

Environmental Impact Assessment Appropriate Assessment Water Policy Framework

(Screening according to Schedule III of S.L. 549.46, S.L. 549.44 and S.L. 549.100, respectively)

ERA Reference no.: EA/00014/25

PA Reference no.: PA/03462/25

Project Title: Demolition of existing boundary walls, site clearance, and excavation to the required levels, followed by the construction of an extension to the existing Sewage Treatment Plant. The extension will include a pre-treatment area, a new water plant room, thickening and dewatering facilities, a ferric dosing kiosk, a subterranean sludge holding reservoir, and an MBR area.

Location: Site at Ta' Mgarr Ix-Xini, Għajnsielem

Screening date: February 2026

I. BACKGROUND

1. Outline of Proposal

1.1 The proposal entails the upgrading of the existing Gozo wastewater treatment plant (WWTP), through the construction of an additional treatment unit. The project will also upgrade the treatment rate of 6,000m³ to an average flow capacity of 12,000m³ daily to serve the population increase in Gozo in the past decade, thus resulting in the plant treating 80,000pe load. The proposed development footprint is 7,830m² (refer to Figure 1) while the existing plant has a footprint of 10,000m² (totalling to circa 17,830m²).

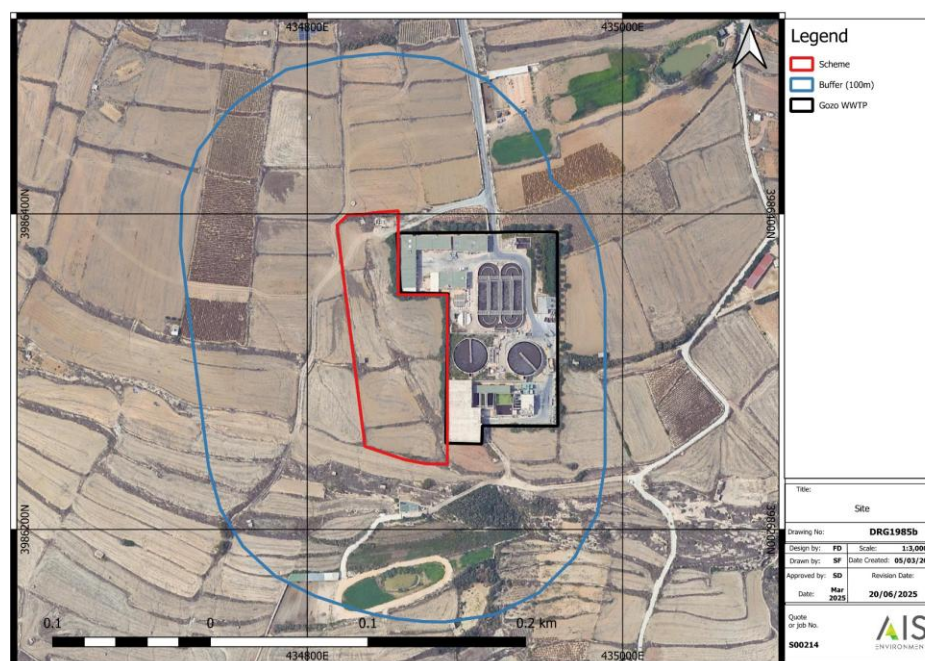


Figure 1: Proposed extension (Source: PDS)

- 1.2 In view that the continuous wastewater treatment at the existing plant cannot be interrupted, the additional unit is proposed to be constructed on a plot of vacant land adjacent to the site (refer to Figures 2 and 3). This additional unit would include Membrane Bioreactor (MBR) technology to ensure the provision of high-quality effluent. The whole treatment process spanning from the arrival of raw wastewater up to the production of reclaimed water (locally also known as 'New Water'), shall consist of the following stages:
- Pumping of wastewater from the inlet pumping station to the plant;
 - Pre-treatment of the raw wastewater;
 - Phosphorus removal;
 - Biological treatment followed by solid/liquid separation (MBR plant);
 - Sludge treatment; and
 - Water reclamation.
- 1.3 During the construction phase, the project is envisaged to generate c. 13,000 m³ of solid waste, consisting primarily of excavated material (limestone and soil) as well as any material encountered and collected during site clearance and off-cuts generated during works. The proposed works would generate approximately 16 daily heavy construction vehicle trips and 15 daily trips by cars and minivans.
- 1.4 During operations, the upgraded plant is expected to generate between 8m³ and 16m³ of dewatered sludge per day (equivalent to 1-2 truckloads per day), as well as 3-4 truckloads per day of washed screenings and grit. All such waste is proposed to be transported in sealed containers to the landfill. Treated wastewater would be discharged through the existing discharge point, with the volume of treated discharge increasing from 8,000m³ to 12,000m³ per day. Due to additional treatment using an Advanced Oxidation Process, 4,000m³ (maximum, during peak operation) of treated wastewater could be reused as 'New Water' for irrigation purposes in agriculture. The increased treatment capacity will reduce the likelihood of any discharge of untreated wastewater during peak flows.

