutra*)
- Lesser Noctule (*Nyctalus leisleri*)
- Pine Marten (*Martes martes*)
- Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- West European Hedgehog (*Erinaceus europaeus*)

Bat Survey -

Introduction

The aim of the bat survey was to assess bat activity at the site. Given the time of the survey and the habitats on site, a static detector was deployed from 19th to 21st October to record bat activity.

Competences

Ruth Minogue MCIEEM undertook the survey work, Ruth has been undertaking bat surveys since 2013 and has attended bat training and conferences as part of Continued Professional Development. She has 11 years' experience in undertaking bat survey work primarily during the activity season and including emergent, re-entry surveys, preliminary roost surveys of trees and buildings. Ruth undertakes bat surveys over the active bat season from May to early September for planning applications, master planning and the Acres Traditional Farm Building Schemes and is a licensed ecologist (Bat License Der -Bat 23-96). She has prepared previously undertaken full season activity survey work on Newhall and Edenvale SAC (Newhall Stables) over 2013 and more recently bat surveys over 2021 at Ballaghfadda for Clare County Council.

Limitations

Limitations: the surveys were undertaken during outside the bat activity season. Therefore, the survey results are limited in terms of reflecting bat activity that may be higher over the May to September period.

Methodology

Methodology included desktop and data search, preliminary roost assessment of the building, and deployment of static detector over 2 nights from 19th to 21st October 2024.

Equipment

The team used the following survey equipment:

- Thermal imaging camera PixFrd ARC series.
- Elekon S2 x 1

Results were analysed using Elekon Batexplorer software.

The inspection survey was conducted in accordance with the Bat Conservation Trust (BCT) methodology (Collins, 2016). A potential roost classification using criteria in Collins et al (2023). The church was then assigned a level of suitability for roosting bats as outlined in Table 2.2 below.

Table 2.2. Roost Suitability Potential Buildings (Collins, 2023)

No roosting suitability		No features likely to be used by any roosting bats at any time of year
Negligible suitability	roosting	Buildings with few, if any, features suitable for roosting, however a small amount of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low roosting suitability		One or more potential roost sites that could be used by individual bats opportunistically at any time of year. The features do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate suitability	roosting	One or more potential roost sites that could be used by bats due to their space, shelter, protection, appropriate conditions and/or suitable surrounding habitat but are unlikely to support a roost of high conservation status (e.g. maternity or hibernation).
High roosting suitability		One or more potential roost sites that could be used by larger numbers of bats on a more regular basis/ longer periods of time, due to their space, shelter, protection, appropriate conditions and/or suitable surrounding habitat. These structures could support roosts of high conservation status (e.g. maternity or hibernation).
Confirmed roost		Evidence of bat occupation found

Results

A desktop review of publicly available relevant data was undertaken on the National Biodiversity Data Centre (NBDC) and National Parks & Wildlife Service (NPWS) websites. The National Biodiversity Data Centre was reviewed for relevant data, specifically

- existing species records for the 2km square in which the study site is located (M51R) and
- an indication of the relative importance of the wider landscape in which the study site is located, based on Model of Bat Landscapes for Ireland (Lundy et al. 2011). In the latter, the index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats.

Desktop results

Designated Sites

No statutory sites designated for bats are located within 5km of the site

Bat Records

National Biodiversity Database was searched on 15th of October for 10km tetrad (M63) and the following records were returned:

Species name

- Brown Long-eared Bat (*Plecotus auritus*)
- Common Pipistrelle (*Pipistrellus pipistrellus sensu stricto*)
- Daubenton's Bat (*Myotis daubentonii*)
- Lesser Noctule (*Nyctalus leisleri*)
- Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)

The following table presents record of bats found within 2 km(M64E) of the site in the last 10 years.

Table 2.3. Bat records within 2km 2014-2024.

Species	Year/location	Designation
Lesser Noctule (<i>Nyctalus leisleri</i>)	02/09/2019 2km North west of site	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Common Pipistrella	02/09/2019 2km North west of site	
Soprano Pipistrelle	02/09/2019 2km North west of site	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Daubenton's Bat (<i>Myotis daubentonii</i>)	02/09/2019 2km North west of site	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts

The bat habitats at landscape scale database was reviewed and this shows the project site and environs is of second lowest suitability for all bats. See figure 2.37 below.



Figure 2.37. Bat Landscapes.



Figure 2.38. National Bat Database.

Visual inspection exterior and interior- roost suitability potential

The castle itself has a several crevices that could be used by roosting bats, however the siting of the castle at an elevation, the absence of ivy and very limited woodland habitat close to the site reduces the overall suitability of the castle as a roosting structure and it is evaluated as being of low suitability.

Static survey 19th to 21 October.

The static detector (Elekon S2) was deployed over 2 nights with temperatures ranging from 12 to 19C. No bats were recorded within 50m of the detector that was placed on the inside western wall of the structure. Within 250m of the detector the following records were returned with most frequently recorded species, common pipistrelles occurring each night, Myotis spp recorded on two nights, and an individual Leisler bat on one night. See table below:

Table 2.4. Static detector results, calls withing 250m of the structure.

Timestamp	Species Text	Calls [#]	Temperature [°C]
21/10/2024 18:12	Nyctalus leisleri	2	19
19/10/2024 19:08	Pipistrellus pipistrellus	1	14
19/10/2024 19:10	Pipistrellus pipistrellus	1	14
19/10/2024 19:13	Pipistrellus pipistrellus	1	14
19/10/2024 19:03	Pipistrellus pipistrellus	2	14
21/10/2024 19:00	Pipistrellus pygmaeus	5	20
19/10/2024 18:59	Pipistrellus pipistrellus	1	14
19/10/2024 19:12	Pipistrellus pipistrellus	1	14
19/10/2024 19:44	Myotis spec.	4	13
21/10/2024 03:54	Myotis spec.	5	12
21/10/2024 04:07	Myotis spec.	7	12

Bat activity recorded was very low reflecting the time of year. The castle is not evaluated as low roosting potential due to its elevation and absence of linear woodland features adjacent to same. The absence of dense ivy growth is noted also in this regard. It may be used opportunistically over the activity season by low number of bats however.

Recommendations.

Bat activity recorded was very low reflecting the time of year. However, should further works to the structure be proposed in 2025, a bat survey in the activity season (May to September) should be undertaken to confirm absence of roosting bats. The avoidance of any artificial lighting would be important to reduce disturbance to birds and mammals. The All Ireland Pollinator Plan provides useful guidance including to community groups for actions for pollinators, as well as actions for nocturnal pollinators which could comprise relevant actions for planting schemes or actions around the churchyard. Some are presented below and can all be accessed at the following link: Resources » All-Ireland Pollinator Plan (pollinators.ie)

If appropriate from an archaeological perspective, some additional planting at the perimeter of native low growing shrubs such as Guelder rose or viburnum would provide additional habitat for wildlife at local scale; if not within the site the lane for access could be planted to function as a local ecological corridor it would need protection.

2.4.2 Associated archives and collections

At the time of writing there are no known archives associated with the monument at Moylough. The National Museum of Ireland Topographical File Collection was consulted for artefact finds in the townland of Moylough and the immediate locality. No artefacts are recorded.

2.4.3 Placename evidence and dedication

The castle is situated in the townland of Moylough in the barony of Tiaquin and the civil parish of Moylough.

The Placenames Database of Ireland contains the following information on the place name Moylough. The name Moylough may translate as *Mhaigh Locha*, meaning ‘the plain of the lakes’. However O’Donovan translates the name Moylough as *Maoileach*, meaning ‘bald hill’.

The first use of the name Maglacho, referencing the parish church (sic) is in 1411.

Table 2.5. Historical references to the placename Moylough, Moyloughbeg & Moyloughmore listed by the Placenames Database of Ireland (<https://www.logainm.ie/en/20543>).

Date	Placename	Abbreviated Reference provided in Placenames Database of Ireland
1411	Maglacho	CPL6.255
1426	Maglacha	Arch. Hib. XXVI
1475	Mailacha	Cal. Pap. Reg. Vol. XIII
1479	Malacha, Molacha	CPL 13.434
1566	Moylaghe	FI 969
1578	Moylaghe	F3463
1585	Myllagh	Inq. 1139
1591	Moylagh	F 5617
1628	Moylagh	Ing. II
1566	Moylaghe	FI 969

2.4.4 Folklore

A search was made in www.Duchas.ie for any folklore relating to Moylough. The following entries were returned;

Moylough Castle

This castle, the ruins of which are still to be seen, is supposed to be built by O'Kelly of Hymany. O'Kelly owned several other castles in this district - Mullaghmore, Garbally, and Castleblakney. Tradition says that there is an underground passage between Moylough and Garbally castles. The latter is square in plan. Only three of its walls now remain the other having been blown away some three hundred years ago. The remaining three walls are about fifty feet high. There are loop holes or openings at its sides. It has a stone stairs leading to the top. The door must have been on the missing side as there is only a small opening on one of the sides at present. O'Loughlin O'Kelly is said to have been the last owner of the castle. His brother, Tadhg, lived in Mullaghmore Castle a few miles from Moylough. It is said that O'Loughlin O'Kelly was a very kind chivalrous man. Tadhg and his followers fought against O'Loughlin and his followers in Laught. The latter was defeated and killed in June 29th 1,646. He was buried in 'Leacht' and hence its name. The epitaph on his tomb was 'Oh people! who has seen so great a cause of pity, Since the three Marys were watching the grave? Full of a castle of noble women. Trusting to one man and he was taken from them'.

The Schools' Collection, Volume 0077, Page 258.

The History of Moylough Parish

In olden times the parish was called the parish of St. Stephen because St. Stephens built a church in the parish. The church was situated in the old graveyard which lies on the west side of Moylough. The feast of this Saint is celebrated on the fourth day of August.

The ruins of Moylough Castle are still to be seen standing on a hill about a quarter of a mile from Moylough village. The O'Kellys lived there long ago. O'Loughlin O'Kelly owned the castle. His brother Tadhg lived in Mullaghmore a few miles from Moylough. He owned a castle there but no trace of the ruins can be seen there today. Mr. Rourke the landlord cleared away all the ruins. The castle got the name of Moylough first and later the Parish of St. Stephen was changed to the parish of Moylough. Tadhg killed his brother O'Loughlin on St. Peter and Paul's day the 29th of June 1660 The tomb of O'Loughlin was taken from Moylough to Laught. The epitaph on the tomb was written in English and in Irish "A duine do connaich an díot truaighe ó bhí na trí trí mhuire a fáire na h-uaigne lán cáirtíán do mnaoibh uairte taobhadh lé aon faór i a bhreith uatha. 'Oh people who have not seen so great a cause of pity since the three Marys were watching the grave. The full of a castle of noble women trusting to one man and he was taken from them. O'Loughlin always kept noble ladies in his castle and protected them from ill treatment and danger. Tadhg Mór from Aughrim and Tadhg Mór from Gallach Castle Blakeny were first cousins of Tadhg Mór from Mullagh-more of O'Loughlin O Kelly. They were called the three best Tadhgs in Ireland.

The Schools' Collection, Volume 0081, Page 035.

Moylough in the Penal Days

Moylough by all accounts was very small if it was here at all in the penal days. Moylough was situated about where the castle stands now about a quarter of a mile west of the present village. Mass was said on the hills and in little houses built in hiding places. There is a place near Moylough where mass was said called Cnoc an Aifrinn, the mass rock is situated outside the castle on a hill which was surrounded by a lot of fine tall trees. Mass was said in a valley surrounded by hills so that when people stood on them they could see yeomen coming a distance away. There is a valley in Laught between two hills where mass was said. There was a small chapel built there which must have been very small. The ruins of the chapel remains there yet.

The Schools' Collection, Volume 0081, Page 104.

Moylough Graveyards

There are three graveyards in Moylough. One around Holy Trinity Protestant Church and another on top of a hill in Lakeview called Cillíneach. The Holy Trinity graveyard is the oldest. Before the penal days it was catholic but now it is divided into two parts, one part for the burial of protestants and the other for the burial of Catholics. This graveyard was taken from the Catholics and a Protestant church built on it. A wall was built across the graveyard. This wall was built of headstones. One of the oldest graves is there numbered eleven hundred and thirty one and another seventeen hundred and ninety. A catholic priest called Mr. O'Rourke became a protestant minister during the penal days. The graveyard was not as it is now. Mr. O'Rourke made great changes in the graveyard. Some of the houses in which the Yoe-men lived in were built of headstones. There are two burial-grounds for children near Moylough. One is situated on a hill in Lake-view and the other in Moylough Beag. There are no headstones in the children's burial grounds except crosses made of iron. A graveyard where unbaptised children are buried is called a Cillíneach. The graveyard called Esker Stephens is situated on a sand-hill and it seem very ancient according to the tombs.

The Schools' Collection, Volume 0081, Page 027.

2.5 Surviving Remains

Table 2.6. List of recorded features and labelled as part of this study.

Label	SMR number	Element
A	GA045-029001-	Castle - hall-house
B	GA045-029002-	Enclosure
C	GA045-029003-	Earthwork

The site descriptions below first provide those on the Historic Environment Viewer(HEV) available at www.archaeology.ie. This report supplements the earlier descriptions where required with up-to-date written and photographic record of the elements on the site.

2.5.1 Description

Element A: Castle-Hall house

GA045-029001-

HEV

Description: Within a rectangular enclosure (GA045-029002-). A rectangular 13th-C keep (Claffey 1983, 157-8), in fair condition, surviving to a height of three storeys. The SW wall has almost completely collapsed. The robbed-out doorway, near E corner of SE wall on 1st floor, is flanked by beam slots which supported a wooden stairs leading up to it. An intramural stairs in N corner connects 1st and 2nd floors. All the floors were wooden. Apart from large robbed-out windows on 1st floor, the remainder consist of rectangular slits or single lights with flat heads. A church (GA045-033001-) lay 110m to ESE. (O'Flanagan 1927, Vol. 1, 233; Waterman 1956, 73-6)

The above description is derived from the published 'Archaeological Inventory of County Galway Vol. II - North Galway'. Compiled by Olive Alcock, Kathy de hÓra and Paul Gosling (Dublin: Stationery Office, 1999).

2024 fieldwork

The site consists of a thirteenth century castle known as a hall house (or chambered tower). It is three storeys in height, constructed of undressed limestone rubble, set in a hard gritty limestone mortar. This mortar contains occasional small lumps of lime. The building measures approximately 6m by 12m by 15m in height. The walls are an average of 2m in thickness.

Base batter

The castle originally had a base batter which projected approximately 0.4m beyond the vertical wall. It was built up from large rectangular basal stones. This has been robbed out from all the walls except for part of the SE wall.



Figure 2.39. Robbed out base batter on NW wall (F. Coyne).



Figure 2.40. Robbed out base batter on NE wall. Note intact batter to rear (F. Coyne).

Ground Floor/Basement

The basement (ground floor of the castle is accessed through the collapsed SW wall. Loose stone covers the interior, and it is likely that the original floor is covered by a substantial depth of soil and stone. The basement was originally lit by seven narrow windows. Externally the light was only c. 0.2m wide (as evidenced by window 2). Internally they had a wide spay, all averaging 1.2m in width, with the internal flat arch supported on a timber lintel.

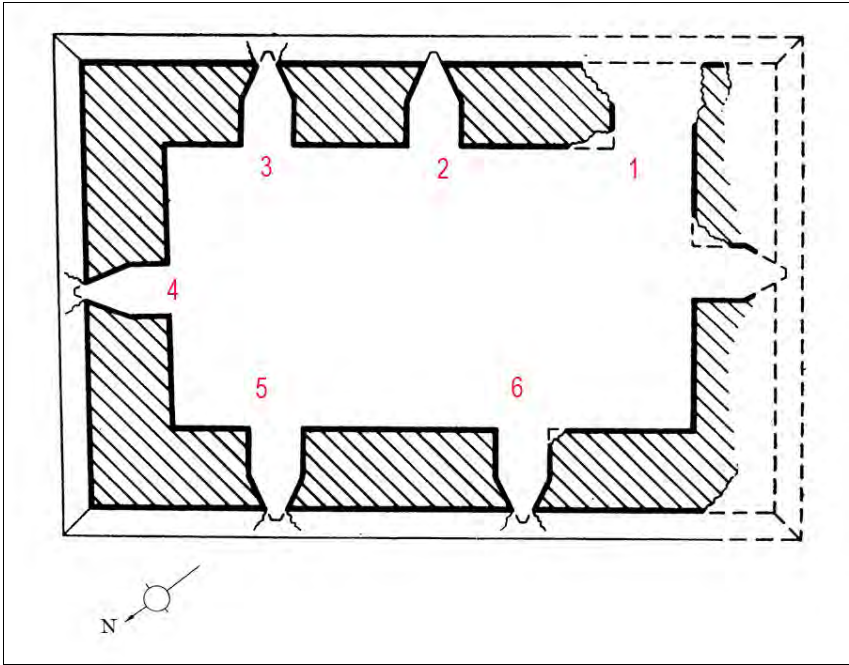


Figure 2.41. Plan of ground floor/basement (after Waterman).



Figure 2.42. View of ground floor, from SW (F. Coyne).



Figure 2.43. Window 1, partially collapsed, from SE. Only the N side of the embrasure survives. (F. Coyne).



Figure 2.44. Window 2, note slot for timber lintel, from NW (F. Coyne).



Figure 2.45. Window 2, mostly intact external window with complete arch, although rudimentary arch, from SE (F. Coyne). The light is approximately 0.2m wide.



Figure 2.46. Window 3, note slot for timber lintel, from NW (F. Coyne).



Figure 2.47. Window 4, note slot for timber lintel and robbed out flat arch, from SW (F. Coyne).



Figure 2.48. Window 5, note slot for timber lintel and robbed out flat arch, from NW (F. Coyne).



Figure 2.49. Window 6, note robbed out flat arch and jambs, from SW (F. Coyne).



Figure 2.50. Window 7, only portion of the embrasure is visible, from SE (F. Coyne).

First Floor

Holes for timber joists/beams indicate the level of the first floor. This was accessed externally via a wooden stairs to the door in the E angle of the SE wall. No holes are visible externally to indicate the position of the stairs. Inside, a drawbar socket is visible, as is a rebate in the NE wall to receive the door when it was open. The floor was lit by four windows, three of which still survive. These were narrow, set in tall embrasures. Waterman records window seats.

