

Archaeological Building investigation

Vallis Salutis a Cistercian Abbey at Baltinglass, County Wicklow, Ireland

written by
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2. RESEARCH AIMS AND METHODOLOGY

2.1 Research Aims

The objective of this archaeological investigation is to produce a permanent, accurate and accessible record of Baltinglass Abbey including architectural drawings and scale photographs, which describe the structure and features of the building, the materials used in its construction and an analysis of the structural changes.

This Level 3 report, as defined by English Heritage (2006:14), has been written as an exercise in practical learning and experience by recording an actual example, “incorporating an account of the origins and development of the site or structure based on an examination of the building itself together with readily available sources”, to develop skills in writing an analytical, as well as descriptive, report whilst considering some of the social, economic or functional significance of the structure (AR7524 2009).

As a learning opportunity Baltinglass Abbey represents a challenging undertaking; it has a history exceeding 850 years and it has been built and rebuilt in numerous phases, most of them undocumented, as socio-economic circumstances or functional use changed.

2.2 Methodology

All aspects of Building Recording were conducted according to the guidelines in ‘Framework and Principles for the Protection of Archaeological Heritage’ and ‘Policy and Guidelines on Archaeological Excavation’ published by the National Monuments Service (NMS 2014) and the architectural plans were produced using the guidelines defined within ‘A Guide to Good Recording Practice’ by English Heritage (2006).

The site was visited seven times between November-2014 and January-2015 (visits during January-2015 were assisted by Róisín Hayter). The site is an active cemetery, as well as a historical monument, and care was taken to avoid disturbing visitors.

Each context was recorded, see Appendix VII, and measured using a Bosch 40m Laser Rangefinder and a horizontal datum was established using both a Mannesmann Laser Spirit Level and a Mannesmann Rotating Laser. Photographs were taken with a Nikon D800 Digital SLR with a GP-1A GPS Unit and Nikon 24-70mm and 70-200mm f/2.8G Prime lens. The images were processed using Adobe Photoshop CS3, with a Graphic Tablet. The elevations were initially sketched (Figure 3), to determine where detail or measurements were missing, and then converted into architectural drawings using Autodesk’s AutoCAD 2014 (Student License) and the horizontal sequence was drawn using Microsoft Visio 2013. This report has been written using ClfA guidelines (2008:16-18).

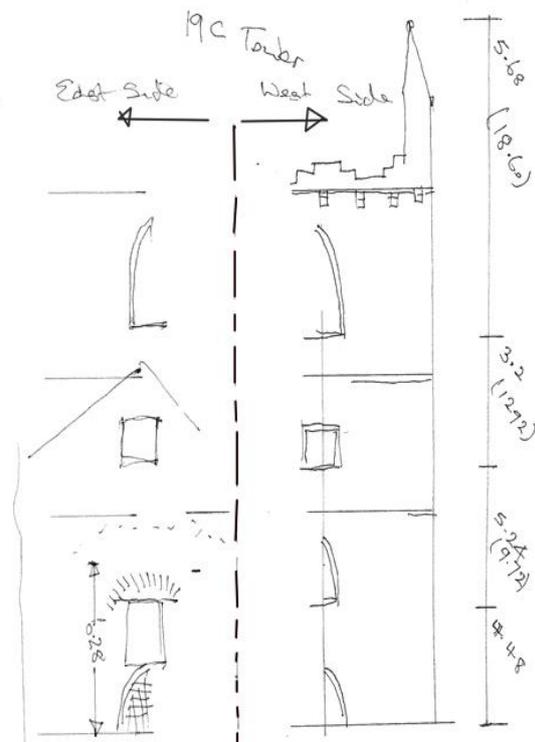


Figure 3: Structural Survey sketch

2.3 Legislation

Before conducting any archaeological research or surveying in Ireland it is advisable to have a good understanding of the legislation relating to historic monuments.

In Ireland registered historic monuments are protected by the National Monuments Service (NMS 2014), which is part of the Department of Arts, Heritage and the Gaeltacht, and maintained by OPW. Any site or building which is a registered monument is protected by an automatic preservation order under the National Monuments Acts 1930 to 2004 (Irish Statue Book 2014). The Acts prohibits, with severe penalties, any interference, including excavation, digging, sampling, restoration or exploitation of any part of the scheduled zone. Metal detectors may only be used if a licence has been issued by the Minister for Arts.

3. HISTORIC BACKGROUND

The historical background of the building can be divided into two major phases; the Cistercian period and the post-Cistercian period.

3.1 Cistercian Period

When the Cistercians created their first Irish monastery during the 1140s they were already a pan-European institution with hundreds of monasteries and which owned vast tracts of land and had thousands of monks and lay bothers. Their arrival, as Duffy wrote (2005:2), was a pivotal event in Irish history.

Shortly after the Cistercian's arrival in Ireland *Diarmait Mac Murchada*, the King of Leinster, a major supporter of the Order, donated land at Baltinglass to establish their second Irish monastery (Stalley 1987:242). Mac Murchada's grant was one of political expediency because it provided a buffer-zone between *Ua Tuathail* demesne lands, in the lordship of Uí Muiredaig, and *Uí Mail* lands in the Wicklow Mountains which they had recently acquired (F. Byrne cited by O'Keefe 1997:53).

Within forty years of the Cistercian's arrival Ireland was partially conquered by the Anglo-Normans. Despite the conquest of Leinster, Baltinglass retained some of its Gaelic identity (Stalley 1987:242) and in the decades following the invasion the Order established a further ten monasteries (Appendix I). Williams (1998:20) believes that the buildings in Gaelic controlled areas were built using predominantly Romanesque architecture and those in Anglo-Norman areas were constructed in the 'Early English' or Gothic style.

The Norman Conquest forced many of the ruling Irish families off of their lands and into the Wicklow Mountains where they began centuries of resistance to Anglo-Norman rule (O'Byrne 2005:18). Baltinglass Abbey, at the foothills of the Wicklow Mountains, was a tempting target for the Irish resistance and the monastery and its lands were frequently raided (Lawlor 2005:394) - see Appendix II for a fuller description. The abbey managed to acquire 2,300 statute acres of land (Glynn and Hadcock 1970:127) but by the end of the fifteenth century Baltinglass, like most other Cistercian abbeys, was desolate and impoverished (Glynn and Hadcock 1970:119).

The abbey's end came in 1536 when it was suppressed on the orders of Henry VIII (White 1943:125-132) and its buildings and land passed into secular ownership.

3.2 Post-Cistercian Period

The monastic confiscations were an opportunity for Henry VIII to redistributed huge tracts of land into the hands of loyal supporters. Baltinglass was granted to the newly created Viscount Baltinglass and this helped to create a buffer zone between The Pale and the Irish rebels (Lyons 2003:43) as well as protecting Dublin's north-south access route (O'Keeffe 1997:53).

The resistance to English rule continued and in 1580, after a period of insurrection, the 3rd Viscount Baltinglass "*broke downe the abbey and howse, and burnt the whole towne, which together with the lands ...*" (Lyons 2003:43) in an attempt to prevent the rebels from using the town or the former abbey's buildings.

At the end of the sixteenth century the abbey and its lands were rented to Captain Francis Stafford and from legal documents, such as 'The Baltinglass Mortgage' (Ball 2007:189-194), the elevation of the family to the title 'Earl of Aldborough' (Woodfall 1831:759-760), and records from the seemingly frequent disputes relating to the Stafford family (PRONI 2007:2-6), we can establish that the same family controlled the site until the 1870s when the title became extinct.

In the early nineteenth century the church was rebuilt, including a neo-Gothic tower, to serve as the Protestant parish church and it remained in use until the 1880s when a new and larger church replaced it (Archiseek 2014).

4. DESCRIPTION OF THE BUILDING

4.1 Summary

The heart of any Cistercian abbey was the claustral range and its architecture, which was austere, was relatively consistent throughout Europe. Their churches were cruciform and flat ended in design (Duffy 2005:2) and the claustral range included dormitories, a kitchen and refectory, latrine and storage areas. The stone built buildings were able to house over eighty people (Stephen of Lexington, during his visitation to Ireland in 1227-1228, wrote that monasteries were restricted to a maximum of 36 monks and 50 lay-brothers (Lexington 1982:159)).

