TOWER ON MULLAGH HILL, CO. OFFALY
PRELIMINARY ARCHITECTURAL REPORT

Margaret Quinlan Architects RIAI Grade 1 Accredited in Conservation

120 Rock Road Booterstown County Dublin mqarc@eircom.net

THE TOWER ON MULLAGH HILL

1 Introduction

1.1 Margaret Quinlan of Margaret Quinlan Architects was appointed by the Follies Trust to report on a protected structure, the tower on Mullagh Hill also known as Sadleir's Tower. The aim of the report is to comment on condition and make recommendations for repairs on a prioritised basis. It also aims to be of guidance to the owner, Mr Alo Dillon in the carrying out of the 2012 phase of the works. All recommendations will be agreed prior to commencement of works with Offaly Co Council, through consultation with Heritage Officer, Amanda Pedlow and Conservation Officer Rachel McKenna.

1.2 The tower is a protected structure. Most works to protected structures require planning permission. Certain repair and maintenance works may be exempt, provided they are carried out in accordance with good conservation principles and by operatives with the required skills and experience. A Section 57 Declaration will define any works which require permission and those which are exempt. The urgent/short-term works listed in Section 5 would normally be considered exempt, if properly carried out. The owner should ensure that consultation with Offaly County Council takes place and submit an application for a Section 57 if required .

1.3 This report is written on the understanding that a skilled craftsperson, experienced in historic masonry and the use of lime, is on site during the works. An initial meeting will be held on site with a core minimum attendance of the owner, Offaly County Council, the skilled craftsperson and the undersigned. At that meeting, the actions set out under Sections 5 and 6 will be discussed and any necessary guidance given by the undersigned.

1.4 The inspection was carried out starting at 11am on 20 April 2012. Conditions were windy / showery. Present were Primrose Wilson, Edward Wilson, Amanda Pedlow and Margaret Quinlan. The owner, Alo Dillon attended for a short time.

1.5 Access to the tower was limited to the ground floor and first floor circular passage.

1.6 Locally known as the tower on Mullagh Hill, it has been referred to as Sadlier's Tower in some written sources, principally the National Inventory of Architectural Heritage. This title derived from Francis Sadleir, who built it. Note that Sadleir is the correct spelling of the family name.

2 Context and History

2.1 The tower stands on top of Mullagh Hill. A cylindrical structure, it was built as a folly or a viewing tower - or possibly both - in the 1820s and is located southeast of the nearby site of Mullagh House, with which it is associated. There is no evidence of a path between house and tower on the first or second edition OS maps. Located on a hill-top, the site is shown as rocky ground on both maps.

Extract from 1st edition, 1838 Ordnance Survey map. Tower to south-east of Mullagh House and marked in red

2.2 The entry in the National Inventory of Architectural Heritage (NIAH) is as follows:

Description

Cylindrical tower folly, erected c.1820, within former demesne of Mullagh House. Random coursed stone and brick walls covered by roughcast render with parapet surmounted by smaller cylindrical turret with parapet. Loop openings with yellow brick surrounds. Pointed-arched door opening with yellow brick surround to ground floor. Pointed-arched opening to smaller tower with yellow brick surround, leads onto viewing platform. Interior with stone spiral steps.

Appraisal

Sadlier's Tower, on Mullagh Hill, is located on the highest point of the ground for miles with uninterrupted views of the surrounding landscape. Built as a folly to Mullagh House, the tower is reminiscent of ancient round towers, but one unusual aspect of this structure is the smaller turret surmounting the larger tower. Sadlier's tower now stands in the centre of an agricultural landscape, yet it is a reminder and a survivor of a past era and an important structure within Offaly's architectural heritage. It was identified as 'Spire' on the first edition OS for County Offaly which dates to 1840.

2.3 The tower is said to have been built by Francis Sadleir, (1774 - 1851) Provost of Trinity, who lived at nearby Mullagh House. There is a reference in Howley's *The Follies and Garden Buildings of Ireland*, 1993 to an inscribed plaque on the wall reading *'Built Rev Sadler Provost TCD.'*. However, no evidence of the plaque or its location could be found on site.

The following is an extract from ***Famous Offaly People***, *2007 Kearney, Offaly Historical and Archaeological Society.*

Francis Sadleir was a native of Castletown, Co. Tipperary. Some time in the early years of the nineteenth century he came into possession of Mullagh House, Killurin, near Tullamore. The Dictionary of National Biography, vol. 50, London (1897) carries a brief account of his career. It states that he was born in 1774, the youngest son of Thomas Sadleir. Educated at Trinity College, Dublin he became a doctor of divinity in 1813. Here he later held professorships of mathematics and Greek. Mr. Sadleir was an ardent supporter of Catholic Emancipation and was one of the first commissioners for administering funds for the education of the poor in Ireland in 1831. In 1837 he was made Provost of Trinity College and remained in that position for fourteen years. It is said that he refused an offer of a bishopric on a number of occasions. He married Letitia Grave of Ballycommon in 1801.

