Archaeological Impact Assessment of two outbuildings on the historic werf at Weltevreden Farm, Ptn 14 of Farm 1646, Franschhoek

Prepared for:

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Executive Summary

This report presents the results of structural analysis of two buildings, the West and East Barns, on Weltevreden Farm (Portion 14 of Farm 1646) in the Drakenstein Valley, Franschhoek. Original plans to re-zone the farm as a resort and to create a golf course have been abandoned and new plans have been submitted to Heritage Western Cape.

Investigations were limited to plaster stripping and fabric analysis of the two buildings. These revealed that the West Barn comprises five phases, while the East Barn comprises four, three of which can, by comparing building fabric, be linked to phases in the other building. This initial analysis suggests greater antiquity for these buildings than previously thought, and the buildings could even pre-date the subdivision of the farm from neighbouring farm Lubeck in 1771.

The *werf*, comprising the two outbuildings and the U-shaped house rebuilt in the early 1900s, is significant in the regional context of the Winelands. It is suggested that the *werf* be accorded a Grade of no less than 3B, while the West Barn should be accorded a Grade of 3A.

It is recommended that the footprint of Phases 1 to 4 of the West Barn should be preserved, with only limited alterations to or partial demolition of the fabric of its outer walls and that structural analysis should precede any alteration work. Archaeological investigation by excavation should take place prior to any disturbance of the sub-floor deposits in the West Barn Phase 1 structure, with monitoring of any disturbances of deposits in the Phase 5 extensions. These Phase 5 structures may be demolished, provided demolition is preceded by mitigation: archaeological excavation where this falls within the Phase 1 structures and monitoring beyond. The internal divisions of at least one of the Phase 5 workers' cottages should be incorporated into the design of the proposed development, either by retaining the fabric, or by indicating the location of these structures in the final design.

Similarly, the footprint of the Phase 1 structure of the East Barn should be preserved, with only limited alterations to or partial demolition of the fabric of its eastern elevation wall. Any disturbance of sub-surface deposit in the northern three-quarters of the building (Rooms 6 and 7) should be monitored and subject to archaeological mitigation if there are any surviving internal structures and floors dating to the Phase 1 use of the building. This mitigation can be limited to detailed description, photography and measured survey of structural features and/or floor surfaces, together with recording or recovery of any artefacts that may date these features, if preservation is poor or disturbed, while small-scale archaeological excavation and appropriate recording of exposed features should occur if preservation is sufficiently good.

Monitoring of all other disturbances to the *werf* by a historical archaeologist should be conducted, with archaeological mitigation taking place, if remains or artefacts of significance are encountered.

The proposed redevelopment of the *werf* should be allowed to proceed, subject to the recommendations detailed in chapter 4 (summarised above) being made conditions of this redevelopment.

Details of landowner and applicant

Project Title	**Alterations and additions, Weltevreden Farm, Ptn 14 of Farm 1646, Franschhoek**
HWC Case Number	**120731JW30M**
Landowner	Stephan Ekbergh Two Rivers Farm (Weltevreden) R45 Franschhoek
Project applicant	Malherbe Rust Architects P.O. Box 85 Paarl 7622 contact person: Chris Fick Tel: 021 872 1623 email: cfick@mrarchitects.co.za

Table of Contents

List of Figures

List of Plates

1. Introduction

This report presents the results of structural analysis of two buildings on Weltevreden Farm (Portion 14 of Farm 1646) in the Drakenstein Valley, Franschhoek. The farm was recently renamed and is also referred to in a previous Heritage Impact Assessment as Two Rivers Farm (Winter & Baumann 2007). The two investigated buildings are situated on the historic farm *werf* and are referred to as the West Barn and East Barn.

Plans for the redevelopment of these buildings have been drawn up by Malherbe Rust Architects on behalf of the landowner, Mr Stephan Ekbergh. An application for this proposed redevelopment has been submitted to Heritage Western Cape (Case Number: 120731JW30M) and is the subject of a Record of Decision (RoD) by Heritage Western Cape issued on 21 September 2012 (Appendix 3). In accordance with this RoD, the author was approached Mr Chris Fick of Malherbe Rust Architects to undertake an archaeological assessment of these structures, and on 13 November 2012 was appointed by the landowner. The results of the archaeological assessment are presented in this report.

1.1 Site location and description

Weltevreden Farm (Farm 1646) is located in the Drakenstein-Simondium Valley on the R45, approximately 12.5km west-north-west of Franschhoek (Fig. 1). The farm werf is located c. 600m north of the R45 and is centred on co-ordinates S 33.8667198°, E 18.9977440°. Access to the *werf* was historically along the track lined with mature eucalyptus trees, running from Delta Farm to the west (Fig. 2). This access is currently closed, though a gate at the boundary between the two farms still services this track. Current access to the *werf* is along a dirt track leading directly from the R45 to the south.

The Weltevreden werf was built on flat ground on the 160m contour (1:50 000 topographical map, Fig. 1). It is situated on a raised river terrace with the ground to the east and north-east of the *werf* sloping down to the Berg River, which flows from north-west to south-east and is located c 250m to the east of the *werf*.

The current *werf* comprises three buildings headed by the homestead to the north-east, with a forecourt flanked by two buildings. The buildings flanking the homestead are referred to as the West Barn and East Barn, and are the principal subject of this report (Fig. 2). The forecourt and the West and East Barn buildings are on a north-east by south-west alignment, though for ease of reference when describing structural elements of the buildings in this report, this is taken to be a north-south alignment.

A preliminary structural analysis of the West Barn and East Barn buildings was undertaken by Malherbe Rust Architects and is incorporated in architectural drawings of the buildings as they currently stand. These are presented as Figures 3 and 4. The East Barn is currently not in use and in an advance state of disrepair, with no roof structure over the majority of the building's footprint and its outer walls partially collapsed. The West Barn is structurally sound with the exception of a partially collapsed structure at its northern end (recorded as Dilapidated Structure, Fig. 3). The southern section of the West Barn is currently uninhabited and is used for long-term storage of timber and fencing materials. The northern section of the building is actively used as garages and stores.

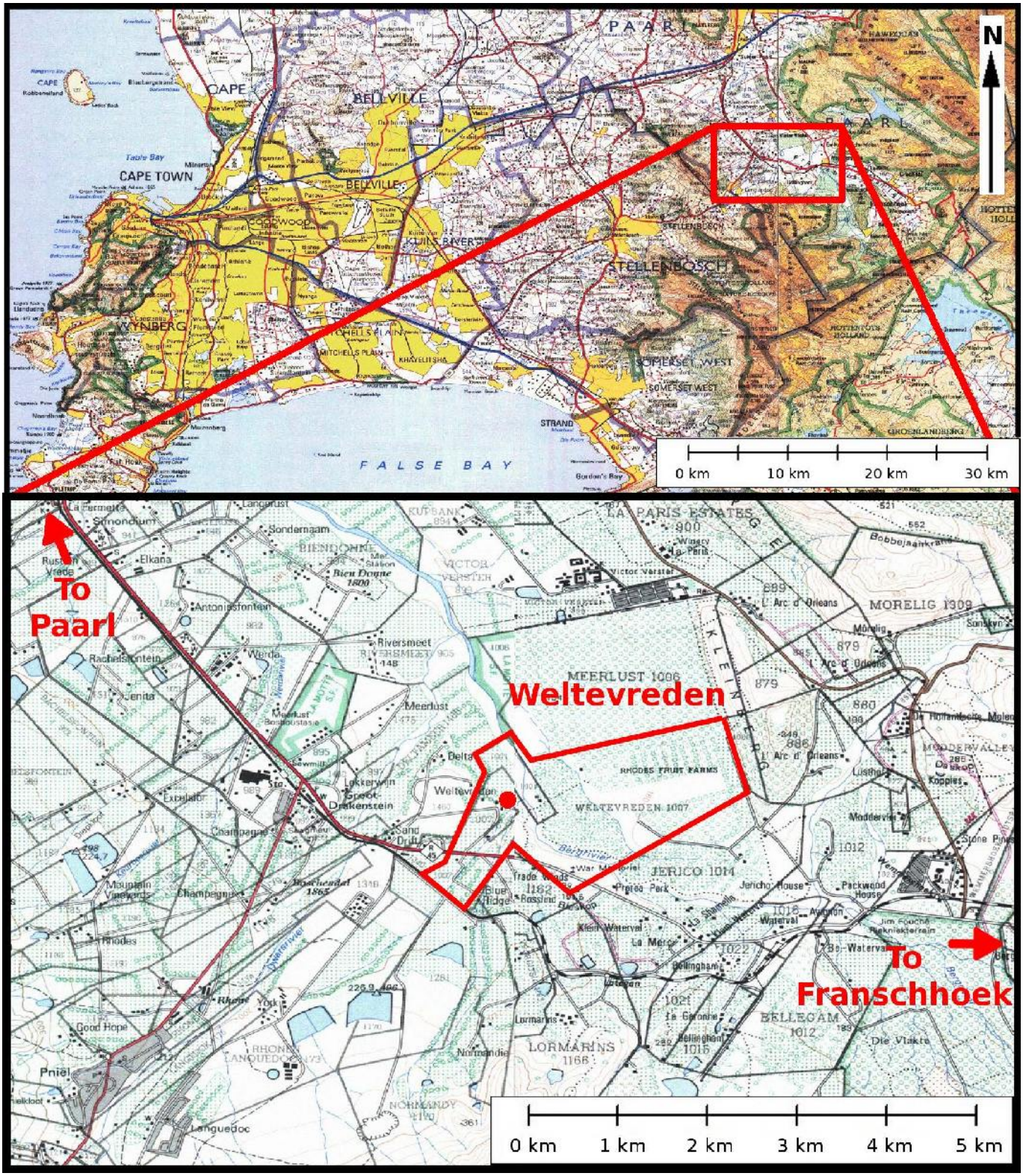

Fig. 1: Map showing site location outlined in red with werf indicated by red dot. 1:250000 maps 3318 and 3319 (above) and 1:50000 maps 3318DD and 3319CC below; © Chief Directorate Surveys and Mapping.

Fig. 2: Aerial photograph of Weltevreden werf taken in 2010.
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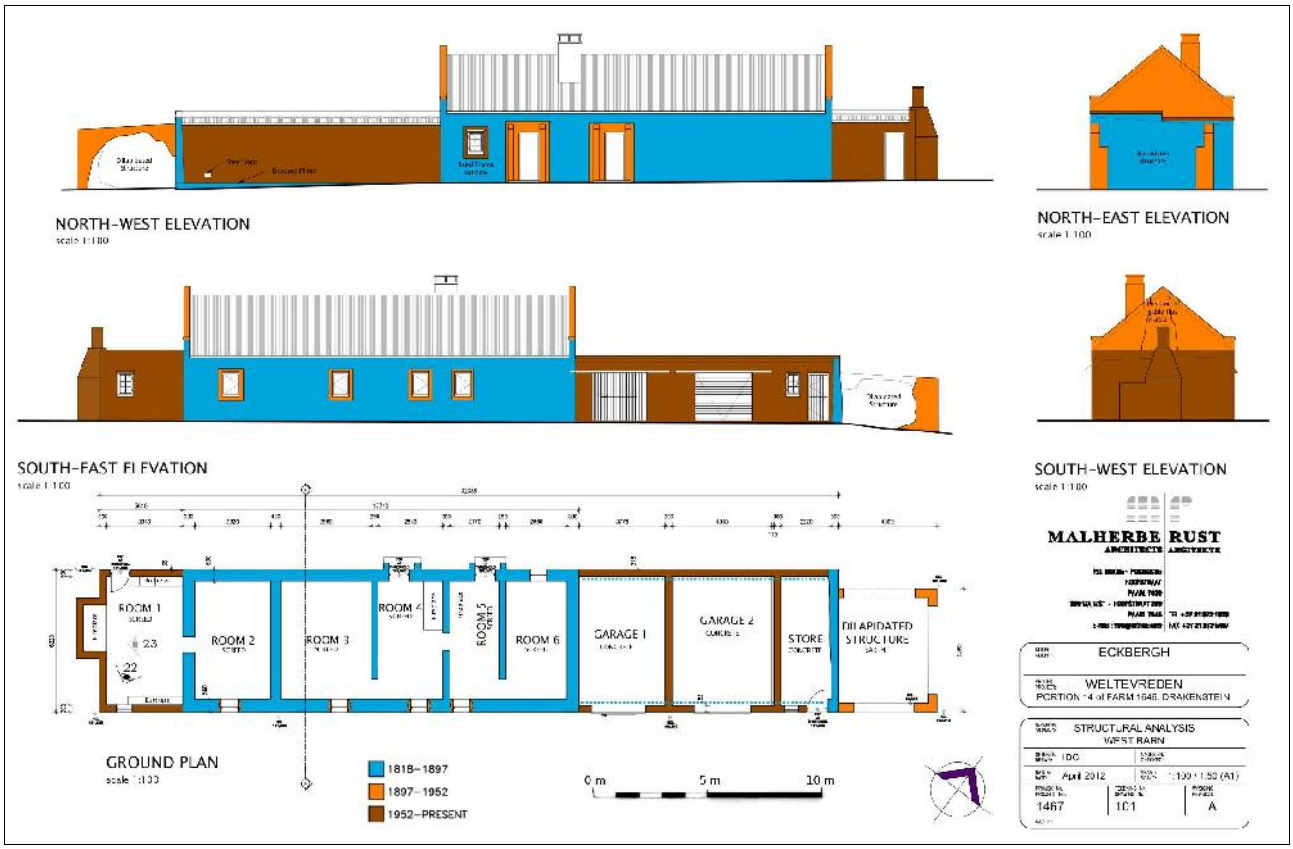

Fig. 3: Architect drawings of West Barn structure. © Malherbe Rust Architects

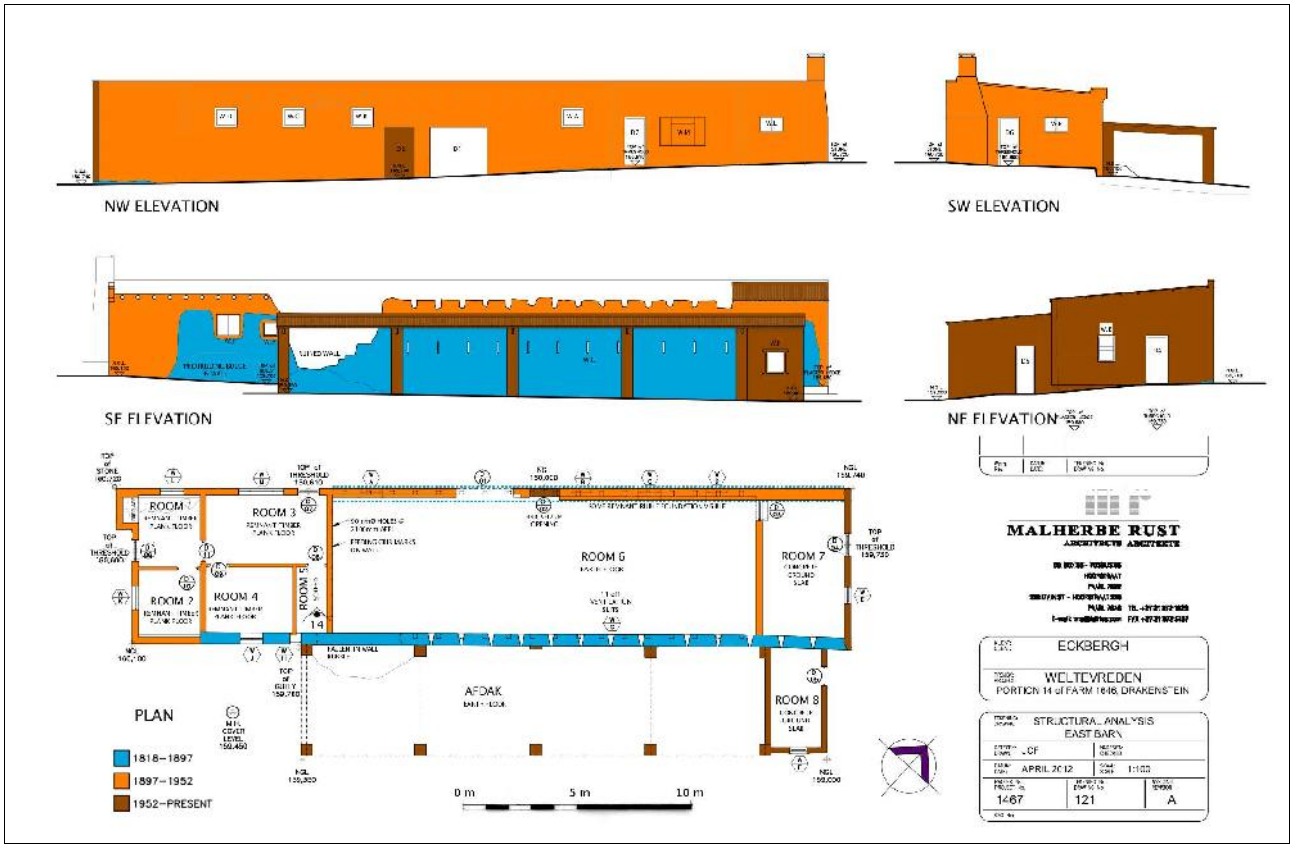

Fig. 4: Architect drawings of East Barn structure. © Malherbe Rust Architects

1.2 Background

The site has been the subject of a Heritage Impact Assessment undertaken in 2007 as part of proposed re-zoning of the farm as a resort and the construction of a golf course (Winter & Baumann 2007). This proposed development has since been abandoned, though some of the landscaping associated with it is evident on the aerial photograph taken in 2010 of the *werf* forecourt and the area to the south-west (Fig. 2).

