St. Bride's Chapel, Lamlash - Consolidation: Archaeological Mitigation

Data Structure Report

by Louise Turner

issued 30th June 2017

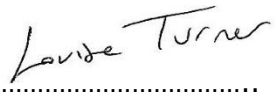
revised 22nd August 2017

on behalf of North Ayrshire Council

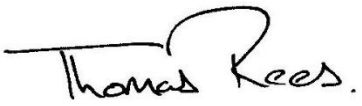
RATHMELL ARCHAEOLOGY LTD

Quality Assurance

This report covers works which have been undertaken in keeping with the issued brief as modified by the agreed programme of works. The report has been prepared in keeping with the guidance of Rathmell Archaeology Limited on the preparation of reports. All works reported on within this document have been undertaken in keeping with the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct.

Signed  Date ……22nd August 2017…

In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:

Checked  Date ……22nd August 2017…

Quality Assurance Data

Author(s)	Dr Louise Turner		
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Commissioning Body	North Ayrshire Council		
Event Name	St. Bride's Chapel, Lamlash - Consolidation		
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Event Date(s)	March-May 2017		
Rathmell Archaeology Code	RA14003	OASIS Ref	rathmell1-288929
Location	United Kingdom : Scotland : North Ayrshire		
NGR	NS 2324 4228	Parish	Kilbride
Designation(s)	Scheduled Monument (6639); Category B Listed Building (7484)		
Canmore IDs	40200 (Chapel, 14th century)		

Contents

Introduction 4
Archaeological and Historical Background 4
Project Works 5
Findings 13
Fabric 1 13
Fabric 2 (South Elevation) 15
Fabric 3 15
Fabric 4 (South and East Elevation (Exterior), South-east Corner) 17
Fabric 5 (North-South Cross Wall, Fragments of North elevation, inner face) 17
Fabric 6 (North-west Corner, Blocked Doorway in South Elevation) 17
Fabric 7 (Adjoining Burial Lair on North Elevation) 18
Fabric 8 (North-west Corner, Blocked Doorway in South Elevation) 18
Mortars & Surface Finishes 18
The Free-Standing Carved stones 23
Discussion 23
Recommendations 25
Conclusion 25
Acknowledgements 26
References 26
Appendix 1: Registers 27
Context Register 27
Photographic Register 29
Appendix 2: Images of Works 37
Appendix 3: Site Plans and Elevations Prior to Works 41
Appendix 4: Initial Phasing 45
Appendix 5: Scheme of Consolidation Works 46
Appendix 6: Discovery & Excavation in Scotland 50
Contact Details 51

Introduction

1. This Data Structure Report has been prepared to present the findings of archaeological monitoring undertaken in support of conservation work upon the fabric of the Scheduled Monument of St. Brides Chapel, Lamlash, Isle of Arran. The chapel is both a Scheduled Monument (SM6639) and a Category B Listed Building (LB7484). As such all consolidation works were subject to a consent process, primary among these being Scheduled Monument Consent as administered by Historic Environment Scotland.

2. On site works were carried out with the aim of leaving the structure as complete as possible: any downtaking and subsequent rebuilding was to be undertaken only where it was absolutely necessary to ensure the long-term future of the monument. Most work involved the raking-out and repointing of masonry across the extent of the structure (interior and exterior), the consolidation of the wallhead and the addition of soft topping across the extent of this wallhead. Four free-standing graveslabs in the east chamber were provided with new supporting brackets, and during this process, the opportunity was also taken to rotate one of these slabs, which had previously been displayed upside-down, to its correct orientation. Finally, all existing ferrous fittings and fixtures (including a gate) were to be removed and replaced with non-ferrous equivalents where appropriate.

3. Archaeological mitigation was required to monitor and record any disturbance to the structure and its underlying sediments occurring during the works and the structure of this was established in the form of a *Written Scheme of Investigation* prior to works commencing (Rees and Turner 2016). Archaeological input also included the provision of specialist advice from an early stage regarding what portions of the masonry were of high significance and this in turn helped inform the impact of any works undertaken. Prior to consolidation works commencing, detailed site inspections were undertaken (both before and after vegetation removal). The result was a baseline survey which allowed an enhanced understanding of the structure itself to be obtained. This in turn allowed the impact made by any proposed downtaking/rebuilding works to be properly evaluated prior to execution, as well as providing a detailed record of the structure as it was prior to consolidation.

4. The consolidation works were commissioned by North Ayrshire Council and undertaken under the terms of Scheduled Monument Consent granted by Historic Environment Scotland on behalf of Scottish Ministers. Historic Environment Scotland provided guidance on the structure of archaeological works appropriate.

5. Rathmell Archaeology Limited was appointed by North Ayrshire Council to undertake the development and implementation of archaeological mitigation works.

Archaeological and Historical Background

6. The Old Parish Church of Saint Bride is a well-known site, much loved by local residents of Lamlash and further afield. First described in detail in MacKenzie's comprehensive summary of Arran's archaeology and history, *The Book of Arran* (McKenzie 1910), the ruined church was also described in Fairhurst's field guide to Arran's archaeology, *Exploring Arran's Past* (Fairhurst 1982).

7. By far the most detailed summary and description of the structure was completed recently by Cowley (Cowley 2011): entitled *The Old Paroch Kirk of Saint Brigide, Isle of Arran*. This A5, self-published pamphlet of 44 pages is entirely devoted to the structure and provides a detailed description of the building's fabric and associated monuments and gravestones. It also presents a comprehensive summary of the building's history and its associations with historical families and personages, in particular the Hamiltons of Brodick who have had close links with the island from the 1500s onwards.

8. It is not the role of this report to re-iterate Cowley's work in any detail, and those wishing to find out more about the site are encouraged either to refer to his publication directly, or to refer to the earlier *Written Scheme of Investigations* produced in connection with these works (Rees and Turner 2016). However, a brief timeline is helpful in understanding how the different building fabrics identified within the structure (described in *Findings* below) might fit in with the church's broad history of use. This is provided below, using information derived from Cowley's work.

9. The parish church of Saint Bridget (or Saint Bride) is first mentioned in documentary sources in 1357, although Cowley makes a strong case for its origins being earlier (Cowley 2001, 35). It was burned, along with Brodick Castle, during a series of tit for tat reprisals between the Scots and the English following the capture of Prince James, Duke of Rothesay (the future James I) by the English in 1406. Following its refurbishment (or rebuilding) after this event, the church continued to be used as a place of worship (though changes to its fabric are evident, probably dating to the post-Reformation period) until the 1770s, when the new Kilbride Parish Church at Lamlash was completed. By 1772, the church was described by Thomas Pennant as being in ruins (Cowley 2001, 43): it then appears to have been consolidated as a burial lair, used in particular as a place where favoured Hamilton estate workers were laid to rest. The ruined church briefly became host to a gravedigger's shelter during the early- to mid-20th century, with a small, brick-built structure inserted for this purpose: this was removed during the course of the current consolidation works.

10. In summary, it was clear from Cowley's detailed work upon the history and development of the structure that the fabric of the church had been subject to repair, consolidation and perhaps even rebuilding on a number of occasions and that the resulting narrative would be very complex. This was reflected in the results of the first site visit (carried out prior to vegetation removal) where a preliminary statement of phasing and significance was prepared by this author in order to inform the on-site works and prioritise which portions of wall fabric should be retained and which might be rebuilt if necessary without jeopardising the significant (i.e. early) portions of the fabric. While the findings and conclusions remain broadly consistent following the works, some revision has occurred through the benefit of greater understanding. In addition, the level of detail has, perhaps understandably, changed, and the revised phasing of the masonry provided in this Data Structure Report reflects this.

Project Works

11. The programme of works began with a preliminary survey which allowed a basic categorisation of the structures into areas of low, moderate and high significance according to the character of the masonry (Turner 2016). It was recognised even at this very early stage that the structure was extremely complex and that any preliminary conclusions were likely to require revision: this situation was exacerbated by the fact that a dense growth of ivy had accumulated over the north wall of the structure, obscuring much of the wallhead and also entirely concealing much of the north-west corner.

12. One of the earliest tasks to be undertaken on-site was the removal of this vegetation, leaving just the major root masses in place. Once this work was completed, the remainder of the baseline survey was carried out. This recorded all elevations, internal and external, to Enhanced Level (as per the ALGAO 2013 guidelines).

13. Detailed elevation drawings were provided by RPP Architects, so the main focus of the survey was on photography. However, at the time of the earlier RPP Architects survey, vegetation growth still obscured key portions of the structure leaving substantial areas unrecorded. These locations also coincided with those areas where the structure was most severely compromised and where the most radical interventions were required in order to ensure its long-term survival. In these circumstances, measured drawings were undertaken in order to create a detailed record of original masonry, even where this had previously been classed as low significance, in those areas where down-taking and rebuilding was to be undertaken. This was particularly relevant in the north-west corner, where a detailed record was made of the newly exposed wall faces on both the internal and external elevations as a precautionary measure. This exercise allowed a revised version of the architects' elevation drawings to be compiled showing the newly-revealed masonry as it was prior to the consolidation and reconstruction of the structure (Figure 1a). It was also possible to perform a detailed re-evaluation of the structure's fabric (Figures 1b and 1c) and it is the data recovered during this exercise which forms the bulk of this report.

14. Much of the on-site work comprised low impact maintenance such as raking-out and repointing. Voids were infilled, and wallheads consolidated, with soft topping added in order

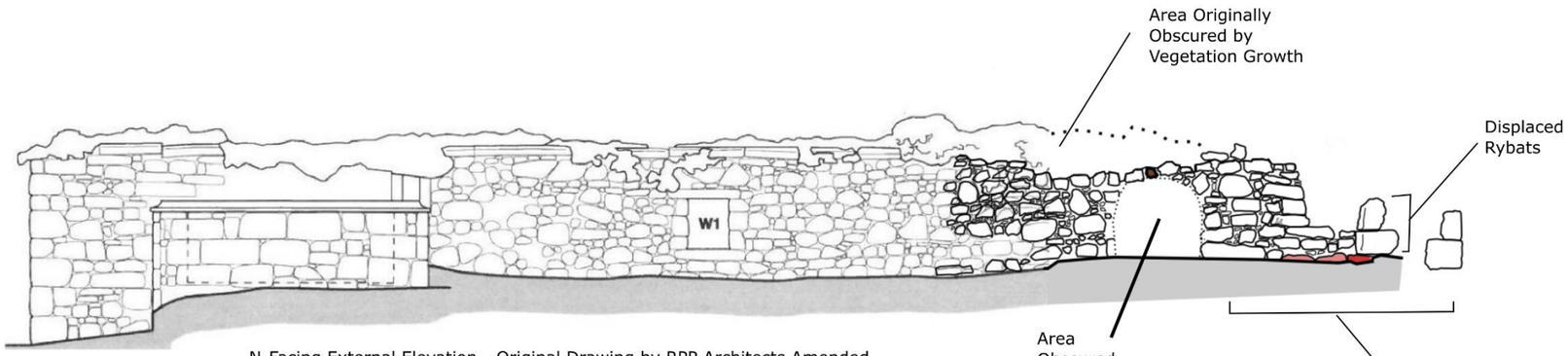
to protect the wall core from water ingress. At the west end of the north wall, however, a more intrusive intervention was required. Over a distance of 2m from the west end, the inner face of the north wall had been pushed out of true by a significant amount (Figure 2a), raising questions as to its structural integrity and hence its long-term viability. The outer face had already collapsed over much of its length in this location: the removal of the tumbled masonry which had accumulated in this area (Figure 2b) revealed an *in situ* rybat with a probable threshold sitting immediately adjacent (Figure 3a). The character of the masonry suggested that this portion of the structure had been rebuilt on perhaps more than one occasion in recent times; on this account, the walling was deemed to be of low significance. A detailed elevation drawing was, nonetheless, undertaken in order to properly record it prior to rebuilding.

15. Posing an equally difficult problem was the root mass of a sycamore tree, mentioned by Cowley in his comprehensive 2011 booklet devoted to the structure. The tree had taken root within the wallhead and its roots had extended down into the wall core, causing distortion of the inner face in particular. The outer face in this location comprised early fabric of high significance and the need to retain as much of this as possible was stressed from the outset. The internal face, however, was of very different character, and so it was agreed that this could be downtaken to as much as three courses above ground level if necessary in order to ensure that as much of the root system was removed as possible to ensure that regrowth would not occur. Thankfully, stabilisation of the external elevation proved successful in this location: only the upper courses, which did not comprise *in situ* early masonry, were removed with the main portion of the wall remaining undisturbed for the duration of the works. It was also possible to retain one of the structure's so-called 'piscina' type features which was located in close proximity to the root mass (Figure 3b): although clearly part of later rebuilding works, its presence in this location plays an important role in the long-term narrative of the structure's occupation and use, and in this respect it was felt that the feature should be retained *in situ* if at all possible.

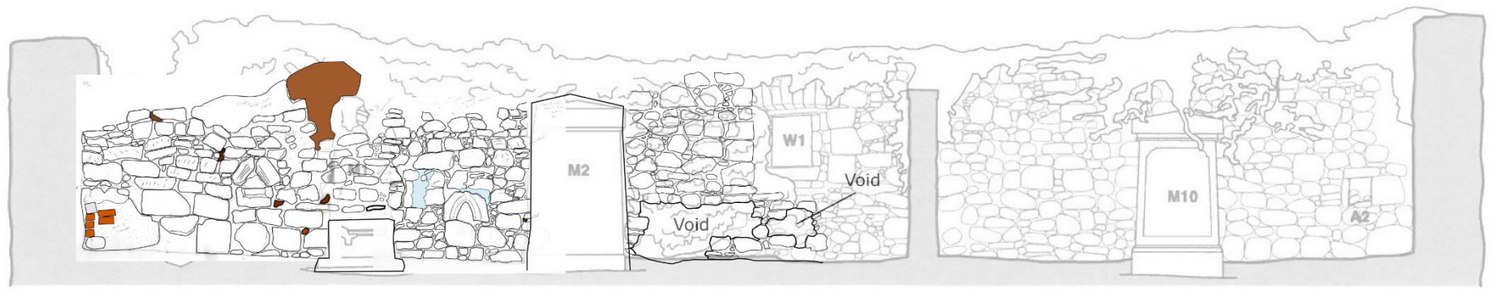
16. The downtaking of the inner wall face did not allow further insight into the construction of the medieval chapel. The wall core had been compromised through tree growth to such an extent that the root mass had expanded throughout the upper portion, with the small stone blocks of the rubble core incorporated into the root mass and the surrounding areas infilled with a matrix of mixed soil and degraded lime mortar or left as a void.

