



## WELL HOUSE CONSERVATION MANAGEMENT REPORT



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# **1 INTRODUCTION**

## 1.0 INTRODUCTION

### 1.1 Background

The Community of Mount Melleray Abbey commissioned a conservation report on the Well House at the Abbey. The Well House protects the spring which forms the sole drinking water supply for the monastery. It was built circa 1840 shortly after the establishment of the monastery in 1832. The spring feeds a watermain that runs directly to the monastery.

We were invited by the Community to prepare a proposal to form part of an application for funding from the Heritage Council's Community Heritage Grants Scheme 2023. We were given a brief prepared by them which gave us the background information. On the basis of the brief, we assembled a team with the relevant experience and expertise. The application for the grant was successful.

This report will consider the well house and its immediate surroundings. It will address and prepare a programme of policies and actions for the conservation, maintenance and use of the structure.

### 1.2 Statutory Protection and Designations

The site is within the curtilage of a Protected Structure, ref. no. WA750053 - Mount Melleray Abbey, but does not have a separate dedicated listing in the Record of Protected Structures or the National Inventory of Architectural Heritage.

### 1.3 Team

Margaret Quinlan FRIAI, MUBC Architect, Margaret Quinlan Architects  
RIAI Grade 1 Conservation

John Kelly B.E., M.Sc., C.Eng., M.I.Struct.E., M.I.E.I., FConsEI, David Kelly Partnership  
Conservation Accredited Engineer

Tír 3D Surveys  
Laser Scan Survey

Fr Richard Purcell, ocsa, of Mount Melleray  
Historical research in the monastery archives

### 1.4 Methodology

#### 1.4.1 The principles in the following guidance documents were followed:

- Framework and Principles for the Protection of the Archaeological Heritage (Government of Ireland, 1999) and full regard to all relevant policy and guidelines;

- Publications by the National Monuments Service;
- Department's Architectural Heritage Protection Guidelines for Planning Authorities (2011);
- Department's Advice Series: and in particular 'Ruins - the Conservation and Repair of Masonry Ruins'.

1.4.2 Research was conducted into historical sources. Most informative were an unpublished manuscript by Fr Aloysius O'Keefe in the monastery library and an MA thesis by Robin Turk (Dept of Archaeology UCC)

1.4.3 Fieldwork was carried out consisting of:

- a laser scan survey consisting of plans, sections and ortho-rectified internal and external elevations;
- a visual examination of the fabric by the team to study the evolution of the fabric and to assess condition;

1.4.4 A statement of significance was prepared based on the historical background and the assessment of the monument in its setting.

1.4.5 A condition assessment of the fabric of the building was prepared and included summary recommendations for repair works to halt deterioration.

1.4.6 Issues were identified and recommendations made to address them.

## **2 DESCRIPTION OF THE BUILDING**

## 2.0 DESCRIPTION OF THE BUILDING

### 2.1 Setting

The well house is located in a forest clearing on the hillside above and northwest of the Abbey. The surrounding ground is soft underfoot with water visible, presumably because of the spring.

### 2.2 Description

The building comprises a small, square, single-storey stone masonry structure, 2.8m x 2.8m on plan and 1.85m high to the eaves, with a shallow (25 degree) pitched pyramidal concrete roof surmounted by a stone cross at its apex. The walls are built of roughly coursed sandstone rubble masonry with dressed limestone pointed arch niches in the external elevations. A timber-sheeted door gives access to the interior. The interior contains a 1.75m deep stone cistern with narrow stone paved floor between the perimeter of the cistern and the external walls.



*Location of Well House*

## 2.3 History

*Richard Purcell ocsa*

Almost everything that we know about the history of the Well House comes to us from Fr Aloysius O'Keeffe who wrote an account of the Spring Well and the Well House. It is in manuscript form in the monastery archives and a transcript is attached in Appendix I.

### **Date of Construction**

It was most likely constructed during the early years of 1840s in the time of Abbot Vincent Ryan, the first abbot of Mt Melleray. Dom Vincent died in 1945. Fr Aloysius states that when the repairs were carried out on the Well House in 1893 it had already been standing for '50 years and more' so it would seem that it was most likely constructed during the early years of 1840s.

### **Original Design**

It would appear that the original design of the Well House was somewhat different from how it looks today as the appearance of the building was altered at the time of the 1893 repairs. The most notable difference was probably in the roof which was originally a flat roof. Fr Aloysius tells us that for its first 50 years or so the Well House had 'slabs of flag', which 'served as a roof to keep out the rain'. The pitched cement roof was added in 1893 but it would seem that the stone cross on top of the structure was part of the original design as Fr Aloysius writes 'A stone cross surmounts the whole but that cross was there from the beginning.'

### **Function**

The Spring Well was the main source of water for the monastery - in both accounts above Fr Aloysius notes as much: 'the well that principally supplies the Monastery with water' and 'Abbot Vincent's enclosed well, which supplies the monastery with water'. In addition to the monastery proper, where the monks lived, Fr Aloysius would have used the term 'monastery' to include included the guesthouse, guest WCs, refectory, lavatorium (washrooms), dairy, abbot's apartments, sacristy, infirmary, and lodge. This spring well, sometimes referred to as the 'house well', originally provided the main supply of water, not just for drinking but also for washing and cleaning.

The Well House receives its supply of water from a spring. Unlike the surface water that comes down from the mountain the well house water is clear and from an underground spring. This spring was first identified in the early 1840s and for over 180 years has been and continues to be the main supply of water for the monastery. It is never known to have dried up as Fr Aloysius was written: 'The spring well



underneath never runs dry, or even loses some of its water, even in the hottest or driest summer when numbers of other spring wells in the neighbourhood cease to throw out water.' And about the exceptionally dry summer of 1887 he wrote 'Abbot Vincent's enclosed well, which supplies the monastery with water, did not appear to lose a pint of its water.'

### **1873 New Pipe Work**

The original pipes bringing the water from the well to the monastery were most likely made of earthenware. The route of the pipe dissects two fields of the farm and earthenware pipes would not have been sufficiently robust to withstand the pressure of animals grazing and horses pulling farm machinery so it is probable that they were damaged and had to be replaced as Fr Aloysius writes that 'About the year 1873, new metal pipes were put down underground to convey water from that well to the monastery, the old ones having been injured by time.'

