



TN 163702

**REDEVELOPMENT OF AN EXISTING DERELICT HOTEL INCLUDING
ENVIRONMENTALLY FRIENDLY MEASURES AND PROVISION OF PUBLIC
ANCILLARY FACILITIES AT TA' KALANKA, DELIMARA**

PROJECT DESCRIPTION STATEMENT



Version 1: February 2016



Report Reference:

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Quality Assurance

TN 163702 Redevelopment of Existing Derelict Hotel including Environmentally Friendly Measures and Provision of Public Ancillary Facilities **Project Description Statement** February 2016

Report for: **Delimara Bay Hotel Ltd**

Revision Schedule

Rev	Date	Details	Written by:	Checked by:	Approved by:
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I. INTRODUCTION

- I.1. This Project Description Statement (PDS) describes a proposal to redevelop the former Delimara Hotel into an ecological boutique hotel comprising 13 luxury suites, 3 superior deluxe suites and 1 presidential suite. Proposed amenities associated with the hotel will include a lounge, bar and restaurant, gym, spa and outdoor pool. The project also includes development of beach facilities (for public use) at Kalanka Bay including public toilets and showers, a first aid room, storage room and waste separation facilities.
- I.2. The project is proposed by Delimara Bay Hotel Ltd, who is hereinafter referred to as 'the Applicant'; the project is hereinafter referred to as 'the Scheme'.
- I.3. **Figure 1.1** shows the location of the Scheme Site.

BACKGROUND

- I.4. The Delimara Bay Hotel was built in the 1950s. Later, due to demand, another wing and an additional storey were built. Eventually, the hotel was converted into a Bar and Restaurant, which remained open until 1985. The building has since been in a state of disuse and is currently in disrepair.
- I.5. As part of the planning process, MEPA issued a screening letter on 28th October 2015. The letter requested submission of a Simplified Traffic Statement (STS) and Visual Impact Assessment (VIA) as well as the Project Description Statement (PDS). The STS was submitted to MEPA in January 2016 and the VIA was submitted in December 2015.

OBJECTIVES OF THE SCHEME

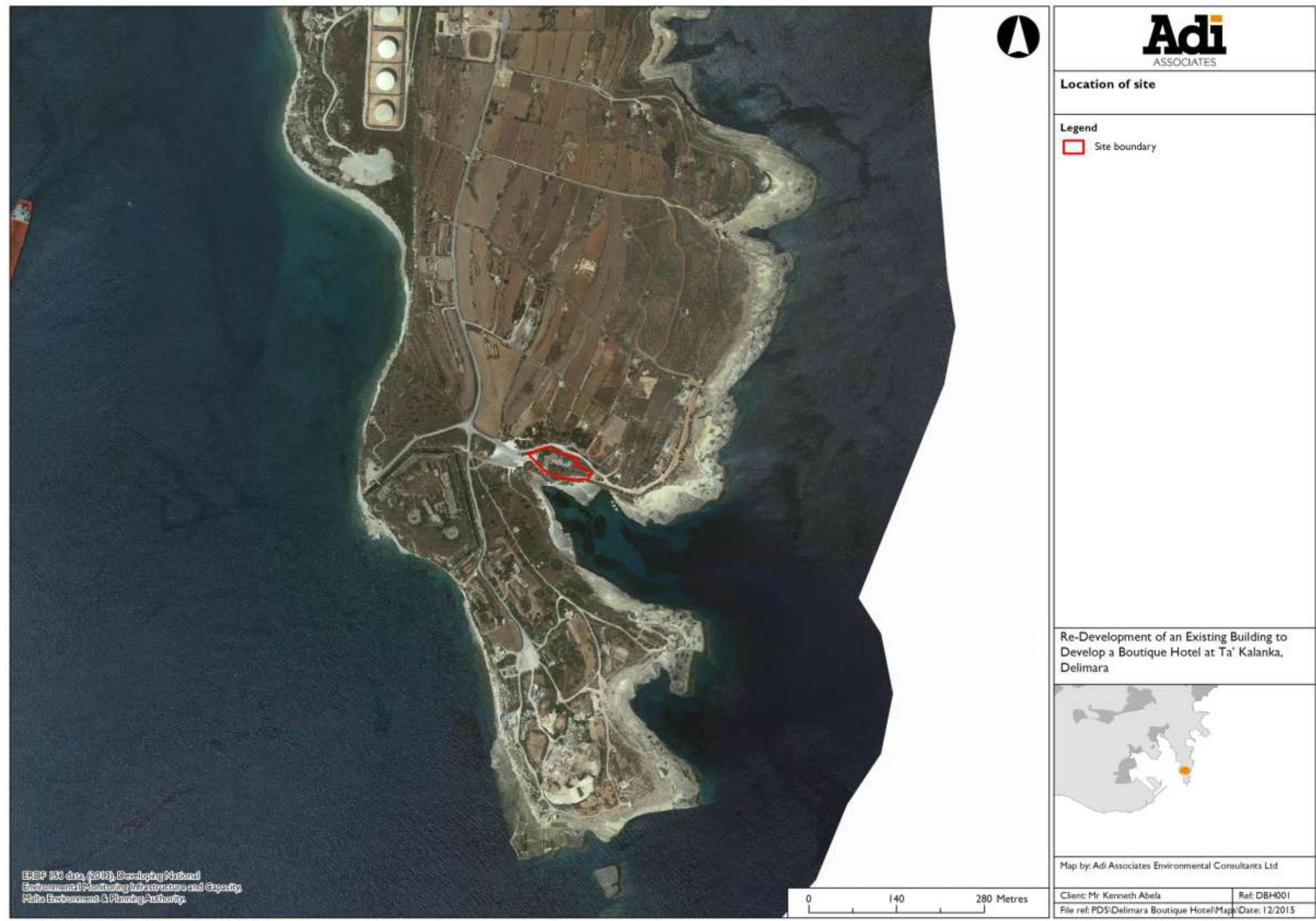
- I.6. As described by the Applicant, the Scheme aims to develop an 'eco-boutique' hotel that will operate using innovative and green/sustainable technologies as far as is feasible. The Applicant is also committed to achieving Blue Flag status for Kalanka Bay.

ALTERNATIVE SITE SELECTION

- I.7. The Scheme involves the redevelopment of an existing structure which the Applicant owns. As such, therefore, no alternative sites were considered by the Applicant.



Figure I.1: Location of the Scheme Site





2. DESCRIPTION OF THE SCHEME

LOCATION OF THE SCHEME SITE

- 2.1. The Scheme Site is located on the Delimara peninsula, overlooking Kalanka Bay (see **Figure 1.1** above); the site is located within the Marsaxlokk Local Council administrative area.

CHARACTERISTICS OF THE SCHEME SITE

- 2.2. The Scheme Site covers an area of approximately 3,646 m² including landscaped areas, concrete terraces (approximately 707 m²) and the building area; the current building footprint covers an area of approximately 343 m². It is noted that the concrete terrace is one storey high, and includes some additional abandoned rooms as can be noted in **Figure 2.4**; **Figure 2.5** shows some photographs of the terraced, platform area.
- 2.3. The previous Kalanka Bay Hotel is still standing; however, it is no longer in use and is currently in a dilapidated state. **Figure 2.1** to **Figure 2.5** illustrate the existing building and its layout including photographs.
- 2.4. The area in the immediate vicinity of the building was previously landscaped to the west and some ornamental plants and trees remain. The area to the east consists of largely disturbed vegetation and a small building marks the edge of the site; concrete paving lies to the east of the hotel.

Planning Context

Strategic Plan for Environment and Development, 2015

- 2.5. The Strategic Plan for Environment and Development (SPED) provides proposals for the spatial distribution of development together with protection of the environment on land and sea in a manner that is consistent with and integrates national policy objectives across the three pillars that are social, economic and environment.
- 2.6. The SPED outlines a National Spatial Framework (NSF) for the Maltese Islands. The General Principles of this NSF advocate a sequential approach to the use of land, with the aim of ensuring the sustainable use of land resources and the efficient use of available space. This approach aims to safeguard rural areas, where land take-up should only be considered “as a last resort and where it is essential for the achievement of sustainable development”.
- 2.7. The National Spatial Framework provides a set of Strategic Objectives which includes a set of Thematic Objectives that cover socio-economic and environmental sectors and a set of Spatial Objectives for the Maltese Spatial Structure.
- 2.8. In relation to guiding socio-economic development, and with relevance to the Scheme, Thematic Objective I of the NSF advocates:

“To manage the available potential space and environmental resources on land and sea



sustainably to ensure that socio-economic development needs are met whilst protecting the environment and limiting land take up within the Rural Area...