As part of that Heritage Impact Assessment (HIA), a detailed historical analysis of Weltevreden Farm and its broader context within the valley was undertaken by Harriet Clift, with additional research of local oral and documented histories by Marianne Gertenbach. A summary of their research is reproduced here:

> **PRECOLONIAL PERIOD (pre 1652):** The area was occupied by hunter-gatherer and nomadic pastoralist communities. Archaeological sites dating to the Early Stone Age, Middle Stone Age and Later Stone Ages have been recorded in the area, e.g. recently very important archaeological remains dating to Late Stone Age and Contact Periods were discovered in the vicinity of the historical werf on the nearby Solms Delta farm and is the focus of an archaeological excavation carried out by the Archaeological Contracts Office, now ACO Associates (Orton, in press). Historical documents confirm that the Khoekhoe herders were the predominant inhabitants in the Cape at the time that the first Europeans started frequenting the Cape. The Drakenstein region, including Paarl and Franschhoek, was 'discovered' by Europeans while on expeditions to barter for cattle with the Khoekhoe.
>
> **EARLY COLONIAL PERIOD (c 1687 to late 1700s):** Dutch and Huguenot settlers and free blacks

were granted freeholdings along the banks of the Berg and Dwars Rivers from the late 17th century. This provided the foundations for the establishment of a distinctive pattern of settlement. The pattern of early colonial settlement in the Valley consisted of rectangular grants placed perpendicular to the Berg River. Farm werfs were strung out in relation to the Berg and Dwars Rivers. Due to favourable conditions for habitation and cultivation, settlement tended to be concentrated along these river courses as opposed to the flat and exposed valley floor to the east of the Berg River.

COLONIAL EXPANSION PERIOD (late 1700s to early 1800s): a period of great agricultural prosperity and expansion, especially in the wine industry (Smuts 2012a). It was during this period that most of the larger, grander historical farm werfs were established, either newly built or altered/rebuilt, to reflect the status and prosperity of it owners. Examples include Boschendal, Rhone, Lekkerwijn, Delta and Meerrust.

The use of the eastern valley floor occurred during the mid to late 19th century. It was predominantly used for grazing purposes. The resulting extensive land use pattern to the east is thus in contrast to more intensive, fine grained pattern to the west of the Berg River.

EMANCIPATION PERIOD (Mid to late 1800s). After slavery was abolished in 1834 slave labour was resettled in farm villages or in mission settlements such as Pniel c 1842.

INSTITUTIONAL PERIOD (early 1900s to 2000): During the 18th and 19th centuries, Drakenstein was well known for its mixed farming; grain fields, grazing lands and vineyards but with an increasing emphasis on wine production. Up until the 1850s wine was one of the most important sources of income for the Cape Colony and the Drakenstein became a major wine production area. In the late 19th century the wine industry at the Cape collapsed as a result of *phylloxera.* By the 1890s, 80% of the vineyards of Drakenstein had been destroyed (Van Zyl 1987).

The Drakenstein Valley was chosen as a viable area for a demonstration project for a scheme introduced by CJ Rhodes to develop the deciduous fruit export industry. Under the instruction of CJ Rhodes, 29 farms including Weltevreden were bought up in the Valley and in 1902 were consolidated under Rhodes Fruit Farms, which from the 1960s until recently was owned by Anglo American Farms. The institution associated with Rhodes Fruit Farms lasted more than a century and had a major impact on the cultural landscape of the Valley.

It lead to a number of significant changes: improvements to the road and railway network; the restoration/rebuilding of a number of historical farm werfs, most notably the work designed by Sir Herbert Baker; an increased demand for farm labour and the construction of labourer's villages such a Baker designed village of Lanquedoc and Kylemore; the establishment of pine forests; an increase in cultivation from vineyards to orchards; the development of a range of agro-cultural activities, e.g. saw-mill and fruit cannery; and the establishment of a number of social institutions to serve a newly emerging community, e.g. St Georges Anglican Church c 1906 and Drakenstein Games Club. The powerful institutional memory associated with Rhodes Fruit Farms is very much evident in the landscape in terms of its settlement form, architecture, social institutions, patterns of planting and labour.

(after: Winter & Baumann 2007, pp. 11-12)

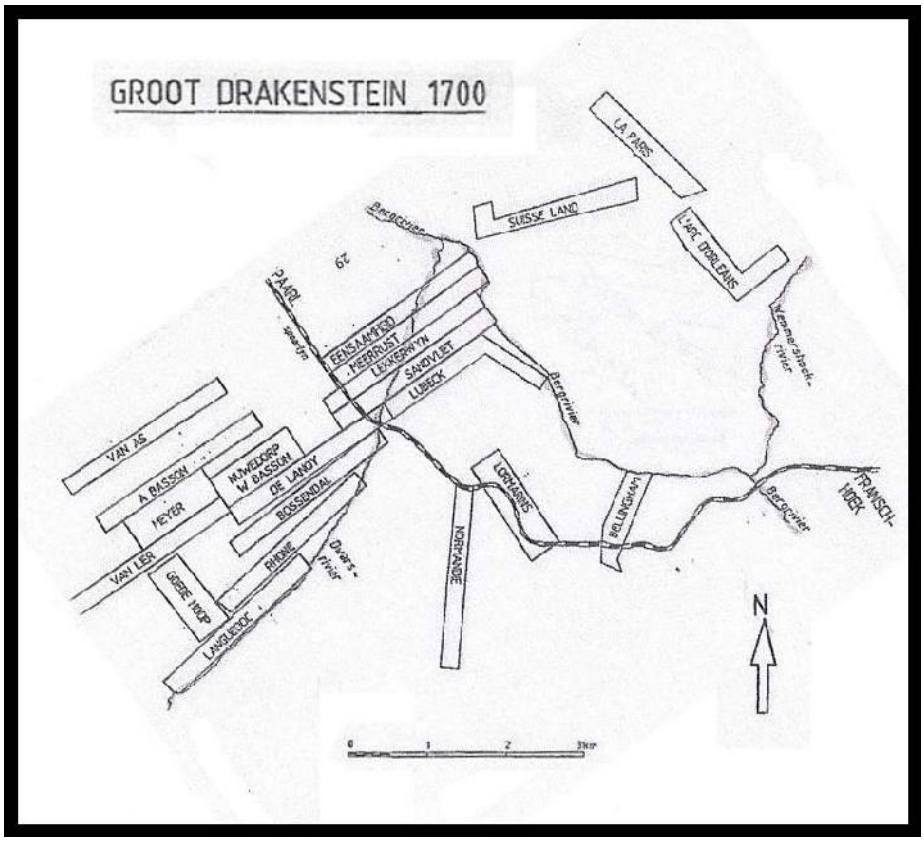

Fig. 5: Plan of Groot Drakenstein historic farm grants c 1700. (after: Drakenstein Heemkring)

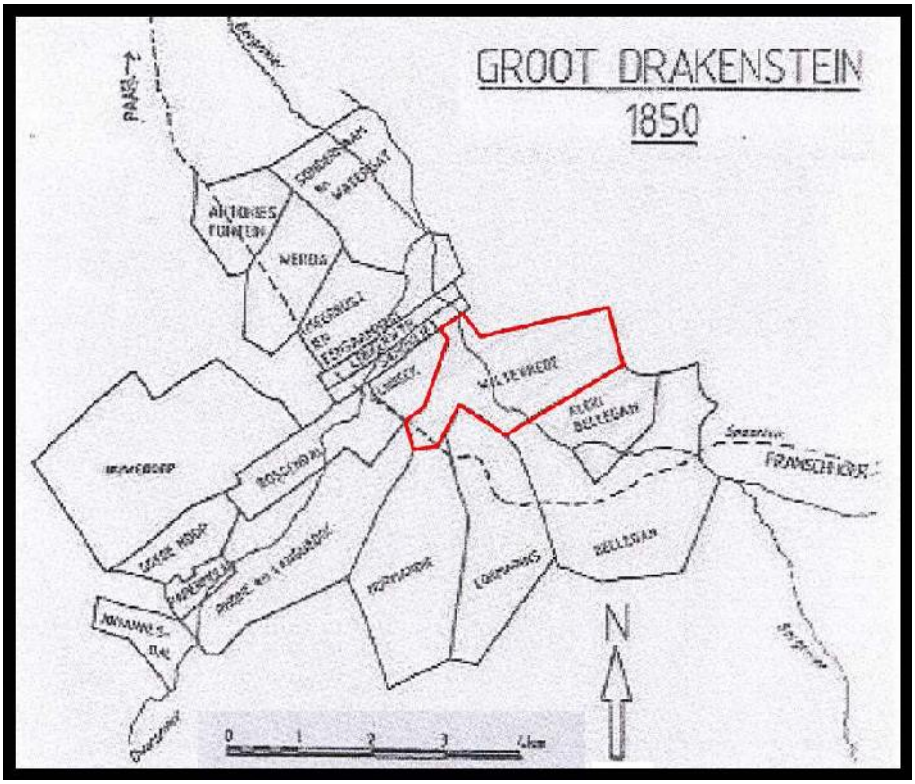

Fig. 6: Plan of Groot Drakenstein historic farm boundaries c 1850; Weltevreden Farm outlined in red. (after: Drakenstein Heemkring)

The Weltevreden farm *werf* is situated within a cultural landscape of high heritage significance. Within a 2km radius are the important historical farm werfs of Delta, Lekkerwijn, L'Ormarins, Bellingham, L'Arc de Orleans, Boschendal, Rhone, Meerlust and Bien Donne, amongst others (Winter & Baumann 2007). These comprise farms that were established in the Drakenstein Valley before 1700 and represent the earliest colonial settlements in the valley (Fig. 5).

The origins of Weltevreden Farm itself arise from a complex transfer history, originating from a subdivision of the original 1692 freehold grant of Lubeck Farm. In 1771 Lubeck Farm was subdivided and the remainder (Portion B) was the portion which later became part of the farm known as Weltevreden (for a detailed analysis of the transfer history see Clift 2007, pp. 108-117). It is likely that once Portion B of Lubeck was subdivided from the original grant, this portion was then farmed as a separate entity from Lubeck, with its own homestead and farm buildings. As Portion B became part of Weltevreden Farm, it is therefore possible that the historic Weltevreden *werf* had its origins in the C18th.

A comment on the historical architectural value of the Weltevreden *werf* was prepared by Dr Hans Fransen as part of the HIA undertaken in 2007 (Fransen 2007). The homestead is U-shaped with a series of

well executed Concave-convex gables clearly dating to the period of Rhodes Fruit Farms (ibid). Fransen remarks that this building is a good example of the sympathetic 'Rhodes Fruit Farm' style and it's design could possibly be attributed to Henry Baker, though according to research into the local history the house was actually designed by Henry Adams (Gertenbach 2007). This historical research also informs us that the current homestead was built after the destruction of the old homestead by a fire in 1919 (ibid). Fransen notes that the West Barn and East Barn buildings are older than the homestead. He estimated the outbuildings to date to the C19th, though noted that the portions of those structures built of “rubble and clay bricks” were potentially of an earlier date (Fransen 2007, pp. 127).

An Archaeological Scoping Survey was also undertaken across the property by Cape Archaeological Survey as part of the Heritage Impact Assessment (Patrick 2007). With regard to the Weltevreden *werf*, the survey recorded the presence of a walled structure, situated immediately west of the West Barn building. It was recorded as a stone-built structure standing “to about knee height” (Patrick 2007, pp. 138), with photographs of it at the time showing the remnants of this structure within dense vegetation cover (Fig. 7). It was recorded as having an overall extent of 10m by 20m, though the vegetation cover made it difficult to establish the spacial layout of the feature and no measured plan of this structure was undertaken as part of the scoping survey. The report went on to say that the dimensions of this structure should be confirmed by adequate recording methods and measured drawing (Patrick 2007).

Fig. 7: Photograph of structural remains to west of West Barn.
(after: Patrick 2007, pp. 135)

1.3 Terms of reference and brief

The structures on the Weltevreden werf are protected under section 34(1) of the National Heritage Resources Act (No 25 of 1999), which states:

“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.”

An application to Heritage Western Cape for a permit in terms of Section 34 of the Act (No 25 of 1999) for alterations and additions to structures on the Weltevreden werf was tabled at a meeting of the Built Environment and Landscapes Committee (BELCom) of 19 September 2012 (Case Number 120731JW30M). Heritage Western Cape issued a Record of Decision (RoD) on 21 September 2012 based on the resolutions of that committee meeting, presented as Appendix 3.

The Committee resolved that:

- A phase 1 Archaeological assessment focusing on the werf and the above ground structures must be conducted with the view to inform future work.
- The proposals are approved in principle and must be further resolved taking into account the new grading and the outcome of the archaeological study.

This RoD forms the basis of the brief for the current investigation. The proposed restoration that is the focus of the permit application comprises the redevelopment of the buildings flanking the Weltevreden homestead, referred to as the West Barn and East Barn buildings (Fig. 2). The proposed redevelopment plans for these buildings are presented in Appendix 2. Based on the RoD issued by Heritage Western Cape, the objectives of this archaeological assessment are to:

- Undertake a detailed structural analysis of construction materials of the West Barn and East Barn buildings to establish the construction and development phases of these structures.
- Estimate the date and determine the character, function and preservation quality of each phase identified in the structural analysis of these structures.
- Identify any other heritage resources that would be impacted by the proposed redevelopment.
- Assess the significance and recommend a grading of heritage resources within the werf.
- Assess the impact of the proposed development on heritage resources.
- Make recommendations for the mitigation or conservation of heritage resources with respect to the proposed redevelopment.