17. The downtaking of the coursed rubble wall at the west end was preceded by the removal of the buttress at its base. Composed of bricks and occasional marble blocks (re-used portions of memorial slabs) set within a mass of concrete 0.7m x 0.4m in extent, this feature had functioned partly as additional support to the walling but also as a means of infilling a large void of similar dimensions which sat in the north-west corner of the elevation at ground floor level (Figure 4a). Some thick roots survived *in situ*, indicating that there had once been a sizeable tree in this location, the growth of which may have played a significant contribution in the distortion of the inner wall face where it abutted the west elevation. The removal of the wall face revealed modern clear bottle glass deep within the wall core, supporting the earlier theory (Turner 2016) that this portion of the wall had been rebuilt in recent times.

18. In the vicinity of the root mass, it was difficult to characterise the masonry which resulted in some uncertainty as to the phasing of this portion of the structure. It lacked coherence: the facing stones had been displaced as a result of the tree growth and any pinning stones dislodged, giving the appearance of random rubble similar to that used in the church's 19th century cross-wall (see *Fabric 5*). The possibility that this portion of the inner wall face had been rebuilt was considered likely from the outset: however, it was only when the facing stones were removed and the tree removed that this could be confirmed archaeologically. In this instance, a range of dateable bottle glass was recovered, the earliest item being the base of a dark green/black wine bottle (possibly hand-blown) of 19th century date, and the latest a clear glass spirits bottle of early-mid 20th century date. The broad date range of this material may indicate that the wall was repaired on more than one occasion, perhaps indicating why the masonry lacked coherence as it reflected repeated and localised attempts at repair rather than part of a broader rebuilding campaign.



N-Facing External Elevation - Original Drawing by RPP Architects Amended to Show (In Bold) In Situ Wall Face Only (Exposed Wall Core & W Wall omitted).



N-Facing Internal Elevation - Original Drawing by RPP Architects AMended to Show (In Bold) In situ Wall Face

Key:

- Tree Root
- In Situ Threshold
- In Situ Rybat
- Brick
- Portland Cement

Client: North Ayrshire Council

Project Name: St. Bride's Chapel, Lamlash

Title: Masonry in North Wall Exposed Following Vegetation Removal

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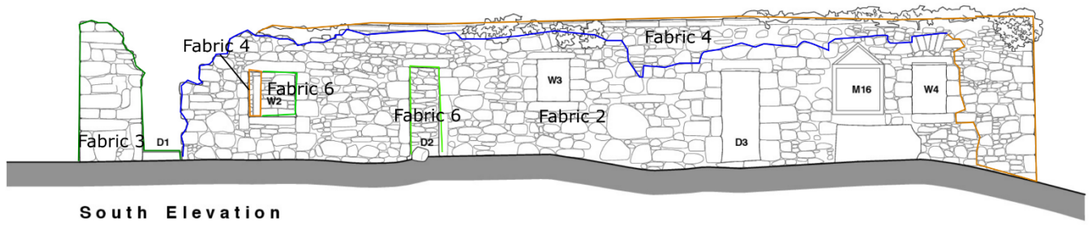
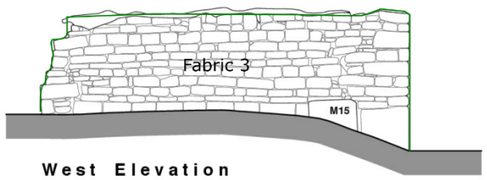
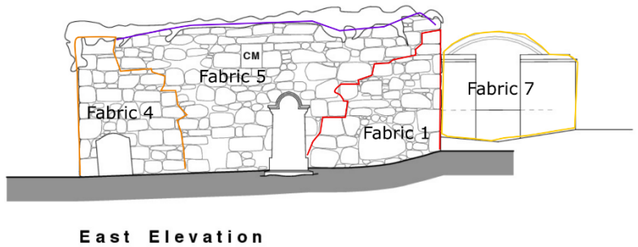
Drawn: CLT Date: 26/06/2017
Checked: TR Sheet: A3

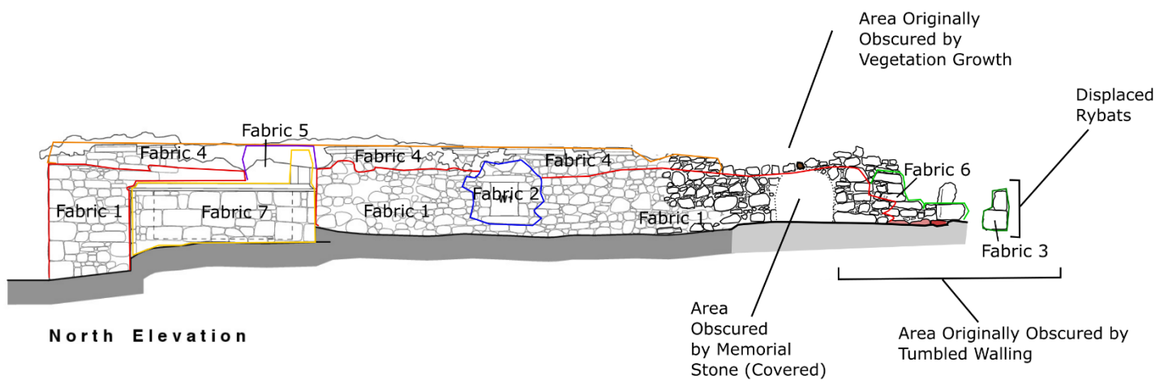
Reference No. RA14003/DSR/1

Figure 1a: Elevation Drawings modified to show Stonework obscured by vegetation









Key:

In Situ Threshold

In Situ Rybat

Client: North Ayrshire Council

Project Name: St. Bride's Chapel, Lamlash

Title: Revised Phasing of External Elevations

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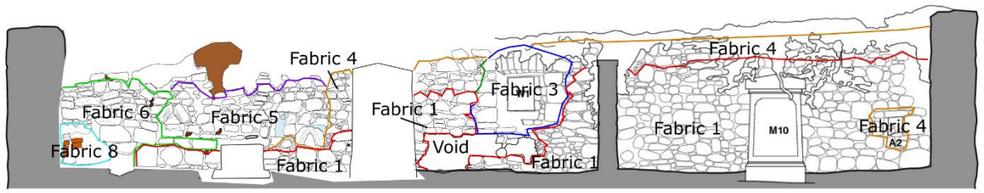
Drawn: CLT Date: 18/08/2017
Checked: TR Sheet: A3

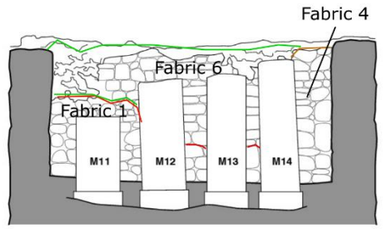
Reference No. RA14003/DSR/1

Figure 1b: Elevation Drawings modified to show Stonework obscured by vegetation

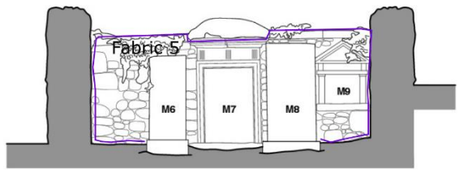


West Chamber (North Wall)

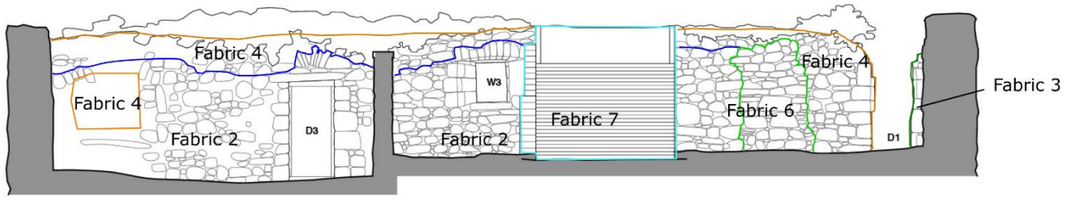
East Chamber (North Wall)



East Chamber (East Wall)

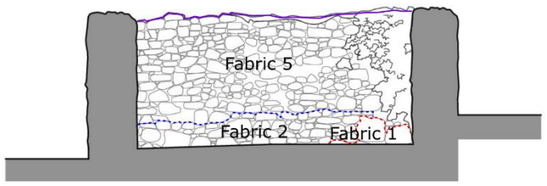


East Chamber (West Wall)

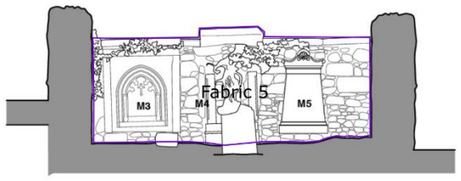


East Chamber (South Wall)

West Chamber (South Wall)



West Chamber (West Wall)



East Chamber (West Wall)

Key:

Tree Root

Brick

(NB. Dashed Lines In Phasing Show Fabric Identification Based on Drawings Only)

Client: North Ayrshire Council

Project Name: St. Bride's Chapel, Lamlash

Title: Revised Fabric Characterisation - Internal Elevations

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Checked: TR Sheet: A3

Reference No. RA14003/DSR/1

Figure 1c: Elevation Drawings modified to show Revised Phasing

Figure 2a: North-west corner (internal elevation) prior to works commencing, with squared rubble repair pushed out of alignment and root masses clearly visible at wallhead

Figure 2b: North-west corner (external elevation) prior to works commencing, with tumbled masonry *in situ*

Figure 3a: North-west corner (external elevation): rubble cleared, threshold stone (broken) revealed in basal course with *in situ* rybat to west (two displaced rybats above)

Figure 3b: North-west corner (internal elevation): works in progress, upper courses removed to reveal substantial portion of root mass

Figure 4a: North-west corner (internal elevation): brick & cement buttress removed to reveal void to rear (former site of tree)

Figure 4b: Interior, South Elevation: Re-used carved stone (?fragmentary cross-slab) within Fabric 6 blocked doorway

19. All works were conducted in accordance with the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Environment Scotland Policy Statement.

Findings

20. The programme of works at St Bride's Chapel, Lamlash allowed a welcome opportunity for a reappraisal of the structure, the complexity of which is attested in part by the church's long and well-documented history, and also, more graphically, perhaps, by the nature of the masonry itself. A casual inspection of the structure reveals marked variation in the stonework, with each external elevation incorporating different styles of masonry, and with the internal elevations often appearing different again. These various fabric types are described below, starting with the earliest ('Fabric 1') and ending with the latest ('Fabric 8').

21. The earliest evidence of ecclesiastical use upon the site comes from a fragment of carved stone, potentially derived from a free-standing cross which would, presumably, once have stood nearby (Figure 4b). This no longer has any coherent role in the structure: rather, it has been incorporated into a doorway which has been blocked at a much later date. Two further early carved stones – now missing - were recorded from the site: Cowley describes them as disc-headed stones, similar to an example from Cumbrae (Cowley 2011, 11)

22. Because the structure is so complex, it is difficult to assign a date range to any of these various styles of masonry with any degree of confidence. However, it is possible to surmise which styles are earlier, and which are later, partly from their relative locations within the structure but also from the techniques employed in construction and the raw materials used. Hence the construction of a chronological narrative of sorts can be attempted (see **Discussion** below). This should not, however, be considered definitive: instead, it should be considered a starting point for further research and detailed study.

Fabric 1

23. The earliest masonry to survive on the site is characterised by unworked or roughly worked blocks of rubble laid in rough courses. The stone employed is very varied in character: unworked blocks of basalt and granite are used in conjunction with roughly worked sandstone, and these are coupled with very thin, sinuous lines of snecking stones which snake their way between the courses, minimising the variation in stone size and helping to create a more level plane for the overlying courses (Figure 5a). Sometimes the individual stones can be extremely large and heavy, measuring up to 0.8 x 0.6m. These larger boulders are often, though not exclusively, placed in the basal or lower courses.

24. The quoins in the north-east corner are thought to be original and there is nothing to suggest otherwise: these are squared red sandstone, believed to have been quarried locally. Their rough appearance and lack of tooling suggests an early origin, though it is possible that the corners have subsequently been rebuilt at some point during the intervening centuries using the original stonework.

25. Fabric 1 survives most extensively in the north elevation, where it can be identified over much of the inner and outer wall faces to a height of around six courses. Repairs and rebuilding works undertaken in the north-west corner have removed most of the evidence for this early fabric in this location, particularly in the inner wall face (in the vicinity of the modern tree root), but the basal course on both sides is likely to be contemporary with this type. Thus, the threshold stone and rybat identified at the west end of the north elevation can be confidently linked with this fabric.

Figure 5a: North Elevation (external elevation, approx. 5-6m east of west end): Fabric 1 in lowermost six courses, showing thin line of snecking stones overlying irregular, unworked blocks

Figure 5b: South Elevation: Fabric 1 in lowermost 3 courses, with Fabric 2 above (excluding wallhead)

Fabric 2 (South Elevation)

26. This particular fabric was one of the most difficult variants to identify and also to comprehend. It was similar in many respects to Fabric 1, making use of unworked rubble blocks of a variety of types and with small stones used as snecking in order to create fairly regular courses. It differed in that the snecking stones formed less coherent lines, with courses disrupted on an infrequent basis through the use of clustered pinnings which often formed a tapered, triangular shape within the masonry (Figure 5b).

27. Similar clustered, tapered pinnings were to be found around the large, rectangular window openings which had been inserted into the fabric during the post-medieval period. This phase also saw the first appearance of blonde sandstone. This was used for the margins of windows and doorways, providing a contrast with the exclusive use of red sandstone noted in Fabric 1. The combined use of both red and blonde sandstone blocks in the rybats of both the blocked doorway in the south elevation and the eastern doorway of this same elevation would perhaps indicate an origin in this later phase. The fact that the wall fabric is very similar to that used in the preceding phase suggests potential re-use of earlier fabric with only limited quantities of blonde sandstone brought into the site for use in the window and door margins.

