LYDIAN INTERNATIONAL Amulsar Gold Mine Project Environmental and Social Impact Assessment, Chapter 6



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6.17 Cultural Heritage

Potential impacts to cultural heritage from the Amulsar Project consist of direct physical disturbance of archaeological sites as a result of construction and mining activities. The Project is set in an archaeologically rich region, with evidence of past occupation beginning more than fifteen thousand years ago, at the latest, and extending through the Late Medieval period to the present. The region surrounding the Project area has not yet been the subject of comprehensive academic research, and may hold substantial potential to illuminate Armenian prehistory, particularly that of the Palaeolithic and Neolithic periods which are not well understood in this region or in Armenia as a whole. In addition to the sites and potential sites identified by the baseline investigations, there is also a high potential for undiscovered archaeological sites within the Project area. Baseline investigations have identified no built heritage, or tourist sites in or near the Project area.

6.17.1 Project Activities Affecting Cultural Heritage

The assessment focuses on potential direct physical impacts to archaeological cultural heritage that would affect a site's scientific or perceived cultural value through physical disturbance. Examples of direct physical impacts include soil disturbance and displacement of an archaeological site caused by grading, excavation, or other site preparatory activity. Wherever ground-disturbing construction or operation activities directly encroach on cultural heritage resources, these direct physical impacts will occur. Thus, the area of direct physical impact will include the footprints of the following Project components as well as their associated construction disturbance footprint:

- Erato open mine pit;
- Tigranes and Artavazdes open mine pit;
- Barren Rock Storage Facility (BRSF) and associated sediment pond;
- Run of Mine (ROM), crushed ore and low-grade ore stockpiles;
- Topsoil stockpiles;
- Crushing plant;
- Fueling area;
- Truck shop and administration offices;
- Explosives magazine;
- Haul roads (approximately 30 m wide corridor)
- Access roads (approximately 10 m wide corridor);
- Overland conveyor line (approximately 30 m wide corridor);
- Conveyor truck load-out structure;



- Electrical substation;
- Heap Leap Facility (HLF) including:
 - Heap leach pad (HLP);
 - o Process Pond and Storm Ponds;
 - Contact Water Pond;
 - Water passive treatment system (PTS);
 - o Adsorption-Desorption-Recovery (ADR) plant; and
 - Offices and laboratories;
- Domestic waste water treatment facilities;
- Landfill for domestic and non-hazardous industrial waste;
- Temporary construction workers' camp;
- Arpa River Pump Station;
- Quarries for construction materials; and
- Temporary construction laydown areas.

In addition to these larger mine components, the construction of smaller mine infrastructure such as water pipelines and electrical lines could result in impacts to cultural heritage sites. Areas that will be subject to ground disturbance as part of construction staging and preparation, such as laydown areas and construction access roads, could also result in direct physical impacts to cultural heritage sites. As the locations of all of these construction components may not yet have been determined, their associated impacts will be evaluated as part of the post-ESIA commitments outlined in the Project's Cultural Heritage Management Plan (CHMP).

Direct physical impacts are anticipated during the construction phase of the Project in the majority of the Project areas identified above. The Project will disturb approximately 922 ha of land. Operational phase archaeological impacts would only occur as new mining areas are excavated, as archaeological resources in mountainous terrain are typically located near the ground surface. The majority of impacts to potential cultural heritage sites identified during baseline survey and located within the Project footprint can be avoided or mitigated prior to construction and operation. There is the potential for archaeological remains not identified prior to construction to be inadvertently damaged during the construction or operation phase. In order to mitigate damage to previously undiscovered cultural heritage sites, the Project will implement a Chance Finds Procedure during the construction and operations phases.



The Project affected area is largely an undisturbed or developed area that contains objects, structures, and natural landscape features used by the community for a range of traditional agricultural and leisure activities with cultural heritage value. The cultural services associated with the Project affected area are considered in Chapter 6.20. Appendix 8.6 (Stakeholder Engagement Plan) identifies the discussions that relate to the intangible cultural assets of the Project affected area and Appendix 8.16 (Community Development Plan) includes a commitment to supporting a maintaining traditional uses of the land, including summer herding.

6.17.2 Impact Prediction Methodology

The magnitude of direct physical impacts to cultural heritage sites is determined by the physical extent of the damage. Such impacts are immediate and permanent, as once an archaeological site has been damaged or modified its lost value cannot be recovered or restored. The method used for gauging the magnitude of direct physical impacts to cultural heritage sites is based on the impact assessment methodology detailed in Section 6.2.2. The application of this methodology to assessing the magnitude of impacts to cultural heritage is summarized in Table 6.17.1.

