

**ENVIRONMENTAL IMPACT ASSESSMENT FOR
THE PROPOSED GOLF COURSE
AT IX-XAGHRA L-HAMRA AND TAL-QORTIN,
I/o MELLIEHA.**

Technical Appendix 4: Cultural Heritage Baseline Survey

Volume I

Supporting Document for
Environmental Impact Statement

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CONTENTS

INTRODUCTION.....	1
Terms of Reference.....	1
Study Methodology.....	1
Area of Influence.....	2
Competence of Surveyors.....	2
Field Survey Methodology.....	3
Evaluation.....	4
SITE DESCRIPTION.....	9
SURVEY RESULTS.....	10
Scheduling.....	10
Historical Background.....	13
Historical Importance of the Area.....	15
CULTURAL FEATURES.....	20
Rural Features.....	20
Archaeological Features.....	38
Cultural Landscape.....	55
BIBLIOGRAPHY.....	i

FIGURES

Figure 1: Area of Influence.....	2
Figure 2: Buffer Zone and Scheduled Area relating to cart ruts and quarries at ix-Xaghra I-Hamra, Manikata.....	11
Figure 3: Buffer Zone and Scheduled Area relating to the Ghajn Tuffieha Entrenchments.....	12
Figure 4: The building and repair of rubble walls (Borg 2000: 122, 123).....	21
Figure 5: Classified rubble walls in the Study Area.....	22
Figure 6: Grade A rubble wall.....	23
Figure 7: Grade B rubble wall.....	24
Figure 8: Grade C rubble wall.....	24
Figure 9: Location of Corbelled Huts in the Area of Influence.....	26
Figure 10: Location of Proposed Scheduled Corbelled Huts.....	30
Figure 11: Scheduled Corbelled Hut at Xemxija (now collapsed).....	30
Figure 12: :Location of water catchment features in the area.....	31
Figure 13: Location of beehives.....	32
Figure 14: Rural Structures.....	34

Figure 15: The Nahhalija Hamlet	36
Figure 16: Quarries.....	37
Figure 17: Cartruts	38
Figure 18: Tombs	40
Figure 19: Soldiers in the area of Manikata	42
Figure 20: Profiles of entrenchments at Ta'Falka.....	44
Figure 21: Entrenchment MNK05_094 similar in construction to the technique shown in Figure 12.....	45
Figure 22: Plan and elevation of Church later transformed to cinema.....	46
Figure 23: Drawings for the construction of Barracks at il-Kamp ta' Ghajn Tuffieha (Hal Ferh tourist complex)	47
Figure 24: Drawings recording the plan of the Barracks at il-Kamp ta' Ghajn Tuffieha (Hal Ferh tourist complex).....	48

TABLES

Table 1: Protection ratings and cultural significance	8
Table 2: Rubble Walls	23
Table 3: Rubble Wall Statistics.....	25
Table 4: Catalogue of corbelled huts showing entrance orientation	27
Table 5: Giren	29
Table 6: Cultural Features that merit conservation and their policy importance.....	50

I. CULTURAL HERITAGE STUDY

INTRODUCTION

- 1.1. This baseline report describes the study of the archaeological, cultural and rural heritage features in the area surrounding the Development Site. This Study forms part of the Environmental Impact Statement of the proposed development prepared at the request of MEPA as per Legal Notice 204 of 2001.

Terms of Reference

- 1.2. The study has been undertaken in accordance with the draft Terms of Reference issued by MEPA and the Cultural Heritage Assessment Method Statement prepared by the sub-consultants and Adi Associates Environmental Consultants and approved by MEPA on 7th November 2005. The relevant ToR are:

2.0 DESCRIPTION OF THE SITE AND ITS SURROUNDINGS

This description is identified by the area of influence for each relevant parameter. The area of influence for each parameter shall be determined by the consultant who shall also justify the extent of the chosen sphere of influence. This must be approved by the Malta Environment and Planning Authority prior to commencement of the EIA. This description should include:

2.5 Archaeological sites and features

Architectural and historical heritage, and other cultural assets, such as elements of vernacular or rural architecture (e.g. rubble walls, huts, wells, irrigation channels, farmhouses etc.) making reference also to scheduled property.

STUDY METHODOLOGY

- 1.3. The study covers aspects of archaeological, rural, vernacular, historical, and cultural heritage within the Area of Influence (A of I) as shown in **Figure I**. The objectives of the Study are to:
- Identify, document, and present all relevant information about cultural heritage assets within the A of I;
 - To describe and analyze the cultural landscape;
 - Assess the cultural heritage significance of each feature within the A of I; and
 - Propose statutory and physical protection of the individual features and of the site.

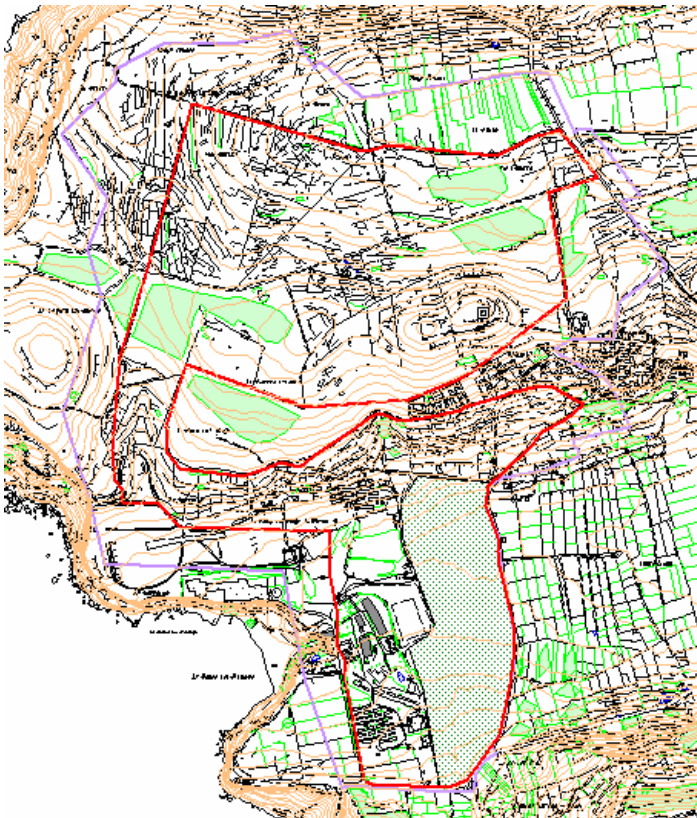
Area of Influence

- 1.4. The Cultural Heritage Baseline Study considers the area to be directly developed and the Area of Influence as shown in **Figure 1**. This A of I surrounds the area of development and comprises a buffer of approximately 200m from the development boundary. In some places the area has been extended to paths, roads or boundary walls to ease the mapping of cultural features during the survey. The extent of the A of I beyond the site boundary took into consideration the matters such as dust emissions, the effect of which is not likely to extent beyond 100 metres.

Competence of Surveyors

- 1.5. The surveys were undertaken by:
- Kevin Borda BA (Hons) Archaeology;
 - Daniel Borg BA (Hons) Archaeology;
 - Marlene Borg MA Archaeology;
 - Joseph Calleja BA (Hons) Archaeology;
 - Clive Vella BA (Hons) Archaeology; and
 - Ernest Vella BA (Hons) Archaeology.

Figure 1: Area of Influence



Field Survey Methodology

Literature Search

- 1.6. Based on literature searches and the consultants' knowledge of the area, a summary of previous survey work undertaken within the study area is provided as context to the results of the current survey work. This phase also included research comprising:
- Study of toponomy (place names);
 - Analysis of cartographic and photographic material;
 - Conservation legislation (including proposed legislation); and
 - Published printed matter (including archival research) relating to the area.

Mapping

- 1.7. The archaeological, rural, vernacular, historical, and cultural heritage features visible within the site boundary were mapped during field surveys based on what is technically referred to as Ground Reconnaissance. This method of investigation primarily involves fieldwork but also involves consultation of documentary sources and place-name evidence [Renfrew & Bahn 1991: 63]. The fieldwork consisted of a site-surface survey, or field-walking, in order to locate and record the whereabouts of sites and features. No aerial reconnaissance or sub-surface surveys, including excavations, were carried out.
- 1.8. The fieldwork was carried out between the 1st and 15th August 2005 and 13th and 15th September 2005

Cataloguing

- 1.9. Relevant information for each feature is presented on cards and digital media in the same format as currently used by MEPA. Each feature has been individually identified with a consecutive numbered reference. The information for each feature includes:
- A short written description of the feature;
 - Co-ordinates recorded up to 5 digits for each Eastings and Northings based on the local UTM grid reference;
 - Locality and address;
 - Site indicated on a map to a scale of 1:2500;
 - Colour photograph(s);
 - Wherever possible a sketch of the feature showing the most significant details;

- The conservation importance of site or feature (proposed grading following Structure Plan UCO and ARC policies);
- Existing and / or proposed legislative and physical protection;
- Current and proposed use / enhancement;
- References; and
- Name of surveyors and date of compilation.

Evaluation

- 1.10. An archaeological assessment and significance of the archaeological, rural, vernacular, historical, and cultural heritage features has been derived from the desk-top and field studies. The importance of the conservation of the identified sites and features has been identified with reference to relevant legislation, standards, guidance, and practices. These include the Structure Plan for the Maltese Islands, Development Planning Act 1992, the Cultural Heritage Act 2002, various Government Notices, and proposed legislation that has been published by Government.

Consultations

- 1.11. Where necessary, consultations were held with Adi Associates Environmental Consultants Ltd and the Superintendence of Cultural Heritage. Consultations were also held with MEPA and with persons who have known the area for a long time and were encountered during the field survey.

Standards and Guidance

- 1.12. Planning guidance on the protection of cultural heritage was derived from the Cultural Heritage Act, Government Notice 160 of 1997 (Rubble Walls Regulations) and the Structure Plan for the Maltese Islands.

Cultural Heritage Act

- 1.13. This Act provides overall protection to all movable or immovable objects of artistic, architectural, historical, archaeological, ethnographic, palaeontological and geological importance and includes information or data relative to cultural heritage pertaining to Malta or to any other country (section 2). In section 3 it also specifies that *“for the purposes of this Act, an object shall not be deemed to form part of the cultural heritage unless it has existed in Malta, including the territorial waters thereof, or in any other country, for fifty years, or unless it is an object of cultural, artistic, historical, ethnographic, scientific or industrial value, even if contemporary, that is worth preserving.*

No person shall make any interventions on such cultural property or classes thereof without first having obtained a permit therefore from the Superintendent (Section 44.3).

-
- 1.14. Applications are determined subject to the results of prior investigation: *Before determining an application under subarticle (3) hereof the Superintendent may require such information including the results of such tests, examinations or inspection by such persons accredited under this Act for the purpose as may be required by the Superintendent (Section 44.4).*
- 1.15. The restrictions on archaeological excavations is stated in Section 43(1) whereby *archaeological or palaeontological excavations or explorations on land as well as in the territorial waters or in the contiguous zone of Malta can only be made by the Superintendent, or with written permission of the Superintendent. Chance discoveries of archaeological remains are also regulated by Section 43(2), Any person who, even accidentally, discovers any object, site or building to which this Act applies in accordance with article 3, shall immediately inform the Superintendent, keep the object found in situ, and shall not for a period of six working days after informing the Superintendent proceed with any work on the site where the object of cultural property is discovered. The details about rights and obligations by all parties in the eventuality of an archaeological discovery are described in Sections 43(3), 43(4), 43(5), 43(6), 43(7).*

Legal Notice 160 of 1997

- 1.16. The conservation and maintenance of all rubble walls and rural structures is required by law through Legal Notice 160 of 1997 (as amended by Legal Notice 169 of 2004) that states that *“in view of their historical and architectural importance, their exceptional beauty, their affording a habitat for flora and fauna, and their vital importance in the conservation of soil and of water”*. (Section 2).
- 1.17. The law defines a “rubble wall” as a dry stone wall, built in loose unhewn stones, which stands by gravity and friction without the use of mortar; and a “rural structure” as any traditional rural construction, and also includes any free standing boundary wall in ashlar masonry (*gebla tal-kantun*) bordering rural tenement (Section 4).
- 1.18. The law also states that *“no alterations to the location or construction of rubble walls and the traditional methods of their repair and maintenance shall be permitted unless a written request and approval are previously made to and obtained from the Director for the Protection of the Environment”*. (Section 3).
- 1.19. Furthermore Legal Notice 160 of 1997 prohibits the *construction, addition, or the keeping of any drum, tank or any other object which is not constructed of rubble wall building material on any rubble wall, or any rural construction, structure or tenement, or any land* (Section 5.1).
- 1.20. It also forbids the *demolition or the endangerment of the stability or integrity of any rubble wall or any rural construction, structure or tenement, or to prevent the free percolation of rainwater through the structure of a rubble wall, or to undermine the foundations of such rubble wall or rural construction, structure or tenement*. (Section 5.2).

Structure Plan Policies

- 1.21. The Structure Plan contains policies that refer to the grading of archaeological sites and buildings.
- 1.22. Policy **ARC 1** states that in Local Plans within Rural Conservation Areas the Planning Authority may identify and designate Areas and Sites of Archaeological Importance.
- 1.23. Structure Plan Policy **ARC 2**, indicates that if an area is considered top priority conservation **Class A**, no development will be allowed which would adversely affect the natural setting of these monuments or sites. A minimum buffer zone around the periphery of the site will need to be established in which no development will be allowed.
- 1.24. Features identified as **Class B** are regarded as *very important and should be preserved at all costs. Adequate measures to be taken to preclude any damage from immediate development.* For features that are listed as **Class C**, *every effort must be made for preservation, but may be covered up after proper investigation, documentation and cataloguing. Provision for subsequent access shall be provided.*
- 1.25. The permissible effects of the proposed development on archaeological remains are regulated by policy **ARC 3** that states that *“development affecting ancient monuments and important archaeological areas and sites, including areas and sites having such potential, will normally be refused if there is an overriding case for preservation. Where there is no overriding case for preservation, development of such sites will not normally be permitted until adequate opportunities have been provided for the recording and, where desirable, the excavation of such sites”.*
- 1.26. All other archaeological features listed in the catalogue may be included in the National Protective Inventory of the Planning Authority according to policy **ARC 7** for which protection is granted by means of policy **ARC 6**.
- 1.27. Rural buildings and rubble walls are protected by the **Rural Conservation Areas** policies and policy **UCO 7**. Policy **UCO 7** establishes the grading of listed buildings in Urban Conservation Areas and regulates works that are acceptable in such buildings. The following are adaptations to that grading system to enable classification of rural features within a rural setting:
 - **Grade 1:** Buildings to be retained in their entirety. *Demolition or alterations which impair the setting or change the external or internal appearances, including anything contained within the curtilage of the building, will not be allowed.*
 - **Grade 2:** Buildings assigned a Grade 2 are considered to be of vernacular architectural interest and to contribute to the visual image of the rural area. Permission to demolish such buildings will not normally be allowed. *Alterations to the interior will be allowed if proposed to be carried out sensitively and causing the least detriment to the character and the architectural homogeneity of the building.*

- **Grade 3** rural buildings are usually either modern (mid-20th century onwards) and therefore *have no historical importance and are of relatively minor architectural interest*, or in a state of ruin and are impossible to restore. Permission may be granted for such modern buildings to be demolished provided the replacement buildings are in harmony with the surroundings. In the case of ruined buildings it is recommended that they be dismantled and the materials re-utilised for the construction or restoration of other features.

Policy Importance of Archaeological Features

- 1.28. The classification of archaeological features according to their policy importance is guided by legislation, including the Cultural Heritage Act, the Development Planning Act, Structure Plan Policies, and Government Notices regarding specific cultural features. **Table I** indicates the grading of archaeological features. It is noted that the same classification applies to rural features as discussed below. **Table I** summarises the features and indicates their policy importance.

Features of International and National Importance

- 1.29. Archaeological features of international or national importance are protected by all of the above, and particularly Structure Plan Policy **ARC 2 Class A**. A feature graded as Class A in **Table I** would qualify for protection under Structure Plan Policy **ARC 2 Class 2**. Such features are considered to be top priority for conservation *where no development will be allowed which would adversely affect the natural setting of these monuments or sites. A minimum buffer zone of at least 100m around the periphery of the site will be established in which no development will be allowed.*

Features of National Importance

- 1.30. Archaeological features of national importance are also protected by the above legislation. They are graded as Class B or medium in **Table I**. They include those referred to in Structure Plan Policy **ARC 2 Class B**, and are *very important and should be preserved at all costs. Adequate measures to be taken to preclude any damage from immediate development.*

Features of Minor Importance

- 1.31. Archaeological features classified as being of minor importance are protected by the Antiquities Protection Act, and other legislation mentioned above. Structure Plan Policy **ARC 3 Class C** provides for the *development affecting ancient monuments and important archaeological areas and sites, including areas and sites having such potential, will normally be refused if there is an overriding case for preservation. Where there is no overriding case for preservation, development of such sites will not normally be permitted until adequate opportunities have been provided for the recording and, where desirable, the excavation of such sites.* The features that have been listed as **Class C**, are protected in so far as every effort must be made for preservation, but may be covered up after proper

investigation, documentation and cataloguing. Provision for subsequent access shall be provided.

Remaining Features

- 1.32. All other archaeological features encountered on Site and listed in the catalogue may be included in the National Protective Inventory of the Planning Authority according to policy **ARC 7** for which protection is granted by means of policy **ARC 6** which indicates that all sites listed in the NPI *will be protected in accordance with the Development Planning Act powers and by reference to the ratings given in Policy ARC 2.*

Table 1: Protection ratings and cultural significance

Cultural Significance	Class	Grade	Protection
Major <i>National Importance</i>	A	1	Conserve plus 100m buffer zone
Medium <i>Local Importance</i>	B	2	Conserve
Minor	C	3	Record May be covered
None	-	-	May be covered, destroyed, or recycled

SITE DESCRIPTION

- 1.33. The site for the proposed golf course lies in the area known as Ix-Xaghra l-Hamra and Tal-Qortin. The area is situated on the northern slope (il-Qortin) and the southern slope (il-Qasam ta' Ghajn Tuffieha) of the ridge occupied by Ix-Xaghra l-Hamra and on the aforementioned ridge itself. The area consists of open garigue characterized by the presence of a large number of corbelled huts and rubble walls constructed in an attempt to utilise all possible resources in a very harsh environment. This forms a very important cultural landscape, testament to human activity within this rural landscape. Moreover the strong presence of British Military architecture in the area further enhances the value of the area because it has created a unique environment: the remains of both the early modern period and the British period have persisted to this day, with little or no interruptions occurring during the other historic periods.

