PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

TUMAHOLE EXT 7 RESIDENTIAL DEVELOPMENT, PARYS, FREE STATE, SOUTH AFRICA

DATE: 2007-11-23



REPORT TO:

MOTSAMAI MAFOKENG (Emendo Africa)

Tel: 011 315 3870; Fax: 011 315 3861; Postal Address: P.O. Box 240, Groenkloof, 0027; E-mail: motsamai@emendo.co.za

ANDREW SALOMON (South African Heritage Resources Agency / SAHRA – Head Office) Tel: 021 462 4505; Fax: 021 462 4509; Postal Address: P.O. Box 4637, Cape Town, 8000; E-mail: asalomon@sahra.org.za

GABRIEL TLHAPI (South African Heritage Resources Agency / SAHRA – Free State) Tel: 051 430 4139; Fax: 051 448 2536; Postal Address: P.O. Box 9743, Bloemfontein, 9300; E-mail: gtlhapi@fs.sahra.org.za

PREPARED BY:

KAREN VAN RYNEVELD (ArchaeoMaps Archaeological Consultancy) Tel: 084 871 1064; Fax: N/A; Postal Address: P.O. Box 28530, Danhof, 9310; E-mail: kvanryneveld@gmail.com

PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

TUMAHOLE EXT 7 RESIDENTIAL DEVELOPMENT, PARYS, FREE STATE, SOUTH AFRICA

CONTENTS

| 1.1) DEVELOPMENT LOCATION AND IMPACT. 3 2) THE PHASE I ARCHAEOLOGICAL IMPACT ASSESSMENT | 1) | FERMS OF REFERENCE | 3 |
|--|--------------|---|------|
| 2.1) ARCHAEOLOGICAL LEGISLATIVE COMPLIANCE 2.2) COVERAGE AND GAP ANALYSIS 3.3 METHODOLOGY. 4.2.4.1.3 ISTE DESCRIPTIONS. 1.4.1.1.3 SITE T.3 Contemporary Cultural Heritage Feature - Residence 2.4.1.2 SITE T.3: Contemporary Cultural Heritage Feature - Parmer stock enclosure remains 1.1.2.4.1.3 SITE T.3: Contemporary Cultural Heritage Feature - Dam. 1.2.4.1.4 SITE T.4: Contemporary Cultural Heritage Feature - Dam. 1.2.4.1.5 SITE T.5: Contemporary Cultural Heritage Feature - Dam. 1.2.4.1.6 SITE T.6: Contemporary Cultural Heritage Feature - Dam. 1.2.4.1.7 SITE T.5: Contemporary Cultural Heritage Feature - Dam. 2.4.1.8 SITE T.6: Contemporary Cultural Heritage Feature - Structure remains. 4.4 2.4.1.6 SITE T.6: Contemporary Cultural Heritage Feature - Quarry. 1.5.2.4.2) CONCUSION. 1.6 3. RECOMMENDATIONS 1.7 4. REFERENCES CITED. 1.8 APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 2.0 APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999). 2.1 LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations. 1.7 Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations. 1.7 LIST OF FIGURES Figure 1: Sasolburg, Free State, South Africa Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys. 4.7 Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area. 5.7 Figure 6: General view of the north-western part of the Tumahole Ext 7 Residential Development area. 5.7 Figure 6: General view of the north-western part of the Tumahole Ext 7 Residential Development area. 5.7 Figure 6: Conceral view of the north-western part of the Tumahole Ext 7 Residential Development area. 5.7 Figure 7: Spatial display of the Tumahole Ext 7 Residential Development area. 5.7 Figure 8: Onwerfspruit, demarcating the southern boundary of the development area in the background. 5.7 Figure 1: General view of the nort | 1.1) | DEVELOPMENT LOCATION AND IMPACT | 3 |
| 2.2) COVERAGE AND GAP ANALYSIS. 6. 2.3 METHODOLOGY 6. 2.4.1 STE DESCRIPTIONS 1. 2.4.1.2 SITE DESCRIPTIONS 1. 2.4.1.3 SITE To Contemporary Cultural Heritage Feature - Residence 1. 2.4.1.3 SITE T3. Contemporary Cultural Heritage Feature - Former stock enclosure remains 1. 2.4.1.3 SITE T3. Contemporary Cultural Heritage Feature - Dam 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Formal waste site 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Formal waste site 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Structure remains 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Structure remains 1. 2.4.1.5 SITE T6. Contemporary Cultural Heritage Feature - Quarry 1. 2.2.4.2 CONCLUSION. 1. 2.2.4.2 CONCLUSION. 1. 3 RECOMMENDATIONS 1. 4 REFERENCES CITED 1. APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 2. APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 2. APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 OF 1999). 2. LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations 7. Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations 7. Figure 1: Sasolburg, Free State, South Africa 7. Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 4. Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area in Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development area 6. Figure 6: General view of the northeen part of the Tumahole Ext 7 Residential Development area 7. Figure 7: Spatial display of the Tumahole Ext 7 Residential Development area 8. Figure 8: Onwerfspruit, demacrating development part of the Tumahole Ext 7 Residential Development area 8. Figure 1: General view of the northeen part of the Tumahole Ext 7 Residential Development area 1. Figure 1: General view of the onth-western part of t | 2) | THE PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT | 6 |
| 2.2) COVERAGE AND GAP ANALYSIS. 6. 2.3 METHODOLOGY 6. 2.4.1 STE DESCRIPTIONS 1. 2.4.1.2 SITE DESCRIPTIONS 1. 2.4.1.3 SITE To Contemporary Cultural Heritage Feature - Residence 1. 2.4.1.3 SITE T3. Contemporary Cultural Heritage Feature - Former stock enclosure remains 1. 2.4.1.3 SITE T3. Contemporary Cultural Heritage Feature - Dam 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Formal waste site 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Formal waste site 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Structure remains 1. 2.4.1.5 SITE T5. Contemporary Cultural Heritage Feature - Structure remains 1. 2.4.1.5 SITE T6. Contemporary Cultural Heritage Feature - Quarry 1. 2.2.4.2 CONCLUSION. 1. 2.2.4.2 CONCLUSION. 1. 3 RECOMMENDATIONS 1. 4 REFERENCES CITED 1. APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 2. APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 2. APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 OF 1999). 2. LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations 7. Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations 7. Figure 1: Sasolburg, Free State, South Africa 7. Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 4. Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area in Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development area 6. Figure 6: General view of the northeen part of the Tumahole Ext 7 Residential Development area 7. Figure 7: Spatial display of the Tumahole Ext 7 Residential Development area 8. Figure 8: Onwerfspruit, demacrating development part of the Tumahole Ext 7 Residential Development area 8. Figure 1: General view of the northeen part of the Tumahole Ext 7 Residential Development area 1. Figure 1: General view of the onth-western part of t | 2.1) | ARCHAEOLOGICAL LEGISLATIVE COMPLIANCE | 6 |
