

21 May 2012

South African Heritage Resources Agency
Archaeological, Palaeontological and Meteorites Unit
PO Box 4637
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South Africa



Attention: Mrs Mariagrazia Galimberti

INTERIM REPORT: ARCHAEOLOGICAL MITIGATION WORK, SITE PGS 01: N1 FREEWAY – MISGUND INTERCHANGE PROJECT, JOHANNESBURG, GAUTENG PROVINCE – SAHRA PERMIT 80/12/01/003/51

PGS Heritage & Grave Relocation Consultants was appointed by *Environmental Impact Management Services (Pty) Ltd* for SANRAL to implement the proposed archaeological mitigation work as recommended by the Heritage Impact Report (Fourie, 2011) and SAHRA recommendations for the project. This interim report on the mitigation works aims to augment the application for destruction of the site as applied for by SANRAL.

1. N1 MISGUND INTERCHANGE – SITE PGS 01

The proposed upgrade of the N1 Misgund Interchange will impact on an Iron Age Site (**PGS 01**) adjacent and on the eastern side of the N1 Freeway.

1.1 PGS 01 – Site description

The site was situated at the foot and the southern slopes of a small koppie just to the east of the current N1 Misgund interchange alignment on the Farm Misgund in the Gauteng Province (Figure 1). The farm Misgund was situated on the western extent of the Klipriviersberg range. This mountain range to the south of Johannesburg was well known for its Later Iron Age stone walled settlements and associated Iron Age rock engravings (Maggs, 1976; Mason, 1968 and Huffman, 2007).

The land was open grass land to the south with a rocky outcrop to the north. Large parts of the area have been disturbed by previous construction activities (from the freeway and the adjacent residential suburb).