2. Archaeological investigation

2.1 Methodology

The investigation consisted of stripping the plaster render from selected areas of the building to expose the underlying fabric. Where possible, this was done solely with chisels and hand-tools; a pneumatic chisel was used to break more robust sections of cement render.

Individual context recording was used for all structures exposed, with each distinct construction fabric assigned a context number from a running sequential register. Detailed descriptions of the type of construction materials (stone/bricks, mortar type, etc.), construction methods, and overall dimensions were recorded for each context.

The relationship between each context (building fabric) and every other context it had a physical interface with was recorded. This was then used to produce a Stratigraphic Matrix diagram, given in Appendix 1. The Matrix diagram includes every context number assigned during this investigation and illustrates the direct stratigraphic relationships between them, where this was exposed. Interpretation of the architectural features they represent (such as openings for doorways/ windows or their subsequent blocking), together with similarities between contexts in construction methods and materials, allows the grouping of contexts into distinct phases of construction and/or demolition. This phasing of contexts establishes a sequence of construction, alterations and developments to the buildings throughout their history.

Photographs of each context and of specific details in their relationships were taken with a 1.0m or 2.0m scale. General shots of the buildings were taken with a 2.0m scale, where appropriate. Some have been selected as plates for the main body of this report, with the remainder recorded on a CD-ROM and listed in Appendix 4.

The extent of each context was overlaid onto the measured architect's drawings of the current structures (Fig. 3 and Fig. 4). Together with the relative phasing of each context, a series of plans illustrating the alterations to the buildings through each phase are presented as Figures 10 to 21.

2.3 Areas of investigation

Figures 8 and 9 show the sections of the buildings sampled as part of this investigation. These represent the sections where wall plaster was removed to expose the underlying fabric (labelled as sec 1 to sec 15 on Figures 8 and 9).

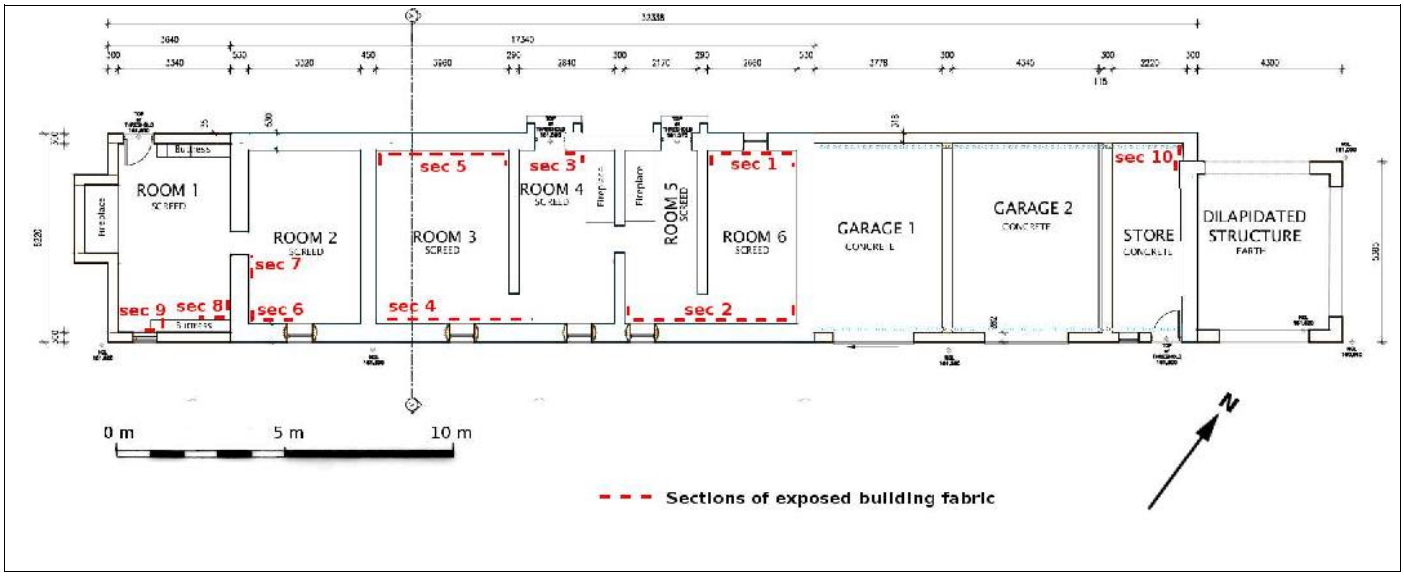

Fig. 8: Plan of West Barn showing sections of plaster stripping.

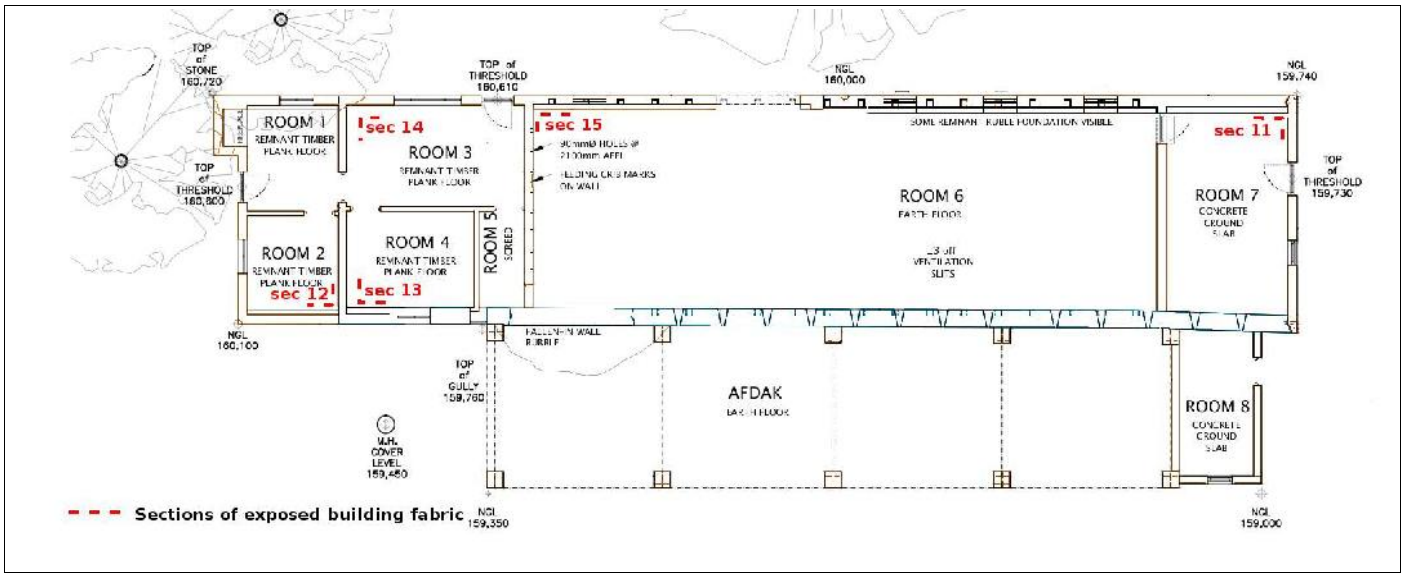

Fig. 9: Plan of East Barn showing sections of plaster stripping.

3. Results

3.1 West Barn

Five distinct construction phases were identified in the West Barn building. These were determined through analysis of stratigraphic relationships between each context, together with interpretation of the structures they represent and comparison of construction fabric of each context. A relative dating sequence for the alterations and additions to the building throughout its history was thus established. This relative phasing is limited to the contexts identified in the course of this investigation. It is likely that further investigation would establish additional phases, or a refinement of the sequence presented in this report. The following section will discuss each phase and the interpretations for each context assigned to it.

An estimated date for each phase is proposed. However, as there was no artefactual material associated with any context, no conclusive dating of each phase can be established from this investigation. Dating of historic buildings in the Cape based solely on construction materials and methods have been shown to be unreliable at best, and dates can only be positively ascertained with artefactual data, usually recovered through excavation of *in situ* contexts (Smuts 2012a). Nevertheless, in order to provide a historical context, estimated dates for each phase are suggested. These are based on analysis of aerial photographs and construction materials used, but should be considered as broad estimations in lieu of artefactual evidence.

Phase 1: C18th

The earliest structures in the stratigraphic sequence of the West Barn were walls 01, 06, 10 and 26 (Fig. 10). With the exception of the internal division formed by wall 10, all were originally external building walls built with irregular rounded and sub-rounded sandstone cobbles, generally uncoursed or laid in rough courses, set in a soft soil bond (comprising a dark grey sandy-silt). Internal dividing wall 10 was built with unfired (sun-dried) dark grey bricks, set in a similar dark grey soil mortar.

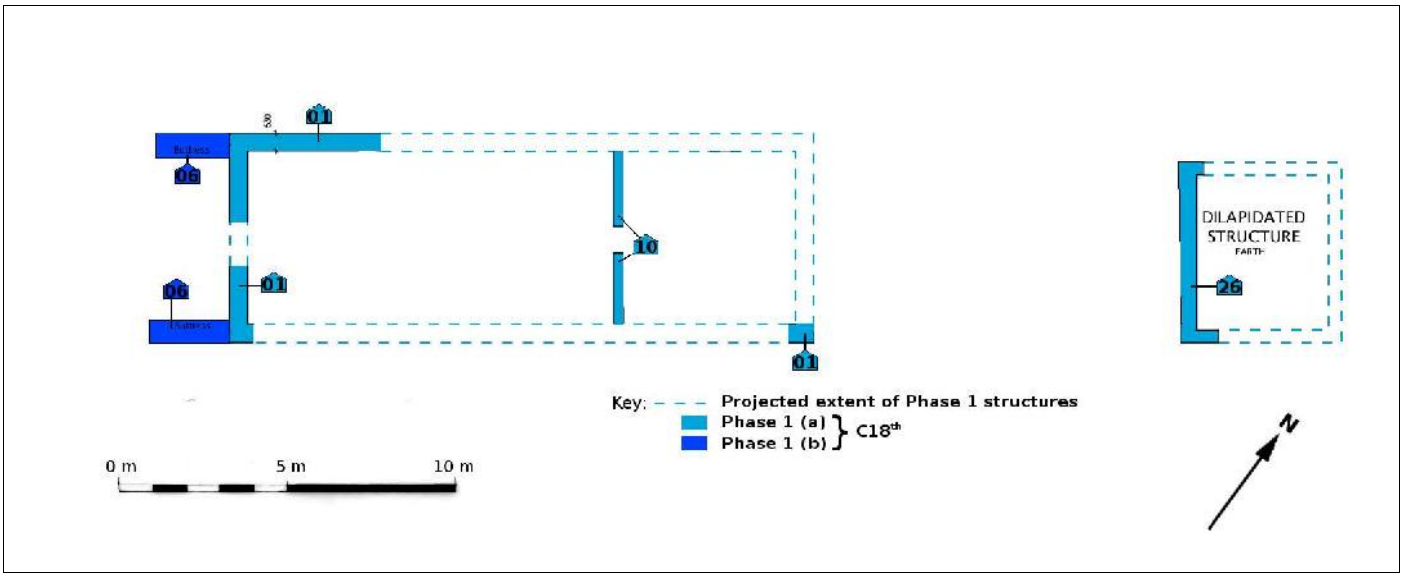

Fig. 10: Plan of West Barn Phase 1 structures.

Wall 01 represents the footprint of a rectangular building, measuring 17.34m north-south by 6.22m east-west. The only sections of fabric from this original building that survive in the current structure

were mainly exposed towards the south end of the building in sections 6, 7, 8 and 9 (Fig. 8). The presence of identical building fabric in what represents the north-east corner of the Phase 1 building (exposed in section 2) determines the northernmost extent of this original Phase 1 building.

Plate 1: Photograph showing keyed-in continuation of wall 26 to the north.

Plate 2: Section 10 showing interface between walls 25 and 26.

The internal division formed by east-west wall 10 did not have a direct stratigraphic relationship with wall 01 and, as such, could potentially be assigned to a later construction phase. Wall 10 has been preliminary assigned to Phase 1 based on the fact that the bricks used in its construction were all unfired, whereas in all later phases there is a fired brick component, and the soil mortar used is identical to that used in all other Phase 1 structures.

Context 26 formed the southern wall to a smaller building, situated approximately 11m north of the Phase 1 building represented by wall 01 (Fig. 10). Although the remainder of this second Phase 1 structure has subsequently collapsed, the two stone-built and keyed-in right-angle corners at the eastern and western ends of wall 26 continue to the north (Plate 1). This indicates context 26 represents the southern wall of a separate structure, rather than the northern wall of the Phase 1 building represented by wall 01. This is supported by the fact that wall 26 does not extend across the entire 6.22m width of the building represented by wall 01, as shown in section 10 (Plate 2). Assuming that the original north-eastern and north-western corners of this structure were referenced when they were re-built in Phase 5 (see below), wall 26 represents an almost square building measuring c. 5.40m east-west by 4.60m north-south.

Wall 26 did not have any direct stratigraphic relationship with wall 01, which means this square building could be assigned to an earlier or later phase than the rectangular Phase 1 building to the

south. However, based on the similarity of construction materials, wall 26 has also been assigned to Phase 1.

Two buttresses, recorded as context 06, were built at the south-east and south-west corners of the Phase 1 building represented by wall 01 (Fig. 10). Both buttresses were built onto its southern façade with identical materials to those used in the construction of wall 01: irregular rounded and sub-rounded sandstone cobbles laid in rough courses and set in a soft, dark grey soil bond. These buttresses were not keyed-in to wall 01 but were in fact built abutting the external plaster render of wall 01, exposed in section 8. This indicates that buttresses 06 were not a feature of the original building, but a subsequent addition to stabilise the southern end gable of the Phase 1 building. Due to the similarity of the construction materials, buttresses 06 have been assigned to Phase 1(b), though they could potentially date to a later construction phase.

The footprint of these original Phase 1 structures formed the basis for alterations and additions to the West Barn in subsequent phases.

Phase 2: late C18th/ early C19th

The Phase 2 structures are represented by two contexts: wall 02 forming a tract of the building's western elevation, exposed in sections 1, 3 and 5; and wall 16 forming a tract of the building's eastern façade, exposed in section 4 (Fig. 8 and Fig. 11; section 4 was also recorded as a drawn elevation and is presented as Fig. 16).

Wall 02 was built with a combination of stone and brick coursing, set in a soft, dark grey sandy-silt mortar identical to that used in the Phase 1 structures. The lower portion of wall 02 was built with rounded and sub-rounded sandstone cobbles to a varying height of 0.76m, 0.50m and 0.57m above current internal floor level (sections 1, 3 and 5 respectively). The upper part of wall 02 was completed with pale orange, low-fired friable bricks, with occasional dark grey sun-dried bricks randomly included in the wall fabric.