### **1893 Repairs to the Structure**

It would appear that a significant repair/rebuild of the structure was undertaken in the autumn of 1893 at which time the walls were repaired and the pitched cement roof added, as recorded by Fr Aloysius: 'wherever it was necessary the walls were repaired with small stones and cement, and a cement covering put over the slabs of flag'.

### **Continuity of Function**

It would appear that the structure and functioning of the Well House has remained unaltered since the end of the 19<sup>th</sup> century. It has been maintained by generations of monks with minor repairs undertaken as necessary. The Well House and the spring it protects continue to serve their original purpose over 180 years later.

### **Spring Water Supply<sup>1</sup>**

A technical and historical assessment of the well house and water supply was written by Robin Turk and is attached in Appendix II.

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<sup>1</sup> Turk, Robin W., *Harnessing Water in a 19<sup>th</sup> Century Cistercian Monastery: Mt Melleray Abbey Co. Waterford*, Minor Thesis submitted for MA. Degree in Archaeology, Department of Archaeology, UCC (N.U.I.), October 2004, pp 56-59.

### **3 STATEMENT OF SIGNIFICANCE**

### 3.0 STATEMENT OF SIGNIFICANCE

The well house is a modest building, the significance of which is found in an amalgam of architectural, historical, social, spiritual and landscape values.

- It is an essential part of the monastery infrastructure, providing water to the community from the early years of the foundation.
- It has functioned without fail for almost two centuries.
- Its architectural qualities lie in its simple formality, symmetry and fine proportions, all lending dignity to its important function.
- It has been given external expression with religious connotations, not all of which were part of the original. Structures of this nature are found in other Cistercian foundations.
- It has an importance as a place of informal devotion for a small number of people who visit and leave religious items, reminiscent of the holy well tradition.
- A part of the monastic endowment, it is dramatically placed on the southern slopes of the Knockmealdowns and on the route down to the monastery from the north.
- It is beside St Declan's Way - the pilgrim path between Ardmore and Cashel - and happening upon it on mountain terrain should be memorable and a delight to the pilgrim and other walkers.

## **4    CONDITION ASSESSMENT**

## 4.0 CONDITION AND RECOMMENDATIONS

### Overall Condition

The building is well maintained but the structure is in poor condition with significant cracks in the roof and walls. The solid concrete (and possibly stone) roof structure added in 1893 was probably cast on stone filling added to the roof to form the pyramidal shape and support the cross at the apex. As the filling compacted, the concrete deflected (and cracked) imposing an outward force at the tops of the external walls. The additional loading and associated deflection is likely to have caused the cracking in the roof slopes, in the ceiling slabs and the vertical cracks in the external walls. Works to secure the roof structure and walls are required in the short term to prevent further deterioration.

The fabric condition in the various area of the building is described in this section and the recommended works are listed for each area.

A list of recommended works to be carried out is included at the end of this section.

### Statutory Approval for Works

As the site is within the curtilage of a Protected Structure, all works should be carried out in consultation with Waterford City and County Council's Conservation Officer.

## 4.1 DESCRIPTION AND CONDITION OF UPSTANDING WALLS AND ROOF

### Roof

The roof comprises a shallow square pyramid of concrete with a slightly sprocketed profile and a stone cross at the apex. The cross is slightly off-vertical. There may be filling material between the external concrete slopes and the flat stone ceiling visible internally. The roof slopes have deflected and cracked causing outward forces at the perimeter at eaves level.

**South Elevation - External**

The roof slope comprises smooth concrete with a slightly sprocketed profile and a short overhang at the eaves. There is one wide crack close to the western hip and narrower cracks on the eastern side, all emanating from the base of the stone cross at the apex of the roof.

The roughly coursed sandstone masonry wall contains two small arch headed niches backed by slate, one either side of the timber sheeted door which has an unpainted timber lintel at its head. There is light vegetation growing from the joints. The masonry joints are quite thin, and the mortar joints are somewhat eroded. There is horizontal cracking just under the eaves course at the external corners.

**East Elevation - External**

The roof slope comprises smooth concrete with a short overhang at the eaves. There are two significant cracks close to the hips, north and south. The northern crack extends through the wall masonry.

The roughly coursed sandstone masonry wall contains two small arch headed niches backed by slate. There is light vegetation growing from the joints. The masonry joints are quite eroded, particularly in the centre of the elevation.

**North Elevation - External**

The roof slope comprises smooth concrete with a short overhang at the eaves. There is a significant crack across the hip at the eastern side which extends through the wall masonry and has cracked the arch-headed lintel (formed from a single piece of stone) over the eastern niche.

The random rubble sandstone masonry wall contains two small arch headed niches with dressed sandstone heads and backed by slate. There is light vegetation growing from the joints. The masonry joints are quite eroded, particularly over the eastern niche and at the base of the wall.



**West Elevation - External**

The roof slope comprises smooth concrete with a short overhang at the eaves. There are two significant cracks close to the hips, north and south. The northern crack extends through the eaves, detaching a small piece. The southern crack is much wider and extends through the wall masonry, around the dressed stone arch-headed lintel.

The roughly coursed sandstone masonry wall contains two small arch headed niches backed by slate. There is light vegetation growing from the joints. There are further cracks in the wall masonry at the southern corner.

### Internal

The ceiling comprises three large stone slabs spanning east-west between the external walls. The ceiling slabs rest on a course of large stone with diagonal stones across the internal corners. Two of the three slabs have cracked at midspan. There are lime deposits at the joints between the slabs, at the cracks and on the wall faces. The southernmost joint between the ceiling stones has widened due to movement in the external walls.

The walls comprise roughly coursed sandstone rubble masonry, with cylindrical niches in the north, east and west walls. There are vertical cracks through the niches and at the internal corners.



*Stone slabs forming ceiling (note lateral cracks marked by lime deposits)*



*Western Wall - Inner Face*

A narrow walkway around the perimeter of the cistern is covered in squared, dressed sandstone flags.

The cistern itself appears to be lined with stone and is approximately 1.75m deep below floor level.