- 2.9. Thematic Objective 8 and Coastal Objective I both call for the requirement to safeguard and enhance biodiversity, cultural heritage, geology and geomorphology. . Specifically, Coastal Objective I seeks:

To prioritise uses that necessitate a location on the coastal zone and marine area in a manner which minimises user conflicts, does not accelerate coastal erosion, protects biodiversity, cultural heritage, landscapes and visual access to them, public access and use and increases resilience to climate change impacts...

Rural Policy and Design Guidance, 2014

- 2.10. When defining the scope, the spirit of the Rural Policy and Design Guidance is defined as follows: ‘... to allow whoever genuinely needs to upgrade or redevelop an existing building or to construct a new one outside the development zone, in conjunction with its use.’
- 2.11. Policy 1.3G addresses the conservation of protected areas including Areas of Ecological Importance (AEIs), Sites of Scientific Importance (SSIs) and Areas of High Landscape Value (AHLVs) and identifies that any proposed development that could have unacceptable adverse effects, shall not be permitted. Policy 1.2H protects landscapes features specifically seeking to conserve their connectivity, appearance and/or integrity as well as the character, scenic or ecological value of the area.
- 2.12. Policy 6.2C focuses on the redevelopment of existing buildings ODZ and states that:

Permission may be granted for the total redevelopment of an existing building, or the consolidation of buildings, located outside development zone, provided that all the following criteria are satisfied:

- (1) The applicant can sufficiently prove that the building/s is covered by development permission (other than those specifically permitted for agricultural use after the coming into force of this policy document), or that it is/are/was a pre-1978 building/s;*
- (2) The building/s does not merit inclusion in the list of scheduled property and/or is not historical, architectural, vernacular or other significance;*
- (3) The replacement building does not exceed the total floor area of the previous buildings/s;*
- (4) The replacement building is of high quality rural design and shall fully respect the wider context in which it is located;*
- (5) The replacement building shall be limited to:*



- a. *A use already legally established and/or covered by a development permission; or*
 - b. *New uses permitted by this policy document subject to the respective criteria. Except for dwellings referred to in Policy 2.2B, this policy excludes dwellings which dwellings can only be permitted in terms of policies 6.2A and 6.2B;*
 - c. *Disused livestock farms which have ceased operation for at least 10 years (prior to the coming into force of this policy document) and which are creating a negative environmental impact on the site and its surroundings. These may be redeveloped into 1 single dwelling unit which is not to exceed 200 m² floor space;*
 - d. *Any other use that would result in a wider environmental benefit, provided the site is already serviced by a road network that would adequately cater for the proposed new use;*
- (6) *The use of the building shall be subject to prior consultation with the Departments/Authorities responsible for regulating such use; and*
- (7) *Any existing trees and shrubs within and around the site shall be fully cared for and retained, and if not such vegetation exists, soft landscaping around the redeveloped building shall contain a number of trees and shrubs of at least three different indigenous species, planted in clusters.*

A full basement may be permitted and is limited to the footprint of the existing building (the basement will not count as part of the total floor area).

Where no legally-established peripheral boundary walls exist around the building to be redeveloped, the Authority may allow the construction of walls built in random-sized irregularly shaped rough dressed stones (recycled from demolition) using the same traditional construction methodology of rubble walling to define the cartilage of the building. Provided this does not lead to visual or environmental impacts (including the demolition of existing rubble walls).

Marsaxlokk Bay Local Plan, 1995

- 2.13. The Scheme site falls within the area of the Marsaxlokk Bay Local Plan. The area lies within an Area of Ecological Importance and Site of Scientific Importance as defined by Policy ME01, which states that:



Areas of Ecological Importance and Sites of Scientific Importance are defined as indicated on the Policy Map. The major areas are in the vicinities of Wied il-Qoton, Wied Zembaq, Ghar il-Friefet, Wied Znuber, Ghar Hasan, north of Marsaxlokk, Xrobb il-Ghagin and Delimara Point.

2.14. The Local Plan states, in relation to this policy, that:

...development of any description which in the opinion of the Planning Authority could prejudice the unique natural characteristics of the areas or adversely affect individual sites will not be permitted.

2.15. Policy MD01 designates Delimara Peninsula as a national park – Delimara National Park and states the following:

In accordance with Structure Plan Policy RCO14, the greater part of the Delimara Peninsula, as defined on the Policy Map, will be designated as a National park where priority will be given to conservation, protection and improvement of the natural heritage. In this location, positive provision will also be made for recreational uses consistent with this objective. Limited commercial development related to the needs of park users will be considered. Other uses likely to have a harmful or conflicting impact will be refused.