	Table 6.17.1: Magnitude of Change Scale							
	Magnitude of change	Description of change						
1	Negligible	No discernible change in the physical condition.						
2	Low	Small part of the site is lost or damaged, resulting in a loss of scientific or cultural value.						
3	Moderate	A significant portion of the site is lost or damaged, resulting in a substantial loss of scientific or cultural value.						
4	High	The entire site is damaged or lost, resulting in complete, or nearly complete loss of scientific or cultural value.						

The potential consequence of impacts to archaeological heritage is the loss of scientific information about the history or prehistory of Armenia and the legal consequence from the destruction of cultural property, as defined by the Republic of Armenia *Law on Immovable Monuments of History and Culture Considered Property of the State and Not Subject to Alienation* of 2003 (Section 2.1.12) and the Armenian Mining Code (Section 2.1.2).

The sites identified in the Project area have been divided into six sensitivity categories as identified in Table 6.17.2.



	Table 6.17.2: Cultural Heritage Resource Sensitivity Scale						
	Sensitivity of resource	Description of resource					
1	Un-assessed	Site provisionally identified by the archaeological teams or satellite imagery analysis but not subsequently re-visited, evaluated, or assessed using cultural heritage sensitivity scale.					
2	Negligible ¹	Site judged to have very little scientific or cultural value and/or is very common, being easily substituted by information from other sites.					
3	Minor	Site judged to have low importance based on scientific or cultural value. Has potential for substitution. Value not formally recognized.					
4	Medium	Site judged to have medium importance based on scientific or cultural value. Limited potential for substitution. Value is often recognized regionally and resources may already be protected by either local or national legislation, but recognized as a resource of local significance.					
5	High	Site judged to have high importance based on scientific or cultural value. Very limited potential for substitution. Value is often recognized nationally and resources may already be protected by national legislation. High sensitivity sites qualify as non-replicable cultural heritage as defined in IFC Performance Standard 8.					
6	Very High	Site judged to have very high importance based on scientific or cultural value. No potential for substitution. Value is often recognized internationally and resources may already be protected by national legislation and international conventions. Very high sensitivity sites qualify as critical cultural heritage as defined in IFC Performance Standard 8.					

All of the potential cultural heritage sites identified during the ESIA baseline surveys were identified by professional archaeologists during archaeological reconnaissance surveys. However, the non-intrusive, rapid reconnaissance methods employed during the baseline study did not allow for the determination of site sensitivity at every potential cultural heritage site.

The sensitivity of 138 potential cultural heritage sites identified during the reconnaissance surveys were assessed using the criteria outlined in Table 6.17.2. Sensitivity determinations were made by the Armenian Archaeological Team through additional investigations at sites initially identified during pedestrian survey, including evaluation excavations. ERM archaeologists re-visited a number of sites, originally documented by the Armenian archaeological team (Cultural Heritage NGO), and assessed site sensitivity through the

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The methodology for assessing impact significance in Section 6.2 does not include a receptor sensitivity level of negligible. For the purposes of this analysis, the significance of impacts to cultural heritage resources of negligible sensitivity will be assessed as one degree lower than a similar magnitude impact to a minor sensitivity resource. As a result, the most significant impact to a site of negligible sensitivity is minor: a high magnitude impact to a site of negligible sensitivity is an impact of minor significance.



application of the scale outlined in Table 6.17.2. These sensitivity assessments were conducted to characterize the importance of different site types and to inform the Project's post-ESIA commitments to mitigate potential impacts. The cultural heritage sensitivity of unassessed sites which could potentially be impacted by the Project will be determined as part of archaeological surveys and evaluations outlined in the Project CHMP.

6.17.3 Predicted Magnitude of Potential Impacts

Sites located within the Project footprint of proposed mine components will be subject to high magnitude impacts as the entire site will likely be damaged or lost, resulting in complete, or nearly complete loss of scientific or cultural value. The extent of each potential site could not be determined during the non-intrusive pedestrian surveys conducted to date. As a result, it is assumed that portions of potential sites with centre points within 50 m of proposed Project components could be subject to direct physical impacts as these sites may extend into the Project's Project footprint. Sites within 50 m of proposed Project components will be subject to moderate magnitude impacts. Until the boundaries of these sites can be determined through intrusive excavations, it is assumed that a significant portion of these sites will be lost or damaged, resulting in a substantial loss of scientific or cultural value.

