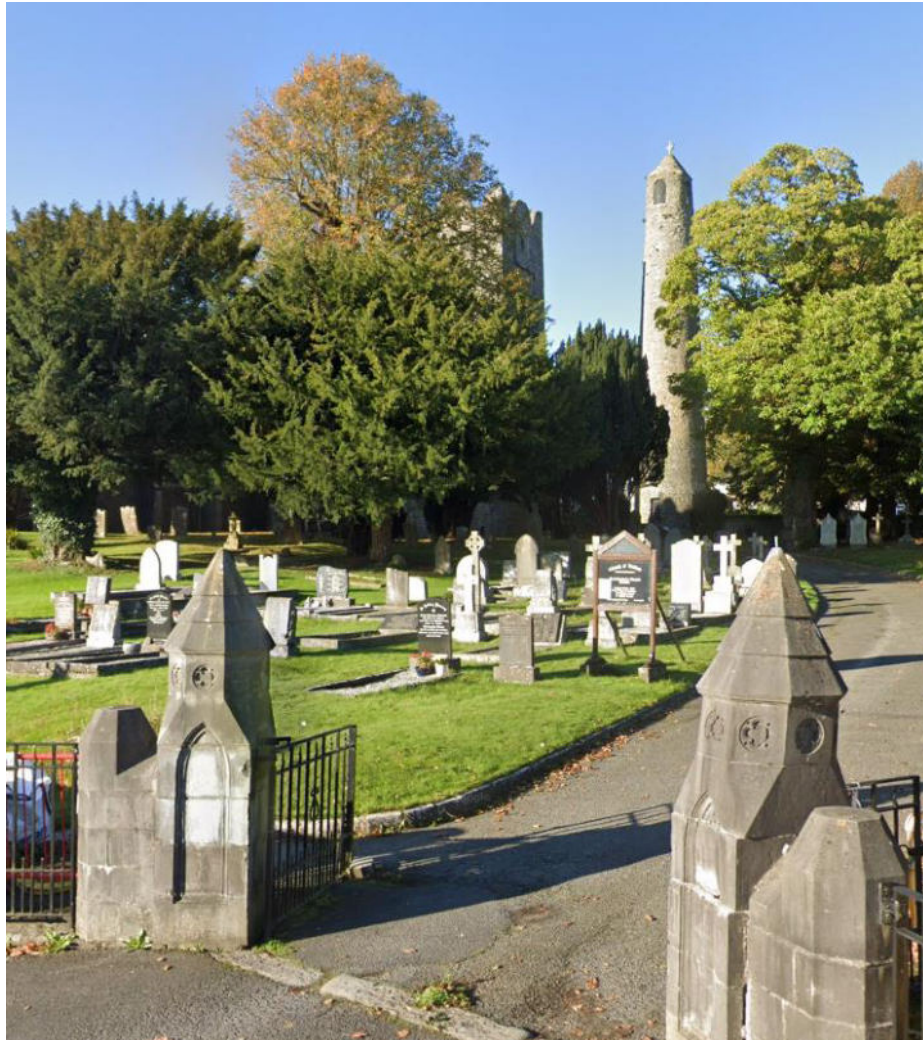




Archaeological Monitoring and Recording
at
St. Columba's, Swords, Co. Dublin
CMF24-1-DF001 Stream 1
Licence No. 23E0752ext

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Executive Summary

A final phase of conservation works was carried out at St. Columba's, Swords, Co. Dublin in 2024. Reinstatement of floors in the belfry tower, and repairs to its roof and gutters, and re-pointing of the interior of the round tower completed the necessary conservation measures for this site.

As the works on the round tower necessitated scaffolding being erected in the interior this facilitated recording of internal features which had not been possible up to now.

Similarly, the works in the belfry tower allowed access to the second and third storeys so that the corbels which held the original floor of the third storey could be recorded, and the manner of flooring the second storey better understood.

1. The Archaeological context and Project Description

1.1 Site Location

The ecclesiastical site of St. Columba's is located on high ground at the end of a long E/W running ridge that overlooks the town of Swords. It is on the western side of the Ward River and the ridge drops sharply to the river which may have formed part of one of the original enclosures surrounding the monastery. It lies close to the centre of the town of Swords and about 300m SW of the castle (Fig.1).

1.2 Project Description

The works carried out completed Phase 2 of the conservation and repair of the belfry tower and round tower at St Columba's, Swords, Co. Dublin, CMF Stream 1. Under the Community Monuments Scheme 2021, Stream 2, a Conservation Report was prepared for the two towers at St. Columba's by the project team comprising Margaret Quinlan, Conservation Architect, John Kelly, Conservation Engineer, David Kelly Partnership and Finola O'Carroll, Trim Archaeology Projects. The Report (CMF21-2-DF001) included an ortho-rectified survey, an archaeological and historical assessment, and a condition / structural assessment with recommendations.

Under the Community Monuments Scheme 2022, Stream 1, the upper half of the Round Tower and dressed stone window surrounds on the west and north elevations of the Belfry Tower were conserved.

Under the Community Monuments Scheme 2023, Stream 1 funding was secured for a schedule of works to take place in Autumn 2023. The schedule of works for 2023 included completion of the re-pointing of the exterior of both towers, and the removal of accumulated nesting material from the interior of the round tower. After clearance of debris from the base of the tower a small excavation took place to determine the nature of the original basement floor. A carefully packed and level mortared stone floor overlying a very compact stone and sandy soil deposit was recorded.

This final phase of the conservation works in 2024 included the complete re-pointing of all areas of the interior of the round tower where mortar loss had occurred, and the exclusion of the pigeon colony by means of wire mesh on the windows and door. The work in the belfry tower consisted of the reinstatement of floors in the tower and repairs to the slate roof and gutters and water goods.

1.3 Archaeological background

St. Columba's in Swords, Co. Dublin is an ecclesiastical site (RMP records DU011-34002-11, 14, and 18; Fig. 1) containing a round tower, a graveyard which most probably continues east beyond the current boundary, a cross-slab, grave slabs, and a cross, all formerly enclosed by one or more enclosing elements now only identifiable by the present street and former field pattern and the townland boundaries. A souterrain to the north of the site in the garden of the present vicarage has recently been added to the Sites and Monuments Record (SMR No.

DU011-0340022) and will be added to the updated RMP. No archaeological excavations have taken place within the current boundaries of the churchyard, so there are only historical and architectural references by which to date the site.

While Swords is traditionally associated with St. Columba or Colm Cille, (520 – 597AD) it is unlikely that he was personally responsible for the original foundation of the site, rather that it became part of the Columban *familia* of sites associated with his adherents, possibly in the late 10th century. It may have earlier origins, but without finding and dating through excavation and scientific analysis some of the primary elements of the site the date of its inception remains unknown. There are other churches referred to in the records in Swords, dedicated to St. Brigid, St. Catherine, and St. Finian. The locations of these are unclear, but archaeological excavations in the wider Swords area within the past 22 years may suggest certain correlations with these references.