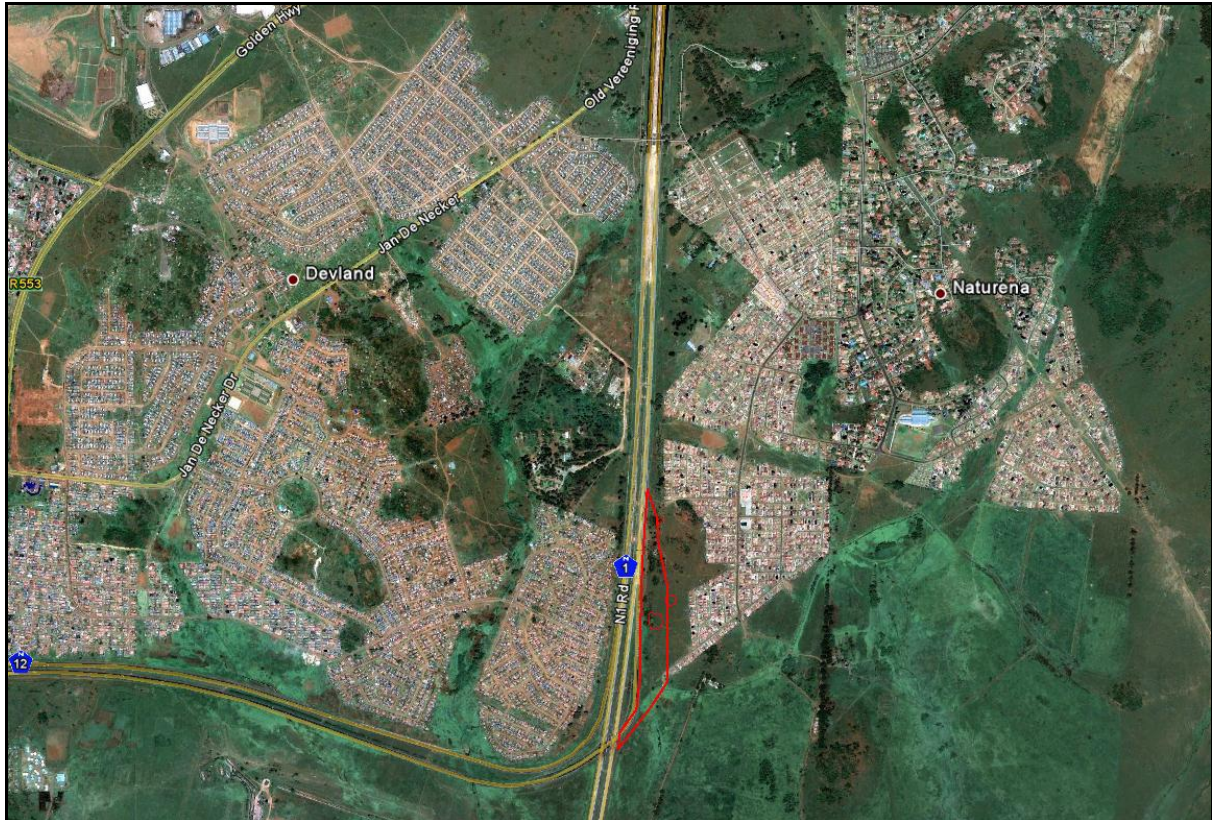


Figure 1: Misgund Interchange Locality

The site consisted of a number of low walls arranged in two large circles adjoining each other. The larger walls were all double walling with infill. The central kraal had two smaller enclosures in the middle that was possibly utilised as small stock enclosures. The site measured approximately 70m in diameter.

Although a small section of the site has been destroyed by the construction of the current Misgund interchange, the site was still well preserved, although most of the walling has been removed previously.

No ceramics could be found initially on the surface, a midden was identified along the south-eastern wall of the settlement.

The settlement unit conformed to the N-type as identified by Maggs (1976) and Class III-Klipriviersberg as identified by Mason (1968) and Huffman (2007).