2.16. Policy MD08 recognises the potential for the declaration of a Marine Conservation Area off the Delimara peninsula.

2.17. The site also lies within an Area of High Landscape Value designated by Government Notice 400 of 1996.



Figure 2.1: Existing Delimara Bay Hotel – general plan

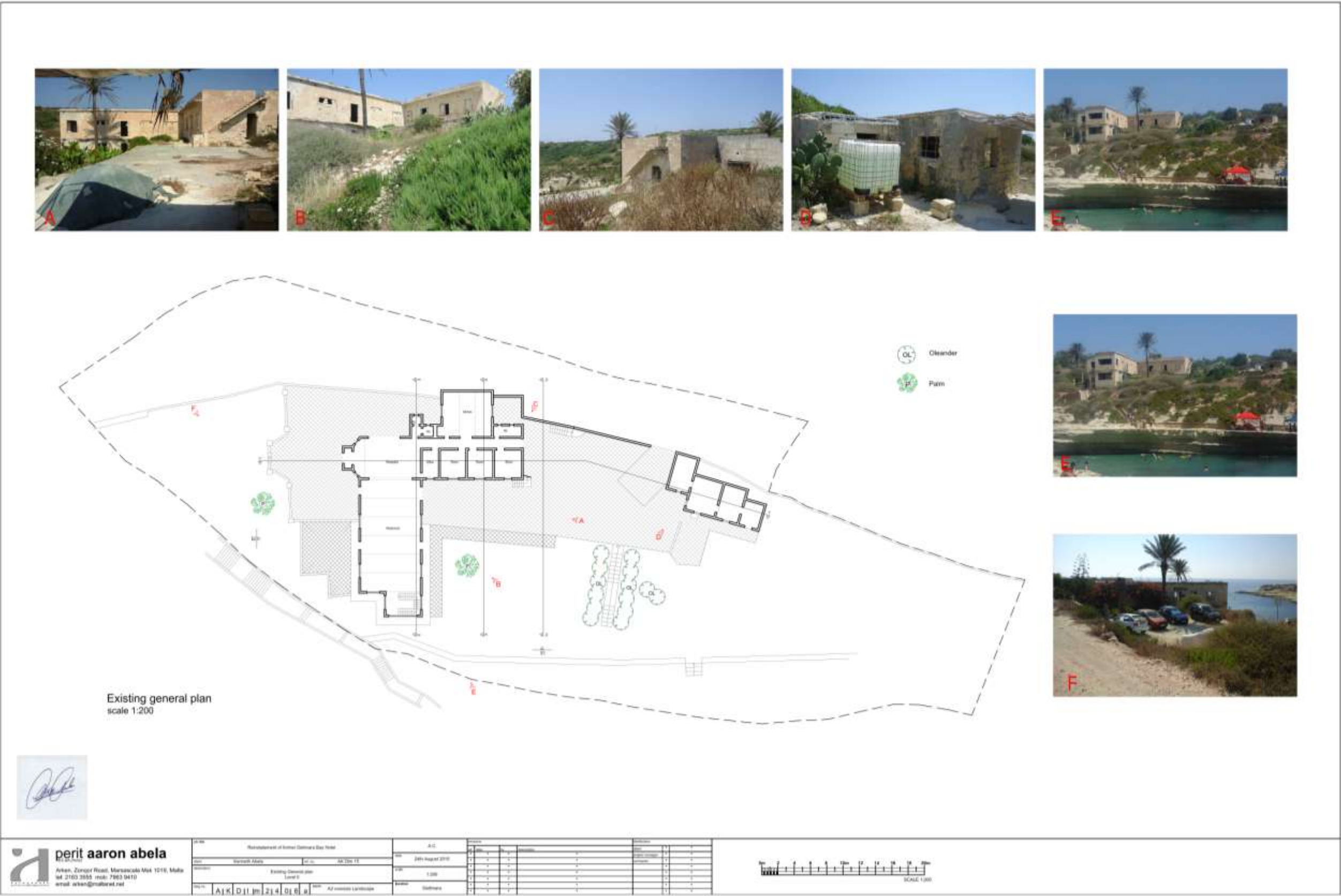




Figure 2.2: Existing plan level 0

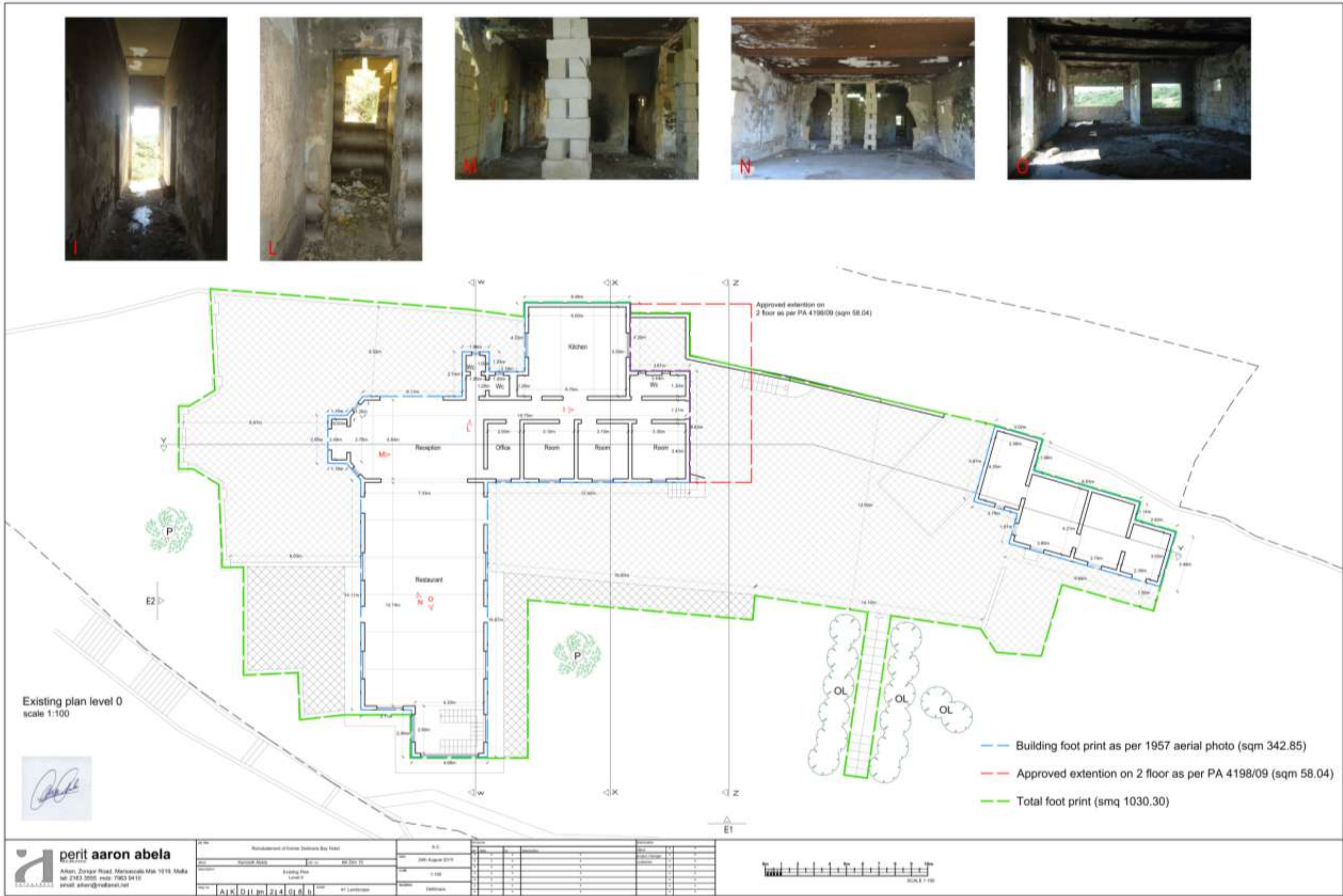




Figure 2.3: Existing plan level -I





Figure 2.4: Existing elevations and sections

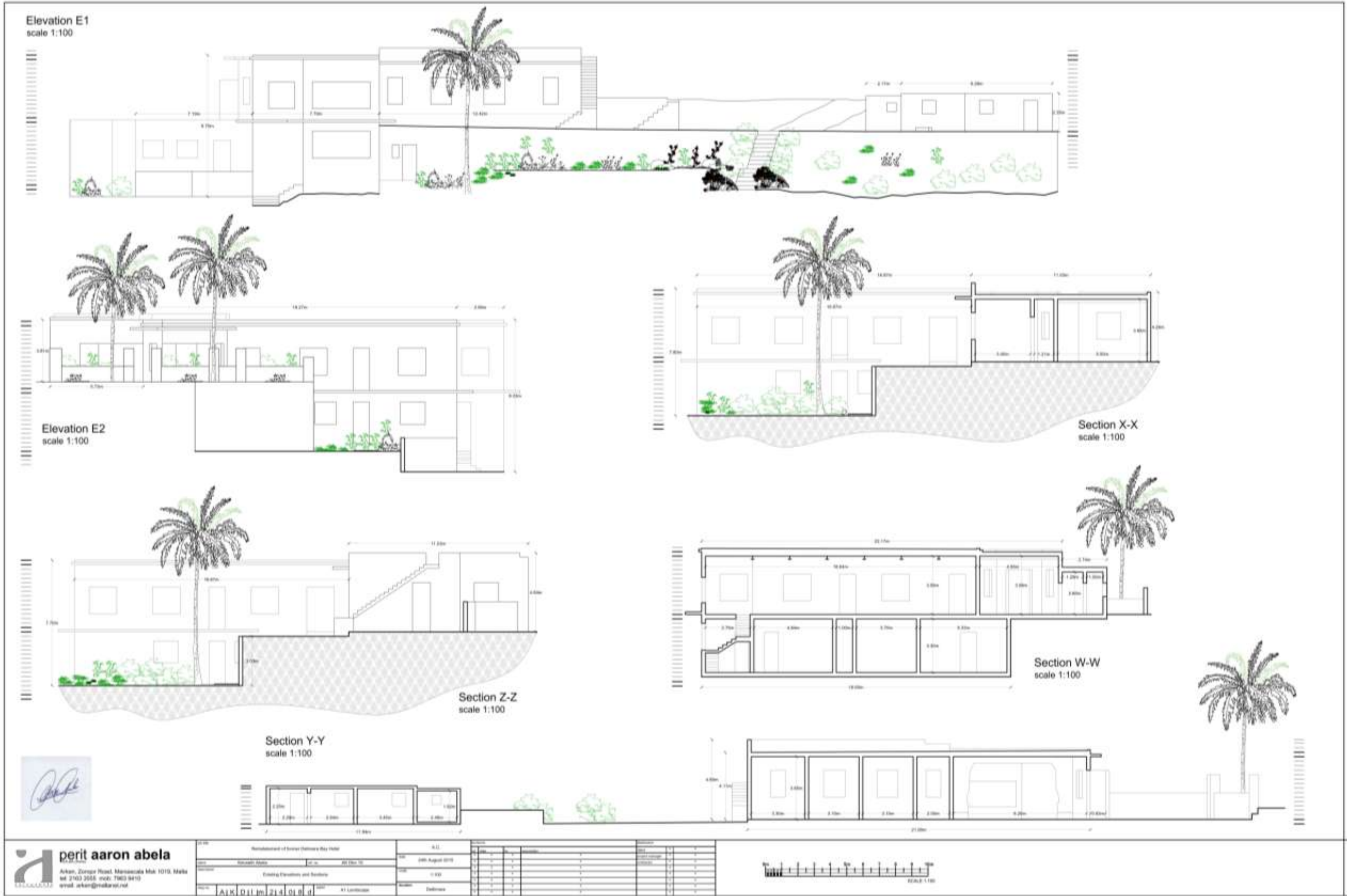




Figure 2.5: Concrete platform





DESCRIPTION OF THE GENERAL SURROUNDINGS

Land Uses

- 2.18. A land use survey of the area surrounding the Scheme Site was carried out in July 2015; the land uses within approximately 250 m of the site are illustrated in **Figure 2.6**, and various images of the surroundings are illustrated in **Figure 2.7**.
- 2.19. The area to the north of the site is largely agricultural land including associated rural structures such as farmhouses. A number of small structures that are being used as dwellings dot the coastline to the east of the site. A typical coastal community grows on the coast including *Limbarda crithmoides* (Golden Samphire), *Crucianella rupestris* (Rock Crosswort) and *Limonium virgatum* (Seaside Sea-lavender). A tarmaced area (although in a dilapidated state) is located to the immediate west of the site that is used as parking for users of the bay. Otherwise, the coastline to the south and southwest of the Scheme site is dominated by natural habitat, typical of the coast. Closer to the hotel, the coastline enclosing the inlet supports a rupestral natural habitat dominated by *Salsola melitensis* (Maltese