RECORDING OF HISTORIC BUILDING AT VOORSPOED MINE (KROONSTAD – FREE STATE PROVINCE)

Project: M. Naude
Date: June-August 2013

PHOTOGRAPHIC RECORDING OF HISTORIC VOORSPOED MINE BUILDING:

	Elevations	
1.	**Northern elevation** The building is not orientated according to the exact north-south axis but is set slightly off this coordinate. This elevation is the same as the southern elevation.	 **Figure 1. North, northwest facade (Photograph: M. Naude 2013)**
2.	**Southern elevation** This elevation and façade has been badly damaged with both window frames removed completely and with badly damaged window sills. This is the only elevation where a section of the original roof facia has remained intact. The clay plaster on the walls have been removed and washed away over time.	 **Figure 2. South southwest elevation (photograph: M. Naude 2013)**

3.	**Eastern elevation** This elevation faces towards the mine and the open cast activities. A short section of the verandah roof has been damaged due to the removal of the roof timbers supporting the verandah roof.  **Figure 3. East northeast elevation (Photograph: M. Naude 2013)**	
4.	**Western elevation** This elevation has been badly damaged with the removal of almost all the door frames and window frames. A large section of the verandah roof has caved-in due to the removal of the supporting timber beams.  **Figure 4. West southwest elevation (Photograph: M. Naude 2013)**	

	Building elements	***Photograph***
1.	<u>Foundations</u> The foundation is one of the unique and very exceptional elements of the building. The entire foundation is intact without structural problems. It was constructed with neatly dressed granite and protrude above the ground to form a plinth. It was left unplastered and was never covered with any material such as paint. The granite stone masonry is topped with two layers of unplastered brick and then covered with a layer of galvanized sheet iron, serving as a damp course. A unique aspect of the damp course is that it extends outwards (not normally done like this) and were then bent downwards almost covering the entire brick directly underneath the damp course. The foundation supports only the building and does not extend outwards (beyond the exterior walls) to define the perimeter of the verandah – even though a row of dressed stones are still in situ indicating the shape and position of the verandah periphery.  **Figure 5. Exposed damp coursing between layers of brick above the granite foundation (Photograph: M. Naude 2013)**	 **Figure 6. Exposed dressed blue granite foundation (Photograph: M. Naude 2013)**
2.	<u>Floors</u> The building is surrounded by a verandah that has no hard and solid floor. It may have had such a covering but it could have been destroyed by cattle or the previous inhabitants of the building.	

	The interior floors were constructed with a thin layer of sand and cement (about 150mm thick), on top of a compacted filling of clay. It could have been ant heap clay but no analysis on the clay type was done. The top of the cement flooring was covered with a red oxide  **Figure 7. Destroyed floor inside one of the rooms (Photograph: M. Naude 2013)**	 **Figure 8. Exposed cement flooring indicating the thickness of the cement and the underlying compacted clay and lime mixture (photograph: M. Naude 2013)**
3.	<u>Stairs and staircases</u> As the interior floors are slightly higher than the verandah surface, each door threshold also serves as a step. In some rooms the threshold has been re-done with a new cement constructed threshold. The verandah surface is the same height as the surrounding ground surface.	 **Figure 9. One of the few entrances with a defined threshold that also serves as a step (Photograph: M. Naude 2013)**

4. Walls

The interior walls are one and a half volume high and determined the height of the ceilings. All the walls were constructed with baked stock bricks. Clay was used as mortar for construction and the same mixture was used as plaster. The exterior of the building was plastered with a sand and lime mixture and in some areas the original plaster has remained intact. The building must have been inhabited by black people at some stage as the walls have been replastered (indicated by the number of layers) with clay and decorated with typical African patterns – clay and coloring applied by hand.