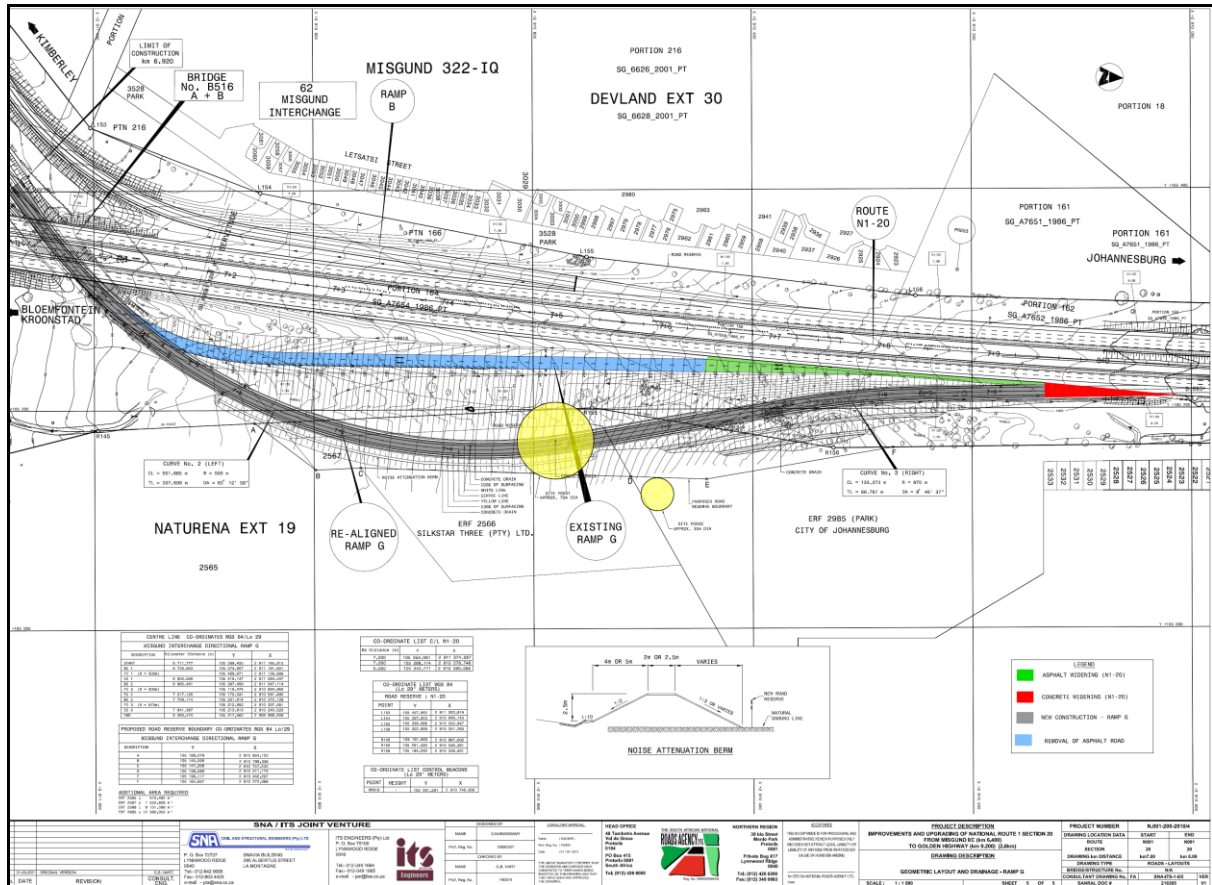


Figure 2: Misgund interchange upgrade -Yellow circle indicates position of the site

1.2 Research Method

- A literature study of sources on the archaeology and ethnography of the region is in the process of completion, to gain an understanding of the archaeology and history of the broader region.
- The extent of the settlement was determined during site visits.
- The settlement was then cleared from its vegetation cover.
- The extent of the site and its layout was surveyed with dumpy level and distometer and a layout plan was generated of the site (Figure 3).
- Five main areas were identified where test trenches were placed. Four of these trenches (area 1-3 & 5) were 1m wide and their lengths varied as the size of each of the identified areas varied (Figure 3).

- An area (area 4), with a midden and where pottery were identified, at the eastern entrance to the site where a test trench of 4x4m was set out. This trench was situated on the outside of the walled settlement (**Figure 3**).
- Mitigation work on site the Misgund Late Iron Age Site commenced on 3 April 2012 and field work was completed on 17 April 2012.

