

The Executive Chairperson  
Planning Authority  
St. Francis Ravelin,  
Floriana

Date: 15 March 2022

Dear Sir/Madam,

**ERA Ref.:** EA/00047/20  
**Planning Ref.:** PA/02566/18  
**Proposal Description:** To reactivate permit PA/4036/93 Hardstone Quarry No.7, to extract hardstone mineral up to +200m (AMSL) and restore quarry to its original level matching adjacent field/garigue levels.  
**Location:** Hardstone Quarry No. 7, Gebel Ciantar, Fawwara, Siggiewi, Malta

### **Environmental Impact Assessment Regulations (S.L. 549.46)**

### **Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44)**

ERA's recommendation and representation on the said development proposal are being lodged in its capacity as an external consultee and an interested party in accordance with the Development Planning Act and the Development Planning (Procedure for Applications and their Determination) Regulations (S.L.552.13).

Reference is made to ERA's Assessment and Recommendations, including Annex I Schedule III Screening, at documents PA/02566/18 – 103a-b.

In its assessment, ERA considered the proposal as two-phased, being: (i) mineral extraction and restoration, and (ii) the after-use of the quarry. With respect to phase 1, ERA had determined that no further assessment is required in terms of the EIA Regulations (S.L. 549.46) and Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44), subject to the submission of further requirements, namely:

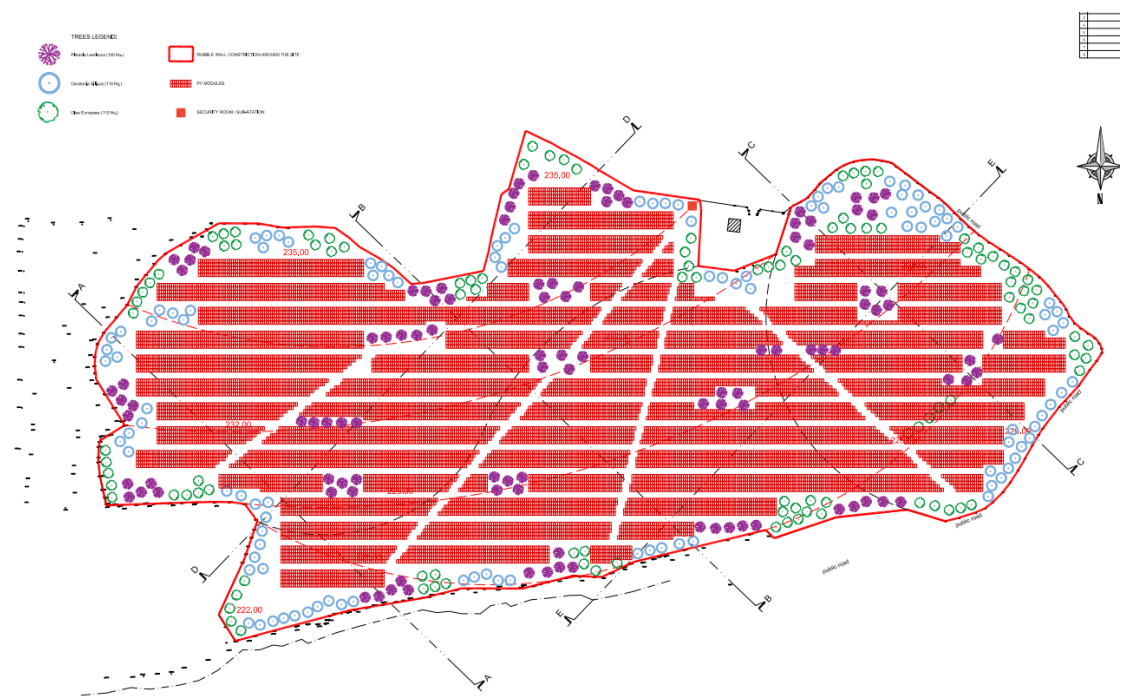
- a) An investigation of the effects of the proposed quarrying activities on the hydrogeology of the site, noting the underlying perched aquifer and its springs; and
- b) A comprehensive Restoration Method Statement covering the entire quarry, including the proposed phasing and its estimated duration, and measures to pre-empt and avoid environmental damage/impact at source.