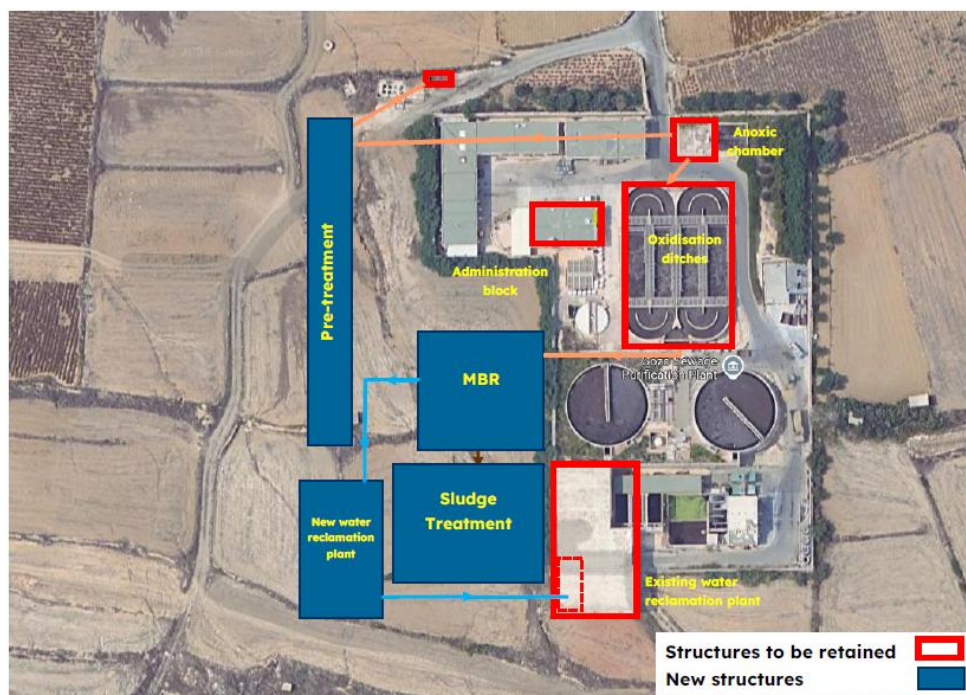


Figure 2: Proposed layout (Source: PDS)



Figure 3: Block plan (Source: eapps PA/03462/25/46a)



VIEW I - existing



VIEW I - proposed



CONCEPTUAL VIEWS - view 1
048_P600_visuals_R00
Site at Ta' Mgarr ix-Xini,
Ta' Mgarr Ix-Xini, Ghajnsielem



Figure 4: Photomontages (view point 1) of the proposed development (Source: e-apps PA/03462/25/52a)



Figure 5: Photomontages (viewpoint 2) of the proposed development (Source: e-apps PA/03462/25/52a)