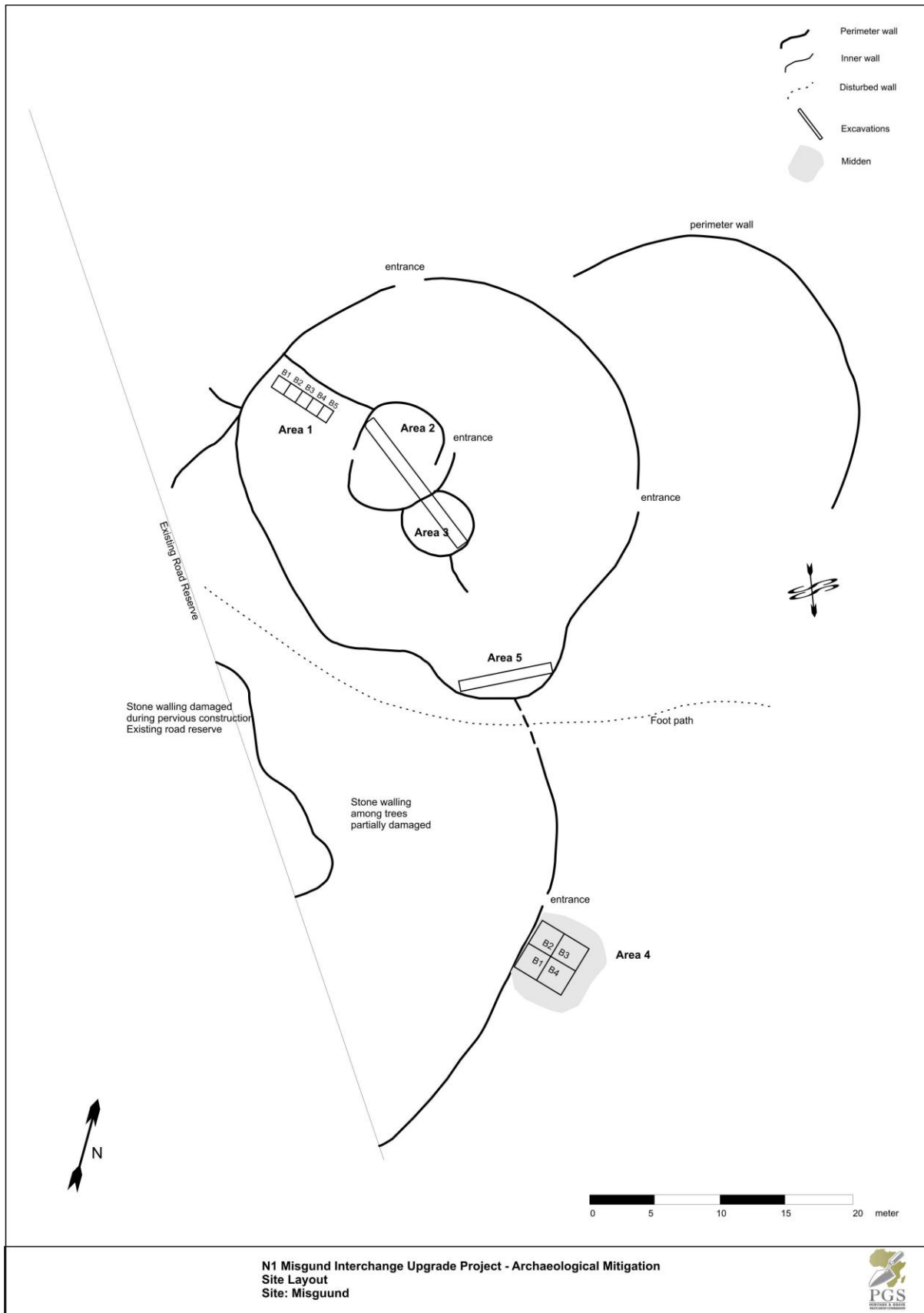
2. EXCAVATIONS

2.1. Area 1

This area was identified at the northern extent of the main stone walled enclosure. A low stone wall connected the northernmost central stock enclosure with the northern section of the main enclosure. This interconnecting wall created two separated areas within the main enclosure. It was decided to test the area to the west of this interconnecting wall. This side of the wall seemed to have relative more deposit as the soil was a bit higher than the level of the soil on the eastern side of the interconnecting wall. The eastern side of the wall also had more rocks strewn all over, which would have complicated excavations.

Test Trench 1 (Blocks 1 – 5)

A test trench which measured 5m x 1m was placed alongside the interconnecting wall. This trench was aligned from north to south. The trench was divided into five equal blocks of 1m x 1m in size. This gave the volunteer students a chance to familiarise themselves with excavation methodology and techniques employed during the excavations. The blocks were numbered B1 to B5 from north to south. The blocks were excavated down to 10cm – 15cm when archaeological sterile soil was encountered. No subterranean features were identified from the excavated blocks (**Figure 4**).



N1 Misgund Interchange Upgrade Project - Archaeological Mitigation
Site Layout
Site: Misgund



Figure 3: Misgund Site Layout



Figure 4: View of Area 1; Blocks 1 – 5; Layer 1 from the north

The excavated soil of each block was screened, but no archaeological materials (artefacts/eco-facts) were recovered.

2.2. Area 2

The northernmost and larger of the two central stock enclosures was identified as the second area to be investigated. This enclosure was circular and had an entrance on the eastern side and measured approximately 6m in diameter.

Test Trench 1

A trench was placed from the northern extent across to the southern end of the enclosure. The trench measured 1m x 5.8m within the opposite walls of the enclosure.

Layer 1

The first layer was excavated down to a depth of approximately 20cm when a layer of light brown/yellow soil was encountered. The first layer consisted mostly of dark brown soil which was mixed with gravel and rocks. The rocks originated predominantly from the collapsed stone walls of the enclosure (**Figure 5**). No features were identified in this layer.

The excavated soil was screened and only 12 x non-diagnostic potsherds (PGS01/12/01) were recovered from this layer.



Figure 5: View of Area 2; TT 1; Layer 1 from the north.

Layer 2

At a depth of approximately 20cm from the surface, a layer of light brown/yellow soil was noticed in the excavated trench. This light brown/yellow soil was excavated as layer 2. The layer of light brown/yellow soil extended in the trench from the southern edge from the enclosure for approximately 4m to approximately 1.8m from the northern edge of the enclosure. The northern 1.8m of the trench did not contain any of the light brown/yellow soil and it only consisted of the dark brown soil and it was consistent with the soil from layer 1.

