

# Annex I

## Environmental Impact Assessment

### Schedule III

(Screening according to S.L. 549.46)

**ERA Reference no.:** EA/00027/19  
**PA Reference no.:** PA/04647/18  
**Project Title:** Landscaping works including alterations to carriageway, construction of promenade, installation of infrastructural services, paving works, installation of street furniture and provision of parking spaces.  
**Location:** Site at, Triq Tat-Tabija/, Triq Gheriexem, Rabat, Malta  
**Screening date:** May 2019

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#### 1. Outline of Proposal

- 1.1 PA 04647/18 is a development application for the widening of Triq Tat-Tabija and Triq Gheriexem, parts of which are classified as being Outside Development Zone (ODZ). The existing carriageways will be modified to better accommodate the traffic passing through these roads; however, the widening will not create any additional lanes. The proposal, which has a site area of around 1,971m<sup>2</sup>, also includes landscaping works and the construction of a promenade.
- 1.2 Extensions over land beyond the development zone boundary will be through cantilevered decks supported by piles. The piles will have a diameter of circa 0.8 m / 0.90 m. Piling will be carried out both from the existing road and from beyond the existing wall, below street level. The proposal will have a total of 200 piles: 100 piles will be within the footprint of the existing road, whereas the other 100 piles will be located beyond the existing retaining wall. The piles will be placed at 6.5 m intervals. The piling in the outer area will be carried out from a temporary platform protruding beyond the existing road. The piling exercise will result in the pruning or removal of trees. Any area below the existing street level that will be temporarily cleared will be rehabilitated once the development is completed.
- 1.3 The proposal will result in the removal of the left-turn slip lanes to and from Triq Santa Rita. This change will provide more space for landscaping and will create a safer junction. The current 15 formal car parking spaces will be removed and will be relocated further to the west of the proposal. Four formal parking spaces will be lost. A paved pedestrian zone will be created on the cantilevered deck.

#### 2. Site Context

- 2.1 The proposed development site is located on the edge of the Rabat-Dingli plateau on Triq Tat-Tabija and Triq Gheriexem along the northern edge of Ir-Rabat, Malta. The said road starts from next to the Domus Romana leading to the Nigret recreational and *Ghajn*: The National Water Conservation Awareness Centre. The surrounding area consists of agricultural land and residential areas. Agricultural land is located in the tal-Gheriexem valley.
- 2.2 The proposal also lies;
  - within the Rabat and Mdina Area of Archaeological Importance (G.N. 1064/13);
  - within the Rabat and Mdina Area of High Landscape Value (eastern side) (G.N. 348/01);