3 General Description

3.1 The NIAH account above describes the building as *'the smaller turret surmounting the larger tower'*. A drum within a drum would be a more accurate description with the mural stair rising between the walls of both. It is comparable in configuration and design to the Hook Lighthouse, although on a far smaller scale. The inner, smaller drum rises higher.

3.2 The external diameter of the tower is approximately 5m, and the inner diameter of the smaller drum is 1.4 m, and the passage between the walls is 0.6 m wide. The total height is approximately 8m and the lower parapet is approximately 5m from ground level but these heights could not be measured accurately at the time of inspection. Both towers have projecting upper courses.

3.3 The tower is built of rubble stone with yellow brickwork at the openings, possibly Pullough brick. Brick manufacturing was a strong industry in west Offaly in the late 18th and early 19th centuries. There is one entrance door and there are loops or slit windows at two levels in the tower. Some at the lower level are 'blind' as there is no space on the interior.

3.4 There is a stone stairs to the right of the door with nine risers leading up to a circular passage at the first floor level, the end of which is blanked off over the entrance. The upper row of loops is at this level. A wider opening leads out on to the parapet in the upper tower

over the entrance door. All openings are of pointed arches externally and internally, where the opes widen with splayed reveals, the lintels are of timber.

3.5 The ground floor appears to have been cobbled. The marks of two suspended floor levels survive within the inner drum, the lower accessed from the circular passage. There is approximately 2.2 m between floor levels, and there is a ledge at the highest level, indicating the eaves level of the roof structure. There are sockets in the wall at the upper floor levels. There is a parapet walkway around the smaller tower at the upper floor level. There is some slight evidence that this may have been crenellated. Close inspection from a scaffold during the works may tell more. There are drain holes around the external wall at approximately inside floor level and, possibly, but not certainly, under the parapet.

3.4 The tower was rendered in a wet dash, much of which has survived. The interior was plastered in the smooth finish which has survived to a surprising degree in a building which is open to the weather.

4 Condition

4.1 The tower is in reasonably good structural condition. The mortar is sound. There is some cracking in the masonry, most visible at parapet level. Many of the masonry joints at ground level have had the mortar washed out. Generally, there is no strong growth of vegetation, but there are small strands of ivy at parapet level.

4.2 There has been loss of fabric around most openings, where yellow brick has been damaged at the reveals. Generally, the brick is soft and is degrading with exposure to the weather. The external render had been providing the necessary protection but has been lost from the brickwork and also, is itself wearing away with exposure. The opening at the entrance door has lost much fabric.

4.3 The parapets of both towers are incomplete - whether by original design or by loss of fabric is difficult to establish with certainty. This is more marked on the north side. Because of this, the tops of the walls at the projecting upper section of both towers are vulnerable to water penetration. The projections seem to be formed by one or two courses of shaley stone, off which the parapet is built. Some protection is provided by soft capping vegetation. In some places, the fabric has been lost down to this level, being roughly half of its original height. It is difficult to establish the original height with certainty from ground level.

4.4 All the timber lintels are decayed and some are missing completely. The openings are small and the masonry structure does not appear to have yet been compromised by the loss.

5 Recommendations

Urgent/Short term

5.1 Repair the wall tops of both inner and outer drums by rebedding loose stone, general consolidation and flaunching the wall tops to weather against water penetration

5.2 Fill empty joints with mortar. Lack of mortar is most noticeable at parapet level and just above ground level.

5.3 Replace all decayed and missing lintels. Vulcanise top and ends by bonding a bituminous type sheet to upper surface and wrapping around, bearing ends to protect endgrain

5.4 Carry out repair work around damaged openings, particularly the entrance door, using a suitable matching brick. This may consist of simple rough racking, sufficient to prevent further loss. The exposed brick should receive a light scud shelter coat.

5.5 Secure the building with simple, lockable steel gates set within the depth of the walls at the entrance and at the access to the parapet at the upper level. The position of the upper gate hangings should be borne in mind when repairing reveals. The heels of the gates should be set in sockets at floor level to reduce weight on walls.

Medium/Longer term

These actions will be considered at a future date and are not part of this phase. The issues should be re-visited before commencement and further consultation with the County Council will be necessary.

5.6 Consider the provision of access to the upper levels. This is difficult because of the size of the spaces involved and the lack of headroom. It is likely that the most practical solution may be a circular stairs of galvanised steel. Lack of headroom may not allow a platform at the top level. The floor at the first level and the steps should be of open grating to allow rainfall through. It will be necessary to consult with the planning authority on this issue.

