PROJECT DESCRIPTION STATMENT

QUARRY HM29 SOLAR FARM

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1 Chapter 1: Introduction

The purpose of this Project Description Statement (PDS) is to enable the Planning Authority to set out the terms of reference for the Environmental Impact Assessment. The PDS is based on the initial designs prepared by the same office.

1.1 Details of the applicant

The proposed development is being carried out by Mr. Paul Xuereb on behalf of Hard Rock Estate Ltd.

1.2 Background of the project

The proposed development consists of an infilled quarry located at Triq Sir Temi Zammit in Imgarr. The development is being proposed as a means to rehabilitate an infilled and disused quarry to be repurposed into a solar farm.

1.3 Current state of the property

Quarry HM29, located on the main road 'Triq Sir Temi Zammit, is currently a depleted stone quarry, which has been infilled with in-earth construction waste.

The following PA applications have been submitted and some are still awaiting an approval:

- The full development application PA PA/01935/93 for "Quarry extension" was submitted to PA on the 8th July 1993. This application was validated on the 8th July 1993 and approved on the 27th June 1996

- The full development application PA PA/06525/98 for "Excavation of existing quarry 10 metres from lowest point." was submitted to PA on the 12th November 1998. This application was validated on the 11th Decemeber 1998 and approved on the 2nd October 2000

- The full development application PA PA/00388/99 for "Renewal of quarry extension" was submitted to PA on the 28th January 1999. This application was validated on the 28th January 1999 and approved on the 29th September 2000

- The full development application PA/04317/17 for “Sanctioning of collection of soil off field, putting this aside on same site, levelling out fields to consolidate same. and relaying collected soil over larger area than originally in order to coordinate with landscaping of adjoining refilled quarry and proposed rubble walls.” was submitted to PA on the 28th Ocotber 2016. This application was withdrawn.

- The full development application PA/01831/08 for “Extension to existing quarry with additional area of 5728 sq.m.” was submitted to PA on the 11th April 2008. This application was validated on the 3rd June 2008. This application was withdrawn at the request of the applicant.

- The full development application PA/00712/07 for “Formation of a substation for Quarry No 29, Torri Falka.” was submitted to PA on the 1st February 2007. This application was validated on the 19th February 2007 and Refused on the 17th March 2007.

- The full development application PA/01870/05 for “Extension to quarry” was submitted to PA on the 5th April 2005. This application was validated on the 12th April 2005 and approved on the 23rd January 2006.

- The full development application PA/01151/04 for “Extension to quarry” was submitted to PA on the 1st March 2004. This application was validated on the 16th March 2004 and approved on the 30th August 2005.

- The full development application PA/07422/03 for “Sanctioning of temporary access road, site office & weigh bridge outside licensed area at hardstone quarry No 29-Torri Falka l/o Mgarr.” was submitted to PA on the 15th Decemeber 2004. This application was validated on the 16th December 2003 and approved on the 30th August 2005.

- The full development application PA/07372/03 for “Quarrying of hardrocks spalls from existing quarry.” was submitted to PA on the 10th December 2003. This application was validated on the 11th December 2004 and approved on the 30th August 2005.

- The full development application PA/06094/01 for “Rock cutting to existing quarry” was submitted to PA on the 20th November 2001. This application was validated on the 20th November 2001 and approved on the 17th December 2002.

- The development notification order DN/00192/17 for “To hold an outdoor activity.” was submitted to PA on the 2nd March 2017. This application was validated on the 6th March 2017 and approved on the 6th March 2017.

2 Chapter 2: Objectives of the proposed development

2.1 Project Proposal

The proposed development is primarily designed to repurpose a depleted, and infilled quarry, into a 5.226 megawatt photovoltaic plant.

This plant shall comprise of 17,420 300 Watt photovoltaic modules. These modules shall be connected to 106 inverters thus converting the DC energy generated by the photovoltaic modules to 400V AC power. The energy at 400V shall once again be converted to 33KV by using five 1- megawatt substations to be connected to an Enemalta substation/switch room placed towards the entrance of the quarry.