28. Fabric 2 can be found in the upper courses of both the north and south elevation (courses 6-9), and it survives in both the inner and outer wall faces at the east end of the structure. The fact that it sits above Fabric 1 masonry means, of course, that it must post-date it, but the precise relationship between the two fabric types is difficult to establish.

Fabric 3 (West Elevation)

29. Fabric 3 marks a radical departure from the snecked rubble of mixed composition which characterised Fabrics 1 and 2. It makes use instead of squared, coursed rubble, composed of blonde sandstone laid in even, regular courses without any use of snecking. Pinning stones comprise small pieces of slate, placed within open jointing.

30. The use of open jointing could be used to surmise that this particular style of masonry is of some antiquity and that it may indeed be evidence that – rather than being of later date – it represents a surviving portion of early masonry in a structure which has been largely rebuilt. However, the widespread use of slate within the fabric would argue against this; instead, the open jointing perhaps reflects the fact that this particular type of masonry occurs on those elevations most vulnerable to the effects of wind and rain and that this has resulted in wholesale loss of the mortar.

31. The outer face of the western elevation is entirely composed of Fabric 3 (Figure 6a), including the quoins which mark the wall return with both south and north elevations. The west end of the south elevation continues in this fabric (Figure 6b(, with the doorway at this end incorporated within similar masonry and therefore likely to be contemporary. A carved skewputt still survives at the wallhead on the south side. Unfortunately, the northwest corner is too poorly preserved to allow any understanding of how Fabric 3 fitted into place alongside the earlier Fabric 1: however, the survival of an *in situ* threshold stone and adjacent Fabric 1 rybat to the west suggests that when the northwest corner was rebuilt at this time, elements of an earlier extant doorway were retained and incorporated. We have no way of knowing whether this doorway remained open and in use at this time.

32. It was originally surmised that Fabric 3 was added to a pre-existing wall (potentially comprising Fabric 1), refaced externally in order to provide reinforcement prior to the construction of a bell-cote. As works progressed, however, and the wall became visible in section, a normal cross-section was revealed comprising inner and outer wall faces, plus a central rubble core (reduced to a void in places). The lack of evidence for a multi-phase wall structure indicated instead that the original wall was entirely refaced, internally and externally, or even completely rebuilt, at this time.

33. The inner wall face of the west elevation differs markedly from the outer, being composed of random rubble. This appears similar to the random rubble of Fabric 5, suggesting a late date, but the presence of an internal plaster finish might instead suggest contemporaneity with Fabric 3, despite the fact that it differs so markedly in character.

Figure 6a: West Elevation: masonry in Fabric 3, with slate pinnings clearly visible

Figure 6b: South Elevation, W end: Fabric 3 in doorway

Fabric 4 (South and East Elevation (Exterior), South-east Corner)

34. Fabric 4 varies in its character, to some extent marking a return to the mixed character of the earlier Fabrics 1 and 2. In places, it incorporates the rough, unworked igneous stones and roughly worked sandstone blocks characteristic of the early fabric, while in others, it is dominated by squared blonde sandstone blocks set in courses of varying height. Both of these variants are linked by the fact that the courses are regularly interrupted, through the use of squared sandstone pinning stones set vertically. This creates an effect very similar to the 'galletting' or 'cherrycocking' characteristic of the late 18th or early 19th century.

35. These clusters of pinning stones contrast markedly with the tapering clusters identified in associated with Fabric 2, and their localised presence in the external wall faces of the south and east elevations at the south-east and south-west corners might suggest a very limited episode of rebuilding work undertaken perhaps in response to some structural problem in this location (Figure 7a).

36. Within the church building, amongst areas characterised by the earlier Fabrics 1 and 2 (such as the east end of the inner wall face of the north elevation), similar small squared pinning stones have been set in isolated location. These may again indicate very small scale repair work, perhaps representing attempts to infill voids left by degraded stones. Similarly, the presence of these clustered pinnings in the courses lying immediately beneath the wallhead, with its corniced sandstone coping, might suggest that the addition of this cornice is contemporary with Fabric 4. The reconfiguration of the west window in the south elevation of the west chamber also appears to have been carried out using Fabric 4, indicating that a larger window was reduced in size as part of the works undertaken at this time.

37. The quoins found in association with Fabric 4 comprise roughly squared blocks of red sandstone. These appear to comprise re-used quoins typical of Fabric 1.

Fabric 5 (North-South Cross Wall, Fragments of North elevation, inner face)

38. Fabric 5 is characterised by the use of sandstone, but unlike Fabric Types 3, 4 and 6, the blocks are only very roughly worked, with few squared edges present, the overall arrangement being random rubble, with few pinnings and no snecking courses evident.

39. This fabric is characteristic of the cross-wall subdividing the chapel structure (Fabric 7b). Its unique character, quite unlike any of the other fabrics identified throughout the structures, suggests that it is associated with the wall-mounted memorials of mid-19th century date which have been erected there. It is quite possible that the cross-wall itself occupies the line of an earlier subdividing wall which once separated nave and chancel (now the west and east chambers, respectively) but there is no evidence of early fabric surviving in this particular feature.

40. Similar use of random rubble is evident in the upper courses of the inner wall faces of the north and east elevations, perhaps suggesting that these areas were consolidated or refaced at around the same date. The two alleged 'piscinae' are associated with this fabric: they may have been inserted into the older structure during the works which generated this Fabric type. Neither seem to be original fixtures. A find of 19th century bottle glass within the wall core to the rear of this fabric would again confirm a date contemporary with the memorials.

Fabric 6 (North-west Corner, Blocked Doorway in South Elevation)

41. Like Fabric 3, Fabric 6 makes use of squared sandstone blocks laid in regular courses, creating masonry which on first impressions appears similar in character. However, in Fabric 6, the individual blocks are less neatly squared, with a tendency to be longer and narrower which is reflected in the character of the courses.

42. The most obvious locations where this fabric type is present are the north-west corner (inner and outer wall faces, overlying the basal course which comprises surviving elements of Fabric 1 – see Figure 4a), and the blocked doorway in the south elevation (western doorway of the two located in the western chamber – Figure 8a). Cowley observes that an

early photograph of the church shows a wooden door covering the exterior of the blocked doorway in the south elevation, and suggests that this may have functioned as a storage facility for the gravediggers' equipment, and it is possible that the blocking of the entrance was undertaken in order to create this storage area. The upper courses of the east elevation also appear to be composed of this fabric.

43. Of particular interest amongst this fabric is the relative frequency of carved stones (Figure 8b): one is a fragmentary cross-slab of medieval date, while the others are dominated by crudely carved initials, including 'J S' (outer wall face, north-west corner) and 'AM' (blocked doorway, southern elevation). Another faint carving featuring a polygonal shape can be identified within the fabric of this blocked doorway – this may represent part of a much weathered carved stone (possibly derived from a grave slab) while the initials, which are all very roughly executed, may represent the initials of masons who worked upon the site. It is possible that the two horses' heads noted by Cowley (Cowley 2011, 10), which comprise an incised example located at low level in the north side of the west elevation (outer face), the other carved in relief at the east end of the north elevation (inner face) in an area characterised by Fabric 1 - owe their origins to the same period, with both carvings representing later modifications of existing fabric rather than deliberate insertions.

Fabric 7 (Adjoining Burial Lair on North Elevation)

44. This fabric represents the only use of ashlar – it comprises a low stone wall composed of three regular courses of large rectangular red sandstone blocks up to 0.6 x 0.4m in extent with a worked red sandstone coping with chamfered edges. Some have conjectured that it may represent the remains of a vestry, but the unique style of the fabric and its limited association with 19th century memorials links it firmly with later use of the roofless church as a burial place (Figure 9a).

Fabric 8 (Gravediggers Hut & Localised Infill)

45. The final fabric identified at the chapel is evidenced by the use of brick and Portland cement. The most obvious (and also obtrusive) feature was the gravediggers' hut which originally stood within the western chamber, forming a lean-to against the south elevation. This was removed as part of the consolidation works. The use of Portland cement in various locations around the structure appears to be contemporary with this phase, with graffiti providing a date of '1955.'

46. Perhaps post-dating the Portland cement use, though only by a matter of decades, was the brick-and-concrete buttress in the north-west corner which had infilled an earlier tree hole (Figure 9b). This also incorporated fragments of broken memorial slabs, made of marble.

Mortars & Surface Finishes

47. The removal of facing stones from the inner face of the west end of the north elevation allowed access to the wall core, but due to root action, the interior was very decayed and reduced to a soil infill or even a void in places. Lumps of lime mortar were identified deep within the wall core, and indeed removed, but it was made clear by the presence of bottle glass of both 19th and 20th century date that Fabrics 5 and 6 in particular reflected repairs and/or reconstruction of the wall face at a relatively recent date and that further analysis of the mortars could only be of limited value as the potential date range for this material was so extensive.

48. Traces of a grey external 'sneck' harling were evident at various locations around the external elevation of the church, and were particularly noticeable at the east elevation (Figure 10a). Once again, an early date could not be demonstrated, as the harling was found in association with Fabric 4, making it potentially modern (i.e. post-1770) in date. The same was true of the internal finishes, which were particularly noticeable over the west elevation, where traces of plaster, laid directly onto the masonry, were present. These earlier finishes were left undisturbed wherever possible during the works and can still be readily identified.

Figure 7a: Fabric 4, with re-used fabric (including quoins) combined with vertical pinning stones

Figure 7b: Fabric 5, East Elevation of North-South Cross-Wall

Figure 8a: Fabric 6, Blocked opening (?doorway) in South Elevation

Figure 8b: Fabric 6, Carved stones incorporated into blocked doorway in South Elevation

Figure 9a: Fabric 7, Low Enclosure With Stone Coping which Abuts North Elevation at East end

Figure 9b: Fabric 8, Brick/Concrete Buttress in North-West Corner (note also Portland cement to right of memorial stone.

Figure 10a: East Elevation (External) – Relict Harling on Masonry (Joints Repointed during 2017 consolidation works)

Figure 10b: Base of medieval grave slab, showing incised chevron decoration and rough tooling

The Free-Standing Carved stones

49. Works also included the provision of new supporting brackets for the four carved stones which are currently housed at the east end of the east chamber in the church. One of these, a medieval graveslab which bears an incised decoration of a sword surrounded by foliate decoration, had been displayed upside down, and so efforts were made to rectify this situation.

50. The graveslab's 'top' end, which was to form its base once the object was rotated, revealed a row of five incised chevron-type decorations running along a chamfered edge which ran adjacent to the roughly-finished base (Figure 10b). These features were recorded by photograph and measured sketches, in case the new positioning concealed them. It proved possible, however, to mount the object in such a way that this decoration remaining visible. The re-orientation of the graveslab also revealed that earlier attempts to display the object had resulted in the mutilation of its base to form a projecting tang which could then be slotted into a plinth.

Discussion

51. Eight different fabric types were identified within the chapel structure as a result of the baseline survey. Some are relatively easy to place into chronological sequence (such as the recently added Fabric 8) while others (such as Fabric Types 1 and 2) proved particularly difficult to unravel. Adding to the complexity was the fact that some distinctive areas (such as Fabric 6, in the inner face of the north-west corner) may have been rebuilt on more than one occasion. Indeed, this same area was rebuilt once again during the 2017 works, and as the decades and centuries unfold, no doubt this and other portions of the site will be repaired again.

52. We know that the earliest mention of the chapel dates to the mid-14th century, and so there is a potential for Fabric 1, in particular the basal course, threshold stone and rybat at the west end of the north elevation, to date back to this early phase of use. However, we are also informed by historical records that the church was damaged after 1406 by the English. We do not know the extent of this damage, nor do we know when the rebuilding work took place. It is unlikely that Fabric 2 represents this rebuilding work, as it is associated with features more in keeping with a post-medieval structure. So it may be the case instead that Fabric 1 represents the remnants of 15th century rebuilding work, with the site's earliest phase of use represented only by the fragmentary cross-slab and the two disc-headed stones (now missing) once recorded as being present on the site.

53. While it could be inferred that the fragmentary lancet window which has been re-used as a piscina within the chapel's interior derived from the original medieval chapel building, this seems unlikely: the re-used window moulding is of blonde sandstone, while the quoins and margins associated with early fabric on the site are all of red sandstone, obtained locally. That the fragmentary window derives instead from another ruined medieval church or chapel located elsewhere on the Hamiltons' extensive estates seems more likely, but unfortunately we have no way of establishing its original provenance.

54. It was initially suggested by this author (Turner 2016) that the large windows and doorways were inserted into the church at the time the building fell into disuse and was transformed into a mausoleum. More detailed inspection argues against this, however. The crude finishes of quoins and rybats are not in keeping with a late 18th century structure, suggesting instead a much earlier origin. Fabric 2 clearly post-dates Fabric 1, which underlies it, but at the same time, it shares common attributes with its predecessor, and some of these attributes can also be found in close association with the window and door openings that were formed in the post-medieval or modern period.

55. Looking at the church's layout and configuration, in particular with regards to the number of doorways and the nature of the window openings with their segmental arched openings with splayed embrasures, we can find comparable structures of pre-Reformation date in the wider area. The Collegiate Church of Castle Semple, located just across the Firth of Clyde in Renfrewshire, features large rectangular windows in the nave and chancel, and multiple doorways in north and south elevations, which appear to be part of the original

build of c. 1504. Its fabric also bears some resemblance to that of St Bride's Chapel, Lamlash, in that it is built of coursed rubble with each course interspersed by thin, sinuous lines of snecking. The builders of Castle Semple were at an advantage, however, in that they were able to make use of sandstone (or 'freestone') throughout: hence the Collegiate Church of Castle Semple features more regular courses with squared sandstone blocks throughout, giving an altogether neater, more ordered, appearance. It also shares with the Phase 2 fabric at Lamlash the use of clustered pinnings, something which bears a resemblance to 'proto'-galletting.

56. Despite these similarities in both building fabric and configuration, the two structures are quite different in one respect: the Collegiate Church of Castle Semple combines large, rectangular windows with a robust form of tracery which links the structure firmly into the medieval past. By contrast, St Bride's Chapel has no evidence of tracery, presenting instead an austere impression which is surely more in keeping with post-Reformation thought and methods of worship.