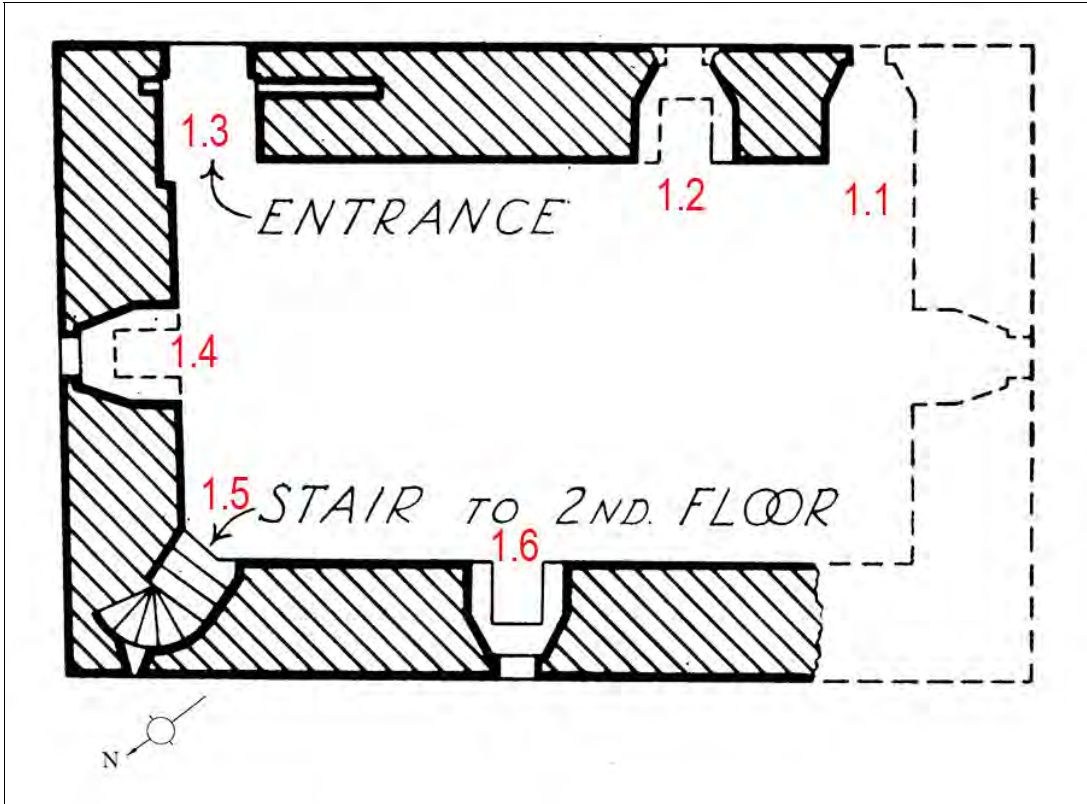


Figure 2.51. Plan of first floor (after Waterman).



Figure 2.52. The slots for timber beams (likely oak) on the inner face of the SE wall, from W (F. Coyne).



Figure 2.53. Window 1.1, only left side of embrasure remaining, from NW (F. Coyne).



Figure 2.54. Window 1.2, from SW (F. Coyne).



Figure 2.55. Window 1.2, plaster in underside of window embrasure, from SW (F. Coyne).



Figure 2.56. Door ope 1.3, from NW (F. Coyne).



Figure 2.57. Door ope 1.3, from W. Note drawbar socket. (F. Coyne).



Figure 2.58. External view of door ope 1.3, from SE (F. Coyne).



Figure 2.59. Window 1.4, plaster in underside of window embrasure, from SW (F. Coyne).



Figure 2.60. Squinch to allow access to stairs 1.5, from S (F. Coyne).



Figure 2.61. Window 1.6, plaster in underside of window embrasure, from SE (F. Coyne).

Second Floor



Figure 2.62. View of stairs, from above (J. Whyte).



Figure 2.63. Access from stairs to parapet, view from above (F. Coyne).



Figure 2.64. Loop 2.1 in stairwell on 2nd floor, from SW (F. Coyne).



Figure 2.65. Loop in stairwell on 2nd floor, window ope 2.2 on right, from SW



Figure 2.66. Window ope 2.3, from NW (F. Coyne).



Figure 2.67. Window 2.4, from SW (F. Coyne).

Element B: Enclosure
GA045-029002-

HEV

Description: In undulating grassland near W limits of Moylough village. Very poorly preserved sub-rectangular earthwork (NE-SW 30.5m, NW-SW 15m) defined by a scarp, intervening fosse and outer bank, best preserved along NW and NE sides. No visible surface trace survives at SW and only the inner scarp survives along SE side. Within the interior are the remains of Moylough Castle (GA045-029001-). Claffey (1983, 57) suggests that both the castle and surrounding earthwork are contemporary. Some 30m to N and E are a series of rectangular earthworks enclosed by earthen banks; probably associated.

The above description is derived from the published 'Archaeological Inventory of County Galway Vol. II - North Galway'. Compiled by Olive Alcock, Kathy de hÓra and Paul Gosling (Dublin: Stationery Office, 1999).

2024 fieldwork

The castle is situated on the western edge of a low ridge, the knoll on which it stands appears to be a natural moraine, with boulder clay visible where cattle have eroded the ground. Waterman (1952, 72) mentions ditch that extends across the width of the narrow promontory. An earthen bank is located on the northeastern side of the knoll, measuring approximately 1m in height and 1.5m wide, extending in a N-S direction for c. 15m. On the northwestern side traces of a bank and ditch are visible, which was also incorporated into a field boundary, depicted on the OS 1st edition and subsequent maps. A silage pit obscures a possible enclosure ditch at southwest, and no clear trace of an enclosing element can be discerned at southeast.

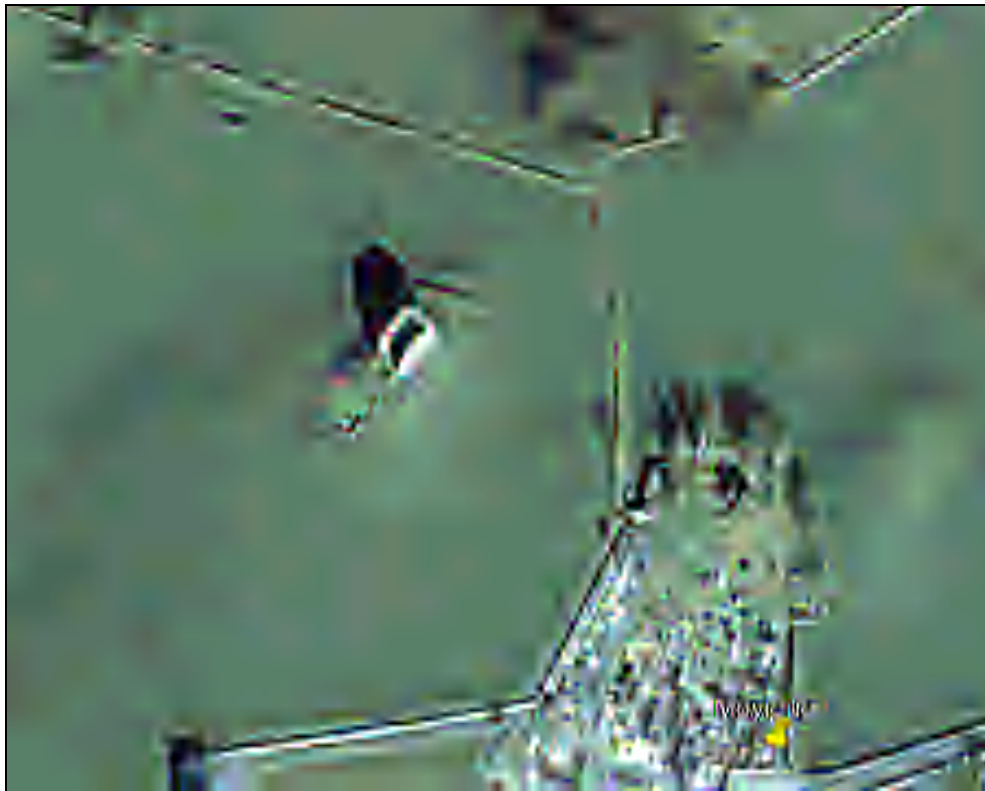


Figure 2.68. Google Earth image 18 March 2009.



Figure 2.69. Google Earth image 18 March 2009 (annotated by writer). Castle (GA045-029001-) at centre, Enclosure (GA045-029002-) in white, Earthwork (GA045-029003-) in yellow (annotated by writer).



Figure 2.70. Map Genie 2011-2013 showing earthworks around castle (www.archaeology.ie).

Element C: Earthwork
GA045-029003-

HEV

No description on www.archaeology.ie. These earthworks presumably are the ones referred to in the site description attached to GA045-029002- (Enclosure), which mentions that '30m to N and E are a series of rectangular earthworks enclosed by earthen banks; probably associated'.

2024 fieldwork

A series of earthworks are visible on aerial photographs, and also on drone images to the eastern side of the castle. These are also visible at ground level in places. They are constructed of compact earth and gravel.

If current thinking on hall houses/chambered towers (see section 3.5.5), this may be the location of a great hall.



Figure 2.71. Castle with visible earthworks to right, from W (F. Coyne).

2.5.2 Current management information

The site is in private.

2.5.3 Condition survey

During the recording of the site a detailed condition survey was undertaken on various dates between September and October 2024.

The building has structural issues, which need to be addressed immediately. Masonry is falling from the walls, particularly in the E corner, and also in the Scornor. A large chunk of masonry has fallen in here in the last five years (see architect and engineers reports).



Figure 2.72. fallen masonry, from W (F. Coyne).



Figure 2.73. Castle with fallen masonry in immediate foreground, from S (F. Coyne).

The site is on private land. However, a sign should be erected to warn of the danger of possible falling masonry.

3. Statement of Significance

This section shows the assessment and statement of heritage significance which is an essential aspect of the plan. It sets out why Moylough Castle is important, which encompasses a variety of reasons of equal merit.

3.1 Key Values: Assessment of Significance

A variety of guidance informs this assessment (Bond and Worthing, 2016; Clark, 2001; CPRE, 2004; DAHG, 2011; DCHG, 2017; English Heritage, 2000; 2008; Historic England, 2019; Lithgow and Thackray, 2009: 17; Semple Kerr, 2013). Moylough Castle was assessed using a number of stated criteria ‘a family of heritage values’ (Fig. 3.1; see English Heritage, 2000 for context; English Heritage, 2008: 23; Historic England, 2019: 16).

‘Value’ and ‘significance’ are loaded terms, embodying different things to different groups. In this report it is defined as ‘an aspect of worth or importance, ascribed by people to qualities of places or monuments’. Value is categorised: aesthetic, communal, evidential or historical. These valuations are subjective, and are thus defined as an assessment

that reflects the values of the person or group making that assessment. Significance is defined as the *sum* of the cultural and natural heritage values (English Heritage 2008, 24, 60). This assessment has

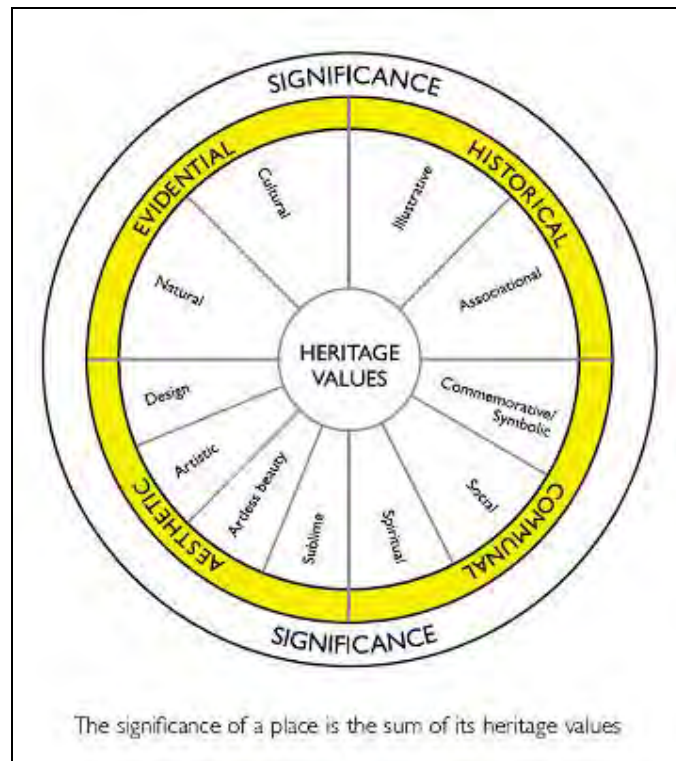


Figure 3.1. Chart illustrating values in an assessment of significance (after English Heritage 2007).

been compiled with consultation and is tabularised in Table 3.1. It has used English Heritage’s heritage values (2008) and more recent heritage interest guidance (Historic England 2019, 16).

Table 3.1. Assessment of significance of Moylough Castle.

Value Category	Heritage Value (interest)	Assessment
Evidential	Archaeological and Cultural	Moylough Castle has a high evidential value as it is an excellent example of a 13 th century Anglo-Norman fortification.
	Natural	Moylough Castle has some potential for supporting research in disciplines such as wildlife species (bats) and their habitats. It has the potential to become a site for increased biodiversity in a landscape increasingly dominated by grazing.
	Architectural (architectural)	Moylough Castle has an architectural value as it is an example of a relatively rare 13 th century monument known as a hall house, although this term is now disputed.
Historical	Illustrative (historic)	Moylough Castle is considered to be of historical value as it is associated with the De Birmingham family
	Social	It currently has a relatively low social value but has the potential to raise its social value, significantly, through increased awareness such as the dissemination of information and improvements in access.
	Spiritual	The monument does not have a spiritual value.
	Landscape and amenity	The landscape and amenity value of the Moylough Castle is high. It is set in a beautiful flat countryside of north Galway It has potential for amenity in the form of a destination point for visitors interested in the architecture of Anglo-Norman Ireland.
Aesthetic	Sublime (artistic)	Moylough Castle is considered as being of ‘sublime’ aesthetic value, as its architectural design is a fine examples of late medieval conflict archaeology.
	Artless Beauty, Artistic and Art Historical	Moylough Castle is not considered as having an ‘artless beauty’, in itself but in its local setting is regionally important.
	Design (architectural and artistic)	Moylough Castle is a relatively rare example of a 13 th century hall house/chambered tower.

3.2 Statement of Significance

Moylough Castle is of regional significance and a rare example of a three storey hall house/chambered tower, with mural stairs, constructed entirely of undressed rubble. It is only one of eleven known in the county, and one of approximately one hundred known from Ireland. They were primarily built in the western half of the country. There are a number of associated earthworks on the eastern side of the castle, which present an excellent opportunity to research current theories about hall houses i.e. that the great hall would have been constructed nearby, and that these structures should more accurately be called chambered towers.



Figure 3.2. Moylough Castle, from E (F. Coyne).

4. Risk: Defining Management Issues and Assessing Vulnerability

There are some factors that are either already risks or are potential risks to Moylough Castle that make the monument vulnerable (Table 4.1). There are also a number of opportunities that would improve the overall condition and environment of the monument which would protect it for future generations to enjoy (Table 4.2). This section assesses those risks and lists potential opportunities, while the following section 5 makes suggestions to mitigate risks and presents options for stabilisation or re-use of the monument.

Table 4.1. List of risks and vulnerabilities to Moylough Castle (relative risks: Low; Medium; High).

Risks and vulnerabilities No.	Sub-risks	Commentary	Relative risk level
1. Fabric Condition	Current condition Future deterioration Issues and lessons learned	Structurally, the castle is in need of immediate repairs, particularly on the southeast wall at the E and S gables. Conservation without regular maintenance is of limited effectiveness. The main threat to the structures is from falling masonry.	M
2. Use levels: changes and appropriateness	Levels of use over time and changes to use Access Vandalism Antisocial behaviour	There is no evidence of antisocial behaviour (littering, graffiti) or vandalism.	L
3. Site constraints	Resources Statutory controls Boundaries Other legal constraints	Funding is intermittent and ad hoc, being available in emergencies. Statutory controls are beneficial and serve to protect monument as an archaeological monument. Local authority policies are supportive. Boundaries are unclear on ground, the complex is in private ownership, though access is freely permitted. There is no formal management plan for maintenance in place	L
4 Wider context issues	Siting Proper knowledge, understanding and appreciation of monument Other external factors	The siting of the monument is good. It is situated on private land, but is visible from the main road, and adjacent graveyard. It provides a prominent landmark to those entering the village of Moylough from the western side. While the site is very well known locally and perhaps regionally; few know the detail of its history, archaeology or architectural features.	L

4.1 Strengths, Weaknesses, Opportunities and Threats (SWOT)

As part of this assessment, a SWOT analysis was undertaken in an attempt to tease out strengths and opportunities for the monument in order to capitalise on these aspects, while acknowledging the inherent weaknesses and threats to the monument—which fed into the risks considered in Table 4.1. Strengths and weaknesses relate to internal forces, while opportunities and threats are external forces to the monument, some of which, it must be acknowledged may not be easily controlled or mitigated for in the future (see section 5). In some cases, forces might be considered both a strength and also a threat.

Table 4.2. Results of SWOT analysis.

	Strengths (S)	Weaknesses (W)
<i>Internal forces</i>	S1. Fine example of a 3 storey castle known as a hall house, or alternatively a chambered tower.	W1. The site is located on private property and loose masonry provides a hazard to the casual visitor.
	S2. It has associated earthworks, which may contain previously undiscovered sub-surface archaeological features, such as a great hall	W2. There is no maintenance regime.
	S3. Accessible from the main road from Tuam to Moylough.	W3. The site is not signposted.
	S5. Moylough Castle presents an opportunity to visit a 13 th century castle.	W4. There is no information at the site.
	Opportunities (O)	Threats (T)
<i>External forces</i>	O1. Many local authority policy objectives in both the Development Plan and local authority initiatives encourage the re-use of heritage sites.	T1. Future climate changes may see monument inundated. Strong winds/gales have a detrimental effect on structural fabric.
	O2. There are increasing opportunities for new novel tourism products Galway and its hinterland, such as walking tours and looped walks.	T2. Structural instability has led to collapse of large chunks of masonry in recent years, and
	O3. Community Monument Funding or Heritage Council funding for conservation, a plan and maintenance into the future and other funding opportunities.	T3. Vegetation growth impacting structures and underlying archaeology.
	O4. Opportunities for research projects. The associated earthworks make this an ideal site for examining current research and theories relating to hall houses and the positioning of the great hall in the 13 th century.	T4. Funding may be hard to come by.

4.2 Gap Analysis

A number of options as to how this ‘vibrant place’ might be practically achieved are outlined in section 5.3.

5. Conservation Management Policy Aims

5.1 Policy Context

Conservation policies for Moynlough are based on the statement of significance assigned in section 3.2, the relative levels of significance in section 3.3, and identified vulnerabilities outlined in section 4. This in turn informs positive strategic aims that can be achieved through the conservation policies below. The implementation of these policies is ideally via a future agreed action plan between all the stakeholders (section 6). The process is informed by a vision statement formulated after the statement of significance. These policies are aligned to the objectives set out in local authority documentation (appendix 8.6).

5.2 Vision

Moynlough Castle shall be conserved, maintained and ultimately introduced to a new generation of visitors. Its ultimate conservation and repair as an archaeological monument, shall maintain its integrity, authenticity, and significance for future generations. Its conservation and ongoing maintenance shall be sensitive to its original use as a thirteenth century hall house/chambered tower, associated with the Anglo-Norman advance into the west. Knowledge and understanding about the monument and its setting shall be advanced. Measures shall be taken to ensure the continued protection of character of the monument.

5.3 Future Options and Appraisal

Following consultation and research on similar projects as a benchmarking exercise, the following options were suggested. It is important to note that (excepting the “do-nothing” option required for comparison; EPA 2017) only options that respect the statement of significance and embody the vision for the monument were listed (table 5.1). All options are in keeping with local authority objectives and national regulation (appendices 8.6; 8.7).

Table 5.1. Options and individual appraisal matrix.