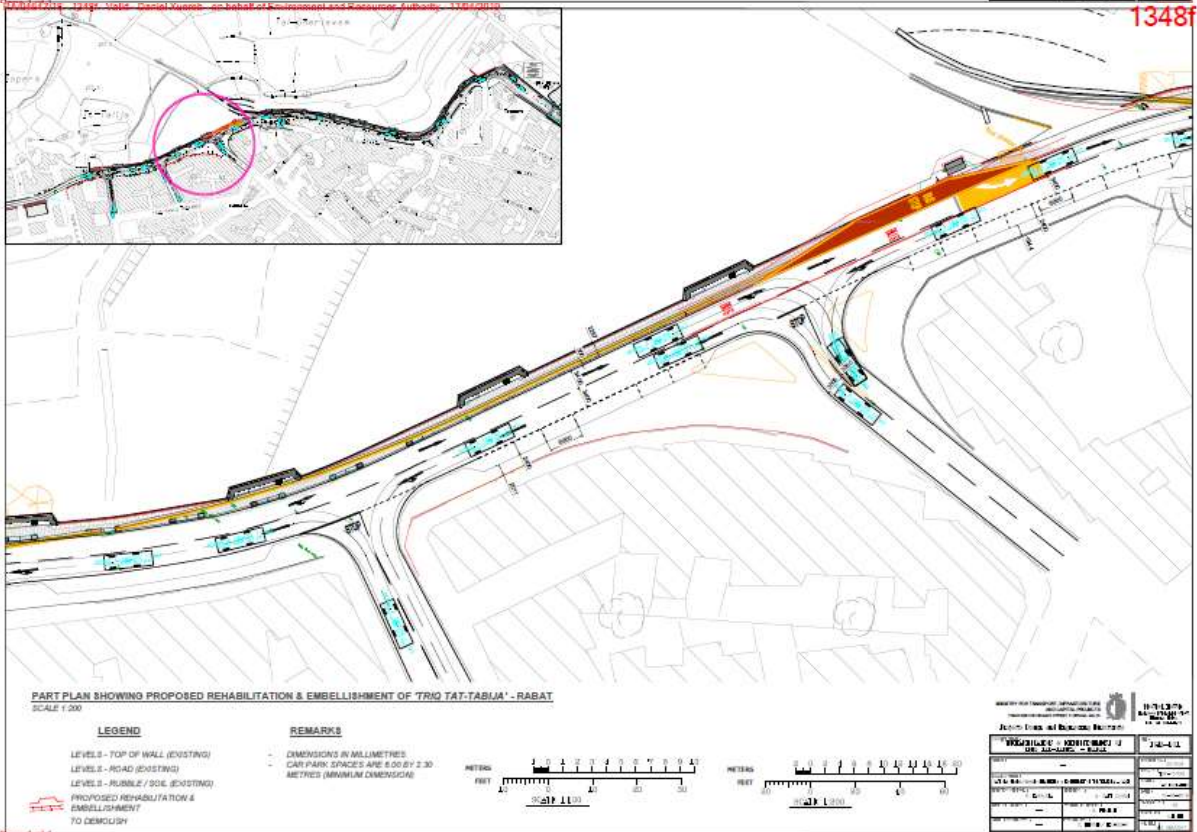
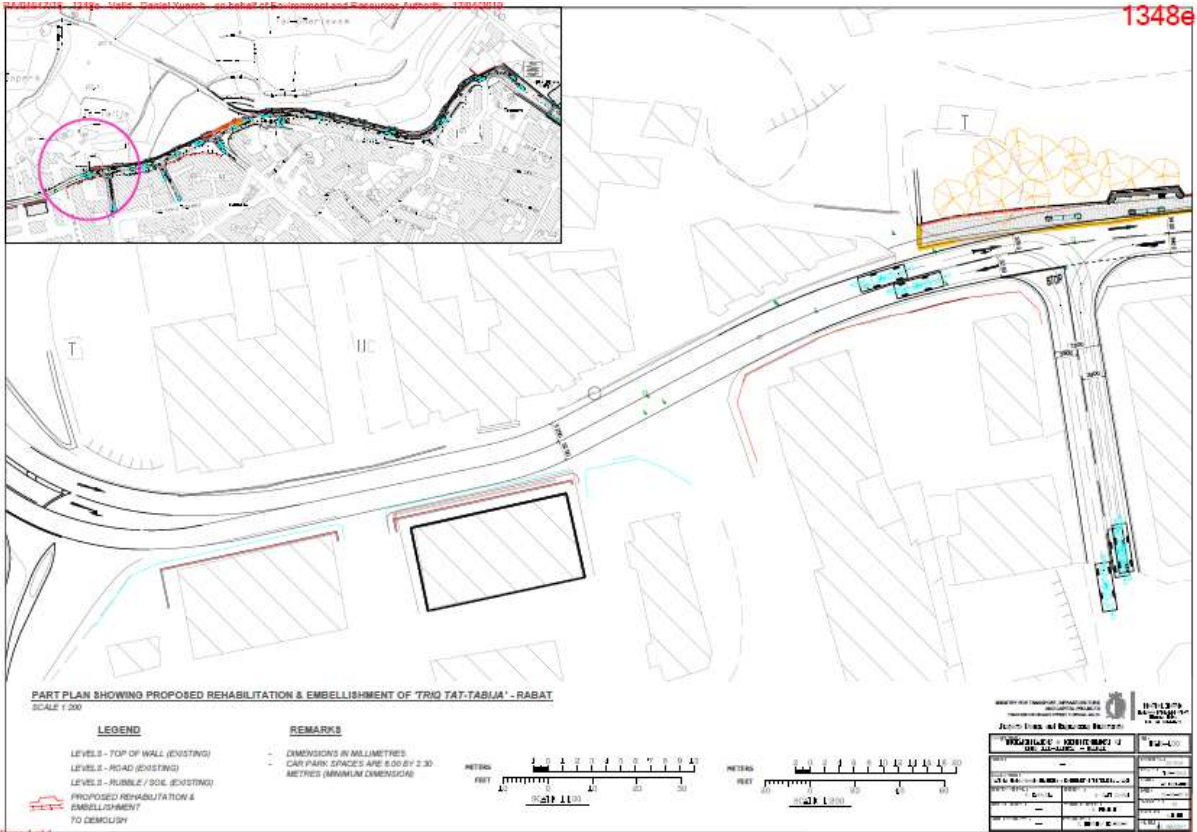
- within the Chadwick Lakes and partially within the Mdina Area of High Landscape Value (western side) (G.N. 1064/13);
- partially within the Buffer Zone of the Għeriexem Fountain (G.N. 313/98);
- partially within the Buffer Zone for Saracenic Cemetery (G.N. 588/94);
- partially within the Buffer Zone for Roman Villa (G.N. 588/94); and
- adjacent to an unclassified farmhouse (G.N. 1064/13).

