

Taung Skull World Heritage Site Heritage Impact Assessment: Report on Archaeology

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The archaeology of the TSWHS spans Earlier Stone Age to recent times, as revealed by intermittent fieldwork principally by Peabody (visited in 1947/8, published 1954), Humphreys (1978) and Beaumont (1978-1990s).

A dozen or so known localities include a few key sites that fall within the TSWHS or its Buffer Zone.

Witkrans Cave: Outside of core area: Buffer Zone.

A small collapsed cave, largely excavated by Peabody. Yielded Middle Stone Age artefacts and associated large mammal bones including two to three undescribed modern human molars. A minimum age of about 89 000 years was established relative to an overlying travertine deposit. Beaumont assessed it as having research potential, and being sensitive in the event of uncontrolled access.

Little Witkrans Shelter: Outside of core area.

Small overhang with earlier to late Holocene Later Stone Age sequence capped by material dating from historical times. Beaumont judged it as having moderate research potential, modest educational/tourism potential, and susceptible to damage in the event of uncontrolled access.

Black Earth Cave: Within core area: Research Zone

Part of a cave system, one gallery containing three hyaena-generated fossil-bearing strata, one of them including human remains said to belong to two types of *Homo*. Potentially of substantial heritage significance, the human remains potentially being of Middle Stone Age context.

Equus Cave: Within core area: Research Zone

A small collapsed cave (mining damage) containing a very rich hyaena-generated maternity-den assemblage containing mammal remains (some 30 000 identifications, 48 species) together with *Homo sapiens* fragments. The sequence spans about 2000 - >27 200 years ago. Stone artefacts in the deposit are thought to have been flushed in from further upslope. The site has yielded significant data on palaeoenvironments in terms of faunal profiles as well as pollen and isotopic analysis. The site is identified as a point of interest along the trail within the TSWHS and has been fenced off. It has high educational and tourism value, also being threatened by natural weathering and human impacts.

Powerhouse Cave: Edge of core area: Ghaap Escarpment & Thabasikwa Valley Zone

A rock shelter overlooking the Thabasikwa River with later Holocene Later Stone Age sequence including animal bones (inter alia, fish), dating between 2000 and 3 700 years ago. Schematic rock paintings here (in the form of finger-painted ochre daubs) and at other sites in the area may be more recent. Beaumont assessed it as having educational and tourism interest and cautioned about graffiti damage to the finger paintings.

Norlim 5 & 6: Within core area: Research Zone

Low stone walling and associated Ceramic Later Stone Age (?Khoekhoe) material, associated at Norlim 5 with dates to 390-400 years Before Present. An excavated assemblage includes animal bones with possible domesticated cow. Beaumont assigned Norlim 5 modest heritage significance, not particularly susceptible to damage from tourism (if included in a trail).

The industrial archaeology of Buxton has generally been treated in previous reports as “Sites of Mining, Historical or Other Cultural Heritage Importance” - and these are not discussed further here, except that in the event that features are located such as ash middens associated with compounds on other dwelling spaces, these should be regarded as being of (recent/historical) archaeological significance. The current collecting of oral histories by the group known as “Ambassadors” would provide important insight into twentieth century histories.

Impacts on archaeological sites, as intimated above, may be significant if visitor access and local uses of the site are not well managed. Not all of the mentioned ‘key sites’ are appropriate for developing public access, by virtue either of their sensitivity or their location within differently designated site development zones. This document comments, as previous ones have done, on the effecting of management parameters and practices, specifically in this instance in relation to the planned “Improvement of visitor facilities, site infrastructure and heritage conservation measures” as set out in a report by EcoAfrica (2015).

Individual project components are addressed in what follows (impacts on palaeontological resources to be reviewed by palaeontology specialist):

1. Protection of the core area/fence

Proposed mitigation measures	Comment
To remove the old fence foundation together with other builder’s rubble. The planting of trees for visual screening of the new fence where needed.	It is not anticipated that this would have an impact on any of the known archaeological resources.

2. The ablution block - picnic site

Proposed mitigation measures	Comment
Security and effective waste management, recognising the ablution facility’s close proximity to the sacred Blue Pools site – and need for effective pollution management.	No anticipated impact on known archaeological resources.

3. The ablution block - Thomeng Waterfalls

Proposed mitigation measures	Comment
Security and effective waste management.	No anticipated impact on known archaeological resources.

4. The road to Thomeng (Roads infrastructure)

Proposed mitigation measures	Comment
Completion of road with rehabilitation where needed.	No anticipated impact on known archaeological resources.

5. The miners' compound (restoration)

Proposed mitigation measures	Comment
Detailed design to be conducted by a recognized professional heritage architect. Management guidelines for the built-environment are to be in place in time.	Be aware of possible historical archaeology in the vicinity, e.g. ash midden.

6. The mine manager's office (restoration)

Proposed mitigation measures	Comment
Detailed design to be conducted by a recognized professional heritage architect. Management guidelines for the built-environment are to be in place in time.	Be aware of possible historical archaeology in the vicinity, e.g. ash midden.

7. The Power House Complex (restoration)

Proposed mitigation measures	Comment
Detailed design to be conducted by a recognized professional heritage architect. Management guidelines for the built-environment are to be in place in time	Be aware of possible historical archaeology in the vicinity, e.g. ash midden.

8. Parking and entrance area

Proposed mitigation measures	Comment
Relocation of the parking area from open area on the hillside at Buxton (where there are heritage features, e.g. historical stone walling) to an area subject to assessment in the vicinity of the entrance. Infrastructural and signage design to be architecturally compliant with themes already in use in the design of the access road and Blue Pools Picnic Area	Be aware of possible historical archaeology in the vicinity, e.g. ash midden.