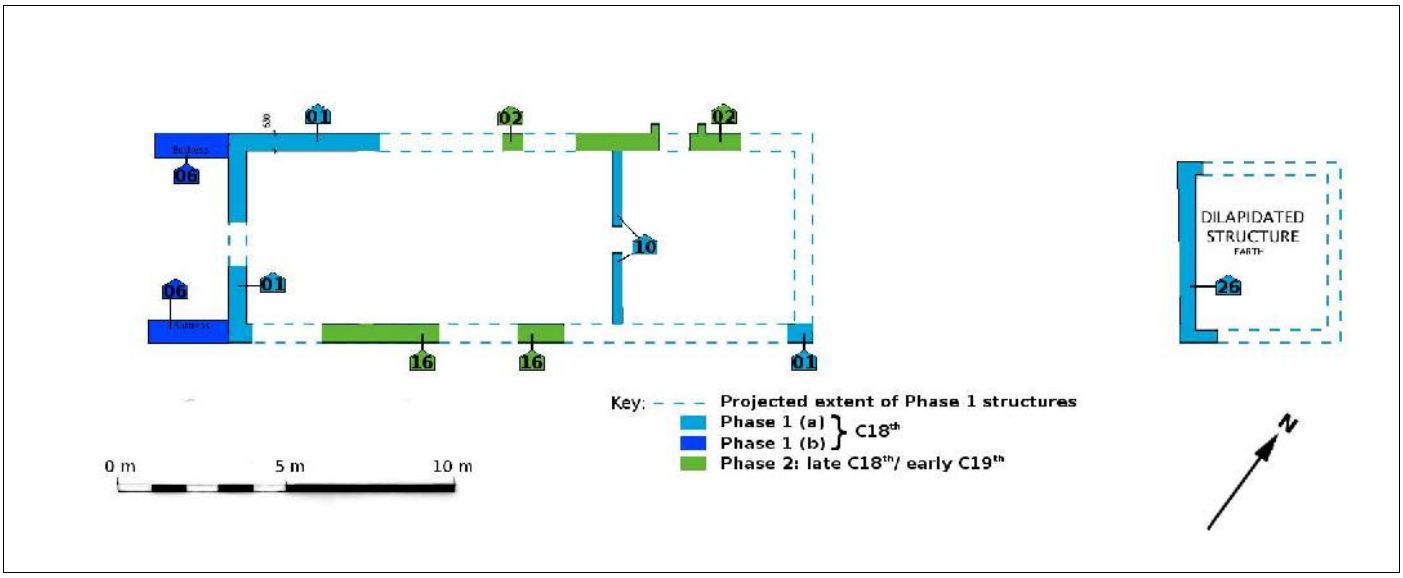

Fig. 11: Plan of West Barn Phase 2 structures.

Wall 16 was built with identical materials to wall 02, though with the notable difference that the

stone and brick coursing were reversed. In this case, wall 16 was built with low-fired and occasional sun-dried bricks to a height of 1.02m above internal floor level, and continued with selected rounded and sub-rounded sandstone cobbles, with approximately half of these cobbles faced on at least one side. The cobbles were laid in rough courses or generally uncoursed (Fig. 16). Both these components were set in a dark grey soil mortar, identical to that used in wall 02 and the Phase 1 structures.

Both wall 02 and wall 16 are interpreted as a re-build of the western and eastern building façades respectively. The irregular height of the stone coursing of wall 02 suggests this re-build was prompted by a partial collapse of the Phase 1 western façade, with the lower stone-built component of Phase 1 that was still structurally sound remaining and the upper part of wall 2 being re-built with brick. This is supported by the fact that the lower stone-built component comprises identical materials and construction methods to those used in wall 01 of the Phase 1 building.

The re-building of the eastern façade represented by wall 16, on the other hand, may have been a planned redevelopment to alter the building's configuration, such as opening new doorways or windows. This is supported by the fact that the change in construction materials from brick to stone on wall 16 was set at a constant height of 1.02m above floor level (Fig. 16), and that the lower portion of the wall is brick-built. This indicates there was a complete demolition (or collapse) of the Phase 1 eastern elevation that would have continued as the entirely stone-built wall 01.

The fact that the building materials for the Phase 2 structures are reversed (the lower portion stone-built and upper portion in brick for wall 2, and vice-versa for wall 16), could be an indication that these structures represent two distinct construction phases. Further investigation would be required to determine this. Due to the similarity of construction materials, the fact that both structures represent re-building of outer building walls and for the sake of not over-complicating the phasing of this building, both wall 02 and wall 16 are included in Phase 2.

Phase 3: C19th

Phase 3 structures comprise contexts 04, 18, 19 and 21. With the exception of wall 04, all Phase 3 structures represent changes to the configuration of the West Barn, namely the opening of three separate doorways along the building's eastern façade. Wall 04 represents the rebuilding of the building's northern end gable (Fig. 12).

Context 18 was exposed in section 2 and represents a 1.18m wide doorway inserted into the building's eastern façade, with its northern jamb situated 1.65m from the building's north end gable (Fig. 12; also recorded as a drawn elevation Fig. 15). The northern section of doorway 18 truncates Phase 1 wall 01, while the southern extent of 18's southern section is truncated by a Phase 4 structure (see below). The white-washed plaster render on both the northern and southern jambs of doorway 18 still survive *in situ* (Plate 3).

Doorway 19 was exposed in section 4 and represents a 1.00m wide doorway inserted close to the centre of the building's eastern façade, located approximately 9.50m south of the north end gable (Fig. 12 and Fig. 15). Both northern and southern sections of this doorway truncated Phase 2 wall 16.

Context 21 represents the southern jamb of a doorway inserted into the building's eastern façade

1.47m north of the south end gable. This structure was exposed in section 6 but, as the northern jamb was not exposed, the doorway's overall width was not determined. The southern section of doorway 21 truncated the Phase 1 fabric represented by wall 01.

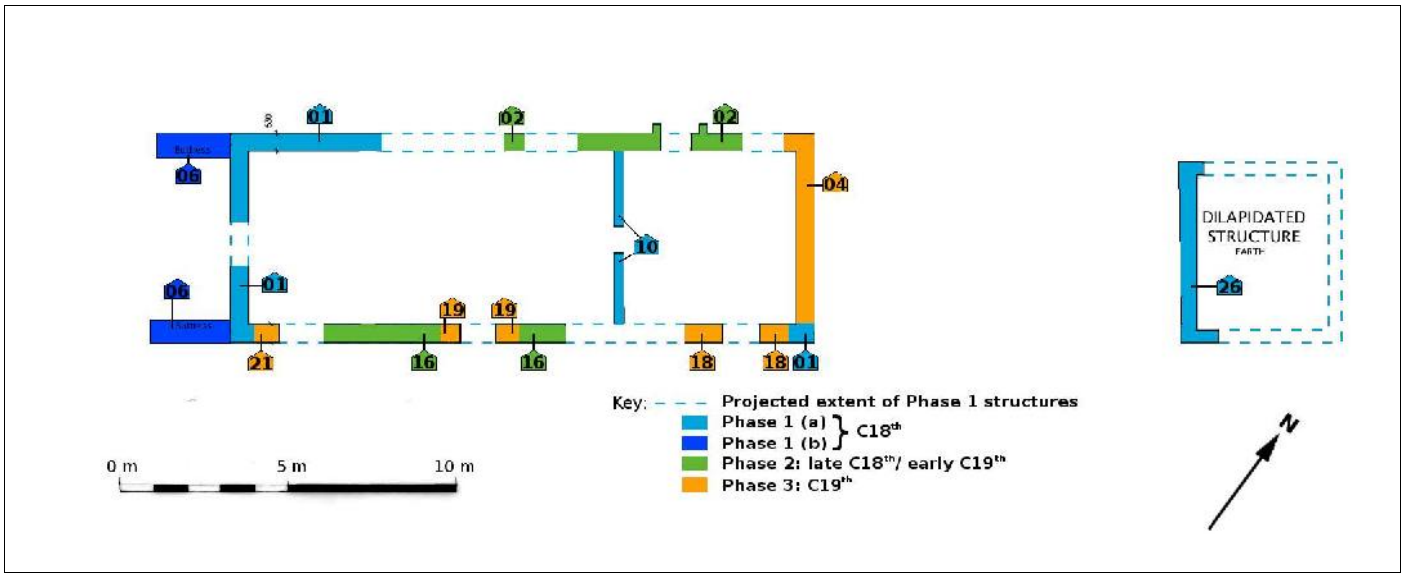

Fig. 12: Plan of West Barn Phase 3 structures.

All of these doorways were entirely brick-built, with orange and pale orange/beige low-fired bricks and occasional dark grey sun-dried bricks, although the latter were primarily found within doorway 18, sparsely within doorway 19 and structure 21 was built entirely with low-fired orange bricks. These were set in a soft soil mortar identical to that used in structures assigned to Phases 1 and 2, consisting of a dark grey sandy-silt.

Plate 3: Section 2 showing plaster on jamb of doorway 18.

Wall 04 represents the rebuilt north end gable of the original Phase 1 building, and was exposed in sections 1 and 2. The western end of wall 04 had a short return to the south that directly overlay a section of the Phase 2 western façade represented by wall 02. The eastern end of wall 04 abutted the inner faces of Phase 3 doorway 18 and a section of Phase 1 wall 01. Wall 04 was built entirely with fired bricks that are pale orange/beige in colour and set in a dark grey soft soil mortar, with no sun-dried bricks evident in the exposed sections. The bricks in wall 04 were apparently fired at a higher temperature, had edges that were less rolled, and as a whole were significantly less friable than bricks used in all other Phase 3 structures and those used in structures of preceding phases. Wall 04 bricks also had the appearance of being mass-produced, compared to a more artisanal appearance of bricks in other structures from Phase 3 and preceding phases, though still not quite of the same appearance and fabric as factory-produced bricks from succeeding phases.

The difference in the type of bricks used in the construction of wall 04 from other Phase 3 structures and, more significantly, the fact that wall 04 abutted Phase 3 doorway 18, means that wall 04 should technically be assigned to a later construction phase. It has been included in Phase 3 due to the use of dark grey soil mortar in its construction, which is identical to that used in all other structures assigned to Phase 3 and preceding phases, and for the sake of not over-complicating this preliminary phasing of the West Barn building. Further investigation would be required to fully characterise the phasing of this building.

It is worth noting that the mortar used in all structures assigned to Phases 1, 2 and 3 was a soft soil, consisting of the same dark grey sandy-silt. Different, harder and less friable mortars were used in the construction of all structures in the succeeding Phases.

Phase 4: early C20th

Phase 4 comprises contexts 08 and 14, with both structures representing a change in the configuration of the West Barn's eastern façade These were exposed in sections 2 and 4 respectively, and both were recorded as hand drawn sections (Fig. 15 and Fig. 16).

Context 08 represents the opening of an approximately 1.00m wide doorway, situated 4.62m south of the building's north gable and only 1.90m south of the southern jamb of the Phase 3 doorway represented by structure 18 (Fig. 13 and Fig. 15). Doorway 08 was built with highly-fired orange bricks that were likely factory produced, and set in an highly indurated grey cement mortar. The northern section of doorway 08 truncated the southern section of doorway 18, assigned to Phase 3, while the southern section of doorway 08 continued south beyond the plaster stripping of section 2, limited by east-west wall 10. It should be noted that although Figure 13 shows the southern section of doorway 08 continuing south of east-west wall 10, this was not confirmed by plaster stripping and is unlikely to be the case (see Phase 5 below).

The fact that doorway 08 was located in close proximity to Phase 3 doorway 18, which remained open during Phase 4, suggests each of these doorways served two distinct spaces within the building. This in turn implies there was an internal dividing wall between these rooms which does not survive in the building's current layout.

Structure 14 represents the blocking of Phase 3 doorway 19 (Fig. 13 and Fig. 16). Structure 14 was also built with highly-fired, mass-produced orange/red bricks, though in this case bonded with a sandy, pale grey lime mortar. Although built with similar bricks to those used in doorway 08, the fact that cement was not used in structure 14 suggests these structures could be assigned to distinct phases or sub-phases. The fact that both structures abut or truncate Phase 3 structures, however, and for simplification of phasing in lieu of a more detailed investigation, both contexts 08 and 14 are assigned to Phase 4.

The use of modern materials in the construction of Phase 4 structures, particularly that of a cement mortar in doorway 08, most likely dates these structures to the C20th. Cement became more readily available and affordable in South Africa after the Pretoria Portland Cement plant was established in 1892 to counter the exorbitant cost of cement imported from Europe (PPC 2011). Even after the establishment of this cement plant in the late C19th, the use of cement as a construction material on farm buildings in the Drakenstein Valley is likely to have been very limited for some time

afterwards, as is suggested by a return to a soil-based mortar used in the construction of Phase 5 structures in the West Barn building.

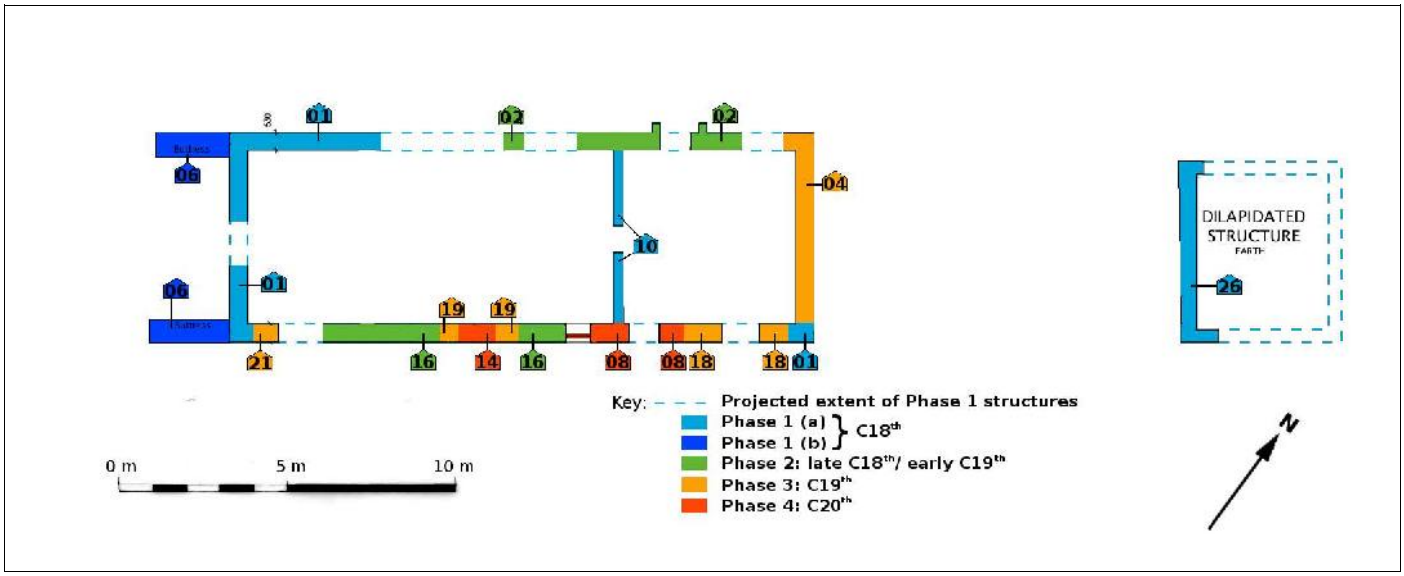

Fig. 13: Plan of West Barn Phase 4 structures.

Phase 5: post-1938

The Phase 5 structures represent substantial alterations to the configuration of the West Barn building(s) of the preceding phases. It was also during this phase that the footprint of the West Barn was consolidated from two separate structures (a 17.34m long building and a 5.39m by 4.60m building located 11m to the north) into a single structure with an overall footprint of 37.64m north-south by 6.22m east-west. The Phase 5 alterations and additions were the last major redevelopment of the West Barn, representing the layout and extent of the building that survives to this day (Fig. 14).