Figure 10. The building used to be plastered with a clay plaster but large areas have fallen off (Photograph: M. Naude 2013)

Figure 11. Entrance where bricks are exposed indicating the extent of the sheet iron damp course (Photograph: M. Naude 2013)

5.	Fire places and chimneys The building has no fire places, hearths or chimneys.	
6.	Roofs The entire building is covered with a corrugated iron roof without gutters and down pipes. The roof structure was constructed with Oregon pine. The roof trusses are supported by both the interior and exterior walls. The verandah roof forms part of the roof structure without additional roof support. It extends the full width of the verandah. The verandah room may have had vertical timber columns along the periphery of the verandah. These have disappeared. They could also have been cast iron supports but no evidence of this possibility exists. There is no archaeological evidence that the verandah had columns as no base structures for columns were found along the periphery of the verandah.  **Figure 12. Section of the verandah roof where the roof beams have been removed causing the roof to cave-in (Photograph: M. Naude 2013)**	 **Figure 13. Roof structure exposed due to los of the ceiling boards indicating that the horizontal tie beams have been removed exposing the 'hanebalk' construction at the top (Photograph: M. Naude 2013)**  **Figure 144. Exposed diagonal truss beams where they exit the building onto the verandah (Photograph: M. Naude 2013)**

Figure 135. Sections of the remaining diagonal trusses exposed underneath the verandah (Photograph: M. Naude 2013)

Figure 15. Remaining section of facia board along the edge of the verandah roof overhang (Photograph: M. Naude 2013)

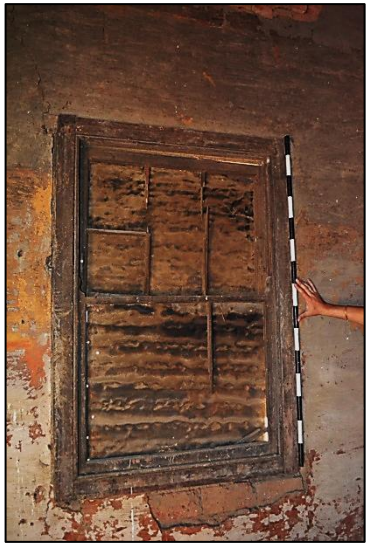
Figure 16. The roof sheeting was screwed to the brandering and not nailed (Photograph: M. Naude 2013)

7.	<u>Ceilings</u> All the rooms had Oregon pine ceilings constructed with wooden strips that were varnished. The varnish resulted in the alteration of the original color of the wood. In some rooms these strips have been removed completely. The ceilings were sealed at the corners with Oregon pine cornices that have remained intact in some rooms. Each room had a separate ceiling entrance to the cavity between the ceiling and the roof even though the building has no attic.	 **Figure 17. Ceiling boarding with attic entrance (Photograph: M. Naude 2013)**
8.	<u>Doors</u> All the doors have been removed from the building and no evidence of what these doors may have looked like have remained. It is only assumed that 4-panel doors were used. However some of the door frames have remained intact and these have protected the door posts from erosion and total decay over time. On some door posts the square brick corners have eroded away , probably due to the movement of animals and rubbing of their bodies when entering and exiting the individual rooms One of the exceptional elements of the doors is the use of thick flat iron (9mm thick and about 900mm wide) strips underneath the arched brick lintels. These were used both as reinforcing and for aesthetic purposes. The same construction method was used for the windows (see windows underneath).	 **Figure 199. One of the doors that has retained its original door frame (Photograph: M. Naude 2013)**

Figure 20. Lost bricks above the entrance of a door exposing the arched lintels (Photograph: M. Naude 2013)

Figure 201. The corners at the doors have been eroded by the movement of cattle and other animals resulting the loss of the original square corners and brick work (Photograph: M. Naude 2013)

	 **Figure 182. Exposed iron strip used to reinforce the lintel of the door (Photograph: M. Naude 2013)**	
9.	Windows Most of the windows have been removed and only a single sash window has remained intact. All the mechanisms (for sliding) have also been removed – except for this one window that was closed with a sheet of corrugated iron and nailed to the window frame. Some of the original window frames have remained intact, but most have been allowed to decay and rot away. A standard window size occurs throughout the building. All the windows and frames were manufactured with Oregon pine.	