Salt-tree); *Sueada vera* (Shrubby Seablite) and *Atriplex halimus* (Shrubby Orache) are also well represented. A staircase provides access down to the bay and three ladders situated at different locations along the coastline provide access to the sea. The slope southwest of the hotel supports natural vegetation closer to the coast, however, a number of tree species have also been planted including Acacia and Tamarisk. In this area there are a number of small structures that appear to be used by hunters. A relatively large beach room is located closer to the coast.
- 2.20. Beyond this slope, on higher ground, land uses remain rural, associated mainly with agriculture. A 19th century lighthouse provides a landmark feature. This lighthouse is managed by the non-governmental organisation (NGO) Din l-Art Helwa who use it to also provide tourist and visitor accommodation. Delimara Fort, another notable 19th century landmark in the landscape, is located to the west of the site that covers an extensive area reaching the opposite coast.

Natural Heritage

- 2.21. **Figure 2.8** shows the natural heritage designations in the vicinity of the Scheme Site. The terrestrial natural heritage designations include:
- Area of Ecological Importance (AEI) – Rdum mid-Dahla ta' San Tumas (GN400 of 1996). The site lies within this area;
 - Area of Ecological Importance (AEI) Level 2 – Il-Bajja ta' San Tumas to Delimara (GN 400/96) The site lies within this area;
 - Area of High Landscape Value (AHLV) Level 2 – Coastal Cliffs. The site lies within this area; and
 - Site of Scientific Importance (SSI) – It – Taqtiegħa (Xrobb l-Għagin) u t-Taqtiegħa ta' Delimara. The site lies outside this area.