*Eastern Wall - Inner Face*

#### 4.2 LIST OF RECOMMENDED WORKS

Provide a removable and robust temporary cover to the cistern before any investigation and for the duration of the conservation works;

Provide props to the cracked ceiling slabs from the base of the walls before undertaking any works;

Remove the concrete roof;

Examine the stone ceiling slabs and, if possible, insert diagonal stitches working from above. The insertion of a steel support may be necessary but will be avoided if possible;

Reinstate the roof as a lightweight structure to replicate the profile of the concrete roof removed. Evidence may emerge during the works of the original roof covering which may suggest an alternative approach to reinstatement;

Remove the ivy and vegetation from the walls. The vegetation is vigorous (see photograph below) and does not appear in the ortho-rectified photography as it was clipped back for the survey. It was not treated at that time and therefore it will regrow;

Repoint the walls locally where joints are eroded with a compatible lime-based mortar;

Pack and stitch the cracks in the walls using stainless steel helical bars, lime mortar and/or grout to reinstate the integrity of the wall;

Stitch the cracked stone lintels (arched and flat) using stainless steel threaded bar set in epoxy resin.



## **5 GENERAL ISSUES**

## **5.0 GENERAL ISSUES**

### **5.1 Condition of Fabric**

The condition of the fabric is a major issue and has been set out in detail in Section 4 with recommended actions. It is in particularly poor condition in areas and works are essential to prevent further deterioration.

### **5.2 Protection of Water Supply**

The protection of water supply and the prevention of contamination are essential. The top of the cistern is uncovered and at risk from deterioration of the building, from works, from unauthorised visitors and from pollution of the ground surrounding the well house.

### **5.3 Security of the Building**

There is a tendency for members of the public to enter the building and leave religious objects in the recesses. This is a risk to both the purity of the water supply and to the safety of those who enter.

### **5.4 Access to the Site**

The site is on a forest road beside St Declan's Way and should be accessed only by walkers. However, increasingly, scrambler and quad bikes are to be found on remote tracks and fuel spillage might be a risk. There may also be forestry equipment in the vicinity of the site during felling and extraction of trees.

### **5.5 Lack of Interpretation**

The information board on the site is dated and almost illegible.

## **6 GENERAL RECOMMENDATIONS**

## **6 GENERAL RECOMMENDATIONS**

### **6.1 Condition of Fabric**

Implement a programme of conservation and repair works to the roof and the walls as recommended in Section 4.

### **6.2 Protection of Water Supply**

Consider providing a moveable cover to the top of the cistern which is visually unobtrusive while stored and can be lowered into place once the building is entered.

Consider the replacement of the door to make the well more secure from entry.

Consult with Coillte regarding access for vehicles to the area because of the risk of leaks or spillage of liquids.

### **6.3 Access to Site**

Consider the provision of a vision panel and low-level solar-powered lighting to the interior to allow walkers to view the interior.

Consider the provision of a stone table or niche close to the well house where religious items can be left by those who come to pray there.

### **6.4 Lack of Interpretation**

Provide a discreet information panel - maybe on St Declan's Way - but in a location agreed with the Conservation Officer.



## APPENDIX I

### The History of the Well House

Almost everything that we know about the history of the Well House comes to us courtesy of Fr Aloysius O’Keeffe<sup>2</sup> who wrote the following account of the Spring Well and the Well House:

#### The Spring Well

In the Autumn of 1893 the little house, our Abbot Vincent’s well at the northwestern corner of the Abbey lands, the well that principally supplies the Monastery with water, underwent repairs. After standing there for the last 50 years and more, it was somewhat injured by time, and hence, wherever it was necessary the walls were repaired with small stones and cement, and a cement covering put over the slabs of flag, which till then served as a roof to keep out the rain. As it formerly stood, it had a very antique appearance, but the repairs divested it of that appearance, and made it an ordinary little structure, and nothing more. A stone cross surmounts the whole but that cross was there from the beginning.

The spring well underneath never runs dry, or even loses some of its water, even in the hottest or driest summer when numbers of other spring wells in the neighbourhood cease to throw out water.

About the year 1873, new metal pipes were put down underground to convey water from that well to the monastery, the old ones having been injured by time. This work was done by the smiths of the monastery. We then had two smiths in our community but soon afterwards one of them, Br. Kieran, died, and since that no other smith has been professed. 13 August 1895<sup>3</sup>

In 1885 Fr Aloysius had begun keeping a diary of ‘Incidents connected with this monastery more or less worthy of being remembered’, and in 1887 he recorded the following:

27 Oct. Today and last night, we had an abundant fall or rain, which was badly wanted, for since the middle of spring, we had but little rain. During the last fortnight, the spring wells in this neighbourhood were mostly dry. Even the enclosed well, which supplies the boarding houses of the seminary with water was nearly dry, like the other springs. Abbot Vincent’s enclosed well, which supplies the monastery with water, did not appear to lose a pint of its water. That admirable well has supplied a great many of the neighbours with water during the last few weeks.<sup>4</sup>

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<sup>2</sup> Fr Aloysius was born in Cork in 1839 and entered Mt Melleray Abbey in 1859, having been a student at the seminary here for the previous two years. From his earliest years as a monk he was interested in the history of the monastery, compiling about 30 volumes of varying value. In 1896 Fr Aloysius completed his unpublished manuscript of *Scraps of the History of Mount Melleray*. In the introduction to this volume, he recounts that during the early 1860s he held an office in the monastery which gave him an opportunity of speaking to about half a dozen of the old lay brothers from Melleray in France from whom he learned much of the early history of Mount Melleray. Fr Aloysius died on 15 October 1919.

<sup>3</sup> O’Keeffe, Aloysius, *Scraps of the History of Mount Melleray*, unpublished manuscript, Mount Melleray Abbey, 1896.

<sup>4</sup> O’Keeffe, Aloysius, *Diary 1 - 1885-1898 - Incidents connected with this monastery more or less worthy of being remembered*, unpublished manuscript, Mount Melleray Abbey, 1898.

## **APPENDIX II**

Turk R. 2004 Harnessing Water in the 19<sup>th</sup> Century Mt Melleray  
(MA Thesis) Excerpt Spring water Supply pp56-59

It is important to note that the Cistercians in particular put water to as many uses as possible. Where the situation allowed they used water for a multitude of industrial purposes. The water supply and distribution system at Mt Melleray is as large and complex as many of the medieval examples. The various separate water supply systems at Mt Melleray were constructed at different periods throughout the history of the monastery and these present a complex array of springs, conduits, ponds, filters, pipes and reservoirs. The main high volume supply runs in an open conduit from its source some 4km to the north west of the monastery and is in itself a remarkable piece of engineering. Indeed, the water works of Mt Melleray may be considered a worthy successor to the famous water works of 13<sup>th</sup> century Clairveaux.