	 **Figure 21. Window sill where the brickwork was exposed and rubbed against causing the loss of the square corner of the sill (photograph: M. Naude 2013)**	 **Figure 22. The last remaining window frame and window in the building gives and indication of the style of the sash windows installed (photograph: M. Naude 2013)**
10.	<u>Toilets, bath tubs and wash basins</u> The building contains no bath rooms and no ablution facilities. This may be the reason for assuming that the building may have been used as offices. However, during the times when the building was erected and used ablution facilities were usually located in a separate building	
11.	<u>Light fittings</u> No light fittings have remained and it may be that the building never had electrical light fittings and had no electricity. No electrical wiring was found inside the building.	

12. Cupboards and shelving

The building contains no cupboards or shelving. The only evidence of any related fitting is the presence of jacket hooks mounted on a strip of wood mounted on the walls in two rooms (rooms 1 and 12).

Figure 23. Remains of the last hat and jacket suspension hooks (Photograph M. Naude 2013)

Figure 24. Jacket and hat suspension hooks (Photograph: M. Naude 2013)

Building description (room by room)

Even though the building has been identified as an office building other uses may have guided the design. The simplicity of the building and repetition of rooms with the same measurements and same window and door configuration suggest that it may have been a hostel rather than an office complex.

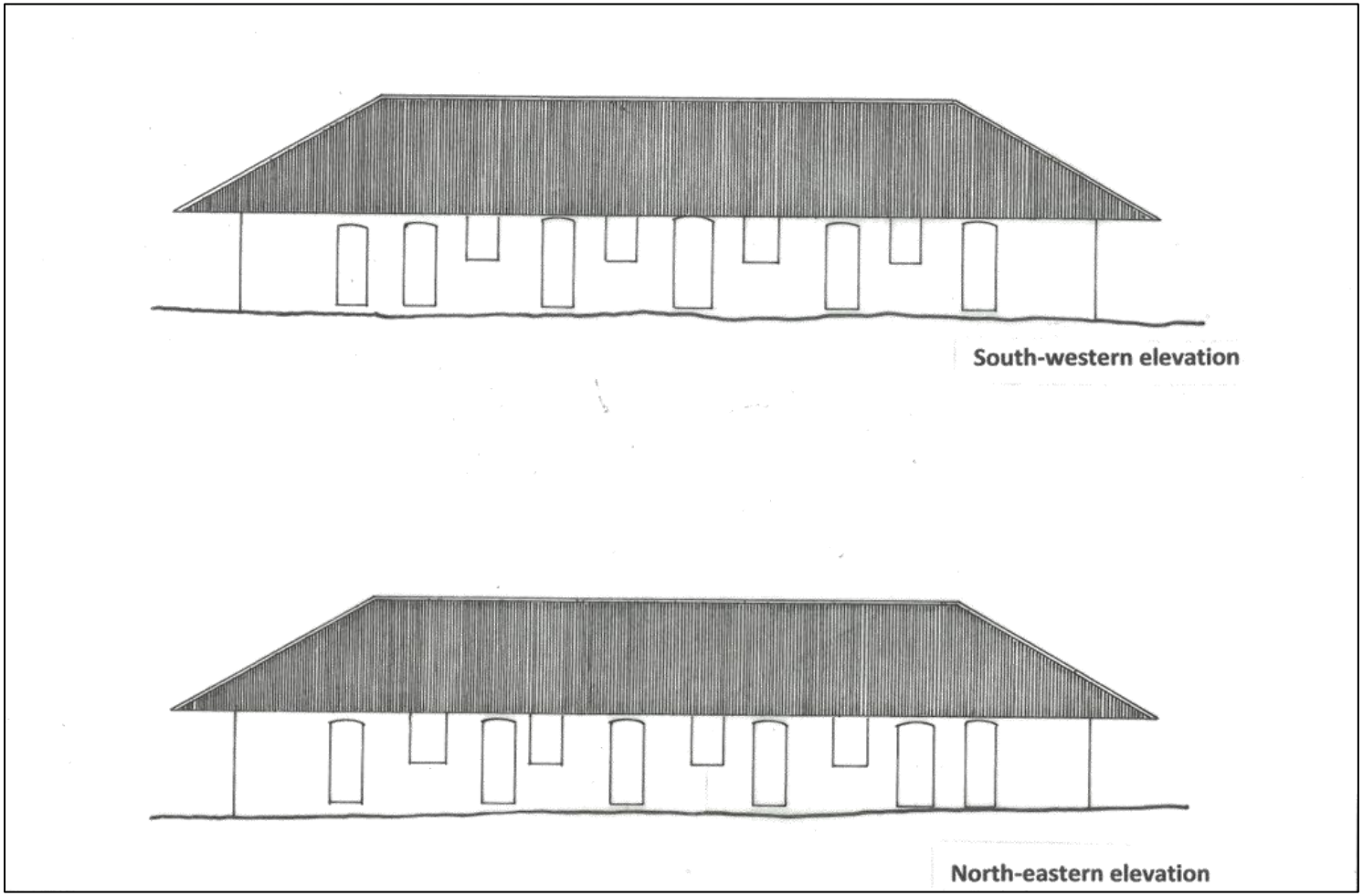
When the mine was abandoned and the other buildings were demolished (except this building), the site was used by the local black community for grazing and they inhabited the historic building. They covered the walls with layers of clay, applied by hand and in some rooms the clay walls were decorated with different colours and patterns were drawn into the coloured clay. After this period the interior of the building was used to accommodate cattle and probably sheep and goats. This had an adverse negative impact on the building as the movement of these animals caused the unprotected corners and door posts to erode away causing the original square corners to become rounded. The movement of animals also caused the destruction of the thin cement floor covering and in most rooms only sections of the original flooring has remained intact. The floors are now mostly dusty loose ground due to the exposure of the original compacted clay base underneath the cement floor covering.

