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South African Heritage
Resources Agency
111 Harrington Street
Cape Town, 8001

21 November 2013

Dear Mariagrazia,

Please accept this as my report of the archaeological survey carried out for the proposed Mountain bike Trail through a portion of the Cradle of Humankind. The project is under the direction of Hein Pienaar, Deputy Director of NEMPAA. Following discussions between the Cradle Management Authority and SAHRA, it was agreed that an archaeological survey should be undertaken of the immediate area around the construction of the trail. Mr Pienaar contacted me under the recommendation of Lindsey Smith. My specialism in South African archaeology, specifically in the Cradle area provided the motivation for me to conduct this work. As was recognised in your correspondence with Mr Pienaar, the proposed trail was due to be constructed on previously disturbed ground within approximately 10m of provincial tar roads within the Cradle. It was, however, prudent to conduct an archaeological survey along the trail route to ensure no further damage was done to archaeologically sensitive material. Please find below my report. In summary, although no *in situ* archaeological material was discovered, and resultant impact of the proposed mountain bike trail is negligible, a few areas were discovered with low densities of artefacts, and I recommend these are avoided by the trail. GPS locations and descriptions of these areas are provided below.

Method:

The 17km trail route was walked between the 13th and the 15th of November 2013. The area marked for the trail was surveyed for any archaeological remains including lithics, ceramics and stone wall structures. Because the trail route has been limited to within the provincial road land, all areas are owned and managed by the provincial government and have been previously disturbed through road construction and maintenance. Photographs and GPS coordinates were taken of any and all archaeological remains, whether disturbed or not to gain an understanding of any patterns of distribution on the landscape. Photographs were taken of the artefact(s) found and their context to allow easy identification of locality by Mr Pienaar and SAHRA when discussing trail route management.

Trail Context:

The first phase of the proposed Cradle of Humankind Mountain Bike Trail covers approximately 17km of mostly provincial roadside ground within the Cradle of

Humankind. The route is intended to be a one-way traffic system starting at Gateway 1 (GPS coordinates South 25°59'26.4''; East 027°49'08.0'') and ending at Gateway 2 (South 25°55'53.1''; East 027°52'56.4'') (Supplementary Figure 1). Both start and finish areas have large traffic circles and associated tourist and rest-stop facilities negating the need for extra construction. The trails themselves are to be constructed from packed local gravel and measure approximately 1-1.5m wide. Maximum depth for the construction is 100mm into the current landscape surface. The general potential for impact of this construction is very low. All areas surveyed have been previously impacted by the construction of the tar roads, disturbing any previously *in situ* archaeological remains. Those remains that were found were generally isolated and associated with an intact deflated landscape cut by the road construction and located further from the road than the trail is intended to impact. Their presence, however, should be noted and trail construction should be aware of the limitations to route flexibility in these areas.

Area 1 (South 25°58'56.9''; East 027°48'45.4'' – Supplementary Figure 2 & 3).

Shallow south facing bank on north side of the road. Bank was created by the cutting for the construction of the tar road and lies approximately 5m from the road surface. The upper surface is representative of a slowly accumulated colluvium containing rolled and broken quartzite and quartz from the local higher ground. This level has formed onto an extensive laterite bed. The colluvium has then been gradually deflated into a layer of variable thickness, either exposed on the surface or buried just below (<50cm), and extends to areas 2 and 3. A low density of isolated artefacts can be found eroding from this level as it is exposed on the bank. Artefacts are contained within a colluvium of unknown origin and age and are, therefore, of very limited scientific value. Artefacts are small to medium sized (20mm-60mm), temporally inconclusive quartzite flakes and cores.

Area 2 (South 25°58'54.5''; East 027°48'43.2'' – Supplementary Figure 4, 5 & 6).

Steeper south facing bank on north side of the tar road. Represents the same formation as Area 1, with the bank being created by the construction of the road. This area differs slightly, in that the colluvial level is thicker and contains a marginally higher density of artefacts. Artefacts are, however, still isolated and contained within a colluvium of unknown origin and age and therefore of very limited scientific value. Artefacts are represented by small to medium (20mm-60mm) quartzite flakes and cores. Of interest was a single unifacial flaked flake (Figure 6) that was found eroded from the colluvial level.

Area 3 (South 25°58'44.8''; East 027°48'31.9'' – Supplementary Figure 7 & 8).

Shallow north facing slope on northern embankment of tar road. Here, the same colluvial layer as is found in area 1 and 2 has formed directly onto a shale deposit instead of laterite and is currently exposed and eroding downslope distributing colluvium over several square metres. The exposed layer lies approximately 6m from the proposed trail route. Artefacts share the same characteristics of Area 1 and 2, but also show several larger flaked artefacts. All artefacts are *ex situ* and of limited scientific or heritage value.

Area 4 (South 25°57'23.5''; East 027°48'07.2'' – Supplementary Figure 9 & 10).

Vertical road cutting on the north side of the tar road. This feature represents the natural landscape truncated for the construction of the road into a short (30-40cm)

vertical face. The original landscape surface is deflated and contains a very low density of isolated *ex situ* small quartzite artefacts (20mm-40mm) typical of the area. The old, and intact landscape surface is extensive and follows the road at approximately 4m distance.

In all areas surveyed rubble and debris from the construction of the tar road was evident, and the proposed trail route is situated on disturbed ground. This ground has evidently been disturbed many times, either through local agriculture, cattle movement or road grading, and then construction. Any artefacts found in this area are *ex situ*, isolated, and of very limited scientific and heritage value. Where the original landscape is intact (approximately >6m away from the road surface), low densities of isolated lithic artefacts are found. These still represent *ex situ* archaeological remains, and no concentrations of lithic, ceramics, stone wall features were found.

I have two recommendations following the completion of the survey. First, on the southern section of the proposed trail, between Gateway 1 and the Lion and Rhino Park, I suggest that the trail route avoid the original landscape surface. Although artefact density is low and potential archaeological and heritage impact is very low, using the cut bank and roadside areas are preferable. Second, the section north of the Lion and Rhino Park is more flexible in terms of trail routing. Although there is an area of intact original landscape surface it has very low artefact density and negligible archaeological and heritage impact.

Kind regards,

A handwritten signature in blue ink, appearing to read 'D. Stratford', is written over a light blue horizontal line. The signature is stylized and cursive.

Dr. Dominic Stratford