9. Protection of sensitive and dangerous sites: Safety on the site.

Proposed mitigation measures	Comment
Specialist study on safety and security to make recommendations.	Recommendations that may affect areas in proximity to known sites should be assessed for possible archaeological impacts.

10. Conservation of Hrdlička's Fossil Site.

Proposed mitigation measures	Comment
Construction of a wooden boardwalk and rim platform with interpretive and warning signage to enhance visitor experience.	This is a palaeontological site. Proposals for boardwalk (removable to allow access for future possible research) to be reviewed by palaeontology specialist.

11. Conservation of Equus Cave.

Proposed mitigation measures	Comment
Equus Cave is fragile and vulnerable site and should be carefully managed. The current fence and gate to be retained (and maintained) at this fragile and sensitive site. The gate to be kept locked at all times, access provided only by a trained TSWHS-accredited guide. Information signs and stone benches to be considered at entrance, outside the fenced area to facilitate introduction prior to entrance by small groups accompanied by a guide (no more than 3 or 4 people at a time). Construction of a stepped walkway to a small platform along the edge and rim of the cave, providing managed access. This to be anchored at the base with adjustable leg supports, involving minimal impact of the site and providing a position at which small groups can view the site. Existing signage to be replaced.	<p>This is a sensitive site susceptible to both natural weathering and human impacts. Previously there was evidence of livestock entering the site. Fencing needs to be maintained and visitors should not be allowed to enter unsupervised.</p> <p>Additional to the proposed mitigation measures, stabilisation of witness sections is recommended together with roofing over unconsolidated sections (as per previous Bapela Cave Klapwijk CMP recommendations).</p>

12. Conservation of Black Earth Cave.

Proposed mitigation measures	Comment
Restricted access: proposal for a rock barricade to prevent visitors from entering the site, with safety warning sign. Information boards to provide understanding of the site. Stone bench seating under acacias.	<p>The suggested mitigation measures are intended to enhance protection of this site. The greatest need here is for generalised interpretive display material that does not draw attention to the particular locality of the cave.</p> <p>Note that previous (Bapela Cave Klapwijk CMP) recommendations suggested non-disclosure as management tool.</p> <p>Obtain opinion from palaeontology specialist.</p>

13. Conservation of Oxland Large Mammal Site.

Proposed mitigation measures	Comment
Access provision for small groups, with stone benches and interpretive material.	<p>This is a palaeontological site.</p> <p>Note that previous (Bapela Cave Klapwijk CMP) recommendations suggested non-disclosure as management tool; and to avoid making access easy.</p> <p>Proposals for this site to be reviewed by palaeontology specialist.</p>

14. Trails and signage

Proposed mitigation measures	Comment
Trail pamphlet and code of conduct for hiking in TSWHS. Signage to be improved, as funds allow.	<p>Impacts on archaeological resources not anticipated, other than that correct signage and interpretive material is critical to the experience and management of visitors.</p> <p>Recommendation that wording and placement of signage be reviewed by specialists before manufacture and erection.</p>

15. Memorial site

Proposed mitigation measures	Comment
Improvements to and around the Hrdlička's Fossil Site; construction of a viewing point and path; wheelchair access to the Memorial at Dart's and Hrdlička's Pinnacles; effective information and waste management required; stone packing along path boundary for delineation, with stone sourced from a single approved area by the Site Archaeologist.	<p>Impacts on archaeological resources not anticipated. A more effective solution to providing information is required (original bronze plaque was removed and marble plaque with inscription has become illegible).</p>

16. Boom Gate and Security Shelter at Thomeng

Proposed mitigation measures	Comment
Architectural design, materials use and colours consistent with TSWHS themes, naturally screened, low visual impact.	<p>Site Archaeologist to provide input on archaeological and paleontological impacts while locating the position.</p>

17. Historical Buildings in the Buffer zone

Proposed mitigation measures	Comment
Brief guideline on the requirement for and purpose of a Built Environment Management Plan.	Site Archaeologist to provide input on archaeological and paleontological impacts while locating the position.

18. Museum and Amphitheatre

Proposed mitigation measures	Comment
Design guideline inputs on visual impacts, safety and re-use of existing buildings and infrastructure.	Site Archaeologist to provide input on archaeological and paleontological impacts while locating the position.

19. Restaurant

Proposed mitigation measures	Comment
Provide design and operational guideline inputs, to enhance cultural values related to TSWHS.	Site Archaeologist to provide input on archaeological and paleontological impacts while locating the position.

20. Auditorium

Proposed mitigation measures	Comment
Management of the use of the auditorium, with 'no landscape change' policy within the auditorium at the top of the quarry, and all waste is carried out and removed, after use.	Site Archaeologist to provide input on archaeological and paleontological impacts while locating the position.

21. Revamping of the Kiln area

Proposed mitigation measures	Comment
Inputs into design and operational matters may be provided.	Site Archaeologist to provide input on archaeological and paleontological impacts. Be aware of possible historical archaeology in the vicinity, e.g. ash midden.

Conclusions

By virtue of location only some of the known archaeological sites at TSWHS have been incorporated into the development of public access. Probably the greatest potential impact in the current phase would be at Equus Cave where earlier recommendations for protecting surviving deposit against natural weathering/slumping remain to be addressed (fencing has been erected and needs on-going maintenance while management of visitor access is dealt with in this phase of development).

In several instances the input of a palaeontology specialist is crucial. The site archaeologist has responsibility to verify sensitivities for a number of the specific project components (e.g. in relation to various existing features and construction elements in the buffer zone). It is recommended that all signage be reviewed before manufacture and erection.