The site is currently in use as a place of worship for the Church of Ireland community. It has protection under the National Monuments Acts (1930 and amendments) but is not subject to a preservation order, nor is it in State Ownership or Guardianship.

1.4 Description of the monument

Round Tower (Figure 1, plan)

The round tower is a six-storey masonry structure above a sub-floor 1.40m below the entrance level, circular in plan and tapering significantly as it rises. Its diameter decreases from about 5m at ground level to about 3.40m at the top of the original stonework – a height of about 22.5m which gives a gradient of c. 1:25, or a taper of 4cm per metre. The walls decrease in thickness with height, so at door level the thickness was measured at 1.30m, the fourth-floor window at 0.85 and the top-most level also at 0.85m. It is constructed of limestone rubble masonry bedded in lime mortar. It is accessed via an east facing ground floor level door with a flat stone lintel. The next four floors each have a single square headed window opening facing in ascending order east, north, south, and west. The top storey of the tower has large openings facing north, south, east, and west formed by round-headed stone masonry arches which support a conical stone roof with a stone cross at the apex. The roof and bell floor windows were remodelled in the late 17th century and the cross was placed on the apex at that time.

Belfry Tower

The belfry tower is four storeys over a vaulted basement, with a projecting stair turret on the southwest corner. The basement is lit by narrow square headed opes on the east and north faces. The one the north is blocked. The vault may be a later insertion as there are notable irregularities in the reveal of the east window which suggest this. The basement level is accessed by a separate door in the south wall of the tower and the upper levels through a door in the east face of the stair turret. The first, second and third floors are all lit by small round headed windows in the north and west walls. The second floor appears to have had a fireplace. The third floor has an additional window in the east wall. The belfry is located on the fourth

floor and lit on each of the four walls by large double arched windows. The roof walk is accessed from the stairs. The parapet wall has high curved gables which are unusual, though paralleled in the battlements of the tower house at Balrothery, and Drimnagh Castle, also in Co. Dublin. This distinctive form is reminiscent of the 'Holborn gable' or Dutch billy, still found in a small number of late seventeenth century houses in Ulster, including Waringstown (Down) and Richhill (Armagh), but otherwise quite rare in Ireland. It seems likely that these were added during improvement works at St Columba's attributed to Rev. Scardeville. They represent either the complete rebuilding of the parapet wall of the tower, or simply the reshaping of earlier, more typical medieval 'crowstep' battlements in order to update the tower.

1.5 Conservation Works

The proposal for the conservation works included the following items:

Belfry Tower

Reinstate the timber floors at their original levels, respecting the levels of the existing corbels where these survive. The reinstated floors will respect the original floor depths and configurations. The floors will be heavy oak planking spanning between composite steel and timber (flitch) floor beams and wall-plates.

Belfry Tower Roof and Parapet Gutter

The existing slipped and damaged slates to be re-fixed and replaced with matching natural slate where beyond use. A new raised flat gutter will be formed with timber and stainless-steel grounds set above the original stone gutter. The new gutter will be covered in walking grade pvc membrane dressed under the slate roof and with a new upstand formed against the rendered inner face of the parapet. The new gutter will protect the original stone gutter. The original outlets will provide ventilation to the new gutter. A new fabricated outlet spout in stainless steel will discharge through one of the existing gutter outlets beyond the face of tower.

Round Tower Consolidation of Inner Face of Tower Wall

Areas where mortar or stone loss is compromising the stability of the masonry face will be consolidated and repointed with NHL2 mortar. All features such as joist or beam sockets will be retained. It may be necessary to add small amounts of masonry to areas if the stone loss is so great as to leave the surrounding masonry unstable.

All works were completed and regularly inspected during the course of the works by the conservation team, John Kelly and Margaret Quinlan, and archaeologist, Finola O'Carroll.

2. The Round Tower

2.1 Record of the interior details and repointing

Figure 2; Plates 1 – 20

The interior of the tower had scaffolding erected in it from the entrance level up to the bell floor level. The space is very confined so working around the scaffolding to record the condition of the walls was difficult, as was the re-pointing work. The access afforded by the scaffolding allowed for an examination of features within the tower that have not previously been recorded. It had been noted that internal ledges to support the floors did not appear to occur in this tower. This was confirmed by this inspection and a series of beam holes were noted on the floors 3 – 6. The position of the beam holes has allowed for an interpretation of how the floor layout and access to the floors above and below was constructed and managed. This is depicted in Figure 2.

Floor 1: Entrance

This floor is lit only by the doorway which is just south of east in orientation. There are no clear indications of how a floor was inserted at this level as there are no beam holes and while there are hints of a shallow ledge in places, it is not continuous. Excavations in the basement area in 2023 uncovered a well made stone and mortar floor 1.4m below the entrance level, at 29.37m OD. The walls retain significant amounts of mortar and render or plaster, having been protected from weathering by the ring of corbelled stones above, part of the floor at the next level up.



Plate 1: Wall in Floor 1, entrance, retaining pointing and possible plaster of unknown date



Plate 2: Looking up towards underside of corbelled stones which have protected the mortar from weathering. Taken in 2023 before the beams were removed.

Residual holes, possibly from wooden beams inserted sometime in the last few hundred years, were noted beneath the corbels, but not further down, but as they are similar to holes in the walls above the corbels where beams were not used and they do not appear to be the result of deterioration, another explanation for them is needed.

The height of this floor from the entrance level to the corbels is 4.90m and the diameter N/S is 2.56m and E/W it is 2.60m.

Floor 2, Treasury floor

There was considerable mortar loss noted at this level. It is lit by a large, east facing window, 1.03m high. The windowsill is at the same level as the corbelled stones. At least seven of these form a ring jutting out from the wall, alternately overlapping and running beneath each other (see Plate 2). Some of the corbels appear damaged and truncated along the south side of the tower and this may relate to the late 17th century work carried out during the improvement works at St Columba's attributed to Rev. Scardeville. A significant number of missing stones were noted in the wall, especially along the west and south sides and their seeming regularity was striking. It is possible that they formed a columbarium at some point in the life of the tower, so they were not filled in except where additional stone was deemed necessary to provide support to overhead stones.

