

17.1 INTRODUCTION

The purpose of this section is to analyse the impact of the proposed development of a Controlled Landfill and related Waste Management Facilities at Ghallis, limits of Naxxar - Malta, on the archaeological remains and historical and cultural features lying within its boundary and in the immediate surroundings. The approach to this study took two preliminary forms, namely desktop research and on-site surveying. The work was undertaken by Godwin Vella B.A.(Hons), M.B.A..

In this respect, the section is divided in three main sections, being a description of the visible man-made features, potential unearthed archaeological ruins and projected effect of proposed development on the cultural potential of the neighbourhood.

The assessment considers the whole of the original application area originally identified by WasteServ. Since submitting the outline application the footprint of the proposed development has been reduced by approximately halving the lateral extent of the proposed non-hazardous landfill. This now occupies just the eastern half of the originally identified area.

17.2 VISIBLE MAN MADE STRUCTURES

17.2.1 Coastal Fortifications

The most apparent cultural features bordering the proposed site for development consists of a series of 17th, 18th and eventually 20th century coastal fortifications built by the Order of the Knights of St. John and by the British respectively, to defend the nearby coast from potential enemy landings.

KNIGHTS PERIOD

Qawra Point Tower & Battery	<ul style="list-style-type: none">• 1637 & 1715 respectively• Originally consisting of a regular coastal tower (similar to the ones of Tal-Ghallis and Qalet Marku), but eventually strengthened and enlarged with the addition of a large coastal battery, itself protected by a ditch and fitted with landward defences.• Guard Salina entrance and Bugibba shoreline• No structural problems, but in need of repairs• circa 900 m to the North-west of the proposed site boundary
Ghallis Tower	<ul style="list-style-type: none">• 1658• 2nd out of the 13 erected by Grand Master Fra Martin de Redin• Guard Salina Bay entrance• Good state of preservation, recently restored• circa 350 m to the North of the proposed site boundary
Qalet Marku Tower	<ul style="list-style-type: none">• 1658• 3rd out of the 13 erected by Grand Master Fra Martin de Redin

	<ul style="list-style-type: none"> • Guard Qalet Marku and Bahar ic-Caghaq inlets • No structural problems, but in need of repairs • circa 600 m to the North-east of the proposed site boundary
Qalet Marku Battery	<ul style="list-style-type: none"> • 1714 – 16 • Original plan and larger than the contemporaneous ones, featuring spacious gun platforms and blockhouse • Demolished, sections of foundations surviving • circa 650 m to the North-east of the proposed site boundary
Salina Right Battery	<ul style="list-style-type: none"> • 1715 – 16 • also known as Grand Master Ximenes (1773-5) Redout as he erected a large salt magazine instead of the original block houses • No structural problems, but in need of repairs • circa 700 m to the North-west-west of the proposed site boundary
Ghallis Battery	<ul style="list-style-type: none"> • 1715 – 16 • A rounded gun-platform with straight flanks attached to a singular blockhouse occupying the width of the gorge. • Partly demolished, lower courses of walls surviving • circa 350 m to the North-north-east of the proposed site boundary
Existing Protection	<ul style="list-style-type: none"> • The respective works are protected under the Heritage Act 2002, and the previous Antiquities (Protection) Act 1925. They are also listed in MEPA's inventory of historic sites.

BRITISH PERIOD

Gun Posts	<ul style="list-style-type: none"> • Three World War II gun-posts are found within the radius of 750 metres from the proposed boundary, namely two for the defence of the entrance to Salina Bay (circa 400 m to the North-west and 250 m to the North-north-west respectively of the proposed site boundary), and a third for the defence of the Qalet Marku and Bahar ic-Caghaq inlet (circa 650 m to the North-east of the proposed site boundary). • These feature various structural problems and need extensive repairs
Hotba l-Bajda Barracks	<ul style="list-style-type: none"> • Another mid-20th century military fortification is the complex of Barracks at il-Hotba l-Bajda. These consist of cubic one-storey high units built with rusticated regular-sized Globigerina Limestone blocks, and lie some 350m to the South-west-west of the proposed site boundary. • Feature no structural problems, and used for animal rearing by third parties.
Existing Protection	<ul style="list-style-type: none"> • The respective works are protected under the Heritage Act 2002 and the previous Antiquities (Protection) Act 1925, though not listed in MEPA's inventory of historic sites.

