Annex 4: Procedures for chance finds and ESM&MP for physical cultural resources¹

Management of Culturally Valuable Sites²

Law 117/1983 for the Protection of antiquities has set certain standards that should be followed during excavation works near a registered antiquity site. Proposed mitigation measures include:

- 1. Identifying a comprehensive list of all registered antiquities falling within the domain of the project and possibly at risk from construction activities.
- 2. Provide supervision by the Supreme Council of Antiquities on implementation of construction works at identified locations.
- 3. If dewatering activities are to take place, the process should be undertaken under the supervision of foundation engineers who shall perform necessary soil investigations.
- 4. Reduce vibration, in identified locations of antiquities:
 - a. using manual tools whenever possible;
 - b. phasing work to eliminate vibrations from several machinery; and
 - c. Establish cutoff barrier through a vertical trench to absorb vibrations.
- 5. Fixing gas risers on the back of architecturally valuable structures.
- 6. Chance find process, in case an antiquity is found during excavation, includes stopping excavation works, and contacting the Supreme Council of Antiquities to handle the site.

Monitoring activities will be site specific according to the requirements and conditional permits granted by the Supreme Council for Antiquities.

- 1. Monitor vibration levels at the monument location during excavation.
- 2. Undertake geophysical survey for some locations prior to construction, according to the instructions of the Supreme Council of Antiquities.

The LDC site supervisor will be responsible for documenting the monitoring activities in monthly reports delivered to EGAS.

These mitigation measures, **if required**, shall be implemented by the Council, while the costs will be covered by LDCs.

Cultural property include monuments, structures, works of art, or sites of significance points of view, and are defined as sites and structures having archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. This includes cemeteries, graveyards and graves.

Antiquities Law 117/1983: Article 24 states that everyone who finds by chance the part or parts of a fixed monument in its place must promptly inform the nearest administrative authority within forty-eight hours.

¹ In the highly unlikely event that such finds are encountered in the project areas which are have been previously excavated for all underground utilities.

² If encountered within project areas.

Prior to the construction phase, the approval shall be obtained from the antiquities department and surveying department

Chance Find Procedures

- 1. Stop the construction activities in the area of the chance find;
- 2. Delineate the discovered site or area;
- 3. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be present until the responsible local authorities and Ministry take over;
- 4. Notify the site manager and HSE supervisor who in turn will notify the responsible local authorities and the Antiquities Authority immediately (within 24 hours or less);
- 5. Responsible local authorities and the Antiquities Authority would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures;
- 6. Decisions on how to handle the finding shall be taken by the responsible authorities from the Antiquities Authority;
- 7. Construction work could resume only after permission is given from the responsible local authorities and the Antiquities Authority concerning safeguard of the heritage.

These procedures must be referred to as standard provisions in construction contracts, where applicable. During project supervision, the site manager and HSE supervisor shall monitor the above regulations relating to the treatment of any chance find encountered are observed.

Relevant findings will be recorded in Monitoring Reports and Implementation Completion Reports (ICRs) submitted to the World Bank.

Table Error! No text of specified style in document.-1: Management matrix for cultural sites (if encountered)

| | ea) | | | | Estimated |
|-------------------------------------|---|---|---|--|---|
| Impac t | Mitigation measures | Responsibilit y of mitigation | Responsibilit y of direct supervision | Means of supervisio n | Estimated Cost of mitigat ion / supervi sion |
| | Identify areas of antiquities, monument repair zones Supervise | Contactor & Supreme Council for Antiquities and Local Council Expert from | LDC HSE | Review permitting procedures and ensure review of Council Review | LDC costs Indicative |
| Effects on cultura 1 sites | intensity and locations of construction activities | Supreme Council of Antiquities | | field reports + field supervision | cost to be revised and included in contractor bid \$715 / site for supervision and measureme nt of vibration for locations identified as "monument -critical" |
| | Control dewatering process | Contractor | Supreme Council Expert + LDC HSE | Field supervision | Indicative cost to be revised and included in contractor bid \$2,850 / site |
| | Reduce vibrations | Contractor | Supreme council Expert + LDC HSE | Contractua l clauses + Field supervision | Indicative cost to be revised and included in contractor bid \$2,150/site |

| Impac t | Mitigation measures | Responsibilit y of mitigation | Responsibilit y of direct supervision | Means of supervisio n | Estimated Cost of mitigat ion / supervi sion |
|------------|---|---------------------------------------|---|--|--|
| | Preserve architecturall y valuable sites | Contractor | LDC HSE | Field supervision | Contractor costs (included in bid price) + LDC costs |
| | Preserve any found antiquity | Contractor + LDC HSE supervisor | LDC HSE | Field inspection throughout works and review field reports | Contractor costs (included in bid price) + LDC costs |

Table Error! No text of specified style in document.-2: Monitoring matrix for cultural sites (if encountered)

| Impact | Monitor ing indicato rs | Responsib ility of monitorin g | Frequen cy of monitori ng | Locatio n of monitori ng | Method s of monitori ng | Estimat ed Cost of monitori ng |
|--|--|---|---|--|--|---|
| Effects on monument s and vulnerable buildings | Vibratio n test results Investig ate possible buried antiquiti es | LDC HSE + Supreme Council for Antiquities | During construction near sites identified by the Council Once before construction if required by the council | Streets and areas identifie d by the Council | Calibrat ed vibratio n test meter Geophy sical survey | (\$750/met er + \$160 maintenan ce and calibration) x 11 vibration meters = \$10,000 Contractor costs (included in bid price) in areas designate d as antiquities or monumen t repair zones (to be covered by LDC) |