Option	Advantages	Disadvantages	Outline of Extent of Works Required
1. Do Nothing	No cost implications	Monument will rapidly become ruinous	N/a
2. Stabilisation	Lower cost implications Considerations such as visitor welfare and access do not need addressing.	Monument will in time become ruinous.	Cut vegetation (ivy) growth. Establish a programme of regular maintenance.
3. Repair	Maintaining site for future generations to enjoy. Improve access for visitors	Cost implications; Schedule of future maintenance required to keep building sound; Future cost implications	Repairs to the southeast east wall at the E and S corners.
4. Re-purpose for public presentation:	In addition to 3. above public access will be promoted after the building is made safe.	The site is on private land. However, there are occasional visitors throughout the year. Increased footfall and insertion of information boards etc. may lead to increased erosion on site.	Information panel to be added.

5.4 Management Policies

Overarching conservation policies are recommended for the conservation of Moylough Castle regardless of the preferred option from table 5.1. They are in no particular order. The themes are deliberately broad and there is some overlap where policies straddle a number of topics:

Table 5.2 Conservation Management Plan policies.

Policy Number	Policy	Description
CMPP1	Protection	<p>There will be the presumption in favour of retaining and conserving all <i>in situ</i> portions of the monument of all periods whether they are extant or sub-surface as important contributions to the character development of the monument. The levels of significance in this document will be adhered to.</p> <p>Ensure the protection of the monument as an architectural/archaeological resource by allowing architectural/archaeological investigations only where it is deemed necessary, justifiable and appropriate and where such work will contribute to a better understanding of the monument. Any work should be in accordance to an agreed research framework.</p> <p>No interventions for conservation or architectural/archaeological purposes shall be permitted without agreed and approved provision for research, recording, analysis, publication and archiving. Under the current legislation at the time of writing, consents are required for such works.</p>
CMPP2	Future conservation, prioritisation of repairs, inspection and maintenance	<p>To conserve the monument and to provide an effective and continuous maintenance programme thereafter for conservation and repair through a programme of works (see section 6 below). The following policies are adopted for repair and conservation works:</p> <p>To be done on a phased basis, in a sustainable way;</p> <p>Archival quality photographic record to be undertaken prior to conservation works;</p> <p>To provide a suitable environment in which conservation workers and visitors are accommodated to ensure safety;</p> <p>To save money in the longer term through effective maintenance;</p> <p>During these works, information and interpretation will be provided to explain what is happening and to increase public awareness and understanding.</p> <p>A regular programme of inspection should commence for the monument by a designated person, which could include for safety, structural and conservational issues. It is recommended that this take place on a regular basis for the purposes of monitoring the stability of the monument.</p> <p>Appropriate craftspeople and professionals will be utilised for all work where feasible. Training will be provided for continued maintenance personnel. Advice from regulatory bodies such as the NMS architectural division should be sought in this regard. The Heritage Officer to approve all specialist contractors and conservation specialists.</p> <p>There is a presumption against removal of material from a historic location. Consideration in favour of repair rather than replacement should always be applied in the first instance.</p> <p>Where materials cannot be salvaged from the monument and re-used, new local materials may be sourced, with appropriate regulation followed.</p>
CMPP3	Understanding, Education and Research, Access	<p>The known recorded history and archaeology have been recorded in this document. An oral history project was beyond the remit of this plan but there may be a wealth of local oral history and tradition associated with the monument that has yet to be recorded. An oral history project could collect this information in order to increase public awareness and to provide opportunities for increased awareness.</p> <p>Encourage research and understanding, for all, including 1st and 2nd level curriculum development and through a variety of media. For example,</p>

		<p>interpretive tools which would include but not be limited to maps, guides, trails, videos, DVD, posters, an information board, an educational pack, which are publicly accessible.</p> <p>Develop ideas to provide for both physical and intellectual access of the monument. This should take into account disability and other pertinent legislation, and might include signage in Braille, or access to support those with limited mobility.</p> <p>The interpretation of the monument will be as holistic as is possible to include histories, natural, cultural, social history and archaeology in the context of the wider landscape of south Galway.</p>
CMPP4	Management	The graveyard committee should undertake ongoing decision-making and conflict resolution where it may occur. The committee should take responsibility for funding support and ongoing budgeting.
CMPP5	Archive management (paper archive; collections, contents)	Steering committee to oversee the creation of an ongoing archive of records of conservation work as it proceeds and the ongoing collection of material of relevance.
CMP6	Environment and wider landscape context	<p>Cognisance to be taken of the ecology of the monument and its surroundings. An ecology survey should be considered in advance of any conservation/re-purposing work and undertaken at the correct time of year.</p> <p>Care should be taken to preserve the current landscape setting of the monument in so far as is practicable.</p>

6. Action Plan: Future Implementation

Table 6.1 outlines a plan of action in order to achieve the management policies and vision for Moylough Castle while strictly adhering to its statement of heritage significance. It is suggested that a steering committee be formed of stakeholders to take responsibility for the actioning of this plan (CMPP4).

Table 6.1 Conservation Management Plan actions (short within 1 year; medium 2-3 years; long 4-5 years).

Action No.	Description	Management policy reference	Action duration (short, medium, long term)
1	Clear intrusive vegetation from the walls (year 1)	2	Short
2	Repairs and consolidation of the S corner of the St wall.	2	Short
3	Repairs to the E corner of the SE wall at second floor level. .	2	Short
4	Information panel	3	Medium

6.1 Detail of short term works (1-2 years)

The most critical aspects of work which need to be carried out in the short term is the conservation/stabilisation of the structure, particularly the S corner of the southeast wall of the castle. The E corner of the southeast wall, at second floor level is also in need of repair. However, this is relatively inaccessible and will necessitate the use of scaffolding. It is envisaged that this project will be a short-medium term endeavour, and that all works will be carried out over three years.

6.1.1 Vegetation clearance

The vegetation clearance should be carried out under the supervision of an archaeologist, or by an archaeological team. Handheld power tools may be necessary such as strimmers, fitted with

strimmer line instead of a blade. Otherwise, all work, particularly when in close proximity to archaeological features should be carried out with hand held tools. It is important that vegetation trimmed back to the edge of stonework using hand tools. However, there is limited vegetation, and it is not posing a threat to the monument at this stage.

6.1.2 Repair and consolidation of upstanding walls.

This is considered to be the most critical conservation work on the site, and essential to the long term survival of the castle remains. The S corner of the SE wall is in urgent need of propping to prevent further collapse of masonry. Similarly E corner of the SE gable at the upper floors is in need of repair. A structural crack is evident, and masonry has fallen from this area.

Repair of these walls will allow safe access to the site.

6.2 Extract from Conservation Architect's Report *by John Deaton RIAI Accredited Conservation Architect – Grade One (see appendix for full report).*

Condition report and recommendations

Structural engineers have been appointed and will prepare a report.

The intention of the report is to existing and potential structural issues and to clearly outline a set of measures and which can be adopted to avoid or mitigate these in order to safeguard the structure for future generations.

All proposals must follow the principles of minimum intervention and of achieving a faithful and honest repair.

Structural issues

Following my inspection and discussions with Mr Coyne I note that there would appear to be two structural issues which would require intervention.

1. There was a masonry collapse in the south end of the south-eastern wall. The remaining wall end is precariously cantilevered and in danger of further collapse.
2. A section of masonry has fallen from the face of the south-eastern wall at second floor level at its northern end. There is a concern that there may be further falls. This will require access at height to be provided in order that a structural inspection be undertaken.

Issues and Proposals

The evaluation of this castle is hampered by the lack of safe access to the upper areas and to the wall tops. Safe and suitable access at height would facilitate a more detailed survey of the building and inspection of its structure and fabric. This would inform its future conservation, care and maintenance.

I have been advised that scaffolding the building would not be feasible within the economic constraints and likely grant funding. Scaffolding will be limited to where required for undertaking necessary structural repairs. A small section of tower scaffold would allow safe access to the corner stairs and access therefrom to the upper areas.

It is not clear whether access by way of mobile hoists (cherry-pickers) would be feasible on this site. A three-dimensional computer scan of the interior might also be considered.

The following actions are proposed:

Masonry collapse at south end of the south-eastern wall. It is anticipated that the wall should be built up underneath the cantilevered section. I assume that it would be built off the existing base wall without the need for the digging of foundations. The question therefore is "How can the works be designed to accord with best conservation practice?"

The proposed intervention is necessary order to arrest further decay and ensure preservation of the building. Article 9 of the Venice Charter acknowledges: The process of restoration is a highly specialized operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents. It must stop at the point where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp. The restoration in any case must be preceded and followed by an archaeological and historical study of the monument. This approach is supported by Article 13 of the Burra Charter, which identifies restoration as being appropriate if there is sufficient evidence of an earlier state of the fabric and only if returning the fabric to that state recovers the cultural significance of the place.

I have considered two options:

1. Construct a new wall in a different material, such as grey brick. The intervention would clearly have a contemporary stamp with no question of ambiguity between new and old. There would be no conjecture involved.
2. Construct the wall in limestone using stone salvaged from site. In order to avoid either conjecture or ambiguity the line of the new wall would be recessed 50mm from the line of adjoining masonry. The coursing pattern of the new wall would be different to the existing coursing.

I consider that option 1. might be seen as aesthetically discordant. Option 2. would be an honest repair which would have little aesthetic impact whilst being clearly perceptible by the expert eye as an intervention.

I recommend Option 2 therefore.

Masonry loss at northern end of south-eastern wall – In order to repair this it will be necessary to obtain access at height (scaffolding), firstly to determine the nature and extent of the defect and secondly to undertake a repair. I await engineer’s proposals in this regard. I have been informed that the cost of scaffolding would be prohibitive and that funds may not be immediately available. With regard to best conservation practice I see no reason why this area should not be repaired in the same masonry and coursing pattern as the existing.

Wall tops, ledges, loose masonry – The wall tops are exposed to the elements and will continue to deteriorate over time. It is recommended that the wall tops be consolidated by rough racking in lime mortar. It is acknowledged that the cost of this would be prohibitive funding it may not be feasible. Any loose stones such as those around opes should be stabilised with lime mortar and pinnings, if accessible. Minor shrub and vegetative growth should be carefully treated and removed.

Conserve fallen masonry – I note that much of the stone has been robbed out in the past. There remains some masonry around the site which is buried or half buried. Buried masonry is best left where fallen. Loose masonry which could be lost or stolen could be safely stored.

Measured Survey -Further Research- Moylough Castle is one of a small number of chamber keeps and is worthy of further research. This could be informed by a detailed survey of the building

including recording all remaining elements and features. The castle could then be considered and compared to others, which would contribute to a broader understanding of this building type.

Ecology – The castle is a potential habitat for bats and other fauna or flora. It is recommended that an ecological survey be undertaken prior to undertaking significant works.

Implementation

- Plans, method statements and schedules of works should be prepared by personnel with the appropriate conservation qualification and experience.
- Plans for the works should include measures to protect the monument during building work. Prepare a follow-up maintenance plan.
- Consult with Galway County Council, National Monuments and relevant authorities and obtain all necessary statutory approvals or references in advance of undertaking the works.
- Only contractors with proven conservation experience should be engaged on the project.
- The works should be monitored by consultant(s) with the appropriate conservation qualification and experience.
- Maintain a record in digital format of the monument, prior, during and after repairs. Update and amend as necessary the conservation management plan thereafter.

6.2 Extract from Conservation Engineer's Report *by Paddy Coleman* (see appendix for full report).

PRIORITY WORKS

The following are a list of priority works to be undertaken:-

Structural Works of Immediate Concern:

- Fence off the site and place notices.
- Get a right-of-way for access to allow maintenance works to the Castle.
- Support the cantilever arch at the ground floor S-E South corner.
- Kill off weeds, grass and shrub growth.
- Fill in the hole at high level to support stonework overhead in the N-E corner at high level.
- Fill the cracks with liquid lime mortar to try and get binding across the cracks and to prevent further deterioration.
- Build support for the North-West front corner at high level
- Rebuild lost stone facing/outer lead on outer face at 2nd. Floor level.
- Support cantilever stones at top of wall over W11.
- Reconfigure wall cap to avoid locations of concentrated rainwater discharge and provide an even cap possibly of limecrete so that rainwater falls off evenly along wall tops.
- Track any changes and record them on the KGSS Cad drawings.

6.4 Indicative Costs

Table 6.2. Indicative costs.

Task	Net (Euro)	Vat 13.5%	Vat 23%	Total
Year 1 tasks SW corner				
Year 2 tasks work on upper floor				
Year 3 tasks other wall repairs				
Contingency 15%				
Information panel				
Allow annual pc sum for heritage specialists to oversee works				
Sub total				

*awaiting visit from contractor to price works

7. Conclusion

This is a conservation management plan and statement of heritage significance for Moynagh Castle.

The condition survey has identified a number of issues and has made recommendations as to how to remedy these issues. It is envisaged that this will be a three-year project.

Moynagh Castle has been an integral part of the landscape of north Galway since the 12th century, and is in need of urgent attention to enable it to continue well into the twenty-first century and beyond.

8. Project References

The following were consulted during the course of the project and have not necessarily been cited in the text.

- 1962** *Geological Map of Ireland*. Dublin: Geological Survey of Ireland.
- 1984** *Index to the Townlands and Towns, Parishes and Baronies of Ireland, from the census of 1851*. Baltimore: Genealogical Publishing Company.
- Aalen, F.H.A, Whelan, K and Stout, M. (eds.) 1997** *Atlas of the Irish Rural Landscape*. Cork University Press.
- Aegis Archaeology Limited 2021** Aegis Quality Manual. Unpublished manual.
- Archaeological Survey of Ireland 1998 RMP** *constraint maps and Inventory for County Galway* Dublin: The Stationery Office.
- Archaeological Survey of Ireland** *Record of Monuments and Places Files*. Unpublished.
- Aygen, Z. 2012** *International Heritage and Historic Building Conservation: Saving the world's past*. London: Routledge.
- Bennett, I. Various dates** *Excavations*. Bray: Wordwell.
- Bhreathnach, E., 2014** *Ireland in the Medieval World ad 400–1000: Landscape, kingship and religion*. Dublin: Four Courts Press.
- Bond, S. and Worthing, D. 2016** *Managing Built Heritage: The role of cultural values and significance. 2nd edn*. Chichester: Wiley-Blackwell.
- Clark, K. 2001** *Informed Conservation: Understanding historic buildings and their landscapes for conservation*. London: English Heritage.
- CPRE (Campaign to Protect Rural England), National Trust, and Heritage Link 2004** *Re-charging the Power of Place. Valuing local significance*. London: The National Trust.
- Croker, T.C. 1824.** *Researches in the South of Ireland*. London: John Murray.
- Bond, S. and Worthing, D. 2016** *Managing Built Heritage: The role of cultural values and significance. 2nd edn*. Chichester: Wiley-Blackwell.
- Carroll, M.P. 1999.** *Irish Pilgrimage. Holy Wells and Popular Catholic Devotion*. London: The John Hopkins University Press.
- Clark, K. 2001** *Informed Conservation: Understanding historic buildings and their landscapes for conservation*. London: English Heritage.
- Dept of Housing, Planning and Local Government 2018** *Guidelines for planning authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*. Dublin: Government of Ireland.
- Dúchas 1999** *Guidelines for the Protection of the Archaeological Heritage*. Dublin: Department of Arts, Heritage, Gaeltacht and the Islands.
- Dúchas 1999a** *Guidelines for Archaeological Excavation*. Dublin: Department of Arts, Heritage, Gaeltacht and the Islands.
- English Heritage 2000** *Power of Place: The future of the historic environment*. London: English Heritage.
- English Heritage 2007** *Draft Conservation Principles, Policies and Guidance*. London: English Heritage.
- English Heritage 2008** *Conservation Principles, Policies and Guidance*. London: English Heritage.
- Environmental Protection Agency (EPA) 2015** *Draft guidelines on the information to be contained in Environmental Impact Statements*. Dublin: Environmental Publications.
- EPA 2015a** *Advice Notes on current practice*. Dublin: Environmental Publications.
- EPA 2017** *Draft Guidelines on the information to be contained in environmental impact assessment reports*. Wexford: EPA.
- Forsyth, M. (ed.) 2007** *Understanding Historic Building Conservation*. Oxford: Blackwell.
- Historic England 2019** *Statement of Heritage Significance: Analysing significance in*

heritage assets Historic England Advice Note 12. Swindon: Historic England.

Historic Scotland 2000 *Conservation Plans: A guide to the preparation of conservation plans.* Historic Scotland Heritage Policy.

Killanin, Lord M.M. and Duignan, M.V. 1967 (2nd ed.) *The Shell Guide to Ireland.* London. The Ebury Press.

Lewis, S. 1837 *Topographical Dictionary of Ireland, vol. 1.* London: S. Lewis & Co.

Lithgow, K. and Thackray, D. 2009 The National Trust's approach to conservation, *Conservation Bulletin*, 60(1), 16–19.

National Monuments Service (NMS) 2006 *Excavation reports guidelines for authors.* Dublin: stationery office.

Ó Cróinín, D. 1995. *Early Medieval Ireland 400-1200.* Harlow: Longman.

Ó Dónaill, N. 1977 *Fócloir Geailge-Béarla* Dublin: Stationery Office.

Ó Riain, P. 2011 *A Dictionary of Irish Saints.* Dublin: Four Courts Press.

Semple Kerr, J. 2013 *Conservation Plan: A guide to the preparation of conservation plans for*

places of European cultural significance. 7th edn. Australia: National Trust of Australia.

Websites

Last accessed 18 October 2024.


<http://downsurvey.tcd.ie/>
<https://maps.biodiversityireland.ie/>
<https://www.logainm.ie/22399.aspx>
www.archaeology.ie
www.askaboutireland.ie
www.buildingsofireland.ie
www.downsurvey.tcd.ie
www.duchas.ie
www.excavations.ie
www.iai.ie
www.logainm.ie
www.myplan.ie
www.nli.ie
www.osi.ie
www.townlands.ie

9. Signing-Off Statement

Archaeological Firm: ÆGIS ARCHAEOLOGY LIMITED

Writer: Frank Coyne MA MIAI,
Aegis Archaeology Ltd.

Client: Moylough Community Resource Cultural and Heritage Centre

Signed: 
For ÆGIS ARCHAEOLOGY LIMITED

Report status: Final

Dated: 15 November 2024

10. Appendices

10.1 Ecology Report *by Ruth Minogue*

10.2 Engineers Report *by P. Coleman*

10.3 Conservation Architect's Report *by John Deaton*

10.4 Survey drawings and images *by KGSS Surveys*



ÆGIS ARCHAEOLOGY LIMITED

32 Nicholas Street | King's Island | Limerick City | V94 V6F7
086 829 3220 | info@aegisarc.com | www.aegisarchaeology.com
VAT Reg. No.: IE8275638J | Co. No.: 275638

1. Moylough Castle-Hall house Conservation Management Plan – Ecology

1.1 Introduction:

Minogue Environmental Consulting (MEC) Ltd were commissioned by Aegis Archaeology Ltd to prepare the ecological baseline report and make recommendations in relation to ecology as part of the Moylough, County Galway. The purpose of the CMP is to follow best practice and to lay the foundations for future initiatives at the monument and the ecological survey aims to identify main habitats, undertake a bat survey to determine presence or absence of bats, and provide recommendations to enhance the biodiversity value of the site.