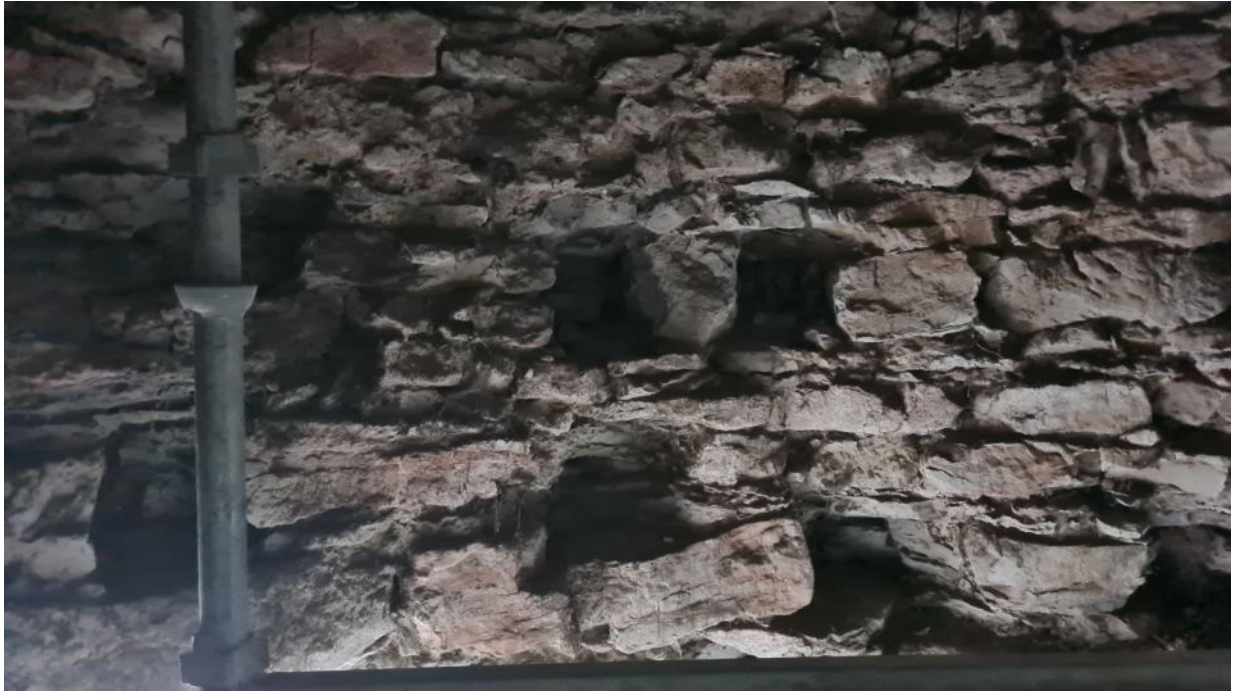


Plate 3: Holes occurring just above the level of the corbels, south side. Note mortar loss.



Plate 4: Holes in the wall, west side, above the level of the corbels

The height of this floor to the beam holes for the floor above is 4.00m and the diameter is 2.55m.

Floor 3, north window

This is lit by a window facing north. It was at this level that beam holes (or joist sockets) were noted in the wall. From their position it was obvious that they worked as pairs, so their orientation could be deduced. The beam holes were recorded clockwise from NNE. They were all about 0.30-0.35m wide and 0.25 – 30m high. Beam hole 3 was partly infilled with loose stones. The alignment of the beams WNW/ESE.

Beam hole locations:

1. NNE
2. SE
3. SSW
4. NW

The relative position of the beam holes was recorded from centre to centre:

BH 1-2 were set 1.93 apart. BH 2-3 were set 1.33 m apart.

BH 3-4 were set 2.25m apart. Bh4-1 were set 1.48m apart.

The height of this floor from beam hole to the beam holes above is 4.47m. The recorded diameters at the floor level are 2.50 N/S and 2.40 E/W. The drop from the windowsill to the top of beam hole or floor level is 0.40m.

The location of the beam holes and their relative position suggests that a floor was laid covering about 75% of the floor area. This would have been broadly N/S with a gap on the west side between the floor and the wall. This would have allowed access by ladder to the floor.



Plate 5: Beam hole 1, before and after re-pointing



Plate 6: Beam hole 2 before and after re-pointing



Plate 7: Beam hole 3 before and after re-pointing; stones were in the hole, and they were mortared in position in error.



Plate 8: Beam hole 4 before and after re-pointing.



Plate 9: Stone loss resulting in ledges at the same level as the beam holes, note pigeons and nesting material



Plate 10: Stone loss on the east side. Possibly caused by the insertion of later wooden beams, now removed.

Floor 4: south window

This is lit by a south facing window. The beam holes were all about 0.30m wide and 0.25 – 30m high. Narrow wooden beams had been inserted in or beside three of these to form floors, possibly in the late 17th century and were left in situ as they hadn't already been removed during previous cleaning of the tower. Two beams were inserted into beam hole No. 4, one ran to beam hole No. 1 and the other to a point just south of beam hole No. 4, making a modern hole in the wall. This did not reflect the original way in which the floor joists had been arranged. The beam holes were recorded clockwise from SW.

Beam hole locations:

- | | |
|---|--------------------|
| 1 | SW |
| 2 | WNW |
| 3 | Just north of east |
| 4 | SSE |

Alignment of the beams is WNW/ESE.

Relative position of beam holes recorded from centre to centre:

BH 1-2 were set 1.54m apart. BH 2-3 were set 1.86m apart.

BH 3-4 were set 1.10m apart. Bh4-1 were set 1.37m apart.

The diameters of the floor recorded at joist level are 2.23 N/S and 2.20 E/W. The drop from the windowsill to the top of beam hole is 0.75m

The height of this floor from the top of the beam holes to the base of the next on floor 5 is 4.08m. The floor probably covered the southern 75%, leaving an access gap on the north side.



Plate 11: Beam hole 3 before and after re-pointing



Plate 12: Beam hole 4 with pigeons in situ on build-up of soil and droppings, and two wooden beams inserted into it



Plate 13: Beam hole 4 after re-pointing but with the wooden beams still in position

Floor 5: west window

The recorded diameters at the floor level are 1.87 N/S and 1.97 E/W. The drop from the windowsill to the top of beam hole is 0.50m.

The beam holes 1, 2 and 4 were all about 0.30m wide and 0.25 – 30m high; beam hole 3 was 0.40m wide. All beam holes were recorded clockwise from NNW.

Beam hole locations:

- | | |
|---|--------------------|
| 1 | NNW |
| 2 | Just east of north |
| 3 | S |
| 4 | WSW |

Alignment of beams N/S.

Relative position of beam holes recorded from centre to centre:

BH 1-2 were set 1.10m apart. BH 2-3 were set 1.86m apart.

BH 3-4 were set 1.10m apart. Bh4-1 were set 1.37m apart.

The height of this floor from the top of the beam holes to the base of the beam holes above is 3.15m. The floor probably covered the western two thirds of the area, leaving an access gap on the east side.



Plate 14: Beam hole 1 before and after re-pointing



Plate 15: Beam hole 3 before and after re-pointing



Plate 16: Beam hole 4 before and after re-pointing

Bell floor level (Floor 6):

The recorded diameters are 1.72m N/S and 1.70 E/W.

The four large windows are about .70m wide on average. These probably are no earlier than late 17th century in date, and probably replaced four smaller windows. The tops of the beam holes are c. 0.85m below the windowsills.

Beam hole dimensions and locations:

1	W 0.3m	WNW
2	W 0.5m	NE
3	W 0.44m	SE
4	W 0.40m	SW

Beam holes were recorded 1-4 clockwise from WNW.