17.2.2 Cluster at Salini Bay

Planted some 750m on the South-west side of the proposed site boundary is a cluster of domestic units adjacent to the chapel of the Annunciation, the Knights salt-extraction complex and a group of Classical Catacombs.

Chapel of the Annunciation	<ul style="list-style-type: none">• The 17th century cubic structure of the spacious chapel of the Annunciation features an elegant facade with a central and ornate door, side pillars, cornice and bell-cot.• Good state of preservation, maintained regularly• circa 900 m to the South-west-west of the proposed site boundary
Salt-Extraction Complex	<ul style="list-style-type: none">• The Knights period salt extraction complex is spread over an area of over 50,000 m², and consists of a series of rectangular basins of different depth encouraging the rapid elimination of H₂O and the extraction of salt from sea water.• Fair state of preservation, still in use• Circa 750 m to the South-west-west of the proposed site boundary
Domestic Units	<ul style="list-style-type: none">• The development of the domestic units in the area is datable to the past decades, and with the exception of a couple of units in the immediate vicinity of the said chapel, these are fairly recent and have no particular cultural significance.
Existing Protection	<ul style="list-style-type: none">• The respective culturally significant units are protected under the Heritage Act 2002 and the previous Antiquities (Protection) Act 1925, and are listed in MEPA's inventory of historic sites.

17.2.3 Vernacular Structures and other Man-made Features

Besides the listed constructions, the gently rolling landscape of the proposed site for development and its immediate environs preserves an interesting patchwork of country lanes and arable plots. Synonymous with this rural setting are the low rubble-walls marking the extent of the respective fields, detached farmhouses and agricultural stores.

Farmhouses	<ul style="list-style-type: none">• In the immediate surroundings of the proposed site for development, one comes across both old and modern farmhouses. Naturally, the modern structures (built after World War II), are not considered as culturally significant and therefore not included in this report.• The respective farmhouses consist of plain and cubic structures, built entirely of the honey coloured Globigerina Limestone. Generally speaking, these are built over two floors, the lower devoted to animal rearing and related agricultural activities, and the upper reserved for habitation purposes. On the southeaster side of the building one comes across a sunny courtyard, which is in turn overlooked by a small terrace adjacent the habitation quarters at first floor level. The said terrace is reached via an open staircase.
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	<p>The south-facing walls of the domestic quarters normally feature a series of squarish or round pigeon coves.</p> <ul style="list-style-type: none"> • Generally speaking, these are still in a fairly good state of preservation and many of them are still in use or manifest extensive restoration and rehabilitation interventions.
Rubble Walls	<ul style="list-style-type: none"> • The gently undulating terrain and shallow soil mantle of the immediate environs of the proposed site for development could easily be transformed into arable plots without the need of heavy terracing. In this respect, the said rubble walls apart from supporting the said shallow soil mantle of the respective terraces, serve also to eliminate and heap the unwanted stones from the resultant soft areas. Thus, their construction consists of two parallel skins slightly inclined against each other, with an in fill of smaller stones and earth. Their average height rarely exceeds the 1.5 m mark, and are constructed of naturally hewn and undressed medium and small sized Lower Coralline and blocks (the larger blocks measure approximately 0.5 by 0.25 metres). Some stretches are however built with regular Globigerina Limestone blocks, thus implying a recent date and unskilful mode of construction.
Agricultural Stores & Giren	<ul style="list-style-type: none"> • The area in caption features also a consistent number of mono-cellular and plain agricultural stores and a couple of giren. The former are normally built of dressed stone and are roofed with a series of stone slabs resting on a central arches/beams and occasional kileb along the walls. Giren are conversely built in the dry-stone technique with undressed stones and are roofed by a dome like structure. • Many of these structures betray no structural problems, even if no longer in use for a consistent period of years. Except, for the two giren at the back of the Ghallis tower, the said agricultural stores are of no particularly significant cultural value.
Bird Trapping Hides	<ul style="list-style-type: none"> • The other vernacular structures dotting the landscape are the bird-trapping hides and associated works. These are normally built with recycled dressed Globigerina Limestone blocks, rubble and other building materials, and present no significant cultural value.
Existing Protection	<ul style="list-style-type: none"> • The respective culturally significant units are protected under the Heritage Act 2002 and the previous Antiquities (Protection) Act 1925, though not listed in MEPA's inventory of historic sites.