Photo 1: View of Church, looking from the west



1.1.1 Site description

The underlying bedrock is pale grey clean skeletal limestone and Visean Limestones (undifferentiated) surrounding soils are a mix of Coarse loamy drift with limestones and fine and Fine loamy drift with limestones the subsoils comprise Basic Esker sands and gravels and peat.

The immediate habitats on site comprise the following:

- BL1 stone walls and other stonework (ruins of Church and walls surrounding graveyard)
- GS2 Dry meadows – the lands around the site are well drained with dry meadows
- Trees are largely absent from the site with the notable exception of a mature ash that is split in the trunk located about 50m from the church. A hedge dominated by hawthorn is located to the north east and there is a large Yew tree within the graveyard.

The Moylough More river is the nearest water source to the site approximately 250m north, which flows south to north-west into Summerville Lough. Water quality is good when measured at the Cloonkeen Bridge north of Summerville Lough.

1.2 Policy framework

The Galway Heritage plan 2024-2030 is under preparation but the following objectives from the existing plan are relevant to the Conservation Management Plan for Moylough Castle:

NH1.1. Engage with the community using an inclusive approach.

NH1.2 Promote and facilitate citizen science – encourage and equip groups to take part in national citizen science campaigns e.g. Coastwatch, Butterfly monitoring or Volunteer bat surveys.

NH1.3 Develop Local Biodiversity and Natural Heritage Plans with communities.

NH 1.4 Develop practical conservation and restoration projects and encourage communities to become involved in the management of sites of local biodiversity interest.

NH 1.5: Encourage and support communities to apply for funding through Galway County Council and other agencies for biodiversity and natural heritage projects.

NH1.6: Encourage communities to work in partnership with various agencies on biodiversity and natural heritage projects.

NH 1.7 Highlight, promote and assist the work of community groups through www.galwaycommunityheritage.org, social and other media.

NH 1.8: Produce guidance notes for community groups undertaking biodiversity or natural heritage projects on issues that need to be considered before embarking on a project.

In addition to the relevant policies and objectives in the Galway County Development Plan 2022-2028. There are also useful resources that apply in terms of planting schemes for nocturnal pollinators and community groups, these are listed under the Recommendations Section.

2 Desktop Research

2.1.1 Protected Sites-

The nearest Spa is River Suck Callows SPA(004097) which is a protected area for many wetland and Waterbirds which lies some approximately 15km to the east of the site. The nearest Sac is Shankill West Bog SAC(000326) which lies approximately 4km north of the site and is an active raised bog.

2.1.2 Woodland habitats-

The NPWS datasets for Ancient and long-established Woodland Inventory (2010) and the National Survey of Native Woodlands 2003 – 2008 were downloaded from the NPWS and reviewed to identify the presence of any such woodlands within or in the immediate vicinity of the project site.

Following this review no ancient and long-established woodlands or native woodlands that have been identified as part of these datasets occur within or adjacent to the project site.

2.1.3 Review of Historical Maps

A review of the historical first edition 6 inch map from 1843; the 25 inch map from 1909; and last edition 6 inch map from 1940 was completed for the project site and surrounding area. The historical maps do not indicate woodland habitat around the site, there has been an increase in residential development to the east of the site over time, and the turlough north west of the castle identified on the historical maps remains.

Figure 2-1 Ordnance survey maps



Figure 2-2 Aerial imagery of lands



2.2 Species

A 10km (M64) search was undertaken using the National Biodiversity Centre database, see Figure 1.7 below. The following protected mammals under the EU Habitats Directive and/or Wildlife Act are recorded within 10km of the site:

Species name

- Brown Long-eared Bat (*Plecotus auritus*)
- Daubenton's Bat (*Myotis daubentonii*)
- Eurasian Badger (*Meles meles*)
- Eurasian Red Squirrel (*Sciurus vulgaris*)
- European Otter (*Lutra lutra*)
- Lesser Noctule (*Nyctalus leisleri*)
- Pine Marten (*Martes martes*)
- Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- West European Hedgehog (*Erinaceus europaeus*)

3 Bat Survey-

3.1 Introduction

The aim of the bat survey was to assess bat activity at the site. Given the time of the survey and the habitats on site, a static detector was deployed from 19th to 21st October to record bat activity.

3.2 Competences

Ruth Minogue MCIEEM undertook the survey work, Ruth has been undertaking bat surveys since 2013 and has attended bat training and conferences as part of Continued Professional Development. She has 11 year's experience in undertaking bat survey work primarily during the activity season and including emergent, re-entry surveys, preliminary roost surveys of trees and buildings. Ruth undertakes bat surveys over the active bat season from May to early September for planning

applications, master planning and the Acres Traditional Farm Building Schemes and is a licensed ecologist (Bat License Der -Bat 23-96). She has prepared previously undertaken full season activity survey work on Newhall and Edenvale SAC (Newhall Stables) over 2013 and more recently bat surveys over 2021 at Ballaghfadda for Clare County Council.

3.3 Limitations

Limitations: the surveys were undertaken during outside the bat activity season. Therefore, the survey results are limited in terms of reflecting bat activity that may be higher over the May to September period.

3.4 Methodology

Methodology included desktop and data search, preliminary roost assessment of the building, and deployment of static detector over 2 nights from 19th to 21st October 2024.

3.5 Equipment

The team used the following survey equipment:

- Thermal imaging camera PixFrd ARC series.
- Elekon S2 x 1

Results were analysed using Elekon Batexplorer software.

The inspection survey was conducted in accordance with the Bat Conservation Trust (BCT) methodology (Collins, 2016). A potential roost classification using criteria in Collins et al (2023). The church was then assigned a level of suitability for roosting bats as outlined in Table 3.1 below.

Table 3-1 Roost Suitability Potential Buildings (Collins, 2023)

No roosting suitability	No features likely to be used by any roosting bats at any time of year
Negligible roosting suitability	Buildings with few, if any, features suitable for roosting, however a small amount of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low roosting suitability	One or more potential roost sites that could be used by individual bats opportunistically at any time of year. The features do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats.
Moderate roosting suitability	One or more potential roost sites that could be used by bats due to their space, shelter, protection, appropriate conditions and/or suitable surrounding habitat but are unlikely to support a roost of high conservation status (e.g. maternity or hibernation).
High roosting suitability	One or more potential roost sites that could be used by larger numbers of bats on a more regular basis/ longer periods of time, due to their space, shelter, protection, appropriate conditions and/or suitable surrounding habitat. These structures could support roosts of high conservation status (e.g. maternity or hibernation).
Confirmed roost	Evidence of bat occupation found

3.6 Results

A desktop review of publicly available relevant data was undertaken on the National Biodiversity Data Centre (NBDC) and National Parks & Wildlife Service (NPWS) websites. The National Biodiversity Data Centre was reviewed for relevant data, specifically

- existing species records for the 2km square in which the study site is located (M51R) and

- ii) an indication of the relative importance of the wider landscape in which the study site is located, based on Model of Bat Landscapes for Ireland (Lundy et al. 2011). In the latter, the index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats.

3.7 Desktop results

3.7.1 Designated Sites

No statutory sites designated for bats are located within 5km of the site

3.7.2 Bat Records

National Biodiversity Database was searched on 15th of October for 10km tetrad (M63) and the following records were returned:

Species name

- Brown Long-eared Bat (*Plecotus auritus*)
- Common Pipistrelle (*Pipistrellus pipistrellus sensu stricto*)
- Daubenton's Bat (*Myotis daubentonii*)
- Lesser Noctule (*Nyctalus leisleri*)
- Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)

The following table presents record of bats found within 2 km(M64E) of the site in the last 10 years.

Table 3-2 bat records within 2km 2014-2024

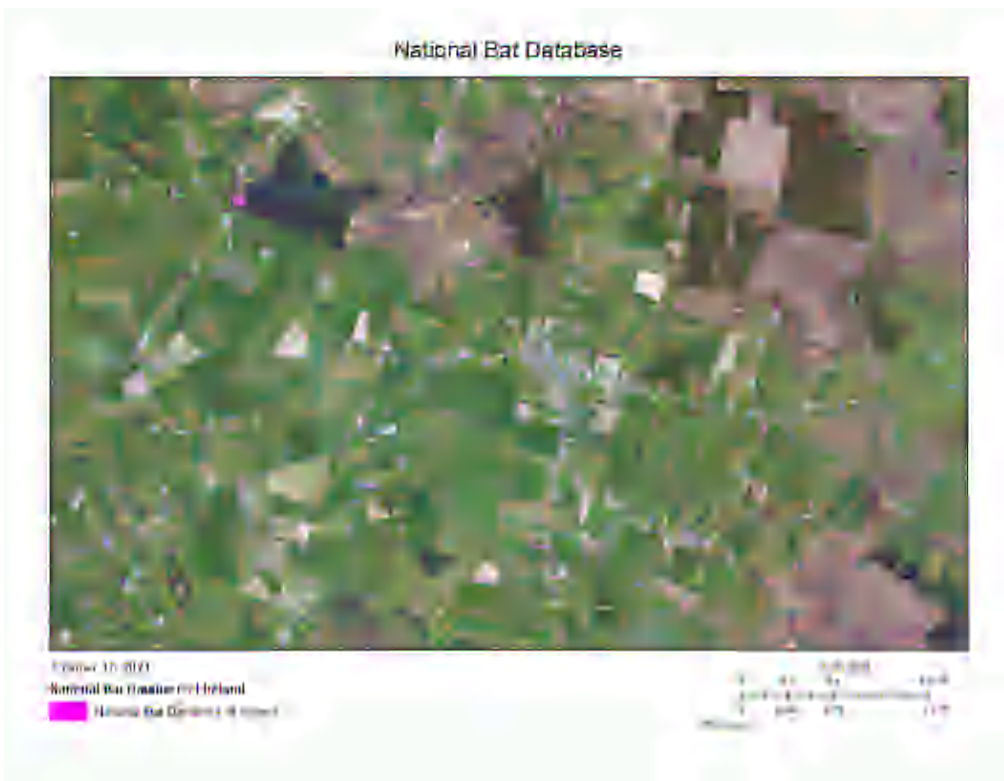
Species	Year/location	Designation
Lesser Noctule (<i>Nyctalus leisleri</i>)	02/09/2019 2km North west of site	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Common Pipistrelle	02/09/2019 2km North west of site	
Soprano Pipistrelle	02/09/2019 2km North west of site	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Daubenton's Bat (<i>Myotis daubentonii</i>)	02/09/2019 2km North west of site	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts

The bat habitats at landscape scale database was reviewed and this shows the project site and environs is of second lowest suitability for all bats. See Figure 3.1 below.

Figure 3-1 Bat Landscapes



Figure 3-2 National Bat Database



3.7.3 Visual inspection exterior and interior- roost suitability potential

The castle itself has a several crevices that could be used by roosting bats, however the siting of the castle at an elevation, the absence of ivy and very limited woodland habitat close to the site reduces the overall suitability of the castle as a roosting structure and it is evaluated as being of low suitability.

3.8 Static survey 19th to 21 October.

The static detector (Elekon S2) was deployed over 2 nights with temperatures ranging from 12 to 19C. No bats were recorded within 50m of the detector that was placed on the inside western wall of the structure. Within 250m of the detector the following records were returned with most frequently recorded species, common pipistrelles occurring each night, Myotis spp recorded on two nights, and an individual Leisler bat on one night. See table below:

Table 3-3 Static detector results, calls withing 250m of the structure

Timestamp	Species Text	Calls [#]	Temperature [°C]
21/10/2024 18:12	Nyctalus leisleri	2	19
19/10/2024 19:08	Pipistrellus pipistrellus	1	14
19/10/2024 19:10	Pipistrellus pipistrellus	1	14
19/10/2024 19:13	Pipistrellus pipistrellus	1	14
19/10/2024 19:03	Pipistrellus pipistrellus	2	14
21/10/2024 19:00	Pipistrellus pygmaeus	5	20
19/10/2024 18:59	Pipistrellus pipistrellus	1	14
19/10/2024 19:12	Pipistrellus pipistrellus	1	14
19/10/2024 19:44	Myotis spec.	4	13
21/10/2024 03:54	Myotis spec.	5	12
21/10/2024 04:07	Myotis spec.	7	12

Bat activity recorded was very low reflecting the time of year. The castle is not evaluated as low roosting due to its elevation and absence of linear woodland features adjacent to same. The absence of dense ivy growth is noted also in this regard. It may be used opportunistically over the activity season by low number of bats however.

4 Recommendations.

Bat activity recorded was very low reflecting the time of year. However, should further works to the structure be proposed in 2025, a bat survey in the activity season (May to September) should be undertaken to confirm absence of roosting bats.

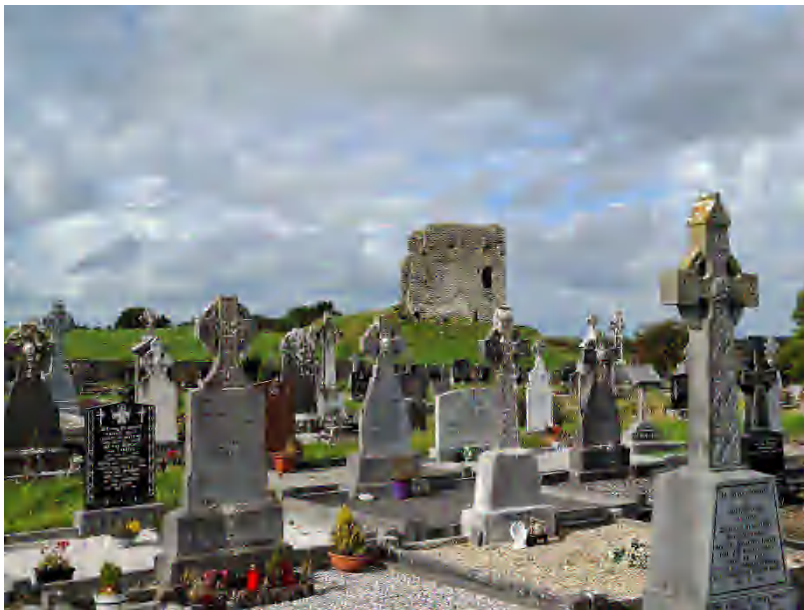
The avoidance of any artificial lighting would be important to reduce disturbance to birds and mammals.

The All Ireland Pollinator Plan provides useful guidance including to community groups for actions for pollinators, as well as actions for nocturnal pollinators which could comprise relevant actions for planting schemes or actions around the churchyard. Some are presented below and can all be accessed at the following link: Resources » All-Ireland Pollinator Plan (pollinators.ie)

If appropriate from an archaeological perspective, some additional planting at the perimeter of native low growing shrubs such as Guelder rose or viburnum would provide additional habitat for wildlife at local scale; if not within the site the lane for access could be planted to function as a local ecological corridor it would need protection.



Photographic record October 2024









Report on Inspection

'DRAFT COPY'

of

Moylough Castle, Ballygar, Co. Galway.

Moylough Castle

Issue: A

Customer Project Number: 7411

Customer Document Number:



Document Sign Off

Report on Inspection of Moylough Castle, Ballygar, Co. Galway.

Moylough Castle

Issue A

File No: 7411

CURRENT ISSUE						
Issue No: A	Date:14.10.24	Reason for issue: Report				
Sign Off	Originator	Checker	Reviewer	Approver	Customer Approval (if required)	
Print Name	Paddy Coleman	Paddy Coleman		Paddy Coleman		
Signature	Authorised Electronically					
Date	14.10.24	14.10.24		14.10.24		

PREVIOUS ISSUES							
Issue No	Date	Originator	Checker	Reviewer	Approver	Customer	Reason for issue

INTRODUCTION

At the request of Moylough Castle Management, I inspected the Castle on Thursday 10th. October 2024.

I refer to Reports by:

- (1) John Deaton, RIAI, Accredited Conservation Architect, Grade One and
- (2) Frank Coyne of Aegis Archaeology Limited.

I refer also to the September 2024 survey of the Castle by KGSS with elevations and sections.

Photographs taken during the October 2024 site visit are also used.

One photograph taken in 2020, is used.

This Report deals with the structural aspects of the Castle and identifies:-

- (a) its present structural condition
- (b) areas of concern structural and
- (c) areas of immediate structural concern.

The Report makes recommendations on remediation works and identifies these of immediate structural concern.

ACCESS

Present access to the Castle is through the private farm lands of Mr. Joe Ryan.

Access into the Castle is through the collapsed South-West wall.

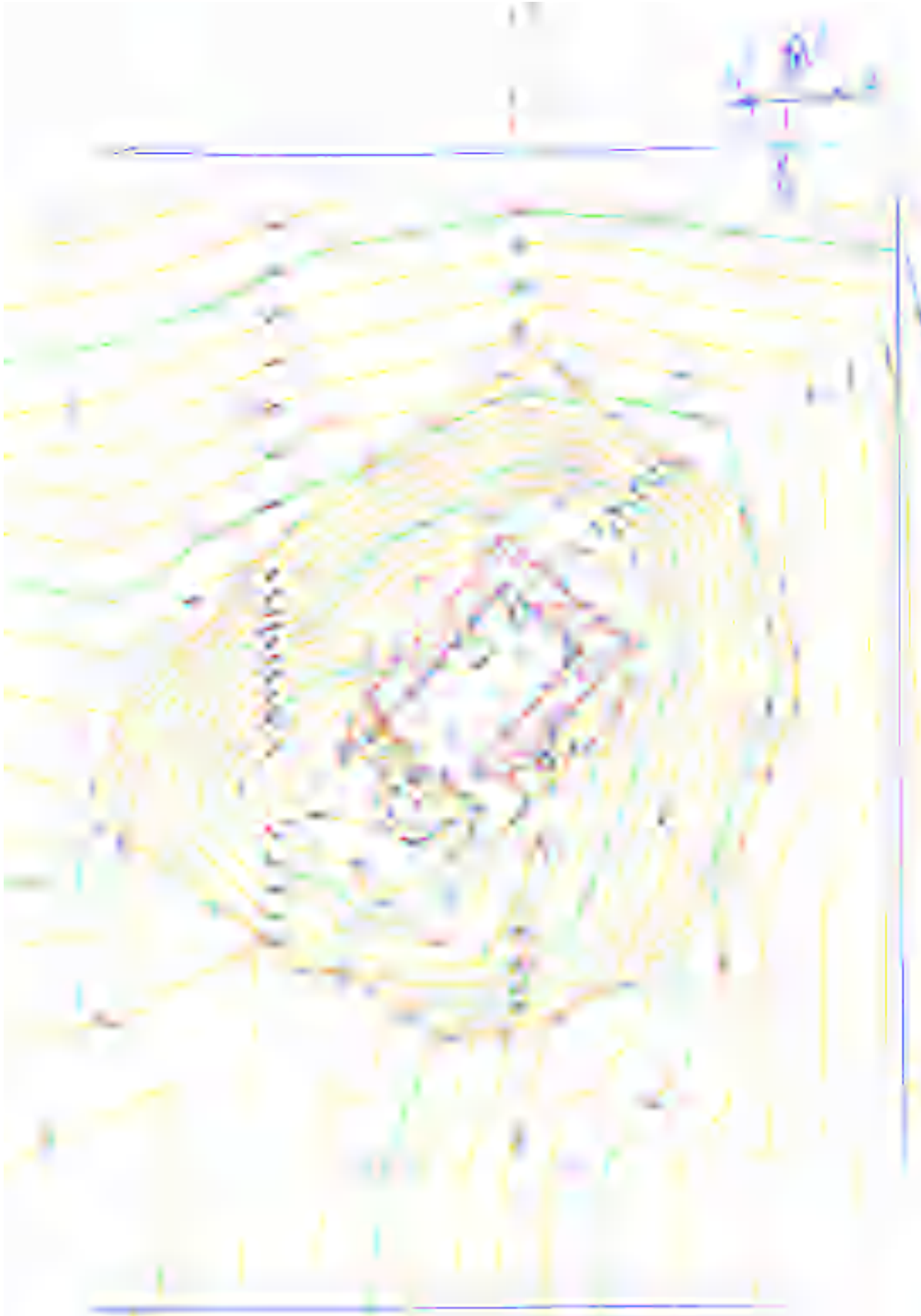
Very few of the public visit the Castle and there is no defined road, path or right-of-way for the public to access except with the permission of the landowner, Mr. Joe Ryan.