Whilst ERA notes that updated plans for the proposed continued quarrying, infilling and restoration of the quarry have been uploaded as per docs PA/02566/18 – 123b-m, the above submissions (bullet a and b) are still pending. In this regard, ERA reiterates such request to conclude its assessment of phase 1 of the project.

Furthermore, ERA notes that the proposed quarrying plan at doc 123c indicates a slightly larger area for proposed continued quarrying compared to the previous plan at doc 64b, with an extension to the west. However, the aforementioned ERA position (and as outlined in docs 103a-b) remains valid.

The required Restoration Method Statement should outline how infilling and restoration of the site will prioritise the cliff-side, in order to stabilise and rehabilitate the sensitive southern part of the site, and commence restoration works in parallel to quarrying. In this regard, the Method Statement should include a plan and description of each phase of the restoration, together with the estimated duration of the required works.

With respect to phase 2, the after-use of the site, ERA has noted the submission of doc PA/02566/18 – 123g, outlining the proposed after-use of the site as a solar farm (also refer to Figure 1). Since ERA’s previous correspondence (docs 103a-b), the Solar Farms Policy has been updated (June 2021) following the conclusion of a Strategic Environmental Assessment (SEA) and a plan-level Appropriate Assessment (AA). In this instance, the proposed after-use can now be assessed further.



**Figure 1:** Proposed restoration plan – final phase – after-use – solar farm (Source: Eapps documents PA/02566/18 – 123g).

## **1. Overall considerations**

- 1.1. The PDS for PA/02566/18 had provided two alternatives, being the restoration back to agricultural land or the use as a solar farm. Though restoration of the quarry void through infilling with inert material is still proposed, the proposed after-use as a solar farm will prevent the reinstatement of the site to agricultural land or back to its pre-existing land cover. On noting the location of the said quarry within a sensitive coastal location predominantly characterised by garrigue and agricultural land, the proposed solar farm is not a preferred use from an environmental point of view.
- 1.2. On the other hand, ERA also notes the importance of maximising the potential for renewable solar energy generation in Malta and notes that the studies carried out a policy level (in function of the afore-mentioned Solar Farms Policy) did not consider the quarries under evaluation (including the quarry in subject) as upfront no-go sites for solar farm development.
- 1.3. In view of the above, while there is no in-principle up-front objection to the installation of a solar farm in this particular location, the acceptability of the proposed use from an environmental perspective would need to be determined following evaluation of the more detailed considerations identified in terms of EIA and AA, as per below sections.

## **2. Detailed EIA Screening considerations (in terms of Regulation 14 of the EIA Regulations S.L.549.46)**

### *Landscape and visual amenity*

- 2.1. The proposed solar farm is likely to conflict with the surrounding natural landscape, designated for its high landscape value ('Diversi Rdumijiet' Area of High Landscape Value (AHLV), designated as per Govt. Notice 400 of 1996). In this regard, the solar farm would require adequate screening through the inclusion of a landscaped buffer surrounding the entire solar farm. The landscaped buffer shall be 5m wide at the southern and western boundary of the site, in view of its exposure to the predominant winds (to ensure adequate space for the survival of the planted species). In the other areas, the buffer shall be at least 3m wide. Planting should consist in species typical of the surrounding environment and include low rubble walls to adequately shelter planted species and provide a smoother visual transition into the landscape. Planting along the cliff face should be low-lying, to avoid unintended visual intrusiveness. To visualise such site treatment, photomontages are to be submitted, illustrating the proposed solar farm from various viewpoints around the site.

### *Ecology*

- 2.2. The installation of a solar farm will prevent the reinstatement of ecological connectivity for faunal and floral species, as the site will remain a physical barrier within this coastal area. This coastal area is scheduled as an Area of Ecological Importance (Level 3) ('Irdumijiet Ta' Madwar il-Kosta miċ-Ċirkewwa sa Bengħisa') designated through the afore-mentioned Govt. Notice 400 of 1996) and thus measures should be taken to reduce

adverse effects on the ecological features in the area. In this regard, the ground surface should be kept porous, and the use of herbicides avoided, to allow the growth of wild vegetation, which in turn would allow various species of wildlife to return back to the area. ERA notes and commends that clusters of landscaping have already been included within the plan of the proposed solar farm, to provide ecological steppingstones. Such clusters should consist of species typical of the surrounding ecology and landscape, similar to the landscaped buffer surrounding the site.