Alignment of beams E/W.

Relative position of beam holes recorded from centre to centre:

BH 1-2 were set 1.50m apart. BH 2-3 were set 1.00m apart.

BH 3-4 were set 1.40m apart. BH 4-1 were set 1.06m apart.

The spacing and placement of the beam holes indicates that the floor would have covered the entire area, and access to this level was probably through a hole placed in the centre.

The height of this floor from the beam holes to the apex of the roof is about 4.40m.



Plate 17: Beam holes 2 (left) and 1 (right) before re-pointing. The distance between them is 1.50m centre to centre, but the wide-angle view distorts this somewhat.



Plate 18: The same beam holes, 2 and 1, after re-pointing.



Plate 19: Beam holes 4 (left) and 3 (right), before re-pointing. The distance between these is 1.40m.



Plate 20: Beam holes 4 and 3 after re-pointing.

3. Round Tower: Conclusions

It was evident that the interior of the tower had suffered severe mortar loss over the entire inner surface from above the level of the corbels to the bell-floor level. However, it became apparent that there was not significant stone loss. The stone loss that did occur seems to be either because of the insertion of floor beams at slightly different levels and different places to the original floors, or, in the case of the missing stones from above the corbels in Floor 2, the deliberate removal of stones to create something, perhaps an ad hoc dove cote.

In addition, there were a number of places where there were holes, usually amounting to a single stone. In the bell floor (Floor 6) there is one such aperture which looks deliberately made with a small lintel like stone spanning the top. This may have been a place to put a candle or other object. In Floor 2 midway up, there were four small holes roughly equidistant to each other at the same level. The entire interior was scanned using an iPad and scanning software and this will be made available to the custodians of the monument. It was extremely difficult to scan the interior successfully, as the scaffolding did not leave adequate space.

The entrance floor level retained a lot more mortar, and some plaster in places. As the tower was re-modelled, at least at the bell floor level in the late 17th century it is possible that some re-plastering was carried out then too. It is equally possible that it is early, but this is unknown.

The manner in which the six levels were floored, and how access to them was managed was not understood, but examination of the beam holes surviving at the various levels allows an interpretation of how the floors were placed (see Figure 2). It is possible that the floor at the entrance level was complete and rested on a ledge in the wall. Traces of such a ledge are visible, but in reality, they are very irregular. The so-called Treasury floor, Floor 2, has corbelling around its perimeter. It is not known how the remainder was floored, whether the corbelled stone continued, or there was a wooden insert. It is likely that the access to Floor 2 was by means of a ladder through the centre of this floor.

The remaining floors appear to have been accessed by means of ladders set between the wall and the edge of the floors which did not completely cover the space. Thus, a ladder could be set along the west wall of Floor 2 facing north. On reaching the floor above, one could step to the right off the ladder onto the floor. On Floor 3 the ladder would have been against the north wall extending east. Again, one could step off the ladder to the right when Floor 4 was reached. From there a ladder would have been placed along the east wall facing south, and access to Floor 5 was again by stepping off the ladder to the right. It is likely that the access to Floor 6, the bell floor, was through a central opening, allowing floor access to each window, if bells were being rung. The ladders therefore went clockwise from bottom to top. This arrangement also meant that the floor extended across to the window at each level, even though the windows do not ascend the tower clockwise. They go Floor 2, east; Floor 3, north; Floor 4, south; Floor 5, west. On floors 4 and 5 the beams would have been parallel to the window, whereas on Floor 3 they were perpendicular to the north window, but that area beneath the window was floored. The arrangement of floors to windows meant that the available light was matched to floor space.

The niches set into the walls at least at Floor 3 and Floor 6 could have held candles, or indeed wooden inserts forming hooks or small shelves for holding objects or bags.

Small mortar samples were extracted from a number of levels, but as yet have to be assessed for suitability for dating. It was surprisingly difficult to locate sizeable pieces of mortar from deep within the wall, as there were lots of small stone inclusions and only already existing holes were accessed.

4. Belfry Tower

The proposed works for 2024 were as follows: at roof level, a new PVC lined parapet gutter was to be formed with integral rainwater outlets through existing parapet outlets.

Re-slate the roof to replace broken slates.

Insert new timber floors complete with oak floorboards, softwood joists, built-up timber floor beams and galvanised steel corbel brackets on two floors.

Locally repoint gaps in the stone stair risers and remove nesting material and floor debris lodged on the first floor above the masonry vault.

Lighting for safe access for maintenance and inspection is being provided and a new handrail is being fixed to the wall as part of the works funded by the Select Vestry.

Interior of the tower

Floors were reinstated on the second and third floor levels. Prior to putting in the scaffolding the debris that had accumulated on the first floor was removed. This was examined to see if it contained any archaeological material with the assistance of Szymon Mierocha, groundsman at St. Columba's. All the finds proved to be modern, and pieces of slate and mortar were also recovered.



Plate 21: Selection of material recovered from above the vault.

Second Floor

The floor joists for the second floor were to be supported on steel brackets. These were inserted without archaeological supervision and the probable original locations of the joist sockets were not used as the joists were placed to reflect the position of the corbels on the floor above. There were no visible sockets or holes in the walls, but in the east and west walls there were areas that clearly had been filled in with mortar and small stones. Several of these which were reasonably regularly spaced had lintel-like stones spanning the tops and would appear to be original joist holes or sockets.



Plate 22: First floor east wall with H-brackets inserted from the NE (left side) corner to centre. Note the lintel-like stones in the centre and above the horizontal ranging rod