The majority of Baltinglass' labour force was provided by lay-brothers. They were segregated from the monks during religious services and their dormitory, in the west range, was also isolated. Over time their numbers contracted and by the fourteenth century there was no need for zones reserved for their exclusive use (Cassidy-Welch 2008:168-169).

The church, Context-1, is the only surviving standing building from the Baltinglass Abbey (Figure 4). It comprises the presbytery, crossing tower and choir, transepts and chapels and a nave with its southern aisle which is divided by an arcade with arches. Most of the structure was built of uncoursed granite rubble which would have been plastered and whitewashed with slaked lime (so the rubble was not visible). Its arches, windows and doorways were formed from granite ashlar quoins.

The Architectural Plan, Appendix VI, confirms that the east-west length of the church is 55.5 meters and, the probable north-south width is 36.0 meters. The Architectural Section of the building, Appendix VII, confirms that it is not possible to determine the original height of the church.

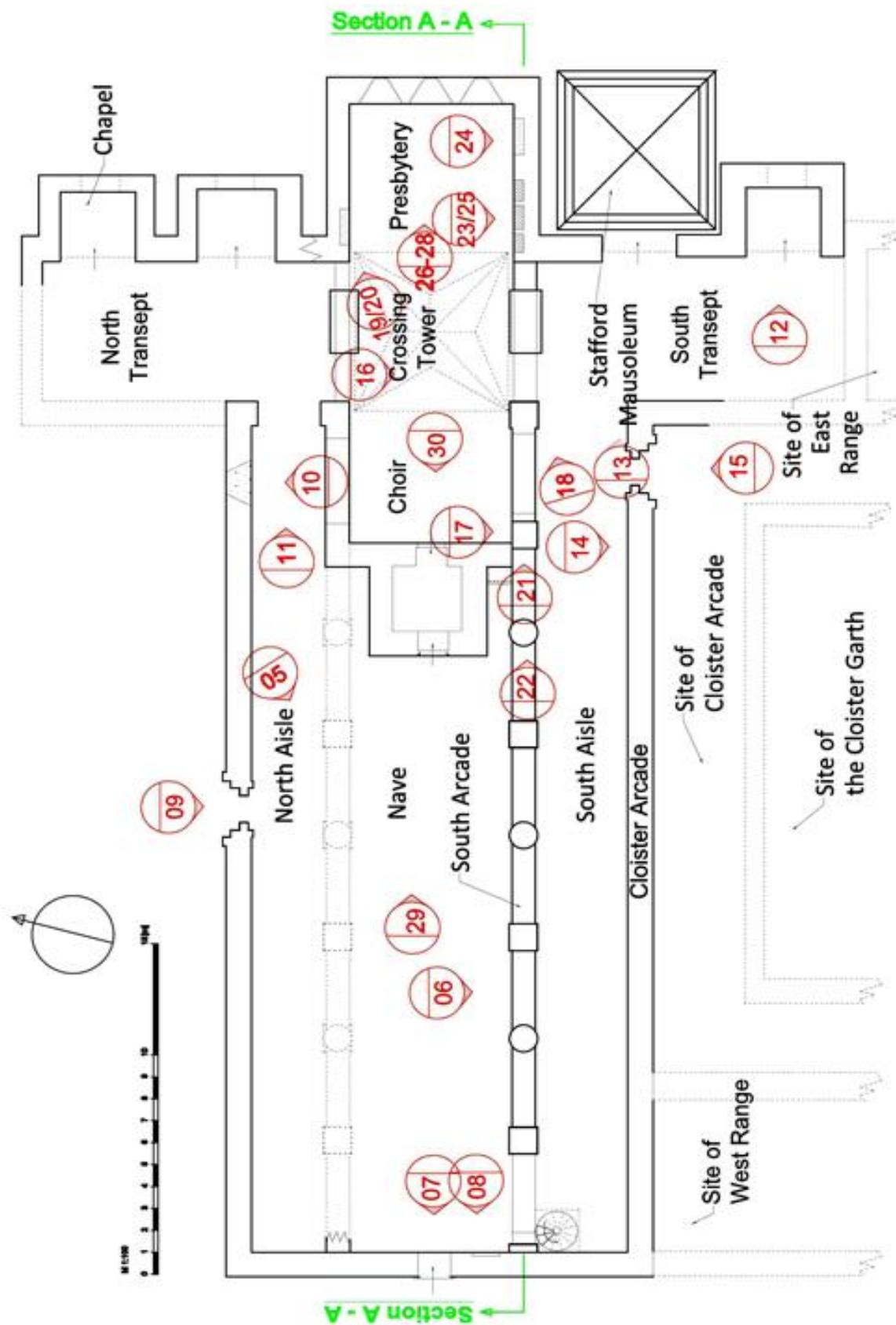


Figure 4: Site Overview and image locations (shown in red)

4.2 Naive, Aisle and Arcade

Today the nave, Context-2 through 20, is a large and open space, approximately 31.5 meters long and 7.1 meters wide, with the remains of an arcade and aisle (Figure 5).



Figure 5: *South-West aspect of the Nave*

The construction phases were dictated by necessity and the availability of human resources and funding; because the arches in the south aisle are very decorative, i.e. non-essential, I suggest that the nave was constructed after the presbytery/choir, during the thirteenth century. The nave is the oldest surviving part of the building. A drawing made by Grose in 1792 (Appendix IV.A) and a 1908 postcard (Appendix IV.C) confirm that its structure was unchanged by the nineteenth century rebuilding phase (except that it was used during the nineteenth and twentieth century for interments, Context-3).

The nave is separated from the abbey's exterior by a low reconstructed wall, Context-4. The south aisle, Context-5, is an open space and its only feature, at its west end, are two steps of a



Figure 6: *Context-12 (Arch)*



Figure 7: *Context-14 (West Door)*



Figure 8: *Context-16 (Blocked Niche)*

reconstructed stairway with a central axis and anticlockwise treads, Context-6, which gave access to an upper space (probably a roof-space rather than a gallery).

The southern arcade, Context-7, separates the nave and aisle and on average it is 8.7 meters high; it has a series of bays constructed as gothic arches. The arches, Context-8 (Figure 6), are approximately 4.7 meters tall and 3.4 meters wide and they are separated by alternate drum and square pillars and a pilaster on its western end. The design of the arches is two-centred, lancet and equilateral; each impost supports a springer and a series of voussoir with a central keystone. The pillar bases and imposts, which are 0.2 meters larger than the pillar, are intricately carved and each has a different pattern. The impost's decorative scheme is either of geometric or vegetal motifs, but the bases have a zoomorphic, probably mythical, figures on each of their corners. Inside each arch, Context-9, is a low screen-wall (0.7 meters high). They are formed from uncoursed rubble and are crudely constructed and unbonded to the pillars; this suggests that they were added during a later building phase and surfaced with plaster/limewash. Directly above each of the pillars, Context-10, are clerestory windows which allowed light into the nave; their location confirms that the aisle roof must have been lower than the windows. The aisle's exterior has a series of regular and evenly spaced putlog holes, Context-11, which suggests an aisle roofline of approximately 8.0 meters.

The nave's west wall, Context-12, is 10.0 meters high and it is the tallest surviving section of the building. It has a lancet window with three lights; the lower parts of the windows have subsided approximately 10 degrees inwards, Context-13. The west door, Context-14 (Figure 7) is constructed from granite blocks with visible flecks of mica. Grogan and Hillery (1993:39) suggest that it dates from the fifteenth century, but Grose's drawing shows a rectangular doorway and, because the neo-gothic tower's doorway is very similar, I feel confident in assigning it to the nineteenth century rebuilding phase. The foundations of the north aisle and its pilaster are visible, Context-15. A blocked feature is visible between the door and south arcade, Context-16 (Figure 8) which possibly held a Piscina for use by lay-brothers (there is a similar niche in the presbytery).