## Spring Water Supply

The founders of Mt Melleray would have found a ready supply of drinking water in the numerous springs which can be found in the locality but the establishment of a permanent and more reliable spring-well would still have been important. Hence, soon after the monastery was founded, during the time of Abbot Vincent, an enclosed spring well was built at its present location to the north west of the monastery (plate 4). This still forms the main supply of drinking water for the monastery. Despite the seeming abundance of water in the locality the well needed to be located fairly carefully in order for it to be reliable, even in times of drought. It is interesting that Fr Aloysius noted in 1887 that a drought had caused many of the spring wells in the neighbourhood to run dry but that Abbot Vincent's enclosed well had 'not lost a pint of water'. To this day it has never run dry.

The well consists of a relatively shallow ashlar-lined cistern enclosed by a conduit-head building. This is a small square building c.3x3m built of random rubble (fig 6.3). There is a door on the south side flanked by two small blind arches of dressed stone. There are two similar arches on each of the other three sides. The roof is supported on corbels and large stone flags although the present concrete roof covering is of later date. This is topped with



*Fig 6.3 Conduit Head.*



*Fig 6.4 Stone lined Cistern inside the conduit head building.*

a carved stone cross. In the interior, the cistern, c1m square and 2m deep is surrounded by a narrow flagstone floor (fig 6.4). There is a small recess at the centre of each wall except the south wall. Around 1900 there was an open conduit (to supply the filter beds) running close to the north of the conduit house but this did not feed the cistern

The presence of an enclosed conduit head is quite common on medieval monastic sites. It acted as protection for the well head and prevented dirt and impurities getting into the well. As is the case here conduit heads were generally located at a higher level than the main buildings in order to supply pressurised water to the monastery in a closed conduit system. This would have had considerable advantages over a traditional well or spring because the water could be distributed throughout the monastic complex under pressure and easily accessed by taps. The water collected in the cistern and was led through a pipe to the monastery.

The cut-stone blind arches, carefully cut stone flags and ashlar cistern of the conduit head at Mt Melleray show that it was designed with care although it was situated some distance from the monastery on a remote hillside. In medieval times conduit heads were often quite elaborate and the Mt Melleray conduit head is similar to those at Valle Crucis Abbey, Wales and Haughmond Abbey, Shropshire (Bond 2001) (Fig.6.4). It looks very like a small wayside chapel. It is of interest that the monk who gave us the description of 13<sup>th</sup> Clairvaux described the conduit head as follows “A small but pretty hut, or tabernacle to use a more reverential word, encloses it and protects it from any dirt” (Matarasso 1993, 292). Perhaps the monks built the conduit heads with such care in a spirit of awe or reverence for the source of the water that brought so many blessings.

The spring well fed into a 3 inch cast iron water main which runs almost in a straight line toward the western side of the monastery (plates 5 and 6). From this main it was distributed through various lead and cast iron pipes to the guesthouse, guest WCs, refectory, lavatorium, (washrooms) dairy, abbot’s apartments, sacristy, infirmary, lodge, and a public water fountain. The plan shows details of the system as shown in various old maps of the estate (plate 5). This spring well, named the ‘house well’, originally provided the main supply of water, not just for drinking but also for washing and cleaning. A second well, named Whelan’s well, supplied water for the farm and workshops as well as the

laundry and W.C.s (or Cabinets as the monks called them). This well was located to the north of the farm and fed a distribution tank in the cart sheds to the north of the laundry. From there it was distributed through lead pipes to the laundry and throughout the farm (plate 5). Very little evidence for the supply from Whelan's well remains as it has been obscured by later work.

## Filtered Water Supply

For many years the spring water supply was quite satisfactory, however, as the monastery grew the water supply was put under increasing pressure. Also, because it was not filtered, the water contained suspended sand and clay particles which caused problems. "The wash house..... sometimes had not half enough water and frequently the water that came to it was neither pure nor free from sand" (Fr Aloysius G). In 1897, the problem was becoming so severe that it was proposed to construct a filtering apparatus to produce a filtered water supply "that would send to all parts of the monastery an abundance of clean, pure water" (Aloysius *ibid*). Such a system would have been an expensive proposition but Fr Aloysius wrote that it was agreed that the benefits to the monastery and the employment it would give to the tradesmen and local labourers helped to justify the cost. From the early days right up to the 1970s providing employment to local people was considered important as there was very little other employment in the locality. The project was agreed at the end of 1897 and work started immediately. It was finished before the end of 1899 (Aloysius *ibid*). The spring water supply continued to provide all the drinking water for the monastery as, indeed, it still does. The filtered water was used for nearly everything else.

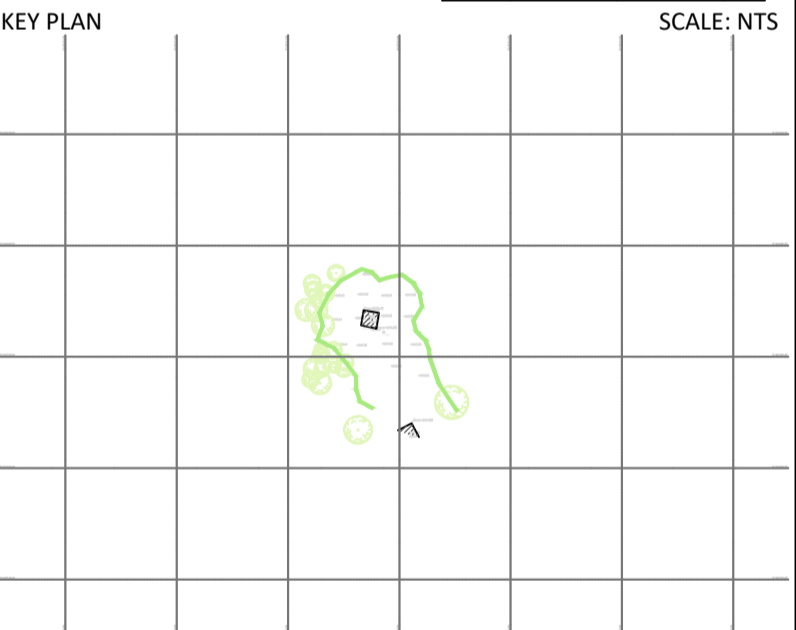
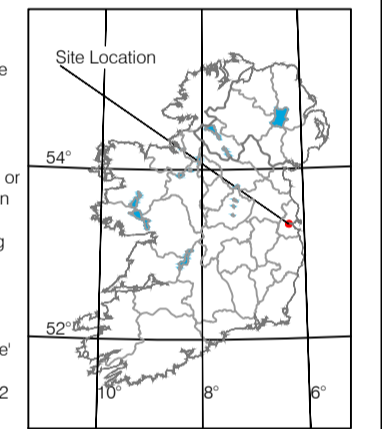
The filter beds and settling ponds were constructed on the site of the northernmost two ponds of a group of four that had been built some time soon after the first turbine had been installed. Aloysius described how a large number of metal (cast iron) pipes and pipes of