Room nr	Description per room	
1.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: none left Windows: none left Ceilings: no ceilings left Fixtures and fittings: Horizontal timber jacket hook mountings mounted on the northern wall	
2.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: none left Windows: none left Ceilings: Oregon pine ceiling boards have remained intact with Oregon pine cornices Fixtures and fittings:	
3.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: none left Windows: none left Ceilings: no ceiling boards left exposing two missing roof trusses Fixtures and fittings: none	

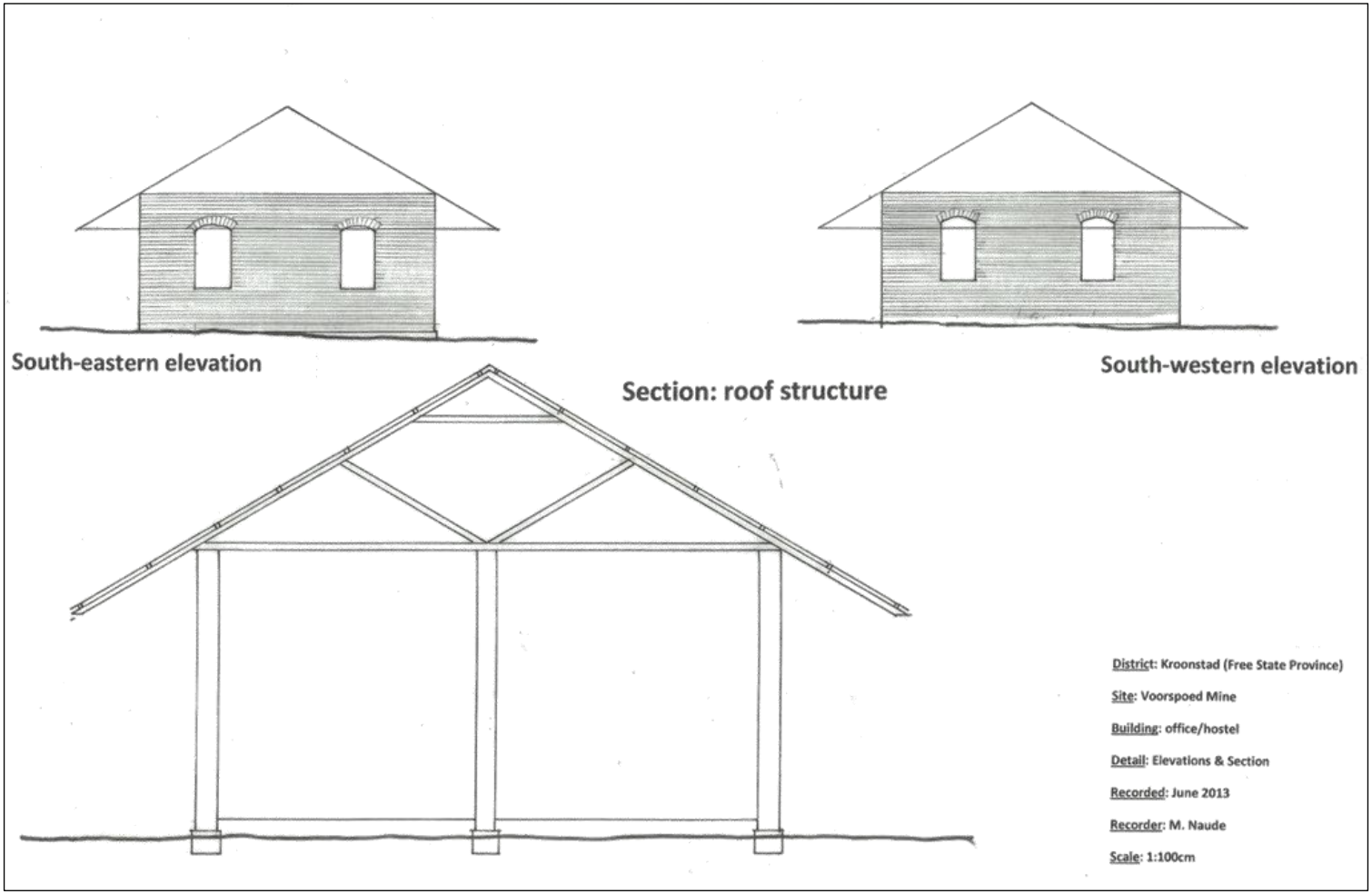
4.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Thin concrete surface that has been broken exposing the clay filling underneath Doors: none left Windows: remains of s sash window frame left intact, but window is missing Ceilings: Oregon pine ceiling boards have remained intact with Oregon pine cornices. Attic door is located in this room. Fixtures and fittings: none	
5.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: none left Windows: half a sash window has remained in situ Ceilings: Oregon pine ceiling boards have remained intact with Oregon pine cornices. Attic door is located in this room. Fixtures and fittings: Oregon pine skirting board has remained intact	
6.	Floor: Thin concrete surface that has been broken, exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: none left Windows: most complete remains of a sash windows intact Ceilings: ceiling boards missing Fixtures and fittings: none	
7.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath. Cement thresholds. Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: none left Windows: wooden window frame Ceilings: ceiling Fixtures and fittings:	
8.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath	

	Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: door frame intact Windows: sash frame intact Ceilings: ceiling boards missing and 2 horizontal roof beams are also missing Fixtures and fittings:	
9.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: door frame intact Windows: window frame intact Ceilings: ceiling boards missing and roof beams also missing. Cornices of ceiling intact Fixtures and fittings: none	
10.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath. Concrete lintel at door. Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: door frame intact Windows: broken sash frame Ceilings: no ceiling boards. Fixtures and fittings: none	
11.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: frame intact Windows: sash frame intact Ceilings: ceiling board partially intact with cornices Fixtures and fittings: none	
12.	Floor: Thin concrete surface that has been broken exposing the clay filling underneath Walls: Baked bricks up to ceiling height, covered with clay plaster that has fallen off at some places Doors: frame left intact Windows: none left Ceilings: no ceiling boards Fixtures and fittings: horizontal wooden planking mounted on wall containing metal hooks for jackets and hats	

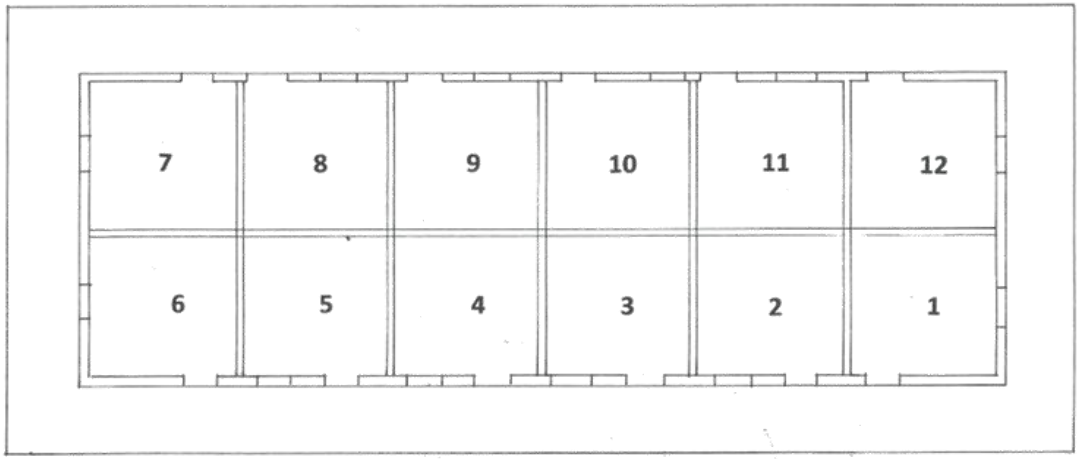
ANNEXURE A SOUTH-WESTERN AND NORTH-EASTERN ELEVATIONS



ANNEXURE B SOUTH-EASTERN AND SOUTH-WESTERN ELEVATIONS



ANNEXURE C FLOOR PLAN



Floor plan: rooms

District: Kroonstad (Free State Province)