The nave's north wall, Context-17, has been reconstructed and a twentieth century excavation revealed a decorative doorway at its centre (excavation report was not produced (NMA 2015, pers. comm. 05-Jan-2015)). The doorway, Context-18 (Figure 9), gave access from the exterior into the north aisle; Grogan and Hillery (1993:39) wrote that this is unusual for Cistercian churches but visits to the Cistercian Abbeys at Jerpoint and Dunbrody confirm that both of these buildings have similar features. The doorway's lower section is stylistically Early Gothic and it has three deeply recessed pillars, which are carved with either a dogtooth or a vertical quirk moulding, and the surviving element of the middle section jambs have triple base/pilasters. The doorway was probably topped with a semi-circular tympana. The doorway's design seems at odds with the Cistercian's austere designs, but O'Keefe (1997:69) points out that the style is used in other mid-twelfth century Irish Romanesque religious buildings, so this may be related to the master mason rather than a relaxation of Cistercian standards.



Figure 9: Context-18 (North Wall)

The nave's north wall has a blocked window, Context-19 (Figure 10). The window is bounded by quoins which are stylistically similar to those in the presbytery so it may date from the twelfth or thirteenth centuries. It is blocked with uncoursed granite rubble, but there are distinct gaps around its edge. A gothic arch, 4.9 meter high and 2.7 meters wide, Context-20 (Figure 11), is at the western end of the north aisle; it demarks the nave and the northern transept. Its impost, like the arches which support the south aisle, are intricately carved with foliate designs.



Figure 10: *Context-19*
(Blocked Window)



Figure 11: *Context-20*
(North Aisle Arch)

4.3 Transepts, Chapels and Cloister Arcade

The cruciform church has a transept on either side of its presbytery/choir area and both the south and north transepts, Context-21 and 28, have two transeptal chapels. The transept and chapels, Context-21 through 30, were most likely constructed in the twelfth century during the earliest building phase (O'Keeffe 1997:74). The chapels, Context-22, 24, 29 and 30, have been rebuilt from the ground up (possibly during the 1950s) but originally they were mirror images of each other. Their appearance is of pairs of separate chapels which projected from each transept; Roger Stalley suggests that they have a continental influence (1975:365) and my visits to the other Irish Cistercian Abbeys confirm that Baltinglass' design is unique in Ireland. This design would have necessitated that each chapel had a separate gabled roof which attached to the transept's east wall.



Figure 12: *Context-23*
(Chapel Window)



Figure 13: *Context-25*
(Stafford Mausoleum)

The south transept's right most chapel has part of its window frame *in situ*, Context-23 (Figure-12). The window has a two-pointed arch rising from a sill and the jambs are decorated with a quirk. The south transept's left most chapel has been reused for a mausoleum, Context-25 (Figure 13). The pyramidal structure was constructed in 1839 as a burial place for the family of the Earl of Aldborough (Library Ireland 2013). It is 6.9 meters wide, 7.3 meters deep and 7.3

meters high. There is an entrance on the mausoleum's north side and, like the plaque on its front, is empty.



Figure 14: Context-26
(Cloister Arcade)



Figure 15: Context-27
(Cloister Doorway)

The Cloister, which played a central role in the daily-life of the Cistercian monks, only has two partly surviving sections. A fragment of the cloister arcade, Context-26 (Figure 14), has been reconstructed. The colonettes, which are contemporary and formed from concrete, support a trefoiled archivolt. Its location is not its original position; it is placed on the footing of the southern aisle but cloister arcades, which were formed by a series of low arches, were intended to be beyond the cloister gallery. The doorway between the cloister and claustral range, Context-27 (Figure 15), has been reconstructed from excavated blocks. The lower section is similar to the north doorway, but it has a much simpler form with two recessed pillars which are decorated with a thin quirk. The cloister, including its doorway and arcade, would have been part of the abbey's later building phases and Stalley (1987:155) has dated the trefoiled arch to the beginning of the fourteenth century.

4.4 Presbytery, Crossing Tower and Choir

The presbytery and choir, Context-31 through 51, were the religious 'heart' of the abbey; they were built during the twelfth century and it was the first 'zone' to be constructed using stone, Context-31. Many of its structural features were altered both during and after the Cistercian period and this makes its chronology challenging to interpret (O'Keefe 1997:73).

During the fourteenth century (Cassidy-Welch 2008:168-169) lay-brothers were phased out of the convent which removed the need for most of the nave. The church was divided, by inserting a wall, Context-49, at the western end of the choir, and it became a small rectangular space comprising the presbytery, with a tower over a rib-vaulted ceiling, and the choir. At about the same time a tower was constructed above the intersection of the choir/presbytery and the transepts. Its form was probably relatively unchanged by the eighteenth century when it was drawn by Lieutenant Daniel Grose (Appendix IV.A) and described as having "a long ruined chapel, a belfry, and a lofty plain east window." Grose's drawing shows that the transept was a ruin, the west wall had a tall round-topped clerestory window and the west wing had a lower roofline than the original nave (the presbytery's roofline was higher and it seems to be unchanged from its original position).



Figure 16: *Context-32 (South Wall of Presbytery)*



Figure 17: *Context-46 (inserted wall)*



Figure 18: *Context-34 (pillar supporting arch)*



Figure 19: *Context-36 (Column)*



Figure 20: *Carving on column base*



Figure 21: *Upside down section*



Figure 22: *Monitoring rate of bowing/cracking*

The south wall, Context-32 (Figure 16) - produced using digital rectified images - is 20.2 meters wide and 8.5 meters high. It has small areas of concrete cladding, but most of the wall is original. The wall's arcade of arches has been bisected by the inserted west wall, Context-46 (Figure 17); it is unbonded and its construction is of a much lower quality than the previous building phases.

The most prominent feature is the substantial Romanesque arch, Context-35, which spans the space between the choir and the presbytery giving access to the transepts (a very similar arch is extant in the north wall). It is a stilted arch and is 7.8 meter high and 6.4 meters wide and it rises, on its right side, from a substantial pillar which is wider than the other arcade pillars, Context-34 (Figure 18) and on the left side by a column, Context-36 (Figure 19). The pillar's exterior has the stub of an arch, which would have demarked the transition from the nave into the southern transept (see Context-20 for the arch in the north transept). Its base is bulbous and has carved panels with either a floral design, spirals or what O'Keeffe (1997:73) believes is a lion (Figure 20; the column from north wall because south wall's column is obscured).

The structural unit formed by the pillar, column and the arch were clearly altered after the presbytery and nave arcades building phases. The column seems to be unaltered, but the pillar has been constructed from reused blocks and, curiously, the arch does not sit centrally over the pillar and the column. The rebuilding included the next westward arcade pillar; its rebuilding is confirmed by one section of the imposts having been reassembled in its original position, but upside down (Figure 21, highlighted in red). There does not seem to be any dating evidence for this rebuilding phase, but, as its style seems most similar to the first building phase I will, tentatively, determine that it was rebuilt shortly after the twelfth century.

The structural stresses, potentially caused by rebuilding the pillar and arch, have caused a pillar (arcade's pillar closest to the inserted west wall) and the wall it supported to bow outwards (southwards). OPW inserted bracing between the choir/tower walls and the pillar's rate of movement has been monitored since March 1999 using a simple 'mortar dab' (AHG 2010:37) which spans one of the wider cracks (Figure 22).

The presbytery has some of the most elaborate features including, on the south side, a Sedilia, with three seats, and a Piscina; there are also two blocked windows, Context-39 and 44, on each side of the structure.



Figure 23: Context-37 (Sedilia)



Figure 24: Context-38 and 39 (Piscina and window)

The recessed Sedilia, Context-37 (Figure 23), which is 3.1 meters wide, has three granite seats; the seat closest to the altar was intended for the abbot and it is higher above the ground level than the other seats. The trefoil arches are flanked by narrow ogee moldings which are decorated with a series of pyramids and its overall design is common to many of the Irish Cistercian churches. Sections of the molding were repaired using concrete strengthened with an internal iron-reinforcing bar (see the darker sections on Figure 23). This repair has been less than successful, and the iron, now heavily corroded, has been exposed in some areas (Figure 25). Iron-reinforcing was reinvented during the nineteenth century (Russwurm 2003:3) and it is reasonable to conclude that it dates from that period.