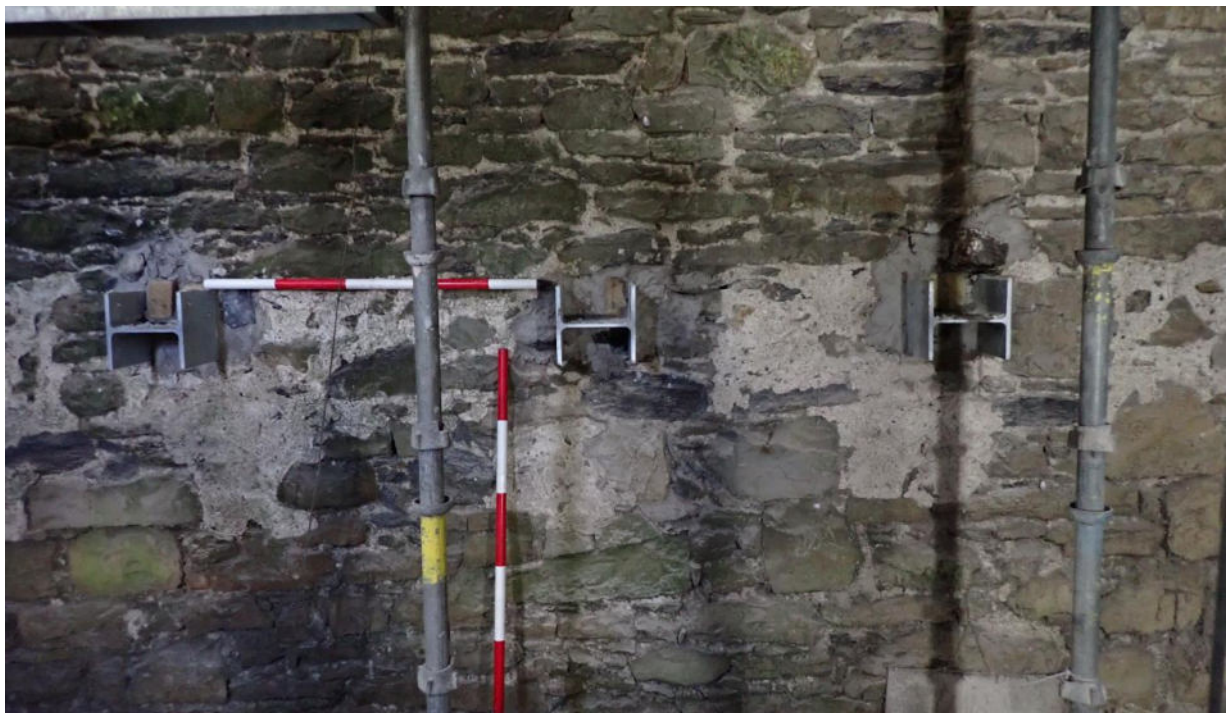


Plate 23: First floor east wall with H-brackets, centre to SE side. Again, note lintel-like stones above the areas with mortar and stone.

The brackets are 20.5cms wide and high externally. They are 40cms long and project 20cms from the wall, and 20cms into the wall. The spacing of the brackets is as follows: NE corner to bracket 1 – 0.04m; bracket 1-2, 1.45m; 2-3 is 0.99m; 3-4 is 0.75m and 4 to SE corner is 0.70m.

When the brackets were inserted, the holes created to do so were initially filled with bricks and mortar. The bricks were deemed to be unsuitable and were replaced with stones.



Plate 24: Second floor, west wall, brackets from SW corner at the door to the centre.



Plate 25: Second floor, west Wall, brackets from the centre to the NW corner.



Plate 26: Stone replacing the brick infilling of the holes around the brackets.

The intervals between the brackets on the west wall are within 1cm of the gaps on the east wall.

Third floor: Figure 3

Projecting stone corbels on the east and west walls were the original supports for the floor at this level. H-brackets were inserted alongside each corbel in error, but were subsequently removed and a beam to support the floor run along the top of the corbels on each wall.



Plate 27: H-brackets positioned beside the corbels, east wall.

The corbels range in size from 12cms to 27cms in width and from 17cms to 28cms high. In contrast, the projection from the wall was between 17-21cms, showing significantly less variation. Four corbels project from the east wall, and three from the west, there is no corbel in the SW corner by the doorway. They are indicated on Figure 3, third floor plan.

The corbels were not perfectly level, so some adjustments had to be made to the beam to allow for that.



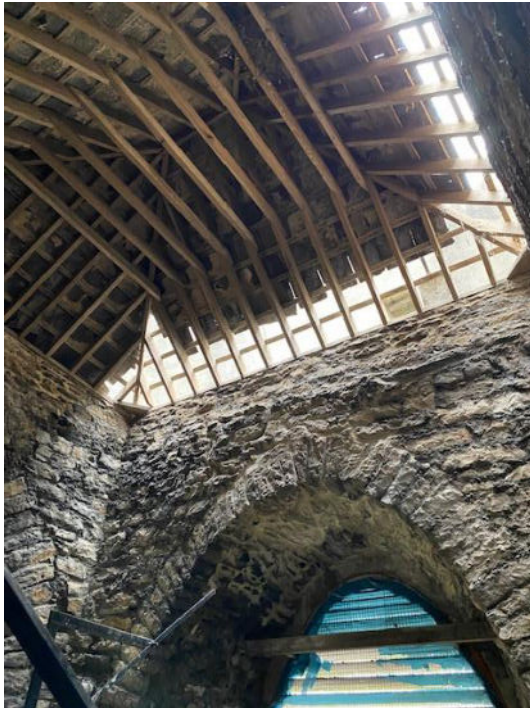
Plate 28: Detail of beam on corbels, west wall, with floor joists above.



Plate 29: Beam over the corbels, east wall, with joists above.

Roof

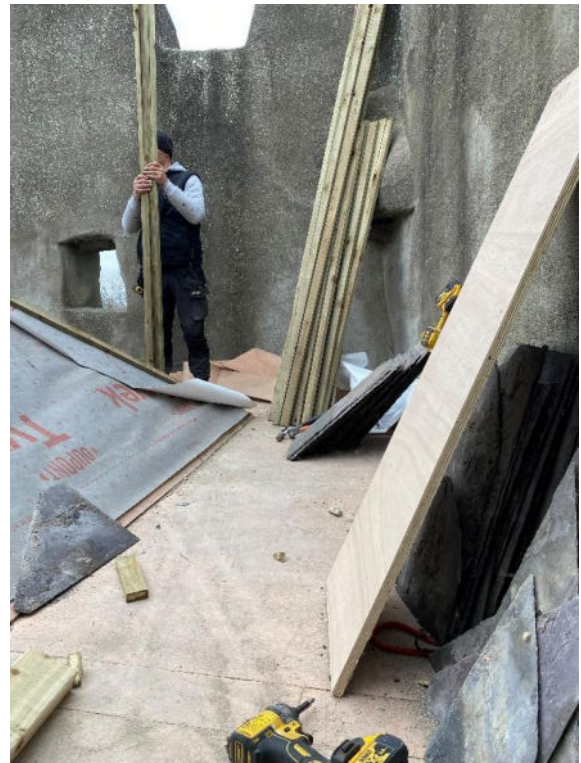
As slates on the roof were cracking or broken, they were stripped off and replaced, using the original slates as much as possible, but replacing damaged ones with matching new slates. A new gutter and spout to manage rainwater run-off is being installed also.



Plates 30-31: Beginning to strip the slates from the roof



Plates 32-33: Slates removed.



Plates: 34-35: Work in progress.

Further comments

In the interior of the tower a row of corbels on the south wall, with apparently matching joist sockets on the north wall were noted between the third floor and the bell floor level. Putlog holes were also noted on the east wall (Figure 3, Second floor plan) and north wall.



Plate 36: View of south wall with two corbels and one socket below the bell floor level



Plate 37: View of the north wall with joist sockets above the window level, below the bell floor. Note the possible putlog holes lower down.

The drop from the surface of these corbels/joist sockets to the top of the corbels beneath is 2.45m (see Figure 3 third floor plan). Looking at the underside of the bell floor and the east wall, there is an area infilled with brick through which a joist for the floor goes.