| 2.4.1.1) SITE DESCRIPTIONS. 2.4.1.2) SITE DESCRIPTIONS. 2.4.1.3) SITE DESCRIPTIONS. 2.4.1.3) SITE T.S. Contemporary Cultural Heritage Feature - Pormer stock enclosure remains. 11.2.4.1.3) SITE T.S. Contemporary Cultural Heritage Feature - Dam. 2.4.1.4) SITE T.S. Contemporary Cultural Heritage Feature - Dam. 2.4.1.5) SITE T.S. Contemporary Cultural Heritage Feature - Pormal waste site. 3.2.4.1.5) SITE T.S. Contemporary Cultural Heritage Feature - Structure remains. 4.4.1.6) SITE T.S. Contemporary Cultural Heritage Feature - Structure remains. 4.5. A.J. CONCLUSION. 3.1 RECOMMENDATIONS. 4.2. REFERENCES CITED. 4.2. REFERENCES CITED. 4.3 REFERENCES CITED. 4.4 REFERENCES CITED. 4.5 REFERENCES CITED. 4.6 REFERENCES CITED. 4.7 REFERENCES CITED. 4.8 PENDIX A: 5. SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 2.6 APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 OF 1999). 2.1 LIST OF TABLES 4.1 LIST OF TABLES 4.2 LOCALULURAL HERITAGE SITE SIGNIFICANE AND ALIGN ASSOCIATED AND AL | 2.2) | | |
| 2.4.1.1) STET T2: Contemporary Cultural Heritage Feature - Former stock enclosure remains | 2.3) | METHODOLOGY | 6 |
| 2.4.1.2) SITE T2: Contemporary Cultural Heritage Feature - Former stock enclosure remains 11 2.4.1.3) SITE T3: Contemporary Cultural Heritage Feature - Dam. 12 2.4.1.4) SITE T4: Contemporary Cultural Heritage Feature - Formal waste site 13 2.4.1.5) SITE T5: Contemporary Cultural Heritage Feature - Structure remains 14 2.4.1.6) SITE T6: Contemporary Cultural Heritage Feature - Structure remains 14 2.4.1.6) SITE T6: Contemporary Cultural Heritage Feature - Quarry 15 2.4.2) CONCLUSION. 16 3) RECOMMENDATIONS 17 4) REFERENCES CITED 18 APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 20 APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 OF 1999). 21 LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations 17 LIST OF FIGURES Figure 1: Sasolburg, Free State, South Africa 17 Figure 2: Location of the proposed development area, identified and associated cultural heritage resources and relevant recommendations 17 LIST OF FIGURES Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 18 Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 18 Figure 2: Spatial display of the Tumahole Ext 7 Residential Development area 18 Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area 18 Figure 6: Spatial display of the Tumahole Ext 7 Residential Development area 19 Figure 6: Spatial display of the Tumahole Ext 7 Residential Development area 18 Figure 7: General view of the norther part of the Tumahole Ext 7 Residential Development area 18 Figure 8: Property Part American 19 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area 19 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area 19 Figure 19: General view of the norther part of the Tumahole Ext 7 Residential Development area 19 Figure 19: General vie | 2 | | |
| 2.4.1.3) SITE T3: Contemporary Cultural Heritage Feature - Dam. 12 2.4.1.4) SITE T4: Contemporary Cultural Heritage Feature - Structure remains 13 2.4.1.5) SITE T5: Contemporary Cultural Heritage Feature - Structure remains 14 2.4.1.6) SITE T6: Contemporary Cultural Heritage Feature - Structure remains 14 2.4.1.6) SITE T6: Contemporary Cultural Heritage Feature - Quarry 15 2.4.2) CONCUSION. 16 3) RECOMMENDATIONS 17 4) REFERENCES CITED 18 APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 20 APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (NO 25 OF 1999) 21 LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations 77 Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations 17 LIST OF FIGURES Figure 1: Sasolburg, Free State, South Africa 77 Figure 2: Location of the proposed Tumahole Ext 77 Residential Development area in relation to Parys 47 Figure 4: Layout of the proposed Tumahole Ext 77 Figure 5: Spatial display of the Tumahole Ext 77 Figure 5: Spatial display of the Tumahole Ext 77 Figure 6: General view of the northern part of the Tumahole Ext 77 Figure 7: General view of the northern part of the Tumahole Ext 77 Figure 8: General view of the northern part of the Tumahole Ext 77 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area 18 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area 19 Figure 19: Informal settlement characterizing the southern boundary of the Tumahole Ext 77 Figure 19: General view of the settlement characterizing the southern boundary of the Tumahole Ext 77 Figure 19: Informal settlement characterizing the southern boundary of the Tumahole Ext 77 Figure 19: Informal settlement characterizing the southern boundary of the Tumahole Ext 77 Figure 19: General view of the formal waste site 71 | | | |
| 2.4.1.4) SITE T4: Contemporary Cultural Heritage Feature - Formal waste site. 2.4.1.5) SITE T5: Contemporary Cultural Heritage Feature - Structure remains. 2.4.1.6) SITE T6: Contemporary Cultural Heritage Feature - Quarry. 15 2.4.2) CONCLUSION. 16 3) RECOMMENDATIONS. 17 4) REFERENCES CITED. 18 APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS. 20 APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (NO 25 OF 1999). 21 LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations. 7 Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations. 17 LIST OF FIGURES Figure 1: Sasolburg, Free State, South Africa. Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys. 4. Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development area. 5. Figure 5: General view of the northern part of the Tumahole Ext 7 Residential Development area. 8. Figure 6: General view of the north-western part of the Tumahole Ext 7 Residential Development area. 8. Figure 6: General view of the north-western part of the Tumahole Ext 7 Residential Development area. 8. Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area. 8. Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background. 9. Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area. 9. Figure 11: General view of the southern part of the Tumahole Ext 7 Residential Development area. 9. Figure 12: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area. 9. Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area. 9. Figure 10: Informal settlement characterizing the souther | | | |
| 2.4.1.5) SITE TS: Contemporary Cultural Heritage Feature - Structure remains | | | |
| 2.4.1.6) SITE T6: Contemporary Cultural Heritage Feature - Quarry | | | |
| 3) RECOMMENDATIONS | | | |
| 3) RECOMMENDATIONS | | | |
| APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS | | | |
| APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS | 3) 1 | RECOMMENDATIONS | 17 |
| APPENDIX A: SCHEMATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS | <i>1</i>) 1 | DEFEDENCES CITED | 1 9 |
| APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999) | 4) 1 | GFERENCES CITED | . 10 |
| APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999) | | | |
| APPENDIX B: EXTRACTS FROM THE NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999) | | | |
| LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations | SCHEM | ATIC OUTLINE OF THE PRE-HISTORIC AND HISTORIC PERIODS | 20 |
| LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations | 4 DDE | VDW D | |