57. It is possible, then, that Fabric 2 represents part of an earlier remodelling which pre-dates the c. 1600 works attributed to the 2nd Marquis of Hamilton. Instead, it may reflect works undertaken during the mid- to late 16th century, perhaps undertaken during the lifetime of the second earl of Arran.

58. This then links Fabric 3 with the 2nd Marquis of Hamilton. This fabric is characterised by the first widespread use of blonde sandstone (indicating use by the Hamiltons of a wider procurement network across Arran and beyond). In addition, we see the first use of slate on the site, the first appearance of which can be linked, Cowley (2011) suggests, with construction works undertaken at Brodick Castle. Part of these works included the re-roofing of the building with slate imported from the mainland: the opportunity may also have been taken to replace the roof of the chapel with slate, with any offcuts used as pinning in contemporary rebuilding works. The presence of slate at low levels within Fabric 3 would thus suggest that the remodelling of the east end, and the construction of bell-cote was undertaken c. 1600 and this would be perfectly in keeping with expectations. The western doorway in the south elevation also dates to this phase – it is, however, unclear whether it occupies the site of an earlier predecessor.

59. Documentary sources suggest that works were undertaken in the church (including the installation of seats) c. 1700 but the building's fabric does not show any evidence of alteration which can be attributed to this period. Instead, it is during the late 18th and early 19th century when we see major changes occurring, when the building ceased to be used as a church (c. 1770) and was remodelled for use as a mausoleum.

60. Fabric 4, with its use of squared blonde sandstone blocks in conjunction with elements derived from Fabrics 1 and 2, and its use of vertical pinnings (also known as galletting or cherry-cocking) has all the characteristics of late 18th or early 19th century masonry, and represents a style of construction entirely different from the random rubble of the cross-wall which is associated with the memorial stones of the 1840s. This fabric is restricted to the south-east corner (interior and exterior wall faces) and also part of the east elevation, which suggests that the church may have already been in a poor condition (a possibility supported by an observation by Thomas Pennant, in 1772, who described the church as being 'in ruins' – see Cowley 2011, 43) with some reconstruction required before it could be re-used as a burial site. The corniced coping stones around the wallhead may also have been added at this time, and there are clusters of squared pinnings underlying this feature which suggest a contemporaneity with Fabric 4, though it is likely this portion of the structure has seen previous efforts at consolidation. Additional changes carried out at this time include the reduction in size of the western window in the south elevation of the western chamber, and the relocation of an earlier, 17th century, memorial slab within the fabric of the eastern external elevation.

61. The earlier appraisal of the structure carried out by this author (Turner 2016) suggested that the addition of doorways and windows may mark the point of transition between its use as a church and its use as a burial place, but a more careful study of the fabric does tend to argue against this possibility. Not only does the masonry associated with the windows and doorways suggest an earlier date, but one of the key aspects of this change

in use – the addition of an internal cross-wall which subdivides the structure into various plots or lairs – represents a different method of construction again and can be dated, by its association with memorial stones, to c. 1840.

62. The random rubble cross-wall may be contemporary with the refacing of portions of the interior wall faces in the eastern and southern elevations (Fabric 5). Here, the fabric lacks coherence, a characteristic which distinguishes it from the other fabric types identified. It is also interesting to note that this fabric type is the one associated most closely with the alleged 'piscinae' features which appear to be later insertions into the structure. The incoherent character of Fabric 5 appears to have been further exacerbated by multiple episodes of rebuilding, a complex history supported by the presence of both 19th century wine bottle glass and a spirit bottle of 20th century date in the wall void to the rear of this fabric type.

63. More striking are the coursed sandstone rubble blocks of Fabric 6 with their associated carved stones. Incorporated into Fabric 6 is a much earlier fragment derived from a free-standing medieval cross-slab, while the remainder of the carved stones comprise crudely incised initials potentially contemporary with the building works. The presence of this graffiti might also suggest that the various horse portraits scattered about the site have their origins in the same period, reflecting, perhaps, the work of a bored mason with a penchant for equines. Fabric 6 was restricted to small-scale repair and consolidation work: the north-west corner of the north wall, the infilling of an earlier doorway, perhaps to create a small storage cupboard for use by the gravediggers, and the consolidation of the wallhead in the east elevation. That both fabrics represent works carried out fairly recently, in the later 19th century, does however seem probable. Fabric 7, representing the only use of ashlar on the site, probably dates to the same period, and is associated with the low enclosure wall of a burial lair abutting the north elevation of the church.

64. The final phase of use is characterised by Fabric 8, which comprises the varied evidence for 20th century activities upon the site. This period included the construction of the brick gravediggers hut and the occasional use of Portland cement which in one instance has been inscribed with the date '1955,' as well as the addition of a crude concrete buttress, which incorporated bricks and broken pieces of memorial stones and was added to help shore up an area of the building in the northwest corner which was compromised as a result of tree growth.

Recommendations

65. During the course of the works described in this report, detailed observations relating to the nature of the building fabric were made which allowed new insights into the structure's history and phasing. While the results of the historic fabric analysis are interesting, they do not significantly alter current levels of knowledge understanding of the monument. As a result, further analysis and publication is deemed unnecessary and hence Rathmell Archaeology Limited recommends that no further work be undertaken. The appropriateness and acceptability of our recommendations rest with Historic Environment Scotland and North Ayrshire Council.

Conclusion

66. Archaeological monitoring works were undertaken during consolidation works undertaken at St Bride's Chapel, Lamlash under Scheduled Monument Consent. The consolidation works included raking-out and repointing, plus consolidation of the wallhead and the removal of trees which had rooted in the wall core. The removal of the root mass resulted in the limited downtaking of masonry, and archaeological input was required both to inform on the likely impact of any proposed works and to record any masonry prior to its removal and reconstruction.

67. The completion of a baseline survey yielded valuable insights into the building and the component fabrics used to construct it. These insights, in turn, were able to contribute to our broader understanding of the structure, though the complexity of the narrative evident within its fabric means that any conclusions presented here must be considered a starting

point for further research and exploration, rather than a definitive summary. The removal of the tree roots was able to take place without disturbing the church's early fabric, and the consolidation works have now been completed and the structure stabilised and made safe for the foreseeable future.

Acknowledgements

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Appendix 1: Registers

Within this appendix are all registers pertaining to works on-site during the watching brief.

Context Register

Context No.	Area/ Trench	Type	Description	Interpretation
001	North, South & East Elevations, Lower Courses only	Structure	Snecked rubble wall composed of roughly worked sandstone or unworked blocks of igneous rock (e.g. basalt, granite) varying in size between 0.1 and 0.9m in length, The courses are unbroken but very uneven, and accompanied by distinctive lines of snecking, which comprise long, sinuous lines of very small stones with occasional clusters of pinnings. Doorway at NW corner is associated with this fabric, with all surviving quoins and margins of roughly dressed red sandstone.	Present in North and South elevations, internal and external, up to a height of 6 courses, with small areas of the East Elevation still surviving at either corner. Only basal courses survive in NW corner, which is entirely rebuilt, including a threshold and a rybat. Absent from W Elevation and SW corner. Known as 'Fabric 1' in text. Potentially 14th century in date, but more likely to be early to mid-15th.
002	North and South Elevations, Upper Courses	Structure	Similar to 001, but the courses are disrupted in places along their length by clusters of tapered pinnings, composed of very small, unworked stones. Window opening in North Elevation and the window and doorway openings in the South Elevation (excluding only doorway in SW corner) appear to be associated with this fabric.	Present in upper courses of North and South Elevations, similar to Fabric 1 but with subtle differences. Reflects rebuilding using original material with additional use of blonde sandstone for dressings. Likely to be of early date (i.e. post-medieval) but difficult to be any more specific than that. Probably Post-Reformation on account of the plain character of the masonry. Known as 'Fabric 2' in text.
003	W Elevation (external), SW Corner	Structure	Squared blonde sandstone blocks set mainly in even, regular courses, open jointed with slate pinnings, even at low level. Quoins and margins of doorway in SW corner are of squared blonde sandstone, and a carved skewputt remains *in situ*.	Represents a complete rebuilding of the west elevation in pre-modern times, perhaps to accommodate the weight of a bell-cote shown in early photographs of the site. Presence of slate can link it with rebuilding works c. 1600 by the 2nd Marquis of Hamilton. Known as 'Fabric 3' in text.
004	SE Corner,	Structure	Squared sandstone blocks up to 0.4 x 0.3m in extent (with earlier fabric	The character of this fabric is similar to

Context No.	Area/ Trench	Type	Description	Interpretation
	Portions of E Elevation (External and Internal)		in the form of unworked igneous rock incorporated) with regular use of vertical pinnings. These give an appearance similar to 'galetting' or 'cherry-cocking.'	that seen in late-18th or early 19th vernacular buildings and an origin in this period can be postulated, perhaps reflecting a need to rebuild the SE corner at the time the church fell into disuse and was rebuilt as a mausoleum. The use of small squared pinnings may also be linked with this phase, including the addition of the corniced coping at the wallhead, and the narrowing of the W window in the W chamber, S Elevation. Its association with the 17th century carved stone on the South elevation suggests that the latter feature may have been moved and set on the external elevation of the church during this phased. Known as 'Fabric 4' in the text.
005	Cross-wall, West Elevation (Internal), Elements of N Elevation (Internal, NW Corner)	Structure	Random Rubble, composed of blonde sandstone set in irregular courses.	The fabric of the cross-wall is composed entirely of this fabric, and is associated with memorials of mid-19th century date. By analogy, similar areas of random rubble are surmised to be contemporary, suggesting that refacing works were carried out in the west and north internal elevations at this time. The presence of 19th century ?handblown bottle glass in the wall core to the rear of this fabric in the north elevation would confirm this date.
006	North Elevation (NW Corner), Blocked Doorway in S Elevation, Upper courses of E Elevation	Structure	Regular courses of blonde sandstone, open-jointed and fairly crude in character. Each block is only roughly squared, and they measure up to 0.6 x 0.3m in extent. The blocks are long, and narrow in shape, contrasting with the more squared appearance of 003, and clearly represent a different phase of building. The three stones bearing incised initials are associated with this fabric.	Forms part of later consolidation works, probably postdating 005 but still likely to originate in the 19th century. The carved initials are very roughly executed, and may have been undertaken prior to the erection of the walling, or this walling may itself have been subject to rebuilding in recent times. The carved horses' heads may originate in this phase. Fabric 6 in

Context No.	Area/ Trench	Type	Description	Interpretation
				text
007	Burial Enclosure Abutting North Elevation	Structure	Ashlar, comprising large (up to 0.6 x 0.4m in extent) blocks of red sandstone with tooled surface (now eroded), laid to a maximum height of 4 courses. The wallhead is capped with chamfered red sandstone coping.	Associated with late 19th century memorials.
008	Gravedigger's hut, Buttress in NW Corner, plus localised evidence elsewhere	Structure	Characterised by use of modern materials, in particular red brick and concrete, and also Portland cement	Used mainly to construct the gravedigger's hut (now removed) but also used in order to provide consolidation in the NW corner, at the former site of a tree stump. Portland cement has been used across the site in localised areas – in one location, the date '1955' was incised, giving an accurate date for its use. Known as Fabric Type 7 in the text.

Photographic Register

Image numbers in bold are shown in Appendix 2

Image No.	Digital	Description	From	Date
001	7125	North Elevation (ext) – W Corner (#1, NW Corner)	NW	01/03/2017
002	7126	As above	N	01/03/2017
003	7127	As above	N	01/03/2017
004	7128	North Elevation (#2, in area of memorial)	N	01/03/2017
005	7129	As above- oblique view towards NW corner	NE	01/03/2017
006	7130	North Elevation (#3, E of memorial)	N	01/03.2017
007	7131	North Elevation (#4, W of Window)	N	01/03.2017
008	7132	North Elevation (#5, Window)	N	01/03/2017

Image No.	Digital	Description	From	Date
009	7133	North Elevation (#5, E of Window)	N	01/03/2017
010	7134	North Elevation (#6, E end)	N	01/03/2017
011	7135	North Elevation, E end – Quoins	N	01/03/2017
012	7136	As above	N	01/03/2017
013	7137	South Elevation (#1, W end)	S	01/03/2017
014	7138	South Elevation (#2, Doorway and Blocked Doorway)	S	01/03/2017
015	7139	South Elevation (#3, Blocked Doorway)	S	01/03/2017
016	7140	South Elevation (#4, Doorway)	S	01/03/2017
017	7141	As above	S	01/03/2017
018	7142	South Elevation (#5)	S	01/03/2017
019	7143	South Elevation (#6. Window & Memorial)	S	01/03/2017
020	7144	South Elevation (#7, Memorial)	S	01/03/2017
021	7145	South Elevation (E End)	SW	01/03/2017
022	7146	North Elevation (Internal) (#1, W end)	S	01/03/2017
023	7147	North Elevation (Internal) (#2, centre, with memorials)	S	01/03/2017
024	7148	North Elevation (Internal) (#3, Window & Cross-Wall)	S	01/03/2017
025	7149	West Elevation (Internal)	E	01/03/2017
026	7150	As above	E	01/03/2017
027	7151	As above	E	01/03/2017
028	7152	North Elevation (Internal) (#4, E of Cross-wall)	S	01/03/2017
029	7153	North Elevation (Internal) (#5, E End, E of Cross-wall)	S	01/03/2017
030	7154	North Elevation (internal) (#6, E End)	S	01/03/2017
031	7155	South Elevation (Internal) (#1, W end)	WNW	01/03/2016