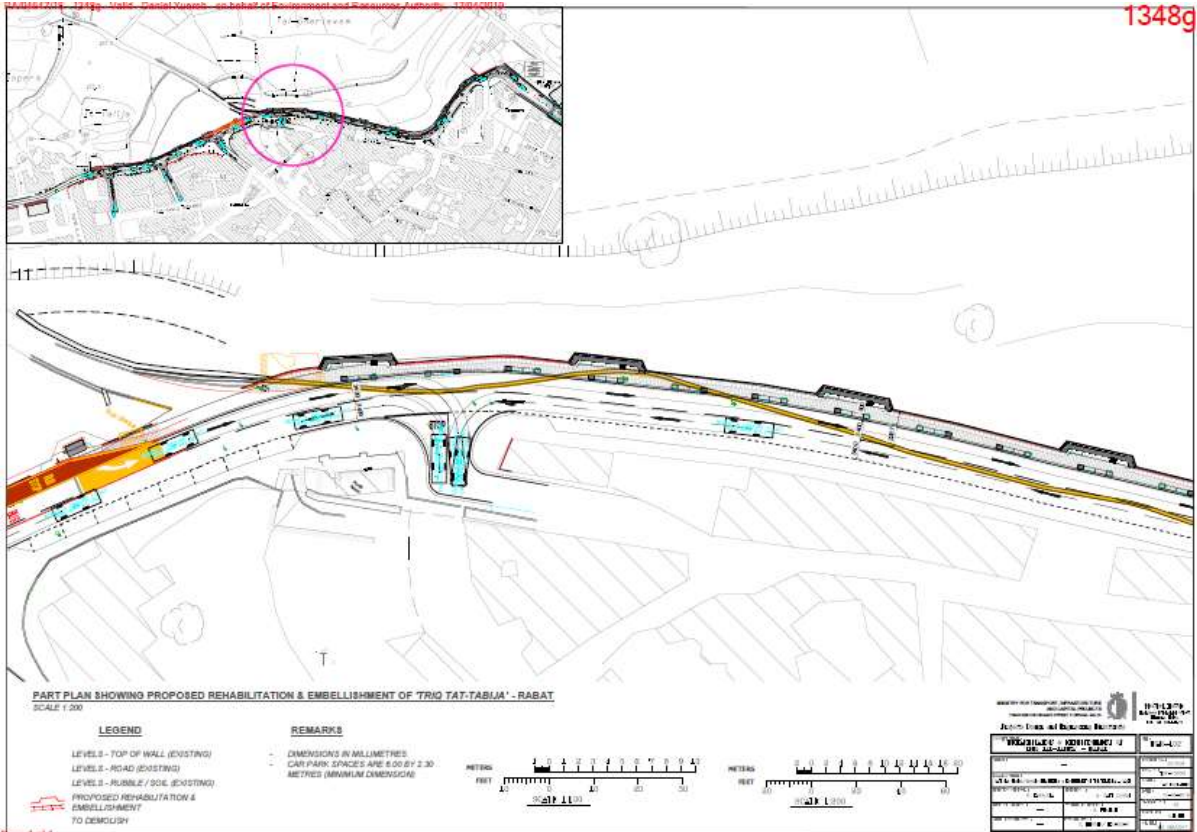
2.3 Other scheduled features in the vicinity of the Scheme site include;