6.17.4 Sensitivity of Cultural Heritage sites

The magnitude of potential impacts to known sites in the Project area was established by mapping the sites on the design layout of the Project, particularly the Project's proposed disturbance footprint. The map review identified 81 potential or known archaeological sites within the Project's disturbance footprint or within 50 m of the disturbance footprint. The sites include:

- 1 site of minor importance;
- 9 sites of negligible importance; and
- 71 sites of un-assessed importance.

Apparent centre points of 70 known or potential sites lie within the Project disturbance footprint, indicating that all or nearly all of each of these sites could be subject to high magnitude impacts during Project construction. The apparent centre points of an additional 11 known or potential sites are located within 50 m of the proposed Project disturbance footprint. The sensitivity and scientific importance of sites within the Project's Project footprint and sites within 50 m of the Project footprint will be assessed as part of the post-ESIA commitments described in the Project's Cultural Heritage Management Plan (CHMP).



6.17.5 Potential Significance of Impacts to Cultural Heritage Sites

The significance of potential impacts to cultural heritage sites is based on a cross-tabulation of the magnitude of Project impacts and the sensitivity of cultural heritage resources. A total of 81 known or potential archaeological sites could be impacted by the development of the Project. Using the assessment methodology described in Section 6.2.2, the sensitivity of these sites was combined with the impact magnitude to determine impact significance. The construction of the proposed Project components would result in the following impacts²:

- HLF and adjacent facilities: High magnitude impacts to 45 potential sites of unassessed sensitivity within the Project footprint and moderate magnitude impacts to five potential sites of unassessed sensitivity within 50 m of the Project footprint;
- Erato and Tigranes-Artavazdes pits: high magnitude impacts to eight resources of negligible sensitivity and one resources of minor sensitivity;
- BRSF and adjacent facilities: High magnitude impact to one site of negligible sensitivity, and thirteen sites of unassessed sensitivity. Moderate magnitude impacts to two sites of unassessed sensitivity within 50 m of the disturbance footprint; and
- Conveyor corridor and Access Roads: High magnitude impacts to three potential sites
 of unassessed sensitivity and moderate magnitude impact to three potential sites of
 unassessed sensitivity.

The significance of potential impacts to 10 cultural heritage sites of assessed sensitivity is summarized in Table 6.17.3 and shown in Figure 4.19.1.

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² The significance of impacts to potential cultural heritage sites of unassessed sensitivity could not be determined because no assessment of site sensitivity has been conducted.



Table 6.17.3: Significance of Potential Impacts to Assessed Cultural Heritage Sites								
Site Number	Project Component Footprint	t Footprint Sensitivity		Project Component Footprint Sensitivity Impact Magnitude				
79	BRSF	Negligible	Medium	Minor				
85	Erato Mine Pit	Negligible	High	Minor				
86	Erato Mine Pit	Negligible	High	Minor				
87	Erato Mine Pit	Minor	High	Moderate				
88	Erato Mine Pit	Negligible	High	Minor				
89	Erato Mine Pit	Negligible	High	Minor				
90	Tigranes Artavazdes Mine Pit	Negligible	High	Minor				
91	Tigranes Artavazdes Mine Pit	Negligible	High	Minor				
92	Tigranes Artavazdes Mine Pit	Negligible	High	Minor				
93	Tigranes Artavazdes Mine Pit	Negligible	High	Minor				

The majority of the potential cultural heritage site impacts would result from the construction of the proposed HLF and adjacent facilities, with 50 potential sites of unassessed sensitivity subject to impacts. A total of 45 potential cultural heritage sites are located within the Project footprint of the proposed HLF while an additional five sites are located within 50 m of the HLF, ADR Plant, topsoil stockpile, water pipeline, and their associated Project footprints. The 43 potential sites within the footprint of the HLF would be subject to high magnitude impacts, while six potential sites located within 50 m of the HLF could be subject to medium magnitude impacts.