Image No.	Digital	Description	From	Date
032	7156	South Elevation (Internal) (W of Cross Wall, Centre)	N	06/03/2017
033	7157	South Elevation (Internal) (W of Cross Wall)	N	06/03/2017
034	7158	Cross Wall, W Elevation, displaced memorial slab	SW	06/03/2017
035	7159	East Elevation (Internal)	W	06/03/2017
036	7160	South Elevation (Internal), E End	N	06/03/2017
037	7161	South Elevation (Internal), E End	N	06/03/2017
038	7162	Cross-Wall, East Elevation	W	06/03/2017
039	7163	As Above	W	06/03/2017
040	7164	South Elevation (Internal), Carved Stone (Polygonal relief)	N	06/03/2017
041	7165	West Elevation (Exterior) – Work in Progress at S end	W	06/03/2017
042	7166	West Elevation (Exterior) – Centre	W	06/03/2017
043	7167	West Elevation (Exterior) – NW Corner	WNW	06/03/2017
044	7168	North Elevation (Exterior) – NW Corner	N	06/03/2017
045	7169	Section of North Wall (W-facing)	W	06/03/2017
046	7170	Section of West Wall (N-Facing)	N	06/03/2017
047	7171	North Elevation, Displaced Door Jamb at W end	ENE	06/03/2017
048	7172	Carved Stone with initials ?'J.S.'	N	06/03/2017
049	7173	North Elevation (Internal), Shoring Installed	SE	16/03/2017
050	7174	West Elevation (Internal), Repointing Work in Progress	E	16/03/2017
051	7175	North Elevation (External), Shoring Installed	NW	16/03/2017
052	7176	As above	N	16/03/2017
053	7177	NW Corner – loose rybats and rubble removed	N	16/03/2017
054	7178	West Elevation (External) – Working Shot	SW	16/03/2017

Image No.	Digital	Description	From	Date
055	7179	West Elevation (Internal), Working Shot	NE	16/03/2017
056	7180	As Above	NE	16/03/2017
057	7181	North Elevation (Internal), *In Situ* tree root exposed	SW	29/03/2017
058	7182	As above	SE	29/03/2017
059	7183	North Elevation (Internal) – Close-up of *In Situ* Tree Root	S	29/03/2017
060	7184	North Elevation (Internal), W of Cross-Wall	S	29/03/2017
061	7185	South Elevation (External) – E end	S	29/03/2017
062	7186	East Elevation (External) – S End	E	29/03/2017
063	7187	East Elevation (Internal) – S End	W	29/03/2017
064	7188	East Elevation (Internal) – Centre	W	29/03/2017
065	7189	East Elevation (Internal) – W End	W	29/03/2017
066	7190	North Elevation (Internal) – NW Corner, Works Ongoing, Upper Courses Removed to Expose Root Mass	SE	11/04/2017
067	7191	As Above	SSW	11/04/2017
068	7192	As Above, Showing Detail of Masonry to be Removed	S	11/04/2017
069	7193	As Above	S	11/04/2017
070	7194	South Elevation (External), Works Ongoing, SW Corner (Re-pointing Underway)	S	11/04/2017
071	7195	South Elevation (External) (Central Section), Vegetation Cleared, Raking Out Completed	S	11/04/2017
072	7196	South Elevation (External) (East End), Vegetation Cleared, Works Underway	SE	11/04/2017
073	7197	North Elevation (External), NW Corner, Upper Courses Removed to Expose Root Mass	N	11/04/2017
074	7198	East Elevation (Internal) – General View, Repointing in Progress (Working Shot)	W	11/04/2017
075	7199	North Elevation (Internal), NW Corner – Detail of Exposed Root Mass With Masonry Removed	S	20/04/2017
076	7200	As above, shown in broader setting	S	20/04/2017

Image No.	Digital	Description	From	Date
077	7201	As above, Detail	SW	20/04/2017
078	7202	As above, Detail	SE	20/04/2017
079	7203	East Elevation (External) – Close-up of external harling	E	20/04/2017
080	7204	As above	E	20/04/2017
081	7205	North Elevation (External) – Repointing in Progress	NE	20/04/2017
082	7206	North Elevation (External) – Upper Courses Removed, Root Mass exposed (Detail)	N	20/04/2017
083	7207	West Elevation (External) – Steel Reinforcement Visible In Wall Prior to Repointing	W	20/04/2017
084	7208	North Elevation (Internal) – Detail of Exposed Wall Core (& Lime Mortar) in Area of Root Mass	S	20/04/2017
085	7209	North Elevation (Internal) – Close-up of Exposed Root Mass	SW	20/04/2017
086	7909	North Elevation (Internal) – Wall Removed to Full Extent (Down to W Arched Recess)	S	04/05/2017
087	7910	As above, General View	S	04/05/2017
088	7911	As Above, Oblique View	SSW	04/05/2017
089	7912	As Above, Oblique View	SW	04/05/2017
090	7913	North Elevation (Internal), W End, Buttress in NW Corner Removed to Reveal Tree Void	S	04/05/2017
091	7914	As Above, Wider View	S	04/05/2017
092	7915	As Above	S	04/05/2017
093	7916	South Elevation (Internal), Carved Stone 'A M' in Blocked Doorway	N	04/05/2017
094	7917	North Elevation (Internal), Stones Marked Prior to Downtaking	S	04/05/2017
095	7918	North Elevation (Internal), NW Corner – Carved Stone 'J C' in Upper Course	S	04/05/2017
096	7919	North Elevation (Internal), NW Corner – Downtaking in Progress	S	04/05/2017
097	7920	As Above	S	04/05/2017
098	7921	As Above	S	04/05/2017
099	7922	As Above – Downtaking Complete	S	04/05/2017

Image No.	Digital	Description	From	Date
100	7923	As Above	SW	04/05/2017
101	7924	North Elevation (Internal), Looking E Into Wall Section From NW Corner	W	04/05/2017
102	7925	North Elevation (Internal), W End) – Masonry Removed Prior to Removal of Root Mass	S	04/05/2017
103	7926	As Above	SSW	04/05/2017
104	7927	As Above	SW	04/05/2017
105	7928	North Elevation (Internal), NW Corner, After Downtaking	S	04/05/2017
106	7929	North Elevation (External), NW Corner, After Downtaking	N	04/05/2017
107	7930	As Above	NW	04/05/2017
108	7931	General View of Entrance to Cemetery	SE	10/05/2017
109	7932	View of Mortar Preparation Area	-	10/05/2017
110	7933	General View of Chapel	SW	10/05/2017
111	7934	West Elevation & SW Corner (External) – General View (Oblique)	SSW	10/05/2017
112	7935	South Elevation (External) – General View (Oblique)	SW	10/05/2017
113	7936	North Elevation (Internal), E of Cross Wall	SE	10/05/2017
114	7938	Cross-Wall, W Elevation, 19th Century Memorial Undergoing Consolidation	NW/vert	10/05/2017
115	7939	South Elevation (External), Window W of Cross-Wall – Repointing Complete	S	10/05/2017
116	7940	Free-standing Grave Slab in E Chamber – Detail of Brace	NW	10/05/2017
117	7941	As Above, View at Upper Level	N	10/05/2017
118	7942	Free-Standing Grave Slabs (Central & S), General View With Works in Progress	NW	10/05/2017
119	7943	North Elevation (Internal), E Chamber – Detail Showing Carved Horse's Head in Relief	S	10/05/2017
120	7944	South Elevation (External), E End – General View	SW	10/05/2017
121	7945	East Elevation (External) – General View	SSW	10/05/2017
122	7946	North Elevation (External) – W End over modern burial enclosure	N	10/05/2017

Image No.	Digital	Description	From	Date
123	7947	North Elevation (External) – General View, Including Wallhead (Oblique)	NE	10/05/2017
124	7948	North Elevation (External) – Detail in Area of Modern Burial Enclosure	N	10/05/2017
125	7949	North Elevation (External) – General View, E End	NNE	10/05/2017
126	7950	As Above – General View, W End	N	10/05/2017
127	7951	As above	NNW	10/05/2017
128	7952	North Elevation (External), NW Corner – Reconstruction in progress	NE	10/05/2017
129	7953	View of Interior (W Chamber) From NW Corner	NW	10/05/2017
130	7954	North Elevation – View of Wall in Section	W	10/05/2017
131	8267	General View, N Elevation	NW	06/06/2017
132	8269	North Elevation (External) – NW Corner With Rybats Reinstated (4 Courses)	NW	06/06/2017
133	8270	As above	N	06/06/2017
134	8271	Lifting Medieval Grave Slab – Works In Progress in E Chamber	NW	06/06/2017
135	8272	Medieval Grave Slab – Detail of Exposed Base	W	06/06/2017
136	8273	As above	W	06/06/2017
137	8274	As above	W	06/06/2017
138	8275	Lifting Medieval Grave Slab, Works in Progress	WNW	06/06/2017
139	8276	As above	WNW	06/06/2017
140	8277	South Elevation (External) – General View	SW	06/06/2017
141	8278	As above	SW	06/06/2017

Drawing Register

Drawing No.	Sheet No.	Area/ Trench	Drawing Type	Scale	Description	Drawer	Date
001	1	N Wall	Elevation	1:100	N wall, internal elevation, W end	CLT	25/06/15
002	2	N Wall	Elevation	1:100	N wall, internal elevation, area between upright memorials, approximately 5-7m E of W end	CLT	25/06/15
003	3	N Wall	Elevation	1:100	N wall, external elevation, W end	CLT	25/06/15
004	3	N Wall	Section	1:100	Section through walling, N elevation	CLT	25/06/15
005	4	N Wall	Elevation	1:100	N wall, external elevation, 4-8m E of W end	CLT	
006	4	W Wall	Section	1:100	N-Facing Section of W-facing Elevation	CLT	
007	5	N Wall	Elevation	1:100	N wall, internal elevation, E of Memorial #2 to N-S Cross Wall	CLT	
008	5	N Wall	Elevation	-	Measured sketch of area to rear of memorial stone #1	CLT	

Appendix 2: Images of Works

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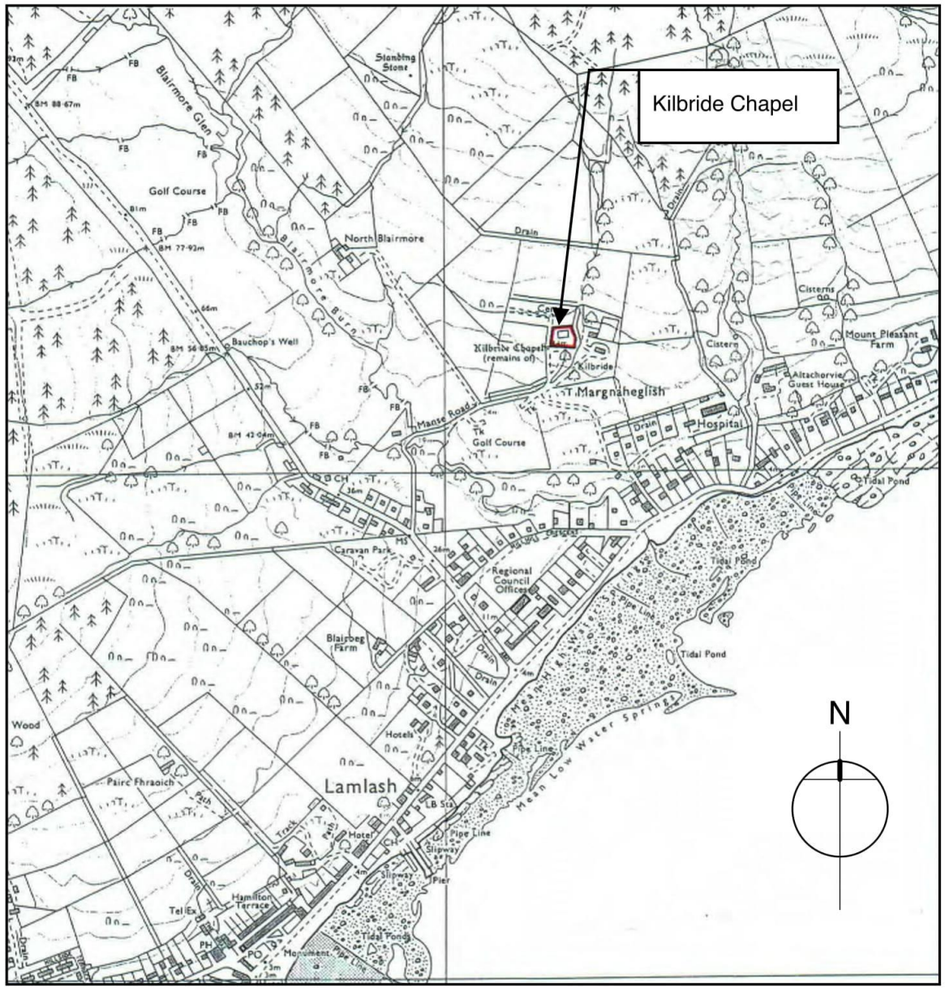
Appendix 3: Site Plans and Elevations Prior to Works

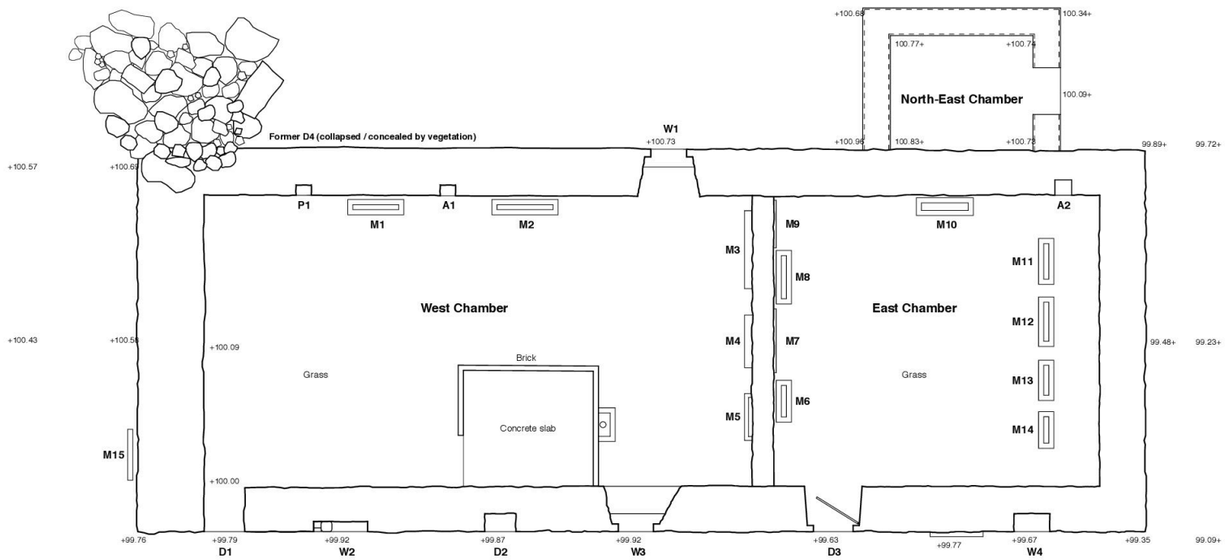
Site Location Plan



Note: Site of application outlined in red

DO NOT SCALE - IF IN DOUBT ASK

ROBERT POTTER & PARTNERS CHARTERED ARCHITECTS & PROJECT MANAGERS	Scale	1:10,000	Saving St Bride's Chapel Arran Group Proposed Consolidation, Repairs & Restoration Work to St Bride's Chapel, Margnaheglish, Lamlash, Isle of Arran.
	Date	July 2016	
7 MILLER ROAD, AYR KA7 2AX TEL. 01292 - 261228 51 NEWALL STREET, DUMFRIES DG1 1LN TEL. 01387 - 255509 87 HANOVER STREET, STRANRAER DG9 7RS TEL. 01776 - 703453 169 ELDERSLIE STREET, GLASGOW G3 7JR TEL. 0141 - 332 9111	Drawn by	PWM	
	Job No.	**7690/LOC**	



Floor Plan

NOTES

DO NOT SCALE DIMENSIONS FROM THIS DRAWING. ALL DIMENSIONS, INCLUDING FIGURED DIMENSIONS, TO BE CHECKED ON SITE PRIOR TO COMMENCING ANY WORKS

North

REVISIONS & ADDITIONS	DATE	BY

PROJECT

Saving St Bride's Chapel Arran Group
Proposed Consolidation, Repairs & Restoration Work to St Bride's Chapel, Margnaheglish, Lamlash, Isle of Arran.