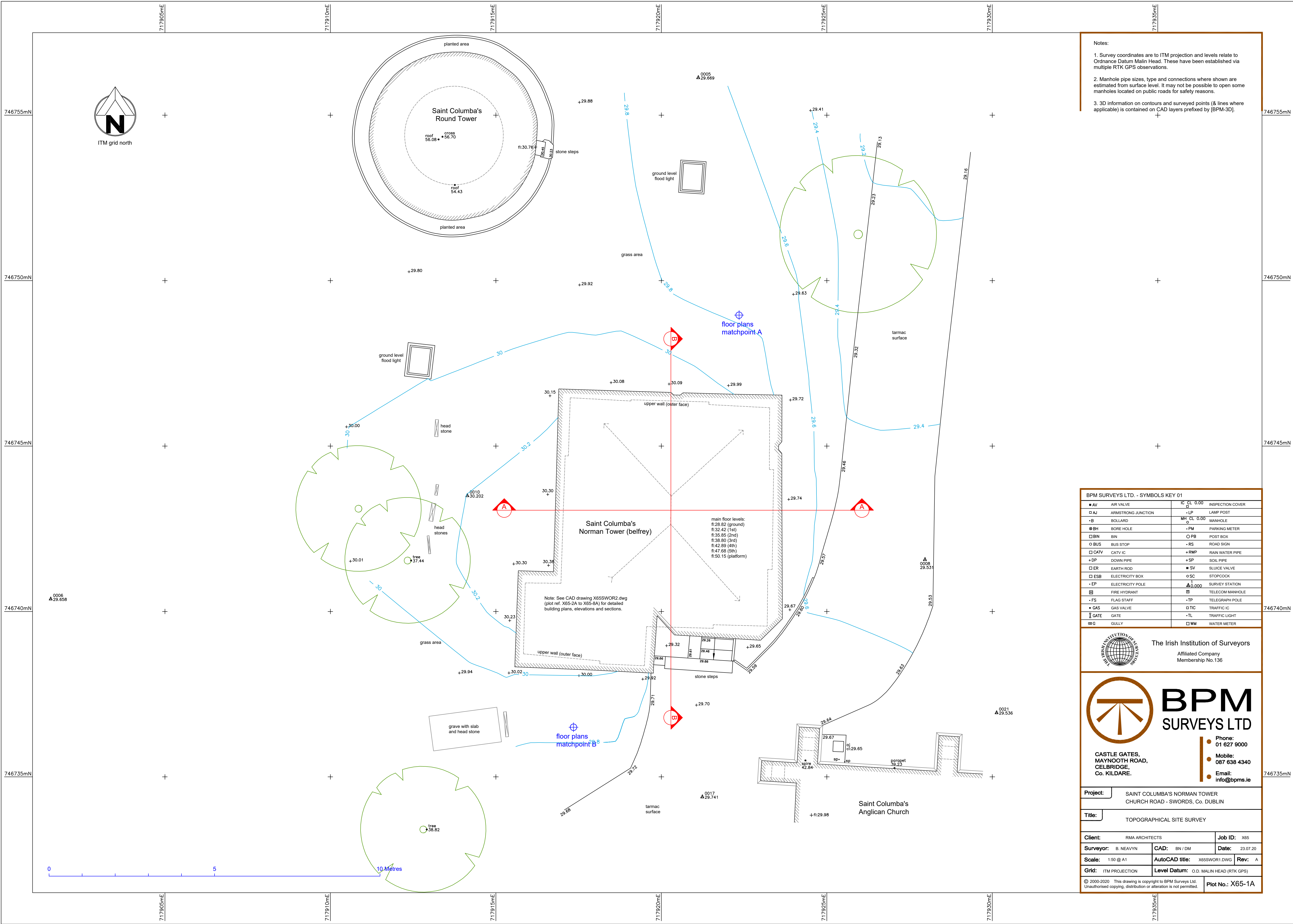
Plate 38: Underside of bell floor with east wall showing brick infill

This might represent an infilled window. At the bell floor level, there is no rebate for the door.

5. Conclusions: Belfry Tower

The current works have afforded a valuable opportunity to examine the interior features of the tower. An interpretation of the corbels as noted might be that the original layout of the tower consisted of a third and fourth floor of around 2.45m each in height, with a fifth bell floor of about 4m in height. The present third floor is about 4.m in height to the underside of the bell floor. The bell floor is about 4.8m high. Allowing for floors the total present height could easily accommodate the floors as suggested above. It is possible that the upper floors were remodelled when the exterior works to the parapet (and the round tower) carried out in the late 17th century.

The completion of the conservation works to the belfry tower mean that the tower is made more resilient for the future. The re-pointing of the exterior, the re-flooring of the interior and the re-slating of the roof mean both that the tower is better weather-proofed and also that opportunities to examine details of its construction and re-modelling have been possible.



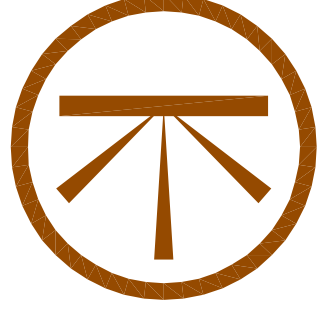
Notes:

1. Survey coordinates are to ITM projection and levels relate to Ordnance Datum Malin Head. These have been established via multiple RTK GPS observations.
2. Manhole pipe sizes, type and connections where shown are estimated from surface level. It may not be possible to open some manholes located on public roads for safety reasons.
3. 3D information on contours and surveyed points (& lines where applicable) is contained on CAD layers prefixed by (BPM-3D).

BPM SURVEYS LTD. - SYMBOLS KEY 01			
■ AV	AIR VALVE	IC CL 0.00	INSPECTION COVER
□ AJ	ARMSTRONG JUNCTION	• LP	LAMP POST
• B	BOLLARD	MH CL 0.00	MANHOLE
• BH	BORE HOLE	• PM	PARKING METER
□ BIN	BIN	□ PB	POST BOX
○ BUS	BUS STOP	• RS	ROAD SIGN
□ CATV	CATV IC	• RWP	RAIN WATER PIPE
• DP	DOWN PIPE	• SP	SOIL PIPE
□ ER	EARTH ROD	■ SV	SLUCE VALVE
□ ESB	ELECTRICITY BOX	• SC	STOPCOCK
• EP	ELECTRICITY POLE	▲ 0.000	SURVEY STATION
■ F	FIRE HYDRANT	□	TELECOM MANHOLE
• FS	FLAG STAFF	• TP	TELEGRAPH POLE
• GAS	GAS VALVE	□ TIC	TRAFFIC IC
■ G	GATE	• TL	TRAFFIC LIGHT
■ G	GULLY	□ WM	WATER METER



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Project: SAINT COLUMBA'S NORMAN TOWER
CHURCH ROAD - SWORDS, Co. DUBLIN