5.7 Carry out an annual inspection and make a photographic record. If possible, replicate the photographs in this report in viewpoints and light conditions. Changes over time will be more easily seen particularly in structural cracking and the loss of any unsound render. Repair of the render may be necessary, retaining sound material and replacing lost or degraded render with new wet dash.

6 Implementation of urgent repairs

6.1 Recover any loose and fallen stone from the surroundings of the tower before scaffolding. Set stone aside and select suitable stone/brick for any repair at parapet level and around openings. It is most unlikely that any fallen stone has been removed from this site but rather moved to walls at field divisions.
Any stone needed should be sourced on site and not brought in from another source.

6.2 Provide safe access to the parapets and other areas needing repair by scaffolding or a cherry-picker. Note that Health and Safety issues are the responsibility of the owner and a licensed competent person should deal with scaffolding.

6.3 All mortar used should be lime-based. Samples of work should be carried out and approval obtained from Offaly County Council. At wall top level and at ground level, the lime used should be NHL 3.5. For other repairs, a weaker mix may be suitable. The ratio of lime to sand will depend on the sand selected. The mortar should match the existing in grade of sand and type of pinnings. Guidance will be given on this at the initial site meeting.

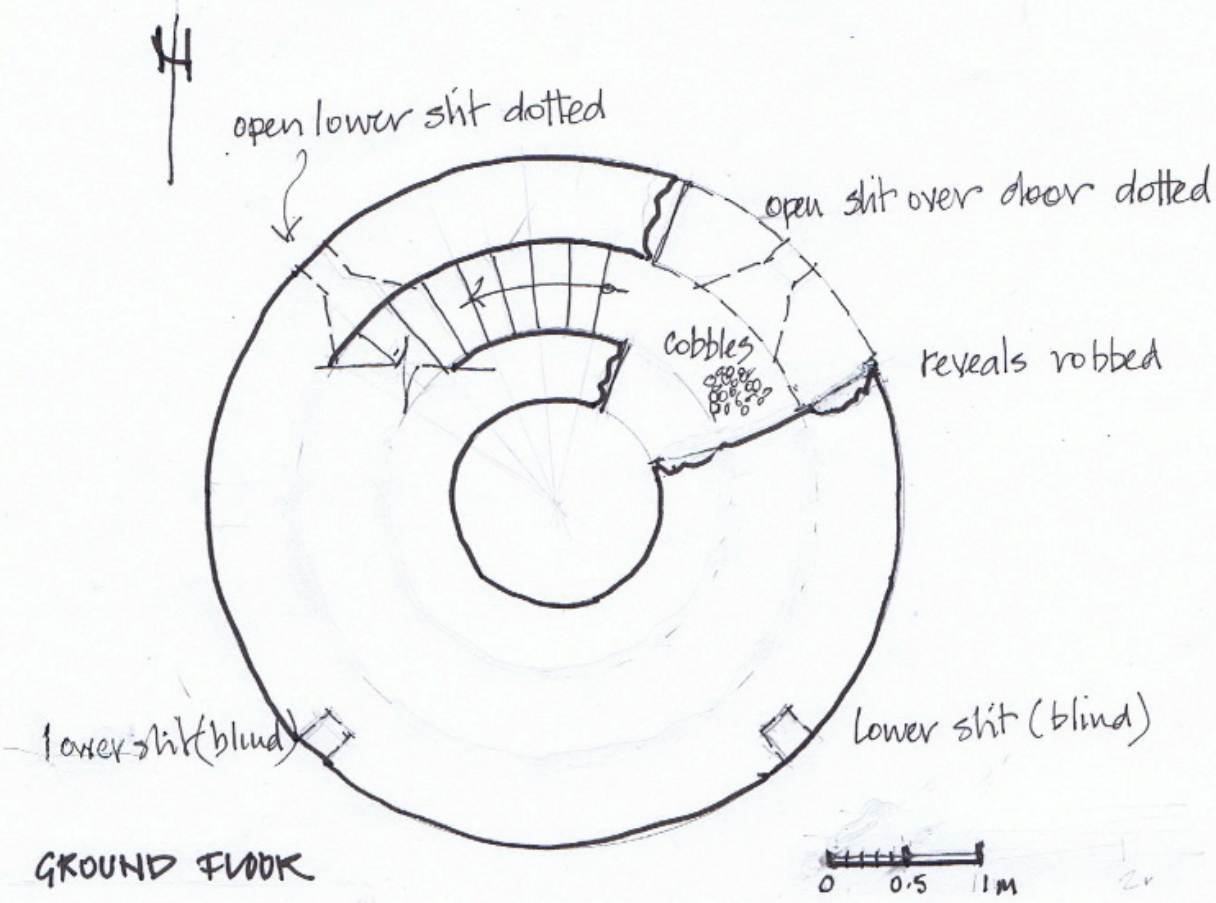
6.4 Clean off the tops of the parapet walls and the parapet walkway. Leave all suitable soft plants and moss as soft capping where possible. Treat ivy and other woody plants by careful spraying with a systemic weedkiller to kill the roots. Leave for 1 to 2 weeks and remove when dead. Remove all humus and organic material from joints.

