

## **10.1 Historical and Current Land Use**

Historically, the Princess Louise and North Point project area has been used for mining activities, which commenced in the 1870's and occurred intermittently whenever profitable operations could be sustained. The underlying tenure has been pastoral lease, with the land being used for running beef cattle.

Currently the land is used solely for pastoral activity. The land is not currently used by Aboriginal people, with the nearest community being the Kybrook community, which is located approximately 70 km from the project areas.

## **10.2 Archaeological Sites in Mining Area**

Information on Aboriginal and European archaeological sites in the project area has been collected from literature reviews and site surveys carried out by commissioned consultants Begnaze Pty Ltd (Begnaze 2006) in June 2006 (see Appendix C for full report. Please note that the maps presented in the archaeologist's report were based on preliminary site layouts, which are now out of date; this section of the PER contains maps with the updated conceptual site layouts for the mines).

The archaeological sites located at Princess Louise and North Point Mine Sites are mapped in Figures 10.1 and 10.2 respectively.

### **10.2.1 Aboriginal archaeological sites**

The most common forms of archaeological sites found between Adelaide River and Pine Creek in the NT are small to medium sized artefact scatters and quarries located mainly on low rises and ridges (Begnaze 2006). Artefacts may be the remnants of tools, implements for hunting purposes or waste products associated with the manufacture of these implements (Begnaze, 2006). The dominant raw materials used to manufacture stone artefacts at these sites are quartz or tuff, with some chert and hornfels (Begnaze, 2006). Due to the high disturbance levels of both Princess Louise and North Point Mine Sites from previous exploration and mining activities, there is little potential for the presence of undisturbed Aboriginal archaeological remains (Begnaze, 2006).

A total of four Aboriginal archaeological sites were identified during surveys, and eight background scatters (Begnaze, 2006). Background scatters are isolated stone artefacts occurring in a very low density, with a more or less continuous distribution over the landscape, and do not constitute a formal archaeological site (Begnaze, 2006). The background scatters found at Princess Louise and North Point are similar to other scatters in the area, and have low archaeological significance (Begnaze, 2006).

The four archaeological sites are stone artefact scatters (PL1, PL2, NP1 and NP2; see Figures 10.1 and 10.2 for locations). The density of artefacts in these are around five times higher than in the background scatters; generally, this means at least ten artefacts within an area of two square metres. The four stone artefact scatters at Princess Louise and North Point have been subjected to only minor levels of disturbance despite being located near cleared areas of previous mining activity. Three of these sites are



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considered of low archaeological significance, while one site at Princess Louise (PL1) has been described as moderately significant due to its research potential for understanding Aboriginal settlement patterns, resource use and artefact manufacture (Begnaze, 2006).

Of the twelve sites recorded, only one background scatter (BS Arch/His3, at Princess Louise) is located within the proposed areas of disturbance for the mining project. This site is of low archaeological significance.

### 10.2.2 Aboriginal sites of cultural significance

In February 2007, an Aboriginal Areas Protection Authority (AAPA) Certificate was granted for the Princess Louise and North Point mine sites and surrounding exploration areas, confirming that there are no Aboriginal sacred sites in the project area (see Appendix D).

The area is not covered by any Native Title claim.