| LIST OF TABLES Table 1: Cultural heritage site significance assessment and mitigation recommendations. 7 Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations. 17 LIST OF FIGURES Figure 1: Sasolburg, Free State, South Africa 3 Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 4 Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area 4 Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development area 4 Figure 5: Spatial display of the Tumahole Ext 7 Residential Development Alf findings 7 Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area 8 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background. 9 Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area in the background. 9 Figure 11: General view of Site T1's living quarters 10 Figure 12: Informal living and livestock enclosures, Site T1 10 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11 Figure 14: The Site T3 cement dam remains 12 Figure 15: General view of the site T4 formal waste site 13 Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14 Figure 17: General view of the Site T6 quarry 15 | | | 21 |
| Table 1: Cultural heritage site significance assessment and mitigation recommendations | EXIKA | CIS FROM THE INATIONAL FIERITAGE RESOURCES ACT (INO 25 OF 1979) | .41 |
| Table 1: Cultural heritage site significance assessment and mitigation recommendations | | | |
| Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations | | LIST OF TABLES | |
| Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations | | | |
| Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations | Table 1 | : Cultural heritage site significance assessment and mitigation recommendations | 7 |
| LIST OF FIGURES Figure 1: Sasolburg, Free State, South Africa | Table 2 | 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant | |
| Figure 1: Sasolburg, Free State, South Africa Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 4 Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area 4 Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development area 5 Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings 7 Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area 8 Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area 8 Figure 8: Ouwer/spruit, demarcating development boundaries to the north and east 9 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background 9 Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area 9 Figure 11: General view of Site T1's living quarters 10 Figure 12: Informal living and livestock enclosures, Site T1 11 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11 Figure 14: The Site T3 cement dam remains 12 Figure 15: General view of the site T4 formal waste site 13 Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14 Figure 17: General view of the Site T6 quarry | recomr | nendations | 17 |
| Figure 1: Sasolburg, Free State, South Africa Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys 4 Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area 4 Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development area 5 Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings 7 Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area 8 Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area 8 Figure 8: Ouwer/spruit, demarcating development boundaries to the north and east 9 Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background 9 Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area 9 Figure 11: General view of Site T1's living quarters 10 Figure 12: Informal living and livestock enclosures, Site T1 11 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11 Figure 14: The Site T3 cement dam remains 12 Figure 15: General view of the site T4 formal waste site 13 Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14 Figure 17: General view of the Site T6 quarry | | | |
| Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area Figure 4: Layout of the proposed Tumahole Ext 7 Residential development Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area Figure 8: Ouwerfspruit, demarcating development boundaries to the north and east Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area Figure 11: General view of Site T1's living quarters Figure 12: Informal living and livestock enclosures, Site T1 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11 Figure 15: General view of the site T4 formal waste site 13 Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14 Figure 17: General view of the Site T6 quarry | | LIST OF FIGURES | |
| Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area Figure 4: Layout of the proposed Tumahole Ext 7 Residential development Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area Figure 8: Ouwerfspruit, demarcating development boundaries to the north and east Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area Figure 11: General view of Site T1's living quarters Figure 12: Informal living and livestock enclosures, Site T1 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11 Figure 15: General view of the site T4 formal waste site 13 Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14 Figure 17: General view of the Site T6 quarry | | | |
| Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area Figure 4: Layout of the proposed Tumahole Ext 7 Residential development Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area Figure 8: Ouwerfspruit, demarcating development boundaries to the north and east Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area Figure 11: General view of Site T1's living quarters Figure 12: Informal living and livestock enclosures, Site T1 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11 Figure 15: General view of the site T4 formal waste site 13 Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14 Figure 17: General view of the Site T6 quarry | Figure | 1. Sacolburg Free State South Africa | 3 |
| Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area | | | |
| Figure 4: Layout of the proposed Tumahole Ext 7 Residential development | | | |
| Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area Figure 8: Ouwerfspruit, demarcating development boundaries to the north and east. Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background. Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area Figure 11: General view of Site T1's living quarters. 10: Figure 12: Informal living and livestock enclosures, Site T1 Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 11: Figure 14: The Site T3 cement dam remains 12: Figure 15: General view of the site T4 formal waste site 13: Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site 14: Figure 17: General view of the Site T6 quarry | | | |
| Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area | | | |
| Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area | | | |
| Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background | | | |
| background | | | |
| Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Development area | | | |
| Figure 11: General view of Site T1's living quarters | | | |
| Figure 12: Informal living and livestock enclosures, Site T1 | | | |
| Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2 | | | |
| Figure 14: The Site T3 cement dam remains | Figure | 12: Informal living and livestock enclosures, Site T1 | 10 |
| Figure 15: General view of the site T4 formal waste site | | | |
| Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site | | | |
| Figure 17: General view of the Site T6 quarry | | | |
| | | | |
| | | | |
| | -81 | | |