6.5 Consolidate wall-tops by rebedding loose stone, by lifting, clearing and replacing bedding mortar and vertical joints.

6.6 Flaunch all wall tops and parapet walk, using the minimum necessary mortar and finishing in a way that allows water run-off. Supplementing the soft capping is a matter for judgement on site.

6.7 Provide new timber lintels where decayed or missing. Timber to match the existing in section and to be of oak if possible, salvaged pitch pine or douglas fir. The tops, sides and bearing surfaces of the timber lintels to be vulcanised by torching on an appropriate material such as polyester roofing felt.

M Quinlan
22 June 2012
Revised 21 May 2014 following access to upper level and further visits by Amanda Pedlow



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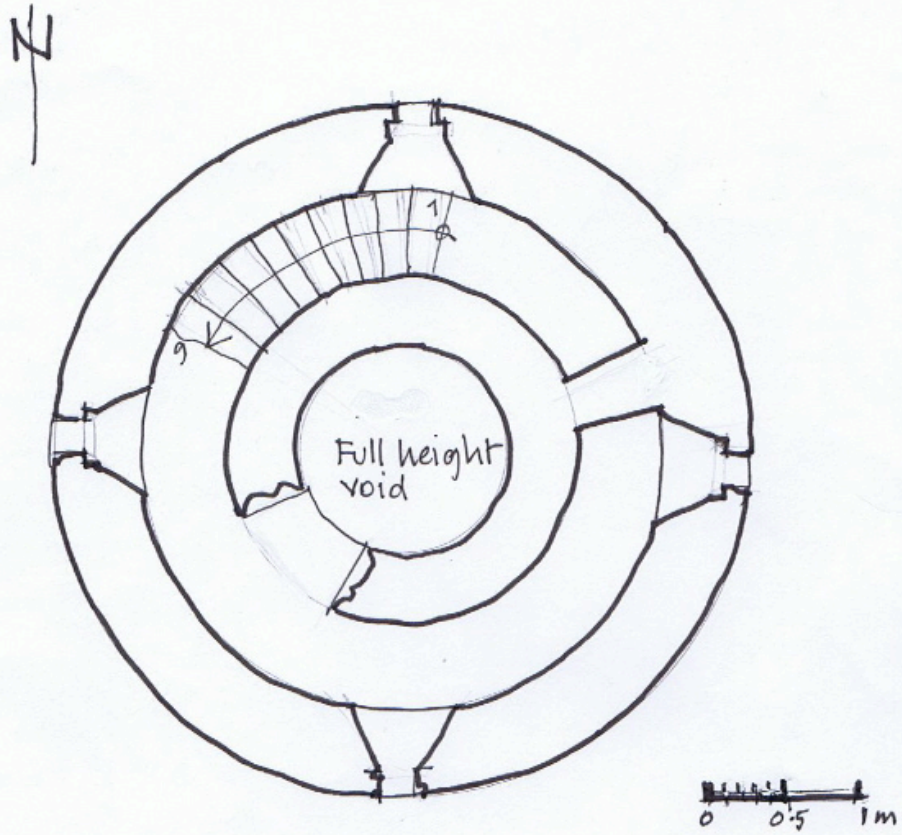

FIRST LEVEL with upper loops or slits and walkway

Tower on Mullagh Hill

1. 

2. 

3. 

4. 

Exterior
Clockwise North to East

Tower on Mullagh Hill

5. 

6. 

7. 

8. 

Exterior
Clockwise East to South

Tower on Mullagh Hill

9. 

10. 

11. 

12. 

Exterior
Clockwise South to West

Tower on Mullagh Hill

13. 

14. 

15. 

Exterior
Clockwise West to North

Tower on Mullagh Hill

16.

Degraded brickwork damaged by weathering 17

Cracking at projection 18

Tower on Mullagh Hill

Loop over entrance door
Note decayed lintels in place 19

Mural stairs 20.

Circular passage 21

22 Inner drum looking upward to roof ledge

23 Inner drum looking downward to inner door ope

24 Loop showing socket for timber lintol