Site: Voorspoed Mine

Building: office/hostel

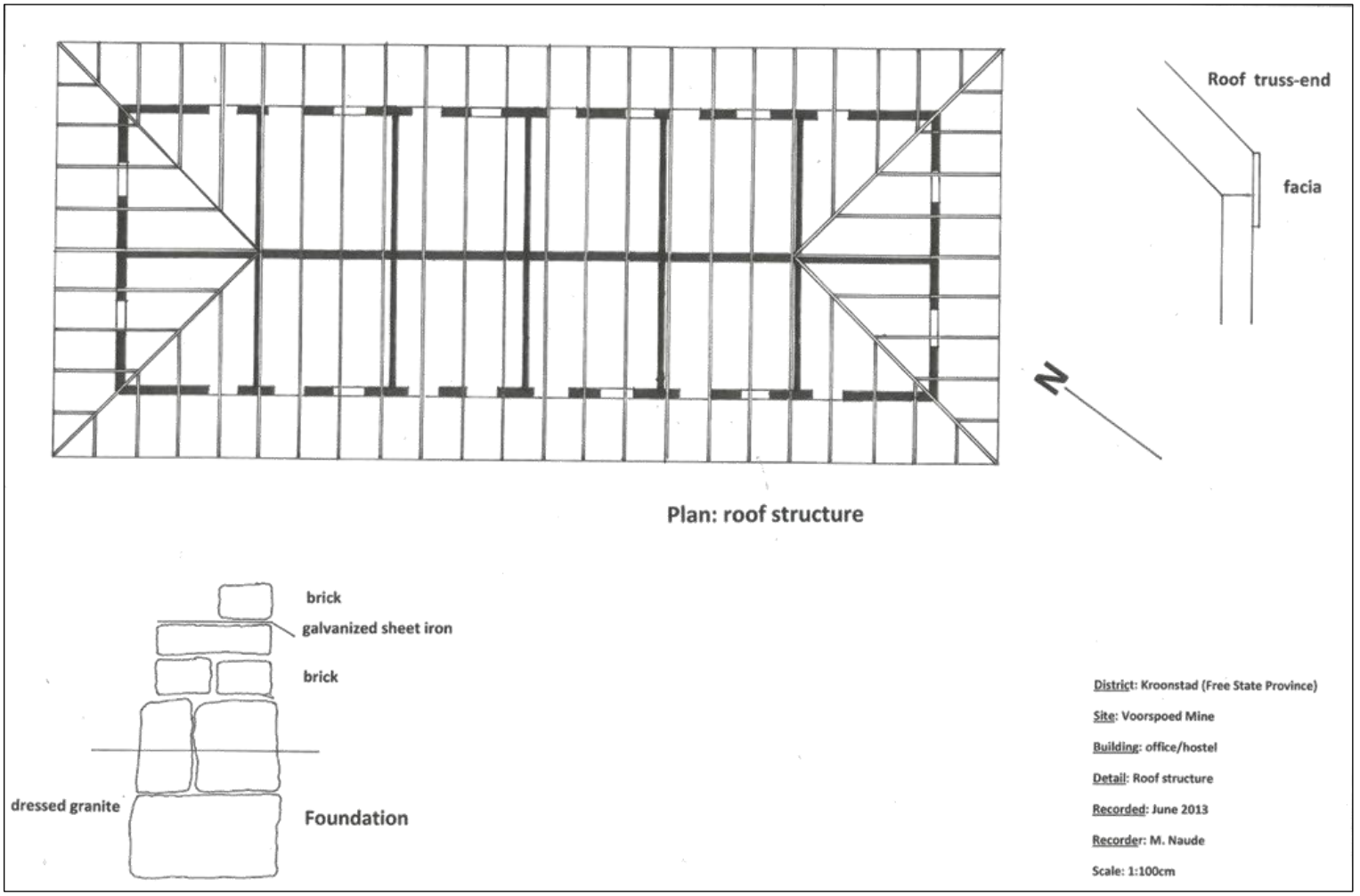
Detail: Floor plan

Recorded: June 2013

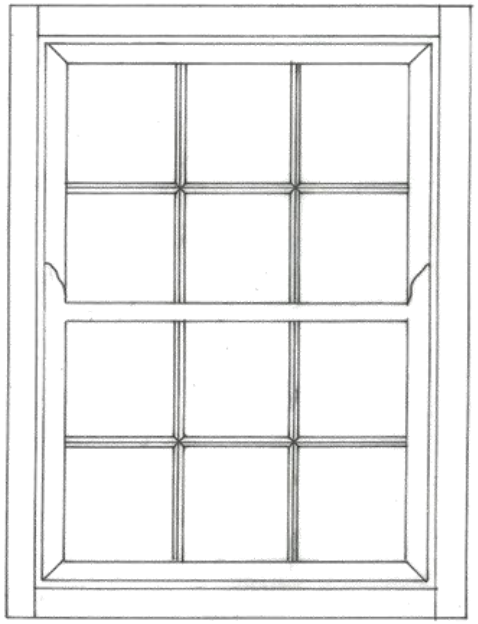
Recorder: M. Naude

Scale: 1:100cm

ANNEXURE D ROOF STRUCTURE



ANNEXURE E WINDOW



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