STRUCTURAL FORM

The basic construction of the Castle consisted of four external walls with floors at ground level, first floor level and possibly at second floor level. The existence of the second-floor level is highly likely. These are referred to in John Deaton's Report. There had to be a roof but its shape, profile, level are not discernible from evidence on site.

FOUNDATIONS

The location of the Castle is on a small hillock which dominates a large land swathe to the North and East. Rolling lands possibly of drumlins, feature to the South and West – see attached contour survey around the Castle



The present ground floor level is approximately 8m. over the surrounding land area on three sides. At the South-West corner of the hillock is an exposed section of ground where removed grass has exposed a type of dense boulder clay. It can be assumed that the Castle is founded on this material which is quite strong under compression. It is doubtful that foundation work has extended onto a rock level below the level of the low lying land around. This is speculative until trial holes are undertaken.

RECENT FALL OF MASONRY

There is no date on the failure of the floors or roof of the Castle. Such structural elements generally tie the walls together especially those that they rest on or are tied to.

The first item to fail was the roof which let water in which in turn damaged the floors which over time collapsed due to weight of water or roof debris on rotting timbers or a combination thereof.

Overall foundation failure would not appear to be the cause of the collapse of the South-West wall.

PRESENT STRUCTURAL CONDITION

Presently, there are three walls of the Castle substantially in place. One wall in the South-Western side has collapsed and fallen away leaving approximately 1m. height of wall above present ground floor level in place. Presumably, the failure mode pivoted around the 1m. height of wall as the external ground against this external wall prevented or invited the full rotation at the level of the embankment.

Looking at photo no. 1 (0134), it is noted that the ground level outside the Castle is lower on the rear or North-East side and sloping up to the higher ground level at the collapsed South-West side. Presumably, this is due to the substantial amount of fallen stone outside the South-West wall. There is reference in John Deaton's Report to stolen or robbed stones. Really this is only speculation in relation to below ground levels, outside and inside the Castle until site investigation and /or slit trenches are carried out by Archaeologist's investigation.



Photo no. 1 (0134)

At present, the three remaining walls are substantially vertical, substantially in good structural condition and for its age and location in private lands does not present a substantial Safety & Health issue to the public.

It should, however, be fenced in with notices of 'Beware of falling masonry'.

In relation to the likelihood of future partial collapse of parts of the wall, I refer to photo no. 1 (0134) above and no. 2 (2020) taken in 2020 below, which were presented as evidence that there was a partial collapse of the hatched area in 2020. This reaffirms the view that collapse or falling of loose or partly supported masonry can fall at any time and consequently the advice re; fencing of the site and placing notices warning the public of the hazards should be erected.



Photo No. 2020

STRUCTURAL OBSERVATIONS

WALLS

The three walls are thick stone rubble walls between 1.8 and 2m. thick. Looking at the KGSS sections, the top floor or section of wall is thinner in places than the lower walls. These are rough masonry walls with no consistency in stone size, shape or placement.

The lower level of ground floor and first floor walls have a 'higher quality' facing finish (internally at least) and possible a higher quality or level of binding than the top of the walls at second floor level.

The second floor or top floor walls are distinctly of a lesser built and bound quality with rougher facing finish internally.

The following are a number of structural observations on the walls:-

1. There is no separation crack at the two corners internally between the side walls and the rear wall. This applies to the full height.

2. There are no signs of separation at the two corners externally.
3. The three walls are substantially vertical with no very evident leaning, tilting or bulging.
4. Generally small individual isolated stone areas on the wall faces internally and externally have fallen out especially at high levels. These areas would not have been robbed. These areas would have fallen out due to bad binding with mortar or lack of mortar or lack of tying-in on through stones. These are like an outer leaf or skin or leaf of stone masonry that has detached and fallen out – see photo no.'s 3 (0170), 4 (0171), 5 (0172) and 6 (0202).



Photo No. 3 (0170)



Photo No. 4 (0171)



Photo No. 5 (0172)



Photo No. 6 (0202)



5. The make-up of the walls is somewhat different from most formal Castles in that there are no corners with dressed stone quoins at the corners which would often define the body within which the Castle is built or located. All stonework is random rubble bound with lime mortar. Facing mortars at face joints also bind the walls. However, there are large areas of the walls where the facing pointing is missing or was never installed.

In some areas within the body of the wall where small stones were used, the binding mortar is minimal.

6. Much of the lower levels of the Castle walls externally have a level of horizontal coursing in the masonry - see photo no. 7 (0186) below whilst the upper level in photo no. 8 (0188) is more random rubble with very little or no face pointing.



Photo No. 7 (0186)



Photo No. 8 (0188)

7. Externally the bottom section of the walls has a batter which is evident at a few locations – see photo no.'s 9 (0192), 10 (0203), 11 (1011), 12 (1017) and 13 (1018). The batter is not a separate buttress but was integral with the wall construction - see photo no.'s 14 (0204), 15 (1015) and 16 (1016).



Photo No. 9 (0192)



Photo No. 10 (0203)



Photo No. 11 (1011)



Photo No. 12 (1017)



Photo No. 13 (1018)



Photo No. 14 (0204)



Photo No. 15 (1015)



Photo No. 16 (1016)

The stone at the two rear North-West and North-East corners have been robbed as seen from the above photo no.'s 17 (0167), 18 (0174) and 19 (0175).



Photo No. 17 (0167)



Photo No. 18 (0174)



Photo No. 19 (0175)

8. Referring to the outside face of the rear or North-East wall, it is seen that rain water flowing off the soft top grass capping at two points has contributed to or caused the damaging of the stone masonry below these locations and this has caused these patches of external stone face to fall out – see photo no.'s 20 (0202), 21 (0200), 22 (0197) and 23 (0195).



Photo No. 20 (0202)



Photo No. 21 (0200)



Photo No. 22 (0197)



Photo No. 23 (0195)

9. There is no formal or level capping to the top of the walls – see photo no.'s 24 (0202) and 25 (1042).

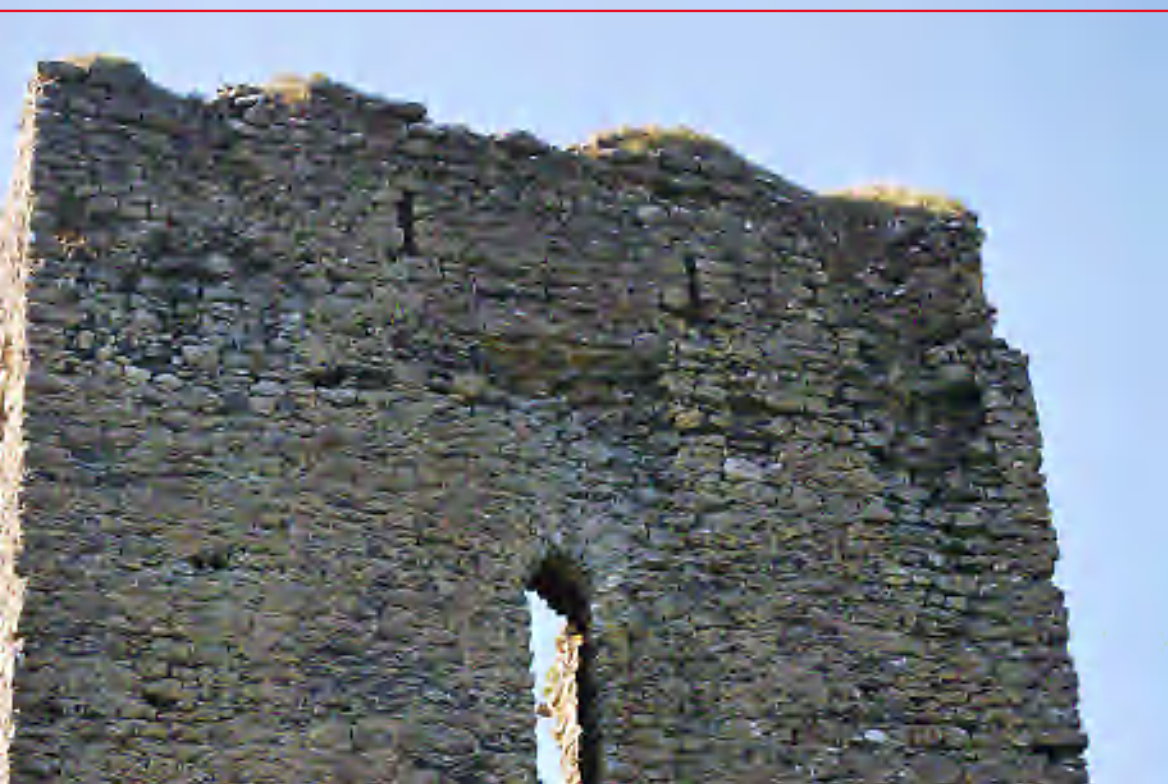


Photo No. 24 (0202)



Photo No. 25 (1042)

The top of the walls is uneven and is finished up with a soft grass topping. This type of topping was once a preferred top as it absorbs rainwater and allowed it to dry out during sunny or dry windy weather. However, in this case, the topping did not have the capacity to hold all of the rainwater and in this wall, it resulted in at least two locations where overflow occurred and caused damage to the masonry mortar bound wall directly under resulting in fall outs of masonry outer leaf.

10. On the external elevation of the right-hand wall South-East wall, there are at least four dropout stone areas in the wall, again at high level, and it is not evident that all of these were caused by rain water from the capping.
11. There are only minimal areas of facing stone fall-out on the left-hand North-West wall – see photo no. 26 (0182).



Photo No. 26 (0182)

12. Externally this feature of stone face fall-out is only evident at upper levels and not below in the ground floor and first floor walls. This could be partly related to what looks like a lesser standard of masonry binding and pointing at the high levels.

13. Cracks - External Elevation

There are cracks in the Castle walls but those present are not wide and are more or less in locations to be expected i.e. at weak points on lines between the open top of walls and openings in the walls such as at door and windows. None of these are at low level in the well constructed masonry of the ground floor.

The crack over the main door at first floor level extends into the head of the door and is the full depth of the wall – see photo no. 27 (0154)



Photo No. 27 (0154)

Similarly the crack over the head of the first floor arched window extends into the plastered head of that arched window for its full depth.

These cracks are mainly in the South-East wall – see South-East Elevation cracks with the cracks coloured 'red'. There are no such evident cracks visually externally in the two other walls – see photo South-East elevation cracks.

14. Cracks - Internal Elevation

Strangely there is very little cracking internally with the only very evident cracks being those identified externally in the right-hand wall or South-East wall identified above and these are evident at the openings of the main door and arched window at first floor level.

15. Window And Door Heads And Openings

In the first floor or main Hall floor, there are three windows, one in each wall, which have stone arched heads, two of which have some lime render in the heads. The main door which is also at that floor level also has a stone arched head.

These arched head openings are in relatively good condition.

The remaining windows or openings in the walls at ground floor and second floor level have flat heads, some of which are formed over flat stone arches with a keystone. Some of these flat window heads have a narrow recess at both sides just under the head in the depth of the wall and these were for flat stone or timber lintols or shuttering for the construction and support of the head. All of these recesses are void and there is no evidence of any timber or other shuttering.

Internally on the ground floor, the window heads of W1, W2 and W3 are partly damaged but no structural movement or cracking has resulted. The arching action of the stone wall overhead is an effective support over these fairly narrow windows $\approx 1.2\text{m}$. Some minor repairs could be done to W1, W2 and W3 at their sides and heads to prevent further damage or robbing.

The second-floor windows are narrow and generally have flat heads – see photo no.'s 28 (1034), 29 (1042), 30 (1053) and 31 (1011) with a single stone lintol.

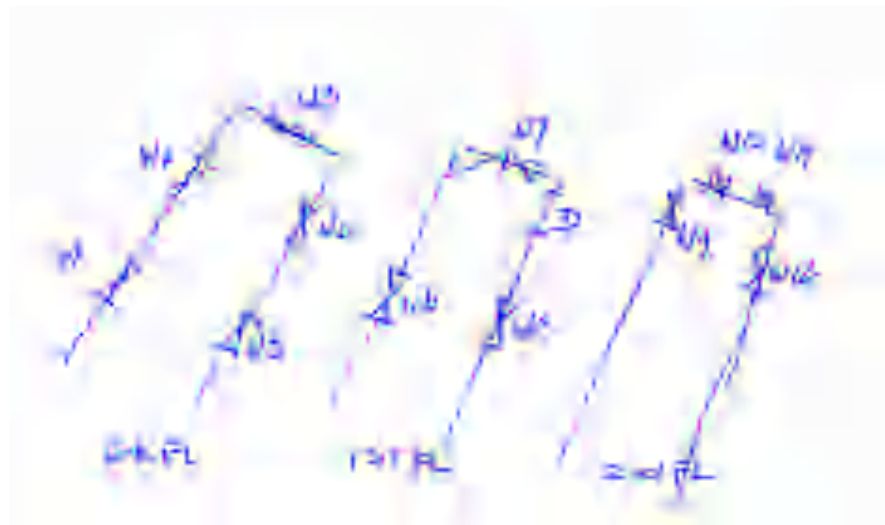




Photo No. 28 (1034)



Photo No. 29 (1042)



Photo No. 30 (1053)



Photo No. 31 (1011)

Internally the heads of W9 – see photo no. 32 (0139) and W11 – see photo no. 33 (0138) are suspect and will need support lintols especially on the inner face where arching across the opening does not appear to be in place.



Photo No. 32 (0139)



Photo No. 33 (0138)

In the short term – no new work is proposed to any of the high level openings unless access is provided to the level of W9 and W11 for other works.

16. SQUINCH ARCH HEAD

This arched head – in the squinch - see photo no.'s 34 (0135) and no. 35 (1032) in the first floor has substantial bearing either side of the wall opening and bearing is available both sides for a further section or infill below the stone arch. This has been in this present condition for a long period. The existing upper section of the arch is adequately supporting the overhead masonry – the binding of the keystone would improve the integrity of the existing arch.



Photo No. 34 (0135)



Photo No. 35 (1032)

FLOORS

The ground floor is an earthen floor with an amount of loose scattered stones which have fallen from the surrounding Castle walls.

Debris and materials from the original first and second floors and from the original roof would have dropped onto the ground floor.

Opening up is required to determine the level of the ground floor and the make-up of the soil down to floor level.

A strong feature of the Castle are the two lines of putlog holes to carry large heavy timber beams or putlogs used to support the first floor. None of these timbers remain or any of the materials in the floor make-up above and between the beams.

A rough recess is gouged out of the masonry just beneath the putlog line and its purpose is not clear. A similar recess is in the rear wall line but is not horizontal. Again, its purpose is unknown.

AREAS OF ADDITIONAL CONCERN

The following are areas of additional concern:-

1. There is a critical support issue at the rear right hand corner or North-East corner at high level where stone fall out has left a substantial height of wall supported on two corner stones – see photo no.'s 36 (0195), 37 (0196), 38 (0197), 39 (0198) and 40 (0201).



Photo No. 36 (0195)



Photo No. 37 (0196)



Photo No. 38 (0197)



Photo No. 39 (0198)



Photo No. 40 (0201)

This is in critical structural condition and unless it is remedied, the top corner section of this corner will collapse. This has already happened at the North-West corners – see photo no.'s 41 (0173), 42 (0185) and 43 (0188).



Photo No. 41 (0173)



Photo No. 42 (0185)



Photo No. 43 (0188)

2. Internally at 2nd. floor level on the left-hand wall or North-West wall, there are two areas where the inner skin of the stone masonry appears to have fallen away leaving overhead masonry unsupported except for the tying-in of the masonry at that level to the main body of the masonry wall – see photo no.'s 44 (0140) and 45 (0141).



Photo No. 44 (0140)



Photo No. 45 (0141)

3. There is an overhanging single large stone over window W11 – see photo no. 32 (0138) which looks unstable.



Photo No. 32 (0138)



4. Growth of grass, weeds and shrubs in the upper levels needs to be killed off and not be allowed to develop with root stems extending into the masonry to cause future damage – see photo no. 32 (0138) above. No ivy was noted.

5. One of the major areas of concern structurally is at the front face of a corner of the right-hand wall at the South-East corner at ground floor level where the collapsed front wall pulled part of the side wall with it. It appears as though there was an arched opening at ground floor level and a window almost directly over it at first floor level. These would form a weak point or line in the side wall and it is along this line that the masonry attached to the front wall that fell separately from the side wall – see photo no. 45 (1040).