1) TERMS OF REFERENCE

The proposed Tumahole Ext 7 Residential Development aims to address the increased demand for accommodation in the Tumahole Township near Parys, Free State, South Africa. The proposed, approximate 100ha development will comprise of 900 residential erven, 2 business erven, 4 church erven, 1 primary school, 1 undetermined erf, 1 sport erf and 12 public space erven. Associated linear development will include as minimum access roads, water and sewerage.

1.1) DEVELOPMENT LOCATION AND IMPACT

The Tumahole Ext 7 Residential Development will be located on an approximate 100ha development area comprising of a portion of the farm Klipspruit 64, Parys, Free State, South Africa (1:50,000 map ref. – 2627CD and 2627DC).

Development will impact on the total surface area of the approximate 100ha development area to an estimated sub-surface level of approximately 1.5m deep. Development impact on the affected area will be total; resulting in the loss of all surface and sub-surface heritage sites / features that may be present within the proposed development area.



Figure 1: Sasolburg, Free State, South Africa

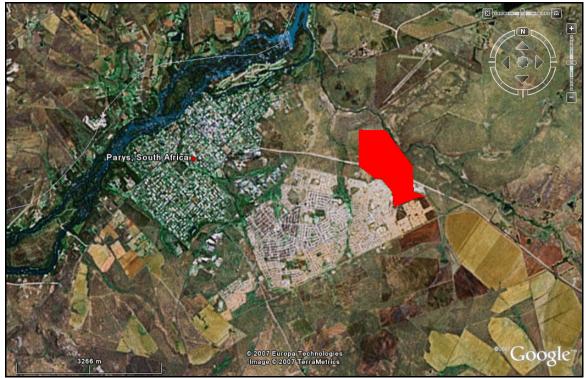


Figure 2: Location of the proposed Tumahole Ext 7 Residential Development area in relation to Parys