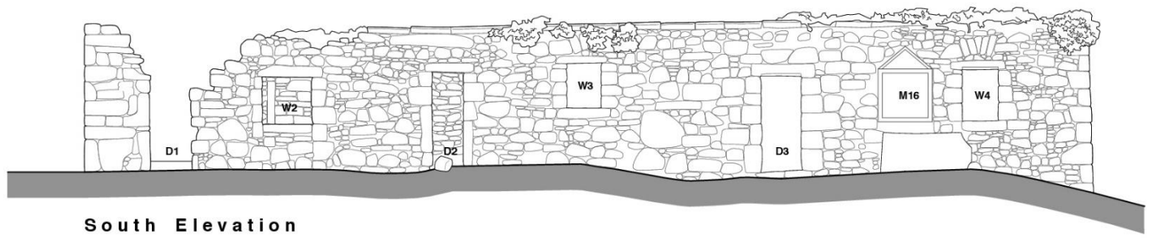
DRAWING TITLE

Floor Plan as Existing

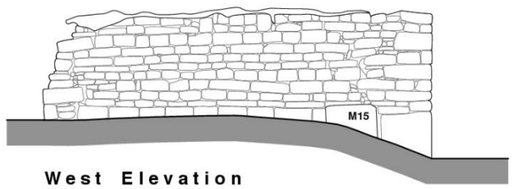
ROBERT POTTER & PARTNERS
CHARTERED ARCHITECTS & PROJECT MANAGERS

7 MILLER ROAD, AYR KA7 2AX 01292 - 261228
51 NEWALL TERRACE, DUMFRIES DG1 1LN 01387 - 255509
87 HANOVER STREET, STRANRAER DG9 7RS 01776 - 703453
169 ELSERSLIE STREET, GLASGOW G3 7JR 0141- 332 9111

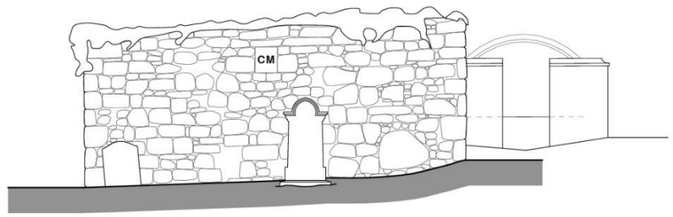
SCALE	1:50 @ A1 1:100 @ A3	7690/01
DATE	June 2015	
DRAWN BY	S.McCreadie	
CHECKED BY		REVISION



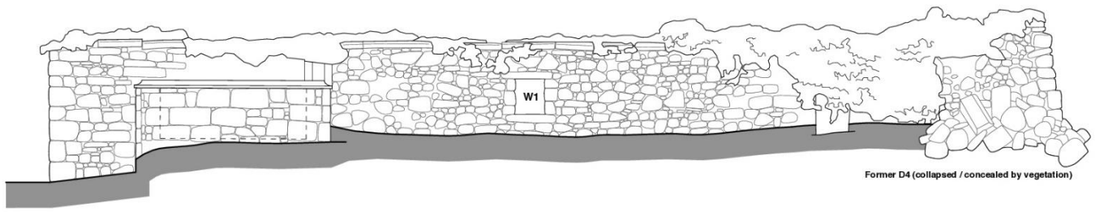
South Elevation



West Elevation



East Elevation



North Elevation

NOTES

DO NOT SCALE. DIMENSIONS FROM THIS DRAWING. ALL DIMENSIONS, INCLUDING FIGURED DIMENSIONS, TO BE CHECKED ON SITE PRIOR TO COMMENCING ANY WORKS

REVISIONS & ADDITIONS	DATE	BY

PROJECT

Saving St Bride's Chapel Arran Group
Proposed Consolidation, Repairs & Restoration Work to St Bride's Chapel, Margnaheglish, Lamlash, Isle of Arran.

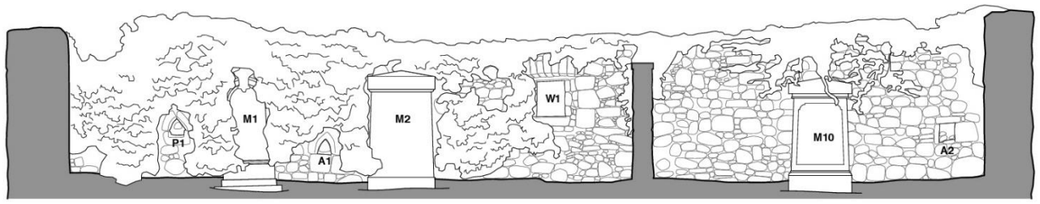
DRAWING TITLE

Elevations as Existing (Sheet 1)

ROBERT POTTER & PARTNERS
CHARTERED ARCHITECTS & PROJECT MANAGERS

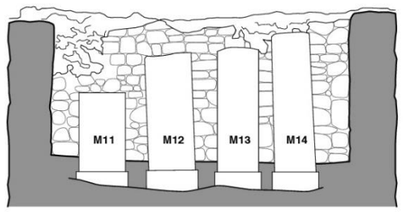
7 MILLER ROAD, AYR	KA7 2AX	01292 - 261226
51 NEWALL TERRACE, DUMFRIES	DG1 1LN	01387 - 255509
87 HANOVER STREET, STRANRAER	DG9 7RS	01776 - 703453
169 ELSERSLIE STREET, GLASGOW	G3 7JR	0141- 332 9111

SCALE	1:50 @ A1 1:100 @ A3	7690/02
DATE	July 2015	
DRAWN BY	S.McCreadie	
CHECKED BY		REVISION

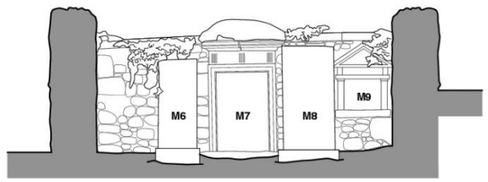


West Chamber (North Wall)

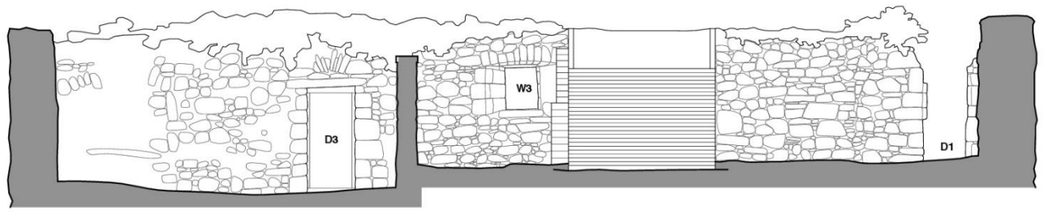
East Chamber (North Wall)



East Chamber (East Wall)

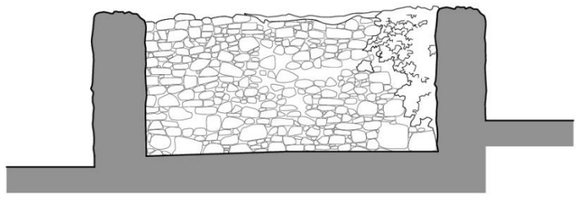


East Chamber (West Wall)



East Chamber (South Wall)

West Chamber (South Wall)



West Chamber (West Wall)

West Chamber (East Wall)

NOTES

REVISIONS & ADDITIONS	DATE	BY

PROJECT

Saving St Bride's Chapel Arran Group
Proposed Consolidation, Repairs & Restoration Work to St Bride's Chapel, Margnaheglish, Lamlash, Isle of Arran.

DRAWING TITLE

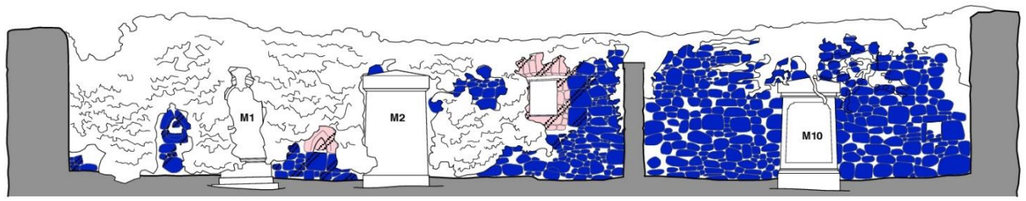
Elevations as Existing (Sheet 2)

ROBERT POTTER & PARTNERS
CHARTERED ARCHITECTS & PROJECT MANAGERS

7 MILLER ROAD, AYR KA7 2AX 01292 - 261228
51 NEWALL TERRACE, DUMFRIES DG1 1LN 01387 - 255509
87 HANOVER STREET, STRANRAER DG9 7RS 01776 - 703453
169 ELSERSLIE STREET, GLASGOW G3 7JR 0141- 332 9111

SCALE	1:50 @ A1 1:100 @ A3	7690/03	
DATE	July 2015		
DRAWN BY	S.McCreadie		
CHECKED BY		REVISION	

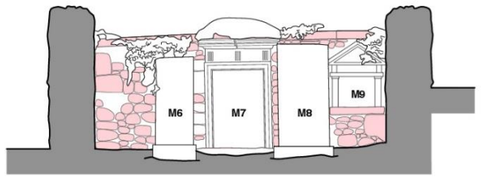
Appendix 4: Initial Phasing



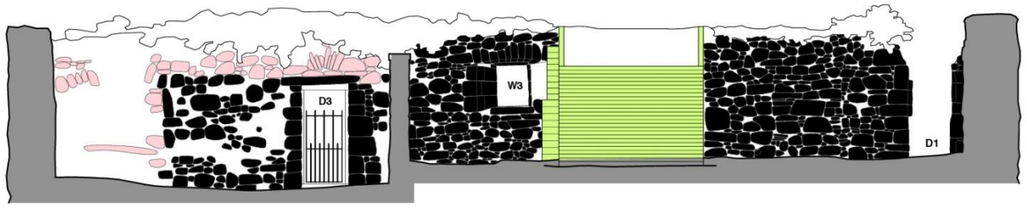
West Chamber (North Wall)

East Chamber (North Wall)

East Chamber (East Wall)

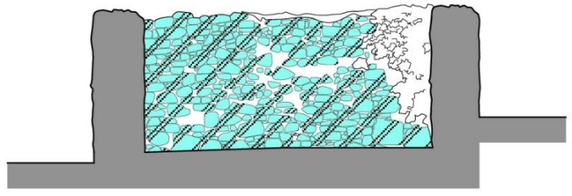


East Chamber (West Wall)



East Chamber (South Wall)

West Chamber (South Wall)



West Chamber (West Wall)

West Chamber (East Wall)

NOTES

DO NOT SCALE. DIMENSIONS FROM THIS DRAWING. ALL DIMENSIONS, INCLUDING FIGURED DIMENSIONS, TO BE CHECKED ON SITE PRIOR TO COMMENCING ANY WORKS

KEY:-

- Phase 1 : C13th-14th
- Phase 2: eC17th
- Phase 3: eC18 (No apparent physical evidence and not indicated)
- Phase 4: lateC18th
- Phase 5: midC19th
- Phase 6: midC20th
- Inderterminable (Likely C14th- C18th alterations)
- Areas of considerable ambiguity

Note: Evidence from phasing comes in part from historical sources and existing interpretations (in particular, Cowley 2011) and from Rathmell Archaeology, , Robert Potter & Partner, British Geological Survey and Scottish Lime Centre Trust investigations predominately during 2016.

It should be noted that, at this stage, only broad brush observations have been made and further more detailed study is required to elucidate the complexity of the fabric which has been much altered.

REVISIONS & ADDITIONS	DATE	BY

PROJECT

Saving St Bride's Chapel Arran Group
Proposed Consolidation, Repairs & Restoration Work to St Bride's Chapel, Margnaheglish, Lamlash, Isle of Arran.