SURVEY RESULTS

Scheduling

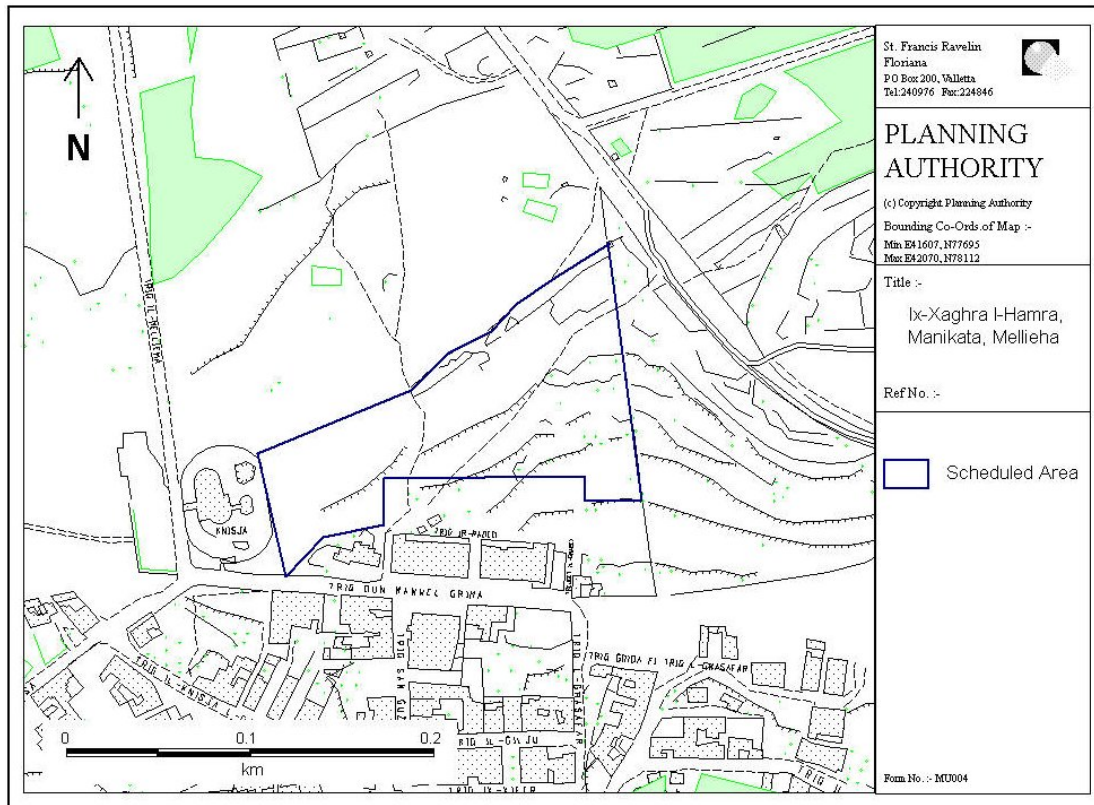
- I.34. Within the A of I there are only three scheduled sites, one archaeological, one military, and one ecological. Only the first two are pertinent to this study and are described below. Ecological scheduling is considered in the Ecology Baseline Study.

Cart ruts

- I.35. The cart ruts and quarries located behind the modern church of Manikata are scheduled under Government Notice 722 of 1995. The area contains a number of cart ruts running in different directions on the exposed rock surface. The area also comprises ancient quarries with an extracted ashlar block still in situ and a number of megalithic walls that have been tentatively recorded as prehistoric and included within the scheduled area.

Property Address	GN No	Category	Type	Feature	Level
Ix-Xaghra L-Hamra, Manikata	722/95	Archaeology	AAI	Cart Ruts, Quarries	B

Figure 2: Buffer Zone and Scheduled Area relating to cart ruts and quarries at ix-Xaghra I-Hamra, Manikata.

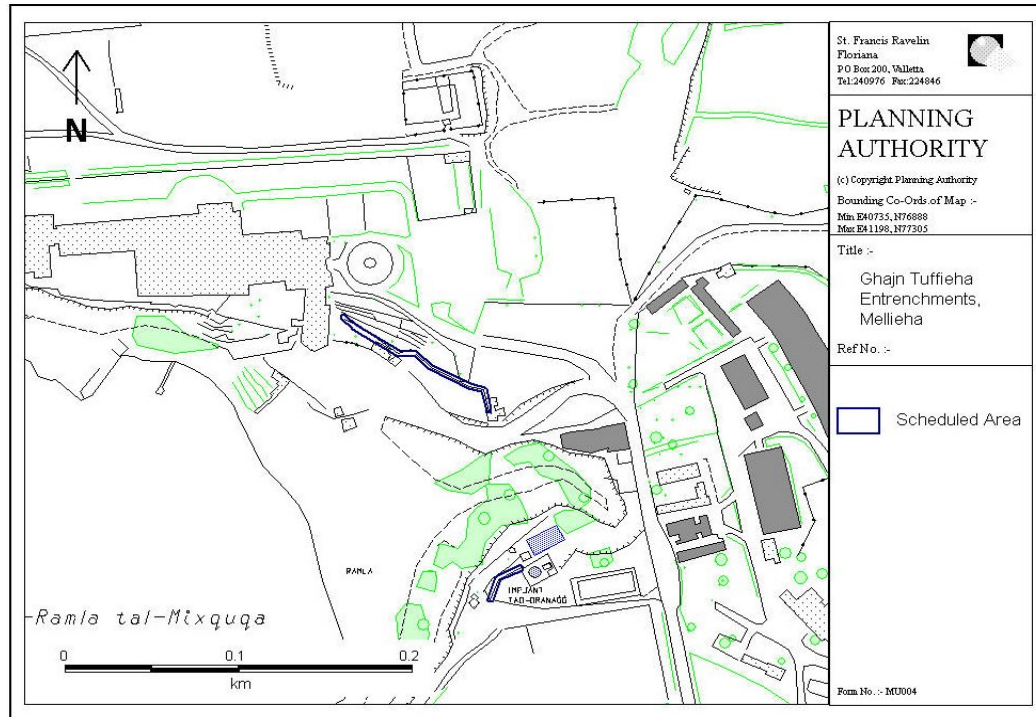


Entrenchments

1.36. The entrenchments located on the two sides of the valley overlooking ir-Ramla tal-Mixquqa (Golden Bay), were scheduled under per Government Notice 729 of 1995. These entrenchments date to the Knights period, constructed as part of the coastal defences of the Island during the early part of the 18th century. The proposal for their construction is documented in a 1714 report and construction itself commenced in 1715. By 1722 it was realised that these defences would prove to be ineffective and difficult to maintain and thus, more energy was devoted to fortifying the Great Fault between Bingemma and Madliena abandoning works in the northern half of the island. A second period of the construction of the coastal entrenchments occurred after 1761 following an invasion scare. However, it is unclear in which exact date the Ghajn Tuffieha entrenchments were constructed (Spiteri 2001: 345-356).

Property Address	GN No	Category	Type	Feature	Level
Ghajn Tuffieha Entrenchments	729/95	Architecture	Military	Entrenchment	I

Figure 3: Buffer Zone and Scheduled Area relating to the Ghajn Tuffieha Entrenchments.



Historical Background

- 1.37. An extensive search was undertaken into the historical background of the site. Reference was made to Museum Department Annual Reports (1904 to 2000) and publications by various scholars were consulted including Wettinger 1981, 2000; Spiteri 1999, 2001; Trump 1997; Evans 1971; Fsadni 1999; Jaccarini 1998 and Borg 2000.

Difficulties

- 1.38. Existing data on the site itself was poor because few studies have been carried out in the area of the development. The general perception is that the area is mainly garigue with little cultural activity. However the field survey revealed a rich presence of cultural features ranging from rural to military ones. It also became evident to the surveyors that the take over of the general area by the British Military forces during the British occupation has resulted in an alienation of local interest from the area, probably accounting for the dearth of information available.
- 1.39. Although the proposed development is a sensitive issue for the people living in the area, the consultants found collaboration from the local farmers, which enabled them to access private fields, which exercise has resulted in the recording of important finds that would have been otherwise inaccessible.

Toponymy

- 1.40. Several place-names in the proposed area of development and its immediate surroundings have been identified from the survey sheets or other literature as indicated in subsequent paragraphs. Toponymy, may indicate historical aspects of the area and as such, meanings and dates can be derived. Below is a list of these place-names as found on survey sheets and related documents. However, a considerable number of areas remain without place-names.

Ghajn Znuber

- 1.41. Horticultural land, west of Mellieha, mentioned in the Treasury documents dating to 15.viii.1727 and 25.v.1746. Meaning: at the spring beside the pine trees. (Wettinger 2000: 193)

Tal-Qortin

- 1.42. Numerous localities in the Maltese Islands overlooking plains or the sea hold this name. (Wettinger 2000: 443)

Ta' Ciantar

- 1.43. No direct reference in Wettinger (2000) but there is a similar toponym in Zabbar. The name refers to a Maltese surname, possibly the owner's. (Wettinger 2000: 85)

Il-Minzel

- I.44. No direct reference in Wettinger (2000) but the same place name in Lesser Bulebel is explained as 'the field at the descent' or 'the field at the house'. Manzil refers to a stopping place, a place of alighting, a camping ground, settlement, house or abode. (Wettinger 2000: 385)

Il-Ghonq

- I.45. No direct reference in Wettinger but he gives the meaning of the same toponym in Gudja / Ghaxaq as either referring to a proper name of Arabic origin, or a long-necked fabulous bird like a griffon or phoenix. It may also mean pass or defile. (Wettinger 2000: 225)

Rdum Majjiesa

- I.46. A locality north of Ghajn Tuffieha mentioned in the Archives of the Order of St John in 21.i.1629. The toponym means the cliff at Majjieza, if Majjieza is considered as a proper name or nickname. This name is unrecorded and Wettinger writes that Abela (Abela 1647: 24) explains it a name deriving from the Italian word *maggese* which means fallow land. However, Wettinger questions why no other such fallow land in Malta holds the same name. (Wettinger 2000: 465)

Ix-Xaghra tal-Mejjiesa

- I.47. No reference found.

Ix-Xaghra tal-Qortin

- I.48. Wettinger found a reference to such a place name in the Università records dating to 24.iii.1534 but this is not bound to any locality. However, this place name, as Il-Qortin, is very common and means the garigue at the end of the headland. (Wettinger 2000: 606).

Ix-Xaghra t'Ghajn Znuber

- I.49. No reference found.

Ix-Xaghra l-Hamra

- I.50. No reference found.

Il-Moxa t'Ghajn Tuffieha

- I.51. No reference found.

In-Nahhalija

- I.52. No reference found.

Il-Kamp t'Ghajn Tuffieha

I.53. No reference found.

Il-Qasam t'Ghajn Tuffieha

I.54. No reference found.

Ghajn Tuffieha

I.55. Horticultural land and fief in the North West of Malta mentioned in the Archive of the Aragonese Crown and dating to 8.ii.1299 onwards. It probably means 'the spring beside the apple tree', or it refers to a female proper name like Toffiecha bint Michamed mentioned in the Archives of the Order of St John in 23.vii.1629. (Wettinger 2000:191)

Manikata

I.56. No reference found.

Ix-Xatba

I.57. Ix-Xatba means 'a field in the west of Mizieb ir-Rih'. The first reference to this locality is found in the archives of the Order of St John dating to 21.i.1629. It means 'the gate'. (Wettinger 2000: 612)

Il-Mejjieli

I.58. There is no direct reference to this locality in Wettinger but the author gives the meaning of this toponym as 'sloping land'. (Wettinger 2000: 371)

Il-Wied l-Abjad

I.59. No reference found.

Historical Importance of the Area

I.60. Historically, the area has played a rather marginal role in the advancement of the island. Apart from the Ghajn Tuffieha fiefdom which has been in existence since 1299, little real importance was given to the area. No large towns or important villages developed other than small rural hamlets and farmhouses. This is largely due to the harsh environment that did not encourage agricultural experimentation. However, some of the areas are recorded in documents dating to the Knights' period. Large-scale agricultural exploitation dates to 1870 by the British in an effort to find employment for the rising population (Bowen-Jones, H., Dewdney, J.C., Fisher, W.B 1961: 120-121). This saw the rise of major settlements in the area like St Paul's Bay, Mellieha and Mgarr; however, Mellieha might have existed before that, in the 14th century (Blouet 1978: 168).

- 1.61. Notwithstanding, the area was still distant from the main cities surrounding the Grand Harbour, and thus it was rather dangerous territory since invasion was very much possible and in fact few resources were invested in the area. Entrenchments and look out towers were built by the Knights in this part of the island. Their sole purpose was to delay rather than stop any such invasion since the Knights' strategy was to abandon any lands located north of the Madliena-Bingemma natural fault (Spiteri 2001: 345).
- 1.62. Furthermore, the area provides no valuable or essential natural resources which could be extracted. The exposed Upper Coralline Limestone meant that any extraction of rock was simply for use in the immediate area in the construction of rubble walls, corbelled huts, and other rural architecture. The importance of the area lies in its depiction of a very self-sufficient way of life where production was based on subsistence characterised by very small parcels of land, channelling devices for the collecting of precious fresh water, and the small *girna* used for both storage and for shelter and temporary habitation during the busy agricultural periods. These are all important components of the cultural landscape.
- 1.63. The historical importance of the area is accentuated during the British Period, when in the area two large barrack camps were built and the area was utilised for military manoeuvres and training.
- 1.64. A more detailed look at the history of the area reveals that human presence here can be attested since antiquity. Evidence of this has been documented in the area for the following main periods.

Prehistoric Period

- 1.65. Besides the scheduled cart-ruts, quarrying and 'megalithic' walls found behind the Manikata church MNK05_077, the surveyors encountered cart ruts in other areas along the Xaghra I-Hamra plateau. The latter have not been previously properly documented (even though included in the National Protective Inventory [NW 210-239]); it is therefore important to note their significance through recording and appropriate scheduling. Cart ruts or tracks are "grooves cut or worn into the rock [that] can be found practically anywhere bare rock is exposed" (Trump 2004: 379). Although the cart rut phenomenon has not been given an exact date until now, it is customary for scholars to place these features within the Bronze-Age.
- 1.66. Along the Xaghra I-Hamra plateau, within close proximity of the cart ruts mentioned above, 'stone cairns' MNK05_055 were noted. Such features need to be further studied to determine their exact nature and their relationship with the history of the area.
- 1.67. In the area known as in-Nahhalija, located to the immediate south of the Xaghra I-Hamra plateau, two silo pits MNK05_120 were found. It is important to note that in Maltese Archaeology, silo pits are generally found near cart-ruts.

Classical Period

- 1.68. Punic tombs were found in the area by AA Caruana in the second half of the 19th century. Their location was generally recorded as “at Ghajn Tuffieha”. In her publication, Claudia Sagona reproduces these tombs without throwing fresh light on their exact location (Sagona C, *The Archaeology of Punic Malta*, Peeters 2002: 813-818). Sagona mentions other tombs which were found in 1931 during works relating to the rifle range, and which tombs were destroyed after recording (Sagona 2002: 813-818). A number of tombs were located by the surveyors immediately south of the village of Manikata in some private fields and further west at Ix-Xaghra tal-Qortin (MNK05_036 & MNK05_091). The plans of these tombs as published in Sagona do not resemble in any way the recorded tombs. This could indicate the presence of other tombs in the area which are either found in inaccessible areas, are currently buried or they may be fully or partially destroyed.
- 1.69. Further human presence dating to about the same period can be attested in the surrounding area. To the south of the A of I remains of Roman Baths were found; this indicates that the area was popular during the Roman period. In the area referred to as in-Nahhalija a Classical building was mentioned to the surveyors, but its exact location is still unclear (Personal communication with Dr Nicholas C Vella, Senior Lecturer Archaeology, University of Malta) and could therefore not be recorded.

Medieval Period

- 1.70. Records of the medieval history of the Maltese Islands are very sparse and little documentation is available. The oldest notarial archives date to 1467 and the title records date to 1500 (Wettinger 1981:3), thus making a reconstruction of the period very difficult. It seems that life centred mainly around the fortified towns of Mdina and Birgu, with a number of casali or villages dotting the countryside. Notwithstanding, the islands were agriculturally productive enough in order to meet the expenses needed to import wheat, other foods, superior textiles and a wide variety of foreign goods. The income generated also served to finance the defence of the island and to pay the substantial rents to the local as well as the absentee landlords. Society was complex enough to support the existence of a class of craftsmen, notaries, a doctor and landlords living on the dues collected (Wettinger 1981:4).
- 1.71. The most important agricultural areas were those with a prefix of ‘gnien’ or ‘ghajn’ and the open karst areas were important for grazing and the supply of fuel. The area known as Mizieb ir-Rih, located north of the area under study, is mentioned by Wettinger as communal land utilised for grazing. In 1458 the authorities complained that Antonius Desguanes attempted, with royal permission, to enclose large parts of the common land, mostly in the north and west and furthermore, to appropriate himself of Mizieb ir-Rih. This was considered to be ‘extremely prejudicial to the community’ (Wettinger 1981:32-33).

- 1.72. Land holding in Malta consisted mainly of fiefs (originally these amounted to between 30 and 40), consisting of blocks of royal land granted to influential inhabitants of Mdina who also frequently owned allodial land and which were in turn rented out (Wettinger 1981:5). One of these fiefs was that of Ghajn Tuffieha, located to the south of the proposed area of development, and which existed since 1299, having been created by the Aragonese Crown. In this area it was possible to practice a garden type of horticulture as well as vines, due to the availability of fresh water (Wettinger 1981:28). In 1606 the Ghajn Tuffieha fief's income production had increased from 22 to 50 uncie (Wettinger 1981:114). Hence this area was slowly gaining economic importance.
- 1.73. The Girna or corbelled hut has been extensively documented in the area by Fsadni, 1999. Other huts have been identified during the site survey. The date of these structures is unknown and some of the recorded corbelled huts together with the associated rubble walls could partly date to this period.

Knights' Period

- 1.74. During the Knights' Period, the Maltese Islands underwent a total transformation in the social, economic, and political spheres. These changes translated into a transformation of the Maltese landscapes, effects of which are still evident today. However, in the A of I there is almost no change registered. Some place names do appear in contemporary documents, such as Ix-Xatba (1629), Rdum Majjiesa (1629) and Ghajn Znuber (1727 & 1746) which shows that some interest was still devoted to the area. However, the physical transformation of the area was minimal.
- 1.75. The only structures dating to this period are entrenchments **MNK05_119** built during the 18th century and the watch towers built during the 17th century outside the area of the proposed development. As stated above, the Knights of St John had no interest in the area since they feared invasion, and this area would be immediately given up to the enemy.
- 1.76. However, the hamlet **MNK05_080** located at in-Nahhalija very probably dates to this period. It resembles other hamlets located in the north-western part of the island (Ghajn Tuffieha, Tas-Santi, Bahrija etc) built during the same period. Apparently, according to a local farmer, the hamlet originally carried two coats of arms which are no longer extant and thus it is not possible to date this hamlet.