#### *Construction-phase impacts*

- 2.3. Though construction-phase impacts are likely to occur, including dust emissions, noise and vibrations and light pollution, these impacts would already be present during the preceding phases of quarrying and backfilling for restoration, and are expected to be of lesser significance than during the said quarrying and backfilling phases. Therefore, such impacts are not considered to be significant as long as the works are carried out properly such that environmental damage/impact is pre-empted at source through stringent good practice (e.g. damage to the cliff edge and garrigue habitats surrounding the site are strictly avoided). Manoeuvring of construction vehicles should be restricted to the existing road network and the already committed land within the site, to avoid further degradation of the surroundings. Such measures should also be duly reflected in the required Restoration Method Statement.

#### *Operational impacts*

- 2.4. Given its nature, the proposal is not expected to generate significant vehicular traffic to and from the site, nor significant waste streams during the operations of the solar farm. With respect to emissions (air, noise, and lighting) no significant impacts are envisaged as long as noise generating equipment (e.g. substation, pumps) are duly muffled, and on-site lighting is limited to an intruder-triggered safety and security system, to avoid continuous nocturnal lighting.
- 2.5. With respect to run-off management, any water run-off generated on site should be adequately captured in soak-away reservoirs for the gradual infiltration of surface runoff into the ground (to recharge the perched aquifer), and reuse on site (e.g. for irrigation or cleaning of PV panels). Stringent attention should be made to the cleanliness of the inert infill material to avoid dispersion of contaminants into the ground and the perched aquifer. Geotechnical advice would be required for the inclusion and location of such reservoirs in the plans, to ensure that impacts on the cliff face stability are avoided.

#### Screening outcome

The above screening has concluded that the environmental impacts of the proposed development are unlikely to be significant to the point of warranting an EIA in accordance with Regulation 15 of the EIA Regulations (S.L. 549.46), subject to the following submissions:

- A landscaping plan, showing the required green buffer, clusters of landscaping within the solar farm and porous ground cover to allow growth of wild vegetation, in line with the requirements specified in paragraphs 2.1 and 2.2;

- Photomontages, illustrating the proposed solar farm with the afore mentioned required landscaping, from various viewpoints around the site;
- Updated plans, including the required soak-away reservoirs; and
- Confirmation that on-site lighting during operations of the solar farm will be limited to an intruder-triggered safety and security system (to avoid continuous nocturnal lighting), and all noise generating equipment will be duly muffled to avoid chronic operational noise.

**3. Screening in terms of the Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44)**

- 3.1. As already indicated in ERA's Assessment and Recommendations (including annexes) at EApps documents PA/02566/18 – 103a-b, the site of the proposal lies immediately adjacent and within the area of influence of a protected Natura 2000 site (MT0000024 - Rđumijiet ta' Malta: Ir-Ramla taċ-Ċirkewwa sal-Ponta ta'Bengħisa: Special Area of Conservation (SAC) and Site of Community Importance), designated for its sensitive coastal habitats and associated species. Of note is the Schedule I (S.L. 549.44) listed habitat 6220\* (Pseudo-steppe with grasses and annuals of the Thero-Brachypodietea), which is a priority habitat for Malta. Furthermore, the afore-mentioned plan-level AA undertaken for the Solar Farms Policy identified the presence of Schedule II (S.L. 549.44) listed bat species within or in near proximity to the site. These species require protection, and the said AA assessed the risk of potential impacts on such species from a solar farm on site as high.
- 3.2. In addition, the site is also located in close proximity to the coastal cliffs which form part of the Natura 2000 network in view of the presence of protected seabirds (MT0000032 - Rđumijiet ta' Malta: Ras il-Pellegrin sax-Xaqqa and MT0000111 - Żona fil-Baħar fil-Lbiċ: Special Protection Areas (SPA). However, ERA notes that the afore-mentioned plan-level AA did not consider the site to be within the area of influence of these protected sites.
- 3.3. With respect to the terrestrial SAC, the plan-level AA concluded that, overall, a solar farm development within the Gebel Ciantar quarry site may pose high risks to the adjacent protected site and therefore should be subject to rigorous requirements and conditions.
- 3.4. The relevant environmental impacts of concern, as assessed in the said AA, mainly relate to potential operational impacts on bats from collisions with the PV panels, nocturnal lighting, and noise generation (e.g. reservoir pumps, cleaning procedures, etc.). The significance of such impacts is uncertain and would require further assessment to better understand the population dynamics of bats within this area and any likely adverse effects from the presence of the solar farm upon such populations.
- 3.5. Though construction-phase impacts (e.g. noise, dust emissions) have also been identified, such impacts were not considered to be significant, noting their temporary duration, and