**APPENDIX III**  
Survey Drawings and Ortho-Rectified Photographs



Legend - Water / Drainage		Legend - Ground Features	
CUL	Culvert	FE	Fence
DYC	Ditch	WL	Wall
WAF	Water Edge	REG	Railing
POND	Pond	RT	Risk Top
WER	Weir	RR	Risk Bottom
ACO	Acc Drain	RWB	Retaining Wall Base
GL	Long gully	RWT	Retaining Wall Top
Legend - Roads - Rail		Legend - Vegetation	
RD	Road Carriageway Edge	GRASS	Grass partitions
RC	Road Centre	HE	Hedges
KT	Kerb Top	VL	Vegetation Line
KB	Kerb Bottom Channel	VL	Tree Stamp
KBAC	Kerb Back	TR	Tree
SR	Speed Ramp	Legend - Services	
TRK	Tracks	ORC	Overhead Cables
VE	Verge	PP	Power Inspection Cover
KTRK	Kerb Track	PP	Power Pole
Legend - Roads Markings		PP	Sty
SWLD	Single White Line Dashed	PP	Sty (Pylon)
SWL	Single White Line	FFH	Fire Hydrant
SYLD	Single Yellow Line Dashed	GV	Gas Valve
SYL	Single Yellow Line	GV	Gas Valve
DWLD	Double White Line Dashed	LFP	Lamp Post
DWL	Double White Line	M/P	Mast / Pylon
DYLD	Double Yellow Line Dashed	TCPC	Telecom Control Panel (Pillar)
DYL	Double Yellow Line	TC	Telecom Cover
YB	Yellow Box	TL	Traffic Lights
Legend - Buildings / Structures		TP	Telephone Pole
BGL	Building Line	TP	Telephone Pole
RI	Ridge	TP	Telephone Pole
E	Eaves	TP	Telephone Pole
PAR	Parapet	TP	Telephone Pole
SUF	Scilla	TP	Telephone Pole
CAN	Canopy - Overhead Features	TP	Telephone Pole
CAN	Canopy	TP	Telephone Pole
PF	Perforated Building	TP	Telephone Pole
B	Roofs	TP	Telephone Pole
GH	Greenhouse	TP	Telephone Pole
SH	Shed	TP	Telephone Pole
S	Sign	TP	Telephone Pole
CAB	Cabin	TP	Telephone Pole
CR	Chimney	TP	Telephone Pole
BIG	Bridge	TP	Telephone Pole
LDR	Ladder	TP	Telephone Pole
T	Tank	TP	Telephone Pole
P	Platform	TP	Telephone Pole
MONU	Monument	TP	Telephone Pole
L	Litter Bin	TP	Telephone Pole
PB	Post Box	TP	Telephone Pole
RS	Road Sign	TP	Telephone Pole
B	Bus Stop	TP	Telephone Pole
F	Flower box	TP	Telephone Pole
S	Survey Station	TP	Telephone Pole
Legend - Services - Underground		TP	Telephone Pole
UA	Underground Sewer	TP	Telephone Pole
UCOM	Underground Cooled	TP	Telephone Pole
UF	Underground Fuel	TP	Telephone Pole
UG	Underground Gas	TP	Telephone Pole
UP	Underground Power	TP	Telephone Pole
US	Underground Storm	TP	Telephone Pole
UT	Underground Telecom	TP	Telephone Pole

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REVISION	DESCRIPTION	DATE

Client: **Margaret Quinlan**

Location: **Melleray Well, Co. Wexford**

Job: **Topographical Survey**

Drawing Number: 23097 Scale: 1:200 / A1

Coordinate System: ITM Reference Datum: GPS Derived Malin Hd (OSGM2015)