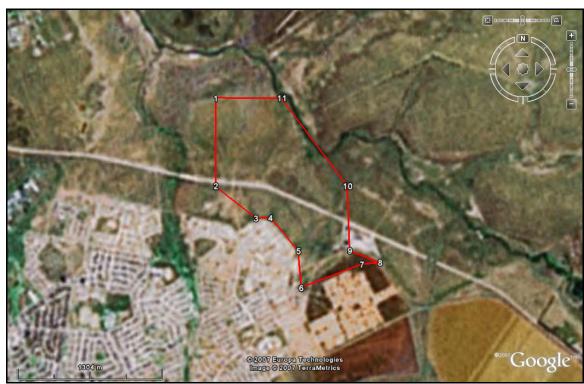


Figure 3: Close-up of the proposed Tumahole Ext 7 Residential Development area

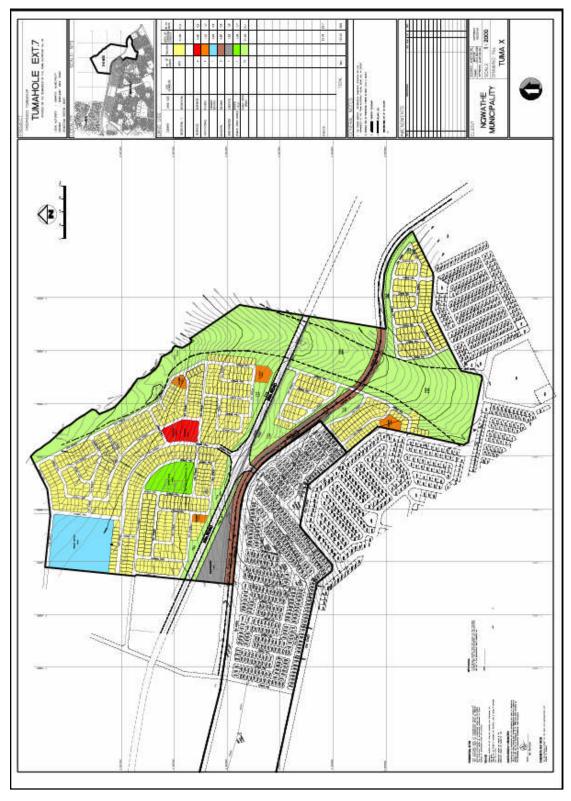


Figure 4: Layout of the proposed Tumahole Ext 7 Residential Development (courtesy Emendo Africa)

2) THE PHASE 1 ARCHAEOLOGICAL IMPACT ASSESSMENT

2.1) ARCHAEOLOGICAL LEGISLATIVE COMPLIANCE

The Phase 1 Archaeological Impact Assessment (AIA) was requested by the South African Heritage Resources Agency (SAHRA) mandatory responsible for the National Heritage Resources Act, Act No 25 of 1999 (NHRA 1999).

The Phase 1 AIA's was requested as specialist sub-section to the Environmental Impact Assessment (EIA) in compliance with requirements of the National Environmental Management Act, No 107 of 1998 (NEMA 1998) and associated regulations (2006), and the NHRA 1999 and associated regulations (2000).

The Phase 1 AIA aimed to locate, identify and assess the significance of cultural heritage resources, inclusive of archaeological deposits / sites, built structures older than 60 years, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict and cultural landscapes or viewscapes as defined and protected by the NHRA 1999, that may be affected by the proposed development. Palaeontological deposits / sites as defined and protected by the NHRA 1999 are not included as subject to this report.

2.2) COVERAGE AND GAP ANALYSIS

The Phase 1 AIA covered the approximate 100ha Tumahole Ext 7 Residential Development area and immediate surrounds.

Access to the development area is via an existing gravel road.

2.3) METHODOLOGY

The Phase 1 AIA was conducted over a one day period (2007-11-15) by one archaeologist. The assessment was done by foot and off-road vehicle (200cc quad) and limited to a Phase 1 surface survey; no excavation or sub-surface testing was done.

Visibility across the development area was in general good; visibility in the southern portion was affected by existing informal settlement. In the north-eastern portion of the development thicker vegetation associated with the *Ouwerfspruit* stream did impact on visibility.

GPS co-ordinates were taken with a Garmin e-Trex Vista GPS (Datum: WGS84). Photographic documentation was done with a Casio X-S2 Exilim camera. A combination of Garmap and Google Earth software was used in the display of spatial information

Archaeological and cultural heritage site significance assessment and associated mitigation recommendations were done according to the system prescribed by SAHRA (2007).

| SITE SIGNIFICANCE | FIELD RATING | GRADE | RECOMMENDED MITIGATION |
|---------------------|-------------------------|---------------|--|
| High Significance | National Significance | Grade 1 | Site conservation / Site development |
| High Significance | Provincial Significance | Grade 2 | Site conservation / Site development |
| High Significance | Local Significance | Grade 3A / 3B | Site conservation or extensive mitigation prior to |
| | | | development / destruction |
| High / Medium | Generally Protected A | - | Site conservation or mitigation prior to development / |
| Significance | | | destruction |
| Medium Significance | Generally Protected B | - | Site conservation or mitigation / test excavation / |
| | | | systematic sampling / monitoring prior to or during |
| | | | development / destruction |
| Low Significance | Generally Protected C | - | On-site sampling, monitoring or no archaeological |
| | | | mitigation required prior to or during development / |
| | | | destruction |

Table 1: Cultural heritage site significance assessment and mitigation recommendations

2.4) PHASE 1 AIA ASSESSMENT FINDINGS

Six cultural heritage resources were identified during assessment of the approximate 100ha Tumahole Ext 7 Residential Development area. Three of the identified resources (T1-3) are located within the proposed development area. One resource (T4) cross-cuts the boundary fence of the proposed development. Two resources (T5-6) are located in close proximity to the development area.

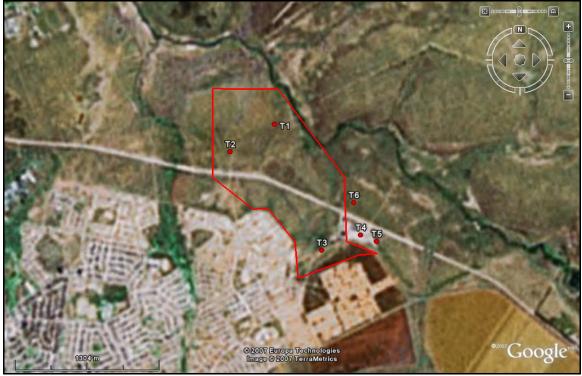


Figure 5: Spatial display of the Tumahole Ext 7 Residential Development AIA findings

All six identified sites comprise of contemporary heritage resources; none fall within the categories of archaeological deposits / sites, built structures older than 60 years, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict and cultural

landscapes or viewscapes as defined and protected by the NHRA 1999. Located sites can briefly be described as:

- 1. T1 Residence
- 2. T2 Former sock enclosure remains
- 3. T3 Dam
- 4. T4 Formal waste site
- 5. T5 Structure remains
- 6. T6 Quarry

Exposed sub-surface sections, varying from 20-40cm across the development area to approximately 1.5m below the present day surface at the T6 quarry site, proved to be anthropically sterile. Inspection of the *Ouwerfspruit* stream sections to the north and east of the development area yielded no culture stratigraphic layer.