17.3 POTENTIAL ARCHAEOLOGICAL REMAINS

Having highlighted the visible man-made features, it is considered opportune to discuss any potential archaeological ruins, still buried beneath the soil mantle. At this stage, however, it must be noted that the site survey conducted in connection with the preparation of this report did not detect any evident concentration of pottery shards and related surface finds. Conversely, the desktop research produced various references of

archaeological remains from the immediate environs of the proposed site for development, as listed hereunder. One cannot, thus, exclude the possibility of similar culturally relevant features should the area be cleared from the existing landfill.

Prehistoric	<ul style="list-style-type: none"> • The Temple period (4100 – 2500 BC) is represented by the Tal-Qadi megalithic Temple, discovered in 1927 some 750 m to the South-west of the proposed site boundary. • The third and last prehistoric period, the Bronze Age (2500 – 800 BC), is also represented in the area. An interesting Tarxien Cemetery (2500 – 1500 BC) Dolmen are found at Ta' Hammud, some 500 m to the South-east of the proposed site boundary.
Classical	<ul style="list-style-type: none"> • At the back of the Chapel of the Annunciation is a set of cart-tracks, running for 1.5 km in the direction of Targa Gap. These pass less than 500 metres to the South of the proposed site boundary. • An equally interesting and enigmatic archaeological site from the area is the group of catacombs behind the said chapel. This group includes three units, one of which was packed with human skeletal remains when found.

17.4 LIKELY EFFECTS OF PROPOSED DEVELOPMENT ON THE CULTURAL HERITAGE AND POTENTIAL OF THE AREA

The desk study and on-site surveying did not identify any scheduled man made structures within the development site, although a number of structures were visible from the site of the proposed development. It therefore follows that the development would be visible, to a greater or lesser degree, from these structures. The most prominent scheduled feature close to the site is the recently restored coastal Ghallis Tower which lies over 350m from the site boundary. The existing landfill is readily visible from this location, and the proposed development, although closer, would be less prominent.

All the scheduled archaeological features are located at least 350m from the site boundary. At this distance the proposed development is not considered likely to have any significant impact upon the scheduled structures either during operation or on restoration.

The site of the proposed development contains two single storey farmhouses, together with a network of rubble walls which are typical of the Maltese landscape. These features would be lost as a result of the proposed development, although they are not considered to have any particular high cultural heritage value. In the surrounding landscape there are a number of traditional farmhouses, together with more modern properties. The inhabited properties are located at least 100m from the edge of the proposed development, and the majority currently enjoy views of the existing landfill. The proposed development, which mainly involves landfilling below ground level, will be far less obtrusive than the existing Maghtab landfill. Consequently the development is not likely to have any significant direct effect on these traditional properties or their

settings. Stone from the rubble walls would be collected and reused in the restoration of the site.

In terms of archaeological sites the desk study identified no scheduled site within the site itself and only two sites in the general vicinity. The closest of these are cart tracks which run within around 500m of the site. Whilst there is the potential that there may be unrecorded archaeological features within the development area, a walkover survey did not reveal any pottery shards or surface finds.

Overall the cultural heritage impact of the proposed development is assessed as being low. To address the potential for undiscovered archaeological features existing beneath the soil cover, it is recommended that a trained archaeologist should oversee soil stripping operations.