Surveyed By: JH Drawn By: IP

Date: Surveyed 03 08 23 Issue 14 08 23 Checked By: LM





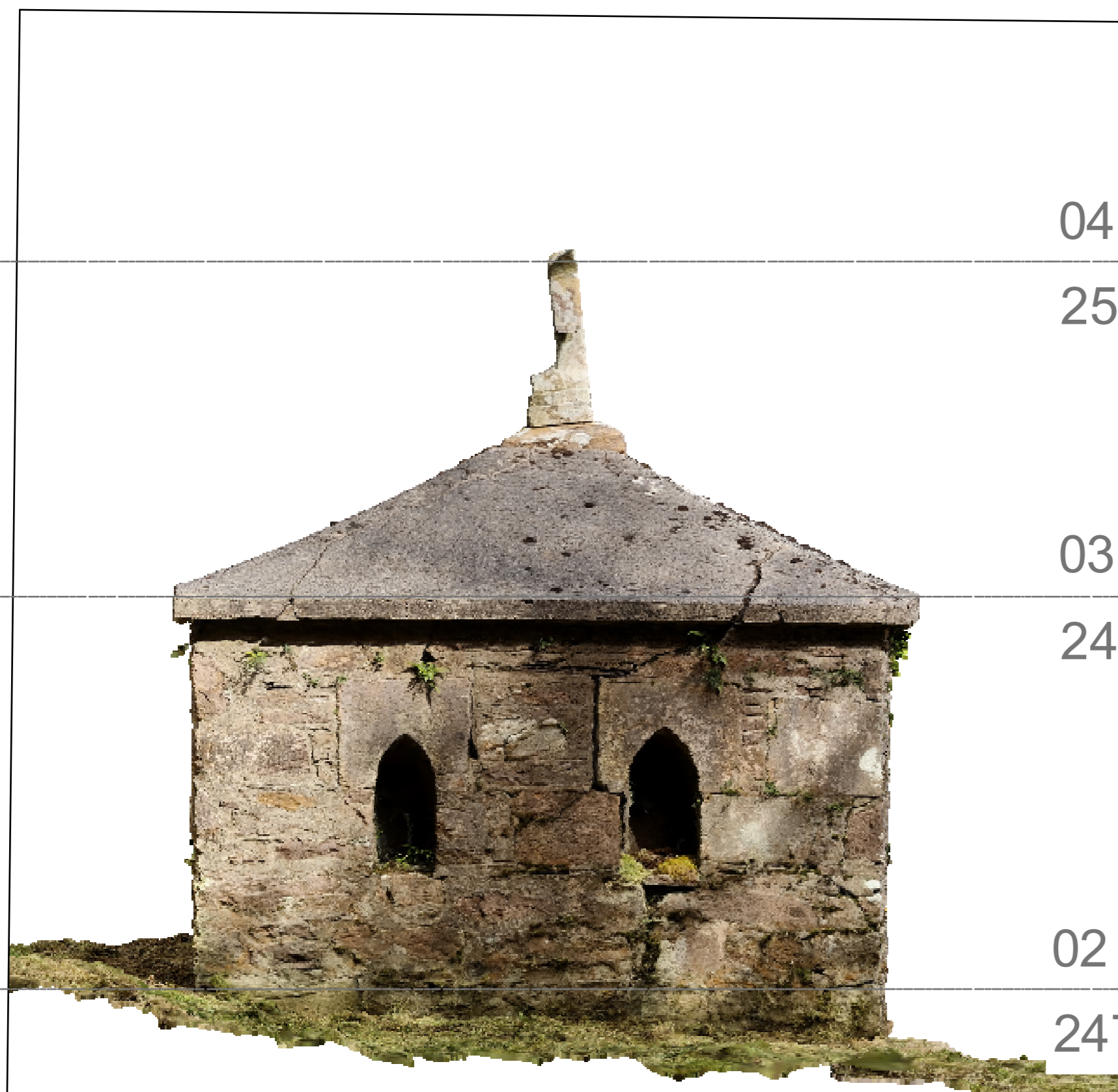
Elevation 1

04 Roof	250.773	
03 Roof	249.390	
02 Ground	247.687	
01 Datum	247.000	



Elevation 2

04 Roof	250.770	
03 Roof	249.367	
02 Ground	247.687	
01 Datum	247.000	



Elevation 3

04 Roof	250.773	
03 Roof	249.409	
02 Ground	247.813	
01 Datum	247.000	



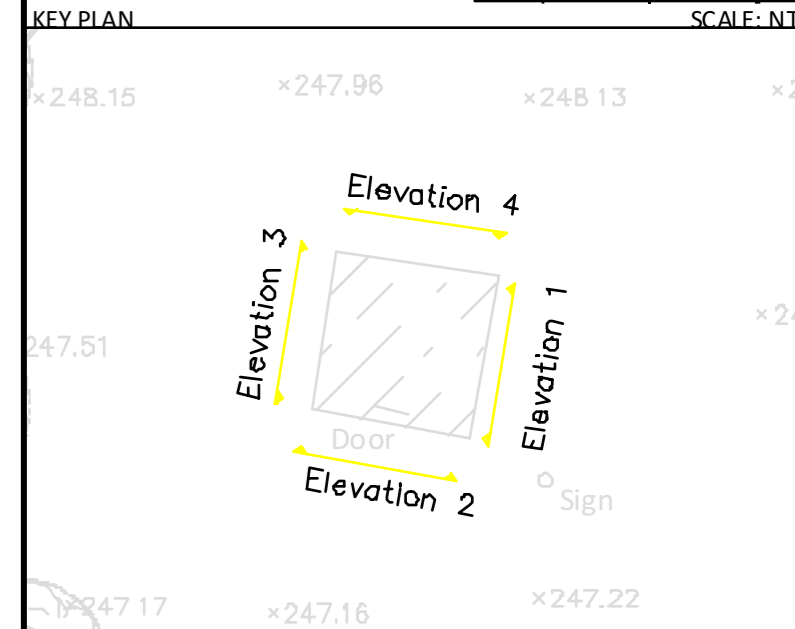
Elevation 4

04 Roof	250.770	
03 Roof	249.409	
02 Ground	247.813	
01 Datum	247.000	

- Legend - Water / Drainage**
  - CUL - Culvert
  - DTC - Ditch
  - WAF - Water Feature
  - POND - Pond
  - WER - Weir
  - AD - Aqueduct
  - GL - Gravel
- Legend - Roads - Rail**
  - RD - Road
  - RC - Road Centre
  - KT - Kerb Top
  - KB - Kerb Back
  - KBAC - Kerb Back
  - SR - Speed Ramp
  - TRK - Track
  - VE - Veil
  - RTRK - Rail Track
- Legend - Roads Markings**
  - SWLD - Single White Line Dashed
  - SWL - Single White Line
  - SYLD - Single Yellow Line Dashed
  - SYL - Single Yellow Line
  - DSWD - Double White Line Dashed
  - DWL - Double White Line
  - DSYLD - Double Yellow Line Dashed
  - DYL - Double Yellow Line
  - YB - Yellow Box
- Legend - Buildings / Structures**
  - BL - Building Line
  - AP - Apse
  - RI - Ridge
  - EAV - Eave
  - PAR - Parapet
  - SAR - Scaffolding
  - CAN - Canopy - Overhead Structure
  - CAN - Canopy
  - PF - Prefab - Building
  - RAN - Rains
  - GH - Gable
  - SH - Shed
  - SK - Skirt
  - CAB - Cabin
  - COL - Column
  - BRG - Bridge
  - LDR - Ladder
  - TAK - Tank
  - PLA - Platform
  - MINU - Minaret
  - LI - Little Bit
  - POB - Post Box
  - RS - Road Sign
  - BE - Bench
  - FL - Flower Box
  - ST - Survey Station
- Legend - Services - Underground**
  - UA - Unassigned Utility
  - UCOM - Underground Combined
  - UF - Underground Fuel
  - UG - Underground Gas
  - EP - Underground Power
  - US - Underground Sewer
  - UT - Underground Telecom
- Legend - Ground Features**
  - FE - Fence
  - WL - Wall
  - RIG - Railing
  - BT - Back Top
  - BB - Back Bottom
  - RWB - Raising Wall Base
  - RWT - Raising Wall Top
  - PCH - Pathway
  - HA - Haired
  - RAMP - Ramp, Landing, Steps
  - BR - Barrier
  - ARB - Arched Barrier
  - CHAM - Chamber
  - LDR - Ladder
  - CAN - Canopy
  - CONC - Concrete
  - CO - Concrete (Main)
  - CO - Concrete (Minor)
- Legend - Vegetation**
  - GRASS - Grass
  - HE - Hedge
  - NL - Natural Line
  - TR - Tree
- Legend - Services**
  - OSC - Overhead Cable
  - PIP - Pipe
  - PI - Power Inspection Cover
  - PP - Power Pole
  - ST - Stop
  - ISB - ISB (Pylon)
  - FR - Fire Hydrant
  - GS - Gas Valve
  - LP - Lamp Post
  - MA - Mail / Pylon
  - TC - Telecom Control Panel (Pylon)
  - TC - Telecom Cover
  - TC - Telecom Pole
  - TL - Traffic Light
  - TR - Telephone Box
  - CTV - Cable TV Inspection Cover
  - WV - Water Valve
  - WM - Water Meter
  - AS - Arming Station
  - GU - Gully
  - MC - Manhole Cover (Square)
  - MC - Manhole Cover (Round)