Figure 2.6: Surrounding Land Uses

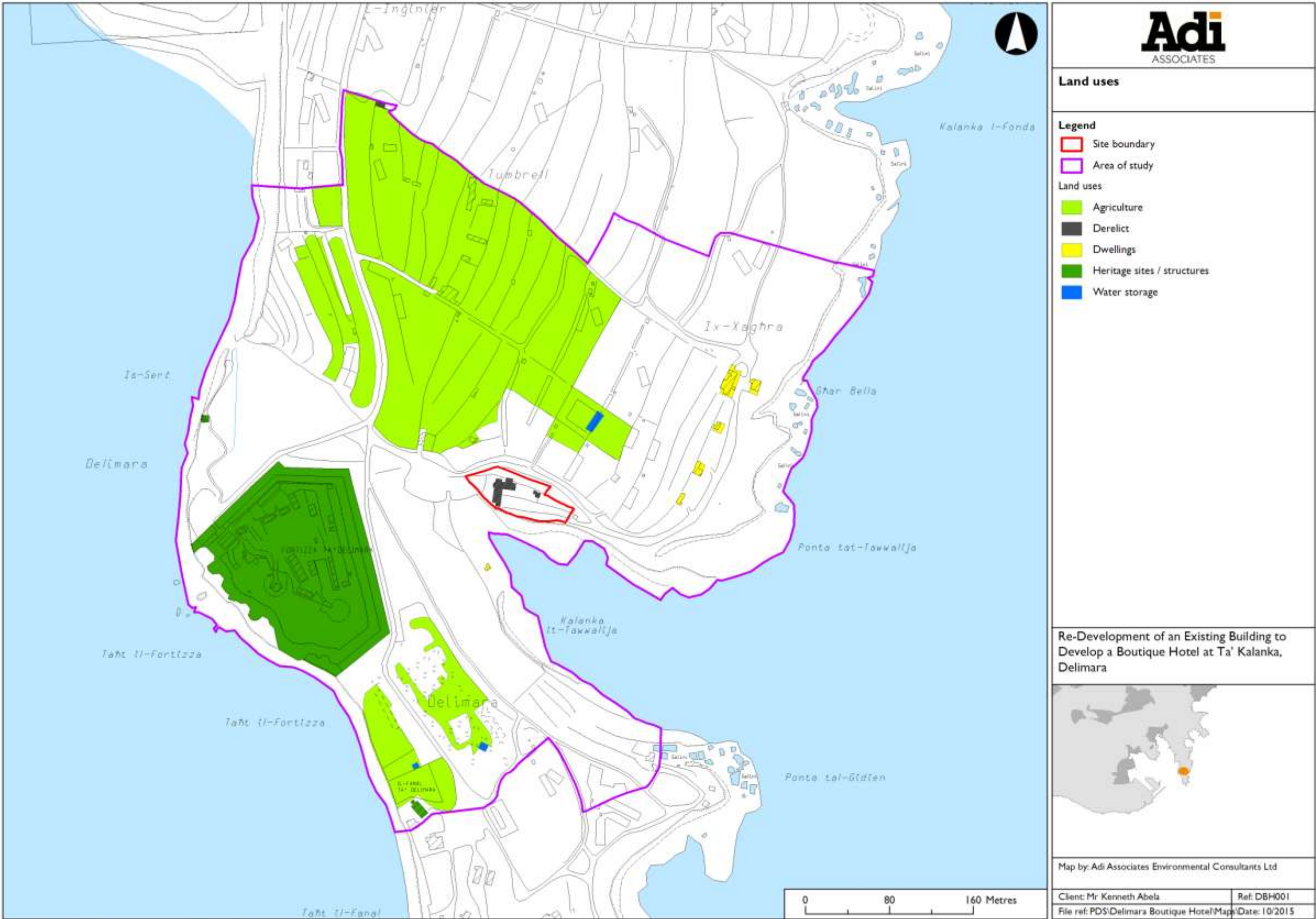


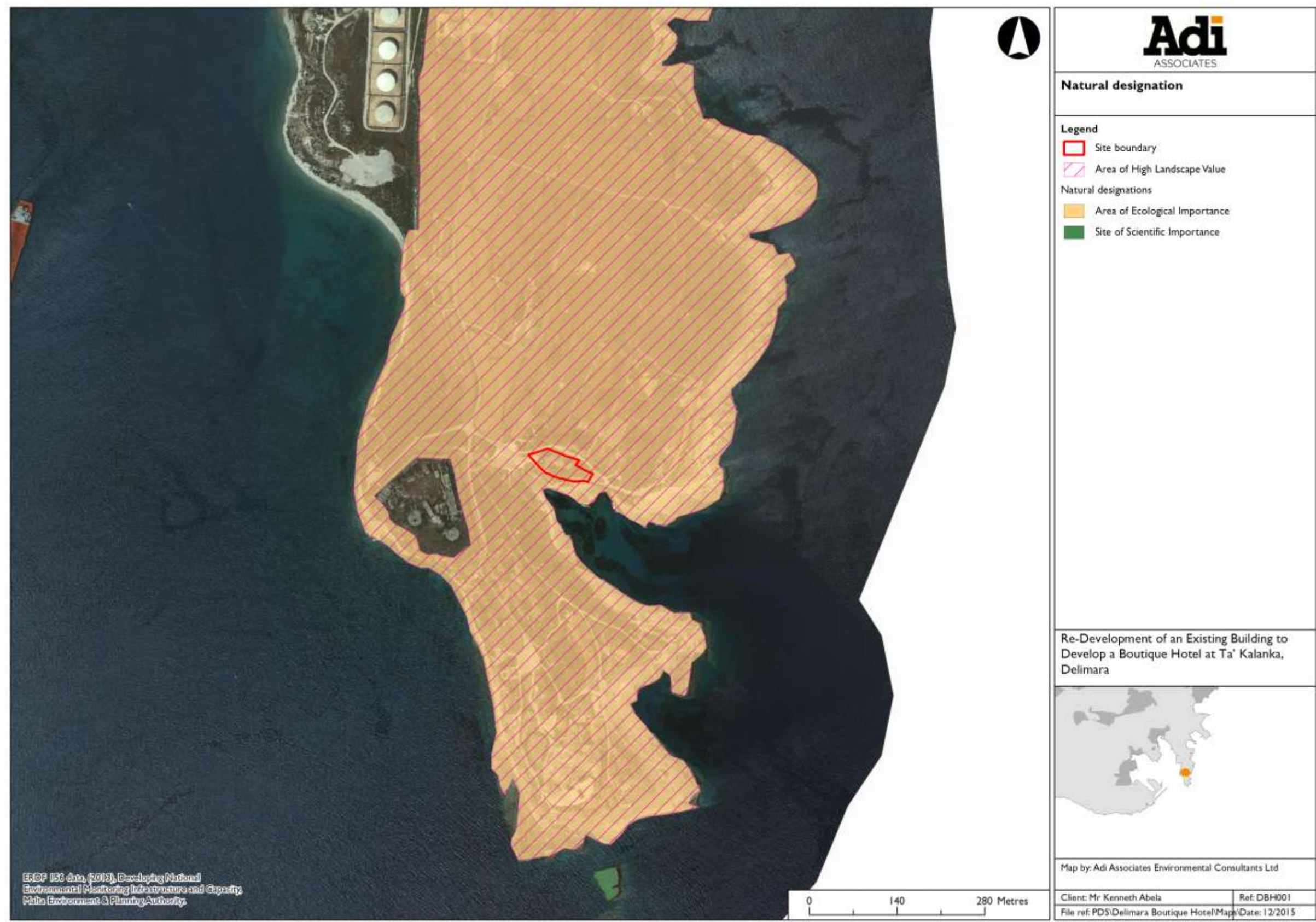


Figure 2.7: Images of the Surrounding Land Uses

		
Area currently used for parking by beach users	Natural slope – small structures are noticeable and the landmark lighthouse is noticeable.	<i>Salsola melitensis</i>
		
Terraced fields (Delimara Power Station is visible in the background)	Front entrance of Delimara Fort	Coastal community and dwellings in the background



Figure 2.8: Natural heritage designations





THE SCHEME

- 2.22. The Scheme involves the redevelopment of the Delimara Bay Hotel into a boutique hotel comprising 13 luxury suites, 3 superior deluxe suites and 1 presidential suite. Proposed amenities include a lounge area, bar and restaurant, gym, a spa and an outdoor pool. **Figure 2.9** presents a block plan of the existing site and a block plan of the Scheme illustrating the changes to the site area. The building area will be increased from 343 m² to 561 m². Concrete terracing to the west of the building will be replaced with landscaping.
- 2.23. In addition to the redevelopment of the existing building, the Scheme includes the creation of a link to the Bay through the hotel. This will involve excavation of a tunnel through the rock down towards the Bay itself as illustrated in **Figure 2.16**.
- 2.24. The Scheme includes construction of public facilities to service the Bay including a beach equipment store, first aid room and ablution facilities. Access to the Bay from the hotel via the tunnel will allow for wheel-chair access to the rocky beach.
- 2.25. **Figure 2.9** to **Figure 2.15** present plans of the Scheme. **Figure 2.16** presents the proposed interventions related to beach facilities.

Existing Block Plan scale 1:200

- Disturbed Landscaping (sqm 1282.00)
- Undisturbed Landscaping (sqm 1314.05)
- Concrete Terraces (sqm 707.20)
- Building Area (sqm 343.00)

Proposed Block Plan scale 1:200

- Concrete Terraces (sqm 390.80)
- Hard Landscaping (sqm 1073.05)
- Building Area (sqm 561.00)
- Landscaping (sqm 1341.00)

Existing Aerial photo not in scale

perit aaron abela

Existing building

Existing foot print

Grass blocks

Soil

Wooden decking

Proposed block plan
scale 1:200

perit aaron abela

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Project Information		Client		Date		Scale		Drawing	
Project Name		Client Name		Date		Scale		Drawing	
Project Description		Client Address		Date		Scale		Drawing	
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Figure 2.11: Proposed plan level 0