It seemed as if the light brown/yellow soil was separated from the dark soil in this layer by a line of loosely arranged rocks. There was a distinct line between the two different colours of soil. This could possibly have been caused by the later expansion of the enclosure towards the northern side. The line of loosely arranged rocks could have been the remnants of the foundations of the old enclosure. The layer of light brown/yellow was excavated down to approximately 10cm – 15cm when archaeological sterile soil was encountered. The dark brown soil on the northern side of the trench also proved to be archaeologically sterile and was not excavated any deeper (**Figure 6**).

The excavated soil was screened and 12 x non-diagnostic potsherds (PGS01/12/02) and 34grams of animal bone and teeth fragments (PGS01/12/03) were recovered. A sample of the light brown/yellow soil (PGS01/12/26) was also taken from this layer for any possible future analysis.



Figure 6: View of Area 2; TT 1; Layer 2 from the north

2.3. Area 3

The smaller and southern central stone walled enclosure was identified as area 3. This enclosure was circular and measured approximately 3.6m in diameter. No specific entrance could be identified due to the collapsed state of the walls.

Test Trench 1

A trench was placed from the northern extent across to the southern end of the enclosure. This trench extended from the trench placed in the previous identified area. The trench measured 1m x 3.6m within the opposite walls of the enclosure.

Layer 1

The first and only layer was excavated down to a depth of approximately 10cm – 15cm when archaeological sterile soil was encountered. This layer consisted mostly of dark brown soil which was mixed with gravel and rocks. The rocks originated predominantly from the collapsed stone walls of the enclosure. The light brown/yellow soil which was encountered in the adjacent enclosure was not present in this enclosure (figure 10, 11 & 12). No other features were identified in this layer.

The excavated soil was screened and 5 x non-diagnostic potsherds (PGS01/12/04), 1 x diagnostic potsherd (PGS01/12/05) and 33grams of animal bone and teeth fragments (PGS01/12/06) were recovered from this layer.



Figure 7: View of Area 3; TT 1; Layer 1 from the north

2.4. Area 4

An area on the south-eastern extent of the stone walled complex was identified as a possible midden during the initial heritage impact assessment. This area was re-evaluated and it was pinpointed to an area on the outside of the stone walled complex and just to the south of an identified entrance. It was decided to put a trench/grid which measured 4m x 4m which extended from the stone wall outwards. The largest collection of surface finds were identified in this area. 19 x non-diagnostic potsherds (PGS01/12/07) and 1 x diagnostic potsherd (PGS01/12/08) were recovered from the surface.

The 4m x 4m grid was divided into four 2m x 2m blocks which were numbered blocks 1 – 4.

Block 1

This 2m x 2m block was situated on the south-western side of the placed grid. It was situated right against the stone wall of the identified complex. This block was excavated down to a depth of approximately 25cm – 30cm when archaeological sterile soil was encountered on the northern and western extents of the block. The block consisted of a fine brown/gray-coloured soil mixed with ash, which was consistent throughout the layer. No specific stratification or any layers could be identified from the profiles. Some large rocks, probably from the collapsed stone wall were also found in this block. No specific stratification or any layers could be identified from the profiles. A segment of a deteriorated clay (dagha) floor was identified in the south-western corner of the block at the same depth. The identified clay (dagha) floor, or segments of it, extended over to the other excavated blocks (**Figure 8** and **Figure 9**).

The excavated soil was screened and 146 x non-diagnostic potsherds (PGS01/12/09), 32 x diagnostic potsherds (PGS01/12/10) and 112grams of animal bone and teeth fragments (PGS01/12/11) were recovered from this layer.



Figure 8: View of Area 4; Block 1; Layer 1 from the west



Figure 9: View of the remains of a clay floor in Area 4; Block 1; Layer 1

Block 2

This 2m x 2m block was situated on the north-western side of the placed grid. It was also situated right against the stone wall of the identified complex. This block was excavated down to a depth of approximately 25cm – 30cm when archaeological sterile soil was encountered on the northern, eastern and western extents of the block. The block also consisted of a fine brown/gray-coloured soil mixed with ash, which was consistent throughout the layer. No specific stratification or any layers could be identified from the profiles. Some large rocks, probably from the collapsed stone wall were also found in this block. A segment of a deteriorated clay (dagha) floor was identified in the south-western corner of the block at the same depth. The identified clay (dagha) floor, or segments of it, extended over to the other excavated blocks (**Figure 9**).