- Class B Ditch of Roman Melite (G.N. 766/98);
- Grade 1 Għeriexem Fountain (G.N. 313/98);
- Grade 1 Engineering scheduling related to the water source of the Għeriexem Fountain (Unnamed) (G.N. 313/98);
- Class B Rock Cut Chambers on Triq Għeriexem corner with Triq ir-Rebħa (G.N. 1064/13);
- Class B Structural and deposits at 1, Alley 1 Triq Għeriexem and 5, Triq Għeriexem (G.N. 1064/13);
- Class B Structural and deposits on Triq Doni (G.N. 1064/13);
- Unclassified Remains and Deposits on Triq Doni (G.N. 1064/13);
- Class B Settlement within the St Margerita Cemetery (G.N. 1064/13);
- Class A Site of Archaeological Importance – Saracenic Cemetery and Roman Remains (G.N. 588/94);
- Class A Site of Archaeological Importance – Domus Romana (G.N. 588/94 & G.N. 766/98); and
- Roman Villa Museum (Architecture – Grade 1) (G.N. 348/01).

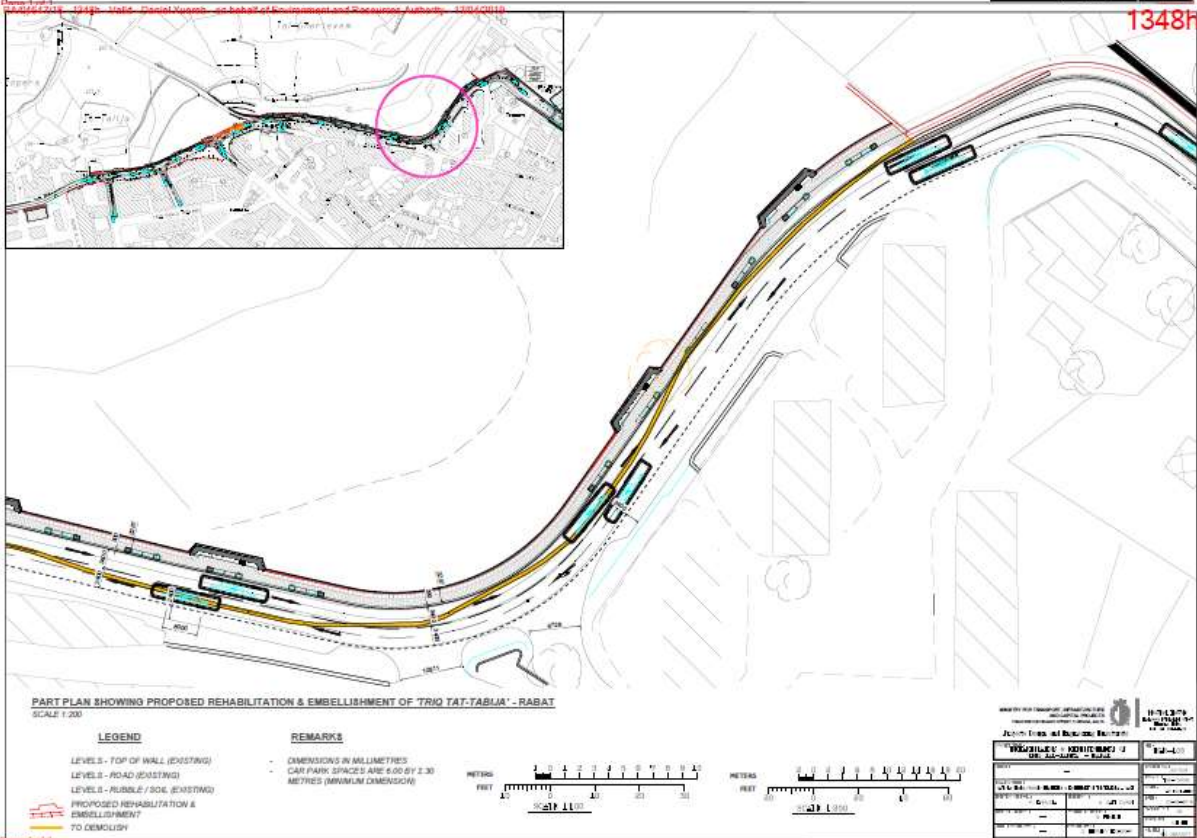


**Figure 1:** Location of the site earmarked for the proposal (**Source:** PA Geoserver)





1348g



1348h

Figure 2: Block Plan (Source: PA/04647/18/Doc.1348e-h)



**Figure 3:** Photomontages (Source: PA/04647/18/Doc.1357a-b)

### **3. Overall Assessment and EIA Screening**

- 3.1 The proposed development falls within the scope of Schedule I, Category II Section 2.1.2.1 (Construction, excavation or realignment of roads, tunnels, viaducts or bridges, not covered by Category I, if located ODZ or at the edge of the development zone) of the Environmental Impact Assessment Regulations, 2017 (S.L. 549.46).
- 3.2 Documents used for screening:
- ERA consultation reply (PA/04647/18/Doc.1113a);
  - Project Description Statement (PDS) (PA/04647/18/Doc.1352a); and
  - Draft Construction Management Plan (CMP) (PA/04647/18/Doc.1348a)
- 3.3 The following are potential impacts envisaged on the surrounding environment:
- 3.4 The site is located within an area of high archaeological sensitivity. Piling and construction works will be mitigated as per agreement with the SCH, and include the provision of an archaeological monitor on site. Following such mitigation measures any impacts are unlikely to be significant.
- 3.5 The proposal may have an impact on the geo-environment. A desk study to assess the geotechnical issues within the development site confirmed that the site has stability issues. Precast cantilevered beams supported on piles at the centre of the existing road and beneath the existing road footprint will be used instead of a gravity retaining wall to improve the stability of the

road and of the surrounding area. This would reduce stress of the Blue Clay layer. Further ground investigations, as outlined in the PDS, would need to be undertaken to ensure that any significant impacts on geology are effectively mitigated.