### 10.2.3 European and Chinese historical sites

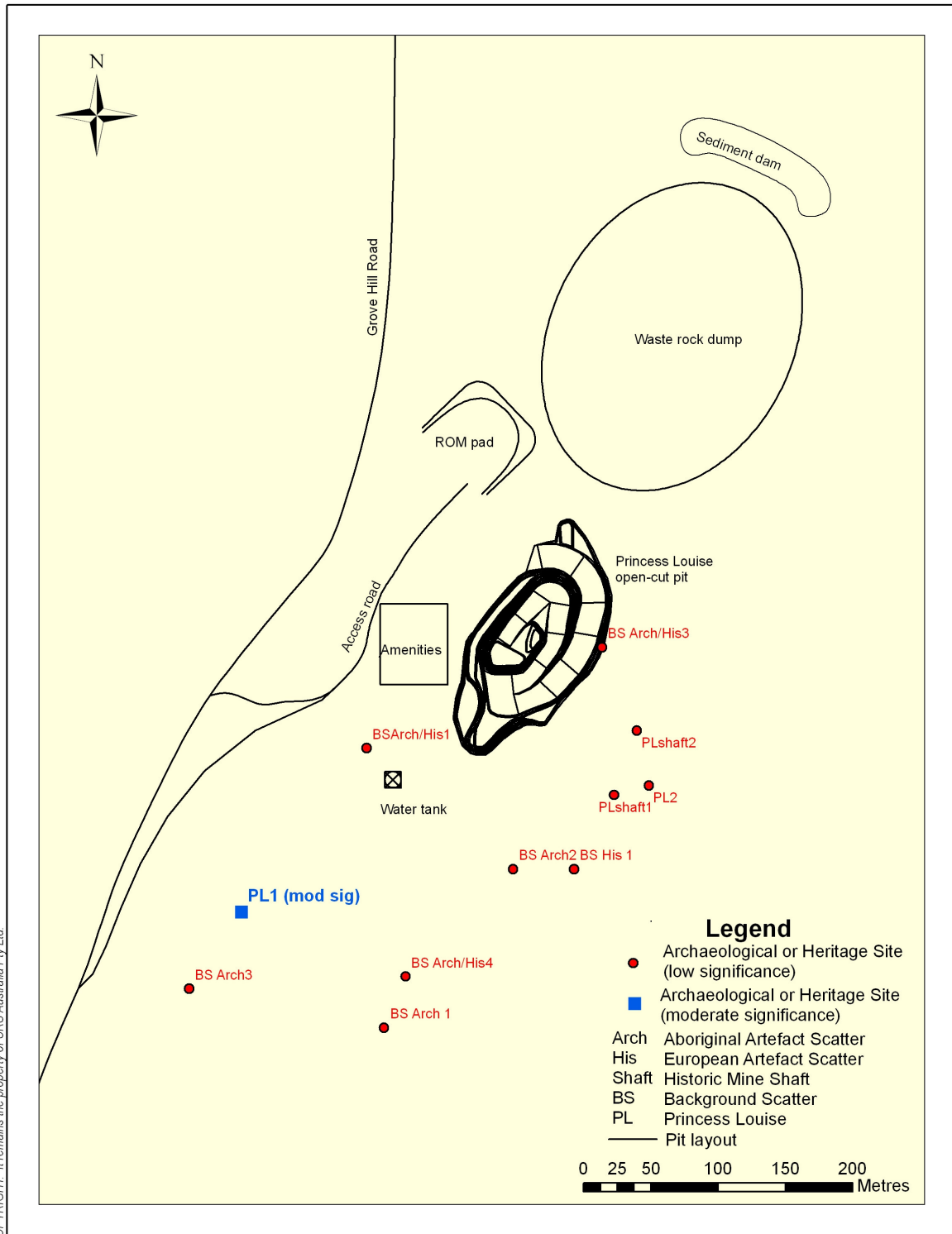
The Princess Louise and North Point mine sites are located in the NT goldfields, a region that has undergone exploration and mining activities since the 1870's when the first discovery was made at Yam Creek (Begnaze, 2006), 550 m south of the North Point Mine Site. Between 1872 and 1875 eight tributaries sunk shafts and tunnels at Princess Louise, and another major mining operation by Chinese tributaries occurred there in 1908 (Begnaze, 2006). In 1888 as many as 600 Chinese miners are said to have been employed in mining at the North Point lease (Begnaze, 2006).

A number of mineshafts were located in field surveys of the project area; two at Princess Louise and five at North Point (see Figures 10.1 and 10.2, Begnaze, 2006). Shafts are very common in the historic goldfields of the NT, and the shafts at Princess Louise and North Point are mostly considered to have low historic significance (Begnaze, 2006). The one exception, however, is the NPshaft1 at North Point (see Figure 10.2) that contains features including trenches for extracting ore from the mine and built-up floor areas; this shaft has been assigned moderate archaeological and historical significance based on its rarity and potential for understanding past mining processes (Begnaze, 2006). It is noted that NPshaft1 is not located within the area of proposed disturbance for the mining project.

Other historical sites identified in the project area included numerous pits, trenches and background scatters of glass and metal fragments left over from past mining activities. These are all considered to be of low historical significance (Begnaze, 2006).

Located south of the North Point mine site is the decommissioned Yam Creek Mine and Smelter site, which is listed on the Register of National Estate and is representative of Northern Territory mining activity of the 1880's (DEH, 2006b). Remnants of the hilltop battery complex and smelter ruins still exist today, but these will not be impacted by the proposed mining operations at North Point or Princess Louise. The decommissioned mine pit at Yam Creek, which is not included in the Register of National Estate, will be utilised for storage of excess pit dewater during operations at North Point.