Construction of the proposed BRSF could result in moderate to high magnitude impacts to 16 sites of un-assessed sensitivity and one site of negligible sensitivity. Thirteen potential sites are located within the Project footprint of the BRSF and would be subject to high magnitude impacts, while two potential sites located within 50 m of the BRSF could be subject to medium magnitude impacts. The scientific importance of these sites was not evaluated after their initial identification during the rapid reconnaissance survey. One site of negligible sensitivity would be impacted by construction of the BRSF resulting in an impact of minor significance

Potential site types identified by the Armenian Archaeological Team within the Conveyor Corridor, Main Access Road, HLF, and BRSF areas include tombs, crypts, grave mounds, fish petroglyph and associated temple, Bronze Age tomb mounds, Eneolithic artefact scatters, Bronze Age fortifications, wall fragments and observation tower foundations. Based on potential site types provided by the Armenian archaeological team, the sensitivity of the remaining sites is likely to range from negligible to high, resulting in potential impacts of minor to not acceptable significance.



The scientific importance of these sites was not evaluated after their initial identification during the rapid reconnaissance survey and, as a result, their scientific importance is unknown. However, a number of the potentially impacted sites were identified as possible tombs or tomb mounds. If these sites are tombs they would be considered high to very high sensitivity sites and the high magnitude impacts associated with the creation of the Project components would result in impact significances of very high to not acceptable.

6.17.6 Mitigation of Impacts

Further research is being carried out to gain a better understanding of values and cultural associations of known cultural heritage sites. A Project CHMP (Appendix 8.17) has been drafted to establish specific management measures to be implemented in order to minimise impacts to known and undiscovered cultural heritage sites. This plan will include the following general mitigation measures which will be implemented by the Project. Different mitigation strategies will be applied to different sites based on their sensitivity and the magnitude of potential impacts.

Preconstruction Mitigation

(a) Avoidance

The preferred means of mitigating direct archaeological impacts is avoidance through Project design. Based upon the findings of the cultural heritage surveys, a number of Project components have already been relocated to avoid impacts to archaeological sites. For a discussion of alternatives considered, refer to Chapter 5.

(b) Additional Surface Reconnaissance Survey

The substantial number of archaeological sites already identified in the vicinity of the Project suggests that un-surveyed footprint areas may contain additional, as yet undiscovered, archaeological sites. Additional surface reconnaissance surveys will be conducted in these areas. If additional sites are found the mitigation measures of avoidance or excavation would be implemented at these sites to mitigate and manage the potential impacts.



(c) Excavation

When potential archaeological sites cannot be avoided (i.e. all or part of the site will be lost or damaged) excavation will be carried out to assess the scientific integrity and significance of the site through the recovery of artefacts and cultural information. The Project will take a staged approach to evaluating which sites will require full excavation and the extent of those excavations. Potential sites within the footprint of proposed Project components will be subject to an archaeological field evaluation³ to determine the presence or absence of archaeological features, structures, deposits, artefacts, or other resources through a programme of limited and targeted excavation. If these types of resources are present the field evaluation will define their character, extent, and archaeological integrity.

Potential sites located within 50 m of proposed Project components will be examined in a similar fashion with a focus on confirming the existence of a site and identifying its boundaries. In addition, a sample of the sites of minor and negligible importance within the mine pits will be archaeologically evaluated in order to confirm the sensitivity value currently assigned to these sites. An excavation strategy will be developed to determine if this group of similar sites represent archaeological sites, modern stone or earthen piles, or natural landscape features.

Archaeological excavations will be used to establish or confirm a site's sensitivity level. If sites prove to be of medium or greater sensitivity, a data recovery excavation will be executed to mitigate the loss with scientific recordation and study. Site specific excavation strategies will be developed and executed in consultation with the Ministry of Culture (MoC) of RA, specifically with the Historical and Cultural Heritage Protection Agency (HCHPA), an agency within the MoC and the Marzpet of Vayots Dzor and Syunik.

Excavation techniques will be aligned with internationally recognised practice and executed by qualified archaeologists. Sites will be systematically excavated prior to impact by Project activities. Excavation will be accomplished in stratigraphic layers using hand tools. Soils will be carefully culled for artefacts, which will be retained for further study and curation. Excavation activities will be recorded in drawings, digital photographs and detailed field notes. When appropriate, special analyses such as human osteology or C¹⁴ dating will be

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³ "Standards and Guidance: Field Evaluation", Institute for Archaeologists November 22, 2013.



undertaken. Data and artefacts will be analysed and described in archaeological reports that reflect current international practice. Artefacts and scientific samples from excavated sites will be retained by appropriate local museums or universities.