The excavated soil was screened and 179 x non-diagnostic potsherds (PGS01/12/12), 35 x diagnostic potsherds (PGS01/12/13) and 111grams of animal bone and teeth fragments (PGS01/12/14) were recovered from this layer.



Figure 10: View of Area 4; Block 2; Layer 1 from the west

Block 3

This 2m x 2m block was situated on the south-eastern side of the placed grid. It was situated away of the stone wall of the identified complex. This block was also excavated down to a depth of approximately 25cm – 30cm when archaeological sterile soil was encountered on the northern and eastern extents of the block. The block also consisted of a fine brown/gray-coloured soil mixed with ash, which was consistent throughout the layer. No specific stratification or any layers could be identified from the profiles. Some large rocks, probably from the collapsed stone wall were also found in this block. A rather large segment of a deteriorated clay (dagha) floor was identified in the southern extent of the block at the same depth. Deteriorated clay fragments of possible clay were found throughout the western and central parts. The identified clay (dagha) floor, or segments of it, extended over to the other excavated blocks (**Figure 11**).

The excavated soil was screened and 104 x non-diagnostic potsherds (PGS01/12/15), 32 x diagnostic potsherds (PGS01/12/16) and 117grams of animal bone and teeth fragments (PGS01/12/17) were recovered. A fragment of an animal figurine (PGS01/12/18) was also recovered from this layer.



Figure 11: View of Area 4; Block 3; Layer 1 from the west.

Block 4

This 2m x 2m block was situated on the south-eastern side of the placed grid. It was situated away from stone wall of the identified complex. This block was also excavated down to a depth of approximately 25cm – 30cm when archaeological sterile soil was encountered on the eastern extents of the block. The block also consisted of a fine brown/gray-coloured soil mixed with ash, which was consistent throughout the excavated layer. No specific stratification or any layers could be identified from the profiles. Some large rocks, probably from the collapsed stone wall were also found in this block. A segment of a deteriorated clay (dagha) floor was identified in the south-western corner of the block at the same depth. The identified clay (dagha) floor, or segments of it, extended over to the other excavated blocks (figure 13 & 18).

The excavated soil was screened and 116 x non-diagnostic potsherds (PGS01/12/19), 32 x diagnostic potsherds (PGS01/12/20) and 24grams of animal bone and teeth fragments (PGS01/12/21) were recovered. A possible fragment of an animal bone link shaft was also recovered from this layer (PGS01/12/22).



Figure 12: View of Area 4; Block 4; Layer 1 from the west.

2.5. Area 5

This area was identified at the southern extent of the main enclosure. The main enclosure formed an elliptic scallop which also seemed to have a raised deposit. This area seemed to have been an occupational area or some kind of activity area. It was decided to place a test trench across this area which extended from east to west.

Test Trench 1

A trench was placed from the eastern extent across to the western end of the identified area. The trench measured 1m x 6.5m within the opposite walls of the scalloped stone wall.

Layer 1

The first and only layer was excavated down to a depth of approximately 10cm – 15cm when archaeological sterile soil was encountered. This layer consisted mostly of dark brown soil which was mixed with gravel and rocks. The rocks originated predominantly from the collapsed stone walls of the nearby stone wall (figure 19 & 20). No other features were identified in this layer.

The excavated soil was screened and 69 x non-diagnostic potsherds (PGS01/12/23), 6 x diagnostic potsherd (PGS01/12/24) and 7 grams of animal bone and teeth fragments (PGS01/12/25) were recovered from this layer.



Figure 13: View of Area 5; TT 1; Layer 1 from the west

The field work also provided the opportunity for PGS to give on-site training of archaeological students from the Universities of the Witwatersrand, Pretoria and South Africa.

3. CONCLUSION

Analysis of the cultural affinity of the material and settlement layout will be incorporated into the final report to be submitted July 012.