2. Site context

- 2.1 The project site covers a substantial footprint of about 7,830m², in the Southern part of Gozo, in a coastal area known as Ras il-Ħobż in the limits of Ghajnsielem. The plot of land on which the additional treatment unit is proposed, is presently agricultural land, adjacent to the existing plant. The current plant is surrounded by agricultural land of visual and landscape value, especially to the South of the proposed site.
- 2.2 With regards to groundwater, the proposed development falls within Ground Water Body MT013 – and is located at an elevation of about 40m above mean sea level. The projected maximum excavation depth from current ground level is 6m. The Gozo Mean Sea Level groundwater body is classified with a poor quantitative status. Besides, the extensive agricultural practices present in this area challenge the achievement of good qualitative status when considering nitrates and chlorides.
- 2.3 The geology on site consists of Blue Clay and Globigerina Limestone (GL). Two faults cross the southern part of the 100 m buffer zone. The site lies outside the groundwater safeguard zone, however, is overlying the Gozo Mean Sea Level Aquifer (MT013).
- 2.4 The proposal envisages the intervention of trees forming part of the treatment plant's current landscaping (mainly Italian Cypress and Chaste Trees located at the western boundary of the site, as indicated in document PA/03462/25/46), which will be uprooted and replanted within the new premises.
- 2.5 The proposed site also falls within the area of influence of the following Natura 2000 sites as declared through the Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44):

- Special Protection Areas: MT0000027: *Rdumijiet ta' Għawdex: Ta' Ċenċ* (Government Notice No. 859 of 2008);
- Special Protection Areas: MT0000112: *Żona fil-Baħar madwar Għawdex* (Government Notice No. 1311 of 2016);
- Special Area of Conservation MT0000034: *L-Inħawi ta' Ta' Ċenċ* (Government Notice No. 1379 of 2016); and
- Special Area of Conservation: MT0000104: *Żona fil-Baħar bejn Il-Ponta tal-Ħotba u Tal-Fessej (Għawdex)* (Government Notice No. 682 of 2018).

3. Case history

The site was previously subject to the following development permit applications:

- *PA/01548/02*: Construction of an urban wastewater treatment plant, intake pumping station and adjoining access roads. Approved.
- *PA/03144/05*: Construction of an urban wastewater treatment plant, intake pumping station and adjoining access roads and temporary construction camp. Approved.
- *PA/02503/12*: To construct a polishing plant within and on part of the existing treatment plant site. Approved.
- *DN/01808/14*: PV panels on treatment plant site at Gozo Treatment Plant, Ras Il-Hobz, Ghajnsielem, Gozo. Accepted.
- *PA/03216/16*: Installation of a communal PV farm system on top of the WSC sewage treatment plant. Includes PV panels inclined at a 10deg angle and necessary trenching works to connect electricity cables to the existing substation. Approved.
- *PA/02267/19*: Renewal of application *PA/02503/12* to construct a polishing plant and on part of the existing treatment plant site at Ghajnsielem, Gozo. Withdrawn by applicant.
- *PA/05435/19*: Proposed extension to existing polishing plant and sanctioning of alterations/extensions within the existing Treatment Plant Perimeter. Approved.
- *PA/02332/21*: Installation of diesel storage tank for the standby generator at Gozo STP. Approved.
- *DS/00213/23*: Support for failed boundary walls at Gozo Sewage Treatment Plant, Site at Mgarr ix-Xini, Triq ta' Brieghen &, Ta' Mgarr ix-Xini, Ghajnsielem. Accepted.

The existing wastewater treatment plant was subject to an environmental impact assessment in 2002 by the then MEPA, in relation to planning application *PA/01548/02*.

The current operations of the facility are subject to an Environmental Permit (*EP/00389/24*).

4. Screening Criteria

4.1 EIA Screening

(citations refer to S.L. 549.46, except where otherwise specified):

The proposed development falls within the scope of the Environmental Impact Assessment Regulations (S.L. 549.46), notably in terms of the following Category II criteria in Schedule I, thereby requiring further screening in terms of S.L. 549.46:

- *Section 13.0.2.1 (Any change to, or extension of, projects [even if the project is already authorised, executed or in the process of being executed], particularly projects covered by Category I or Category II, where the change or extension itself does not fall under Category I but: (i) meets the thresholds or criteria set out in Category II; or (ii) may have significant adverse effects on the environment); and the associated*
- *Section 4.2.2.1: Waste-water treatment plants, not falling within Category I.*

4.2 Appropriate Assessment Screening

(citations refer to S.L. 549.44, except where otherwise specified):

The proposal lies within the area of influence of the Natura 2000 sites identified in para 2.5 above, thereby also requiring further screening in terms of S.L. 549.44.