Figure 2.12: Proposed plan level I

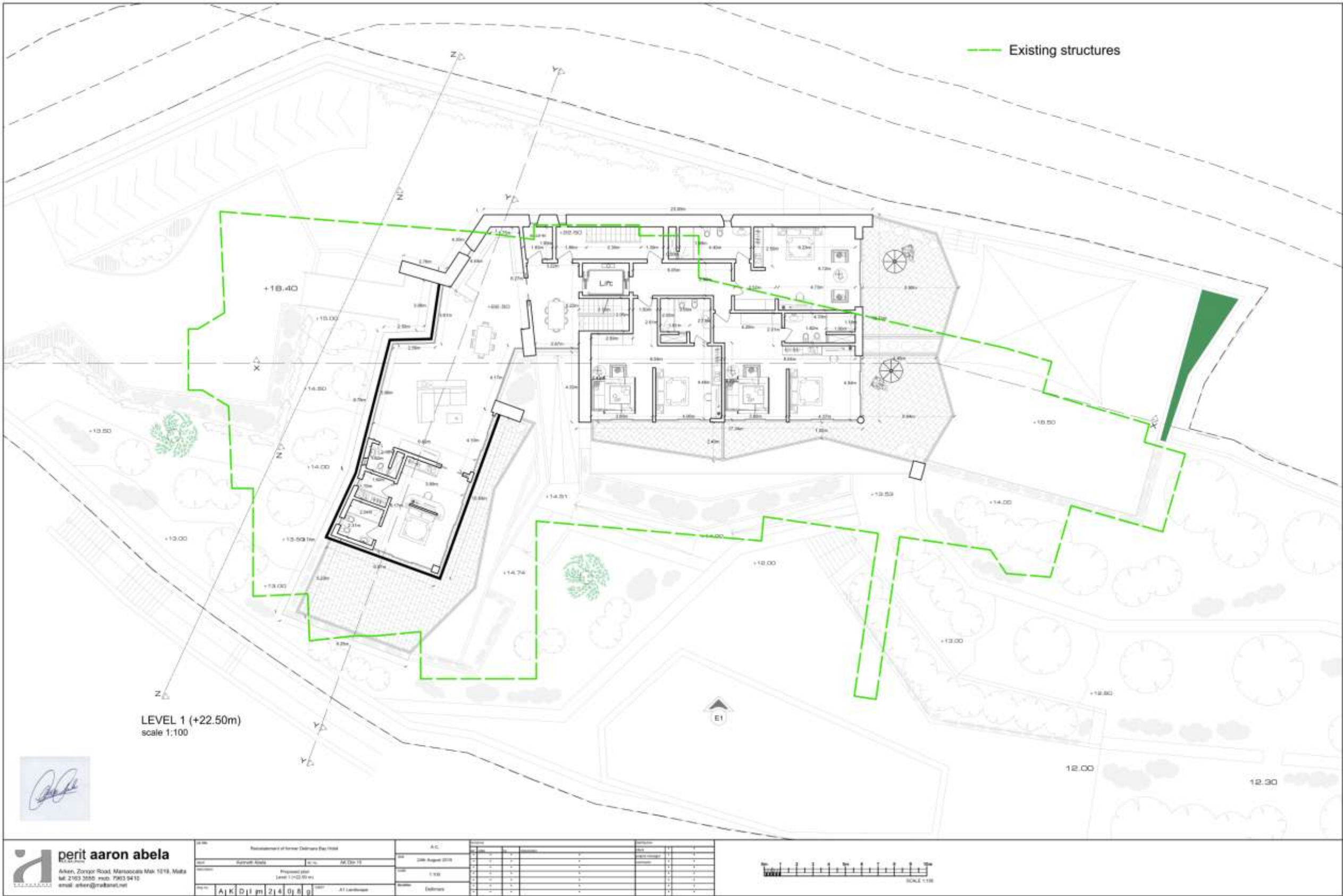




Figure 2.13: Proposed plan level -1

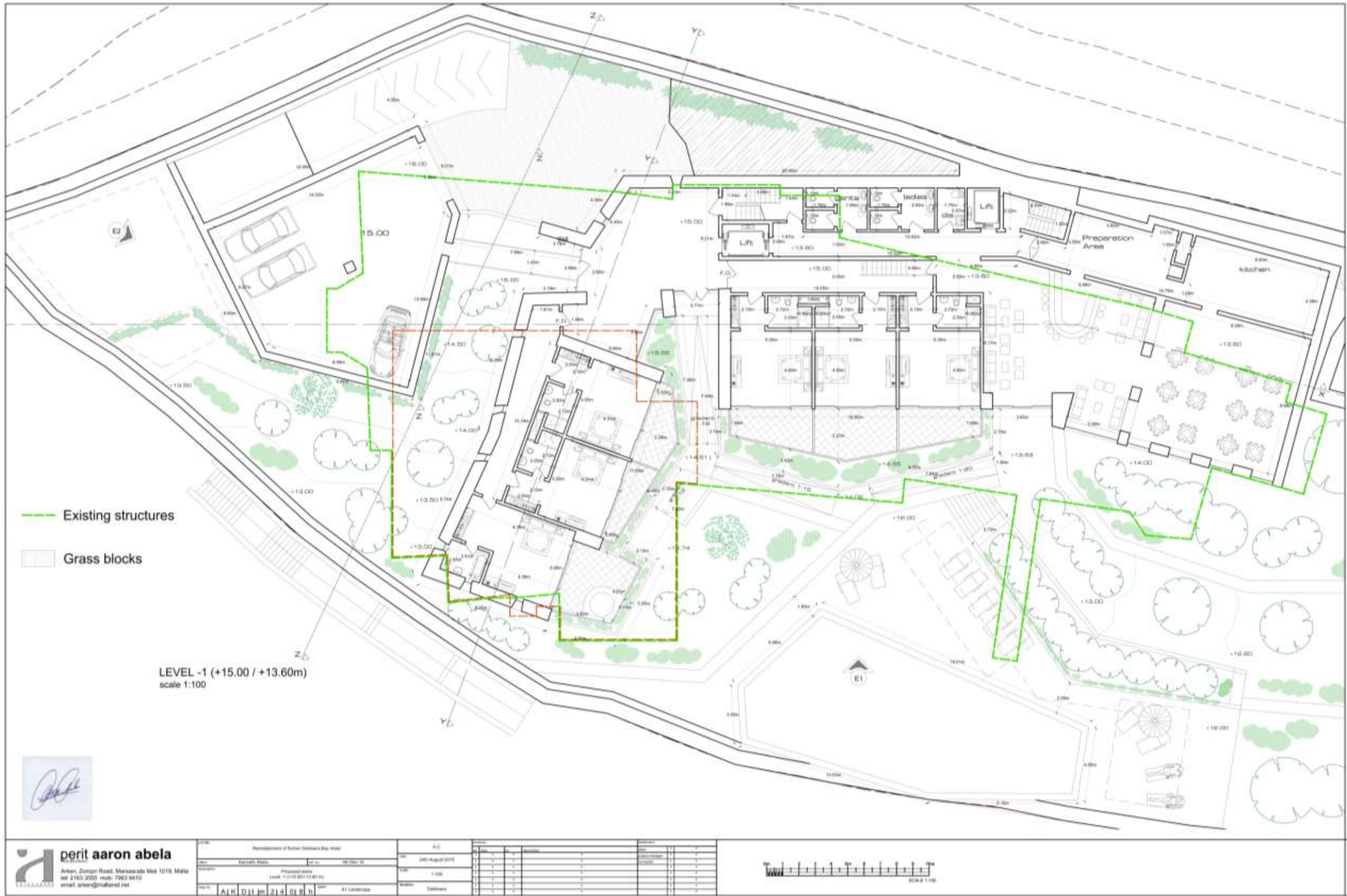




Figure 2.14: Proposed plan level -2

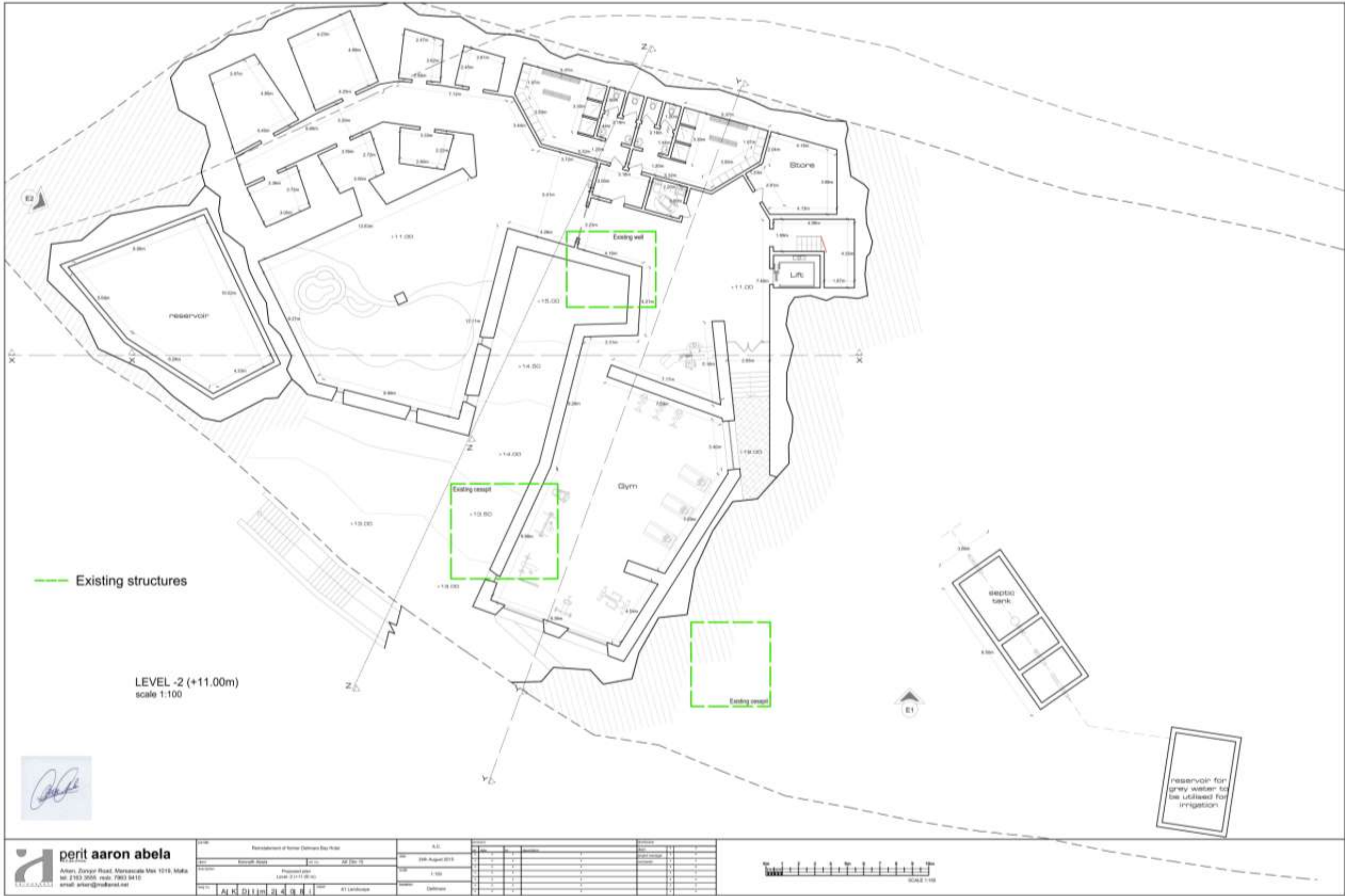
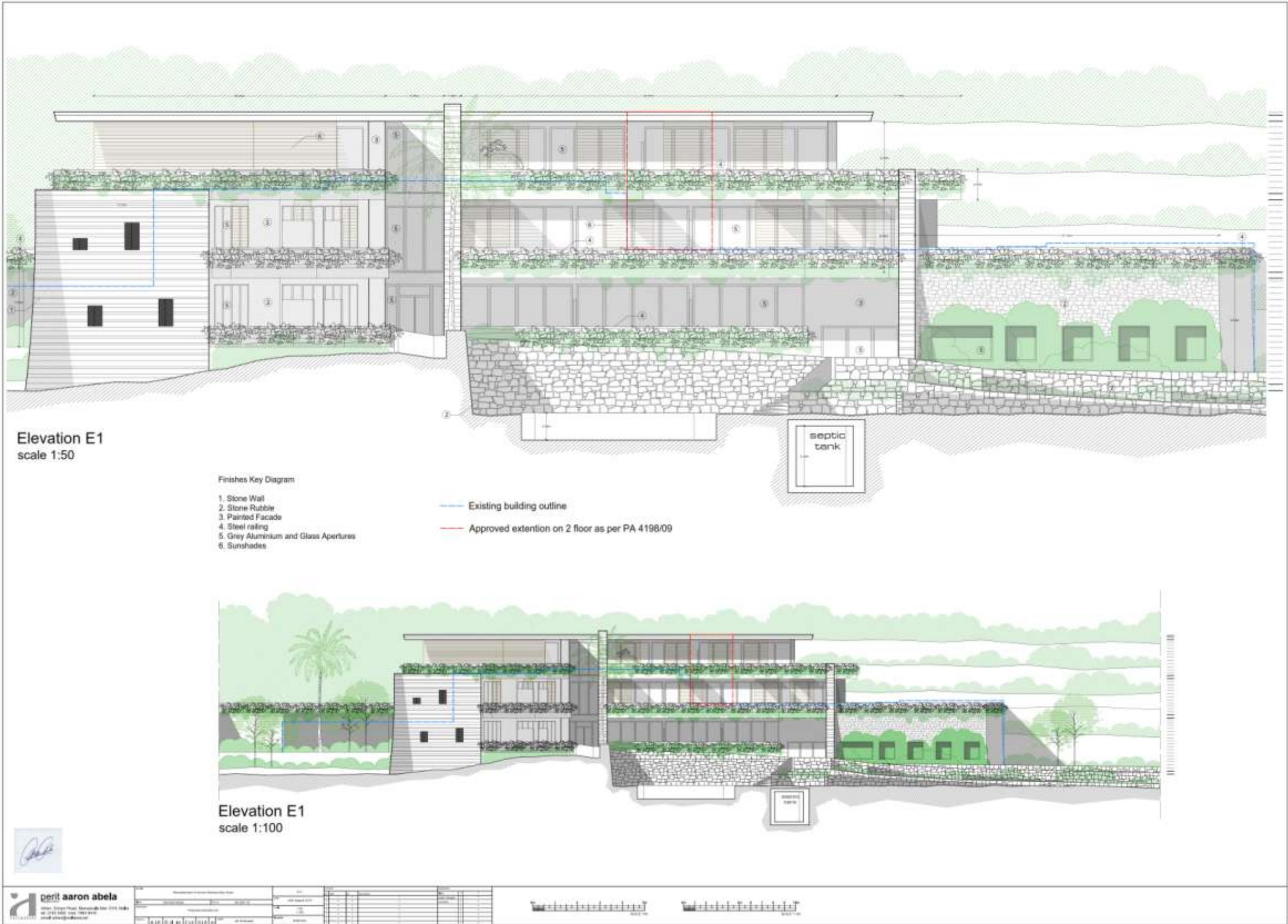




Figure 2.15: Proposed elevation





level -1
scale 1:200

Plan for public beach facilities
scale 1:100

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Project		Client		Date		Scale		Status	
Renovation of former Odebrecht Bay Hotel		Arken		2019 August 2019		1:200		Approved	
Proposed plan for public beach facilities		Arken		2019 August 2019		1:100		Approved	

Scale 1:200



Access and Parking

- 2.26. The area is accessed via Triq Delimara, a local access road that crosses the Delimara peninsula.
- 2.27. Triq Delimara links to the main traffic network at Triq il-Patrijiet Tereżjani, l/o Marsaxlokk, see **Figure 2.17**.
- 2.28. The area is not serviced by public transport; the Scheme site can be accessed by car, by bicycle, or on foot.
- 2.29. Currently, bathers that visit Il-Kalanka t-Tawwalija park in an area that, although was once surfaced, is now in poor condition due to lack of maintenance. This area is approximately 1,900 m² and can accommodate approximately 85 cars and is located in front of the Scheme site.
- 2.30. The Scheme will include a four car garage at level -1.

RESOURCES

Raw Materials

- 2.31. The main raw materials (and estimated volumes) to be used in construction are shown in **Table 2.1**.

Table 2.1: Estimated Raw Materials for Construction

Materials	Volume
Concrete	1,069 m ³
Walls (masonry stone or blockwork)	1633 m ³
Steel	125 tons
Screed	107 m ³

Energy

- 2.32. The Scheme has been designed to take account of passive environmental design, control systems and energy-saving systems. In addition to the design measures to maximise passive heat / ventilation and natural lighting, it is envisaged to use specific energy-saving measures as follows:
 - Air conditioning chiller that uses a low global warming potential (GWP) refrigerant. This type of chiller ensures a high level energy efficiency ratio (EER) and with control optimisation of the condenser fans, energy savings of up to 50% can be achieved. In addition, the compressor has a starting current of only 5 Amps (as compared to a conventional compressor which can typically have a peak starting current of 600 Amps or more).
 - Pool and hotel floor area temperature management through the use of geothermal holes. The heat pump will use the same chiller type as described