Title: TOPOGRAPHICAL SITE SURVEY

Client: RMA ARCHITECTS **Job ID:** X65

Surveyor: B. NEAVYN **CAD:** BN / DM **Date:** 23.07.20

Scale: 1:50 @ A1 **AutoCAD title:** X65SWOR1.DWG **Rev:** A

Grid: ITM PROJECTION **Level Datum:** O.D. MALIN HEAD (RTK GPS)

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Plot No.: X65-1A



East Elevation

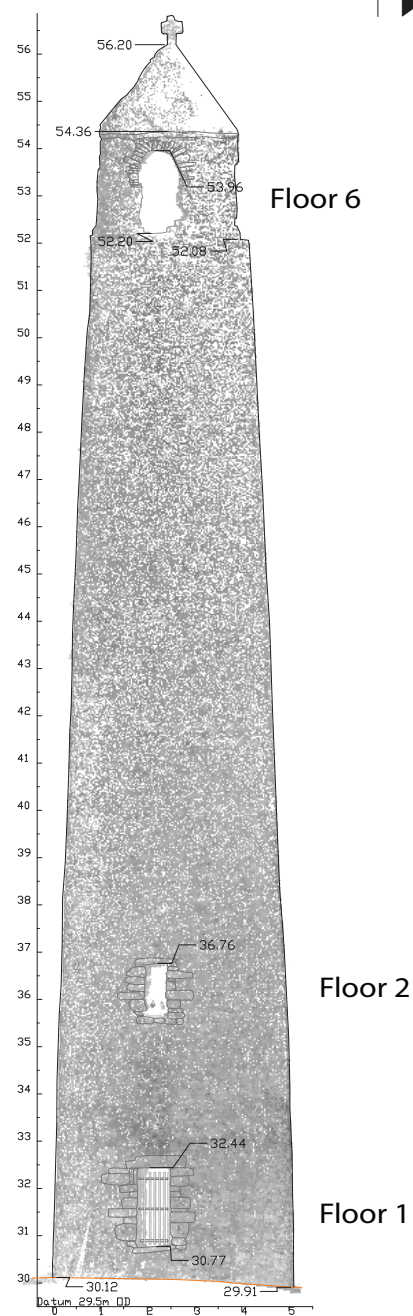
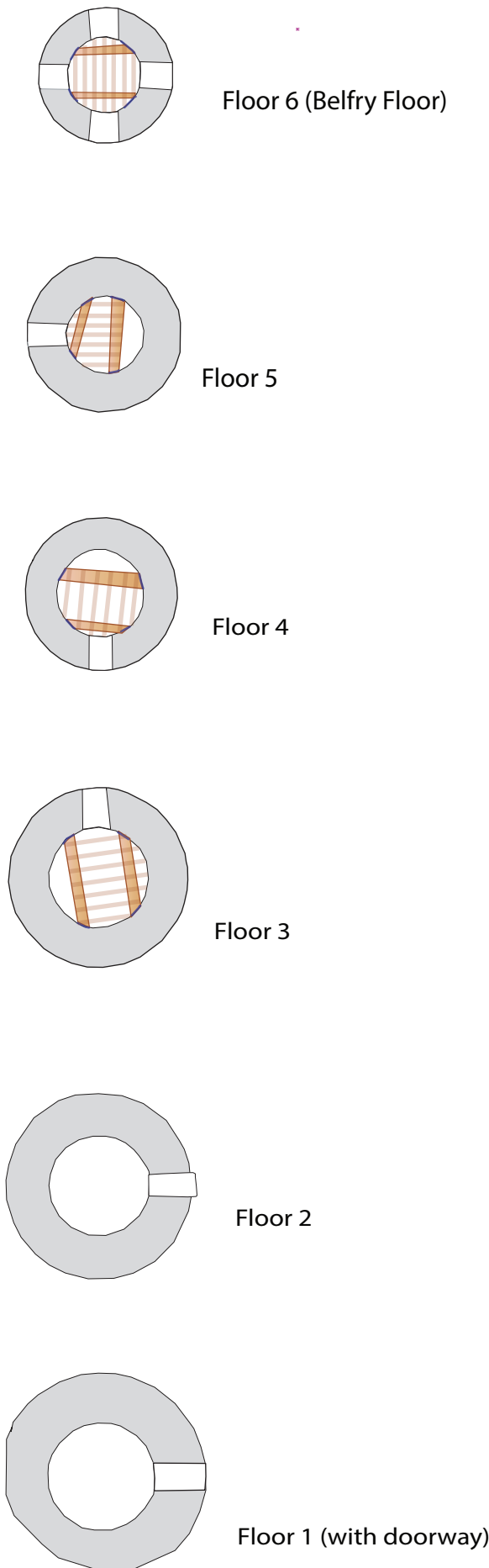
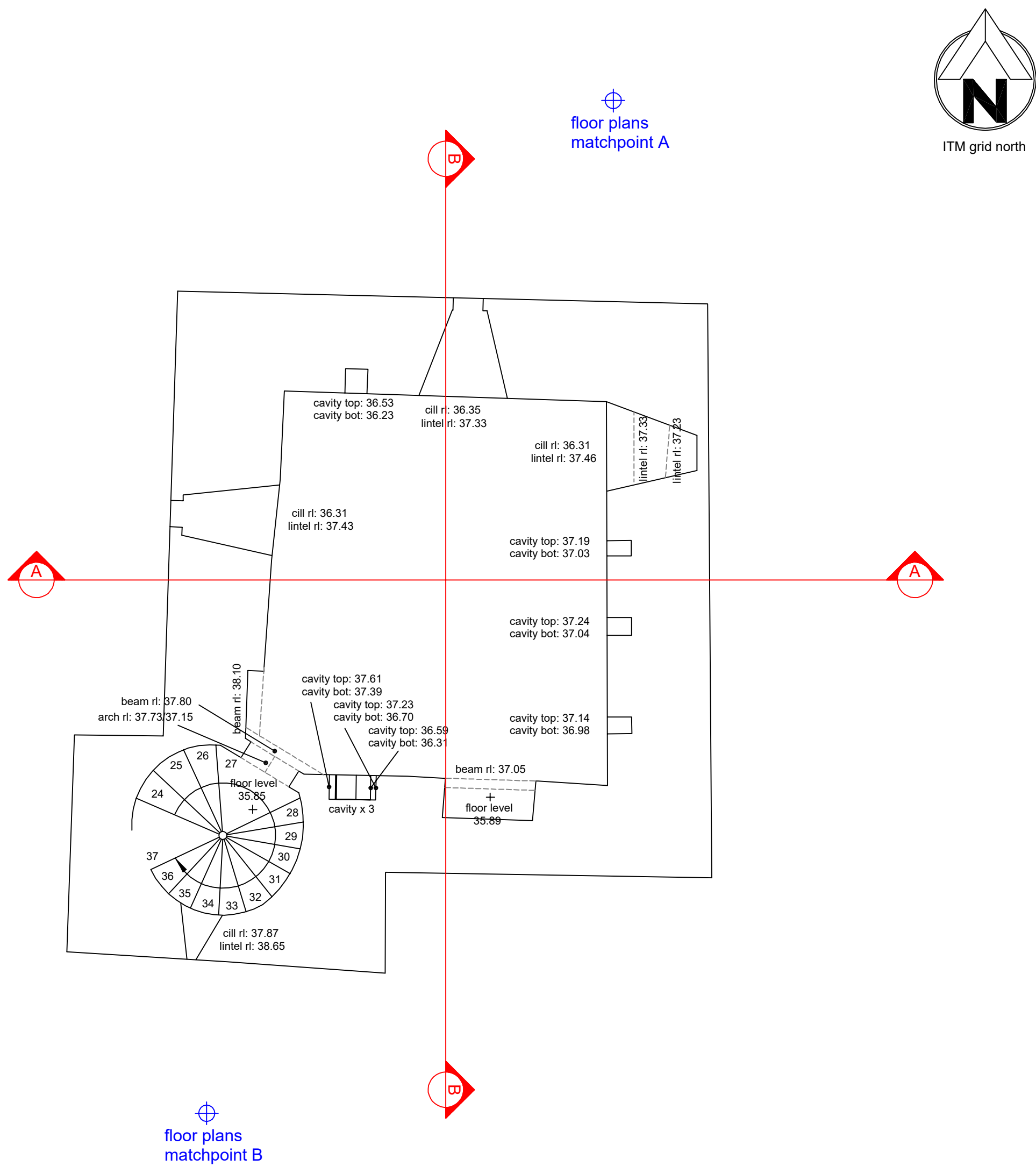