British Period

- 1.77. The occupation of the Maltese Islands by the British has been mainly influenced by the British military needs. This can be seen in the large number of fortifications, forts, fortified lines, batteries, pill-boxes, etc., which still dot the Maltese Islands. Within the A of I the historic presence of the British is immediately attested by the presence of two barrack blocks **MNK05_085** & **MNK05_099**, the only ones found in the northern part of the island. Within the A of I there is also the Manikata pill box **MNK05_086** and a second pill box **MNK05_004**, at Ghajn Znuber. The aim of

these pillboxes was to hinder landings and inland advance of enemy forces. Each pillbox was strategically placed and camouflaged. Initially, rubble stone cladding was used, than paint-work became the accepted method (Spiteri, 1996: 10).

- I.78. The area was also used for military manoeuvres and training. This eliminated the possibility of domestic structures in the area. Probably the above-mentioned hamlet was abandoned at this time. In fact, barbed wire and British Period accretions to some of the hamlet's structures suggest British military use. Another important transformation undertaken by the British was the parcelling of large fields in the 1870's in an effort to increase productivity (Bowen-Jones, H., Dewdney, J.C., Fisher, W.B 1961: 120-121). The long rubble walls stretching for hundreds of metres are still visible in the landscape, even though the large parcels of land have been subdivided into smaller manageable fields.

CULTURAL FEATURES

Rural Features

- 1.79. The rural features present in the area reflect the immediate needs of the inhabitants characterized by a life-style adapted to frugal resources and a harsh environment. The main characteristic of the area is extensive exploitation of the available soil resources, characterized by a complex field network consisting of small parcels of land enclosed by rubble walls and containing a variety of features such as corbelled huts, water channelling devices, and bee hives amongst others. The landscape is dotted by a small number of field rooms and farm houses, whilst the Nahhalija hamlet dominates the valley below.

Rubble Walls

- 1.80. Rubble walls have stood in the area for centuries, delineating boundaries, offering protection from winds to man, animals, crops and trees, and even used to build field terracing. The dating of rubble walls is usually difficult.
- 1.81. Rubble walls are an essential part of the Maltese landscape. They are not only boundary walls between landholdings, but also the habitat of a number of organisms, and are essential soil and water retainers (Borg 2000: 125). They are found in other areas in the Mediterranean region, but they are “the commonest dry stone expression of the Maltese archipelago, with the corbelled stone hut and the farmhouse, they are the most distinctive landmarks of its landscape” (Jaccarini 1998: 20,22).
- 1.82. Rubble walls were built using irregular shaped blocks of stone packed and locked together without the use of mortar or plaster. These irregular blocks were held together with the use of larger stones inserted into the width of the wall, keeping together the two skins of the wall and the internal filling. This was known as katina. It was inserted every 2 metres and was about 1 metre in length and 0.25 metres wide. It was also important to keep the wall as vertical as possible with no slanting sections. A row of regular stones (posta) was built on top of each other as shown in **Figure 4**. These columns were placed 5 m apart (Borg 2000: 128). The rubble walls in the area under study were built using these techniques. **Figure 5** shows the rubble walls in the Area including their classification, which is described in the subsequent section.

Figure 4: The building and repair of rubble walls (Borg 2000: 122, 123)

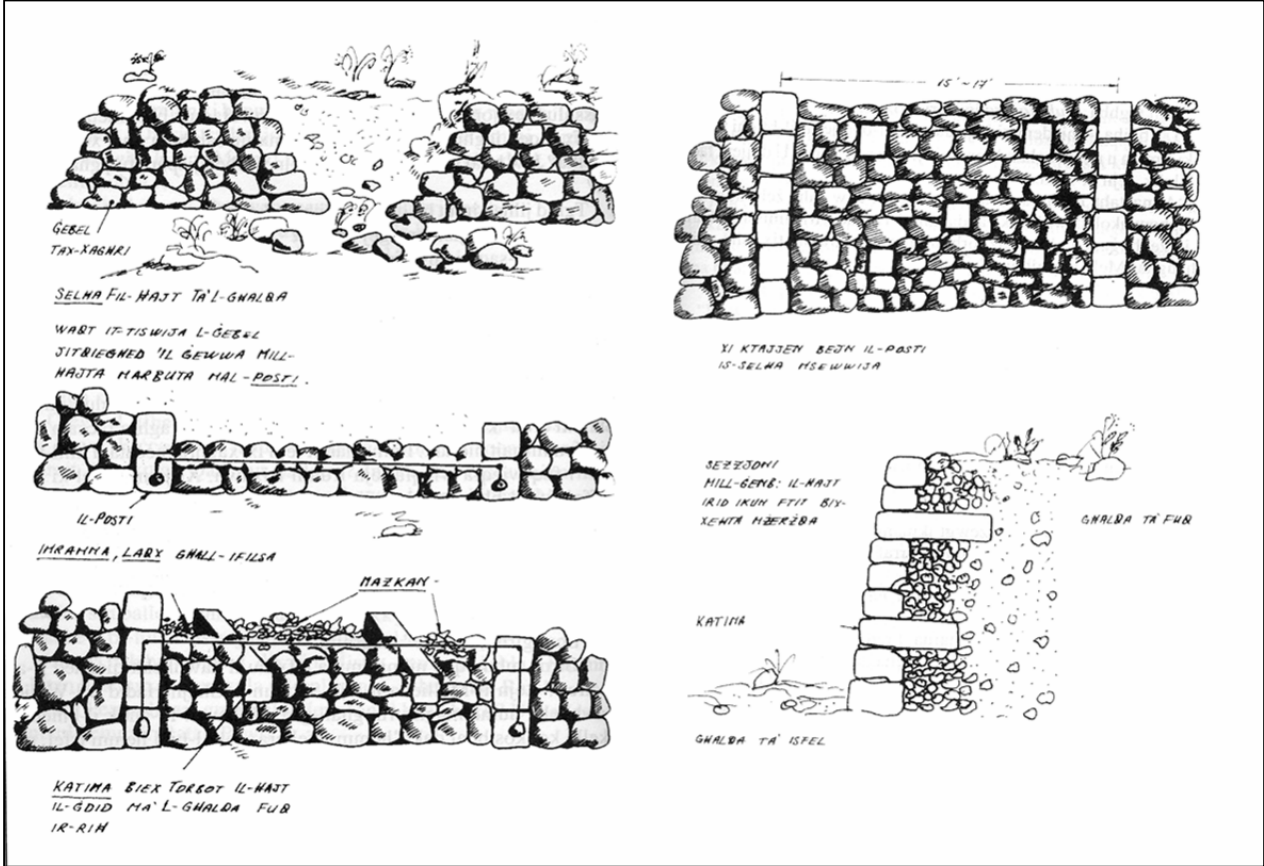
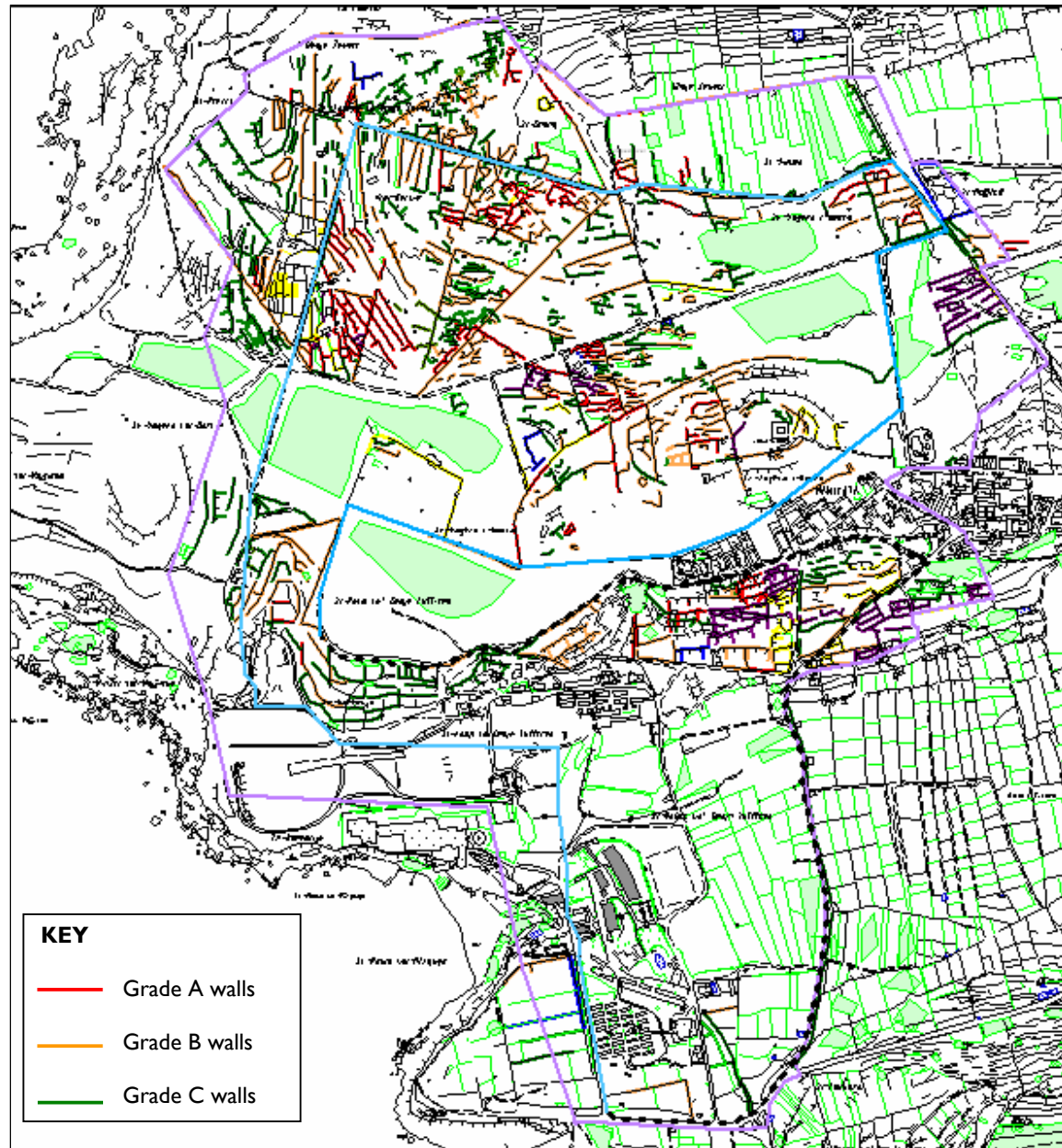


Figure 5: Classified rubble walls in the Study Area



1.83. The rubble walls in the area can be categorized into three main periods. The older rubble walls date certainly to pre-1870 retaining a long established network of small fields. The second phase dates to 1870 when the British heavily impacted on the area to obtain larger field parcels (Bowen-Jones, H., Dewdney, J.C., Fisher, W.B 1961: 134 fig 68). The third phase relates to modern field-walls and older field walls that have been reconstructed, often retaining not only the original footprint but also the lower courses.

- I.84. The state of the rubble walls in the area is divided into three categories (as agreed with MEPA) and as shown in **Table 2**.

Table 2: Rubble Walls

Condition	Grade	Colour Code on Figure 5
Good to Fair Condition	A	Red
Fair to Poor Condition	B	Orange
Bad Condition/ Slight Traces only	C	Green

Grade A walls

- I.85. The state of preservation of the rubble walls indicated as Grade A, ranges from good to fair condition. These walls still retain a large percentage of the original stonework, which may vary from 85% to 65% of the whole (See **Figure 6**).

Figure 6: Grade A rubble wall



Grade B walls

- I.86. Grade B walls range from fair to poor condition. These walls still contain part of the original stonework but have parts either restored with new blocks of stone or are still in a partly demolished state. The amount of original stonework varies from 64% to 35% of the whole (See **Figure 7**).

Figure 7: Grade B rubble wall



Grade C walls

- I.87. These walls are in a bad state of repair and in some cases they consist of slight traces of wall only. The amount of original stonework varies from 34% to 10% of the whole (See **Figure 8**).

Figure 8: Grade C rubble wall



- I.88. It was also noted that in various places rubble walls contained large boulders, see for example **MNK05_059**. This type of wall is similar to others noted during the scheduling of the remains found behind the Manikata Church by Prof A Bonanno, who mentions a number of walls built from irregular megaliths, tentatively dated as prehistoric (National Protective Inventory [NWI] 1994).

Table 3: Rubble Wall Statistics

Grade of walls	Number of walls	Length in metres	% of Total Amount	% of Total Length
A	183	6,213	18.8	16.4
B	370	16,350	37.9	43.0
C	422	15,434	43.3	40.6

- I.89. The total length of rubble walls in the area is close to 38,000 metres, with the majority (43%) being Grade B walls. **Table 3** also shows that 56.7 % of the total number of rubble walls (or 59.4 % of the total length of walls) found in the area are either grade A or B, thus their condition ranges from good to poor - with the poor ones being in a state of preservation which allows for the possibility of restoration. The condition of the rubble walls, the presence of a large number of corbelled huts and other rural features calls for the area indicated in **Figure 5** to be scheduled as a 'Rubble Conservation Area' in accordance with Regulation 3 of Legal Notice 160 of 1997)

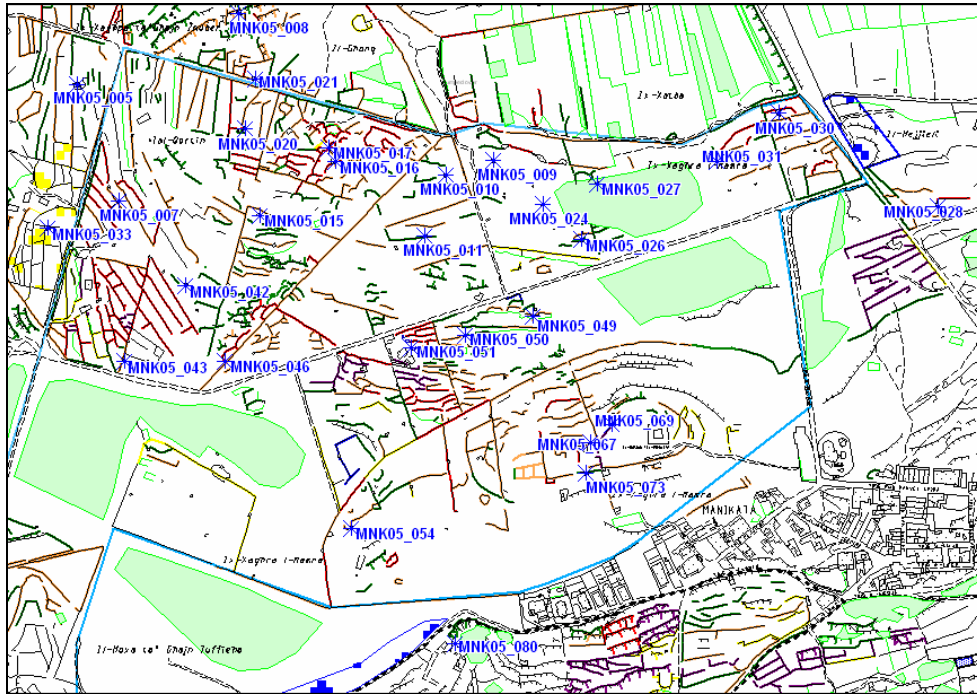
Corbelled Huts

- I.90. The 'girna' or corbelled hut forms an integral part of the rural Maltese landscape, mainly the garigue areas in the west and northwest of Malta. Its method of construction and general appearance is similar to other corbelled huts in the Mediterranean Region, mainly in the Italian peninsula, the Balkans, and North Africa. Buhagiar, in his review of Fsadni, compares the construction technique utilised for the girna to that utilised in the construction of the prehistoric huts and megalithic temples, stating that the girna has "a clear affinity with the dry stone buildings of many of the prehistoric communities of the Mediterranean" (Buhagiar 1993: 214). A further important note in the valorisation and preservation of the girna is brought forward by Buhagiar in that he recognizes the possibility that "its origins are... rooted in the "African huts" worded by Jean Quentin in 1536. These humble buildings dotted the island, and, together with the rock-cut shelters, were often the only type of house found in the countryside. It is probable that they were used for the rearing of live stock as well as for human habitation and that they represented an early type of razzett or farmhouse."¹ It is possible that giren eventually were built into complexes, together with animal pens and other enclosures to evolve in the later rural farmhouse. (Buhagiar 1993:215)

¹ The reference made by Buhagiar is to the report prepared by Jean Quintin D'Autun in 1536, who was commissioned by the Knights of St John to determine the viability of setting up residence on the island. The report has been reproduced as "The Earliest Description of Malta (Lyons, 1536) by Jean Quintin D'Autun", translated and annotated by H.C.R. Vella. Malta, 1980.

- 1.91. There are 29 corbelled huts in the area, (see **Figure 9**), 18 of which are in a very good state of preservation; some of them are still in use today. A number are in a state of collapse; they range from those that are slightly damaged and can easily be restored to others that have almost completely collapsed and their reconstruction is very difficult. Fsadni makes a specific reference to the giren found at ix-Xaghra l-Hamra and Ghajn Zhuber stating that they “are quite interesting...Some of them look very old. (Fsadni 1999:10)
- 1.92. They are concentrated in the same location as most of the older rubble walls and other rural features mainly associated with agriculture and water management.

Figure 9: Location of Corbelled Huts in the Area of Influence



- 1.93. In some instances the huts were found in close proximity to an enlarged natural hollow, possibly utilised to hold rain water, for example features **MNK05_009**, **MNK05_015**, **MNK05_024**, **MNK05_042**, **MNK05_046** and **MNK05_054**. A number of water features such as wells, bore holes, channels, etc., were also noted to be in the same area as the corbelled huts. Reservoir **MNK05_019** is found next to huts **MNK05_020** and **MNK05_021**. Borehole **MNK05_022** is also located near huts **MNK05_016**, **MNK05_017**, **MNK05_020** and **MNK05_021**, and well **MNK05_023** is found next to huts **MNK05_009**, **MNK05_010** and **MNK05_011**.
- 1.94. Fsadni clearly indicates the primary use of the girona in the rural landscape was for storage as well as habitation. “The giren were built to meet the personal needs of farmers and herdsman, or for the raising of livestock. Very often it was necessary for farmers to work

fields situated a long way from their farmhouse and they had to have somewhere to shelter during the hot summer hours during some sudden downpour. In this shelter or girna they used to keep food and drink they took with them and any small children they could not leave behind. Indeed, in some cases, they even used to hang a cradle for the baby...Before returning to their farmhouse, farmers used to store their tools and implements inside.”