Figure 25: Iron-reinforced concrete



Figure 26: Context-42 (Reused block)

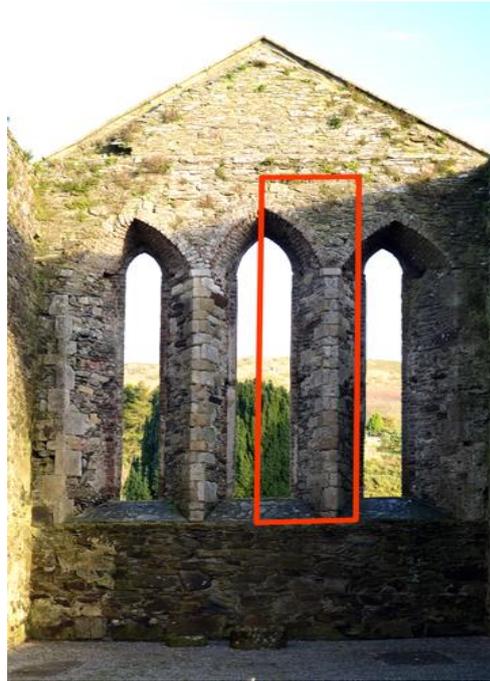


Figure 27: Context-40 (East Wall)

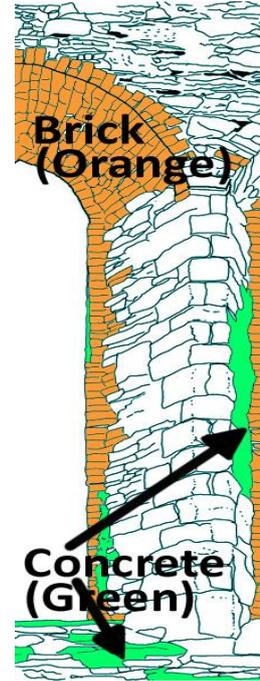


Figure 28: Materials

To the east of the Sedilia is a low Piscina, Context-38 (Figure 24), which is 1.2 meters wide and 0.5 meters high; its base has a scalloped indentation which held holy water used during a mass. Above it, offset to the east, is a blocked window with a rounded top, Context 39 (Figure 24), 2.3 meters high and 0.9 meters wide. It is filled with small uncoursed granite rubble, which is laid irregularly, and the rounded arch is formed from both dressed granite blocks and bricks. There is a second blocked window, on the north wall and further from the east wall, with a similar size, but without the rounded top.

The original east wall, probably, had three low Romanesque windows, but it is evident that the whole wall was rebuilt, Context-40 (Figure 27) - probably during the 1810s when the space was converted into a Protestant parish church. The rebuilt wall, which is not fully bonded to the south wall is 12.4 meters, at its highest point, and 7.3 meters wide and it has three tall lancet windows (Context-41). The wall was rebuilt from uncoursed granite rubble and blocks, but the windows have been formed using bricks and the wall was bonded, and partially clad, using cement - materials that were not available in the twelfth century. See Figure 28 for the placement of bricks and cement in one subsection of the wall. Cement was not commonly used in Ireland until the nineteenth century (ICS 2014) and before this lime was used to make mortar (English Heritage 2011). At least two of the blocks were carved decoratively which

confirmed that they originated elsewhere, Context-42 (Figure 26) - they have the appearance of a shallow block from the lower part of a jamb decorated with a narrow quirk.

4.5 Parish Church

In the early nineteenth century, the presbytery, crossing tower and choir were converted into the local Protestant parish church, with a new Neo-Gothic bell tower, Context-52 through 58 (Figure 29, west exterior and Figure 30, interior).



Figure 29: Context-52 (Bell Tower)



Figure 30: Tower on top of wall

Using the abbey's church was not a new concept as the 1540 audit of the monastic possession recorded that "In the precinct, a church, very ruinous, to which the parishioners resort" (Appendix III). The structure's form can be deduced using a painting of its northern aspect (Appendix IV.B); it shows that a rectangular church was made by blocking the open Romanesque arches, glazing the arches to form weather-proof windows and adding a roof.

The tower was constructed of reused uncoursed rubble with granite ashlar quoins; it is 18.6 meter high and, at its base, 5.2 meters wide (its internal space is 3 meters square but it was not possible to determine its height). It has three stepped sections, each slightly smaller than the section below. The distinct sections and windows were formed by pre-manufactured slabs and it is topped with a mock-crenellated parapet. Both the exterior and interior were clad with cement (much of which has now been removed). The tower is stylistically similar to a number of other towers in the Baltinglass including a modest structure in the Catholic graveyard (Figure 31, left) and a more ornate structure which is integral to Saint Joseph's Church (Figure 31, right).

The builders reused much of the original structure; this may have been a matter of economy, to minimize the effort and materials required, or conceivably as a strategy to preserve as much of the fabric as possible.

Its east-most wall was added over the apex of Context-46 (Figure 32.A). The structure's roof line can be determined from the earthenware tiles which probably directed rain



Figure 31: Towers in Baltinglass

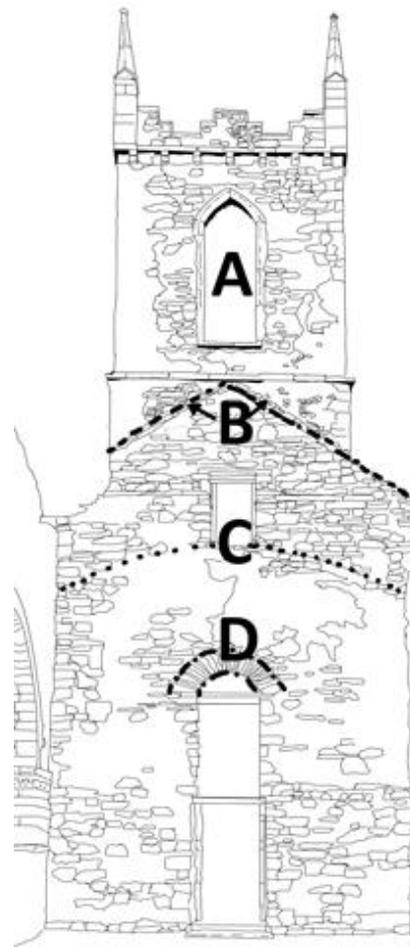


Figure 32: Tower features

into lead flashed channels (Figure 32.B). A curved layer of blocks, (Figure 32.C), which have evidence of painted plaster, must have formed part of the parish church's internal features (possibly a gallery above its nave). The presbytery's inserted west wall and a crudely formed doorway/window (Figure 32.D) have been fashioned by reusing the "lofty plain east window", described by Daniel Grose (Appendix IV.A).

5. DOCUMENTARY RESEARCH

Baltinglass Abbey, like many structures of this period, has limited surviving historical documentation but what does exist can be used, like a patchwork, to form a 'picture of the human factors which resulted in the building's life-cycle.

The abbey, its lands and convent, like most other monastic and post-monastic estates, were recorded in annals, such as those translated by Séamus Ó hInnse (1947), the visitations recorded by Stephen of Lexington in the thirteenth century (Lexington 1982), Cistercian taxes recorded in *Secundum Registrum monasteriorum ordinis Cisterciensis* (Johnsen and King 1979), wills and deeds and also the documents describing legal disputes - such those relating to a seventeenth century dispute known as 'The Baltinglass Mortgage' (Ball 2007). Few of the original Irish Chancery Rolls survived into the twentieth century and these were destroyed in 1922 when the Public Records Office was destroyed by an explosion (TCD 2012).

Many of the surviving historic documents can only provide an interesting historical background, rather than descriptive text which helps to decipher the extant standing buildings, but other documents such as paintings, drawing and photographs (Appendix IV) or more contemporary records, such as the plans or accounts relating to the rebuilding of the Protestant parish church have the potential to be more descriptive.

6. DISCUSSION AND ANALYSIS

Baltinglass Abbey, in parts, was built more than eight hundred and fifty years ago and its standing structures, which today have the appearance of a ruined 'Cistercian' cruciform church, are the result of the changing needs of the community which built it, lived in it or used it. Its evolution can be broadly divided into two major phases, the Cistercian period (1148-1538) and the post-Cistercian period, but these are not sufficient to describe the many phases of building and rebuilding.