From north to south, the exposed Phase 5 structures comprise: wall 30 at the northernmost extent of the building; wall 25 comprising the two garages and current store room (exposed in section 10); window 03 inserted into the western façade and east-west dividing wall 07 (section 1); blocked-up doorway 05 and window 09 inserted into eastern façade (section 2; Fig. 15); fireplace 11 and doorway 12 inserted into western façade (section 3); window 15 inserted into eastern façade (section 4; Fig. 16); east-west dividing wall 13, rebuilt tract of the building's western elevation 17 and east-west dividing wall 20 (section 5); window 22 inserted into eastern façade (section 6); doorway 23 inserted into south end gable wall 01 (section 7); and wall 24 comprising the extension of 'Room 1' to the south end of the building (section 9). The concrete and screed floor surfaces present in the current building are also likely to have been laid in Phase 5 (Fig. 14).

All Phase 5 structures were built using the same construction methods and materials. These consisted of highly-fired, reddish-orange bricks with white grit inclusions. These were also factory mass-produced bricks, although slightly different in appearance and composition from bricks used in Phase 4 structures. The mortar used in Phase 5 structures reverted to a soil based composition, consisting of a pale yellow/brown silty-sand, with possibly some lime mixed in. The lime component was not evident from its appearance but would account for the mortar's relative hardness, making it a substantially more robust and less friable mortar than the dark grey soil used in Phases 1-3. All surviving internal wall faces and structures were also rendered with this

yellow/brown soil mortar and painted white, the only exceptions being the internal faces of garage wall 25 where the brick coursing was left exposed (section 10; Plate 2).

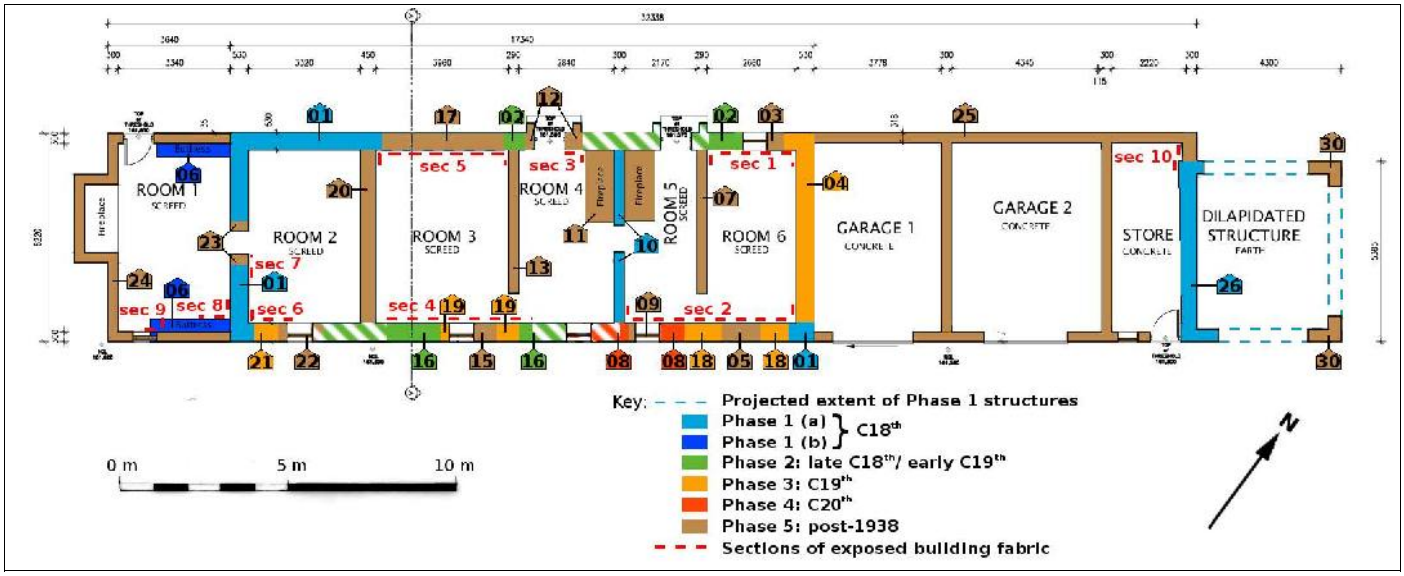

Fig. 14: Plan of West Barn Phase 5 structures.

All Phase 5 structures to the south of the double garage extension represent alterations and additions that converted the southern section of the West Barn into three separate dwellings, or terraced cottages. Each dwelling consisted of two rooms, with a fireplace in one of the two rooms of each dwelling. Each room was also fitted with a window to the building's eastern façade, with the exception of Room 6 where the window was to the western façade Each two-room dwelling was accessed through a door through the building's western façade

The southernmost of these cottages comprised Rooms 1 and 2. The former was a newly built Phase 5 extension to the south end of the building, represented by wall 24, and fitted with a doorway through the western façade, a fireplace along the southern wall and a window to the eastern elevation. Doorway 23 was inserted into the previous south end gable wall 01 to link this room with Room 2, which had window 22 inserted along the eastern façade that also served to block-up Phase 3 doorway 21. This dwelling was separated from the central dwelling by east-west dividing wall 20 that extended across the entire width of the building (Fig. 14).

The central dwelling comprised Rooms 3 and 4, with east-west wall 13 forming the division between these rooms and a 0.85m wide door at its eastern end allowing access between rooms. Room 3 was fitted with window 15 to the eastern elevation, truncating Phase 3 doorway 19 and its subsequent Phase 4 blocking represented by structure 14 (section 4; Fig. 16). Room 4 was also fitted with a window to the eastern elevation that is likely to also date to Phase 5, although as this structure was not exposed by plaster stripping this phasing has not been assigned to the final plan; the diagonal hatching on the phased plan represents the unconfirmed phasing of this window (Fig. 14). Fireplace 11 was built in Room 4 and doorway 12 was inserted into the building's western elevation, the latter truncating Phase 2 wall 02 (section 03). The tract of the building's western elevation re-built as structure 17 (exposed in Room 3; section 5) was possibly a repair to the outer building wall that may have collapsed. Alternatively, it may have been a rebuild required after the demolition of a structural element, such as an internal wall that had been keyed-in to the building's western wall that, as a result of its demolition, damaged the building's western elevation which was subsequently rebuilt as wall 17.

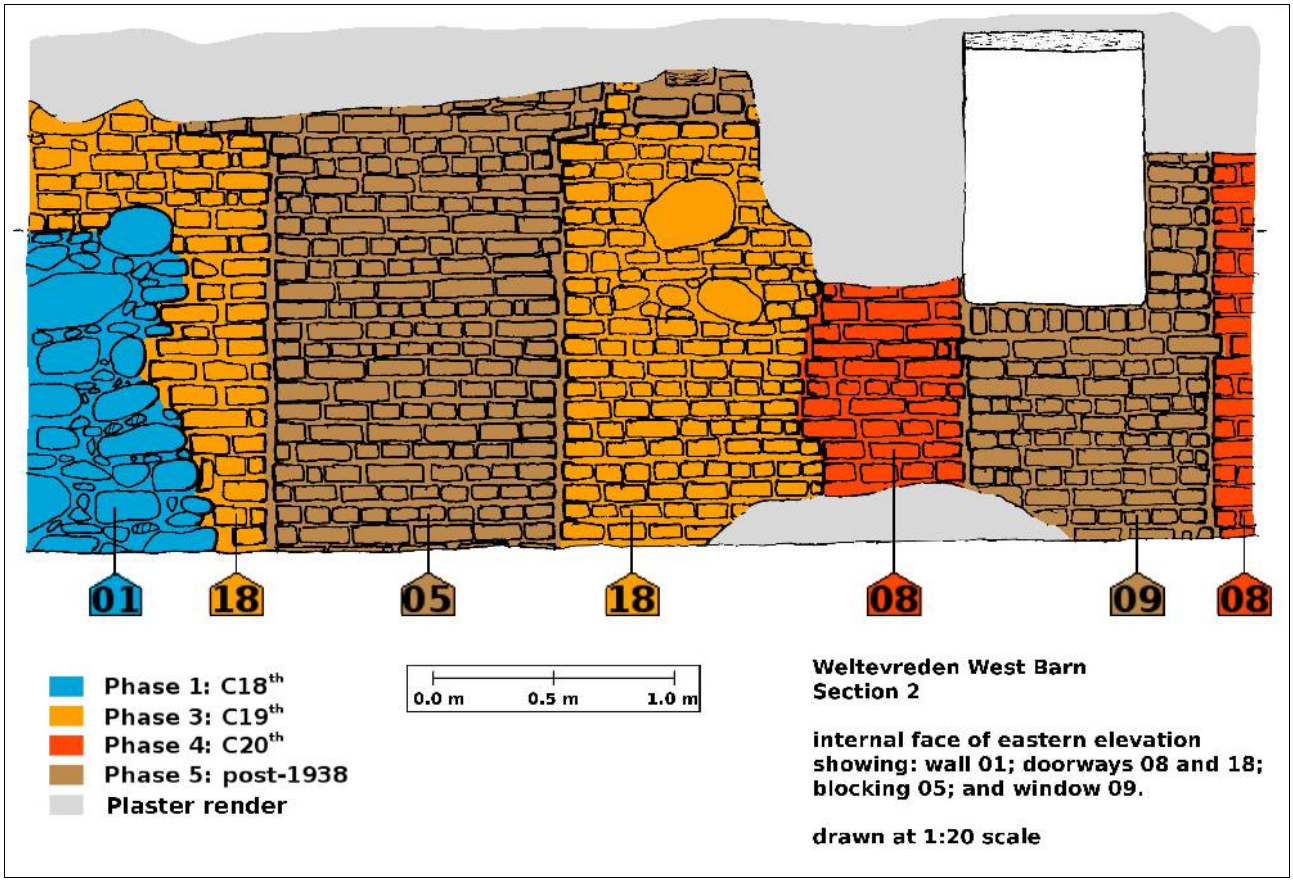

Fig. 15: Drawn elevation of section 2, West Barn.

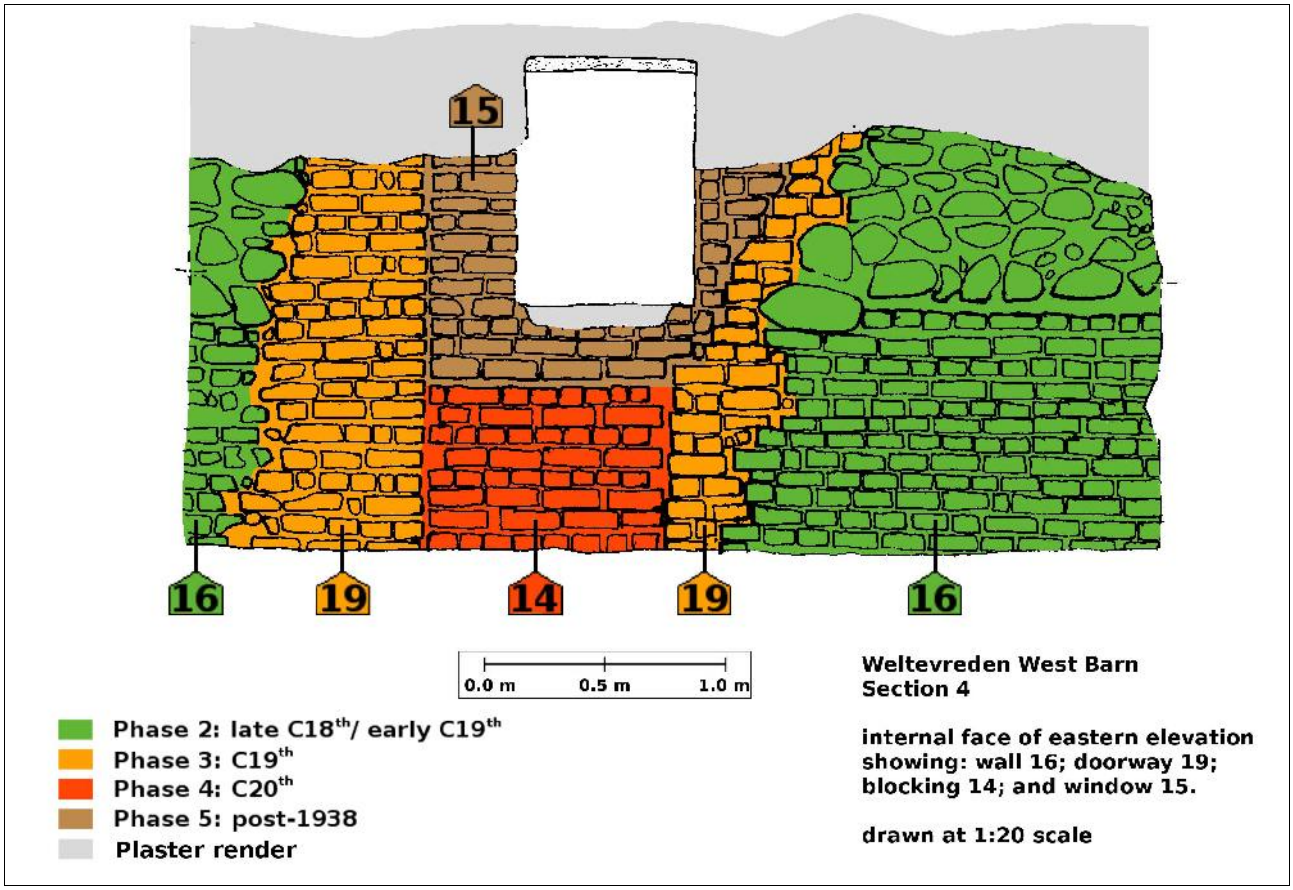

Fig. 16: Drawn elevation of section 4, West Barn.

Plate 4: 'Dilapidated Structure' at the north end of West Barn.

Plate 5: Photograph showing double-doorway to north elevation of 'Dilapidated Structure'

The central and northern dwellings were divided by the existing east-west wall 10, retained since Phase 1, with the northernmost dwelling comprising Rooms 5 and 6. These rooms were divided by east-west wall 07 (Fig. 14). Along the eastern façade, window 09 was inserted in Room 5 blocking-up Phase 4 doorway 08, and Phase 3 doorway 18 was blocked-up with structure 05 in Room 6 (Fig. 15). Window 03 was inserted into the western elevation of Room 6, truncating end gable wall 04 and western elevation wall 02. Access to this dwelling was into Room 5 through a doorway in the western elevation that is also likely to have been inserted in Phase 5, although this was not confirmed by plaster stripping. Diagonal hatching on the phased plan represents the unconfirmed phasing of this doorway (Fig. 14).

Two garages and a store room were newly built as a Phase 5 extension to the north of the three cottages, represented by wall 25. These three rooms were all built with doors to the building's eastern elevation. Wall 25 also abutted the western face of wall 26 that had been retained since Phase 1 (section 10; Plate 2). This extension incorporated what had previously been a separate structure into the overall footprint of the West Barn building as it survives today. It is possible that the remainder of the smaller structure represented by Phase 1 wall 26 had already fallen into significant disrepair or partial collapse by Phase 5, as is the case with this section of the building today (Plate 4). However, the two surviving north-eastern and north-western corners of this structure were re-built as wall 30, which means this sub-square structure was also used during Phase 5. Wall 30 also represents the eastern and western jambs of a north-facing double doorway into this section of the building (Plate 5), indicating this was probably used as a third garage or additional store room.

The dating of Phase 5 was primarily determined by analysis of aerial photographs. When comparing geo-rectified aerial photographs of the Weltevreden farmstead taken in 1938 to the one from 2010, there is a noticeable difference in the overall extent of the West Barn building. Although the earlier photograph has less resolution, it is still evident that the Phase 5 extension to the northern section of

the building comprising the two garages and a store room is not present in that photograph. This therefore dates the construction of these Phase 5 structures to after 1938 when the photograph was taken (Fig. 17).