(Fsadni 1999:108-9) Evidence of this in the A of I are the animal pens built as part of the girna complex. Some of these pens contain mangers and tie-loops. Enclosures are found in MNK05_007, MNK05_008, MNK05_013, MNK05_015, MNK05_017, MNK05_020, MNK05_021, MNK05_049, and MNK05_073.

- 1.95. Most of the giren follow a circular or elliptical plan, whilst others follow a rectangular plan. They are built in the dry-stone technique with their walls following a slightly inward incline closing up in a dome-shaped ceiling capped with roofing slabs that are sealed on the exterior with deffun. The main entrance to the hut is rectangular and faced with regular blocks. The lintel usually consists of a large stone being either flat or concave. Occasionally, the lintel consists of more than one stone to form a more pronounced arch or as in the case of **MNK0_021**, a triangular lintel. Some huts contain small niches on the lintel and small aperture-like windows at eye level, possibly for ventilation purposes.
- 1.96. More than half of the huts have been built with their entrance facing a south, southeast or east direction. Whether this is coincidence or related to a need to exploit more hours of exposure to the sun can only be assessed through a comparison with other huts in other areas, which is beyond the scope of this study.
- 1.97. Although the corbelled hut contains an abundant variety of features, there is still a lack of understanding of its true role within the archaeological, historical, anthropological and geographical setting. This in itself attests to the need for its preservation and detailed study of the girna phenomenon in Malta. Such a need to understand the girna is one of the concluding points of Fsadni’s book, placing his emphasis on the importance of their preservation for posterity. *“There are still many giren in the Maltese countryside, although more than half of them have collapsed or have suffered damage...As such the future of these simple and primitive structures – part of Malta’s architectural heritage – is not all heartening.”* (Fsadni 1999:113) The need for the preservation of the girna is further reiterated by Prof Mario Buhagiar (Head, History of Art Unit, University of Malta) in his foreword to Fsadni’s publication. The *“kileb roofing system is an “ingenious solution to roofing problems in a tree-less environment [which] is essentially Maltese.”* (The author is not aware of its occurrence elsewhere in the Mediterranean.) *“It is therefore another example of the precariousness of our grass roots architecture and of our responsibility to ensure its preservation before it is too late”.* (Fsadni 1999:XV)

Table 4: Catalogue of corbelled huts showing entrance orientation

Feature Reference	Doorway Orientation	Feature Reference	Doorway Orientation
MNK05_005	South	MNK05_031	West
MNK05_007	Undetermined due to	MNK05_033	South

Feature Reference	Doorway Orientation	Feature Reference	Doorway Orientation
	collapse		
MNK05_008	South	MNK05_042	East
MNK05_009	South	MNK05_043	West
MNK05_010	South	MNK05_046	North
MNK05_011	South	MNK05_049	Southwest
MNK05_013	East	MNK05_050	East
MNK05_015	Southeast	MNK05_051	East
MNK05_016	South	MNK05_054	South
MNK05_017	South	MNK05_067	North
MNK05_020	South	MNK05_069	North
MNK05_021	Southeast	MNK05_073	West
MNK05_026	Undetermined due to collapse	MNK05_080e	West
MNK05_027	Undetermined due to collapse	MNK05_082	South
MNK05_028	North		

- 1.98. Although the girna is of unknown antiquity (with some examples being of a certain recent date), it is certain that some examples date back to the transitional period between the late medieval and early modern period. The corbelled hut is not only a unique phenomenon to the island, but it is also restricted to the northern part of the island (Fsadni 1999: 9-10)
- 1.99. In summary, the giren warrant protection afforded by Scheduling under the Development Planning Act not only as a result of the advice of the many authorities mentioned above, but also because of:
- The uniqueness of the concentration of the giren;
 - The relation of the giren to the rubble walls, animal pens etc, indicating their use for habitation and animal husbandry;
 - The unique construction details of the giren;
 - The possible antiquity of many of the giren;
 - The current lack of knowledge about the giren, the acquisition of which on the future would be inhibited by their destruction; and
 - The uniqueness of the cultural landscape comprising the giren and the plethora of other cultural heritage features.
- 1.100. Further evidence for the protection of the giren is obtained from the scheduling of an isolated girna found at Xemxija as Grade B under G.N. 763/98. This sets an important precedent in the scheduling for all of the giren found on the island. Unfortunately, this girna collapsed recently, a fact that clearly highlights the need for proper scheduling and protection of such features.

- 1.101. It is proposed that the giren be scheduled as per L.N. 160 of 1997 which “declares rubble walls and non-habitable rural structures as protected, in view of their historical and architectural importance, their exceptional beauty, their affording a habitat for flora and fauna and their vital importance in the conservation of the soil and water.” (Article 2, L.N.160.97)
- 1.102. Furthermore Article 3 of the Cultural Heritage Act 2002 clearly states that any feature which has existed on the island for more than 50 years merits recognition as part of the cultural heritage. Article 4.2 states that it the right of every citizen to “benefit from this cultural heritage through learning and enjoyment. The cultural heritage is an asset of irreplaceable spiritual, cultural, social and economic value, and its protection and promotion are indispensable for a balanced and complete life.” Article 4.3 states that it is the duty of the State in Malta “ensure that this heritage is protected and conserved.” Finally, Article 5 states that: “The right of access to, learn and benefit from, the cultural heritage does not belong merely to the present generation. Every generation shall have the duty to protect this heritage and to make it accessible for future generations and for all mankind”.
- 1.103. For the purpose of suggested scheduling, the state of the giren in the area is divided into three categories as shown in **Table 5**. Their location is shown in **Figure 10**.

Table 5: Giren

Condition	Grade	Colour Code on Figure XX
Good Fair Condition	A	Red
Fair to Poor Condition	B	Orange
Bad Condition/Collapsed	C	Green

Grade A Giren

- 1.104. The state of preservation of the giren indicated as Grade A, ranges from good to fair and include intact giren and those that are slightly damaged superficially but can easily be restored. These giren should be surrounded by a buffer zone of at least 50m.

Grade B Giren

- 1.105. The state of preservation of Grade B giren ranges from fair to poor. The general integrity of the structure is retained, however it may have suffered some collapse or has evident signs of restoration.

Grade C Giren

- 1.106. These giren are in a bad state of repair and generally have suffered extensive collapse which makes it difficult to fully comprehend their original features.

Figure 10: Location of Proposed Scheduled Corbelled Huts

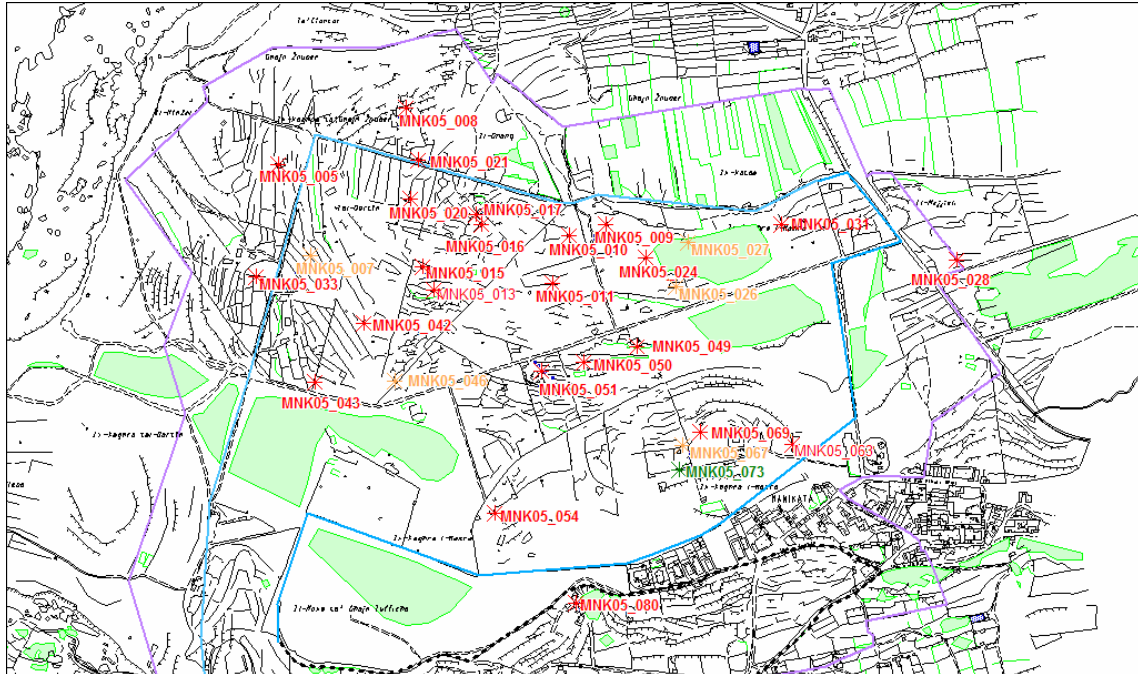


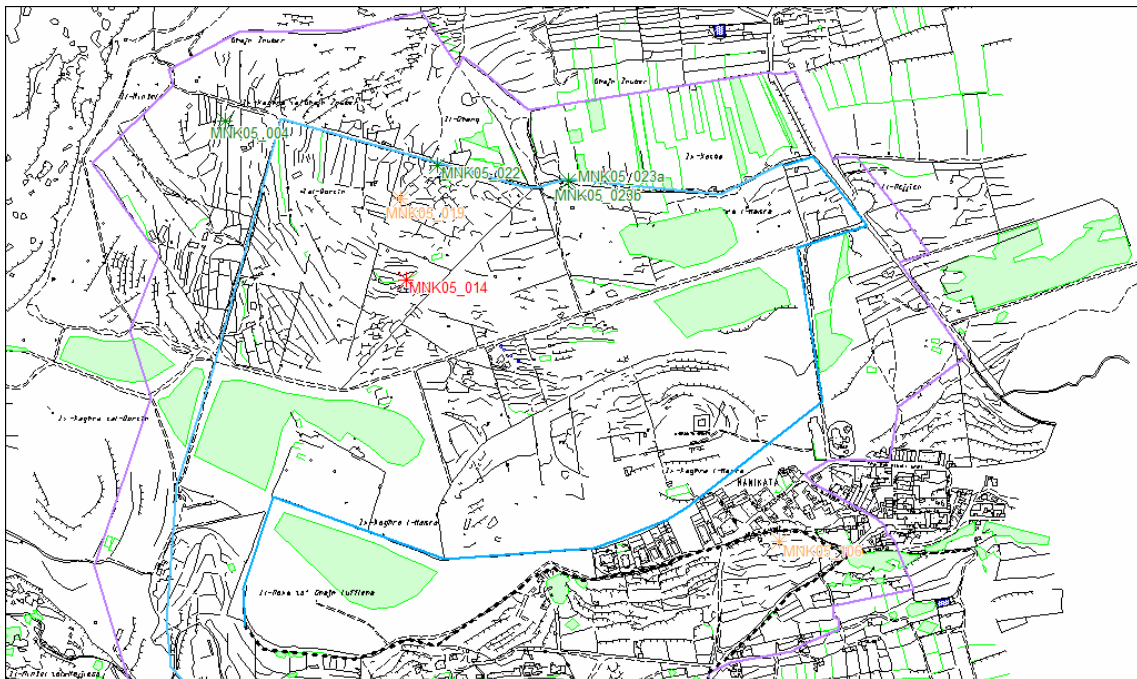
Figure 11: Scheduled Corbelled Hut at Xemxija (now collapsed)



Water Catchment

- 1.107. Water management was an important activity in the area. Although the thin soils were adequate enough for self sufficiency, they retained little moisture so it was necessary to store as much water as possible. Since the garigue generates water run-off, this was collected into cisterns and reservoirs through rock cut channels and other devices, such as through holes in the lower courses of rubble walls to allow drainage of water from one area to the next.
- 1.108. Only the most significant water features were recorded from the A of I Their location is shown in Figure XX. Feature **MNK05_004** consists of a channelling system dug in the rock and partly built into the rubble wall to lead water to a rock-cut cistern. The channelling system built into the wall is similar to that recorded in **MNK05_014**. Other cisterns are those indicated as **MNK05_019**, **MNK05_022**, **MNK05_23** and **MNK05_106**.
- 1.109. The importance of these features lies in the relevance to the cultural landscape of the area since they further enhance the understanding of the relationship between the field patterns, the corbelled huts and the availability of fresh water. The presence of rain-water exit holes in a rubble wall such as feature MNK05_014, necessitates the grading of both wall and feature as Grade I since the presence of the latter makes the wall unique.

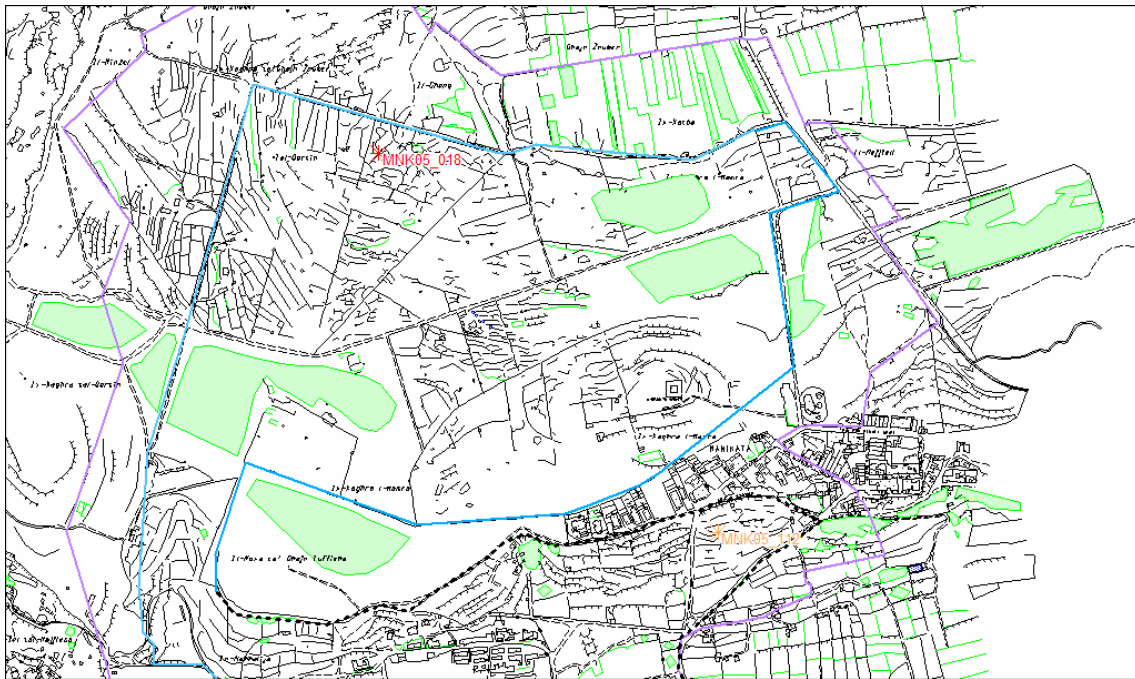
Figure 12: :Location of water catchment features in the area



Bee hives

- 1.110. The presence of wild thyme and other wild flowers in the garigue area encourages the presence of bees since they use the pollen from the flowers to produce honey. Bee-hives for the production of honey were found in the garigue areas.
- 1.111. The older type of bee hive usually consisted of a niche built into the rubble walls with a small hole in the back wall of the niche. Within the niche a large cylindrical pot that was made purposely for this type of use was placed; it is known as 'qolla'. It has a funnel at one end that is inserted into the small aperture to serve as access for the bees, whilst the back end is closed by a stone or piece of wood, which is removed when extracting honey. **MNK05_018** and **MNK05_112** are examples of these bee hives. The former consists of 5 bee hives with some of the 'qolol' still extant. In the latter case, only the niche is still extant.
- 1.112. It should be noted that in the whole area this type of feature was encountered only twice, indicating its rare occurrence. It should be further noted that in his review of Fsadni, Buhagiar comments on the importance of the rural bee hive and argues that the "miġbañ or drystone beehive which shares common characteristics with the girna but is less known and in greater danger of extinction."(Buhagiar 1992:214)
- 1.113. The beehives are incorporated into a rubble wall and this makes the two elements inseparable. The whole becomes a unique feature and it is thus necessary to grade the two features as Grade I.