Figure 6: General view of the northern part of the Tumahole Ext 7 Residential Development area



Figure 7: General view of the north-western part of the Tumahole Ext 7 Residential Development area



Figure 8: Ouwerfspruit, demarcating development boundaries to the north and east



Figure 9: The existing gravel access road with settlement demarcating the southern boundary of the development area in the background



Figure 10: Informal settlement characterizing the southern boundary of the Tumahole Ext 7 Residential Dvelopment area

2.4.1.1) SITE T1: Contemporary Cultural Heritage Feature - Residence

- S 26°54'15.4"; E 27°29'48.9"

Site T1 is located in the proposed Tumahole Ext 7 Residential Development area. The site is characterized by a contemporary informal farmstead setup with living quarters and stock enclosures. Site T1 does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999.

Site Significance and Recommendations: Site T1 does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999; a SAHRA *Site Significance* assignation is thus irrelevant. It is recommended that recommendations as per the Social Impact Assessment (SIA) / Public Liaison Process be complied with.



Figure 11: General view of Site T1's living quarters



Figure 12: Informal living and livestock enclosures, Site T1

Site T2, located in the proposed Tumahole Ext 7 Residential Development area, is characterized by an approximate 10x10m area typified by disturbed vegetation and a central low rising mound representative of a former livestock enclosure. No associated archaeological deposit was identified. The enclosure is interpreted to be of relatively recent (post 60 years of age) date. The site does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999.

Site Significance and Recommendations: Site T2 does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999; a SAHRA Site Significance assignation is thus irrelevant. It is recommended that the site be destroyed without the developer having to comply with further cultural heritage mitigatory requirements.



Figure 13: Recent livestock enclosure deposits and related vegetation change demarcating the locality of Site T2

Site T3 is located in the proposed Tumahole Ext 7 Residential Development area. The site is typified by the ruined remains of a cement dam, post-dating 60 years of age and by implication not protected by the NHRA 1999.

Site Significance and Recommendations: Site T3 does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999; a SAHRA *Site Significance* assignation is thus irrelevant. It is recommended that the site be destroyed without the developer having to comply with further cultural heritage mitigatory requirements.



Figure 14: The Site T3 cement dam remains

The extent of Site T4 cross-cuts the proposed Tumahole Ext 7 development boundary. No historic material was identified on the large formal waste site, testifying to its modern origin. The site thus does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999. Development will not only impact on a portion of the site but may well necessitate formal relocation of the dump for residential establishment purposes [see also 2.4.1.5) Site T5].

** Site Significance and Recommendations: Site T4 does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999; a SAHRA Site Significance assignation is thus irrelevant. It is recommended that development in the area proceed without the developer having to comply with further cultural heritage mitigatory requirements.

(Should development necessitate relocation / rehabilitation of the dump, it is recommended that relocation / rehabilitation proceed. The recommendation pertains only to the locality of the existing dump site and cultural heritage compliance as per the SAHRA requirements regarding a new proposed waste site locality should be complied with.)



Figure 15: General view of the site T4 formal waste site

Site T5 is situated immediately east of Site T4 and outside the proposed Tumahole Ext 7 Residential Development boundary. The site is composed of relatively recent cement structure foundations, post-dating 60 years of age and by implication not protected by the NHRA 1999. In accordance with the development layout, development will not directly impact on the site.

Site Significance and Recommendations: Site T5 is located outside the proposed development boundary and does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999; a SAHRA Site Significance assignation is thus irrelevant.

(Negative development impact on Site T5 may well be inferred should development necessitate relocation / rehabilitation of the T4 waste site. In the event of relocation/ rehabilitation, it is recommended that Site T5 be destroyed without the developer having to comply with further cultural heritage mitigatory requirements.)



Figure 16: Site T5 – cement structure foundations located immediately adjacent to the formal dump site

Site T6 is located east of the proposed Tumahole Ext 7 residential development area. The site is characterized by a contemporary quarry. Quarry sections of up to 1.5m yielded no culture stratigraphic layer. Site T6 does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999.

Site Significance and Recommendations: Site T6 is located outside the proposed development boundary and does not comprise of a cultural heritage resource as defined and protected by the NHRA 1999; a SAHRA Site Significance assignation is thus irrelevant.

(Should development necessitate rehabilitation of the quarry for residential establishment purposes it is recommended that development proceeds without the developer having to comply with further cultural heritage mitigatory requirements.)



Figure 17: General view of the Site T6 quarry



Figure 18: Quarry sections of up to 1.5m proved to be anthropically sterile

2.4.2) CONCLUSION

Assessment of the approximate 100ha Tumahole Ext 7 Residential Development area yielded six cultural heritage resources. Three of the identified resources (T1-3) are located within the proposed development area. One resource (T4) cross-cuts the boundary fence of the proposed development. Two resources (T5-6) are located in close proximity to the development area. All located sites constitute contemporary cultural heritage resources, by implication not protected under the NHRA 1999.