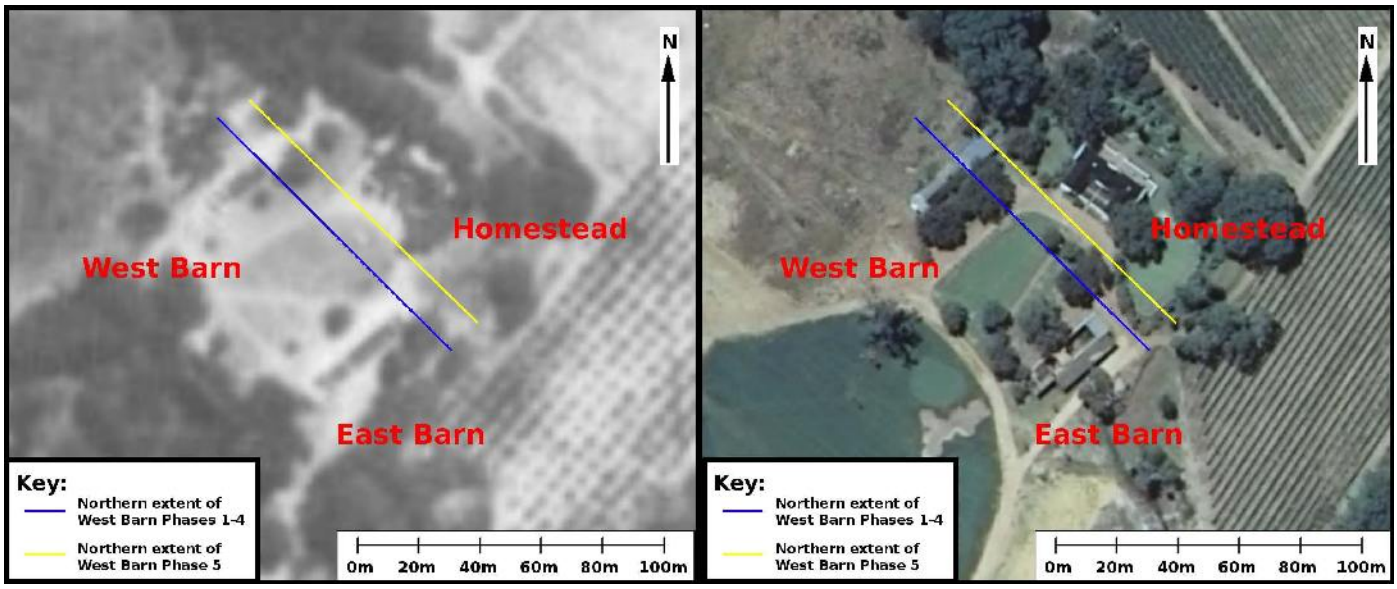

Fig. 17: Aerial photographs comparing extent of West Barn in different phases; from 1938 (left) and 2010 (right).© Chief Directorate Surveys and Mapping.

Conclusion

Structural analysis of the fabric of this building has identified several construction phases, indicating the building underwent a number of redevelopments that have altered its layout, configuration and ultimately its specific functions as a farm building throughout its history. The first of the five recorded phases represents the construction of an original 17.34m long by 6.22m wide building. Phase 1 also included the construction of a smaller (c 5.40m wide) separate structure, located 11.0m to the north of the original rectangular building. The footprints of these structures, particularly the larger rectangular building to the south, formed the basis for alterations and additions of subsequent construction phases.

The C18th date of the Phase 1 and possibly Phase 2 structures is an estimation based on the rustic building materials used in their construction, consisting of undressed sandstone boulders and soft soil mortar, with low-fired and sun-dried bricks also used in Phase 2. It has been pointed out that that this method of dating historic buildings, based solely on building fabric without artefacts from secure contexts to support these dates, is unreliable at best (Smuts 2012a). However, investigations of farm buildings built with identical methods and materials on the historic werfs of nearby Delta and Babylonstoren farms, where the building's dates have been determined through archaeological excavations and more detailed historic analysis, have shown that this type of construction (particularly without the use of even sun-dried bricks) invariably pre-dates C19th buildings on those farms (Pinto *et al* 2009; Pinto & Smuts *in press*; Smuts 2012a and 2012b; Smuts & Clift 2009 and 2010b). The only possible exception to this is the old stables building on Delta Farm, as there was some ambiguity as to the original date of that structure (Smuts 2012b).

Although a C19th date was suggested by Fransen for the construction of the West Barn building (Fransen 20007), this date was estimated without exposing any of the construction fabric of the building's southern section. This interpretation was also based on the assumption that the building

had originally been built as its current configuration of labourers cottages, whereas in fact its use as cottages is attributable to the building's redevelopment in Phase 5. Indeed, Fransen states that the only aspect of interest of this building was the then exposed “end-wall which is rubble-and-clay-built” (Fransen 20007, pp. 130), recorded as Phase 1 wall 26 in this report (Fig. 10). He goes on to say that the eastern wall of the East Barn building, similarly built with stone, sun-dried bricks and soil mortar, “shows great age” and that it is perhaps earlier than the C19th (*ibid*). Based on a similar evaluation of form and construction materials, the Phases 1 and 2 walls are therefore probably pre-C19th in date, with the Phase 1 structures most likely dating to the C18th or even possibly to the original late-C17th grant of Lubeck Farm. Further investigation by way of excavation of sub-surface deposits would be required to conclusively date these structures.

The function of the Phase 1 structures is difficult to determine from this investigation, as the only surviving fabric from this phase consists of sections of the Phase 1 building's outer walls. The only internal feature that possibly dates to this phase is east-west dividing wall 10 (Fig. 10), which on its own is not sufficient to interpret the use of the Phase 1 building in the southern half of the West Barn structure. Likewise, there is very little that has survived of the Phase 1 structure to the north, represented by wall 26 (Fig. 10), to allow any confident interpretation of its use. If it was re-built in Phase 5 according to its original dimensions, then this would represent a sub-square building measuring 5.4m by 4.6m which is an unusual form and layout of a typical historic farm building of that period.

The most likely interpretation is that both these Phase 1 structures represent farm outbuildings used for storage of produce or farming equipment, or possibly used for other ancillary activities, such as workshops. However, other interpretations of these Phase 1 structures are also viable. Although the current Weltevreden *werf* is laid out in a 'U'-shape plan, headed by the homestead with a forecourt flanked by the West and East Barns, it must be noted that this was not necessarily conceived as the original layout of these buildings. We know that the current homestead is the most recent construction of the three buildings, having been re-built after a fire destroyed the old homestead in 1919 (Winter & Baumann 2007). It is probable that the new homestead was built on the site of the old one, centrally placed and flanked by the older barns on either side of it, though this is not necessarily certain. The aerial photographs also show that the West Barn and East Barn are not strictly on a parallel alignment, nor do the positions and lengths of their respective Phase 1 footprints correspond symmetrically with each other across the *werf*.

These factors suggest the West and East Barn buildings were components of a werf that organically grew to meet the needs of the early farm, rather than being planned aspects of a symmetrical and regimented layout. It is therefore possible that Phase 1 of the West Barn building may have been an early, rudimentary homestead, possibly associated with the portioning and sub-division of Lubeck farm into what became Weltevreden (Clift *in:* Winter and Baumann 2007, pp. 108-117). The smaller Phase 1 structure to the north, represented by wall 26, could have been an outbuilding associated with this early homestead, such as a kitchen and/or slave quarters. Further investigation of sub-surface features and deposits within the Phase 1 structure(s) would be necessary to determine this.

Structures from Phases 2, 3 and 4 were all identified as re-building or alterations to the configuration of the Phase 1 building's outer walls. Phase 2 structures indicate repairs to and re-building of the outer building walls, while Phases 3 and 4 are predominantly represented by the opening and subsequent blocking of doorways on the building's eastern façade These later alterations of Phases 3 and 4 are more typical of farm outbuildings, with multiple doorways on the building's façade suggesting access to separate rooms within the building, each with a different

specific function. This contrasts with homesteads which would traditionally have a single entrance centrally placed on the building's façade. Again, evidence of these putative internal divisions dating to Phases 3 and 4 was removed in the redevelopment of the building during Phase 5, but may still survive as sub-surface structural remains.

This type of configuration, with multiple doorways and subsequent alterations to their positioning, is also commonly found on farm outbuildings at Delta and Babylonstoren (Smuts 2012; Smuts & Clift 2009 and 2010a). The location of these doorways on the eastern façade of the West Barn indicates this was the front aspect to the building, facing the East Barn. These multiple doorways could therefore be representative of the time when the West Barn building was converted from an earlier homestead to an outbuilding and the area between the barns became a more formalised forecourt, with a new homestead built centrally at the head of the forecourt to the north-east.

The Phase 5 alterations and additions were the last major redevelopment of the West Barn, resulting in the layout and overall footprint that survives today (Fig. 14). The three cottages at the southern end of the West Barn were most likely occupied by families employed as farmworkers during the period Weltevreden operated as Rhodes Fruit Farms, and subsequently until more recently as Anglo American Farms (Winter and Baumann 2007). The conversion of existing historic buildings into farmworker cottages with a similar layout to these was common on farms operated by Rhodes Fruit Farms, with at least two examples recorded on neighbouring Delta farm: both in the historic cellar building (Pinto *et al* 2009) and in the old stables building (Smuts 2012b).

It is significant that with the redevelopment of the West Barn into farmworker cottages the main orientation of access into the West Barn switched from the eastern façade, where previous doorways of Phases 3 and 4 had been sited facing the homestead forecourt, to the building's western façade Phase 5 doorways were built in Room 1 and inserted into existing building fabric in Rooms 4 and 5. In the case of the northernmost cottage (Rooms 4 and 5), there were already two existing doors in the eastern elevation that could have served as access to this dwelling (doorways 08 and 18), but in Phase 5 these were deliberately blocked and a new doorway opened on the western façade in Room 5 (Fig. 13 and Fig. 14). This clearly indicates the re-orientation of the building's frontage to the western façade was considered important enough to spend additional resources and effort in undertaking this alteration.

This switch of the frontal aspect of the West Barn from the eastern to the western façade effectively broke the direct communication of access between the homestead and the West Barn. This essentially served to disassociate the farmworker families dwelling in these cottages from those living in the homestead and vice-versa. In contrast, the garages and store room extension to the northern half of the West Barn faced the forecourt to the east, indicating these were built to service the homestead, rather than functioning as ancillary buildings used in the working of the farm.

The redevelopments undertaken in Phase 5 removed all internal above ground structures and subdivisions from previous phases in the southern half of the building, with the exception of Phase 1 wall 10 which is still retained as a dividing wall (Fig. 14). However, given that the building has remained in use with a protective roof structure and subsequent protective concrete floors, it is likely that remnants of internal structures and previous floor surfaces of earlier phases survive below the current floors. Good preservation of early structures and floor surfaces has been found to be the case in similar historic buildings, such as the old cellar, koornhuis and stables buildings at Babylonstoren (Smuts 2012a; Smuts & Clift 2009 and 2010b), and the old cellar building at Delta (Pinto *et al* 2009). The putative sub-surface structures and floors in the West Barn building have

immense potential for determining the character, function and date of the building's early phases.

3.2 East Barn

The phasing of the East Barn building was less complex than that of the West Barn, with only four distinct construction phases identified. The same methodology of analysis of stratigraphic relationships between each context, together with interpretation of the structures they represent and comparison of construction fabric of each context, was employed to determine these phases. However, an attempt is made to correlate the construction phases identified in the West Barn to those in the East Barn, so that a single overall phasing sequence can be established for all buildings across the site. As not all phases identified in the West Barn were present in the East Barn building, the construction phases of the East Barn are equivalent to Phases 1, 4 and 5 of the West Barn; an additional Phase 6 was also identified in the East Barn building. The following section will discuss each of these phases and the interpretations for each context assigned to it.

As before, estimated dates for each phase are suggested, based on analysis of aerial photographs and construction materials used, though these should be considered as broad estimations in lieu of artefactual evidence.

Phase 1: C18th

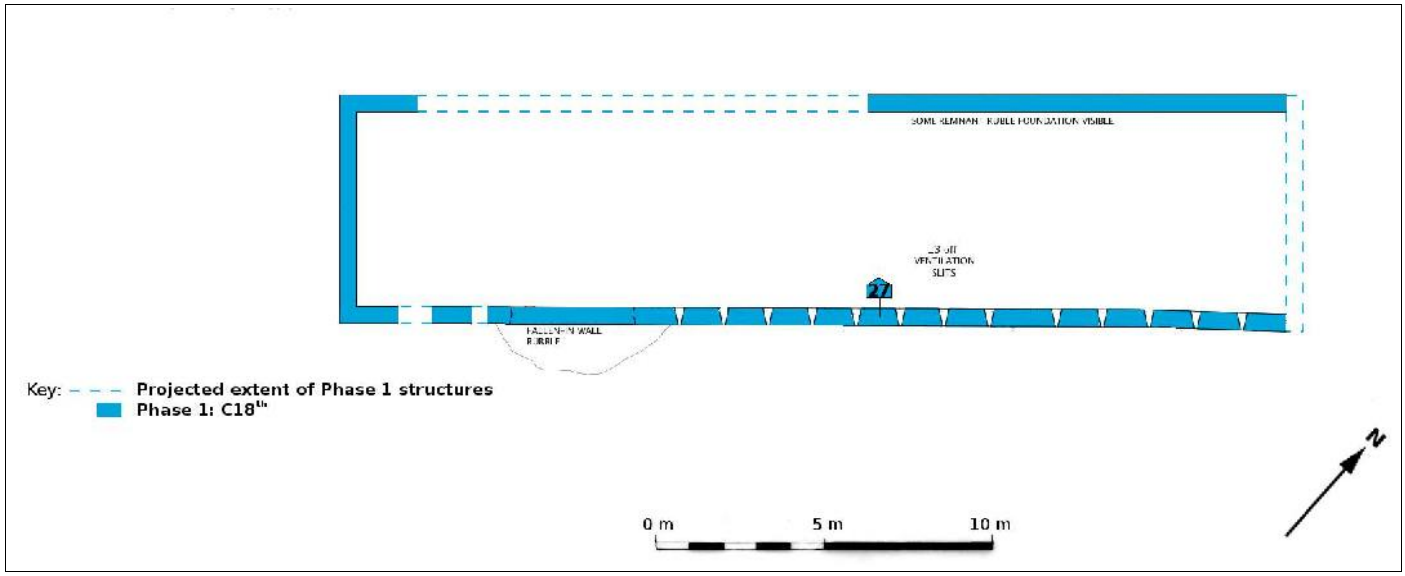

Fig. 18: Plan of East Barn Phase 1 structures.

The earliest context in the stratigraphic sequence of the East Barn was wall 27 (Fig. 18). This structure was predominantly stone-built with rounded and sub-rounded sandstone cobbles, generally uncoursed or laid in rough courses. The cobbles were set in a soft soil bond of a dark grey sandy-silt. These are identical construction materials and methods to those used in the construction of Phase 1 structures in the West Barn. Aside form the eastern building elevation, where large sections of the fabric of wall 27 have been exposed from dilapidation of the plaster render (Plate 6), this structure was also exposed in plaster-stripped sections 11, 12, 13 and 14 (Fig. 9).