Figure 13: Location of beehives

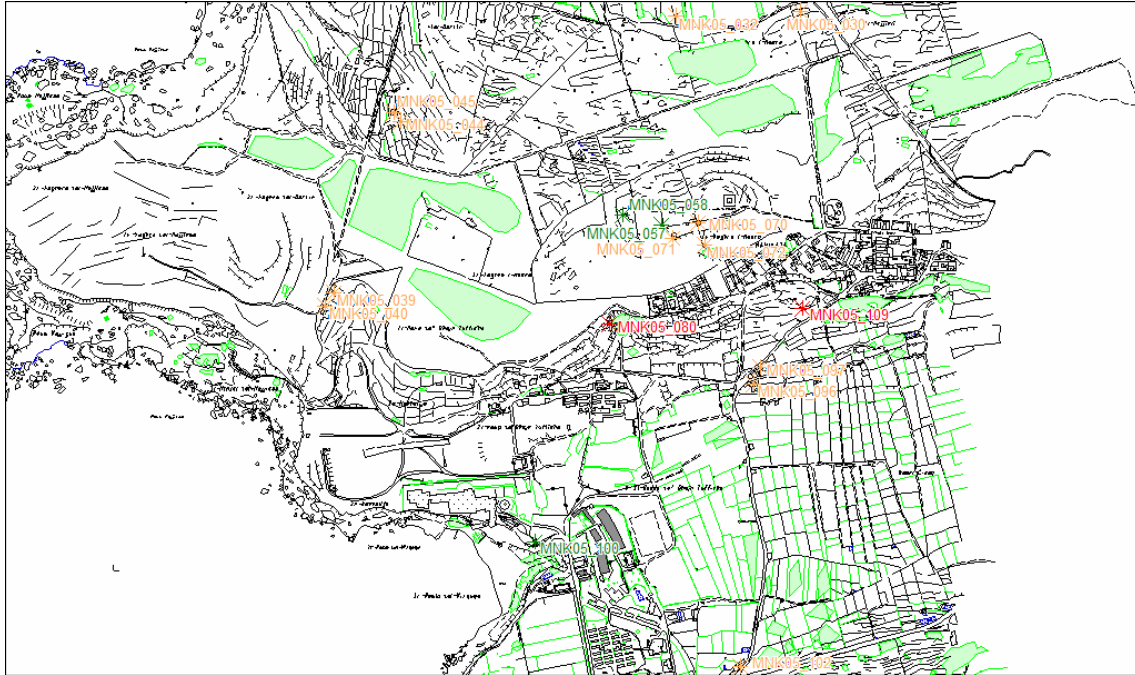


Rural Structures

- 1.114. Within the A of I a small number of field rooms and farmhouses was recorded. These features form part of the vernacular architectural heritage of the Maltese Islands and constitute an important element in history of the area. Such features are the more direct manifestation of the 'practical solutions to the basic problems of shelter and security, animal survival, storage, available building technology and climate' (Jaccarini 1998:2).
- 1.115. The rural features located in the area manifest the characteristic dry-stone technique for building using both regular and irregular stones, stone slabs (xorok), wooden beams, deffun, corbelling for roofing and double-walls with cavity infilling. Some of the features identified in the field survey also contain further characteristics typical of rural architecture such as mangers and animal pens.
- 1.116. Features **MNK05_030**, **MNK05_032** and **MNK05_044** are the typical field rooms found in rural areas, consisting of one room built in the dry stone technique generally used for storage and not for habitation. Feature **MNK05_070** is a rural structure consisting of three rooms and an animal pen. It is evident that the whole structure was constructed in different periods of construction, but the building was inaccessible because it is still currently in use. Feature **MNK05_071** is similar in construction to the latter, in that it too consists of rooms built on the ground floor together with an animal pen. A particular feature of this farmhouse is a small hypogeum, probably from the classical period, located to its immediate south. The hypogeum was transformed into an animal pen and enlarged, with a front animal pen dug out of the rock and partially roofed over in rubble and 'deffun'.
- 1.117. A second type of farmhouse was intended for human habitation on the first floor, and for livestock on the ground floor. The farmhouse **MNK05_072** is an example of such a farmhouse. It consists of two ground floor rooms with an enclosed courtyard for livestock and one room found on the first floor used for human habitation. A more impressive example is **MNK05_040**, consisting of an L shaped building having 4 chambers furnished with mangers for livestock and an enclosed courtyard also furnished with mangers. The area reserved for the farmer consisted of two ground floor rooms and another room on the first floor. A cistern was also located within the courtyard. Feature **MNK05_102** is another farmhouse built in a very similar style with ground floor for livestock and first floor for domestic habitation. **MNK05_096** is a farmhouse currently still and therefore inaccessible and **MNK05_097** is a field room abutting a reservoir that is still in use and also inaccessible.
- 1.118. These features are clearly important in understanding the history of the area. Most of these features probably date to 17th -18th century and indicate a more extensive agricultural use of the area for which the corbelled hut alone did not suffice and thus more permanent structures were needed to house livestock and the farmer. They further complement the rural character of the area giving further depth to the cultural landscape of the area, which is so much more than just derelict garrigue.

This necessitates the classification of such features as Grade 2. Some of the rural rooms are either modern or heavily restored and have thus been classified as Grade 3. It is recommended that feature **MNK05_071** be scheduled as archaeology Class A with a minimum buffer zone in view of the existence of the tomb complex/hypogeum which is incorporated within this building complex.

Figure 14: Rural Structures

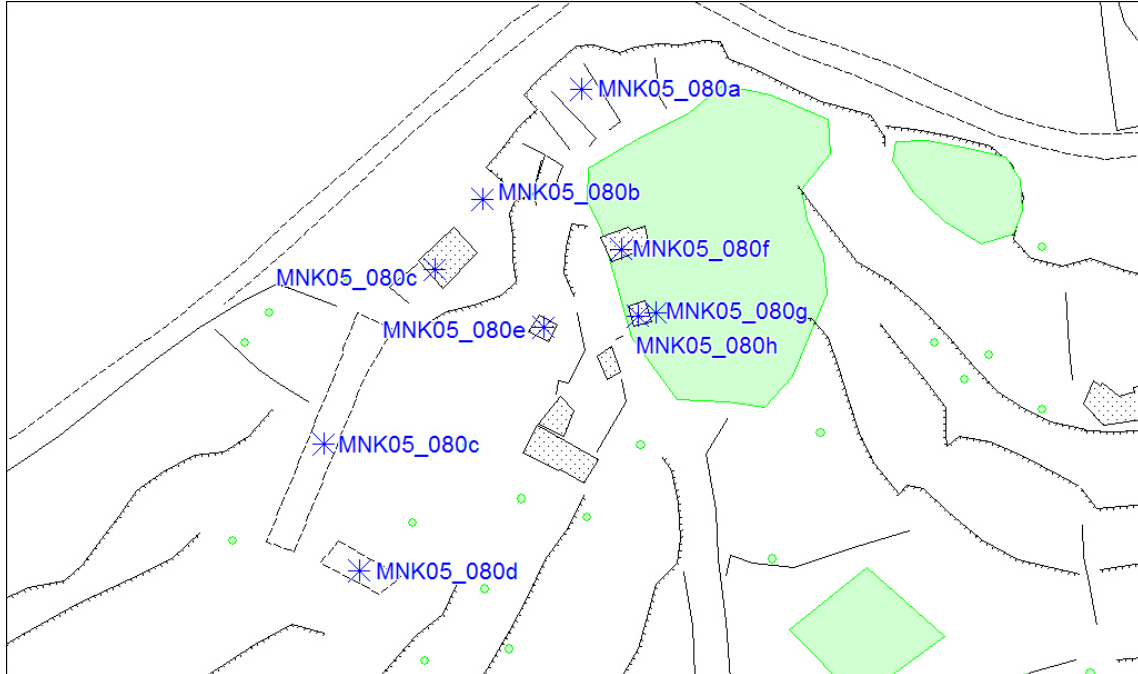


Nahhalija Hamlet

- 1.119. Feature **MNK05_080** with sub-features **MNK050_080a** to **MNK05_080f** can also be classified as a rural structure. (See **Figure 15**.) However, it is being treated separately due its uniqueness. The hamlet dates to the early modern period, similar to other hamlets located in the north-western part of the island (Ghajn Tuffieha, Tas-Santi, Bahrija etc). The hamlet is built in a hollow located beneath the rock-face below Ix-Xaghra l-Hamra overlooking Pwales valley. The rock face forms a long concave wall behind the hamlet, offering shelter from severe weather conditions. The hamlet consists of a number of farmhouses and animal pens built around a central open area.
- 1.120. The eastern-most section consists of caves cut into the cliff face. Feature **MNK05_08a** was partially enlarged by human activity and is situated on one side of a courtyard, enclosed by rubble walls. It was used as an animal pen as evidenced by two mangers found on site. To the west of these caves is a room, feature **MNK05_080b**, which is partly dug into the cliff face with its doorway facing south. The roof consisted of circular side corbels ('kileb tonđ'), timber beams, and stone slabs; it has now collapsed.

-
- 1.121. Further west one finds a two storey farmhouse, feature **MNK05_080c**, which consists of three adjacent ground floor rooms with south facing entrances. The western-most room has partly collapsed but the other rooms were, until recently, used as storage for fodder. An interesting feature of the doorways is the flat lintel on the outside and the arched lintel on the inside. The first floor, now inaccessible, reserved for the farmer, was reached via an external staircase. To the east of the building is a small dry-stone room that is partially cut into the rock face, roofed with slabs and covered with deffun. The entrance faces south and the lintel has a triangular shape. A small animal pen is found in front of the room.
- 1.122. Next to this farmhouse are two stables (feature **MNK05_080d** and **MNK_080 e**) that are adjacent to each other with east facing entrances. A manger is found in the exterior wall and another two mangers with loop holes are found inside. The building also comprises two enclosed animal pens located outside each of the two stables. In the northern room a graffito carries the date of 19 April 1935, whilst another graffito portrays some type of sailing ship / boat.
- 1.123. The hamlet contains another farmhouse (feature **MNK05_080f**) consisting of two large ground floor stables with south facing entrances and an additional room to the east. Mangers are located inside the stables. An exterior staircase leads up to an open terrace and a first floor room that was utilised as a domestic dwelling as evidenced by the number of niches and cupboards built into the thick walls. A gateway separates this structure from another two storey structure located to its south, which is however inaccessible.
- 1.124. Interestingly within the hamlet one finds a corbelled hut (feature **MNK05_080e**) built on a rectangular plan with a west facing doorway, with the roof rendered in deffun. A further particular feature located within the hamlet is a tunnel cut into the rock with its first part built in stone. The tunnel runs for a long distance with a gradual downward slope. After a distance of some 50 meters there is water inside the tunnel; a local farmer recounted that in his childhood, the water flowed through the whole of the tunnel and ended in a type of basin outside the tunnel's entrance.

Figure 15: The Nahhalija Hamlet



I.125. The hamlet probably dates to the 17th century when the Ghajn Tuffieha Hamlet was built on the opposite side of the valley. The presence of the Nahhalija hamlet indicates a well-established farming community. The different buildings found within the hamlet are classified as Grade 2 in view of the various architectural features they contain. The importance of these features and their unique setting necessitates the classification of the hamlet as Grade 1. The preservation of the hamlet is being proposed in terms of L.N. 160 of 1997 as well as the Cultural Heritage Act 2002.

Quarrying

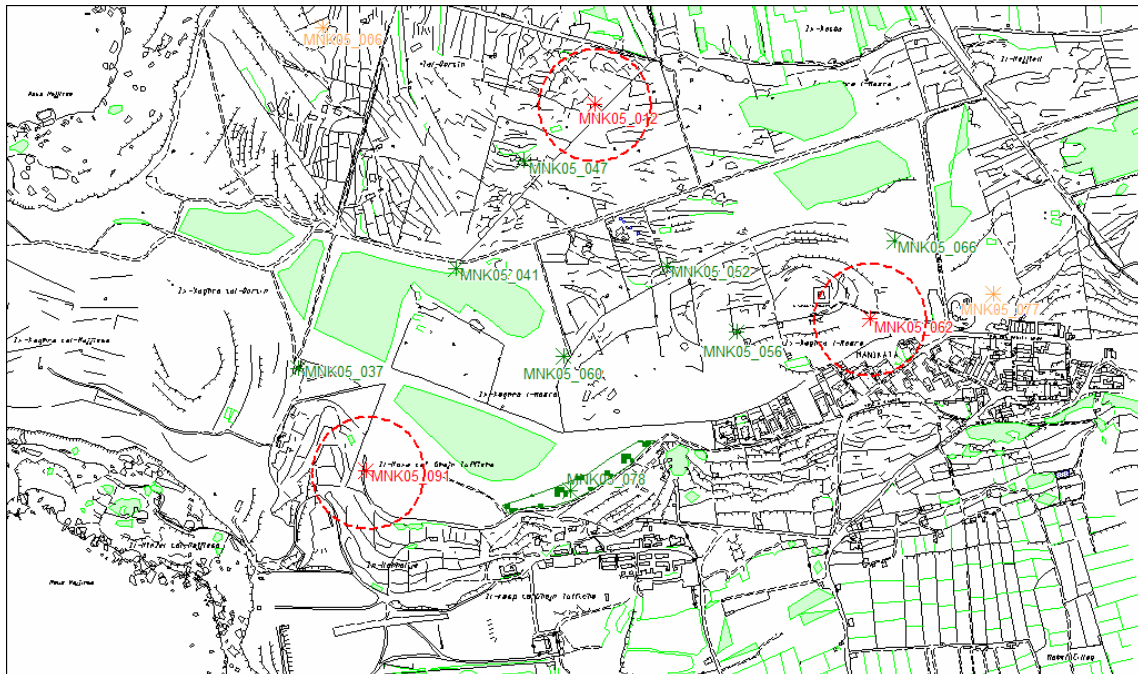
I.126. Quarrying has been often noted within the area. The area comprises small quarries or flat ledges on which cart-ruts may be encountered. Feature **MNK05_006** consists of a flat surface with a pair of cart-ruts. Features **MNK05_012** and **MNK05_047** are abandoned quarries which were turned into small fields. The former is enclosed by a rubble wall which contains large blocks, probably cut from the same quarry. A second quarry **MNK05_035** is found along the side of the road around three metres in depth. Rock extracted from the quarry was probably used in the building of rubble walls in the area. Particular examples of quarrying activity are demonstrated through features **MNK05_041** and **MNK05_060** that consist of flat rock surfaces, heavily marked by channelling and deep circular cuts with evident tool marks.

I.127. Features **MNK05_052** and **MNK05_053** are found in close proximity to each other and are very similar in nature. They consist of garigue areas which have been quarried and contain heaps of stone chippings. In quarry **MNK_052** a channel was

noted and in feature **MNK_053** a pair of intermittent cart ruts are visible. Feature **MNK05_077** is an example of scheduled quarrying due to its association with a number of cart ruts and ‘megalithic’ walls.

- I.128. For archaeologists, quarries present similar problems to cart ruts. They are difficult to date because quarrying only leaves the negative mark of the activity in the rock. Moreover, quarrying was a necessity for all occupants of the islands since it provided the raw material for shelter. In fact, it still is one of the major industries in Malta today. Hence, although quarry remains are widespread, they are not only impossible to date, but also very difficult to associate with a particular building, be it prehistoric or early modern.
- I.129. Small quarries were dug on land that was bought by the quarry owner (known as Sid ix-Xagħira) from a farmer (Borg 2000: 224-225), and after exhaustion of the raw material, it would be resold again after it was re-covered with soil. The soil was stripped off, and the rock surface cleaned of loose stones. The hardened uppermost rock layer was removed, and the resulting stones would be used to build field rooms and rubble walls. The exposed surface was levelled off and since this rock was still hard, it was used to quarry out slabs (xorok) and steps. It was then, that the softer rock was quarried (Borg 2000: 220).

Figure 16: Quarries



Archaeological Features

The Cart Ruts

- I.130. Cart-ruts have been encountered over most of the A of I and have been catalogued as **MNK05_002, MNK05_006, MNK05_053, MNK05_065, MNK05_077, MNK05_081, MNK05_087 & MNK05_092**. These features are controversial because their date, nature, and function is still unclear. This is because, as yet, cart ruts “*have never been the subject of an island-wide scientific investigation*” (Hughes 1999: 66). So far, their origin, function and widespread distribution have not been explained satisfactorily; further research is necessary.
- I.131. It should also be noted that these cart ruts are occasionally associated with other features (for example feature **MNK05_077**) that are related to the quarrying activity and include a number of large boulders. Other ruts are associated with quarrying marks in the same area, such as features **MNK05_006** and **MNK05_053**; feature **MNK05_65** has been interrupting by quarrying (**MNK05_066**). Quarrying at **MNK05_078** is close to cart ruts **MNK05_081** and **MNK05_087**. The quarrying marks at **MNK05_091** are nearby cart ruts **MNK05_092**. These location relationships further strengthen the idea that the cart rut phenomenon is strongly associated with quarrying. The exact relationship remains unclear: it could be either part of the technique to extract stone or the effect on the landscape of transporting heavy loads over the same area.

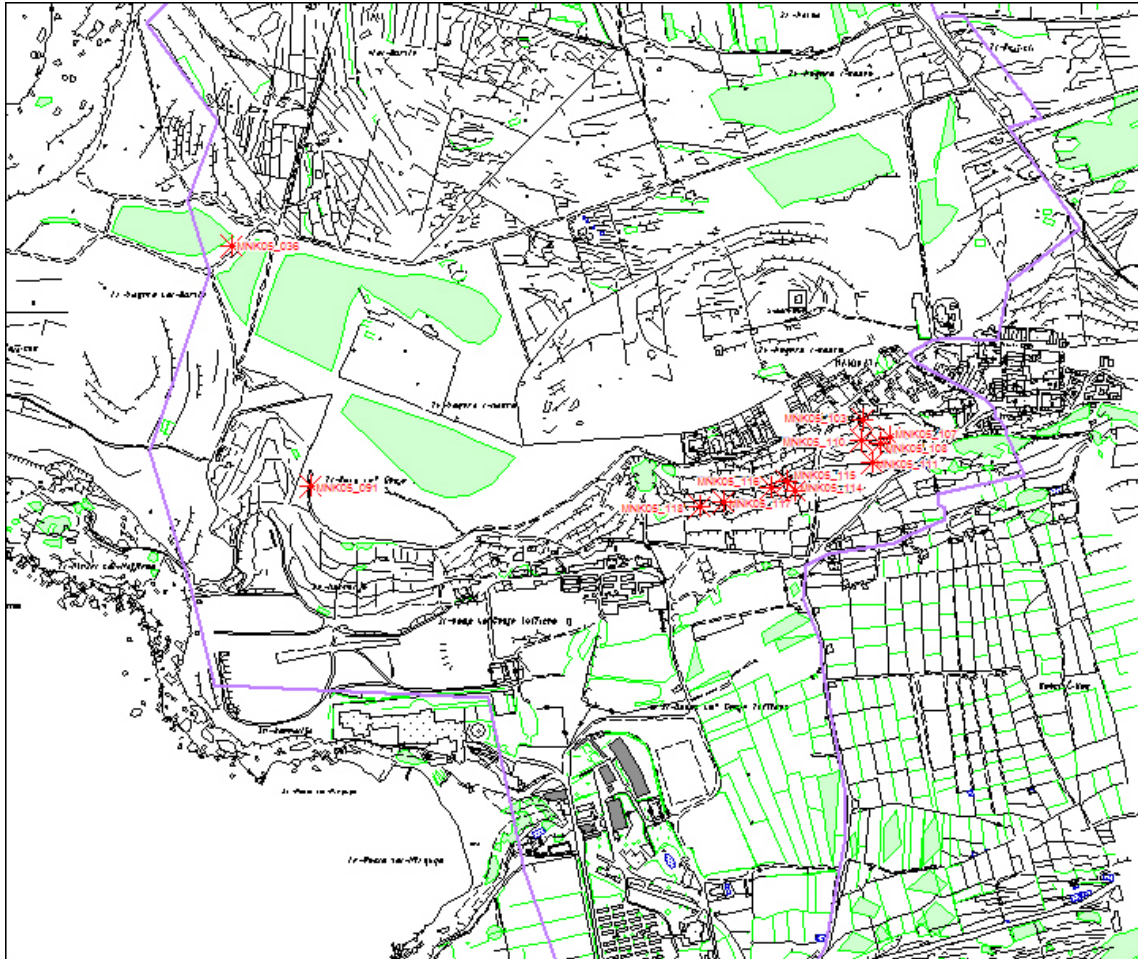
Figure 17: Cartruts



Tombs

- I.132. A number of tombs mostly dating to the classical period were recorded during the survey. Tombs **MNK05_103, MNK05_115 to MNK05_118** were found immediately beneath the village of Manikata; feature **MNK05_036** further west at Ix-Xagħra tal-Qortin, and **MNK05_091** at Il-Moxa ta' Għajn Tuffieħa. The majority of the tombs were accessible (only **MNK05-091** and **MNK05_036** were filled with debris); none of the tombs resemble those recorded by Caruana and reproduced in Sagona (2002). These tombs are very important as evidence of the existence of some type of Punic settlement in the vicinity (Sagona 2002:681).
- I.133. The tombs encountered in the A of I share similar characteristics typical of tombs of the Classical Period. Almost none of the tombs are fully intact because most have been partly quarried away. In most cases the quarrying has affected the entrance shaft to the tombs with all of the chambers being still extant, some with slight damage. The tombs are furnished with the usual features expected, such as headrests, niches, lamp holes, and benches. The two features that merit particular mention are **MNK05_115** and **MNK05_116** because the arcosolia still present; this distinguished them from the other tombs.
- I.134. During the survey, flooring material in use during the Roman period was found within the A of I. This material includes lozenge-shaped floor tiles **MNK05_111** and thick plastering **MNK05_107** and extensive pottery scatters **MNK05_107, MNK05_108, MNK05_110, and MNK05_111**. The presence of these remains shows that the area was important in Classical times.