- 3.6 The proposal will take up about 1,971m<sup>2</sup> of undeveloped land outside the development zone. Active agricultural land is located towards the western half of the development site overlapping with the area outside the development zone. Damage to adjacent natural areas/fields due to vehicular trampling during construction works from within the valley is envisaged. Any disturbed areas would be rehabilitated and returned to their former use once works are completed.
- 3.7 The development will result in the removal of around 15-20 trees (Figure 14 of the PDS), including the largest *Ficus carica* trees in the Maltese islands. According to Regulation 5 of the Trees and Woodlands Protection Regulations (S.L. 549.64), these trees are eligible for the designation of a Tree Protected Area (TPA). The undeveloped land to be taken up by the proposal contains a number of important species. The existing retaining wall along Triq Gheriexem hosts a good population of *Lepidium graminifolium* L. This species commonly occurs in Gozo but is scarce in Malta. Work on the peripheral wall might have detrimental effects on such populations. The proposed works also overlap with an area rich in water-associated plants which are a result of the outflow of water from the Ghajn Gheriexem freshwater spring, found directly opposite to this area. These plants include *Veronica anagallis-aquatica*, *Stellaria neglecta*, *Lepidium graminifolium* and *Apium nodiflorum* which are all scarce, as well as other species such as *Potentilla reptans*, and *Puccinellia fasciculata*.
- 3.8 The PDS does not delve into the conservation value of these species but limits itself to protected species. In fact, the PDS proposes compensatory planting to make up for the loss of trees. The PDS notes that works will need to be properly supervised to curtail unnecessary trampling and to ensure that only those trees that have to be uprooted to allow for the construction are actually removed. Once the works are completed, the disturbed areas will be rehabilitated and returned to their former use. Furthermore, plant species to be used in landscaping works will be selected carefully to avoid disturbance of adjacent natural areas through the escape of cultivars and to ensure that visual integration is maximised.
- 3.9 In this regard, suitable preventive measures and monitoring is recommended to ensure that impacts are restricted to the actual intervention areas and that rehabilitation is implemented.
- 3.10 Construction will generate temporary emissions, namely dust, noise, and vibration, as well as the potential for damage to the underlying perched aquifer. These impacts can be mitigated through the preparation and implementation of a Construction Management Plan (CMP). Measures include the wetting of work surfaces and collection of accumulated dust, as well as use of water sprinklers, a hydrant and suitable equipment. The proposed development site will also be equipped to provide a wheel wash and the use of mechanical road sweeper.
- 3.11 Any soil that will be cleared from the area for piling will be reused on site once the site is reinstated. Approximately, 1,206 m<sup>3</sup> of clay will be extracted in the piling process and will be re-used, stored, or disposed of in line with the relevant legislation.
- 3.12 Operational lighting may also have an impact on the ecosystem within the valley. In order to mitigate any impacts, the lighting system will be carefully considered, including utilising of LED bulbs, with directional downlighting to minimise light dispersion.
- 3.13 The proposed project is located on the edge of Rabat facing Mtarfa which will involve infringement into undeveloped land in the valley that will affect two Areas of High Landscape Value. The eastern side of the project within the Rabat and Mdina area is designated as an Area of High Landscape Value as per Government Notice 348/01. The western side of the project partially falls within the Mdina Area of High Landscape Value as per Government Notice 1064/13. The project is unlikely to have any significant impacts from long-distance views as can be noted from the photomontages at Figure 3. Short-distance views are deemed significant.

## 4. Conclusion

- 4.1 The proposal is a modification to an existing road infrastructure, including the construction of a promenade on land beyond the development zone. The above screening has identified the following main areas of concern:
- i. *Geotechnical*: the issues/impacts are significant however these are already being addressed in the PDS;
  - ii. *Cultural heritage, hydrology, agriculture, topography/terrain reinstatement*: issues/impacts are potentially significant but are avoidable at source through proper design works management;
  - iii. *Landscape and visual amenity*: Whilst the photomontages indicate that the proposed intervention is not conspicuously visible from the selected long-distance views, impact from closer-range viewpoints is expected to be more pronounced. This issue needs to be addressed through the following:
    - Inclusion of other representative receptor points (see approximate indications in the attachment); and
    - Efforts for exhaustive mitigation of visual impact on the immediate and pristine rural environment (short-distance views), such that the development blends harmoniously into the surrounding landscape backdrop (interface between historic/urban and rural environments). A clear indication of the design measures that will be adopted in this regard is required.
  - iv. *Ecology*: The continued existence of existing features worthy of conservation (e.g. aquatic vegetation; unique large Fig tree *Ficus carica* – see attached vegetation survey) needs to be guaranteed and integrated into the project design.

It would also be opportune to discuss these aspects directly at a meeting with applicant and its consultants.

- 4.2 As long as the above are suitably addressed and cleared by ERA, the proposal is unlikely to be significant to the point of warranting an EIA.
- 4.3 ERA will be in a position to provide conditions and specifications (e.g. approved documents) in the development permit once the Further Submissions have been duly submitted and cleared by ERA.
- 4.4 Furthermore, it is being recommended that all proposed upgrades and extensions to the national road network are assessed at a strategic level, in order to have a clear outline of the resultant impacts on traffic and air quality.

### Further Submissions/clarifications

- i. Photomontages taken from the viewpoints attached to this reply;
- ii. A rendered elevation to mitigate the visual impact of the proposal;
- iii. A plan showing an overlay of the piles such that the species identified at Figure 4 (below) are unaffected; and
- iv. Sections showed on doc 1348d are to be cross-referred on the respective plans in docs 1339 b to e and docs 1348 e to h, and the carriageway and promenade width should be minimised so as to address the concern that had already been indicated by ERA.



**Figure 4:** Ecology Survey

**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.