2.2 Expected project duration

It is envisaged that the project shall be completed within 12 months from commencement of works.

3 Chapter 3: Physical characteristics of the site

3.1 Site location and description

The quarry is located on Triq Sir Temi Zammit, opposite an access road which leads to San Anton and San Andrea school. The Total site are of the quarry is of approx. 76,800sq.m with a facade of approx. 365m overlooking the main road. Access into the site is found approx. In the centre of the facade via a gate from which construction vehicles would enter the site during the extraction of rock, as well as the infill process.

3.2 Physical characteristic

The site has an incline as it moves away from the main road, which gradually plateaus as it reaches the back of the site. It has an overall change of height of 51.7m. The site's extents are accessible via multiple paths which were used by the construction vehicles during the infill process of the quarry.

3.3 Current site usage

The most recent use of the quarry was as an infill site for in-earth construction waste. This has now been filled to its maximum capacity and is now being proposed that it be used as a solar farm.

3.4 Surrounding land uses and environment

The surrounding areas are predominantly used for agricultural purposes. Agricultural land surrounds the quarry, whilst a couple of isolated farmhouses are present opposite the quarry and be. Two schools can be found further away from the quarry through a side road opposite the quarry.

4 Chapter 4: Description of the project

4.1 Size and scale of development

The proposed solar farm is intended to cover the extents of the infilled quarry, keeping to the contours of the site. Having an area of approx. 76,800 sq.m, this will allow the installation of 17,420 photovoltaic panels.

4.2 Duration of development

The project is expected to be completed within 12 months from commencement.

4.3 Services necessary on site (water, electricity, etc...)

During works, nominal amount of electricity and water supply will be necessary. This is due to the fact that an amount of hand tools will be used in order to complete the said works. Water facility will also be necessary for the sanitary areas were the workers would be provided with the basic sanitary requirements.

The site office is to be equipped with internet connections and also fixed line telephones. Temporary toilets will be used and thus drainage facilities will not be necessary during the construction works.

Thus during the development / construction, most ancillary facilities will be necessary including, electricity, water, telephone/internet

Once the project is complete, the demand on these facilities will change drastically. Due to the nature of the project, electrical flow will increase significantly due to the photovoltaic panels. Whilst water consumption will remain low, with its main use being to clean the panels to increase their efficiency.

4.4 Amount of workers and parking during each construction phase

It is estimated that not more than 15 workmen will be on site at any one time. Parking for the workers should be easily accommodated due to the large open space at the entrance to the site.

4.5 Energy and waste generation during construction and operation

During the construction phase of the development, waste generated from trenching works to lay the required cabling shall be loaded and carted away to an approved dumping site. Solar panels shall be mounted onto aluminium frame structures which are connected to underground counterweights via a bolting system. This will make mounting and unmounting the panels relatively easier for recycling purposes.

It is envisaged that once fully operational, the site shall be capable of generating 5.226 megawatts.

4.6 Storage and waste handling during construction/operation

The proposed project has no permanent structures to demolish, neither to construct. It is envisaged that no construction or demolition waste will be generated by this project.

The proposed development shall require the use of the following raw materials:

- Precast/Cast in-situ Concrete counterweights.
- Aluminium framework for the photovoltaic panels

4.7 Mitigation measures

The High voltage cables, which are an essential part for the running of the solar farm, shall be laid underground in a suitable protective ducting which shall hide them from the surface, increasing the overall aesthetics of the site.

All materials used on site are recyclable, removable and reusable. With some materials such as the aluminium framework to appreciate in value over time, acting as an incentive to dismantle the plant once it reaches its expected lifespan.

No construction or demolition waste will be generated by this project and no light pollution will be emitted as the project will be carried out during the day.

After the lifetime of the solar farm is reached, the site can be returned to its original state before any works had been carried out.