Construction Phase Mitigation: Chance Finds Procedure

Due to the potential of encountering undiscovered archaeological sites in the Project area during construction, a Chance Finds Procedure (CFP) has been developed. The procedure will address any finds made during ground disturbing activities through the following measures:

- Training of relevant staff and contractors in the recognition, handling, and response to archaeological chance finds;
- Conducting pre-construction site inspections when the ground is cleared in advance of construction activity;
- Deploying archaeologists to monitor construction sites to guide the recognition of and response to archaeological finds made during ground disturbance;
- Establishing protocols for responding to chance finds, including temporary cessation
 of work in the area of finds and evaluation by the archaeological monitor;
- Notification of government authorities when appropriate;
- Use of expedited procedures for evaluation and excavation of significant chance finds in order to limit impacts while minimising construction delays; and,
- Keeping an auditable record of monitoring activities and chance find responses.

The Chance Finds Procedure will also be implemented during operation of the mine, but only in cases where ground disturbing activities might affect previously unknown archaeological sites. If low or negligible cultural heritage sites cannot be avoided through Project redesign, the Chance Finds Procedure will serve as the primary means for mitigating impacts to these cultural heritage sites.

6.17.7 Monitoring and Audit

The monitoring and audit planning necessary to assess the effectiveness of the mitigation strategies have been identified in Table 6.17.4.



Table 6.17.4: Cultural Heritage Monitoring and Audit								
Cultural heritage resources								
Monitoring approach	Baseline	Cultural heritage field reconnaissance in the Project area was undertaken in stages beginning in 2010. A total of 6 pedestrian field reconnaissance surveys have been conducted within the Project area. These surveys identified a total of 487 known or potential cultural heritage sites. Construction of the proposed Project layout could result in impacts to 81 potential or known sites and an unknown number of undiscovered sites.						
Significant effec	ts							
	impacts to known ed archaeological	Construction and operation phase activities could result in significant damage and/or the complete removal of 81 known or potential archaeological sites located within the Project's Project footprint or within 50 m of the Project footprint. Construction and operation phase activities could result in damage to undiscovered archaeological sites within the Project area.						
Specific Actions								
Level 2 Management Plans	The Cultural Heritage Management Plan (CHMP) defines steps to minimise potential Project impacts to cultural heritage sites. The CHMP contains the following commitments for the protection of cultural heritage sites based on the mitigation measures outlined in the Project ESIA: • Avoidance and marking of known cultural heritage sites; • Additional surface reconnaissance and archaeological evaluations, and potential archaeological data recovery excavations; • Implementing protocols and procedures in the Chance Finds Procedure (level 3 SSPS); • Providing cultural heritage awareness training to Project staff; and • Consultation with stakeholders, including the Armenian MoC as well as the Marzpet of Vayots Dzor and Syunik, and local community leaders in Jermuk and Gndevaz.							
Level 3 SOPs	The commitments in the level 2 CHMP will be implemented through the Chance Finds Procedure (CFP) and additional level 3 SSPs to be developed to meet commitments outlined in the CHMP. The CFP provides a process for conducting archaeological monitoring of Project ground disturbing activities and responding to any potential tangible cultural heritage (Chance Find) encountered unexpectedly during Project construction or operation. Additional level 3 SSPs will be developed to execute the CHMP commitments concerning site marking and additional survey and excavations.							
	age Monitoring	Strategy	Monitoring					
Impacts to known cultural heritage sites	Avoidance by redesign and marking of known cultural heritage sites	Avoidance is the preferred means of mitigating impacts to cultural heritage sites.	A number of project elements originally sited in the Vorotan River Valley have been relocated to avoid impacts to cultural heritage sites. If additional sites are identified within 50 m of un-surveyed Project components they will					



Table 6.17.4: Cultural Heritage Monitoring and Audit							
		5 5	be marked for avoidance.				
Impacts to	Surface reconnaissance and excavation	A number of Project components have not been subject to archaeological reconnaissance. In order to minimize impacts to potential undiscovered archaeological sites in these areas, reconnaissance will be conducted.	Professional archaeologists will conduct non-intrusive, pedestrian survey of Project components. These surveys will focus on identifying above ground indicators of archaeological sites. If potential medium or high importance sites are identified, additional excavations may be necessary.				
undiscovered archaeological sites	Chance Finds Procedure/ Archaeological Monitoring	The Project CFP includes the commitment to have an archaeological monitor(s) onsite during all ground disturbing construction activities. The CHMP includes a commitment to provide training in the identification of archaeological resources to Project staff in order to increase the ability of staff to identify potential cultural resources.	A professional archaeologist(s) will monitor multiple construction activities in the Project area and provide oncall support if potential Chance Finds are identified by Project staff. Training in the identification of potential cultural heritage resources and the protocols outlined in the CFP will be provided to Project staff.				