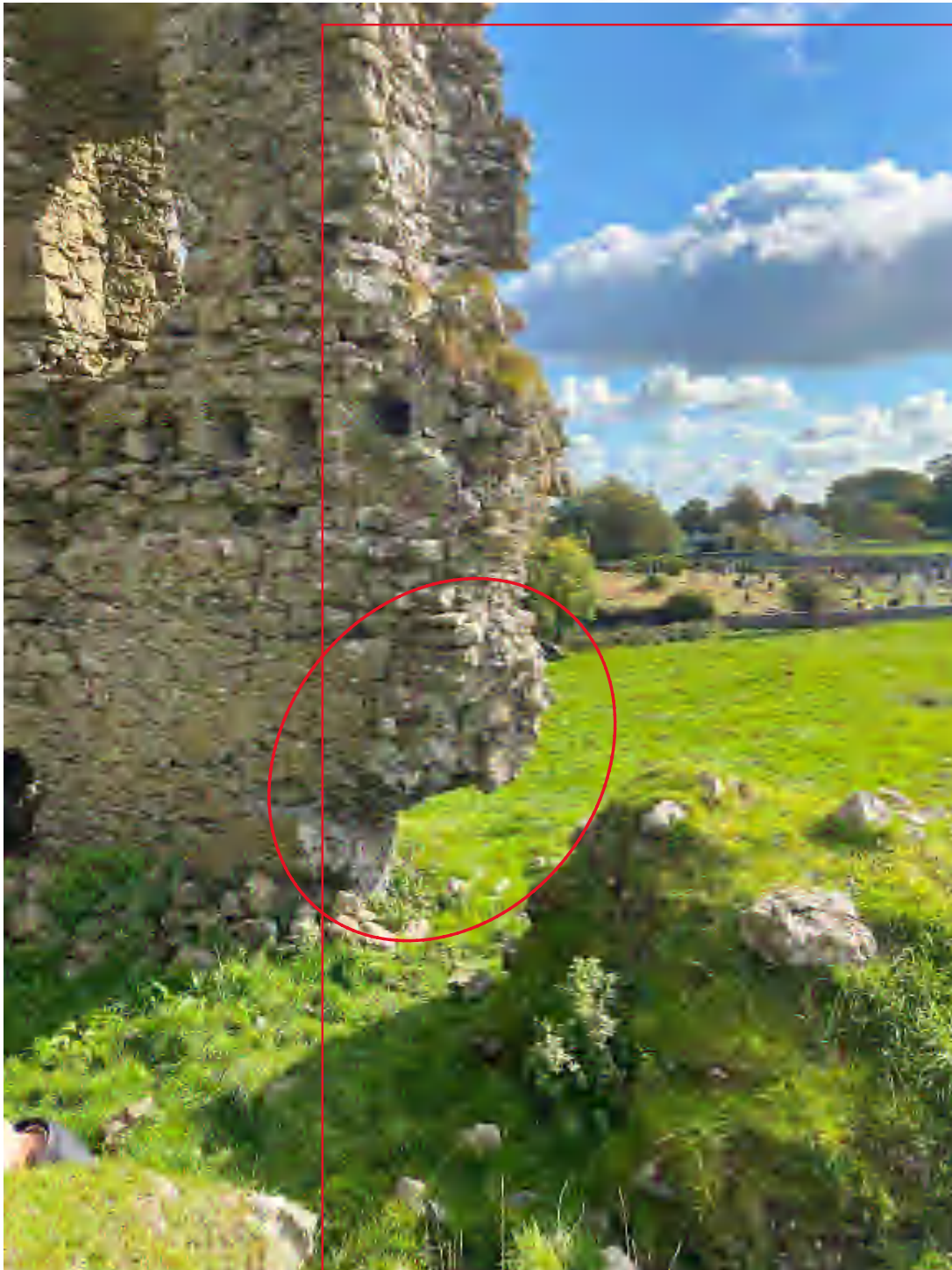


Photo No. 45 (1040)

Because of the shape and configuration of the masonry over the partial remaining arch, a crack will develop from the top of the arch, through the putlog holes to the cill of the window overhead. This combined with the existing crack over the arch of the window will result in the eventual collapse of a large section of this wall – see marked up photo ‘Likely Failure Mode – South-East Elevation’

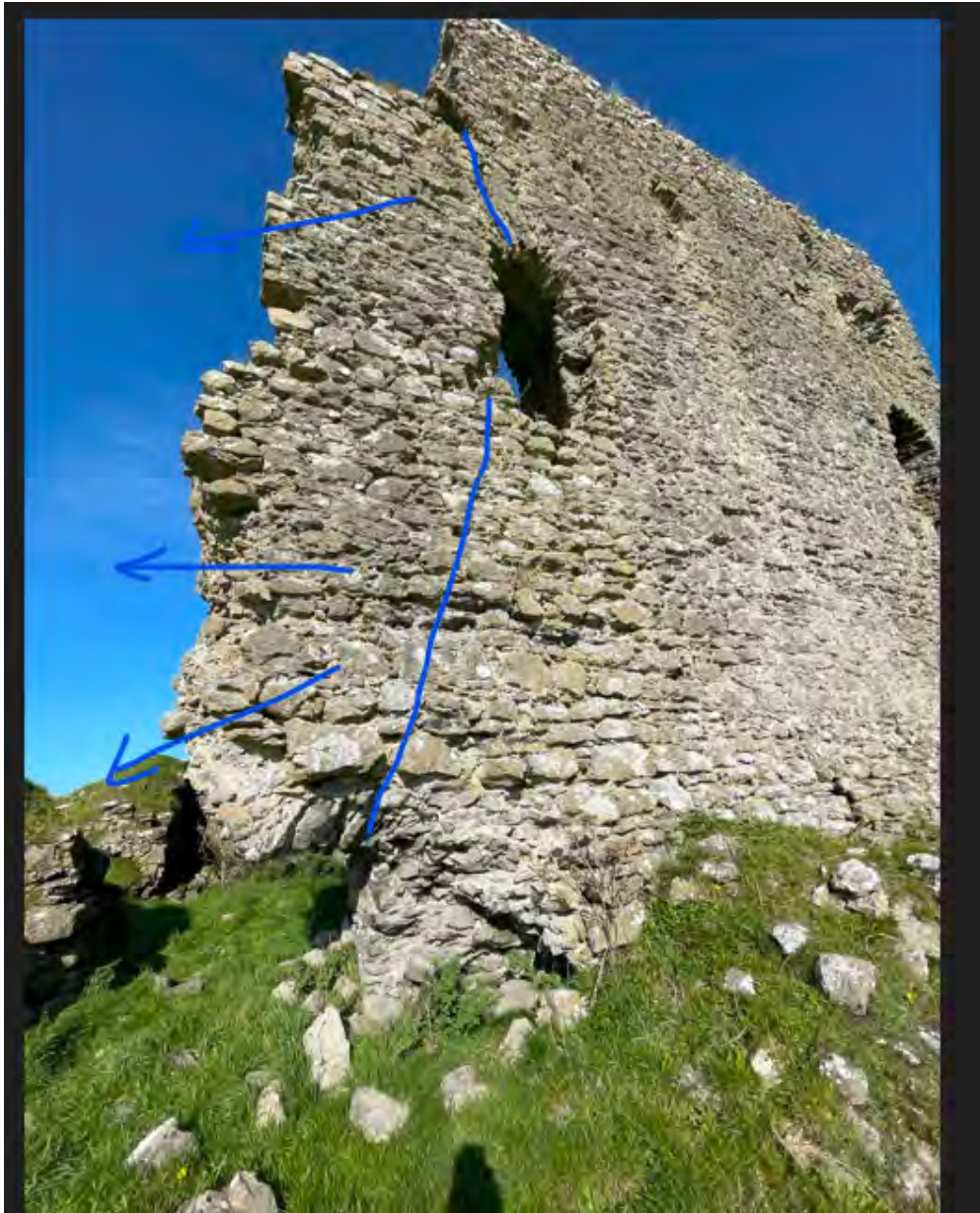


Photo of 'Likely Failure Mode – South-East Elevation'



Photo No. (1041)

The remedial works to the collapse prevent happening is to support the cantilevered overhang. The form of this support can be debated. The easiest and most effective support would be to rebuild the full thickness of the wall under the cantilevered section down to the base of this opening. A visual method of isolating or identifying this rebuild can be decided by the Architect. A less effective method would be to construct a stone masonry pillar at the outer edge of the cantilever leaving part of the arched window opening open. A final solution would be to extend the arched head of the window to tie into and sit on the remaining 1m. height of the front collapsed wall. This is more problematic and involves a decision on the extent of the overhead construction over the arched head which could lead to access issues.

The rebuild for the full thickness is the recommended solution.

6. At the front of the left hand or North-East wall, a section of masonry at high level is liable to fall due to the shape of the vertical face. A small section of support masonry under the recess in the section would secure this in place.

PRIORITY WORKS

The following are a list of priority works to be undertaken:-

Structural Works of Immediate Concern:

1. Fence off the site and place notices.
2. Get a right-of-way for access to allow maintenance works to the Castle.
3. Support the cantilever arch at the ground floor S-E South corner.
4. Kill off weeds, grass and shrub growth.
5. Fill in the hole at high level to support stonework overhead in the N-E corner at high level.
6. Fill the cracks with liquid lime mortar to try and get binding across the cracks and to prevent further deterioration.
7. Build support for the North-West front corner at high level
8. Rebuild lost stone facing/outer lead on outer face at 2nd. Floor level.
9. Support cantilever stones at top of wall over W11.
10. Reconfigure wall cap to avoid locations of concentrated rainwater discharge and provide an even cap possibly of limecrete so that rainwater falls off evenly along wall tops.
11. Track any changes and record them on the KGSS Cad drawings.

Signed _____

Paddy Coleman.
Chartered Engineer.

Date _____



Conservation Architects Report

Proposed Works in Conservation and Management Plan

Upstanding remains of Moylough Castle, Ballygar, Co. Galway



John Deaton

RIAI Accredited Conservation Architect Grade One

44 South Richmond Street, Dublin 2

014754960 0872951838 jdeaton@dlarch.ie

Introduction

This report is for inclusion in the conservation management plan and statement of heritage significance prepared by Aegis Archaeology Ltd. It is limited to consideration of the proposed plan of action to address structural and maintenance issues as per the conservation and management plan. The report has been prepared in advance of a structural engineer's report and is a preliminary draft which will be finalised when the engineer's recommendations come to hand.

Statutory Protection and Policy

Moylough Castle is a Recorded Monument ref: GA045-02901 – "Castle"

National grid reference 16154/24900

It is an Anglo-Norman chamber tower dating from the first half of the 13th century. It is situated on a ridge of morainic origin. Karen Dempsey suggests that "*These buildings, formerly described as 'hall houses', comprise a rectangular two-storeyed block with a first-floor entrance that provided access into a single open space at first-floor level. ...the 'hall-house' was believed to have contained a hall at first-floor level*" She notes that this was erroneous and that these buildings were private chambers and that the halls were separate buildings. (Dr Karen Dempsey – The Standing Stone, Blog - August 2015) The contours of the surrounding ground suggest that a "*hall*" was located on lower ground to the East.

The castle is a rectangular building of three storeys. Three of the original four walls are upstanding and there are no floors or roof. There have been masonry falls in relatively recent times.

The conservation management plans establishes an understanding of the monument and its significance followed by an assessment of how this significance might be threatened or impaired in the future. A set of measures and policies is then proposed to avoid or mitigate potential impairments and safeguard and enhance significance for future generations.

Methodology

This report is based on:

The draft Conservation and Management Plan prepared by Aegis Archaeology Ltd.

Limited desktop research.

Photogrammetric survey prepared by KGSS surveys.

Report of P. Coleman and Associates, Consulting Engineers

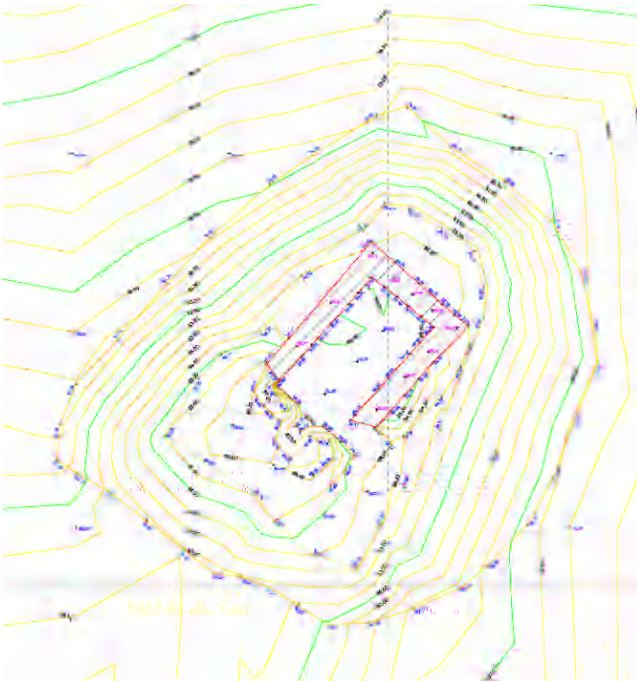
Site visit. Note that access at height was not achieved.

This report is limited to consideration of the proposed works set out in the Conservation and Management Plan.

Upstanding remains



The keep is a three-storey building which comprised basement, first and second floor. There are steps from the second floor leading to the roof. There are three walls upstanding. The fourth (SW) wall has been reduced to ground level.



Plan



View of South-east elevation with first floor entrance on the right

The entrance doorway is at first floor level in the south-east wall. Socket holes for the external stairs were not apparent.



Interior view showing entrance door recess on the right

There is a recess in the side wall internally into which the door would have opened. This recess extends inwards some 300mm beyond and above the doorway entrance. This suggests a recess for an element attached or built into the wall.



The walls are constructed of limestone and chert rubble set in coarse lime mortar. Walls are approximately 2,000mm thick and have a base batter. Large window embrasures have segmental arches. Embrasures to smaller windows at the basement and second floor have jack arches. None of

the openings has dressed stone. It is not clear whether this existed or was robbed out. There are patches of lime render externally and lime plaster internally.



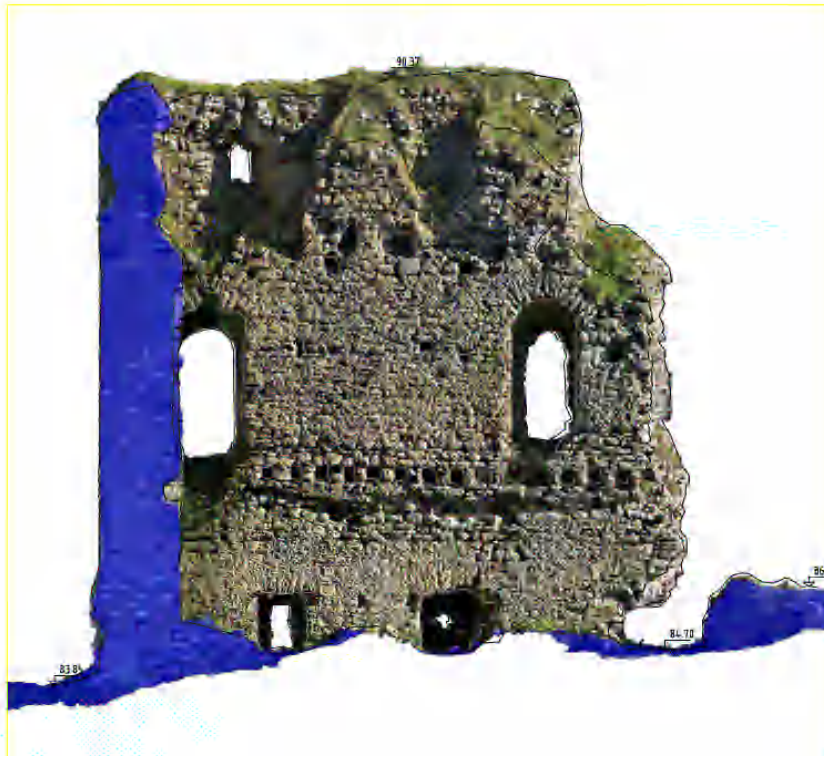
Interior view showing floor beam socket holes, trenching and possible vault outline.

Internally there is a line of socket holes which took the beams of the first floor. Below this line the walls have been trenching. This may have been for the later addition of a double vault, subsequently collapsed or robbed out. The keeps at Athenry and Tomdeely are examples of this.

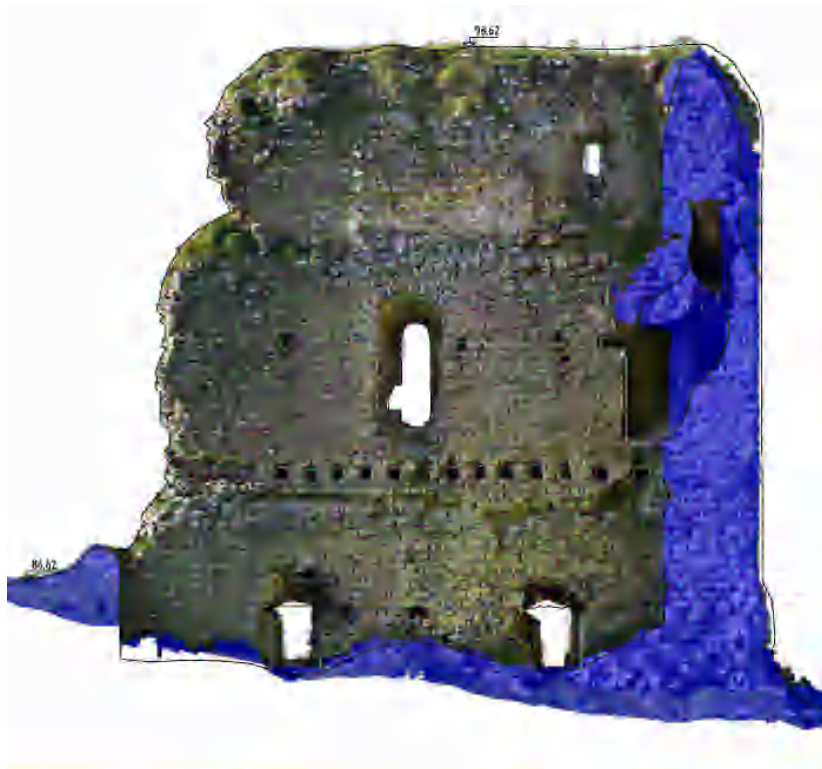


North east

KG24314_Elevation_5.tif



South East



North West

At second floor level masonry has been removed to and forms a ledge where the floor beams would have been built in. Some remaining floor beam socket holes remain.

The parapets have been lost. There are no ports apparent in the external walls consistent with the walls having been reduced to below roof level.

There are pudlock holes in the side walls at high level internally.



North eastern elevation showing stairs ope and squinch on the left.



Stairs

There is a stone stairs in the north western angle where the wall has been thickened out by a squinch for access to the second floor. This continues as a stairway within the northern wall leading to the roof level.

There is no evidence of a latrine which may have been at the demolished south-western end diagonally across from the entrance doorway. There are no fireplaces.

The castle was visited and evaluated by D M Waterman in 1956 who noted inter alia:

“Rectangular keeps, all probably of the first half of the thirteenth century, are particularly well represented in Co. Galway and include examples at Athenry, 15 miles SW. of Moylough, and Cargin, situated twenty-four miles to the west on the shore of Lough Corrib. Cargin, a building of two stories with original basement vaulting and direct stair communication between ground and upper floor, is closely similar in plan to the keep at Rinnduin, on the shore of Lough Ree in Co. Roscommon, but bears little resemblance in detail to the keep at Moylough. The keep at the de Bermingham castle of Athenry however, is more directly comparable and agrees closely in dimensions, measuring 55' by 35' against 53' by 35' at Moylough; it appears to have been of three stories (although there is some evidence to suggest an internal roof at second floor level) and was originally floored in timber throughout, the present basement vault being an insertion. In view of this similarity, a de Bermingham origin for the Moylough keep may be suggested; as Dr. H. G. Leask points out to me, Moylough is situated nearly mid-way between Athenry and another de Bermingham stronghold at Dunmore. The class of rectangular keep to which both Moylough and Athenry belong appears to have flourished in Ireland during the first half of the thirteenth century and occasionally later, as in the case of Greencastle, Co. Down, commenced c. 1260. At Athenry, the presence of good architectural detail indicates a date of c. 1250 for the erection of the keep; based on structural evidence alone, it is difficult to estimate the date of the Moylough building but it may be suggested to have been erected nearer the beginning, rather than towards the middle, of the thirteenth century.”

Moylough Castle, even in its present incomplete condition, is a particularly interesting example of early masonry castle-building in Ireland and unlike the majority of comparable structures elsewhere it has survived without later modifications. The existing masonry appears to be structurally sound and the castle is well worthy of preservation.”

D. M. Waterman

The Journal of the Royal Society of Antiquaries of Ireland, Vol. 86, No. 1 (1956), pp. 73-76 (5 pages)

<https://www.jstor.org/stable/25509233>

Condition report and recommendations

Structural engineers have been appointed and will prepare a report.