The building's structure is complex but its visible stratigraphy reveals some of the major and minor building phases which formed the structure as it is today and these have been recorded, interpreted and modelled using a stratigraphic matrix (i.e. a Harris Matrix and stratigraphic sequences (Harris 1989:34-39 and David 1993:167-180)). The matrix of contexts, see Appendix VII: Vertical feature interfaces, is an effective method of ensuring that all of the features are defined, even if they might seem to be unimpressive or irrelevant, and it has allowed the individual contexts to be placed into their relative building phases. In some cases a context can be securely dated using documentation, for example the Stafford Mausoleum and the Protestant parish church, or visible observations, for example contemporary gravestones within the nave.

The architectural plans, see Appendix VI: Architectural Plan and Appendix VII: Architectural Section, have produced two-dimensional ground and elevation plans of the site. Their measurements and elevations have been modelled, using AutoCAD, to produce a reconstruction of the site during its most significant building phases as a series of isometric drawings.

6.1 Phase 1

The initial phase of building and rebuilding was not a single event, but a series of phases which began in the mid twelfth century and continued into the thirteenth century.

The first major phase of building, see Figure 33, can be relatively well understood from the standing buildings – which is supported by the corpus of studies on Cistercian Abbeys. The initial building phase began in the mid twelfth century and, as with all Cistercian establishments, included an oratory (i.e. presbytery/choir) and conventual buildings such as the dormitory, refectory and guest quarters (Burton and Kerr 2011:54-65). Very little of the transepts or their chapels survive for comparison, but it is probable that they were built at the same time as the presbytery/choir during a single multi-decade building phase. They were built using a style that Stalley (1987:79-80) described as 'Burgundian' and which included the protruding chapels and wide Romanesque arches.

The Cistercian Order (Fergusson 1970:211) expressly prohibited towers in 1157, and again in 1240, saying "Let stone towers with bells not be built nor wooden (towers) of extravagant height (be built) which would mar the simplicity of the Order". It is unclear how the cruciform church's design resolved the central space. My interpretation of the building is that the central space was structurally essential to the cruciform design and that it provided an open and well

lit space which also supported the roofs of the projecting wings. A central tower, probably relatively low and constructed from wood, was not a violation of the Cistercian prohibition but a pragmatic design solution.

The nave and its flanking aisles were probably added during the thirteenth century. This space was primarily used by the lay-brothers and it was not as critical to the Order as an oratory (Burton and Kerr 2011:71) and the decorative carving used on each of the arcade piers is of high quality, but stylistically different from the presbytery/choir which confirms the nave to be a distinct building phase. It is probable that improvements were made within the presbytery/choir; for example, thirteenth century polychromic glazed and slipped tiles were found on the floor of the presbytery (Fanning 1988:101).

6.2 Phase 2

By the end of the High Medieval period the ‘glory days’ of the Cistercian Order had passed and they had become more worldly – effectively Baltinglass’ abbot had become a powerful feudal lord. The convent, which had once comprised of 36 monks and 50 lay-brothers, no longer included lay-brothers and a more pragmatic ‘down-sizing’ of its religious and conventual buildings was the result.

The second major building phase was a fourteenth century redesign of the monastic complex which resulted from of the convent’s changing needs. It is not possible to determine whether the final structure of the building retained the transepts and chapels (Figure 34) or whether they were partially demolished (Figure 35) at the end of the rebuilding phase.

Without the lay-brothers the need for the nave and their accommodation and facilities in the west range ended. The church, as Grogan and Hillery (1993:39) wrote, was formed into an independent unit which was effectively detached from the nave. The overall size of the presbytery/choir was unchanged, so it could still accommodate 36 monks, but a tower with a rib-vaulted ceiling, as drawn and described by Lieutenant Daniel Grose, was built above the structure. The tower was a significant undertaking which demonstrated that the monastery did not contract for purely economic reasons. The tower was constructed using stone and this may have been a stylistic choice or a necessity because by the High Medieval period the widespread exploitation of Irish woodlands

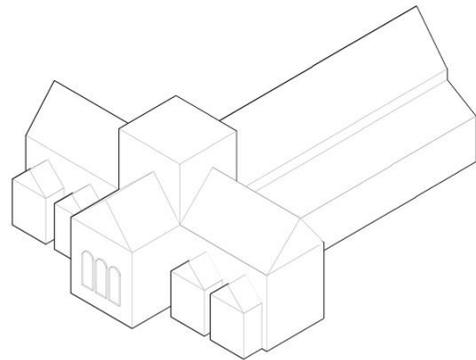


Figure 33: *Building Phase 1*

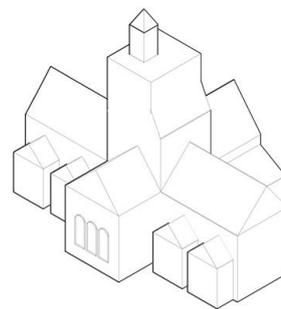


Figure 34: *Building Phase 2 (transept)*

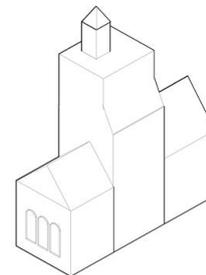


Figure 35: *Building Phase 2 (no transept)*

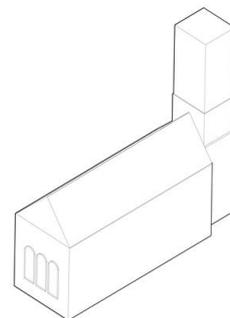


Figure 36: *Building Phase 3*

had outstripped the supply of timber (Little 2014); for example, the forest of Glendalough (in the Wicklow Mountains to the east of Baltinglass) was deforested by 1229.

The transepts and chapels have been reconstructed from their foundations, with the exception of parts of the north transept's western wall, so at some time they fell out of use and were either partially demolished or became ruined. My interpretation, using the survey of the standing building and an analysis of the structural implication of demolishing the supporting transepts, is that the transepts, and probably the chapels, were retained, as Figure 34 shows, rather than being demolished as Figure 35 shows.

6.3 Phase 3

The third and final major building phase was the nineteenth century conversion of the surviving building into a Protestant parish church with a neo-gothic bell tower (Figure 36).

The period between the dissolution of the monastery, in 1538, and its rebuilding as a church in 1815 are unclear. Historical documentation recorded that it was slighted in 1580 by the 3rd Viscount Baltinglass to deny its use to rebels during one of the protracted periods of conflict against the Anglo-Norman establishment (see Appendix II). The Stafford Mausoleum was built in 1839, as a tomb for the family of the Earl of Aldborough, so the church must have been in use at this time and it is possible that the site had been used as a community church even before the dissolution.

A 1908 post-card proved that the structure was in a ruinous condition shortly after the church fell out of use during the 1880s. Today the surviving element of the monastic church and parish church have been reformed as a ruin by OPW.

7. CONCLUSIONS

The Cistercian Order founded over thirty monasteries in Ireland during the High Medieval period and each had an effect on its locality and their collective impact on the medieval Ireland's the socio-economic environment was significant.

The Cistercian Abbey at Baltinglass is a registered historic monument protected by the National Monuments Service and maintained by the Office of Public Works. There are few historical documents relating to the abbey but a wealth of information can be determined from the surviving standing buildings. The building has been used for different purposes during its history and some of these can be determined from phases of redesign and rebuilding. The building survey has clearly identified the Cistercian's use of the building, its reuse as a Protestant parish church and its return to a historical ruin but its use during the post-Cistercian period is less visible.

The objective of this report was to produce a record of Baltinglass Abbey which is permanent, accurate and accessible which utilized architectural drawings and scale photographs. It records the structure and features of the building, the materials used as well as an analysis of its building phases through its 850 year history.

In Ireland only two of the Cistercian abbeys have been studied to any significant level; 1) Tintern was extensively studied between 1982 and 2007 while it was being reverted from a dilapidated home to a medieval ruin (Lynch 2010:13, 31) and 2) the southern precinct of Bective had limited excavations conducted between 2009 and 2012 (Stout 2012:13-15). The information produced from these excavations was extensive - although destructive and

expensive in terms of time and money. My building survey of Baltinglass has confirmed that it is an effective and non-destructive tool for archaeological research when an excavation is not possible or practical.