6.17.8 Residual Impacts

Residual adverse impacts to cultural heritage sites will range from negligible to minor, assuming that the mitigation measures outlined above are implemented as part of the Project's cultural heritage management plan. This also assumes that no undiscovered or unassessed sites of high or very high importance are present in the Project area. The significance of the potential unmitigated impacts to the known or potential cultural heritage sites in the Project's Project footprint are assessed as one moderate, nine minor, and 71 of unknown significance.

The one moderate impact will result from the construction of the Erato Mine Pit. The nine minor impacts will result from the construction of the Erato and Tigranes Artavazdes Mine Pits and BRSF. The application of mitigation measures will reduce the significance of these impacts by at least one degree, from moderate to minor or minor to negligible, depending on the mitigation measures to be used. Excavating a site would reduce an impact by one degree by mitigating the impact through the recovery of scientific information. Avoiding sites through Project redesign would prevent direct physical impacts to cultural heritage sites, reducing the



impact magnitude two degrees to negligible or neutral.

An additional 71 impacts of undetermined significance resulting from impacts on unassessed potential cultural heritage sites will also occur. These will be the result of impacts to sites of unassessed cultural heritage sensitivity within the Project footprints of the HLF, ADR Plant, BRSF, Main Access Road, Conveyor Corridor, and other associated Project infrastructure. A number of sites identified during surveys of the conveyor corridor and some of the infrastructure adjacent to the BRSF have not been evaluated by an archaeologist to assess their cultural and/or scientific significance. These sites were initially identified during surveys of previous Project infrastructure locations or alignments prior to the conveyor alignment shown in Figure 3.1. Therefore, depending on the outcome of the planned site assessments to be undertaken, prior to commencement of construction, unmitigated Project impacts to cultural heritage could be as high as not acceptable. The implementation of the mitigation measures will reduce the significance of these impacts by at least one degree or more depending on the measure used.



Table 6.17.5: Impact Summary – Cultural Heritage								
Impact	Source	Primary Receptor (1)	Phase (2)		;	Significance(3)	Mitigation Measures	Management Plan
		Prir	С	0	ST	LT		
Direct physical impacts to cultural heritage	Excavation, grading and other ground disturbing activities; Passage of heavy vehicles on top of archaeological sites, especially in wet weather.	N	x	х	M -	M -	 Additional surface reconnaissance surveys to evaluate sites of unknown importance that cannot be avoided through Project re-design Chance finds procedure implemented, including training of staff and contractors Project footprint re-alignment where possible to avoid cultural heritage sites Excavation of cultural heritage sites by national authorities, to meet standards required by Armenian law and IFC PS 8; Marking of known sites or high potential areas with high visibility, allowing sensitive areas to be avoided. 	Cultural Heritage Management Plan, including Chance Finds Procedure (Appendix 8.17, Annex 1)
Indirect physical impacts to cultural heritage	Blasting, vibration; transit of heavy vehicles in close proximity to archaeological sites	N	х	х	N	N	Establish appropriate buffer zones and no go areas around known archaeological sites and high potential areas.	Cultural Heritage Management Plan including Chance Finds Procedure (Appendix 8.17, Annex 1)

Notes:

- (1) Primary Receptors: E = employees, R = residents, Fl = flora, Fa = fauna, N = National
- (2) Project Phase: C = Construction, O = Operations
- (3) Expected Significance Rankings: ST = short-term with mitigation, LT = long-term with mitigation, S = significantly adverse, M = moderately adverse, N = neutral, M + = moderately improved, S + = significantly improved

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6.17.9 Conclusions

Overall, residual impacts to known cultural heritage will be limited to negligible to minor with the implementation of these mitigation measures, which are aligned with applicable national and international standards. The impacts to potential cultural heritage sites of unassessed sensitivity will be determined as part of the Project's post-ESIA commitments. The development of the Amulsar Mine Project will also result in positive impacts to Armenian cultural heritage. Project-related archaeological discoveries and investigations in the Amulsar concession area will contribute substantially to scientific and cultural understanding of Armenia's past. Substantial capacity building will also occur as a consequence of activities and international collaboration sponsored by the Project in the execution of its cultural heritage management program.