3.1. Completed Work

All field work, including surveying, collection and documentation;

Analysis of the material, including photography is completed;

3.2 Work to be completed:

Curation and packaging of material for delivery to the Museum of Anthropology and Archaeology, Unisa – Completion date envisaged –July 2012;

Final report with project description, methodology and outcomes, incorporating the specialist data –

Submission date –July 2012;

4. PROJECT STATEMENT

It is our opinion that the mitigation work on site has been completed and all the relevant data gathered to be able to provide a descriptive and comprehensive background to the site.

Our opinion is that the necessary destruction permit be considered with the interim report and above Project Statement.

For further feedback Wouter Fourie at PGS Heritage and Grave Relocation Consultants can be contacted on 082 851 3575 or wouter@gravesolutions.co.za.

Sincerely,



Wouter Fourie

Director / Professional Archaeologist

5. WORKS CITED

HUFFMAN, T.N. 2007. *Handbook to the Iron Age: The archaeology of Pre-Colonial Farming Societies in southern Africa*. University of KwaZulu-Natal Press.

MAGGS, T. 1976. Iron Age patterns and Sotho History on the southern Highveld: South Africa. *World Archaeology*. Vol. 7:3

MASON, R.J. 1968. Transvaal and Natal Iron Age Settlement revealed by aerial Photography and Excavation. *African Studies*. Vol 27:4

ACCESSION LISTMisgund: **Site PGS 01**

Access. No	Date	Context	Description	Amount
PGS01/12/01	11/04/2012	Area 2; TT1; L1	Non-diagnostic potsherds	x 12
PGS01/12/02	11/04/2012	Area 2; TT1; L2	Non-diagnostic potsherds	x 12
PGS01/12/03	11/04/2012	Area 2; TT1; L2	Animal bone & teeth fragments	34grams
PGS01/12/04	12/04/2012	Area 3; TT1; L1	Non-diagnostic potsherds	x 5
PGS01/12/05	12/04/2012	Area 3; TT1; L1	Diagnostic potsherds	x 1
PGS01/12/06	12/04/2012	Area 3; TT1; L1	Animal bone & teeth fragments	33grams
PGS01/12/07	13/04/2012	Area 4; Surface	Non-diagnostic potsherds	x 19
PGS01/12/08	13/04/2012	Area 4; Surface	Diagnostic potsherds	x 1
PGS01/12/09	13/04/2012	Area 4; B1; L1	Non-diagnostic potsherds	x 146
PGS01/12/10	13/04/2012	Area 4; B1; L1	Diagnostic potsherds	x 32
PGS01/12/11	13/04/2012	Area 4; B1; L1	Animal bone & teeth fragments	112grams
PGS01/12/12	13/04/2012	Area 4; B2; L1	Non-diagnostic potsherds	x 179
PGS01/12/13	13/04/2012	Area 4; B2; L1	Diagnostic potsherds	x 35
PGS01/12/14	13/04/2012	Area 4; B2; L1	Animal bone & teeth fragments	111grams
PGS01/12/15	16/04/2012	Area 4; B3; L1	Non-diagnostic potsherds	x 104
PGS01/12/16	16/04/2012	Area 4; B3; L1	Diagnostic potsherds	x 32
PGS01/12/17	16/04/2012	Area 4; B3; L1	Animal bone & teeth fragments	117grams
PGS01/12/18	16/04/2012	Area 4; B3; L1	Clay figurine fragment	x 1
PGS01/12/19	16/04/2012	Area 4; B4; L1	Non-diagnostic potsherds	x 116
PGS01/12/20	16/04/2012	Area 4; B4; L1	Diagnostic potsherds	x 32
PGS01/12/21	16/04/2012	Area 4; B4; L1	Animal bone & teeth fragments	24grams
PGS01/12/22	16/04/2012	Area 4; B4; L1	Bone link shaft fragment	x 1
PGS01/12/23	17/04/2012	Area 5; TT1; L1	Non-diagnostic potsherds	x 69
PGS01/12/24	17/04/2012	Area 5; TT1; L1	Diagnostic potsherds	x 6
PGS01/12/25	17/04/2012	Area 5; TT1; L1	Animal bone & teeth fragments	7grams
PGS01/12/26	17/04/2012	Area 2; TT1; L2	Soil sample	1 x bag