above. An open loop geothermal system will be used. This system will use sea water as the heat transfer medium. The system requires piping from the heat pump to the marine environment. Water is drawn from the sea, run through the heat pump and returned back to the sea. Thus, the water stays in the system for the time it takes to run through the heat pump. Water will be drawn from a depth of 30 metres below sea level since the water at this depth is stable at 18 to 19 °C allowing for a higher COP. This system is more energy efficient than a conventional air cooled heat pump system.

- Use of CHP (combined heat and power) for domestic hot water (DHW). The selected plant includes a variable speed multi inverter operating mode that keeps its overall efficiency rate between 15% and 100% of its rated power, with a prompt response to any variation in energy consumption by the user. Use of this CHP results in a number of benefits including high efficiency cogeneration, uninterruptible power supply, heavy duty power generator and power factor correction.
- Building insulation. Insulation cladding such as polyurethane (PU) insulation will be used.
- Use of Photo Voltaics (PV). PV panels will be installed on the flat roof. Assuming the full use of the roof (325m²) and the installation of high efficiency solar PV panels of 19% of the total PV, peak system will reach 60kW.
- Battery bank. A battery pack will be used to balance the extra power generated from the PV systems and the CHP that the grid line cannot support. This charging unit should be at least 300kWh. This energy can be used for electric cards and electrical supply during the night. The battery pack will also help to balance the use of the CHP.
- Centralised building management system, intelligent light control. A Building Automation System (BAS) or Building Management System (BMS) will monitor all energy consumption per floor, control lighting levels and room temperature. A BAS system is expected to provide an energy saving of up to 12%.
- LED lamps with specifications of 100Lm/W.
- Use of inverter controlled equipment.
- Use of shading devices and any other passive environmental design measures.
- Air quality control will be individual for each room allowing for greater flexibility on the installation.
- Provision of an electric car charging point. .
- Provision of a shuttle service using an electric vehicle with an average consumption of 240kWh daily.