Ideally the building survey would have been combined with a much more extensive programme of research. The areas that I recommend for future activity are 1) study of the Romanesque arches to better understand the motivation for rebuilding, 2) study of the Protestant church history and its place within the local community, 3) a programme of geophysical surveys on the farmlands surrounding the abbey to identify below-ground remains and 4) improved signage explaining its complex history.

8. APPENDICES

8.1 Appendix I: Irish Cistercian Houses

The Cistercian Order established over thirty monasteries in Ireland and it also ‘inherited’ two abbeys from the Savigniac Order (Stalley 2011:138). Baltinglass founded four daughter houses (Monasterevin, Jerpoint, Abbeymahon and Abbeyleix) (Hayter 2014).

Name	County	Founded	Dissolved	Mother House
Erenagh (*)	Down	1127	1177	Savigny, France
St. Mary’s Dublin	Dublin	1139	1539	Savigny, France
Mellifont	Louth	1142	1539	Clairvaux, France (+)
Bective	Meath	1147	1536	Mellifont
Inislounaght (*)	Tipperary	1147-1148	1540	Mellifont
Baltinglass	Wicklow	1148	1536	Mellifont
Boyle	Roscommon	1148	1589	Mellifont
Monasteranenagh	Limerick	1148	1540-1580	Mellifont
Monasterevin (*)	Kildare	1148	1539-1540	Baltinglass
Kilbeggan (*)	Westmeath	1150	1539	Mellifont
Newry (*)	Down	1153	1538-1550	Mellifont
Abbey Dorney	Kerry	1154	1537	Monasteranenagh
Killenny (*)	Kilkenny	1162-1165	1227	Jerpoint
Jerpoint	Kilkenny	1163-1165	1540	Baltinglass
Fermoy (*)	Cork	1170	1539-1541	Inishlounaght (*)
Glanawydan (*)	Waterford	1171-1200	1228	Inishlounaght (*)
Abbeymahon (*)	Cork	1172	1541	Baltinglass
Assaroe (*)	Donegal	1178	1597	Boyle
Midleton (*)	Cork	1179-1180	1573	Monasteranenagh
Holycross	Tipperary	1180	1600	Monasteranenagh
Inch	Down	1180	1541	Furness, England
Dunbrody	Wexford	1182	1536	Furness, England
Kilcooly	Tipperary	1182-1184	1540	Jerpoint
Abbeyleix (*)	Laois	1183-1184	1552	Baltinglass
Abbeyknockmoy	Galway	1190	1542	Boyle
Grey	Down	1193	1541	Holmculttram, England (+)
Corcomroe	Clare	1194-1195	1600+	Inishlounaght (*)
Abington (*)	Limerick	1196	1557	Furness, England
Abbeysrule	Longford	1200	1592	Mellifont
Comber (*)	Down	1200	1543	Furness, England
Tintern de Voto	Wexford	1200	1536	Tintern, England
Duiske	Kilkenny	1202-1204	1536	Stanley, England (+)
Abbeylara	Longford	1210-1204	1540	Furness, England
Macosquin (*)	Londonderry	1218	1600	Morimond, France
Tracton (+)	Cork	1225	1541+	Furness, England
Hore	Tipperary	1272	1540	Mellifont

(*) no extant remains of the abbey exist (+) little remains of the abbey

8.2 Appendix II: March Lands and the Wicklow Mountains

The most dominant physical feature of the province of Leinster are its mountains and these have been an effective fortress and refuge for much of Ireland's history.

Before the Norman Conquest Ireland was divided into over one hundred and fifty Túaths [small kingdoms]. Leinster was controlled by the kings of Uí Dúnlainge, who were Rí Coícids [provincial kings], and they had a number of Rí Tuaithe [minor sub-kings] and Rí Rúires [powerful sub-kings] including the O'Tooles and O'Byrnes (Lawlor 2005:389). During the eleventh century, the region was also partially under the control of Ostmen [descendants of Viking settlers] (O'Byrne 2005:18). The Wicklow Mountains, with its proximity to Dublin and the lowland region to its west [modern County Kildare], is in a strategically influential position but it is predominantly highlands which primarily supports sheep farming, but only 12% of the land, mainly on the coastal littoral, is suitable for cereal crops (AskAboutIreland 2014).

O'Byrne confirmed that the Norman conquest of Leinster forced the O'Tooles and O'Byrnes off of their lands in Kildare and into the Wicklow Mountains and ended the Ostmen (2005:18). These families, along with the McMurroughs, gained control on the highlands (Lawlor 2005:394) and from the 1270s resistance and brigandry against the Anglo-Norman establishment began – and this included the town of Baltinglass, its abbey and the abbey's landholdings. The Anglo-Norman's may have regretted forcing the O'Tooles and O'Byrnes off of their ancestral lands as their contemporary annals refer to the highlands as *Terra Guerre* [land of war] and the lowlands as *Terra Pacis* [land of peace] and the sustained "ethnic tension between the communities of the marches" (O'Byrne 2005:18) resulted in formation of the Pale, an enclave of Anglo-Norman control, centred on Dublin, which diminished over time as their capability to resist Irish attacks eroded.

Baltinglass, at the foothills of the Wicklow Mountains, was an accessible and tempting target for the Irish resistance and Anglo-Norman records say that Baltinglass had to be fortified for its protection in 1275 (Lawlor 2005:394). In the 1320s the O'Toole's leader was described as "*the strong thief, the king's enemy, the burner of the churches, the destroyer of the people*" (O'Byrne 2005:18). Baltinglass Abbey, with its stores of foodstuffs, livestock and horses, would have been a highly attractive target (Lyons 2003:395) and in 1314 the Abbot of Baltinglass was granted permission from the Crown to parley with the rebels to prevent further robberies from the Abbey and to recover stolen goods (Fitzgerald 1906:386-387). The fourteenth century was marked by numerous battles and atrocities as the Anglo-Normans launched unsuccessful expeditions to dislodge the Irish and only by the 1500s a partial peace was maintained by the Anglo-Normans making payments of 'black rents', or bribes, to Wicklow families (O'Byrne 2005:18, Fitzgerald 1906:389).

At the beginning of the sixteenth century, the abbey's estimated value was £76, and it was estimated that in peacetime it would have been £126, and this made it one of the richest abbeys in Ireland (Stalley 1987:242). It was one of the first abbeys to be dissolved in the 1530s and by 1540 an audit of the holdings (White 1943:125-132) recorded that many of the monastery's vills, granges and manors granges had been laid to waste or seized by the Irish rebels (Lyons 2003:43) and that they were granted to loyal supporters of the Anglo-Normans who would provide a defence of the landholdings.

8.3 Appendix III: Post Dissolution Audit of Baltinglass

Abbey of Balkingglas, Extent made at Balkingglas 27 Nov 1540 (White 1943:125-127, with original spellings).

Jurors: Oliver Grace of Rathvile, Brian Oheryn of Balkingglas, Patrick McMurooh of Balkingglas, Dermot McDonaugh of Balkingglas, Oliver Sexe of Taghnoran, David Sexe of Newehouse, John McKays of Carken, John McTegg of Rathbran, Maurice McDermott of Rathbran, Maurice Ryan of Rathbran, Doughe Oinore of Rathbran, Edmund McMorysshe of Litle Graunge, John Ballowe of Barreston and Richard Sex of Knokboyge; true and lawful men of the neighbourhood.

The manor is situated on the borders of County Carlow adjoining Counties Dublin and Kildare, near a river called Slane, between a mountain called Slewdagh Molaghcolen [Tuck Mill Hill] on the east and one called Cyhill [?] on the west, in the district called Omayle inhabited by the Irish Otholes [O'Toole].

In the precinct, a church, very ruinous, to which the parishioners resort, and the rectory of which was appropriated to the monastery. On the site, a castle, a hall with a chamber (*camera*) and a kitchen very ruinous. These buildings unless they are quickly repaired will entirely come to the ground; if repaired, they would be very necessary for the defence and protection of the inhabitants and their goods; their value is nothing above the farmer's requirements.