4.3 Water Policy Framework Screening

(citations refer to S.L. 549.100, except where otherwise specified):

The proposed development falls within the scope of the Water Policy Framework Regulations (S.L. 549.100) in view that the plant discharges treated wastewater into MTMTC103 – *Il-Fliegu ta' Kemmuna*. Therefore, this proposal requires screening to determine whether assessment in accordance with S.L. 549.100.

5. Documents used for screening

- a. Project Description Statement (PDS), referred to ERA via e-apps on 26/05/2025 (PA/03462/25/20a);
- b. Revised PDS, referred to ERA directly on 22/10/2025; and
- c. Clarification note from the architect, referred to ERA directly on 04/02/2026.

II. ASSESSMENT OF PROPOSAL

6. EIA Screening in terms of Schedule III of S.L. 549.46

General

6.1 The proposal involves an extension to the existing facility. The proposed intensification of operations on site is not expected to introduce new environmental disturbances or effects, but will reinforce existing operational activities and their associated environmental disturbance, including noise, traffic and light generation. It will also reduce impacts related to the discharge of wastewater to the sea due to improved capacity and treatment.

6.2 Whereas the construction of the existing plant resulted in the uptake of natural land and modifications to the local topography, the proposed extension will similarly require additional land take. The extension is planned to abut the existing facility on its western side and will occupy agricultural land. ERA acknowledges the need to improve the plant's treatment capacity in order to address current shortcomings—namely the discharge of untreated wastewater during peak flows that exceed the plant's present capacity—as well as to meet future demands. In this regard, the uptake of additional land for the extension is considered necessary.

Construction-phase effects

6.3 The proposed works will generate 13,000 m³ of solid waste, mainly consisting of excavated soil and limestone rock, in addition to some minor fractions of off-cuts generated during the works. Such waste generation is not considered significant, noting that the excavated soil will be transported off-site for re-use, and as long as all waste is management and handled in accordance with the Waste Regulations (S.L.549.63) and the Construction and Demolition Waste Framework Regulations (S.L. 549.161).

6.4 Excavation and construction works will generate dust, noise, vibration and light emissions. Such impacts are short-term and can be minimised at source in line with a Works Method Statement. Such documents should address proper containment of machinery, equipment, materials, run-off within the construction site boundaries (hoarding), covering of truck loads and material stock-piles, and limitation of works to daylight hours.

Operational effects

- 6.5 While the operational emissions of the proposed extension—namely noise, light pollution and emissions to air—are expected to be similar in nature to those currently generated on site, their intensity is likely to increase as a result of the proposed expansion in the plant's treatment capacity. The potential significance on the surrounding natural environmental, notably the nearby sensitive environments, namely the adjacent coastal cliffs and offshore area used by protected seabird species, are unclear. Any potential issues concerning run-off, seepage or overflow into the surrounding terrain or into the sea during malfunctioning or breakdown of the plant are also unclear. These aspects are discussed in more details in the context of the protected Natura 2000 sites in section 7 below.
- 6.6 Exterior lighting should be kept to the barest minimum, not exceeding existing lighting levels, and abatement measures to mitigate noise generation by additional equipment/machinery should be implemented. With respect to emissions to air, a new odour abatement system for the inlet pumping station and biological filters for the emission points of the facility are proposed, which are envisaged to improve the resulting effect on the surrounding area.
- 6.7 From an environmental permitting perspective, the plant's extended operations and all associated mitigation measures and operational limits/parameters require to be duly covered by an Environmental Permit issued by ERA (i.e. update to the existing permit EP/00389/24).