**Disclaimer**  
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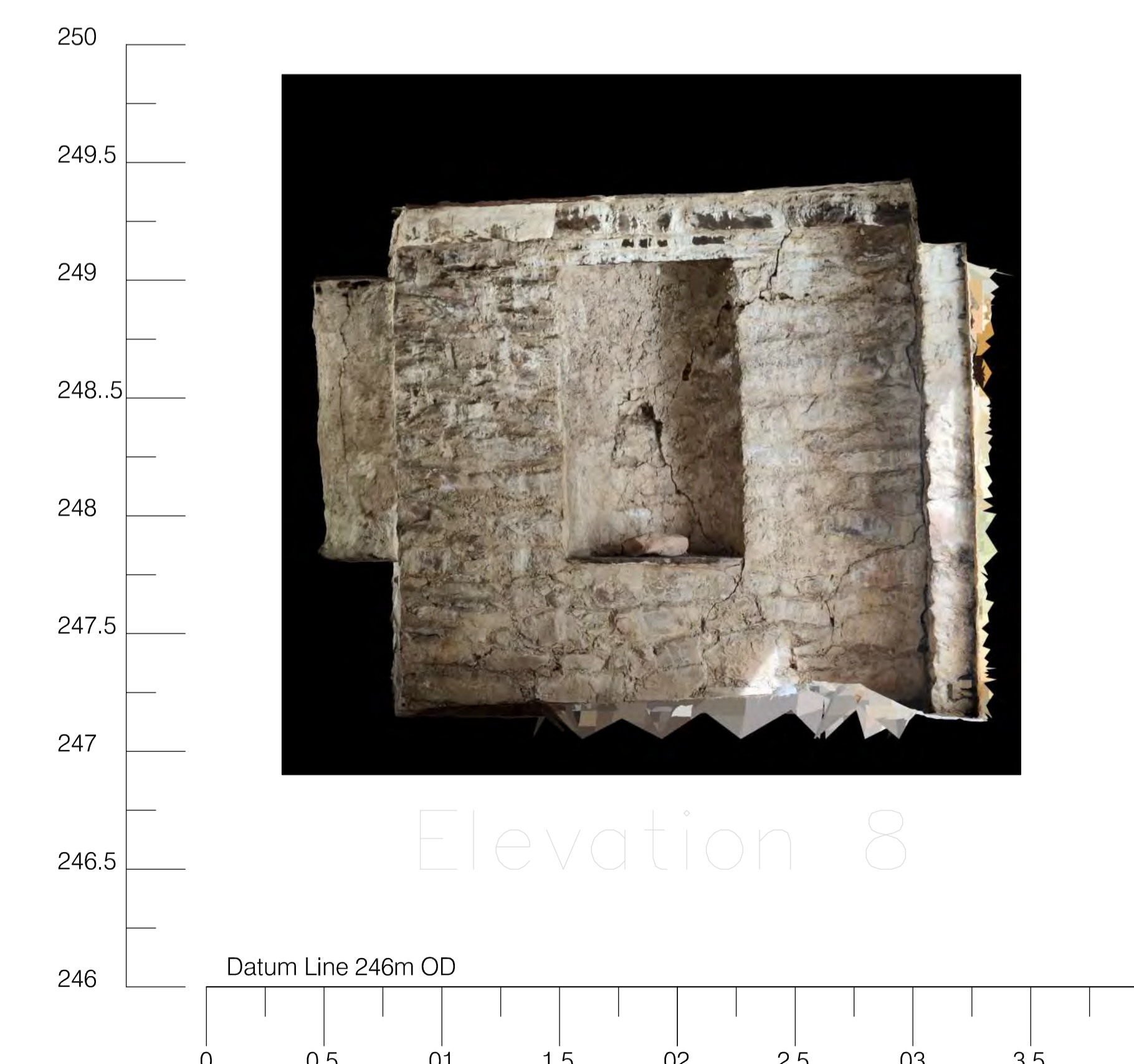
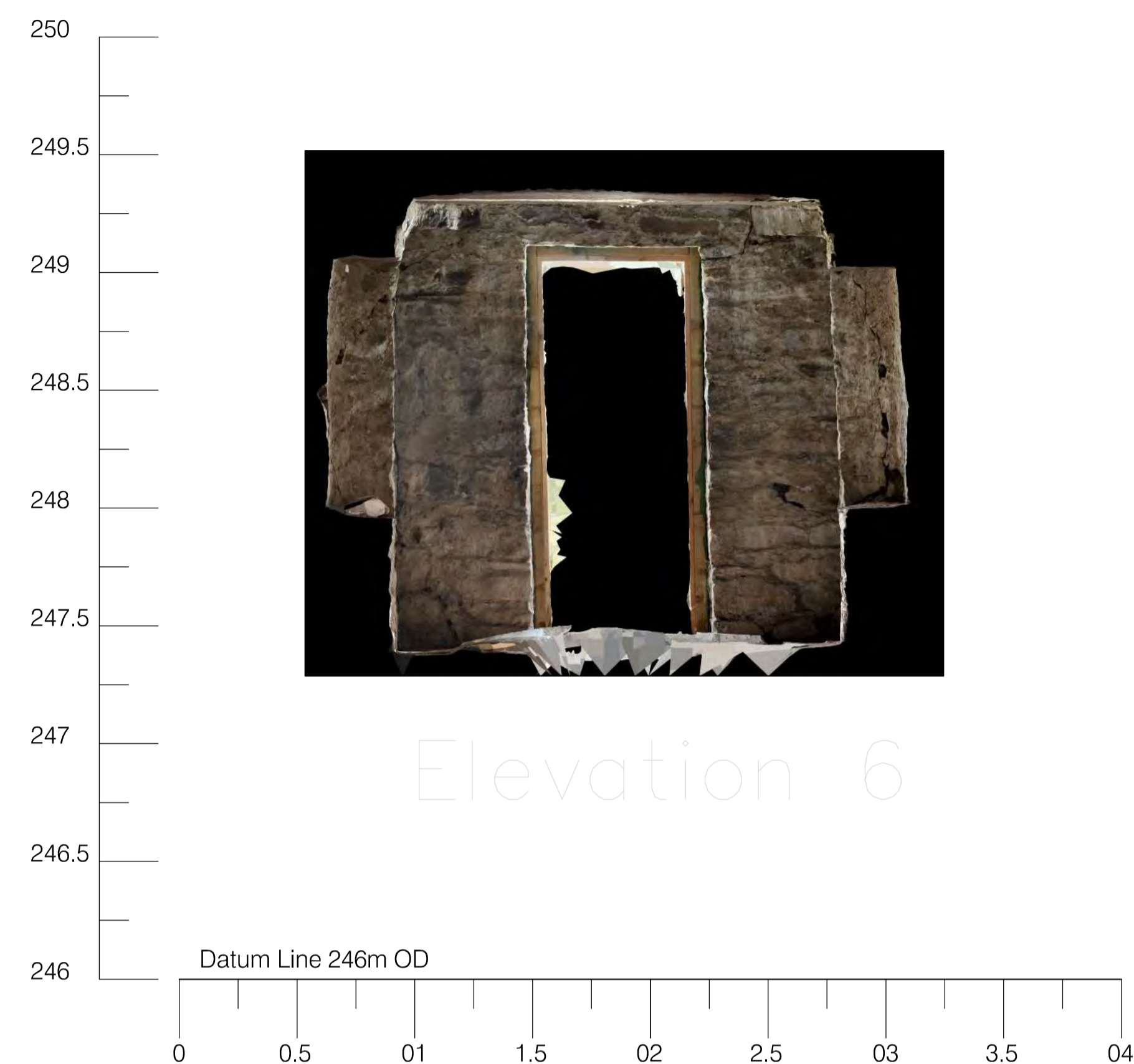
**KEY PLAN** SCALE: NTS