- 2.33. Table 2.2 illustrates the estimated annual electrical consumption by system. Table 2.3 indicates estimated renewable energy source generation. The tables illustrate that the Scheme will generate surplus energy of 21, 951 kWh annually.

Table 2.2: Estimated annual electrical consumption

Area	Energy in kWh
AC system	14,456
Cesspit system	14,308
Water treatment	219
Lighting system	71,175
ICT system	474.5
Kitchen	15,330
Logistic Electric Van	29,200
Total annual consumption	145,162.5

Table 2.3: Renewable energy source (RES) generation

System	Energy in kWh
PV systems	151,305
CHP for DHW	15,808
Total power RES generated	167,113

Water

- 2.34. The Scheme has also been designed to take account of water conservation and sustainable consumption, as follows:
- Engineered cesspit including details of water treatment and reuse. The engineered cesspit will recycle water from all drainage including toilets to be used again for flushing and irrigation. The optimal size for the cesspit will be 26m³ and it will incorporate an automatic chlorine dozer system and UV filters. The filters will treat water generating second class water and water for irrigation.
 - Rainwater collection. The reservoir will collect water from different areas and these will be collected in separate chambers. The well collecting water from the roof will have a capacity of 200m³ in accordance with legal requirements. The well collecting water from the site itself will have a capacity of 632 m³ in accordance with legal requirements. Water will also be collected from the street adjacent to the development (not a legal requirement) and the well will have a capacity of 292 m³ to accommodate this water. The water pumped from the well will pass through a practical filter, a UV filter and treated by an automatic chlorine dozer.
 - Flushing systems, use of aerators/flow restrictors, and any other relevant water



conservation measures. The flushing toilet system will be using a flash valve, which will be controlled to 6 litres per flush.

- Pool management. Chlorine will be used for treatment of the second class water and first class water for the pool area using silver and salt chlorinate.

2.35. The estimated daily water consumption for the Scheme is shown in **Table 2.4**.

Table 2.4: Estimated daily water consumption

System	Water volume in m ³
Toilets	1.25
Hot & cold water	4
Irrigation	0.74
Pool	0.54
Total daily water consumption	6.53

Waste Management

Construction Phase

- 2.36. Waste generated during construction of the Scheme will primarily consist of demolition and excavation waste; this is estimated at 4,019 m³.
- 2.37. The rock in the area is Globigerina Limestone, a particularly friable rock, which is unlikely to be reused.

Operational Phase

- 2.38. Operational waste to be generated by the Scheme will comprise primarily municipal waste. In addition to sewage and foul water, this will include packaging waste (e.g. plastic, glass, metal, cartons, and paper) and kitchen waste, including waste oil. These wastes will be separated and disposed of by licensed waste contractors engaged by the operator, in accordance with the relevant regulations.
- 2.39. The hotel will apply for the Malta Tourism Authority's (MTA) Eco-certification Scheme; therefore, and in order to qualify for eco-certification, the hotel will need to implement a long-term operational sustainability management system that will address energy use and guarantee energy efficiency, water use as well as efficient waste management.

Construction Timing

- 2.40. The estimated duration of the construction phase of the Scheme is envisaged to be approximately 8 months; as described in **Table 2.5**.

Table 2.5: Construction Phasing

Phase	Duration
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Phase	Duration
Demolition / site clearance	3 days
Excavation	15 days
Construction	95 days
Landscaping	40 days
Finishings	90 days

Machinery

- 2.41. The machinery that will be required during construction of the Scheme is estimated to comprise the following, as described in **Table 2.6**.

Table 2.6: Construction Machinery

Plant / machinery	Numbers
Excavation	
Excavator	1
Drum cutter	1
Dump trucks	2
Construction	
Tower crane	1
65kVA generator (if required)	1
Digger (Bobcat)	1
Mini excavator	1

Employment

- 2.42. The Scheme will employ 11 full-time employees and 6 part-time employees. The breakdown of these employees is presented in **Table 2.7**.

Table 1.7: Schedule of Land Uses

	Full-time	Part-time
Hotel		
General Manager	1	
Host Manager	1	
Receptionists (shifts)	3	
Chamber maid	1	1
Maintenance & Gardener	1	1
Restaurant		
Chef	1	1
Kitchen assistant	1	1
Waiters	2	2





3. POTENTIAL ENVIRONMENTAL IMPACTS

3.1. Environmental impacts can be negative as well as positive and their assessment is important so as to better define the effects that a proposal may have on its receiving environment. Although a detailed impact assessment is usually undertaken through the EIA process, the need for an EIA is however dependent on the screening of the likely impacts. At this stage in the process, a preliminary list of the potential environmental impacts of the Scheme can be identified. The list identifies only those impacts that may be significant. The potential impacts of the Scheme are considered to be:

- *Impacts on geology and geomorphology, from site excavation.* The Scheme will involve excavation of approximately 2,708 m³ of rock. Given that the Scheme is located on Globigerina Limestone and includes excavation of a tunnel to the beach, issues with regards to stability and changes to geomorphology will require further investigation and assessment.
- *Impacts on landscape and visual amenity.* The site lies within an Area of High Landscape Value. The extent of the development will be larger than the existing in terms of height and area taken up by ancillaries including food and beverage and outdoor pool and decking area. Interventions at the Bay may also result in impacts. A visual impact assessment was carried out and submitted to MEPA as requested in its screening letter. This submission did not include landscape impact assessment (as this was not requested in MEPA's screening letter).
- *Impacts arising from construction activities, in relation to noise, vibration, dust, and surface water management.* These potential impacts arising during construction are likely to be short term and temporary.
- *Impacts on ecology.* The Scheme lies within an Area of Ecological Importance. Additional lighting and noise generated during both construction and operation could result in impacts on the ecology of the area.
- *Traffic impacts, both during construction (including heavy-vehicle traffic) and during the operation of the Scheme including the requirement to provide additional parking since the Scheme only caters for 4 parking spaces.* This is likely to cause parking off site.
- *Impacts on air quality.* Additional traffic attracted to the area could also have impacts on the air quality in the area.
- *Impacts on energy and water resources.* The Scheme has been designed to take account of both active measures and passive-design principles, with attention to sustainable energy consumption, as well as to water conservation and sustainable water consumption. Rainwater harvesting from the area, including capturing run-off from the dilapidated carpark area, will also reduce negative impacts to the marine environment from debris currently being carried to the sea.



- *Impacts from waste*, generated during both the construction and operational phases of the Scheme. The Scheme will generate an amount of demolition and excavation waste.
- *Social impacts*. Given the importance of the area for bathing and recreation and the relatively open nature of the area to be redeveloped, the social impacts in relation to the feeling of remoteness that the site currently offers are an important consideration when assessing the potential impacts of the Scheme. On the other hand, the Scheme includes provision of public ancillary facilities, resulting in potential benefits for beach users.

MITIGATION PROPOSALS

3.2. Preliminary potential mitigation measures associated with the identified impacts include:

- Careful consideration of the impacts of the tunnel to the Bay both in terms of geology and geomorphology and the wider social impacts;
- Careful consideration of the design (siting, design and landscaping proposals), through the preparation of a detailed landscaping plan, in order to ensure the sensitive integration of the Scheme in the interests of landscape and visual amenity;
- Careful consideration of the access arrangements for all vehicular traffic, both during construction and following the coming into operation of the Scheme, in the interests of traffic and pedestrian amenity and safety;
- Careful consideration of lighting at the Scheme to minimise disturbance to wildlife;
- Ensuring the adoption of best practice environmental measures throughout construction;
- Ensuring compliance with waste management regulations and the adoption of best practice in relation to operational waste management;
- Adoption of the MTA's eco-certification scheme for the implementation of a long-term sustainability management system for the hotel;
- Measures for mitigating noise, vibration and impacts on air quality from the construction works through the preparation of a Construction Management Plan and appropriate operational monitoring regimes will be set up throughout the construction phase to mitigate impacts. Management of surface water during construction will also be important to avoid overspill from the site and potential contamination into the sea; and
- Consideration of social impacts of the Scheme given the importance of the area for recreational and amenity purposes.