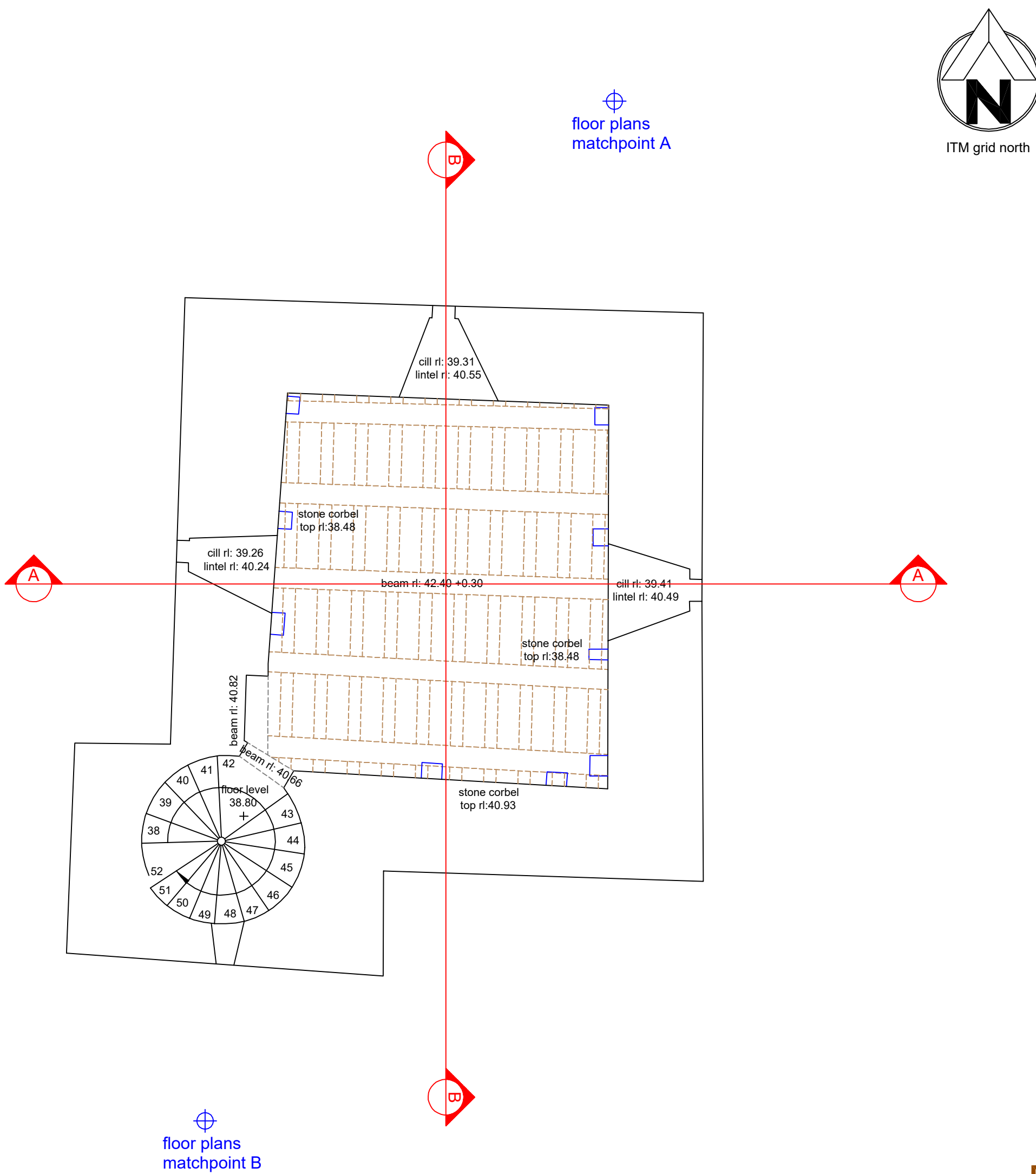
Figure 2: Plan of round tower showing original wooden floors and location of beam holes

Site: Swords Round Tower
Date: October 2024
Drawn by: LC





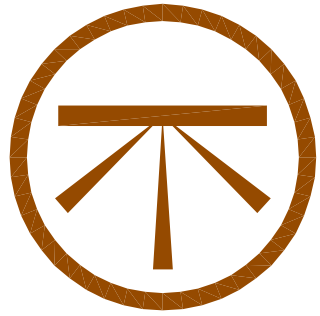
SAINT COLUMBA'S NORMAN TOWER
SECOND FLOOR PLAN - 1:50



SAINT COLUMBA'S NORMAN TOWER
THIRD FLOOR PLAN - 1:50



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Project:		SAINT COLUMBA'S NORMAN TOWER CHURCH ROAD - SWORDS, Co. DUBLIN	
Title:		MEASURED BUILDING SURVEY PLANS - SECOND FLOOR & THIRD FLOOR PLAN	
Client:		RMA ARCHITECTS	
Surveyor:	B. NEAVYN	CAD:	BN / DM
Scale:	1:50 @ A1	Date:	23.07.20
Grid:	ITM PROJECTION	AutoCAD title:	X6SSWOR2.DWG
		Level Datum:	O.D. MALIN HEAD (RTK GPS)
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Plot No.: X65-3A			