Figure 18: Tombs



I.135. The tombs encountered in the area have been proposed for scheduling as Class A with the appropriate buffer zone as indicated in **Table 6**. The reasons for such a recommendation are:

- There has been no proper archaeological recording of the tombs recorded in this survey;
- The associated pottery scatters and other archaeological elements found in close proximity to the tombs are indicative of an important archaeological activity;
- The protection afforded by the Cultural Heritage Act 2002; and
- Although a larger number of tomb complexes have been found around the island, very few have in fact been preserved.

Silos

- 1.136. Two features that are likely to be silo pits (**MNK05_120**) have been found in the area called in-Nahhalija. The pits are currently filled with debris and overgrowth, and it is thus hard to discern their exact nature. These features are unique in the area and are of considerable importance when one considers their context. Silo pits are generally dated to the Bronze Age period and they are usually found in association with cart-ruts. It is to be noted that in the A of I the silos are found in close proximity to three different sets of cart-ruts, namely 106 metres from **MNK05_092**; 139 metres from **MNK05_087** and 177 metres from **MNK05_081**. Moreover it should be mentioned that the stone cairns **MNK05_055**, another probable Bronze Age feature, are located 645 metres to the north-east, within clear view.

Caves

- 1.137. In close proximity to the tombs, two caves **MNK05_104** and **MNK05_105**, were recorded. They were used for domestic purposes and livestock rearing as these natural caves show traces of enlargement to increase the available space. Moreover, the internal area and the area immediately outside the caves is separated into a number of distinct spaces using rubble walls.
- 1.138. The caves are being treated as archaeological features and it is proposed that they be scheduled as Class B features. These features are an important element in that they throw light on the human habitation they have afforded in the past, most probably in periods previous to the farmhouses noted in the area. They are a clear sign of a troglodytic existence typical of the Medieval period.

Cairns

- 1.139. The A of I contains various rubble piles; these are a result of soil clearing, to facilitate agricultural productivity, or quarrying. However the four 'cairns' at **MNK05_055** are completely different because one includes a small aperture faced on its four sides by flat stones over which rubble has been neatly piled up. The other three do not have this aperture but are similar in shape and size to the former. The rubble used is of sizeable regular stones and not small rough stones, typical of rubble resulting from field clearing. It will be necessary to investigate the area carefully to determine the real nature of these 'cairns', since this cannot be done through simple observation.
- 1.140. Other cairns excavated by Evans at Wied Moqbol, limits of Hal Far, were described as 'three small cairns, of different shapes and in differing states of preservations' (Evans, J.D. *The Prehistoric Antiquities of the Maltese Islands: A Survey*. The Athone Press 1971 pp193) which further highlights the difficulty in the interpretation of such features.
- 1.141. It is being recommended that the stone cairns be scheduled as Class A in view of the uniqueness of these features on the Maltese Islands. The proposed scheduling may be revised should proper archaeological investigations throw light on the exact nature of these features.

Fortifications

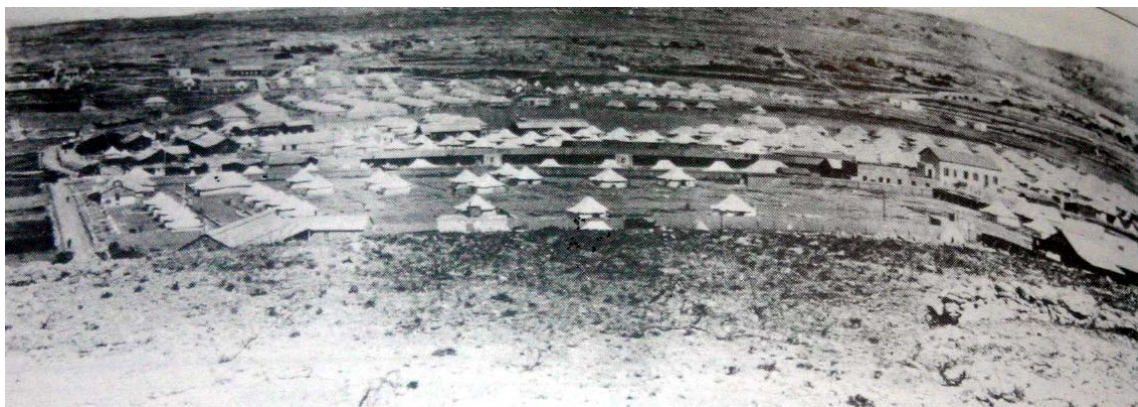
- 1.142. This area was one of the vulnerable points in the defences of the Maltese Islands, since pre-historic times. Since both Ghajn Tuffieha and Golden Bay are sheltered bays offering a convenient naval landing place, the cultural heritage of the area, spanning from the Bronze Age to the British period, is strongly related to the defence of that area of the island. Bronze Age sherds and traces of a wall were found on 'Il-Qarraba', a promontory that encloses Ghajn Tuffieha Bay to the south (Trump 1997: 142).
- 1.143. The most evident fortifications in the area date from the Knights' Period onwards. They built two coastal watch towers in the area, that of Ta' Lippija, overlooking Gnejna Bay and the Ghajn Tuffieha coastal tower. As such these were the only ones built on the island's north-western coastline (Spiteri 1994: 489-490). These were reinforced by entrenchment walls (discussed below).
- 1.144. The British re-enforced the defences of the area. This is reflected in conspicuous cultural features in the area such as barrack blocks and pillboxes as well as in the presence of a well-established road network (for example feature **MNK05_003**) and a number of concrete cement posts (for example **MNK05_035**) acting as a kind of boundary markers, concrete platforms (**MNK05_025, MNK05_029, MNK05_048** and **MNK05_061**) and stone markers (features **MNK05_084, MNK05_088, MNK05_089, MNK05_090** and **MNK05_093**). This area was also an important training ground as demonstrated by the shooting range (feature **MNK05_083**) and **Figure 19**. It was also used to host the wounded soldiers from the Battle of the Dardanelles (the Battle of Gallipoli) during the First World War. Temporary tents were pitched in the area as shown in below. These were later replaced with more permanent structures that are still extant today.

Figure 19: Soldiers in the area of Manikata





Maori soldiers dancing the traditional Haka. These soldiers have been trained in Malta between April 12 1915 and May 28 1915 when they sailed for Gallipoli (Mizzi, 1991: 92)



Il-Kamp t'Ghajn Tuffieha serving as a temporary shelter to wounded troops during the Battle of Gallipoli (Mizzi 1991: 152)



The convalescent camp at Ghajn Tuffieha (Mizzi 1991: 132-133)

Entrenchments

- I.145. The entrenchment walls (**MNK05_119**) built by the Order of St John during the 18th century, overlook Il-Bajja tal-Mixquqa (Golden Bay). They are built in the dry-stone technique and consist of roughly cut regularly-sized blocks capped with a number of slabs placed one next to each other. The whole structure is not more than 1 metre tall, however, it still offered sufficient security since it is located on the immediate edge of the cliff face becoming an extension of the cliff face. The road leading to the sandy beach may have destroyed part of this wall, while the northern segment of the wall has been incorporated into a later structure.
- I.146. It is important to note that feature **MNK05_094** (see **Figure 21**) is probably also some type of entrenchment even though no documentary evidence has been found for this. However, when the building technique is examined it is noted that it is very similar in nature to more substantial entrenchments noted elsewhere on the islands, mainly at Ta' Falka (Spiteri 2001: 348) (See **Figure 20**).
- I.147. As mentioned earlier, the Ghajn Tuffieha entrenchments have been scheduled Grade I as per G.N.729/95. In this regard it is recommended that feature MNK05_094 be also scheduled as Grade I.

Figure 20: Profiles of entrenchments at Ta'Falka

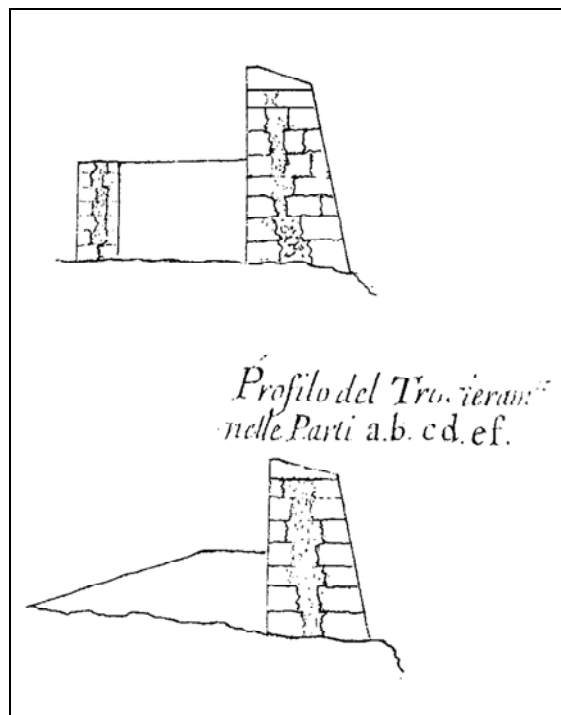


Figure 21: Entrenchment MNK05_094 similar in construction to the technique shown in Figure 12



Barracks

- I.148. The barracks **MNK05_085** and **MNK05_099** dating to the British Period are similar in style to other barrack blocks located elsewhere on the island. However, these are the only example of this type of architecture in the area - other barracks are found south of the Great Fault. The barracks, particularly **MNK05_085**, contain a number of architectural features typical of the neo-classical style adopted by the British during their occupation of the islands. This barrack complex (MNK05_085) probably retains all of the buildings constituting the original layout: the communal sleeping quarters, officers' quarters, main barrack blocks and a probable parade ground. It is noted that most of the barracks in the Pembroke area and those in the Cottonera have been protected under the Development Planning Act and graded Level 1 or 2.
- I.149. As detailed in **Appendix I**, in 1996 the Planning Authority scheduled 60 sites and features within the Pembroke area (GN No.583/96). Twenty three of the 60 features, all of which are buildings, have been scheduled as Grade 1, 30 features scheduled as Grade 2 and only 7 features scheduled as Grade 3. Most of these features consist of British Architecture built during the earlier part of the 20th Century. A large number of characteristics found in the Pembroke Grade 1 buildings such as fake rustication, elaborate cornices, arched loggias etc... are mirrored in the buildings found at Ghajn Tuffieha. Accordingly, the scheduled Pembroke buildings are used as a measure against which the Ghajn Tuffieha barracks are compared and recommended for scheduling. It is therefore being proposed that the barrack complex found at the area indicated as il-Kamp ta'Ghajn Tuffieh (**MNK05_085**) be scheduled Grade 1 as a complex. The various buildings found within the complex

have been recommended for scheduling as Grade 1, 2 or 3 depending on their state, as indicated in **Table 6**.

- I.150. **MNK05_099**, the Hal Ferh Tourist Complex, is probably more recent than the barracks and is of a simpler construction, containing mostly buildings intended as sleeping quarters. However, the buildings still retain the origin layout as detailed in **Figure 24**. They retain varying architectural merits and it was the consultant archaeologists deemed it necessary to record the individual buildings and recommend a level of protection for each building as indicated in Table 6. This necessarily demands that the whole complex, in view of its authenticity, be scheduled as Grade 1. The grading of these features has been determined through a comparison made with the Ghajn Tuffieha Barracks MNK05_085 as well as the scheduled buildings at Pembroke as detailed in **Appendix I**.
- I.151. Feature **MNK05_101** was originally intended as a church but was then used as a cinema. The church, also built in a Neo-Classical style, carries the date 1915 on its pediment. Its construction predates the barracks **MNK05_099** by some 14 years. This style of building is one of few such 'public buildings' built during the British period. It is a simplified version, both in style and general layout, of Australia Hall located in Pembroke and scheduled as Grade A (GN No.583/96). Within this context, it is thus recommended that this feature be also scheduled as Grade A, especially since it is in a much better state of preservation than Australia Hall.

Figure 22: Plan and elevation of Church later transformed to cinema

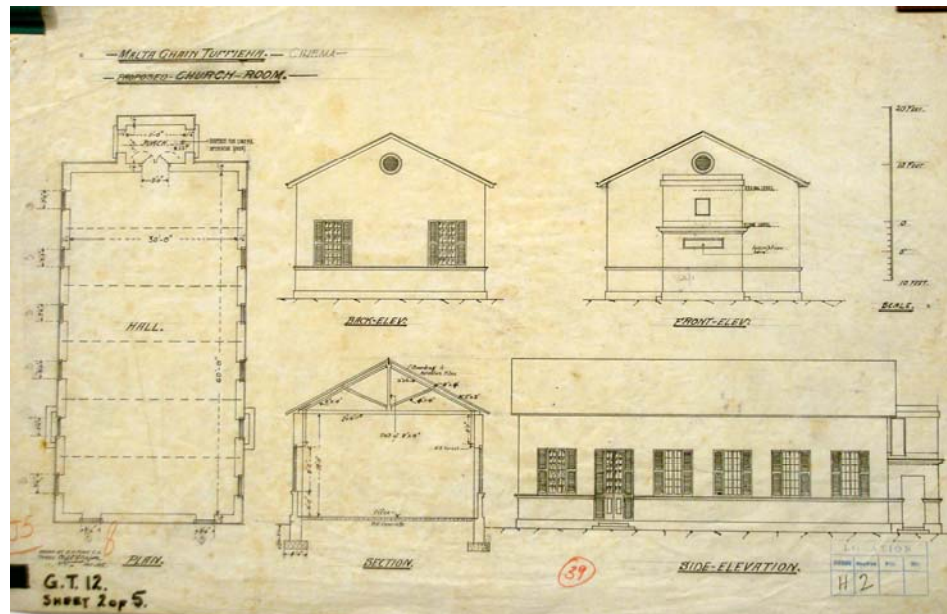


Figure 23: Drawings for the construction of Barracks at il-Kamp ta' Ghajn Tuffieha (Hal Ferh tourist complex)