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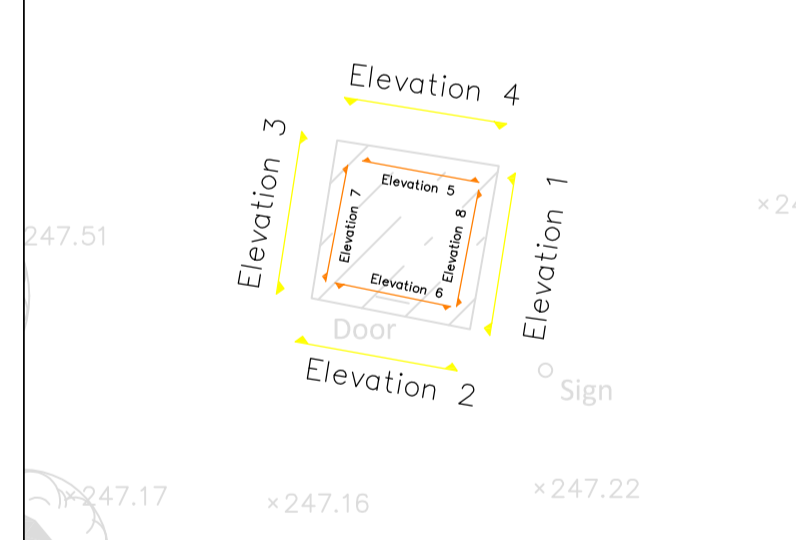
REVISION	DESCRIPTION	DATE

Client: Margaret Quinlan  
 Location: Melleray Well, Co. Wexford  
 Job: Topographical Survey  
 Drawing Number: 23097 Scale: 1:200 / A1  
 Coordinate System: ITM Reference Datum: GPS Derived Malin Hd (OSGM2015)  
 Surveyed By: JH Drawn By: JP  
 Date: Surveyed 03 08 23 Issue 14 08 23 Checked By: LM



Legend - Water / Drainage		Legend - Ground Features	
CUL	Culvert	FE	Fence
DIC	Ditch	WL	Wall
WAT	Water Edge	REG	Railing
POND	Pond	BT	Bank Top
WER	Weir	BB	Bank Bottom
ACO	Access Drain	RWB	Retaining Wall Base
GL	Long gully	RWT	Retaining Wall Top
Legend - Roads - Rail		PATB	Pathway
RD	Road Carriageway Edge	HR	Handrail
RC	Road Centre	RAMP	Ramps, loading bays
KT	Kerb Top	BR	Barrier
KB	Kerb Bottom/Channel	AR	Arrow Marker
KBAC	Kerb Back	ROCK	Rock
SR	Speed Ramp	CHAM	Chamber
TRK	Tracks	LDR	Ladder
VE	Vegetation	CONC	Concrete
KTRK	Rail Track		
Legend - Roads Markings			
SWLD	Single White Line Dashed		
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SYL	Single Yellow Line		
DWLD	Double White Line Dashed		
DWL	Double White Line		
DYLD	Double Yellow Line Dashed		
DYL	Double Yellow Line		
YB	Yellow Box		
Legend - Buildings / Structures			
BGL	Building Line		
AP	Apex		
RI	Ridge		
E	Eaves		
SP	Parapet		
SIF	Sill		
CAN	Canopy / Overhead Features		
COM	Comer		
PF	Profile - Building		
R	Rain		
GH	Greenhouse		
SH	Shed		
S	Steps		
CAB	Cabin		
COL	Column		
BRC	Bridge		
LDR	Ladder		
T	Tank		
P	Platform		
M	Memorial		
MB	Manhole		
PO	Post Box		
RS	Road Sign		
B	Bin		
BS	Bus Stop		
F	Flower box		
S	Survey Station		
Legend - Services - Underground			
UA	Underground Sewer	UP	Underground Power
UCOM	Underground Corridor	US	Underground Storm
UF	Underground Fuel	UT	Underground Telecom
UG	Underground Gas		

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