3) **RECOMMENDATIONS**

The proposed Tumahole Ext 7 residential development poses no threat to our cultural heritage inclusive of archaeological deposits / sites, built structures older than 60 years, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict and cultural landscapes or viewscapes as defined and protected by the NHRA 1999. It is recommended that development proceed without the developer having to comply with further cultural heritage mitigatory requirements.

| MAP CODE | SITE | Түре | DESCRIPTION | Co-ordinates | RECOMMENDATIONS | | | |
|---|------|------|-------------|----------------------------|-----------------|--|--|--|
| TUMAHOLE EXT 7 RESIDENTIAL DEVELOPMENT, PARYS, FREE STATE | | | | | | | | |
| 1 | - | - | - | S26°54'05.1"; E27°29'28.4" | - | | | |
| 2 | - | - | - | S26°54'31.0"; E27°29'28.5" | - | | | |
| 3 | - | - | - | S26°54'40.6"; E27°29'41.8" | - | | | |
| 4 | - | - | - | S26°54'40.4"; E27°29'46.8" | - | | | |
| 5 | - | - | - | S26°54'50.2"; E27°29'55.9" | - | | | |
| 6 | - | - | - | S26°55'01.0"; E27°29'56.8" | - | | | |
| 7 | - | - | - | S26°54'54.1"; E27°30'16.7" | - | | | |
| 8 | - | - | - | S26°54'53.6"; E27°30'22.8" | - | | | |
| 9 | - | - | - | S26°54'50.0"; E27°30'12.8" | - | | | |
| 10 | - | - | - | S26°54'31.1"; E27°30'12.1" | - | | | |
| 11 | - | - | - | S26°54'05.0"; E27°29'50.3" | - | | | |

^{*} No Cultural Heritage Resources as Defined and Protected by the NHRA 1999 were located within the proposed development area

| * 6 Contemporary cultural | heritage resources were | located within the devel | lopment area / in c | close proximity to the d | levelopment area |
|---------------------------|-------------------------|--------------------------|---------------------|--------------------------|------------------|
| | | | | | |

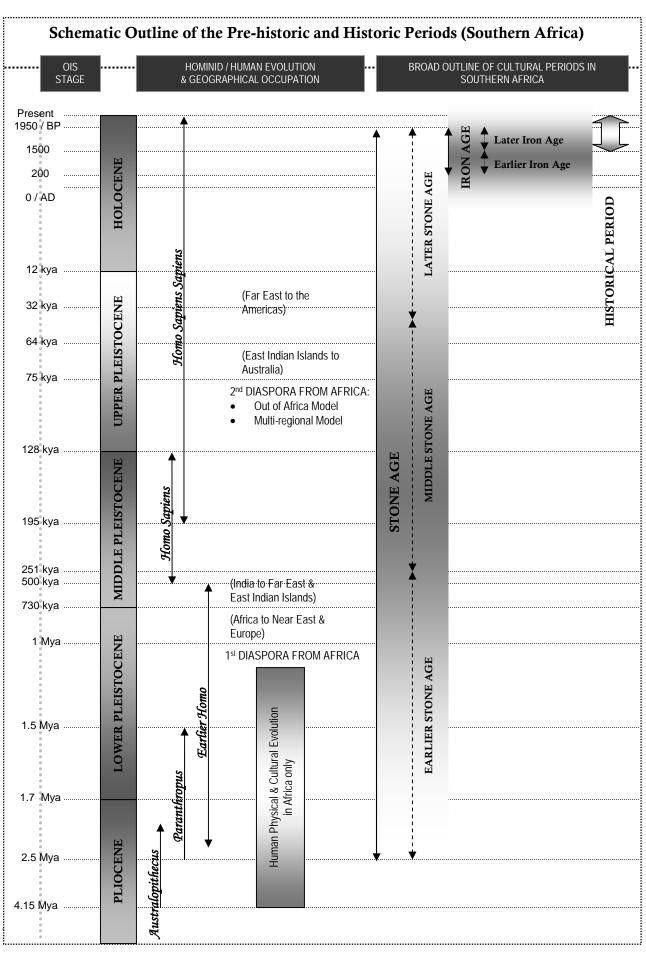
| T1 | T1 | Cont. | Residence | S 26°54'15.4"; E 27°29'48.9" | N/A |
|----------------------|---------|----------|------------------------|--------------------------------|-----|
| | | | | (Located in development area) | |
| T2 | T2 | Cont. | Former stock enclosure | S 26°54'23.5"; E 27°29'34.2" | N/A |
| | | | remains | (Located in development area) | |
| Т3 | Т3 | Cont. | Dam | S 26°54'52.5"; E 27°30'04.5" | N/A |
| | | | | (Located in development area) | |
| T4 | T4 | Cont. | Formal waste site | S 26°54'48.0"; E 27°30'17.3" | N/A |
| | | | | (Cross-cutting development | |
| | | | | boundary) | |
| T5 | T5 | Cont. | Structure remains | S 26°54'49.9"; E 27°30'22.6" | N/A |
| | | | | (Adjacent to development area) | |
| T6 | T6 | Cont. | Quarry | S 26°54'38.5"; E 27°30'15.1" | N/A |
| | | | | (Adjacent to development area) | |
| Cont. | – Conto | emporary | | | |
| N/A - Not applicable | | | | | |

Table 2: Summary of the proposed development area, identified and associated cultural heritage resources and relevant recommendations

(Should any sub-surface cultural heritage resources be encountered during the course of development the developer should immediately cease operation in the immediate vicinity and report the find to SAHRA / CRM archaeologist.)

4) REFERENCES CITED

- 1. South African Government. (No. 107) of 1998. National Environmental Management Act.
- 2. South African Government. (No. 25) of 1999. National Heritage Resource Act.
- 3. South African Heritage Resources Agency. 2007. *Minimum standards for the archaeological and heritage components of impact assessments*. Unpublished guidelines.