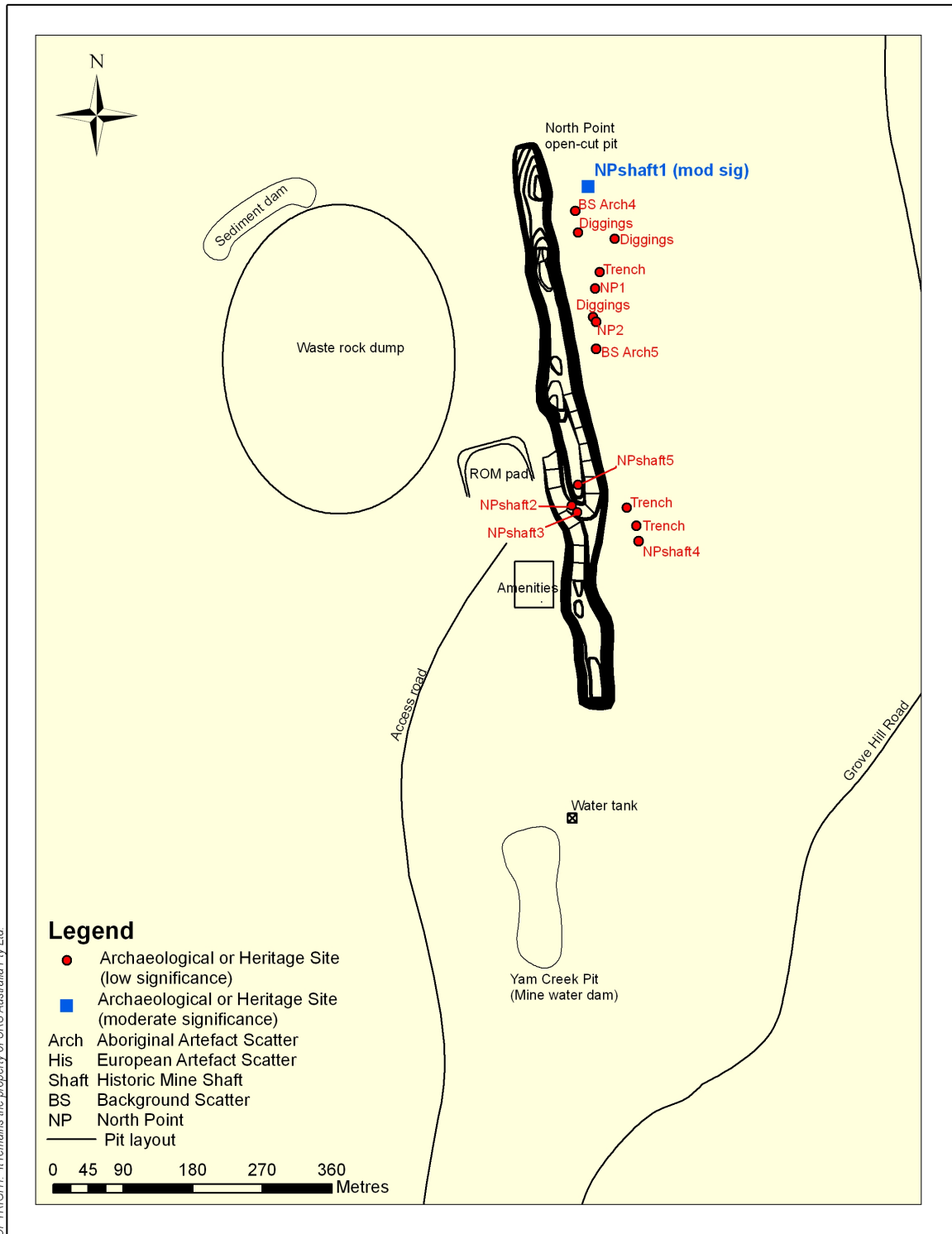




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Figure:10.1		Rev. A A4





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### **10.3 Potential Impacts of Mining**

As presented in Figure 10.1 and 10.2, one background scatter of low archaeological significance (at Princess Louise), and three historic mine shafts, also of low significance (at North Point), are located within the proposed mining footprint.

As all Aboriginal artefacts are protected under the *Heritage Conservation Act* 1991 (NT), Ministerial permission to destroy the background scatter at Princess Louise will be sought prior to the commencement of operations.

The historical mine shafts are not protected by the *Heritage Conservation Act* 1991 (NT), and are of low significance (Begnaze, 2006). No further action will be undertaken to preserve these prior to construction.

Two sites of moderate significance are located close to, but not inside, the development footprint; archaeological stone artefact site PL1 at Princess Louise and the northern most mine shaft at North Point (NPshaft1). The former is located 70 m east of the proposed access road to the Princess Louise mine site, and the latter is 50 m east of the proposed North Point open cut pit. By installing temporary fencing or bunting and signage in the field, these sites will be designated “No-Go” areas for mining vehicles and BOPL personnel, and their heritage values will be preserved with little or no inconvenience to mining activities.

### **10.4 Mitigation of Impacts**

The two sites of moderate significance (PL1 and NPshaft1) will be protected by installing temporary fencing or bunting and signage, designating these areas as “No-Go” areas. Mine site personnel will be made aware of these two heritage sites through inductions and regular communications with the BOPL Environmental Officer, as well as the on-site signage described above.

BOPL has developed an Archaeological Chance-Find Procedure to direct mine staff, contractors and visitors in the event that artefacts are discovered during mine construction or operation. In accordance with this Procedure, work will cease on a site where archaeological material is found. The site Environmental Officer will inspect and secure the site, and will then contact Heritage Conservation Services, Darwin, for advice and arrange for a survey or salvage work as appropriate.

### **10.5 Commitments**

*Prior to commencement of operations, BOPL will manage the background scatters located inside the mining footprint at Princess Louise, in accordance with recommendations of Government and Consultant Archaeologists and the requirements of the Heritage Conservation Act 1991 (NT).*

*At commencement of mining, BOPL commits to designating two heritage sites of moderate significant (PL1 and NPshaft1) as ‘No- Go’ areas by installing temporary fencing or bunting and signage at the site.*

*BOPL commits to implementing a Chance-Find procedure to direct mine staff, contractors and visitors in the event that artefacts are discovered during mine construction or operation.*