There is a *curtilage* [land surrounding a dwelling] with stone-walls, in which the beasts belonging to the people of the neighbourhood are kept at night. There are 5 gardens and an orchard, containing 1 acre, for the last 6 years waste. Of the demesne lands, 24 acres arable; of these 8 have long been waste, and the other 16, with a 2 acres mountain pasture and 2 acres wood, are held by William Talon and 4 other inhabitants of the Villa, paying (8.d.) 10s. 8.d. There is a watermill, very ruinous; 8.s. - Total, 18.s. 8.d.

Villa of Balkingglas

4 *messuages* [implies a plot of land, resident and its outbuildings], the tenants of which occupy between them 1½ ploughs and 1½ carts, paying at Christmas 30.s. 'meatmony', (i.e. the value of a carcase of a fat cow) and 24 gallons of beer and 12 cakes for each plough. For each flock of sheep of 7 or more, 1 sheep (12.d.) 6.s., and similarly for pigs, 1 summer pig, (12.d.) 4.s. - when there are less than 7 owned, for each pig and sheep, (1.d.) 2.s.

The tenants will plough in the *demesne* in time of sowing of wheat and of oats, 3 days for each, and in autumn will cart grain to the 'hagard' [farm enclosure for stacking grain, hay, etc.] and wood from the forest, 3 days for each; (4.d. for each plough and cart *per diem*) 12.d. When they have more ploughs they shall pay more.

There are 8 cottagers, paying only works and customs. Each tenant and cottager will weed, in the demesne 1 day, (2.d.) 2.s., and reap in autumn 1day, (2.d.) 2.s. Each owner of 1 milch-cow will give ¼ gallon of butter, and he who has 2 or more cows, ½ gallon, 12.d. Each man brewing beer for sale will give 1 gallon of beer from each brewing, (2.d.) 3.s. 4.d. Each will give a hen at Christmas, (1.d.) 12.d.

The monastery was dissolved 6 May 1536. No goods and chattels came into the hands of the accounting officer save two bells, which remain at the abbey in his custody.