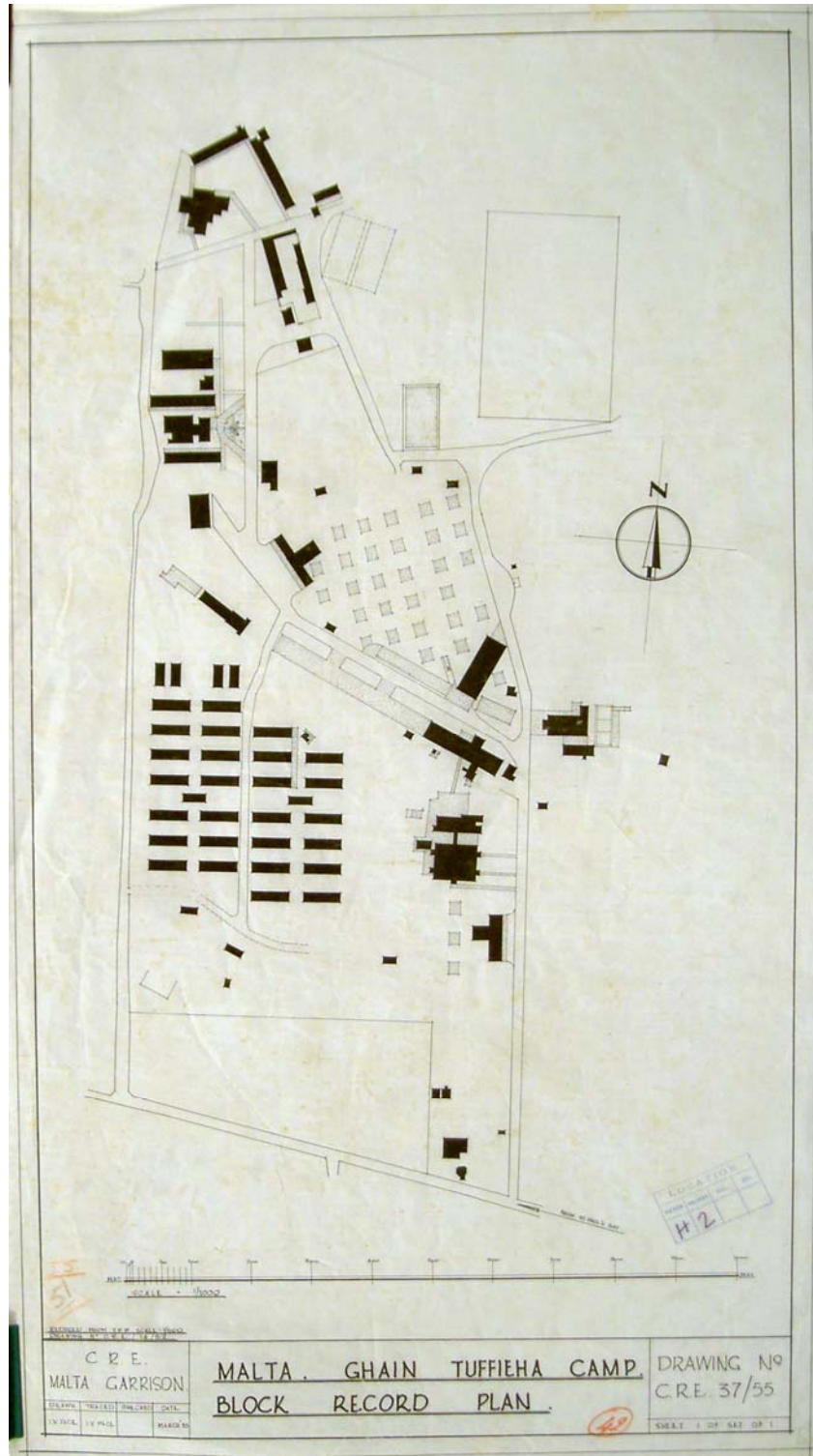
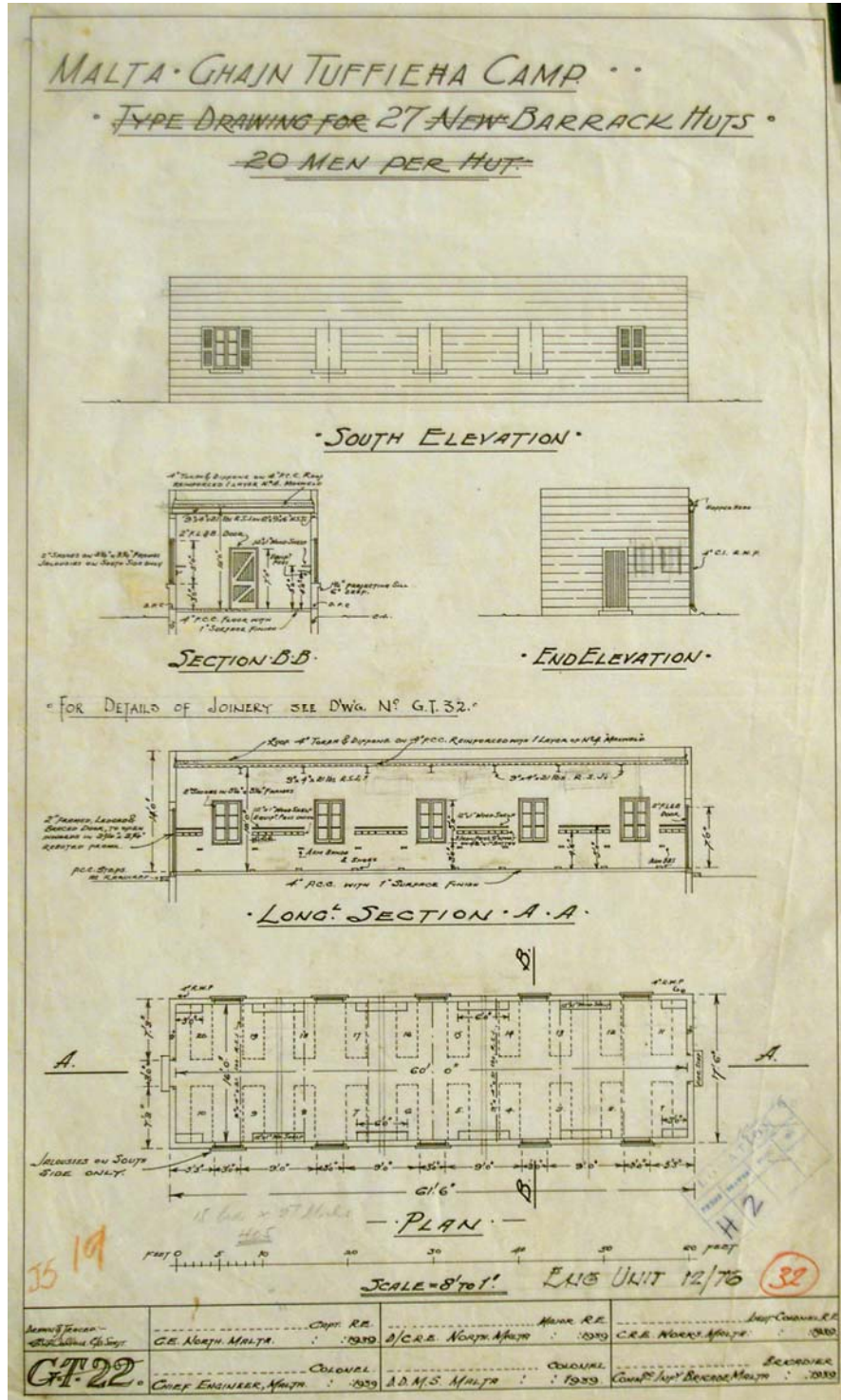


Figure 24: Drawings recording the plan of the Barracks at il-Kamp ta' Ghajn Tuffieha (Hal Ferh tourist complex)



Pillboxes

- I.152. Immediately prior to the outbreak of the Second World War, the possibility of an enemy landing in the north of the Island was considered. To thwart the new threat, a number of pillboxes and some anti-aircraft batteries were built (Cachia Zammit 1996: 45). The aim of these pillboxes was to hinder landings and the inland advance of enemy forces. Each pillbox was strategically placed and camouflaged. The earliest documentation of construction of such pillboxes dates to 1938 (Spiteri 1996: 511). The significance of the pillboxes in the northern part of Malta, lies in the fact that this area was considered to be “the most vulnerable part of Malta due its exposed landing base and lack of fortifications and coastal defences” (Spiteri, 1996: 509).
- I.153. Two pillboxes were documented during the site survey. **MNK05_086** is one of the earliest examples of these structures on the islands. This structure, documented by Spiteri (1999: 513), was built in 1938 as indicated by the stone-cladding used to camouflage it. In fact, this was a phenomenon particular to the earlier pillboxes built around the major base in the north of the island. These were built in preparation for the Italian invasion (Spiteri 1996: 511), prior to the declaration of war. This was an ideal camouflage since it blended very well with the rubble walls and other surrounding features (Spiteri 1996: 513). Such a camouflage was a result of various studies and attempts at disguise which the British exercised themselves in during 1936 (Spiteri 1999: 515)
- I.154. It is recommended that this pill-box be scheduled as Grade A since it is one of the earliest known examples, it is built in a unique shape and it is one of the few examples that has been clad in rubble for camouflage purposes.
- I.155. After 1939, the British resorted to paintwork to camouflage these outstanding structures in the Maltese countryside (Spiteri 1996: 523). This period also marks a shift in the method of construction; a new type of pill-box came into use. This consisted of a simple rectangular planned room with a concrete finish, being particularly visible in the landscape. This new type, such as the pillbox located at Ghajn Zhuber **MNK05_001**, has box-shape emplacements to mount field guns and a rectangular cupola with all round vision slits. This feature, whose interior is inaccessible, was documented by Spiteri (1996: 524). It is in a remarkable state of preservation with traces of paintwork, possibly remains of the camouflage still visible.
- I.156. It is recommended that this pill-box be scheduled as Grade 2 because it follows a style that became more popular across the island. Other pill-boxes built in a similar style have also been scheduled as Grade 2.

Table 6: Cultural Features that merit conservation and their policy importance

Feature Ref. Number	Feature	Class / Grade / Level	Merits
MNK05_001	Pillbox at Il-Minzel, Manikata	Grade 2	Military
MNK05_002	Cart Ruts close to pillbox at Il-Minzel, Manikata	Class B	Archaeological
MNK05_003	British Period Road at Il-Minzel and Ix-Xagħra ta' Għajn Żnuber, Manikata	Grade 2	Military
MNK05_004	Water catchment system and quarrying at Ix-Xagħra ta' Għajn Żnuber, Manikata	Grade 3	Vernacular
MNK05_005	Corbelled-Hut at Ix-Xagħra ta' Għajn Żnuber, Manikata	Grade I	Vernacular
MNK05_006	Quarrying and Cart ruts at Il-Qortin, Manikata	Class B	Archaeological
MNK05_007	Partially collapsed small Corbelled-Hut at Tal-Qortin, Manikata	Grade 2	Vernacular
MNK05_008	Corbelled Hut at Ix-Xagħra ta' Għajn Żnuber, Manikata	Grade I	Vernacular
MNK05_009	Corbelled Hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_010	Corbelled Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_011	Corbelled Hut at Il-Qortin, Manikata	Grade I	Vernacular
MNK05_012	Traces of quarrying at Tal-Qortin, Manikata	Class A (100m buffer)	Archaeological
MNK05_013	Corbelled Hut at Il-Qortin, Manikata	Grade I	Vernacular
MNK05_014	Exit Holes of a Rain Tunnel at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_015	Corbelled Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_016	Corbelled Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_017	Corbelled Hut and adjacent field room at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_018	Recessed Bee Hives at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_019	Rock hewn water reservoir at Tal-Qortin, Manikata	Grade 2	Vernacular
MNK05_020	Corbelled Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_021	Corbelled Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_022	Bore Hole at Tal-Qortin, Manikata	Grade 3	Vernacular
MNK05_023	Water Channel (b) and Well (a) at Ix-Xatba, Manikata	Grade 3	Vernacular
MNK05_024	Corbelled Hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_025	Concrete Platform at Ix-Xagħra I-Ħamra, Manikata	Grade 3	Military
MNK05_026	Collapsed Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade 2	Vernacular
MNK05_027	Collapsed Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade 2	Vernacular
MNK05_028	Corbelled Hut at Il-Mejjieli, Manikata	Grade I	Vernacular
MNK05_029	Concrete Platform at Il-Mejjieli, Manikata	Grade 3	Military
MNK05_030	Field room at Ix-Xagħra I-Ħamra, Manikata	Grade 2	Vernacular
MNK05_031	Corbelled Hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_032	Field Room at Ix-Xatba, Manikata	Grade 2	Vernacular
MNK05_033	Corbelled hut at Ix-Xagħra tal-Qortin, Manikata	Grade I	Vernacular
MNK05_034	Rock-Cut Channel at Ix-Xagħra tal-Qortin, Manikata	Grade 3	Vernacular

Feature Ref. Number	Feature	Class / Grade / Level	Merits
MNK05_035	Cement posts at Ix-Xagħra tal-Qortin, Manikata	Grade 2	Military
MNK05_036	Rock-cut trench at Ix-Xagħra tal-Qortin, Manikata	Class A (100m buffer)	Archaeological
MNK05_037	Quarry at Ix-Xagħra tal-Qortin, Manikata	Class C	Archaeological
MNK05_038	Country track at Ix-Xagħra tal-Qortin, Manikata	Grade 2	Vernacular
MNK05_039	Circular dry stone structure at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Vernacular
MNK05_040	Farmhouse at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Vernacular
MNK05_041	Quarrying at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_042	Corbelled-Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_043	Corbelled-Hut at Tal-Qortin, Manikata	Grade I	Vernacular
MNK05_044	Field room at Tal-Qortin, Manikata	Grade 2	Vernacular
MNK05_045	Structure at Tal-Qortin, Manikata	Grade 2	Vernacular
MNK05_046	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade 2	Vernacular
MNK05_047	Quarrying marks at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_048	Concrete platform at Ix-Xagħra I-Ħamra, Manikata	Grade 3	Military
MNK05_049	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_050	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_051	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_052	Quarrying at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_053	Cart ruts and quarrying marks at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_054	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_055	4 possible cairns at Ix-Xagħra I-Ħamra, Manikata	Class A (100m buffer)	Archaeological
MNK05_056	A small shallow quarry at at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_057	Remains of an Animal Pen at Ix-Xagħra I-Ħamra, Manikata	Grade 3	Vernacular
MNK05_058	Two adjacent collapsed field rooms at Ix-Xagħra I-Ħamra, Manikata	Grade 3	Vernacular
MNK05_059	Undressed boulders forming part of a boundary wall at Ix-Xagħra I-Ħamra, Manikata	Class B	Archaeological
MNK05_060	Quarrying at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_061	Concrete platform at Ix-Xagħra I-Ħamra, Manikata	Grade 3	Military
MNK05_062	Possible tomb shaft and quarrying at Ix-Xagħra I-Ħamra, Manikata	Class A (100m buffer)	Archaeological
MNK05_063	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_064	Possible tomb shaft at Ix-Xagħra I-Ħamra, Manikata	Class A (100m buffer)	Archaeological
MNK05_065	Cart ruts at Ix-Xagħra I-Ħamra, Manikata	Class B	Archaeological
MNK05_066	An area of quarrying interrupting cart ruts at Ix-Xagħra I-Ħamra, Manikata	Class C	Archaeological
MNK05_067	Corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade 2	Vernacular
MNK05_068	Room at Ix-Xagħra I-Ħamra, Manikata	Grade 3	Military
MNK05_069	Small corbelled hut at Ix-Xagħra I-Ħamra, Manikata	Grade I	Vernacular
MNK05_070	Small farmhouse at Ix-Xagħra I-Ħamra, Manikata	Grade 2	Vernacular

Feature Ref. Number	Feature	Class / Grade / Level	Merits
MNK05_071	Farmhouse complex and tombs at Ix-Xagħra l-Hamra, Manikata	Class A (100m)	Vernacular
MNK05_072	Farmhouse at Ix-Xagħra l-Hamra, Manikata	Grade 2	Vernacular
MNK05_073	Corbelled hut at Ix-Xagħra l-Hamra, Manikata	Grade 3	Vernacular
MNK05_074	St Joseph Chapel at il-Manikata	Grade 2	Religious
MNK05_075	Barrel vaulted building at Manikata	Grade 2	Domestic
MNK05_076	Parish Church of St Joseph at Manikata	Grade 1	Religious
MNK05_077	Cart Ruts and Qaurries at Manikata	Class B	Archaeological
MNK05_078	Quarrying at Ix-Xagħra l-Hamra, Manikata	Class C	Archaeological
MNK05_079	Rock-hewn track at Ix-Xagħra l-Hamra, Manikata	Grade 3	Military
MNK05_080	Hamlet at Ix-Xagħra l-Hamra, Manikata	Grade 1	Vernacular
MNK05_080_a	Animal pens, part of larger hamlet at Ix-Xagħra l-Hamra, Manikata	Grade 2	Vernacular
MNK05_080_b	Room partly dug in Cliff face at Ix-Xagħra l-Hamra, Manikata	Grade 2	Vernacular
MNK05_080_c	Farmhouse at Ix-Xagħra l-Hamra, Manikata	Grade 2	Vernacular
MNK05_080_d	Stables at Ix-Xagħra l-Hamra, Manikata	Grade 2	Vernacular
MNK05_080_e	Girna at Ix-Xagħra l-Hamra, Manikata	Grade 1	Vernacular
MNK05_080_f	Farmhouse at Ix-Xagħra l-Hamra, Manikata	Grade 2	Vernacular
MNK05_081	Cart-ruts at Ix-Xagħra l-Hamra, Manikata	Class C	Archaeological
MNK05_082	Corbelled hut at Il-Kamp ta' Għajn Tuffieħa, Manikata	Grade 2	Vernacular
MNK05_083	Shooting Range at Il-Kamp ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_084	Stone Marker at Il-Kamp ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085	Military Barracks at Il-Kamp ta' Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_085a	Building at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085b	Church/Cinema at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085c	Two storey House at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_085d	Rectangular Building at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085e	Two Storey House at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_085f	Parade area at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 3	Military
MNK05_085g	Main communal Barracks at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_085h	Small rectangular building at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085i	Barracks at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085j	Large Structure at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085k	Large structure at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085l	Complex of Buildings at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085m	Large building at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_085n	Nissen Hut at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085o	3 nissen huts at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 1	Military

Feature Ref. Number	Feature	Class / Grade / Level	Merits
MNK05_085p	Building at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_085q	Small building at Il-Kamp ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_086	Gun Post at Il-Kamp ta' Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_087	Cart-ruts at Il-Moxa ta' Għajn Tuffieħa, Manikata	Class B	Archaeological
MNK05_088	Stone Marker at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_089	Stone Marker at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_090	Stone Marker at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_091	Two rock-cut trenches and signs of quarrying at Il-Moxa ta' Għajn Tuffieħa, Manikata	Class A (100m buffer)	Archaeological
MNK05_092	Cart-ruts at Il-Moxa ta' Għajn Tuffieħa, Manikata	Class B	Archaeological
MNK05_093	Stone Marker at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_094	Wall built in dry-stone technique at Il-Moxa ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_095	Shooting Range at In-Nahhalija, Manikata	Grade 2	Military
MNK05_096	Farmhouse at Manikata	Grade 2	Vernacular
MNK05_097	Dry-stone structure at Manikata	Grade 2	Vernacular
MNK05_098	3 Rooms in field at il-Fawwara, Manikata	Grade 2	Military
MNK05_099	Għajn Tuffieħa Camp, at il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_099a	Building at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_099b	Barracks at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_099c	Group of four buildings at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_099d	Small building at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_099e	Building at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 3	Military
MNK05_099f	Small rectangular building at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 3	Military
MNK05_099g	Barrack blocks at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_099h	Porticoed building at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_099i	Large buiding at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 1	Military
MNK05_099j	Water reservoir at Il-Qasam ta'Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_100	Field Room Il-Qasam ta' Għajn Tuffieħa, Manikata	Grade 3	Vernacular
MNK05_101	Church – Room at Il-Fawwara / Il-Kamp ta' Għajn Tuffieħa, Manikata	Grade 2	Military
MNK05_102	Farmhouse at Il-Fawwara, Manikata	Grade 2	Vernacular
MNK05_103	Tomb at Manikata	Class A (150m buffer)	Archaeological
MNK05_104	Cave at Manikata	Class B	Archaeological
MNK05_105	Cave at Manikata	Class B	Archaeological
MNK05_106	Cistern at Manikata	Grade 2	Vernacular
MNK05_107	Collapsed structure abutted by rubble pile containing pottery shards at Manikata	Class A (100m buffer)	Archaeological
MNK05_108	Pottery Scatter at Manikata	Class A (100m buffer)	Archaeological
MNK05_109	Rubble wall at Manikata	Grade 1	Vernacular