The intention of the report is to existing and potential structural issues and to clearly outline a set of measures and which can be adopted to avoid or mitigate these in order to safeguard the structure for future generations.

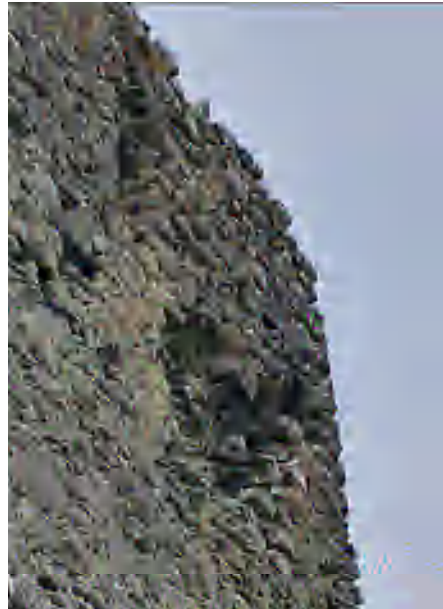
All proposals must follow the principles of minimum intervention and of achieving a faithful and honest repair.

Structural issues

Following my inspection and discussions with Mr Coyne I note that there would appear to be two structural issues which would require intervention.



1. There was a masonry collapse in the south end of the south-eastern wall. The remaining wall end is precariously cantilevered and in danger of further collapse.



2. A section of masonry has fallen from the face of the south-eastern wall at second floor level at its northern end. There is a concern that there may be further falls. This will require access at height to be provided in order that a structural inspection be undertaken.

Issues and Proposals

The evaluation of this castle is hampered by the lack of safe access to the upper areas and to the wall tops. Safe and suitable access at height would facilitate a more detailed survey of the building and inspection of its structure and fabric. This would inform its future conservation, care and maintenance.

I have been advised that scaffolding the building would not be feasible within the economic constraints and likely grant funding. Scaffolding will be limited to where required for undertaking necessary structural repairs. A small section of tower scaffold would allow safe access to the corner stairs and access therefrom to the upper areas.

It is not clear whether access by way of mobile hoists (cherry-pickers) would be feasible on this site.

A three-dimensional computer scan of the interior might also be considered.

The following actions are proposed:

Masonry collapse at south end of the south-eastern wall. - It is anticipated that the wall should be built up underneath the cantilevered section. I assume that it would be built off the existing base wall without the need for the digging of foundations. The question therefore is "How can the works be designed to accord with best conservation practice?"

The proposed intervention is necessary in order to arrest further decay and ensure preservation of the building. Article 9 of the Venice Charter acknowledges: *The process of restoration is a highly specialized operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents. It must stop at the point where conjecture begins, and in this case moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp. The restoration in any case must be preceded and followed by an archaeological and historical study of the monument.* This approach is supported by Article 13 of the Burra Charter, which identifies restoration as being appropriate if there is sufficient evidence of an earlier state of the fabric and only if returning the fabric to that state recovers the cultural significance of the place.

I have considered two options:

1. Construct a new wall in a different material, such as grey brick. The intervention would clearly have a contemporary stamp with no question of ambiguity between new and old. There would be no conjecture involved.
2. Construct the wall in limestone using stone salvaged from site. In order to avoid either conjecture or ambiguity the line of the new wall would be recessed 50mm from the line of adjoining masonry. The coursing pattern of the new wall would be different to the existing coursing.

I consider that option 1. might be seen as aesthetically discordant. Option 2. would be an honest repair which would have little aesthetic impact whilst being clearly perceptible by the expert eye as an intervention.

I recommend Option 2 therefore.

Masonry loss at northern end of south-eastern wall – In order to repair this it will be necessary to obtain access at height (scaffolding), firstly to determine the nature and extent of the defect and secondly to undertake a repair. I await engineer's proposals in this regard. I have been informed that the cost of scaffolding would be prohibitive and that funds may not be immediately available.

With regard to best conservation practice I see no reason why this area should not be repaired in the same masonry and coursing pattern as the existing.

Wall tops, ledges, loose masonry – The wall tops are exposed to the elements and will continue to deteriorate over time. It is recommended that the wall tops be consolidated by rough racking in lime mortar. It is acknowledged that the cost of this would be prohibitive funding it may not be feasible. Any loose stones such as those around opes should be stabilised with lime mortar and pinnings, if accessible. Minor shrub and vegetative growth should be carefully treated and removed.

Conserve fallen masonry – I note that much of the stone has been robbed out in the past. There remains some masonry around the site which is buried or half buried. Buried masonry is best left where fallen. Loose masonry which could be lost or stolen could be safely stored.

Measured Survey -Further Research- Moylough Castle is one of a small number of chamber keeps and is worthy of further research. This could be informed by a detailed survey of the building including recording all remaining elements and features. The castle could then be considered and compared to others, which would contribute to a broader understanding of this building type.

Ecology – The castle is a potential habitat for bats and other fauna or flora. It is recommended that an ecological survey be undertaken prior to undertaking significant works.

Implementation

Plans, method statements and schedules of works should be prepared by personnel with the appropriate conservation qualification and experience.

Plans for the works should include measures to protect the monument during building work.

Prepare a follow-up maintenance plan.

Consult with Galway County Council, National Monuments and relevant authorities and obtain all necessary statutory approvals or references in advance of undertaking the works.

Only contractors with proven conservation experience should be engaged on the project.

The works should be monitored by consultant(s) with the appropriate conservation qualification and experience.

Maintain a record in digital format of the monument, prior, during and after repairs. Update and amend as necessary the conservation management plan thereafter.

John Deaton

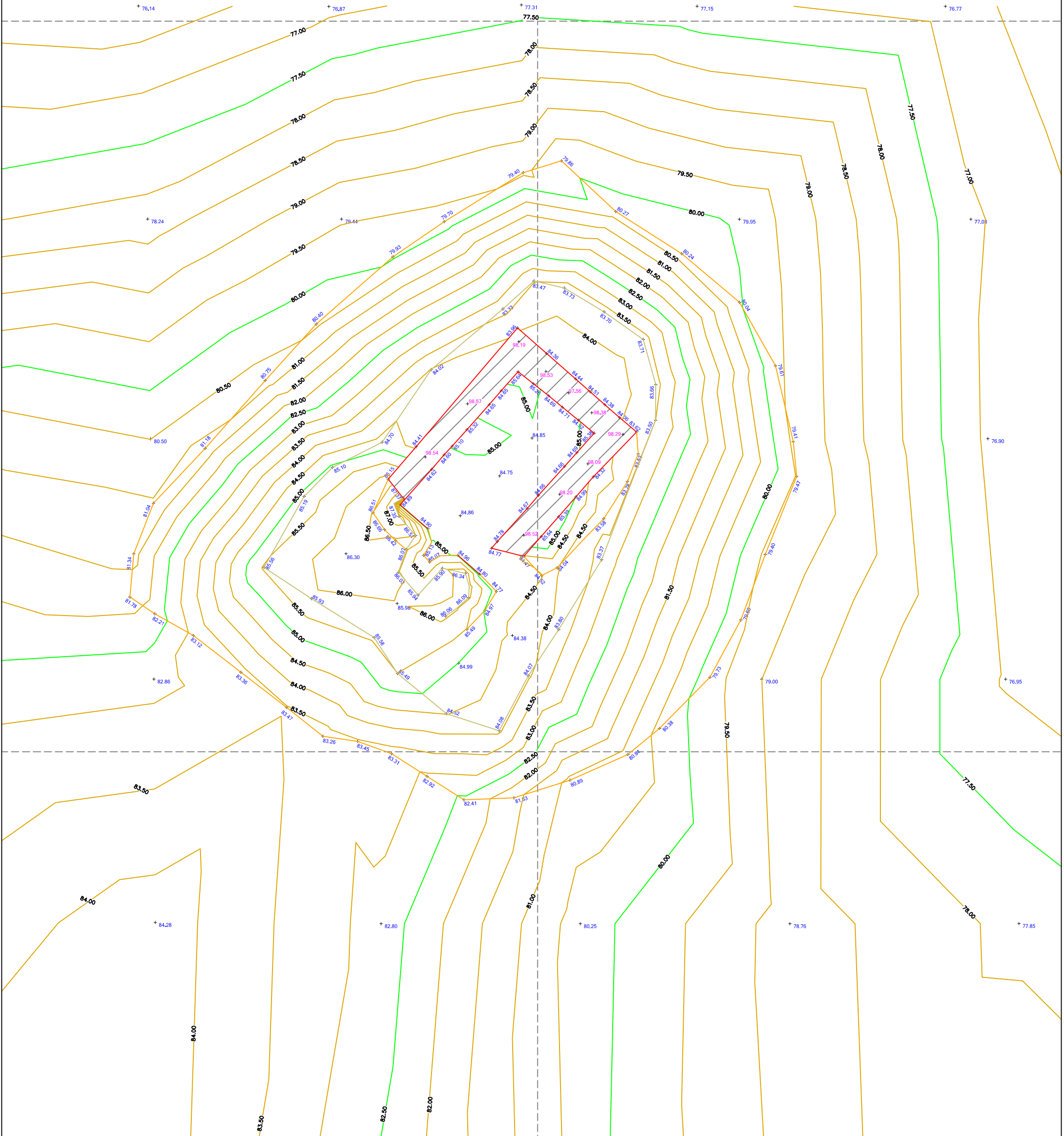
B. Arch. FRIAI Dip Arb., FCI Arb, MII

RIAI Accredited Conservation Architect – Grade One

4th October 2024



561500



LEGEND :

Survey Point	+	Manhole (General)	□	Survey Point Level	100.00
Contour	—	Storm Water	□	Roof / Wall Level	200.00
Fencing	—	Foul Water	□	Digitised OSI data:	—
Gate	—	Access Junction	□	Folio Setout:	—
Building / Structure	—	Sluice Valve	□	Setout Coordinate	—
Wall	—	Fire hydrant	□	Window	—
Road Edge	—	Water Meter	□	Door	—
Kerbed Road	—	Telecom Pole	□	Structural H Beam	—
Path / Track	—	ESB Pole	□		
Banking / Drain	—	Lamp Post	□		
Detail	—	Overhead ESB	□		
Overhead Detail	—	Overhead Telecom	□		
Vegetation	—				
Tree Trunk	—				
Tree Spread	—				



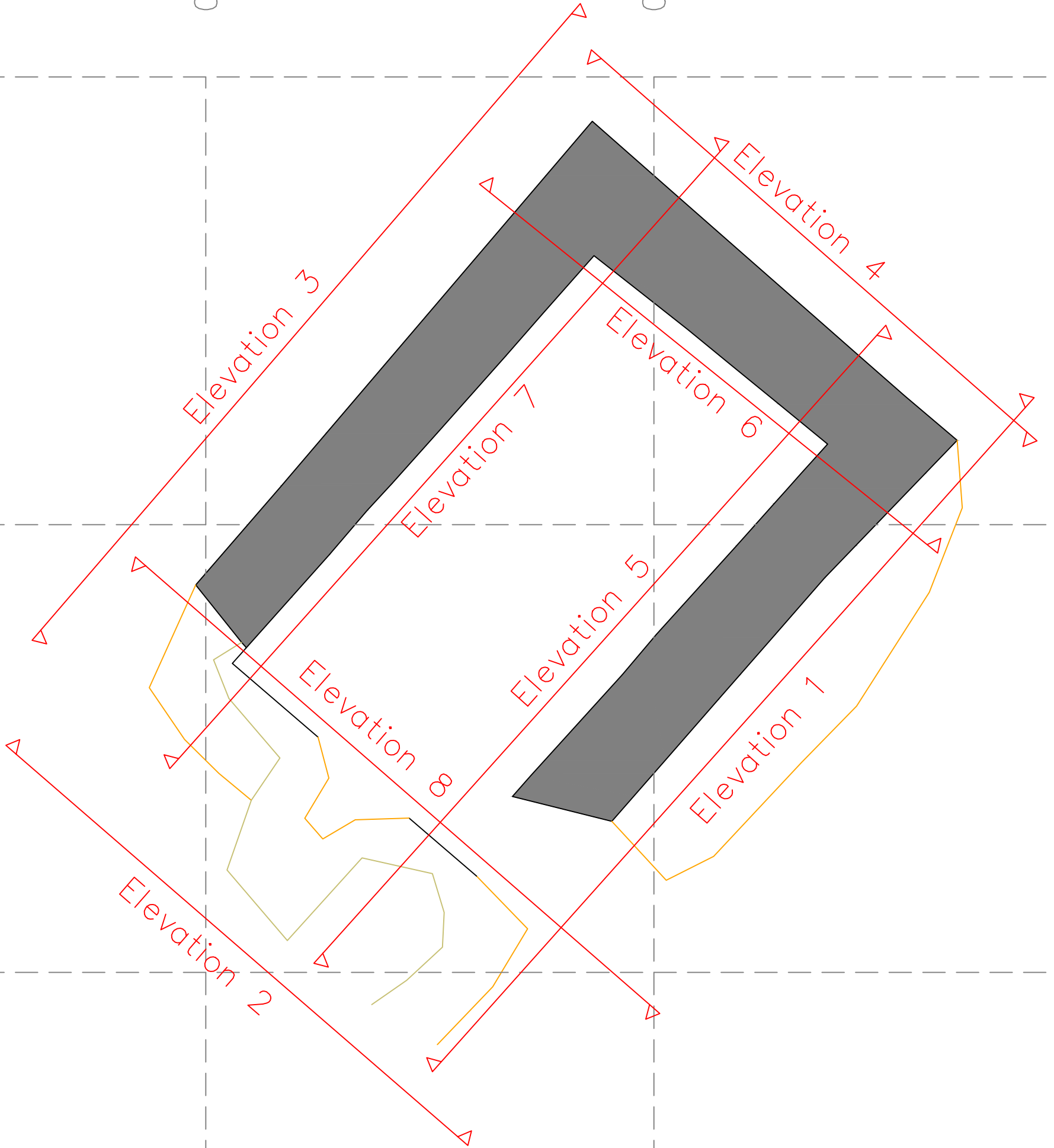
Client: Aegis	Survey Type: Topographic	Drawing No: (1)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:250	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes:			Modifications			
<ul style="list-style-type: none"> - Any boundaries shown may not define the legal boundary between properties. - It is strongly recommended that a CCTV/GPR survey is undertaken in order to locate any underground services that are not visible/accessible from the surface. - Please report any anomalies to the KGSS office for rectification. 			Date			
			Rev.			



E 561510

E 561500

E 561490



LEGEND :

Survey Point		Manhole (General)		Survey Point Level	100.00
Contour		Storm Water		Roof / Wall Level	200.00
Fencing		Foul Water		Digitised OSI data:	
Gate		Access Junction		Folio Setout:	
Building / Structure		Sluice Valve		Setout Coordinate	
Wall		Fire hydrant		Window	
Road Edge		Water Meter		Door	
Kerbed Road		Telecom Pole		Structural H Beam	
Path / Track		ESB Pole			
Banking / Drain		Lamp Post			
Detail		Overhead ESB			
Overhead Detail		Overhead Telecom			
Vegetation					
Tree Trunk					
Tree Spread					



Geo Spatial Solutions:

Client: Aegis	Survey Type: MBS	Drawing No: (Key Plan)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway	
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE

Survey Notes:

- This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS.
- Only visible detail was recorded.
- Please report any found anomalies to the KGSS office for rectification.

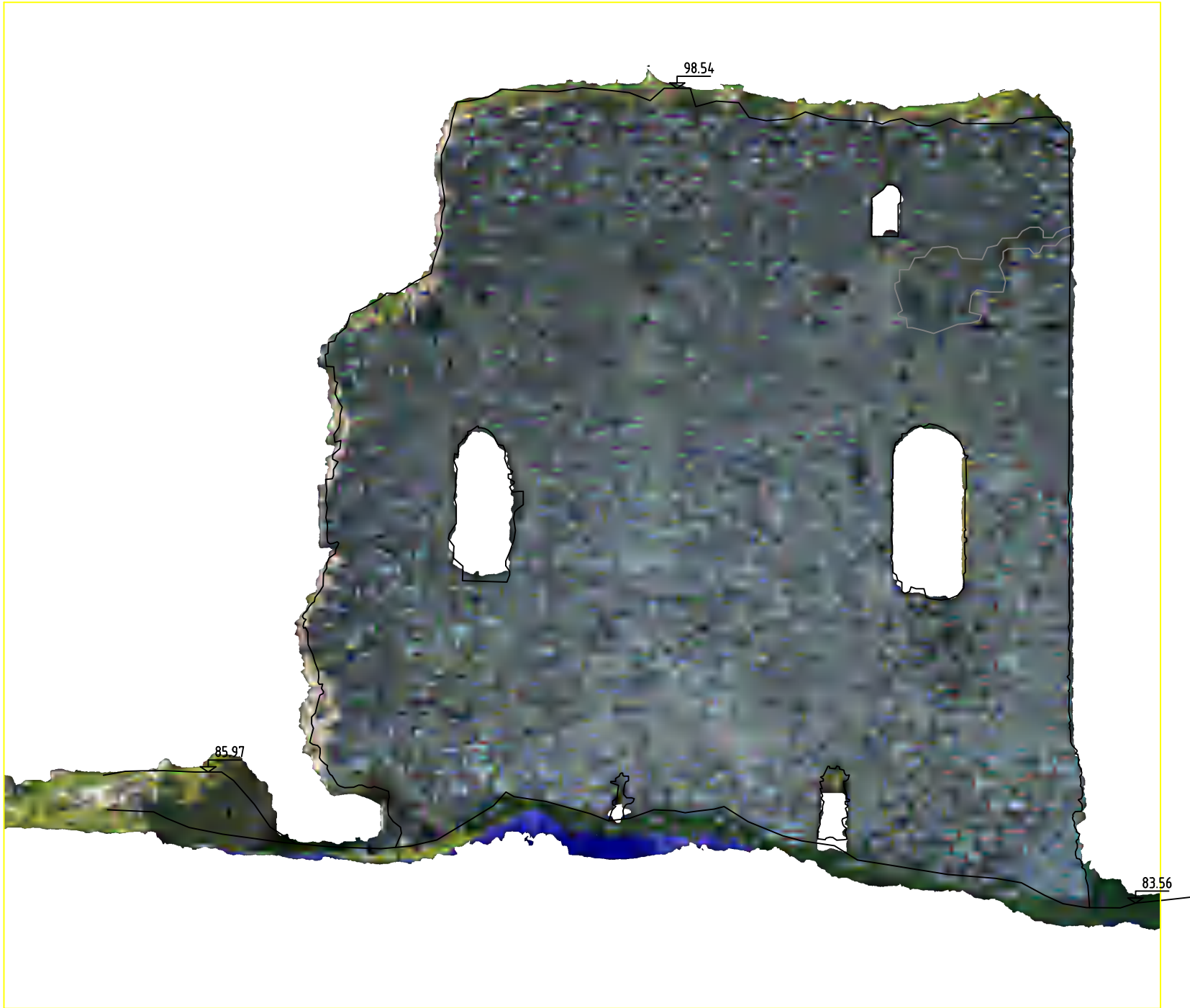
Modifications	Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions



KG24314_Elevation_1.tiff



0.00m 1.58m 14.33m

Elevation 1 Datum : 80.00m

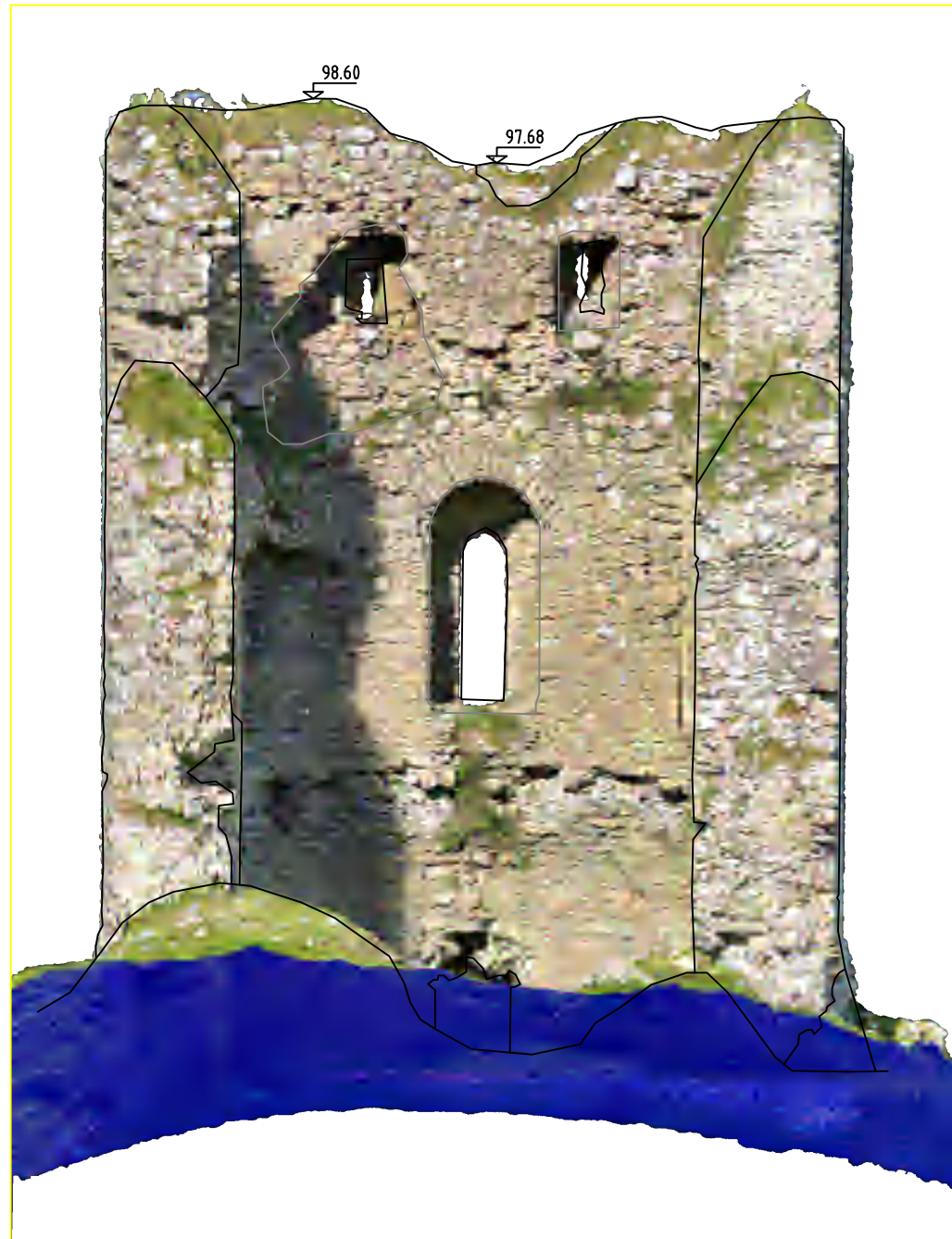
LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



Client: Aegis	Survey Type: MBS	Drawing No: (1)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.



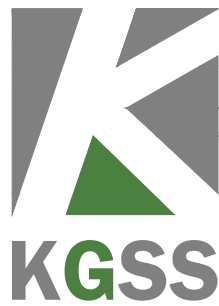
KG24314_Elevation_2.tiff



0.00m 1.93m 2.05m 8.55m 11.13m

Elevation 2 Datum : 80.00m

LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



Geo Spatial Solutions:

Client: Aegis	Survey Type: MBS	Drawing No: (2)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024

Survey Notes:
 - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS.
 - Only visible detail was recorded.
 - Please report any found anomalies to the KGSS office for rectification.

Modifications	Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Geo Spatial Solutions: Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions



KG24314_Elevation_3.tiff



0.00m

14.02m
14.79m

Elevation 3 Datum : 80.00m

LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



Client: Aegis	Survey Type: MBS	Drawing No: (3)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.



KG24314_Elevation_4.tiff



0.00m

11.49m

Elevation 4 Datum : 80.00m

LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



Geo Spatial Solutions:

Client: Aegis	Survey Type: MBS	Drawing No: (4)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Geo Spatial Solutions: Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions



KG24314_Elevation_5.tiff



LEGEND :

Survey Point		Manhole (General)		Survey Point Level	100.00
Contour		Storm Water		Roof / Wall Level	200.00
Fencing		Foul Water		Digitised OSI data:	
Gate		Access Junction		Folio Setout:	
Building / Structure		Sluice Valve		Setout Coordinate	
Wall		Fire hydrant		Window	
Road Edge		Water Meter		Door	
Kerbed Road		Telecom Pole		Structural H Beam	
Path / Track		ESB Pole			
Banking / Drain		Lamp Post			
Detail		Overhead ESB			
Overhead Detail		Overhead Telecom			
Vegetation					
Tree Trunk					
Tree Spread					



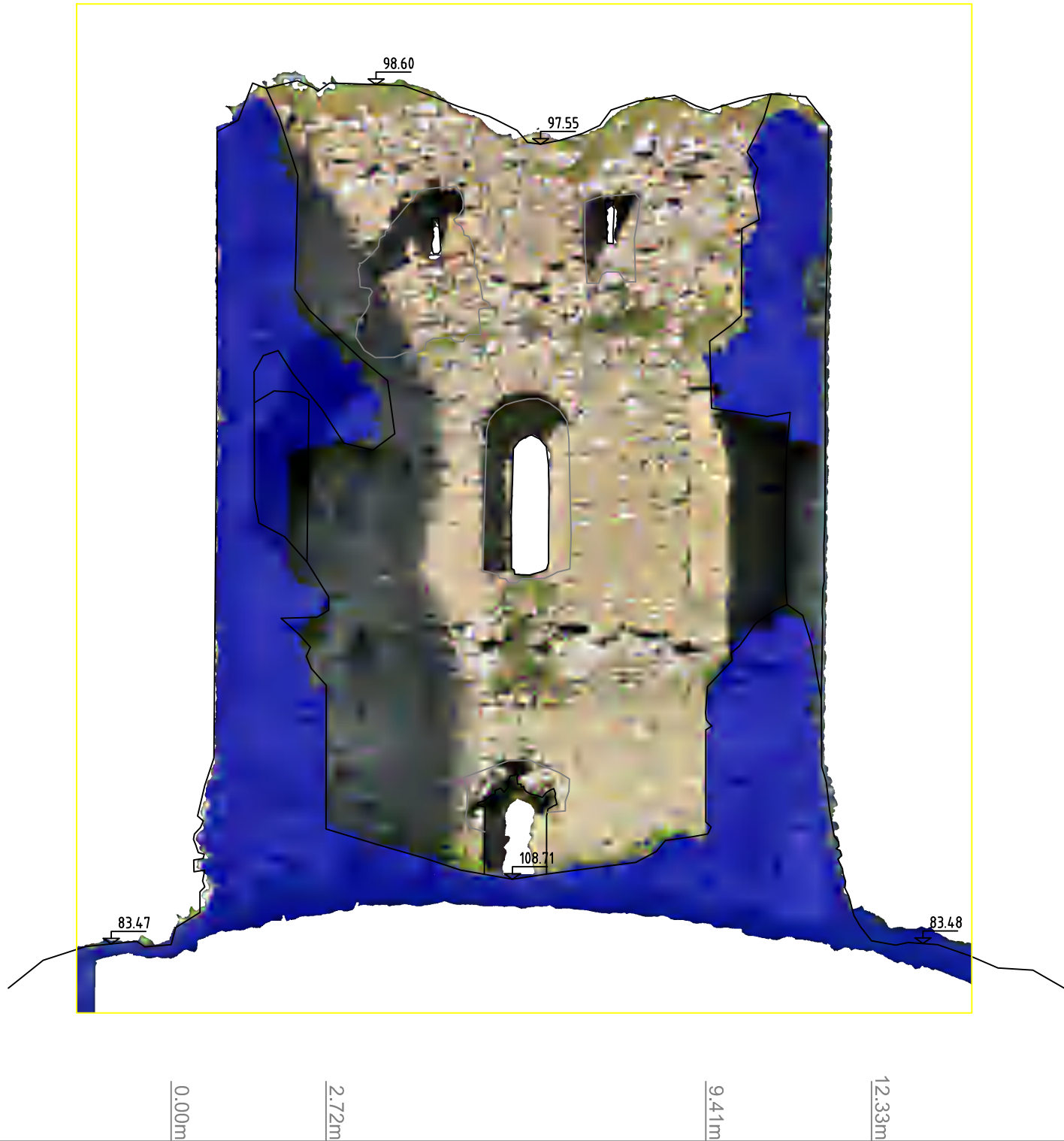
Client: Aegis	Survey Type: MBS	Drawing No: (5)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Geo Spatial Solutions: | Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions



KG24314_Elevation_6.tiff



Elevation 6 Datum : 80.00m

LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



KGSS
Geo Spatial Solutions:

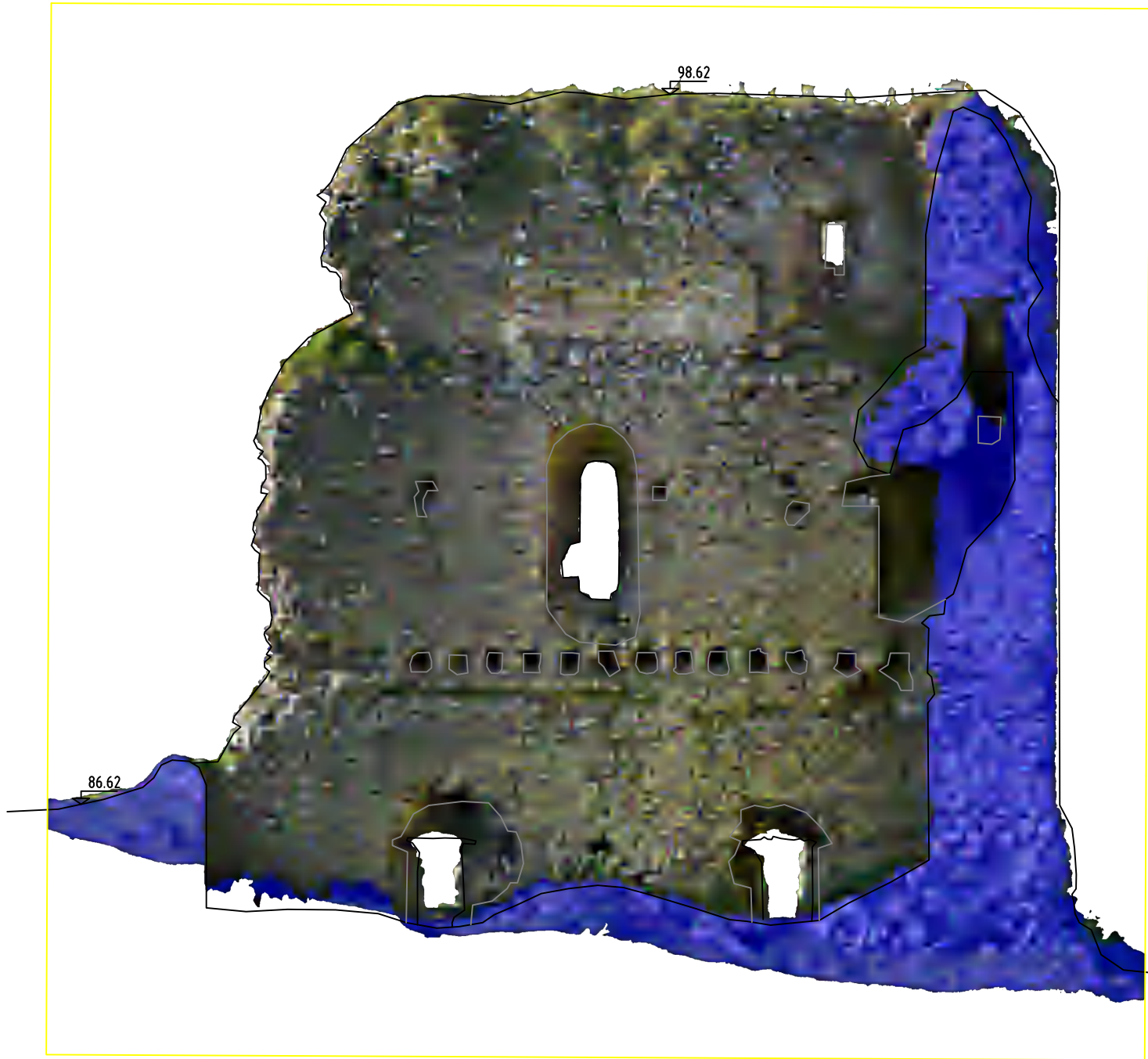
Client: Aegis	Survey Type: MBS	Drawing No: (6)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Geo Spatial Solutions: Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions



KG24314_Elevation_7.tiff



0.00m

12.21m

15.50m

Elevation 7 Datum : 80.00m

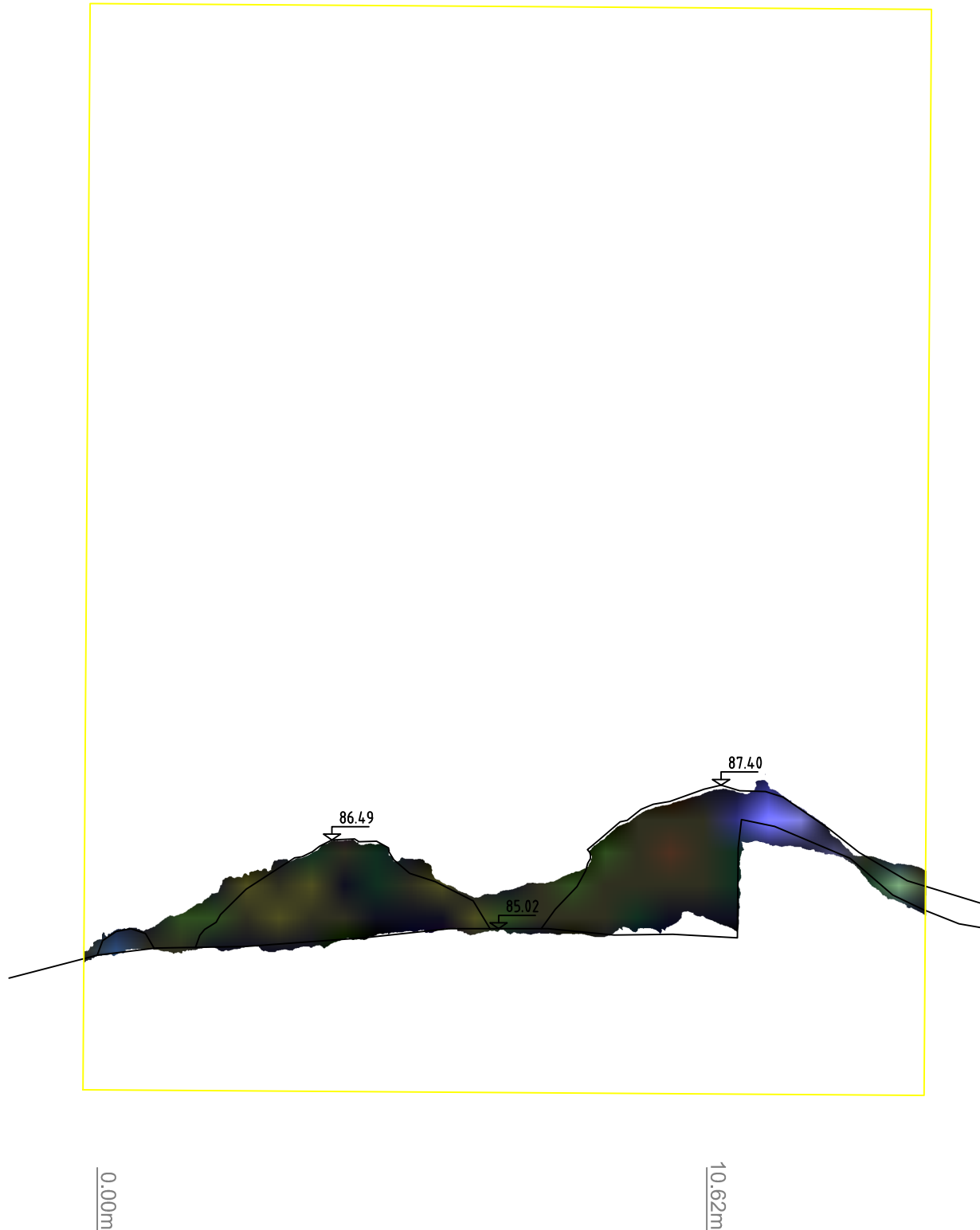
LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



Client: Aegis	Survey Type: MBS	Drawing No: (7)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.



KG24314_Elevation_8.tiff



Elevation 8 Datum : 80.00m

LEGEND :			
Survey Point		Manhole (General)	
Contour		Storm Water	
Fencing		Foul Water	
Gate		Access Junction	
Building / Structure		Sluice Valve	
Wall		Fire hydrant	
Road Edge		Water Meter	
Kerbed Road		Telecom Pole	
Path / Track		ESB Pole	
Banking / Drain		Lamp Post	
Detail		Overhead ESB	
Overhead Detail		Overhead Telecom	
Vegetation		Survey Point Level	100.00
Tree Trunk		Roof / Wall Level	200.00
Tree Spread		Digitised OSI data:	
		Folio Setout:	
		Setout Coordinate	
		Window	
		Door	
		Structural H Beam	



Client: Aegis	Survey Type: MBS	Drawing No: (8)	Project No. KG24314	Project Location: Moylough Castle, Co. Galway		
Horizontal Datum: ITM IRENET95 / EPSG: 2157	Level Datum: OSGM15	Scale: 1:100 A3	Surveyed By: RE	Survey Finish Date: 19/09/2024	Drafted By: RE	Issue Date: 25/09/2024
Survey Notes: - This survey was drafted from point cloud derived by using a Laser Scanner. Reattachment to ITM and OSGM15 datum was undertaken using GPS. - Only visible detail was recorded. - Please report any found anomalies to the KGSS office for rectification.			Modifications		Date	Rev.

Thomas Street, Castlebar, Co. Mayo, Ireland, F23 H978. Tel : +353 (0) 94 901 0103 - Email : info@kgss.ie - Web : www.kgss.ie

Geo Spatial Solutions: Topographic Services | Engineering Surveying | Legal Mapping | Monitoring Solutions