that such impacts would already be occurring throughout the preceding phases of quarrying and backfilling for restoration, whereby the envisaged construction-phase impacts from the installation of the solar farm *per se* are likely to be of a lesser significance. This is on the understanding that any required trenching for the installation of cables (for electrical connection of the solar farm to the grid) beyond the site boundaries is carried out within the footprint of the existing road, to avoid direct disturbance or damage to natural habitats.

- 3.6. In view that the solar farm will be contained within the quarry boundary, and landscaping around the solar farm would act as a buffer, no direct adverse impacts on the surrounding protected habitats (notably priority habitat 6220\*) are expected to occur during operations, as long as noisy equipment is duly muffled to avoid noise emissions beyond the site boundary, in accordance with the best available technology (BAT). Impacts from dispersion of particulate matter through water runoff into the aforementioned Schedule I habitats during operations were assessed of lower risk in the plan-level AA and can be further mitigated through the inclusion of soak-away reservoirs for gradual percolation of runoff into the ground.

#### *Screening outcome*

- 3.7. Noting the findings of the aforementioned plan-level AA, the identified potential impacts on bats during operations of the solar farm, and the observation that impacts on the Natura 2000 site are mainly project-specific and thus have only been assessed to a limited extent in the plan-level AA, ERA determines that a targeted project-level AA study is required to investigate further the likely implications of the proposed solar farm development on the integrity of the protected SAC (MT0000024 - Rđumijiet ta' Malta: Ir-Ramla ta'-Ċirkewwa sal-Ponta ta'Bengħisa) and to identify measures to mitigate any impacts thereon. The AA study should mainly focus on potential impacts on bats from the operations of the solar farm.

#### **4. ERA's Conclusions and way-forward**

ERA's assessment and requirements with respect to the continued quarrying and restoration of the quarry void through infilling (phase 1 of the project) were outlined in ERA's Assessment and Recommendations, including Annex I Schedule III Screening, at EApps documents PA/02566/18 – 103a-b. ERA reiterates its request for further information to conclude its assessment of phase 1 of the project, namely:

- a) An investigation of the effects of the proposed quarrying activities on the hydrogeology of the site, noting the underlying perched aquifer and its springs; and
- c) A comprehensive restoration method statement covering the entire quarry, including the proposed phasing and its estimated duration, and measures to pre-empt and avoid environmental damage/impact at source.

With respect to phase 2 (after-use), the above screening has concluded that the proposed solar farm does not require an EIA in line with Regulation 15 of the EIA Regulations (S.L. 549.46), subject to the required submissions outlined in Section 2 above. On the other hand, in view of residual uncertainty concerning potential impacts on protected bats from the operations of the proposed solar farm (refer to Section 3), a targeted project-level Appropriate Assessment study is deemed necessary to identify any significant impacts on such species and to make recommendations on how these should be addressed.

ERA reserves the right to issue its final position and recommended way-forward with respect to the proposed after-use, including any environmental conditions, following the outcome of the required submissions, including the AA process.

Yours faithfully,

Yves De Blick  
Environment Protection Officer  
f/Director Environment and Resources

***Screening Disclaimer***

*The above screening results, the ensuing conclusions and recommendations are without prejudice to any required changes or updates should the development proposal be eventually modified or should the information/assumptions provided turn out to be incorrect. Any deviations of the proposal from this submission would need to be re-assessed and the merits of this screening would need to be re-opened.*