7. Appropriate Assessment (AA) Screening, in terms of S.L. 549.44.

- 7.1 The wastewater treatment plant lies within the area of influence of the Natura 2000 sites identified in para 2.5 above, thereby also requiring further screening in terms of S.L. 549.44.
- 7.2 Neither the existing nor the proposed facilities are located within the boundary of one of the above-mentioned Natura 2000 sites. The existing facility, discharges treated water to the sea, through the outflow located on the rocky shore to the south of the plant. The discharge flows into the sea, which is designated as a marine SAC, MT0000104 - *Żona fil-Baħar bejn Il-Ponta tal-Hotba u Tal-Fessej (Għawdex)*. The SAC serves for the protection of 4 habitat types (Habitat 1110 - Sandbanks which are slightly covered by sea water all the time; Habitat 1120 - Posidonia beds (*Posidonium oceanicae*); Habitat 1170 - Reefs; and Habitat 8330 - Submerged or partially submerged sea caves).
- 7.3 The discharged water also flows into the sea, a marine SPA, MT0000112 - *Żona fil-Baħar Madwar Għawdex*. This SPA covers a large offshore area encompassing all of Gozo's marine waters as well as those of the northernmost part of Malta, and serves the protection of seabirds, namely Yelkouan shearwaters (*Puffinus yelkouan*) and Cory's Shearwaters (*Calonectris diomedea*).
- 7.4 The terrestrial SPA, MT0000027: *Rdumijiet ta' Għawdex - Ta' Ċenċ*, covers a terrestrial area to the West of the plant and serves the protection of several seabirds, namely Yelkouan shearwaters (*Puffinus yelkouan*), Cory's Shearwaters (*Calonectris diomedea*) and European storm petrel (*Hydrobates pelagicus*).
- 7.5 The proposed upgrading of the facility, and resulting increased capacity, will reduce the likelihood of disposal of untreated sewage in the area. In this regard, the proposed upgrading is beneficial to the marine water body, and to the habitats and species it harbours. With respect to emissions to air, a new odour abatement system at the inlet pumping station and biological filters at the emission points of the facility are proposed.

- 7.6 On the other hand, the potential significance of any additional disturbance due to permanent light and noise emissions from the increased treatment operations on site are unclear. In this regard, the operational effects of the upgraded plant onto the surrounding terrestrial and marine SPAs and its protected seabirds species require further assessment.

The terrestrial SAC (MT0000034 - *L-Inħawi ta' Ta' Ċenċ*) covers also the terrestrial area to the West of the plant and serves the protection of 6 species of flowering plants (*Cremnophyton lanfrancoi*, *Elatine gussonei*, *Hyoseris frutescens*, *Linaria pseudolaxiflora*; *Ophrys melitensis* and *Palaeocyanus crassifolius*) and 8 habitat types (Habitat 1240 - Coastal Cliffs; Habitats 5330/5410/5420 - Garrigue/Phrygana; Habitats 3170/3140 - Temporary Ponds and Rock Pools; Habitat 6220 - Steppe Communities and Habitat 1410 - Salt Meadows). No impact is envisaged on the species and habitats protected through this SAC in view that the proposal will not result in the direct interventions on any relevant habitats or species since the plant is located at a significant distance away from the Natura 2000 site.

Conclusion

- 7.7 Noting the above considerations, the proposed wastewater treatment plant upgrading requires a targeted evaluation of any potential significant effects from increased operational light and noise emissions, as well as potential run-off/spillage effects in the event of any malfunctioning or breakdown of the plant. To this effect, an Appropriate Assessment in terms of Regulation 19 of S.L. 549.44 is required, and the attached terms of reference for such study refer.

8. Water Framework Screening, in terms of S.L. 549.100

- 8.1 As mentioned in section 6 above, the wastewater treatment facility releases treated water into the sea through an outflow point on the rocky shore to the west of the facility. The water body in which the facility discharges is MTC103 – *Il-Fliegu ta' Kemmuna*. Given that the proposed upgrading of the facility's capacity and operations will result in improved treatment and a reduction in likelihood of disposal of untreated sewage in the area, the proposal is expected to contribute to the achievement and maintenance of good ecological and chemical status of the water body, and no further assessment in terms of the Water Policy Framework Regulations (S.L. 549.100) is deemed necessary.

9. Conclusions and Recommendations

- 9.1 Screening has determined that no further assessment is required in terms of the EIA Regulations (S.L. 549.46) and the Water Policy Framework Regulations (S.L. 549.100).
- 9.2 With respect to the Flora, Fauna, and Natural Habitats Protection Regulations (S.L. 549.44), a targeted study (Appropriate Assessment) is required to evaluate any potential effects from increased operational light and noise emissions onto the surrounding protected sites (notably in relation to the seabirds species and their coastal habitat), and from any malfunctioning or breakdown of the plant and resulting spillages/run-off to the surrounding downstream areas and into the sea. Terms of reference are included in **Annex II**.