Note: the medieval acres contained at least 4 statute acres

8.4 Appendix IV: Historical images of Baltinglass Abbey



Appendix IV.A: *Drawn by Lieutenant Daniel Grose in 1792 (Grose 1794:Plate 116)*

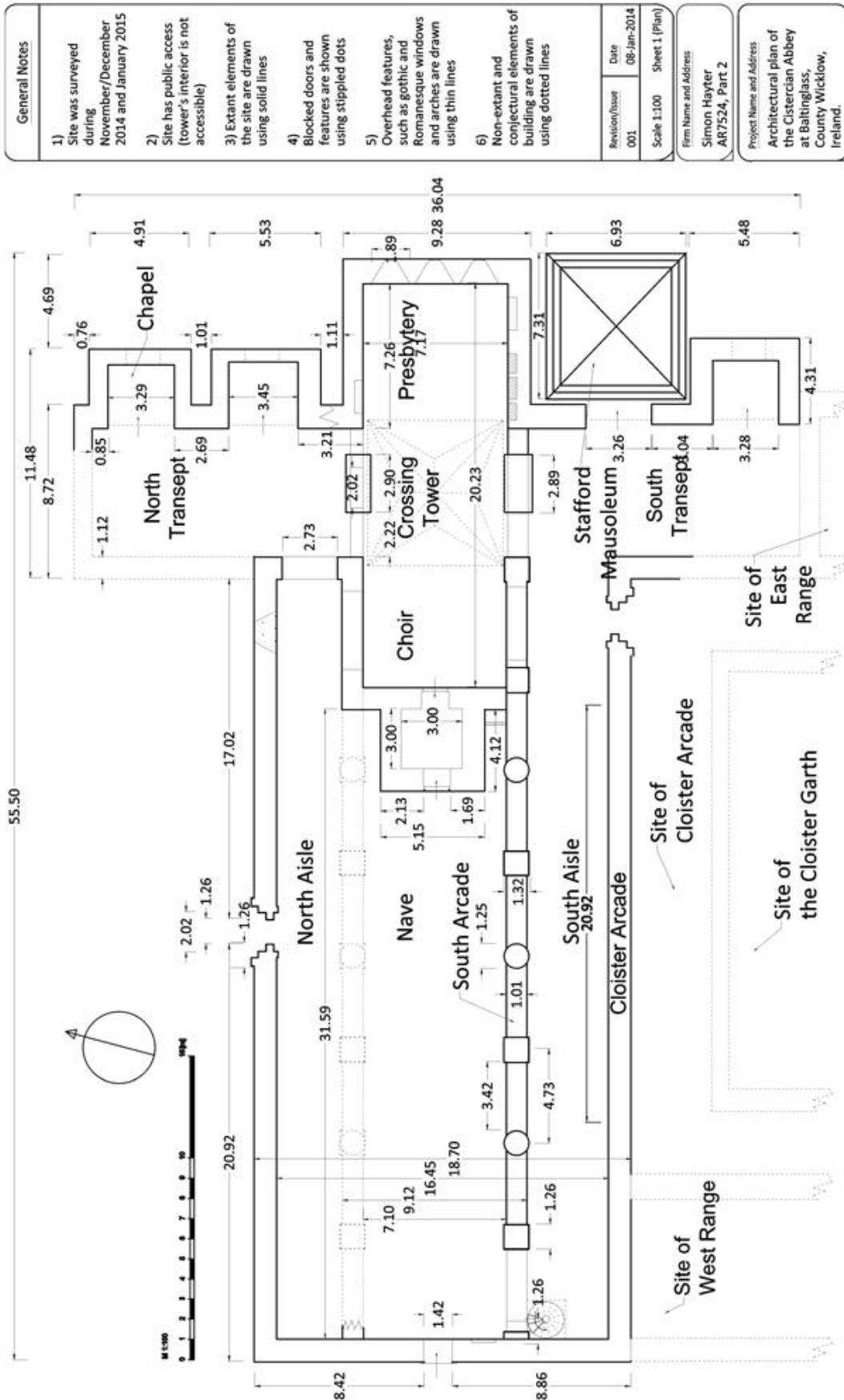


Appendix IV.B: *Oil Painting by B. Watkins, RHA (c.1800) (Fitzgerald 1906:388)*

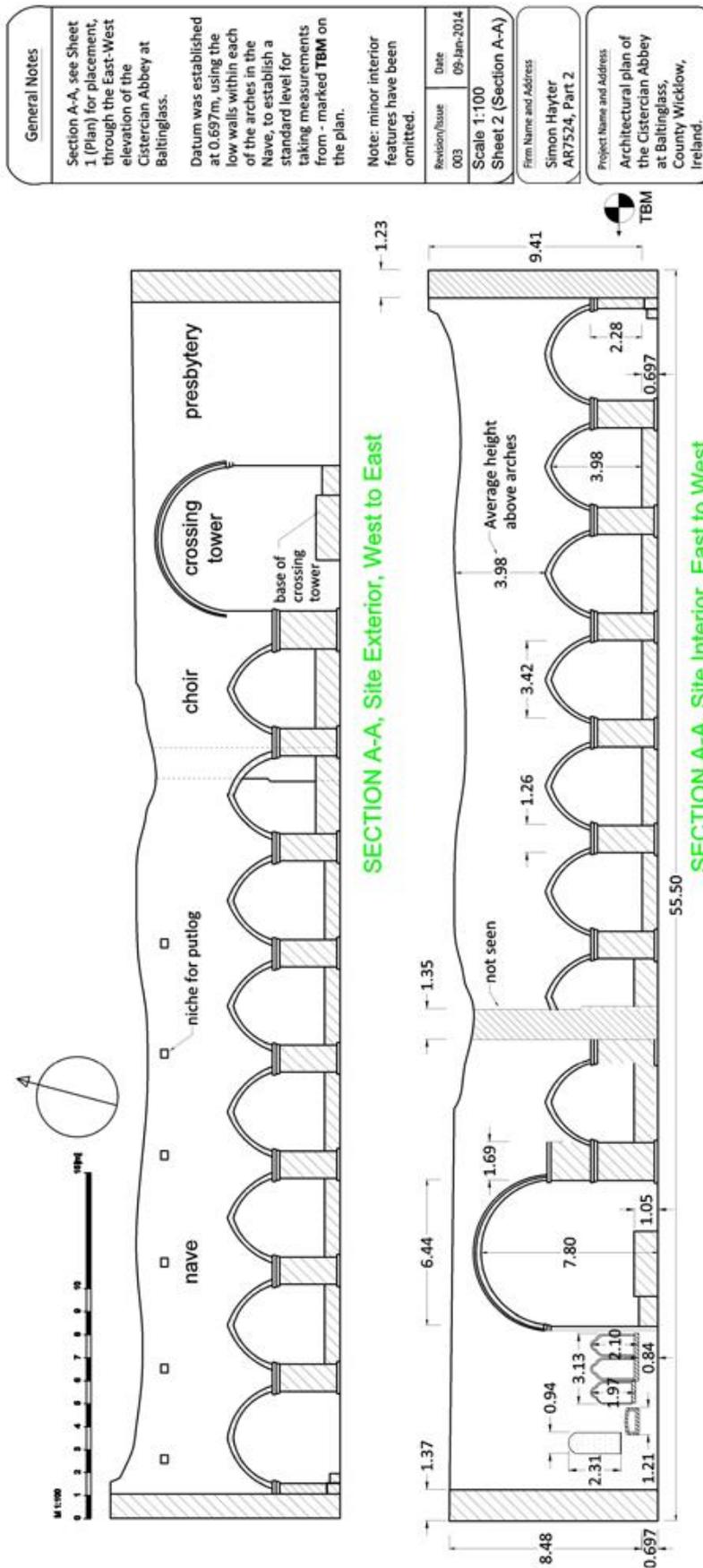


Appendix IV.C: *Postcard of the Abbey, 1908 (Old UK Photos 2014)*

8.5 Appendix V: Architectural Plan



8.6 Appendix VI: Architectural Section



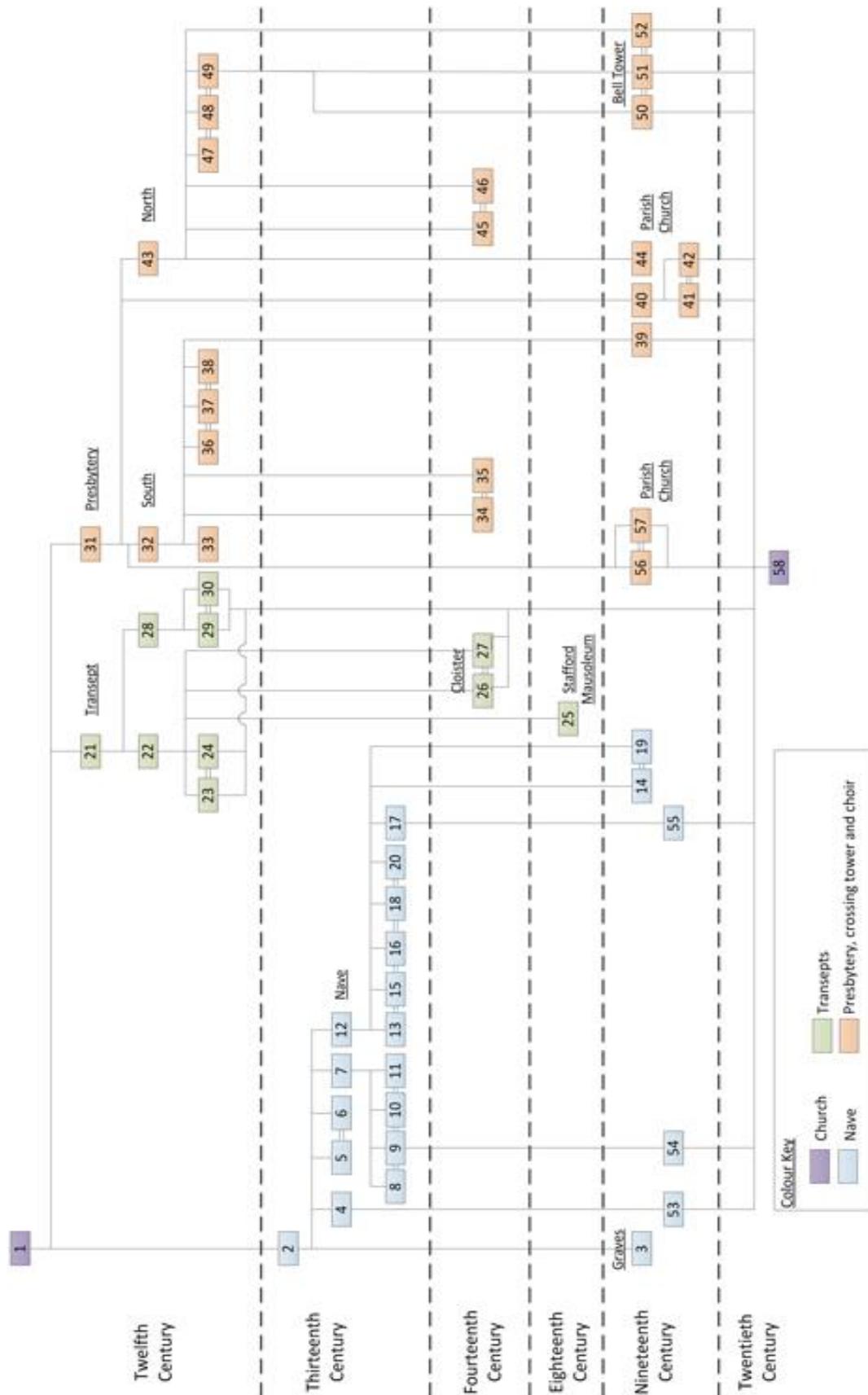
8.7 Appendix VII: Vertical Feature Interfaces

Register of Vertical Feature Interfaces:

Context	Area	Section	Detail
1	Church		
2	Nave		
3	Nave	Graves	
4	Nave	South Wall	
5	Nave	South Aisle	
6	Nave	Circular Stair	
7	Nave	South Arcade	
8	Nave	South Arcade	Arch/Pillar
9	Nave	South Arcade	Low Wall
10	Nave	South Arcade	Window (high)
11	Nave	South Arcade	Putlog holes
12	Nave	West Wall	
13	Nave	West Wall	Widow
14	Nave	West Wall	Door
15	Nave	West Wall	Northern aisle springer
16	Nave	West Wall	Niche
17	Nave	North Wall	
18	Nave	North Wall	Doorway
19	Nave	North Wall	Blocked window
20	Nave	North Wall	Exit
21	Transepts		
22	Transept	South	
23	Transept	South	Left Chapel
24	Transept	South	Right Chapel
25	Transept	South	Stafford Mausoleum
26	Transept	South	Cloister Arcade
27	Transept	South	Cloister Doorway
28	Transept	North	
29	Transept	North	Left Chapel
30	Transept	North	Right Chapel
31	Presbytery		

32	Presbytery	South Wall	
33	Presbytery	South Wall	Arched Window
34	Presbytery	South Wall	Pillar
35	Presbytery	South Wall	Arch
36	Presbytery	South Wall	Column
37	Presbytery	South Wall	Sedilia
38	Presbytery	South Wall	Piscina
39	Presbytery	South Wall	Blocked Window
40	Presbytery	East Wall	
41	Presbytery	East Wall	Windows
42	Presbytery	East Wall	Reused Blocks
43	Presbytery	North Wall	
44	Presbytery	North Wall	Blocked Window
45	Presbytery	North Wall	Column
46	Presbytery	North Wall	Arch
47	Presbytery	North Wall	Column
48	Presbytery	North Wall	Arched Window
49	Presbytery	West Wall	
50	Presbytery	West Wall	Door
51	Presbytery	West Wall	Window
52	Tower		
53	Nave	South Wall	Very low reconstructed
54	Nave	South Arcade	Low Wall reconstructed
55	Nave	North Wall	Low reconstructed
56	Presbytery		Converted into a parish church
57	Transepts		Converted into a parish church
58			Reverted into a ruin

Matrix of Vertical Feature Interfaces



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