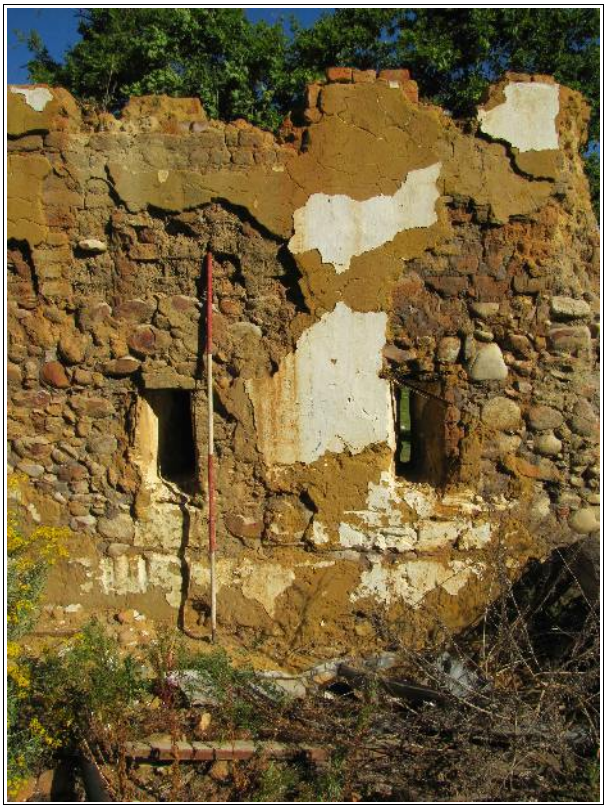

Plate 6: Photograph showing dilapidated render and exposed fabric of wall 27.

Wall 27 represents the footprint of a rectangular building, measuring 28.65m north-south by 6.86m east-west. The best preserved aspect of wall 27 formed the eastern elevation of the Phase 1 building, with the stone-built component of this elevation surviving to a height of 1.95m above current internal ground level. At a height of approximately 1.00m above internal ground surface, wall 27 had a series of thirteen narrow slits spaced approximately 1.3m apart along the eastern façade These slits splayed out from the outer to inner face of this wall (Fig. 18). This elevation continued to a height of approximately 3.00m above internal ground level, with the upper 1.0m built with low-fired orange bricks and sun-dried dark grey bricks set in a dark grey soil mortar (Plate 6). The brick-built component of this elevation may be attributed to a later construction phase representing a repair to, and possible raising of, the original roof structure; however, it is also possible that this brick coursing was part of the original Phase 1 structure.

The tracts of wall 27 along the southern and western elevation survive solely as a stone footing for brick-built walls of subsequent phases. The footprint of this original Phase 1 structure formed the basis for alterations and additions to the East Barn in subsequent phases.

Phase 4: early C20th

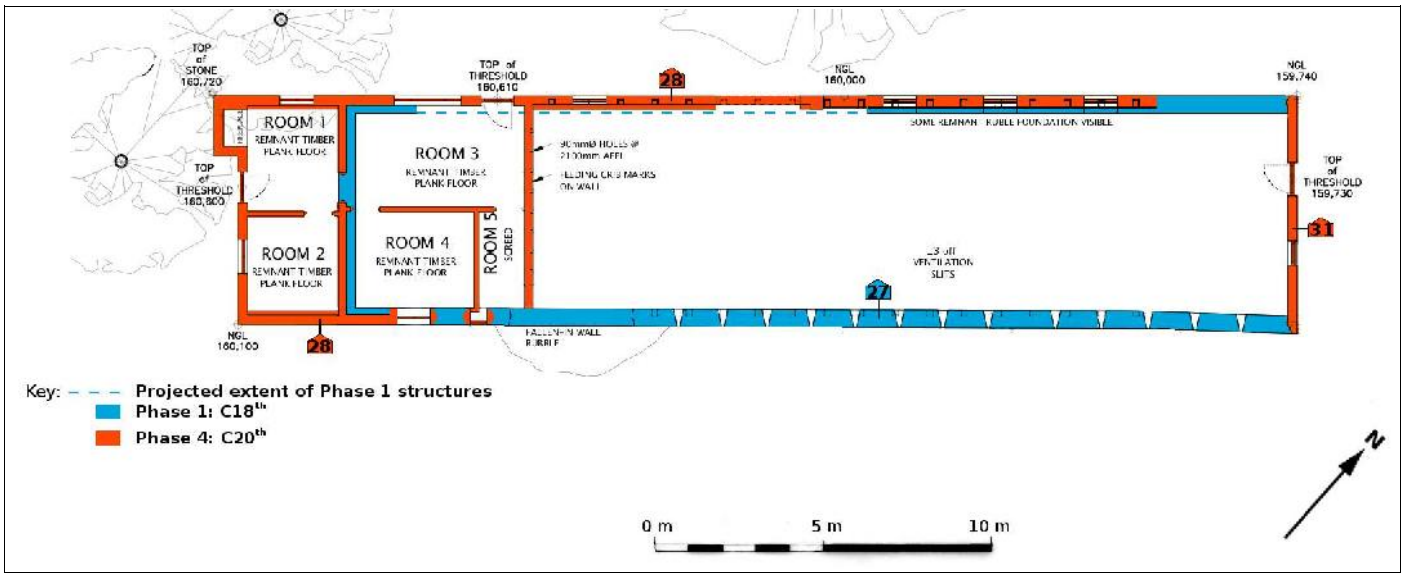

Fig. 19: Plan of East Barn Phase 4 structures.

The Phase 4 structures of the East Barn comprise contexts 28 and 31 (Fig. 19). Both were built with highly-fired reddish-orange, mass-produced factory bricks. These were set in a pale grey cement

mortar which appears to have a high lime content, giving it a paler colour than mortar mixed solely with cement. These are similar materials to those used in construction of Phase 4 structures 08 and 14 in the West Barn building.

Plate 7: Section 11 showing end gable wall 31 overlying stone-built wall 27.

Wall 31 represents the existing northern end-wall of the East Barn building (Fig. 19). The western end of wall 31 was exposed in section 11 and the eastern end was also photographed, with both ends of wall 31 overlying the stone-built Phase 1 wall 27 (Plates 7 and 8). The building's northern elevation was probably re-built as wall 31 after the Phase 1 walls had fallen into disrepair and partially collapsed. This re-build could have also been prompted by the re-configuration of the building's roof structure from a presumably original double-pitch roof to a single-pitch roof, sloping down from west to east. This is indicated by the surviving rafter slots, which are higher on the Phase 4 western elevation wall 28 than those along the eastern elevation wall 27.

Context 28 consists of a series of walls at the south end of the East Barn building that sub-divided the southern end of the building into several rooms and extended the building's footprint by 3.00m to the south (3.70m including the fireplace in Room 1). This extension and sub-divisions represent a four-room dwelling, with an internal WC in Room 5 (Fig. 19).

Plate 8: Eastern extent of end gable wall 31 overlying eastern elevation wall 27.

The east-west tract of structure 28 forming the internal division between Rooms 1 and 2 to the south and Rooms 3 and 4 to the north, was built directly onto the remnants of the southern wall of the Phase 1 building; sections 12 and 13 show the keyed-in east-west return of wall 27 surviving as a footing for the Phase 4 internal dividing wall (Plate 9). Section 14 shows the western end of this dividing wall keyed-in to the building's current western elevation, re-built in Phase 4 and recorded as a continuation of structure 28. Likewise, section 15 also shows the east-west wall forming the northern extent of the dwelling keyed-in to the current

western elevation, with both structural elements also recorded as context 28. The continuation of the re-built Phase 4 western elevation to the north of the dwelling is therefore also recorded as structure 28. This can be seen to overlie a stone-built footing, representing the remnant of Phase 1 wall 27, from approximately 3.20m north of the double-doorway in the centre of the western façade.

Plate 9: Section 12 showing east-west wall 28 overlying stone-built footing of wall 27.

All rooms in the dwelling at the southern end of the building had been fitted with timber plank floors, remnants of which are still extant or indicated by protruding footings on the outer room walls and brick-built footings in the centre of the rooms. This contrasts with the concrete or screed floor surfaces associated with Phase 5 structures in the both the West Barn and East Barn (see below). Also of note is the evidence for indoor plumbing, indicated by the WC in Room 5. Both these factors, together with the use of mass-produced bricks and cement based mortar, indicate a C20th date for Phase 4. This, however, appears to be still of a period prior to concrete being readily available and affordable as a construction material for it to be cast as a ground slab, as in subsequent phases.

Although not exposed in any of the plaster-stripped sections, the windows to the eastern elevation in Rooms 4 and 5 are interpreted as Phase 4 structures inserted into wall 27 (Fig. 19). The actual northern extent of the Phase 4 western elevation wall 28 was also not confirmed with plaster-stripping, and could be different from that depicted in Figure 19 (see below).

Phase 5: post-1938

Structure 29 is the only Phase 5 context exposed in the East Barn. It was built with highly-fired reddish-orange bricks, set in a yellow/brown silty-sand mortar and laid in alternating courses of headers and stretchers, identical to all other Phase 5 structures identified in the West Barn building.

Structure 29 represents a re-build of the northernmost tract of the East Barn's western elevation. This was keyed-in to an east-west wall that sub-divided a 4.20m long section at the north of the building from the larger open-space section in the centre of the building, recorded as Rooms 7 and 6 respectively (Fig. 20). The space divided as Room 7 during this phase was also finished with a concrete floor, as was the case with all other Phase 5 structures in the West Barn.

The continuation of structure 29 as the building's western elevation to the south of the east-west dividing wall was not confirmed with plaster-stripping. The interface between Phase 4 wall 28 and Phase 5 wall 29 along the western elevation is therefore uncertain; this is represented by the diagonal hatching of the colours representing each phase in Figure 20.

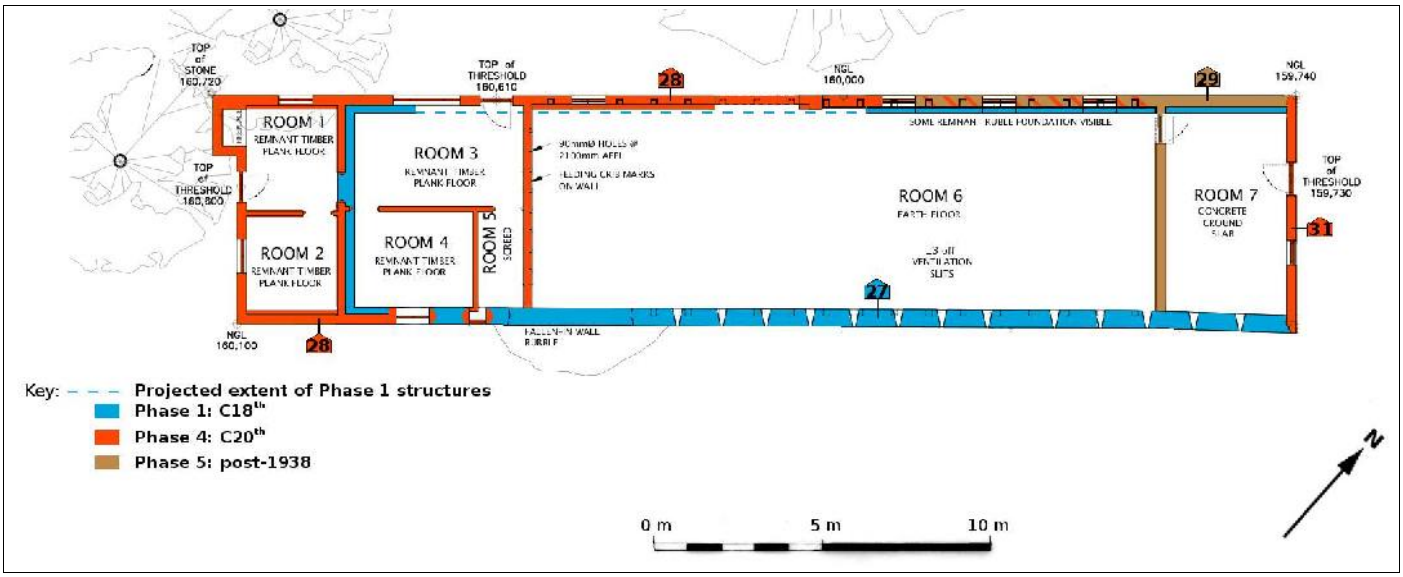

Fig. 20: Plan of East Barn Phase 5 structures.

Phase 6: mid- to late C20th

The Phase 6 structures in the East Barn were recorded as context 32. These structures were built with highly-fired dark red, factory-produced bricks, containing common iron stone and white grit inclusions. Bricks were set in a grey cement mortar.

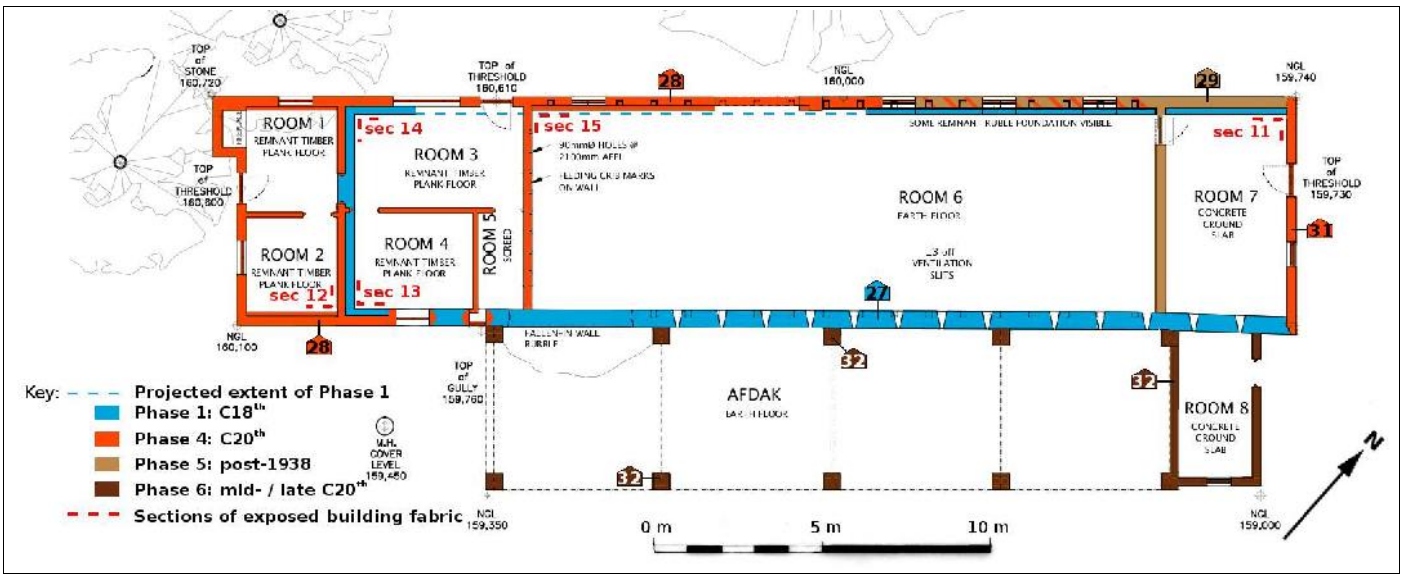

Fig. 21: Plan of East Barn Phase 6 structures.

Context 32 comprised a rectangular room that extended the building's footprint to the east at the northern end of the East Barn, measuring 4.65m east-west by 2.72m north-south and finished with a concrete floor (recorded as Room 8; Fig. 21). Associated with this structure, and also extending the building's footprint to the east, was a lean-to structure (*afdak*) also recorded as context 32. The *afdak* comprised a set of 10 square pillars arranged in two rows running north to south: the western row build adjacent to the barn's eastern elevation wall 27 and the eastern row extending 5m to the east, with a 5m gap between pillars along each row (Fig. 21). These support a single pitch corrugated metal roof sloping down from west to east, that also extended over Room 8 at the north

end of the *afdak*. Both Room 8 and the square pillars adjacent to the building clearly abutted Phase 1 wall 27 (Plate 10).