DRAWING TITLE

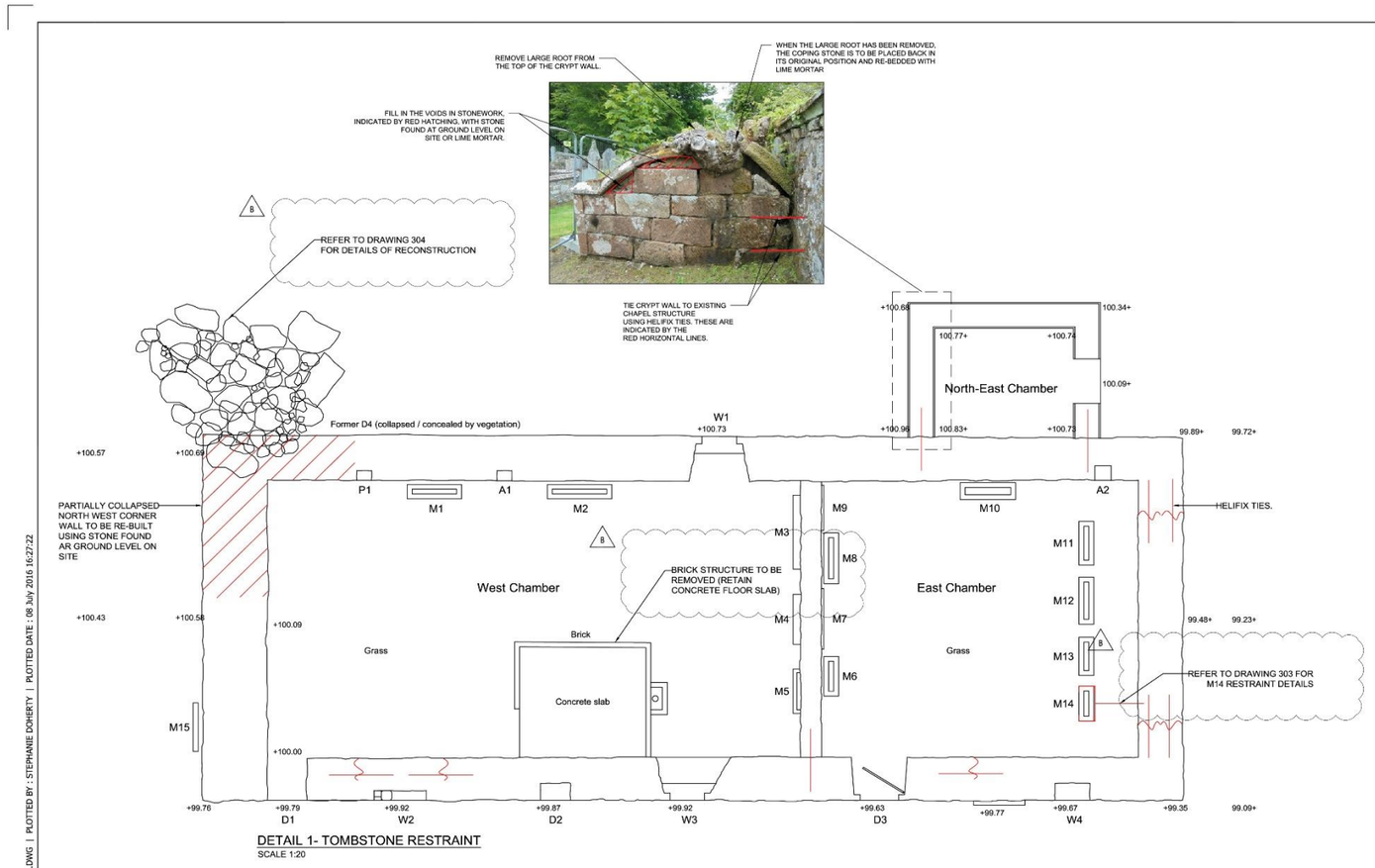
Internal Phasing Elevations

ROBERT POTTER & PARTNERS
CHARTERED ARCHITECTS & PROJECT MANAGERS

7 MILLER ROAD, AYR	KA7 2AX	01292 - 261228
51 NEWALL TERRACE, DUMFRIES	DG1 1LN	01387 - 255509
67 HANOVER STREET, STRANRAER	DG9 7RS	01776 - 703453
169 ELSERSLIE STREET, GLASGOW	G3 7JR	0141- 332 9111

SCALE	1:50 @ A1 1:100 @ A3	7690/P2
DATE	June 2016	
DRAWN BY	PWM	
CHECKED BY		REVISION

Appendix 5: Scheme of Consolidation Works



DETAIL 1- TOMBSTONE RESTRAINT
SCALE 1:20

THIS DRAWING IS INDICATIVE AND REPRESENTS ONLY THE DESIGN INTENT, THE CONTRACTOR MUST PRODUCE FULLY CO-ORDINATED WORKING / INSTALLATION DRAWINGS AS REFERRED TO IN THE CONTRACT DOCUMENTATION

General Notes

- All vegetation growing on the structure is to be removed and the stonework treated to prevent re-growth.
- All perished mortar to be racked out and re-pointed with suitable lime mortar to match the existing. Areas where the mortar is missing will also need to be re-pointed.
- At the vertical cracks helifix screwed rods should be installed into the stone coursing. The vertical cracks are then to be re-filled using suitable lime mortar.
- All large voids in the stonework are to be in-filled by site recovered stone and held in place by suitable lime mortar.
- Displaced coping stones and lintols have to be placed back and fixed in their original positions using lime mortar.
- The northwest corner of the existing structure is to be rebuilt site recovered stone and held in place by suitable lime mortar. When this position of the wall is being rebuilt it is important to ensure that the wall is adequately tied to the adjacent structure.
- Walls that are not tied and have moved out of position from the existing structure are to be tied to the existing structure using helifix ties.
- Brick Structure to be removed but retain concrete floor slab.
- Wall heads are to be capped with lime mortar to prevent water ingress.
- It is recommended that a reliable stonemason also inspects the structure and his/her recommendations are taken into consideration when finalising the repair scope of works.
- The recommendations are to be approved by H.E.S. and may be subject to revision.
- These drawings are to be read in conjunction with Harley Haddow Structural Inspection Report and Architects drawings.
- Helifix ties positions are indicative only. Final positions to suit stone coursing

INFORMATION

REV	DESCRIPTION	BY	CHK	APP	DATE
B	REVISED TO SUIT ARCHITECT'S COMMENTS	SD	AF	GA	08.07.16
A	NOTE ADDED	SD	AF	GA	29.06.16

HARLEY HADDOW CONSULTING ENGINEERS
Suite 4/3, The Skypark, 8 Elliot Place, Glasgow G3 8EP
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Associate of Consulting Engineers Member Firm
Edinburgh I Glasgow I London I Doha
HARLEY HADDOW

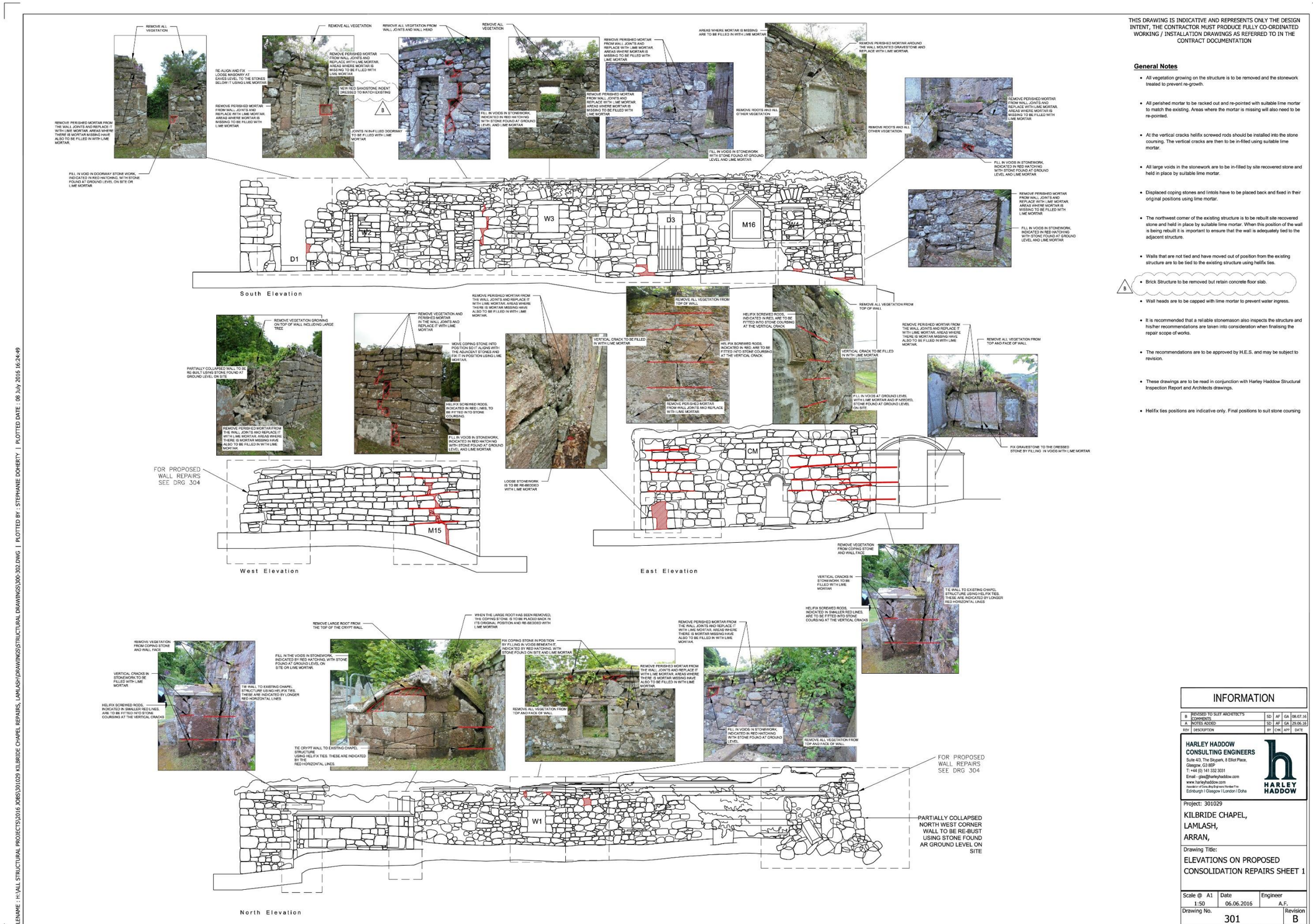
Project: 301029
KILBRIDE CHAPEL,
LAMLASH,
ARRAN,

Drawing Title:
GROUND FLOOR PLAN ON PROPOSED CONSOLIDATION REPAIRS

Scale @ A1	Date	Engineer
1:50	06.06.2016	A.F.

Drawing No. 300 | Revision B

FILENAME: H:\ALL STRUCTURAL PROJECTS\2016 JOBS\301029 KILBRIDE CHAPEL REPAIRS, LAMLASH\DRAWINGS\STRUCTURAL DRAWINGS\300-302.DWG | PLOTTED BY: STEPHANIE DOHERTY | PLOTTED DATE: 08 JULY 2016 16:27:22



THIS DRAWING IS INDICATIVE AND REPRESENTS ONLY THE DESIGN INTENT, THE CONTRACTOR MUST PRODUCE FULLY CO-ORDINATED WORKING / INSTALLATION DRAWINGS AS REFERRED TO IN THE CONTRACT DOCUMENTATION

General Notes

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- These drawings are to be read in conjunction with Harley Haddow Structural Inspection Report and Architects drawings.
- Helifix ties positions are indicative only. Final positions to suit stone coursing

INFORMATION

REV	DESCRIPTION	BY	CHK	APP	DATE
B	REVISED TO SUIT ARCHITECTS COMMENTS	SD	AF	GA	08.07.16
A	NOTES ADDED	SD	AF	GA	29.06.16

HARLEY HADDOW CONSULTING ENGINEERS
Suite 4/3, The Skypark, 8 Elliot Place, Glasgow, G3 8EP
T: +44 (0) 141 332 3031
Email - glas@harleyhaddow.com
www.harleyhaddow.com
Edinburgh | Glasgow | London | Doha

Project: 301029
KILBRIDE CHAPEL,
LAMLASH,
ARRAN,

Drawing Title:
ELEVATIONS ON PROPOSED CONSOLIDATION REPAIRS SHEET 1

Scale @ A1	Date	Engineer
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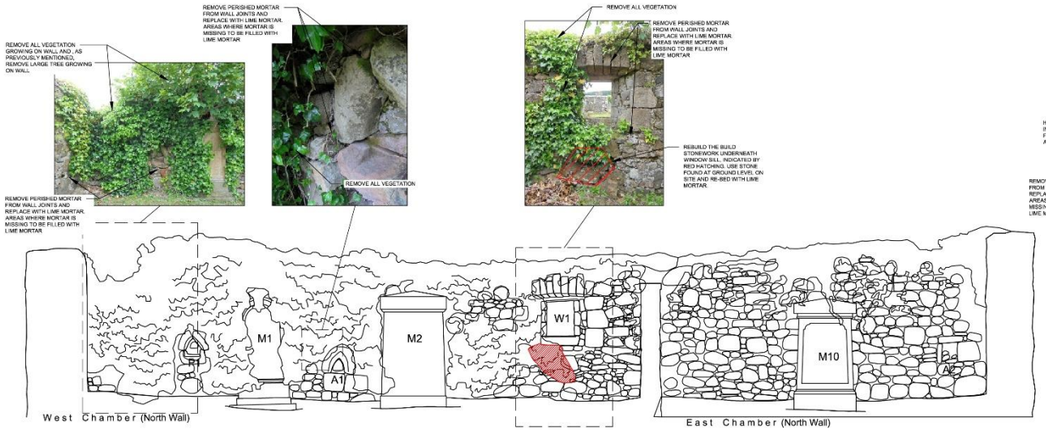
Drawing No. 301 — Revision B

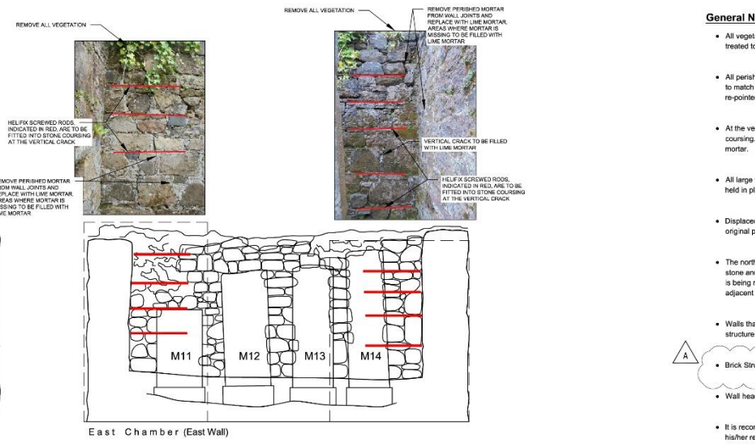
FILENAME : H:\ALL STRUCTURAL PROJECTS\2016 JOBS\301029 KILBRIDE CHAPEL REPAIRS, LAMLASH\DRAWINGS\STRUCTURAL DRAWINGS\300-302.DWG | PLOTTED BY : STEPHANIE DOHERTY | PLOTTED DATE : 08 July 2016 16:24:49