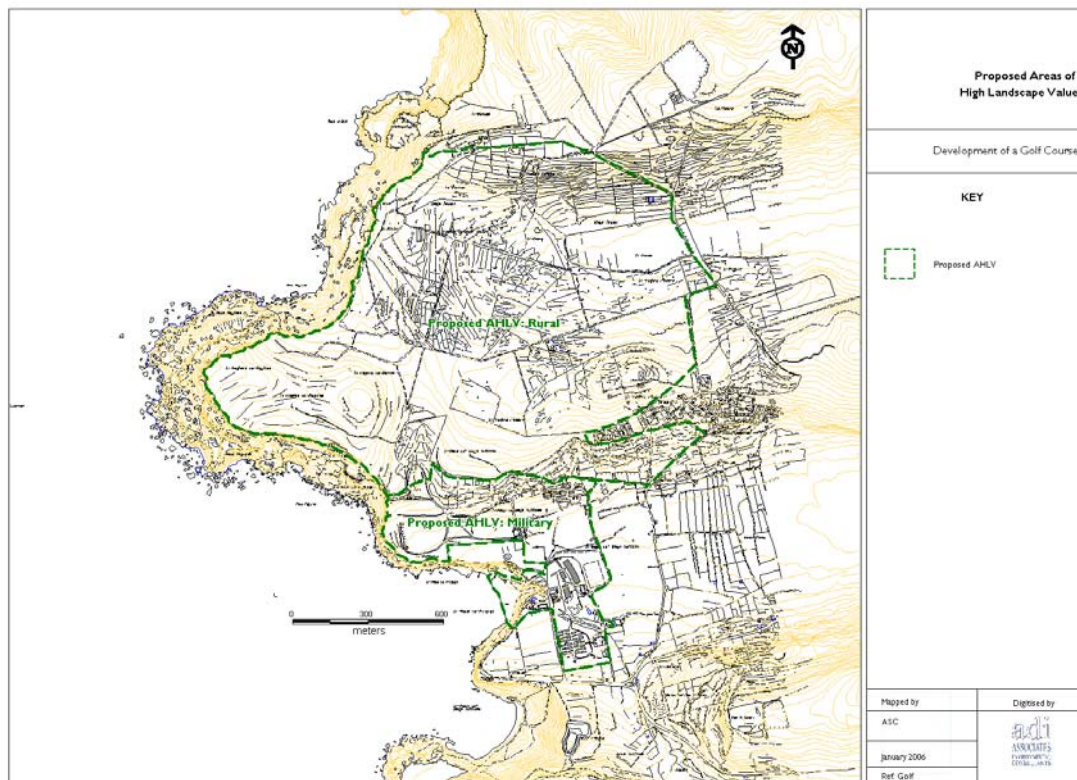
Feature Ref. Number	Feature	Class / Grade / Level	Merits
MNK05_110	Pottery Scatter at Manikata	Class A (100m buffer)	Archaeological
MNK05_111	Pottery Scatter at Manikata	Class A (100m buffer)	Archaeological
MNK05_112	Bee Hive at Manikata	Grade 2	Vernacular
MNK05_113	Large boulder at Manikata	Class B	Archaeological
MNK05_114	Tomb at Manikata	Class A (100m buffer)	Archaeological
MNK05_115	Tomb at Manikata	Class A (125m buffer)	Archaeological
MNK05_116	Tomb at Manikata	Class A (150m buffer)	Archaeological
MNK05_117	Tomb at Manikata	Class A (125m buffer)	Archaeological
MNK05_118	Tomb at Manikata	Class A (100m buffer)	Archaeological
MNK05_119	Entrenchments at Ghajn Tuffieha, Manikata	Grade I	Military
MNK05_120	Silos at in-Nahhalija, Manikata	Class A (100m buffer)	Archaeological

CULTURAL LANDSCAPE

- 1.157. All archaeological and historical sites and features form part of the landscape which surrounds them, and any survey of the cultural heritage has to study a site's context as well as the site itself. Fieldwork is an important tool in building a picture of the landscape in which the site in question is situated. This is important since no site is isolated from the fields and geographical features which surround it, and on which it depends, to varying degrees. Every site is a piece of local history, embedded in its immediate landscape and relating to the area around it (Barker 1993:254).
- 1.158. Virtually all landscapes have cultural associations, because virtually all landscapes have been affected in some way by human action or perception. In keeping with this, the phrase "cultural landscape" does not mean a special type of landscape, but rather a way of seeing landscapes that emphasizes the interaction between human beings and nature over time.
- 1.159. The importance of Cultural landscapes is clearly explained in the European Spatial Development Perspective (ESDP) 1999, an important document in the process of European integration. The report states that 'Cultural landscapes contribute through their originality to local and regional identity and reflect the history and interaction of mankind and nature.' (pg33)
- 1.160. Any landscape is continuously being developed to cater for contemporary needs. However, this is being done to the detriment of those features that make an area particular and diverse, transforming the landscape into a homogenous whole (ESDP: 33). One must strike a balance between the preservation of the landscape and the current needs of society leading to the sustainable development of such landscape. Each landscape is to be assessed on its own merit and policies drafted for each particular landscape (ESDP: 34).
- 1.161. The particular land use found in specific locales and regions has, through the centuries, created a rich diversity of landscapes and land uses. These define the identity of a region, and this "diversity represents an important element of Europe's cultural heritage" (ESDP: 74).
- 1.162. The main value of the cultural heritage in the proposed area of development lies in the information it can yield regarding past settlements and land-use patterns.
- 1.163. The site clearly shows that the area has been occupied since classical times. Although little information remains as to what the landscape during this period really looked like, the evidence that does remain makes it clear that the morphology of the land dictated the type of land use.
- 1.164. The most important cultural landscape in the area is certainly the rural landscape. This landscape is made up of the corbelled huts, the rubble walls, the water catchment devices, and other rural structures. Each one of these elements cannot be understood on its own, but it has to be understood in terms of the relationship between the different features and the surrounding landscape. This cultural

- landscape preserves an important archaic way of life, which has been superseded and remnants of which cannot be found elsewhere on the island. Its preservation has been possible through a coincidental series of events, starting with the abandonment of the area during the early modern period due to its remoteness from the more fortified southern area during the period of the knights, to the take over of the whole area by the British government for military exercises, thus preserving it from the urbanisation undertaken across the island during the 19th and 20th centuries.
- I.165. Superimposed but without intruding on this landscape, is the military landscape, starting with the entrenchments built during the 18th century and completed by the British buildings dating to the earlier part of the 20th century. This military landscape consists mainly of barracks and other structures associated with military training. Again, isolating the individual features removes the understanding of these features since the location of the barracks can only be understood when one sees them in context with the camping ground and shooting ranges.
- I.166. Nowhere is it clearer than within this area that land use is linked to the landscape and vice-versa. *“It can be difficult to develop a specific policy for these landscapes, because it is the whole composition, not individual elements which provide the value... clear strategies mean that spatial development of the cultural landscapes can be influenced: desirable land uses are defined and others precluded”* (ESDP: 75).
- I.167. It is recommended that the significance of the cultural landscape be recognised and the areas in and around the military facilities and the rural cultural landscape on the Mizieb plateau be accorded Grade A protection (Areas of High Landscape Value) under the Development Planning Act. These areas are described on the Figure below.

Figure 25: Proposed Area of High Landscape Value



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Appendix I:
Scheduled Barracks at Pembroke

SCHEDULED BARRACKS AT PEMBROKE.

In 1996, the Planning Authority scheduled 60 sites and features within the Pembroke area (GN No.583.06.09.96). Most of these features consist of British Architecture built during the earlier part of the 20th Century. Twenty-three of these features, all of which are buildings, have been scheduled as Grade 1. The majority or the remaining buildings have been scheduled Grade 2 with only 7 features scheduled as Grade 3. No buffer zone has been established for any of these features. There is no documentation available to explain the scheduling of these features and it is thus clear that these buildings have qualified for conservation on the basis of military architectural merit as well as group value. Some of these Grade 1 buildings are in a good state of preservation and utilised as private residences or as public buildings, whilst other buildings are derelict and in a state of disrepair. Generally speaking the buildings contain a variety of features in the form of elaborate cornices, fake rustication, colonnaded and roofed verandas, elaborately moulded cornices around apertures, arches etc.

Table 1: Grade 1: Relevant Scheduled buildings in Pembroke.

GN Ref No	Structure	Address
66/583/96	Ex-Barracks Block No.7 Houses 1-2	Triq Tobruk, Pembroke
61/583/96	Clock Tower & Sterling Air Services & Malta Institute of Management	Triq Alamein Pembroke
71-75/583/96	Sprachcaffe	Triq Alamein, Pembroke
77-78/583/96	Derelict Barracks Blocks D and E	Triq Giorgio Mitrovich, Pembroke
90/583/96	Australia Hall	Triq Alamein, Pembroke
92/583/96	Ex-Barracks Block No 2 Flats 1-10	Triq Suffolk, Pembroke
94/583/96	Finara,	Road off Triq Falaise, Pembroke
95/583/96	Ex-Barracks Block No.4 Flats 1-10	Triq Falaise , Pembroke
93/583/96	Ex-Barracks Block No.3 Flats 1-10	Triq Falaise , Pembroke
96/583/96	Two Unnumbered Houses	Triq Falaise , Pembroke
89/583/96	Italian School	Triq Falaise , Pembroke
82/583/96	Derelict Ex-Raffles Discotheque	Triq Arnhem, Pembroke
81/583/96	Block 6, Flat 2 & 3 & 5	Triq Alamein, Pembroke
83/583/96	Luxol Sports Club	Triq Arnhem, Pembroke
97/583/96	Sir Luigi Preziosi Secondary Schol	Triq Falaise, Pembroke
80/583/96	Block 7, Flats 1-10	Triq Alamein, Pembroke
43/583/96	Verdala International School	Pembroke
46/583/96	Fort Pembroke	Triq Cassino, Pembroke
65/583/96	Block 10, Flat 1-8	Triq Normandija, Pembroke
57/583/96	Mandalay Flats 3-4	Triq Mandalay, Pembroke
58/583/96	Mandalay Flats 1-2	Triq Mandalay, Pembroke
56/583/96	Pembroke Athleta Juvenis Sports Club	Triq Tunis Pembroke



Figure I: 66/583/96, Ex-Barracks Block No.7



Figure 2: 61/583/96, Clock Tower & Sterling Air Services & Malta Institute of Management at Triq Alamein, Pembroke.



Figure 3: 71-75/583/96, Sprachcaffe Triq Alamein, Pembroke



Figure 4: 77-78/583/96, Derelict Barracks Blocks D and E Triq Giorgio Mitrovich, Pembroke



Figure 5: 90/583/96, Australia Hall at Triq Alamein, Pembroke



Figure 6: 92/583/96, Ex-Barracks Block No 2 Flats 1-10 at Triq Suffolk, Pembroke



Figure 7: 94/583/96, Finara, Road off Triq Falaise, Pembroke



Figure 8: 95/583/96, Ex-Barracks Block No.4 Flats 1-10 at Triq Falaise , Pembroke



Figure 9: 93/583/96, Ex-Barracks Block No.3 Flats 1-10 at Triq Falaise , Pembroke



**Figure 10: 96/583/96, Two Unnumbered Houses at Triq Falaise ,
Pembroke**



Figure 11: 89/583/96, Italian School at Triq Falaise, Pembroke



Figure 12: 82/583/96, Derelict Ex-Raffles Discotheque at Triq Arnhem, Pembroke



Figure 13: 81/583/96, Block 6, Flat 2 & 3 & 5 at Triq Alamein, Pembroke



Figure 14: 83/583/96, Luxol Sports Club at Triq Arnhem, Pembroke



Figure 15: 97/583/96, Sir Luigi Preziosi Secondary School at Triq Falaise, Pembroke



Figure 16: 80/583/96, Block 7, Flats 1-10 at Triq Alamein, Pembroke



Figure 17: 43/583/96, Verdala International School at Pembroke



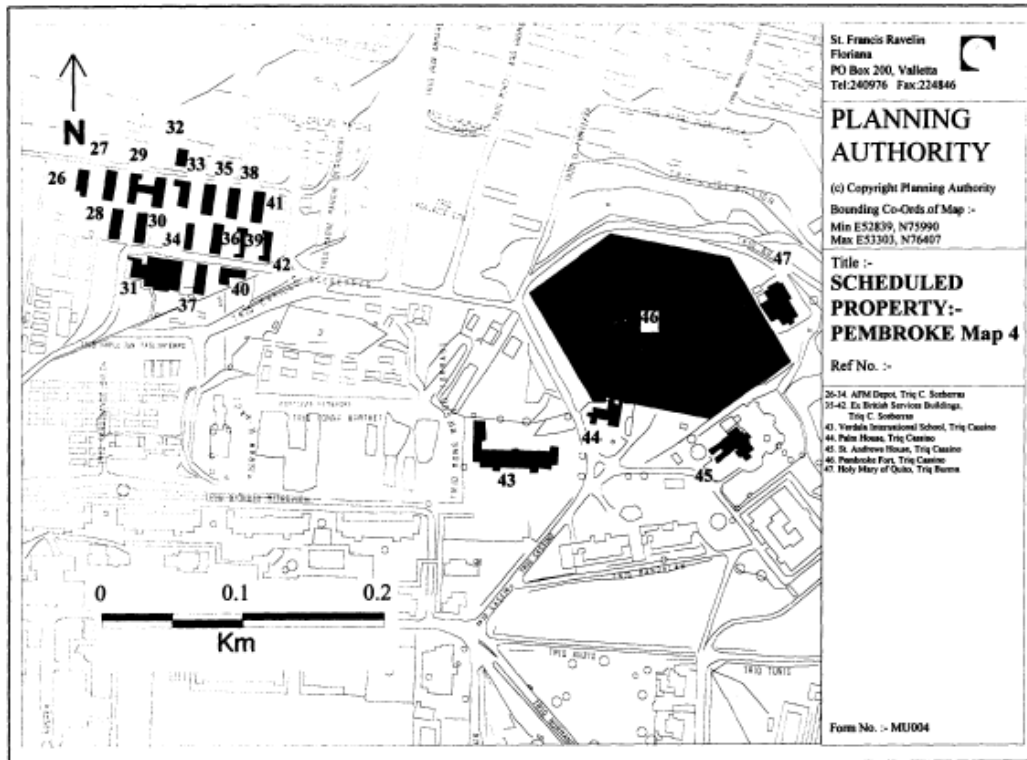
Figure 18: 57/583/96, Mandalay Flats 3-4 at Triq Mandalay, Pembroke

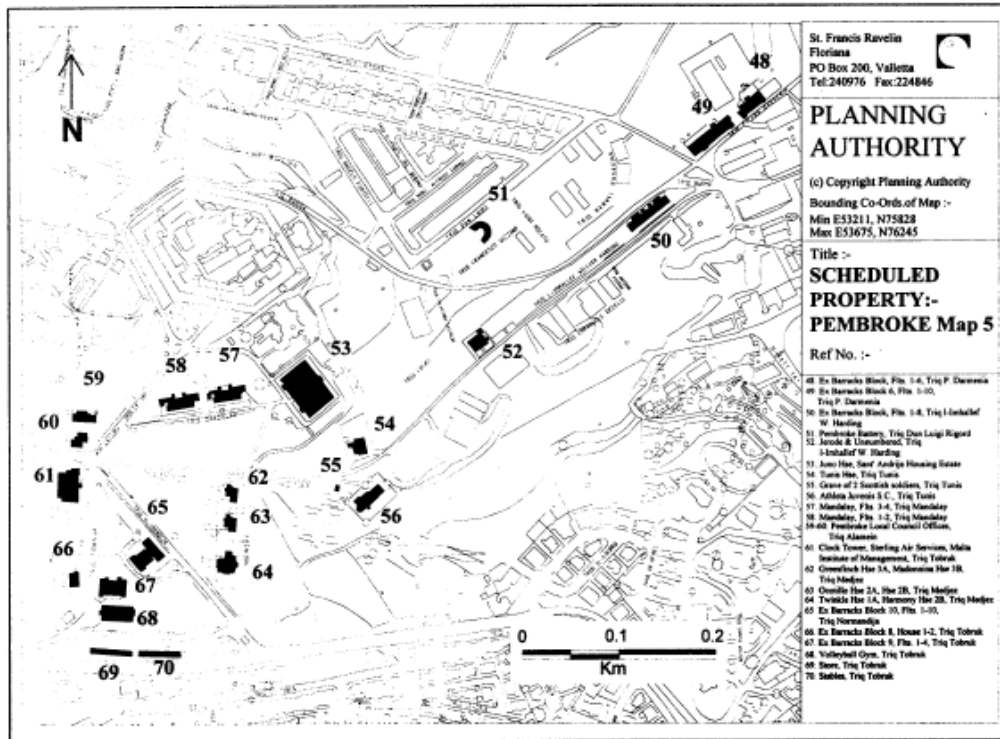


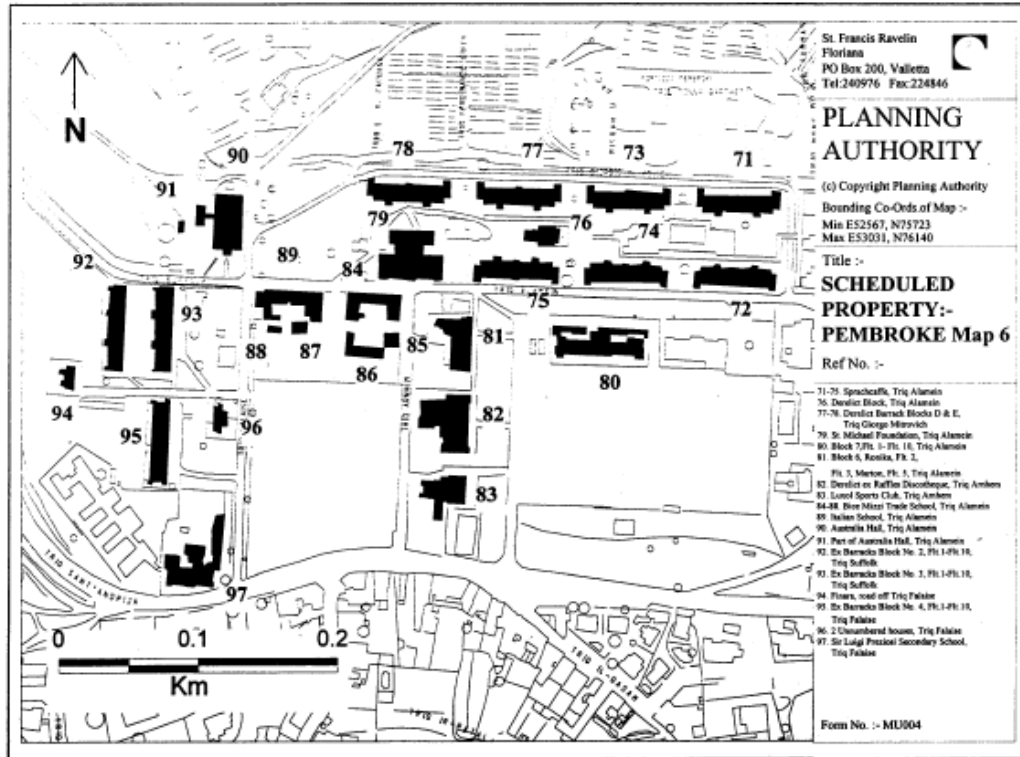
Figure 19: 58/583/96, Mandalay Flats 1-2 at Triq Mandalay, Pembroke



Figure 20: 56/583/96, Pembroke Athleta Juvenis Sports Club at Triq Tunis Pembroke







Appendix 2

Catalogue cards of features within Cultural Heritage Area of Influence

See separate volume