EXTRACTS FROM THE

NATIONAL HERITAGE RESOURCES ACT (No 25 of 1999)

DEFINITIONS

Section 2

In this Act, unless the context requires otherwise:

- ii. "Archaeological" means
 - a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
 - b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10 m of such representation;
 - c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic,... and any cargo, debris, or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation.
- viii. "Development" means any physical intervention, excavation or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including
 - a) construction, alteration, demolition, removal or change of use of a place or structure at a place;
 - b) carrying out any works on or over or under a place;
 - subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
 - d) constructing or putting up for display signs or hoardings;
 - e) any change to the natural or existing condition or topography of land; and
 - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- xiii. "Grave" means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;
- xxi. "Living heritage" means the intangible aspects of inherited culture, and may include
 - a) cultural tradition;
 - b) oral history;
 - c) performance;
 - d) ritual:
 - e) popular memory;
 - f) skills and techniques;
 - g) indigenous knowledge systems; and
 - h) the holistic approach to nature, society and social relationships.
- xxxi. "Palaeontological" means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or trance:
 - xli. "Site" means any area of land, including land covered by water, and including any structures or objects thereon;
- xliv. "Structure" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

NATIONAL ESTATE

Section 3

- 1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- 2) Without limiting the generality of subsection 1), the national estate may include
 - a) places, buildings, structures and equipment of cultural significance;
 - b) places to which oral traditions are attached or which are associated with living heritage;
 - c) historical settlements and townscapes;
 - d) landscapes and natural features of cultural significance;
 - e) geological sites of scientific or cultural importance
 - f) archaeological and palaeontological sites;
 - g) graves and burial grounds, including
 - i. ancestral graves;
 - ii. royal graves and graves of traditional leaders;

- iii. graves of victims of conflict
- iv. graves of individuals designated by the Minister by notice in the Gazette;
- v. historical graves and cemeteries; and
- vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
- h) sites of significance relating to the history of slavery in South Africa;
- i) movable objects, including -
 - objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - objects to which oral traditions are attached or which are associated with living heritage;
 - iii. ethnographic art and objects;
 - iv. military objects;
 - v. objects of decorative or fine art;
 - vi. objects of scientific or technological interest; and
 - vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

STRUCTURES

Section 34

1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

ARCHAEOLOGY, PALAEONTOLOGY AND METEORITES Section 35

- 3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.
- 4) No person may, without a permit issued by the responsible heritage resources authority
 - destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
 - b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
 - trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
 - d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- 5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is under way, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may
 - a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
 - b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
 - c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph a) to apply for a permit as required in subsection 4); and
 - d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- 6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

BURIAL GROUNDS AND GRAVES

Section 36

- 3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority
 - a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
 - b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
 - c) bring onto or use at a burial ground or grave referred to in paragraph a) or b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.
- 4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction of any burial ground or grave referred to in subsection 3a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority
- 5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection 3b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority
 - a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- 6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority
 - a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-internment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

HERITAGE RESOURCES MANAGEMENT

Section 38

- 1) Subject to the provisions of subsections 7), 8) and 9), any person who intends to undertake a development categorised as
 - a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
 - b) the construction of a bridge or similar structure exceeding 50 m in length;
 - c) any development or other activity which will change the character of a site
 - i. exceeding 5 000 m² in extent; or
 - ii. involving three or more existing erven or subdivisions thereof; or
 - iii. involving three or more erven or subdivisions thereof which have been consolidated within the past five years; or
 - iv. the costs which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - d) the rezoning of a site exceeding 10 000 m² in extent; or
 - e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,

must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

- 2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection 1)
 - a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
 - b) notify the person concerned that this section does not apply.
- 3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2a) ...

- 4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development decide
 - a) whether or not the development may proceed;
 - b) any limitations or conditions to be applied to the development;
 - c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;
 - d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
 - e) whether the appointment of specialists is required as a condition of approval of the proposal.

APPOINTMENT AND POWERS OF HERITAGE INSPECTORS Section 50

- 7) Subject to the provision of any other law, a heritage inspector or any other person authorised by a heritage resources authority in writing, may at all reasonable times enter upon any land or premises for the purpose of inspecting any heritage resource protected in terms of the provisions of this Act, or any other property in respect of which the heritage resources authority is exercising its functions and powers in terms of this Act, and may take photographs, make measurements and sketches and use any other means of recording information necessary for the purposes of this Act.
- 8) A heritage inspector may at any time inspect work being done under a permit issued in terms of this Act and may for that purpose at all reasonable times enter any place protected in terms of this Act.
- 9) Where a heritage inspector has reasonable grounds to suspect that an offence in terms of this Act has been, is being, or is about to be committed, the heritage inspector may with such assistance as he or she thinks necessary
 - enter and search any place, premises, vehicle, vessel or craft, and for that purpose stop and detain any vehicle, vessel or craft, in or on which the heritage inspector believes, on reasonable grounds, there is evidence related to that offence;
 - b) confiscate and detain any heritage resource or evidence concerned with the commission of the offence pending any further order from the responsible heritage resources authority; and
 - c) take such action as is reasonably necessary to prevent the commission of an offence in terms of this Act.
- 10) A heritage inspector may, if there is reason to believe that any work is being done or any action is being taken in contravention of this Act or the conditions of a permit issued in terms of this Act, order the immediate cessation of such work or action pending any further order from the responsible heritage resources authority.