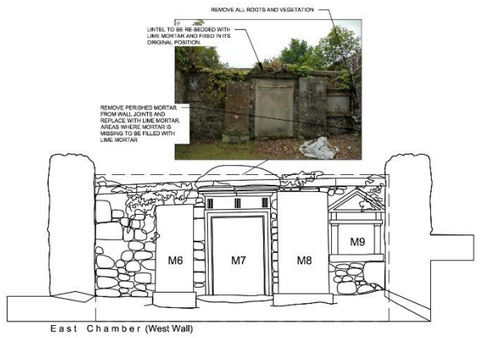
THIS DRAWING IS INDICATIVE AND REPRESENTS ONLY THE DESIGN INTENT, THE CONTRACTOR MUST PRODUCE FULLY CO-ORDINATED WORKING / INSTALLATION DRAWINGS AS REFERRED TO IN THE CONTRACT DOCUMENTATION

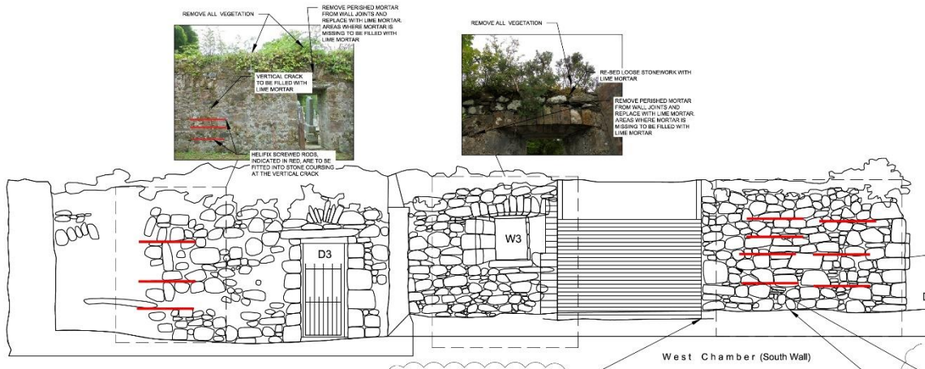
General Notes

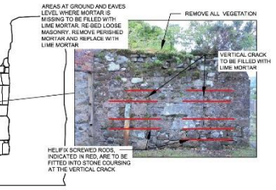
- All vegetation growing on the structure is to be removed and the stonework treated to prevent re-growth.
- All perished mortar to be racked out and re-pointed with suitable lime mortar to match the existing. Areas where the mortar is missing will also need to be re-pointed.
- At the vertical cracks helifix screwed rods should be installed into the stone coursing. The vertical cracks are then to be in-filled using suitable lime mortar.
- All large voids in the stonework are to be in-filled by site recovered stone and held in place by suitable lime mortar.
- Displaced coping stones and lintols have to be placed back and fixed in their original positions using lime mortar.
- The northwest corner of the existing structure is to be rebuilt site recovered stone and held in place by suitable lime mortar. When this position of the wall is being rebuilt it is important to ensure that the wall is adequately tied to the adjacent structure.
- Walls that are not tied and have moved out of position from the existing structure are to be tied to the existing structure using helifix ties.
- A: Brick Structure to be removed but retain concrete floor slab.
- Wall heads are to be capped with lime mortar to prevent water ingress.
- It is recommended that a reliable stonemason also inspects the structure and his/her recommendations are taken into consideration when finalising the repair scope of works.
- The recommendations are to be approved by H.E.S. and may be subject to revision.
- These drawings are to be read in conjunction with Harley Haddow Structural Inspection Report and Architects drawings.
- Helifix ties positions are indicative only. Final positions to suit stone coursing







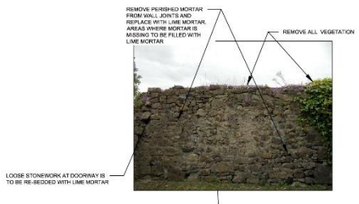


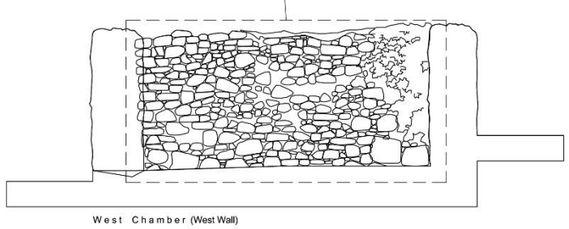


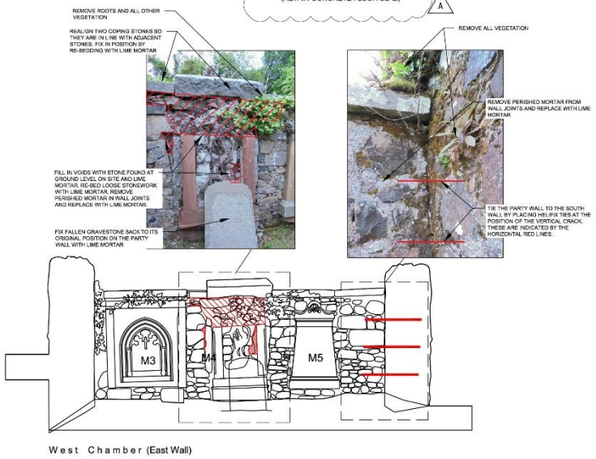
BRICK STRUCTURE TO BE REMOVED (RETAIN CONCRETE FLOOR SLAB) A

NOTE: CONTRACTOR TO TAKE SPECIAL CARE TO ENSURE THE READABILITY OF THE BLOCKED OPENING IS NOT OBSCURED BY REPAIR WORKS. DO NOT INSERT ANY PINNING STONES ETC AT JOINT LOCATIONS

NOTE: PROTECT CARVED STONE AT GROUND LEVEL (CENTRE OF BLOCKED OPENING) AT ALL TIMES. A







INFORMATION

REV	DESCRIPTION	BY	CHK	APP	DATE
A	REVISED TO SUIT ARCHITECT'S COMMENTS	SO	AF	GA	08.07.16

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Edinburgh | Glasgow | London | Doha

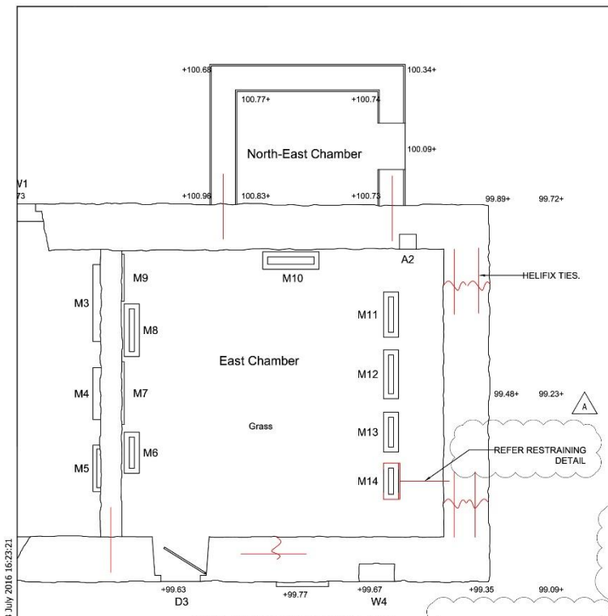
Project: 301029

KILBRIDE CHAPEL,
LAMLASH,
ARRAN,

Drawing Title:
ELEVATIONS ON PROPOSED CONSOLIDATION REPAIRS SHEET 2

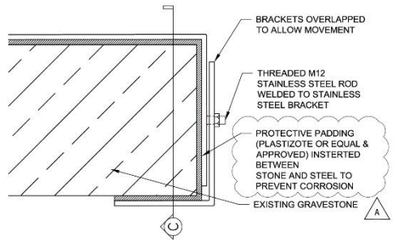
Scale @ A1	Date	Engineer
1:50	06.06.2016	A.F.

Drawing No. 302 — Revision A

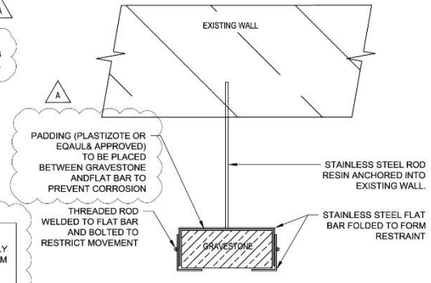


PLAN ON GRAVESTONE POSITIONS
SCALE 1:50

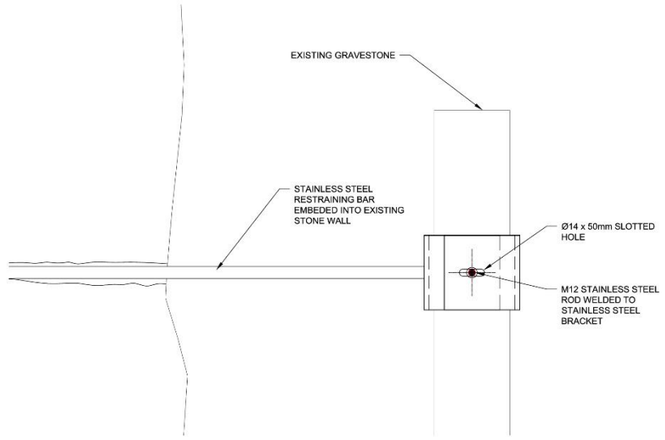
NOTE: EXISTING IRON BARS TO BE CAREFULLY AND FULLY REMOVED, NOT CUT FROM MEMORIAL M14 AND CHAPEL WALL



TYPICAL DETAIL ON RESTRAINT CLAMP
SCALE 1:5



OPTION 1 PLAN - GRAVESTONE RESTRAINT
SCALE 1:20



SECTON C
SCALE 1:5

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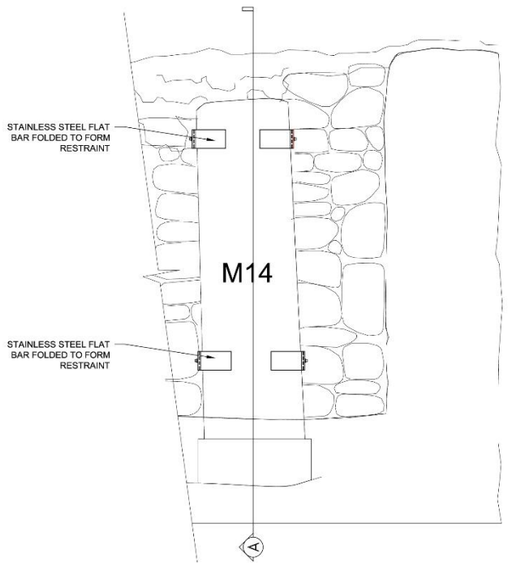
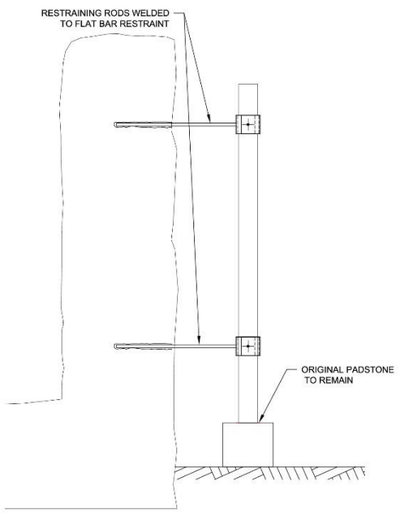


ELEVATION
TOMBSTONE RESTRAINT
TOP AND BOTTOM
SCALE 1:20



SECTION A
SCALE 1:20

INFORMATION

REV	DESCRIPTION	BY	CHK	APP	DATE
A	REVISED TO SUITE ARCHITECT'S COMMENTS	SD	AF	GA	08.07.16

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HARLEY HADDOW

Project: 301029
KILBRIDE CHAPEL,
LAMLASH,
ARRAN,

Drawing Title:
GRAVESTONE RESTRAINT

Scale @ A1	Date	Engineer
AS INDICATED	28.06.16	A.F.

Drawing No. 303 | Revision A

FILENAME : H:\ALL STRUCTURAL PROJECTS\2016 JOBS\301029 KILBRIDE CHAPEL REPAIRS, LAMLASH\DRAWINGS\STRUCTURAL DRAWINGS\303-304.DWG | PLOTTED BY : STEPHANIE DOHERTY | PLOTTED DATE : 08 July 2016 16:23:21

Appendix 6: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	North Ayrshire
PROJECT TITLE/SITE NAME:	St Bride's Chapel, Lamlash
PROJECT CODE:	RA14003
PARISH:	Kilbride
NAME OF CONTRIBUTOR:	Louise Turner
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Building Recording
NMRS NO(S):	-
SITE/MONUMENT TYPE(S):	Church
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NS 0323 3226
START DATE (this season)	1st March 2017
END DATE (this season)	6th June 2017
PREVIOUS WORK (incl. *DES* ref.)	No
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	Historic building recording was carried out in advance of consolidation work at St. Bride's Chapel, Lamlash, in order to help inform the works as they progressed and to record any masonry which would be removed and replaced during the project. This proved necessary in particular at the west end of the north wall, where tree growth had compromised the structure, threatening its long term future. Masonry dating to the earliest, medieval, phases of the church was identified in the outer wall face, while the inner face was interpreted as resulting from later repairs and reconstruction. It proved possible to remove the root mass through the removal of the inner face alone, with finds of 19th and 20th century bottle glass confirming that this fabric had originated in recent times. The wall was rebuilt with minimal disturbance to the, earlier, outer wall face. A fragment of a medieval carved stone, potentially part of a free-standing cross-shaft, was identified at low level within a blocked doorway in the south elevation, along with additional carved stones of much later date.
PROPOSED FUTURE WORK:	No
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	North Ayrshire Council
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU
EMAIL ADDRESS:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to West of Scotland Archaeology Service and archive to the National Record of the Historic Environment

Contact Details

72. Rathmell Archaeology can be contacted at our Registered Office or through the web:

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