Plate 10: North wall 32 of Room 8, abutting eastern elevation wall 27

The type of highly-fired bricks used in structures 32 were not encountered in any other phase of either building. The use of a cement mortar and a concrete floor in Room 8 indicate a C20th date. With no direct stratigraphic relationships between structures 32 and Phase 5 structure 29 in the Eastern Barn, their relative sequence cannot be stratigraphically determined. However, structures 32 have been assigned to a later phase as a cement mortar was used it their construction, instead of a soil-based mortar used in what are interpreted as preceding Phase 5 structures in both the East and West Barns.

Conclusion

The surviving Phase 1 structures of the East Barn indicate it was also originally built as a rectangular building. Its footprint was 28.5m long by 6.9m wide, of similar width but approximately 10m longer than the Phase 1 West Barn building. There were no surviving internal divisions from Phase 1 and the majority of the building survives today as a large open-plan space, recorded as Room 6 (Fig. 21). As the majority of this building (Room 6) was not extensively redeveloped in later phases, providing a greater chance for original structures to survive, together with the absence of wall nibs on the internal face of Phase 1 wall 27 that would indicate internal divisions demolished in subsequent phases, it appears that the Phase 1 East Barn was originally built as a large open-plan building. It is therefore likely this was used as an outbuilding associated with production on the farm, either for storage or processing of produce, or as stabling for animals.

The predominant surviving Phase 1 structure is the eastern building wall that still stands to a height of over 3.0m, recorded as wall 27. A notable feature of this eastern elevation is the incorporation of a series of narrow vertical slits at 1.3m intervals, that splayed from the outer to inner face of this wall (Fig. 18). The incorporation of multiple slits all along the side of the building would have been a more complex design to execute than, say for instance, the incorporation of four standard window openings along the eastern elevation. This suggests the narrow slits were a design feature serving a specific function that may allude to the intended use of this building.

The main purpose of multiple slit openings is likely to have been for ventilating the building, though this could have been achieved with standard window openings. On the other hand their narrowness and splayed form, while allowing some sunlight into the building, would also significantly reduce the amount of light coming in relative to standard window openings. The combination of these factors, allowing good ventilation while maintaining low ambient lighting, are usual requisite specifications for wine cellars involved in wine production. Noxious fumes resulting

from the fermentation process can be lethal and need to be ventilated out of the building, while strong light together with higher ambient temperatures can spoil the wine. The multiple narrow, splayed slits could therefore serve this dual function of ensuring the building is well ventilated, while at the same time restricting the light and maintaining a lower temperature within the building.

Given that Weltevreden is situated in a historic wine production region, it is likely that the Phase 1 East Barn building was originally built as a cellar for wine production. Other internal features that would support this interpretation would be the presence of free-standing pillars used for supporting wine barrels off the ground, similar to those found in the historic cellars at Delta (Pinto *et al* 2009) and Babylonstoren (Smuts 2012a). Evidence of these structures may still survive in sub-surface deposits within the East Barn.

The Phase 4 redevelopment of the East Barn converted the southern quarter of the building into living quarters, leaving the northern three-quarters of the building as an open-plan space. The re-building of almost the entire western building elevation suggests the East Barn had fallen into significant disrepair or partially collapsed prior to Phase 4. From the construction materials used, Phase 4 is dated to the early C20th and would have therefore taken place after Weltevreden was bought and operated as part of the Rhodes Fruit Farms group (Clift 2007). Unlike the cottages built as part of the Phase 5 redevelopment of the West Barn, where each consisted of a two-room dwelling (Fig. 14), the Phase 4 redevelopment of the East Barn was a four-room dwelling complete with an internal WC in Room 5 (Fig. 19). Whereas the Phase 5 cottages in the West Barn are interpreted as farmworker accommodation, in comparison this larger dwelling with internal plumbing at the south end of the East Barn is likely to represent accommodation built for someone with a more elevated position in the working of the farm, such as the farm manager or foreman and their family.

Maintaining of the majority of the East Barn as an open plan space to the north of this dwelling means the use of this space remained linked to production on the farm during Phase 4. By this stage this would mean a function associated with fruit farming, such as short-term storage or packing of produce. This function for the larger Room 6 is likely to have been retained during Phase 5, with the sub-division of Room 7 in the northern part of the building (Fig. 20) indicating a different use for this space, though probably still linked to farm production.

The addition of the lean-to structure (*afdak*) and Room 8 abutting the building's eastern elevation in Phase 6 is provisionally dated to the second half of the C20th. These structures were probably used for the storage of farm machinery and other equipment associated with fruit farming during the period Weltevreden operated under Rhodes Fruit Farms or subsequently as Anglo American Farms.

The East Barn building is currently in a ruinous state. There has been no roof structure in place since at least 2007 (Fransen 2007) and the walls have partially collapsed as a result, particularly the Phase 1 eastern elevation wall 27. With no roof covering or the presence of solid concrete floors over the the majority of the building, any pre-C20th deposits are likely to have been disturbed or eroded by exposure to the elements. The exception to this would be Room 7 in the northern end of the building, where both the roof structure is still in place and a concrete floor was laid in Phase 5 (Fig. 20). It is possible that the putative pillars used for supporting wine barrels that would substantiate the interpretation of the Phase 1 East Barn building as a wine cellar may have survived beneath the current soil and vegetation overburden within Room 6. However, these structures are more likely to have survived beneath the concrete floor in Room 7. Aside from archaeological excavation of deposits to identify the presence of these sub-surface features and potentially recover

artefacts to establish construction dates for Phase 1, the structural analysis of the East Barn presented in this report has probably exhausted the information that could be recovered from the extant above ground structures.

3.3 Remains of structure to north-west

Fig. 22: Aerial photograph of werf showing area of structural remains identified in 2007 survey.

An attempt was made to identify and characterise the remains of the structure noted in the Archaeological Scoping Survey undertaken in 2007 (Patrick 2007). However, as the permit issued by Heritage Western Cape for the current investigation was solely for plaster-stripping of the two standing structures, and did not include permission to undertake sub-surface excavations, this investigation was limited to clearance of low-level vegetation (tall grass) from two small areas in the vicinity indicated by the previous scoping survey (Fig. 22). The aim was to expose the remains of this structure in order to determine its character, extent and preservation quality.

Plate 11: Concentration of boulders on ground surface.

It is evident that the ground surface in the area identified as the site of the structure in 2007 is slightly raised, relative to the surrounding ground surface. The clearing of vegetation in two discreet areas of this site (Fig. 22) did indeed reveal a concentration of sandstone boulders and cobbles (Plate 11), identical to the construction material used in Phases 1 and 2 of the West and East Barn. These were not, however, arranged in clearly linear or rectilinear alignments that would be indicative of a built structure. Nor was there any vertical coursing of sandstone boulders as those photographed in the 2007 scoping survey (Fig. 7), though it is possible that this aspect of the putative structure was covered by the denser vegetation to the north, or has since been demolished or collapsed.

Several C19th ceramic and glass fragments, together with C20th artefacts, were found in the course

of clearing overgrowth. A sample of these is shown in Plate 13. These artefacts, however, were found loose and without a secure context in the vegetation overlying the sandstone boulders, and as such cannot be used to establish a date for this possible structure.

Plate 12: Raised ground surface with exposed boulders adjacent to West Barn, looking south.

Plate 13: Sample of artefacts exposed during vegetation clearing.

The local natural geological substrate is comprised of sub-rounded sandstone boulders, deposited along the course of a palaeo-river bed that preceded the Berg and Dwars Rivers, and forming the river terrace on which the Weltevreden werf was built. Although these were regularly quarried and used as construction material, not only for Phases 1 and 2 of the buildings described in this report but also of early colonial buildings throughout the valley (Pinto *et al* 2009; Pinto & Smuts *in press;* Smuts 2012a and 2012b; Smuts & Clift, 2009 and 2010b), their presence within the study area does not necessarily indicate a built structure.

However, the fact that sandstone boulders were found on the ground surface with no topsoil covering, together with the raised ground surface relative to the surrounding area (Plate 12) and, in particular, the low coursed walling recorded in 2007 (Fig. 7), does suggest the exposed boulders represent remnants of walling or a concentration of rubble resulting from a collapsed structure in this area. On the other hand, it is also possible that this area was used as a general dump of rubble from demolitions or alterations to structures elsewhere on the farm. Further investigation, in the form of vegetation clearing and excavation of evaluation trenches, is required to conclusively determine whether these features represent a built structure.

4. Recommendations

The West and East Barn buildings and the remains of a possible structure to the north-west (Fig. 22) incorporate historic building fabric and/or sub-surface archaeological deposits. All are protected under Sections 34 and 35 of the National Heritage Resources Act (No 25 of 1999). As such, no alteration or demolition of any part of these structures, nor any excavation or disturbance of sub-surface deposits within and surrounding these structures may be undertaken without a permit issued by Heritage Western Cape.

As a pair, the West Barn and East Barn represent the early development of farm buildings on this *werf*, probably dating back to the C18th. These structures potentially reflect the early subdivision of the original C17th Lubeck Farm freehold grant into what became Weltevreden Farm (Clift *in:* Winter & Baumann 2007, pp. 108-117), and could be the earliest structures built on that newly defined farm. In this regard, it is possible that the Phase 1 West Barn building may represent the original homestead of Weltevreden Farm. The differing dimensions and slightly off-parallel alignment of these two buildings suggest they were not built at exactly the same time as components of a planned *werf*, but are rather the product of an organic growth relating to the expansion and economic success of this farm. The remains of the possible structure to the north-west may also represent a component of this early farm *werf*.

As such, these structures are locally important in investigating the establishment and subsequent development of the historic farms of Lubeck and Weltevreden. On a wider local and regional level, they are significant with regard to patterns of early colonial settlement, as well as the subsequent colonial expansion of the late C18th and early C19th in the Drakenstein-Simondium Valley. This in turn adds to our understanding of the development and expansion of the early Cape Colony.

The current homestead is the most recent *werf* structure, dating to the early 1920's. Although reported to have been designed by Henry Adams (Gertenbach 2007), it nevertheless has distinct characteristics reminiscent of Henry Baker's designs and is locally significant with regard to Weltevreden's history as a Rhodes Fruit Farm. It is also likely to have been built on the same location as the preceding homestead and, as such, is representative of the evolution of the *werf* into its current layout, with the homestead at the head of a forecourt flanked by the two barn buildings.

The *werf* buildings, comprising the homestead and flanking East and West Barns, therefore relate to each other as a unit and their heritage significance should be evaluated as such. They are of high significance with regard to the establishment and development of Weltevreden farm throughout its history, and on a wider local level with regard to the early colonial settlement and subsequent expansion in the Drakenstein-Simondium Valley.

In accordance with the National Heritage Resources Act (No 25 of 1999), it is recommended that the Weltevreden *werf* be given a grading of not less than **Grade 3B.** This is to include all standing and sub-surface structures, as well as any other archaeological material within 100m of the *werf* structures. With regard to the potential for good preservation of archaeological features within the West Barn building and the possibility that this could be the original homestead of Weltevreden Farm, the older portion of this building should be considered for a **Grade 3A** heritage resource.

The proposed plans for the renovation of the West and East Barns will have a **Medium** to **High Impact** on the these structures. Given the differential preservation quality of these structures, a set of recommendations with reference to the proposed plans is given for each building. It is

recommended that the proposed development be allowed to proceed, subject to the following conditions and the approval of Heritage Western Cape.

West Barn

The proposed development plans presented in Appendix 2 will have a **High Impact** on the West Barn structure. In accordance with the suggested **Grade 3A** status for this building and with reference to these plans, it is recommended that:

(1) The footprint of the southern half of the building (comprising Phases 1 to 4; Figs. 10-13) should be preserved, with only limited alterations to or partial demolition of the fabric of its outer walls. Every effort should be made to preserve the form of this section of the original building, with all alterations and additions being sympathetic to the form and character typical of a historic I-plan farm building. It is noted that the proposed extension to the West Barn's west elevation, comprising the toilettes and enclosed yard as planned (Appendix 2), does not conform to this recommendation.

(2) Notwithstanding point (1) above, all approved alterations to and/or demolition of the outer walls of the Phase 1-4 structures (Figs. 10-13) should be mitigated with detailed structural analysis prior to their undertaking. This should follow a similar methodology to this assessment: plaster-stripping and recording of exposed fabric by a qualified historical archaeologist, with an aim to characterise and phase the exposed structures as an addition to the analysis presented in this report. If the approved alterations fall within the sections investigated in this report, then these can be considered as already mitigated.

(3) No disturbance of sub-surface deposits is to be undertaken within the footprint of the building without archaeological mitigation. If the proposed development requires the breaking or removal of the current screed floor surface, this should be mitigated by a full archaeological excavation of the impacted areas if this falls within the footprint of the Phase 1 structures (Fig. 10); if there is to be sub-surface disturbance to deposits within the Phase 5 extensions to the building (comprising Room 1, Garages 1 and 2, and the Store; Fig. 14), mitigation can be limited to archaeological monitoring of these works.

(4) The redevelopments and extensions to the West Barn undertaken during Phase 5 (Fig. 14) are less significant than structures of preceding phases. Approval may therefore be granted for the demolition of any and all Phase 5 structures, subject to mitigation as per point (3) above if there is to be any disturbance of sub-surface deposits: archaeological excavation if this is within the footprint of the Phase 1 structures (Fig. 10); or monitoring by a historical archaeologist if sub-surface disturbance falls within the Phase 5 extensions to the building (Room 1, Garages 1 and 2, and the Store; Fig. 14).

(5) Notwithstanding point (4), the Phase 5 redevelopment of the southern section of the West Barn into farmworker cottages resulted in a change to the form and character of the building, and is an aspect of the building's history. As such, it is recommended that the internal divisions of at least one of the two room cottages and its fireplace be incorporated into the design of the proposed development; if the northernmost cottage comprising Rooms 5 and 6 (Fig. 14) were to be selected for preservation, this would also retain the Phase 1 dividing wall 10 which would be preferable. If it is not possible to incorporate these structures into the proposed development, it is recommended that the layout of the internal divisions of the farmworker cottages be depicted on the floor surface of the proposed redevelopment (e.g. as single brick courses or different colour screed set into the proposed floor surface, depicting the layout of internal divisions and fireplaces of the farmworker dwellings).

Any future redevelopment of the West Barn building must take into consideration the fact that this is a historic farm building dating to the early colonial period, with **the potential for excellent preservation of internal structures and floors**. This has been shown to be the case with archaeological excavations of similar buildings that have remained in use to the present day, where maintained roof structures and modern floor surfaces served as protection to sub-surface historic structures and floor surfaces. Excavations of those buildings determined the development and changes in their character and function through time. This in tun greatly increased our understanding of the development and economy of their respective farms, from the early colonial period to their more recent modern history (Pinto *et al* 2009; Pinto & Smuts *in press;* Smuts 2012a).

Heritage buildings of this nature are increasingly limited resources under threat of development that usually results in the destruction of their heritage significance. Although it is recommended that the emphasis should be on preserving and protecting these heritage resources *in situ*, if proposed developments threaten to negatively impact their heritage significance, then adequate mitigation that preserves these buildings 'in record' should be set as conditions for their redevelopment.

East Barn

The proposed development plans presented in Appendix 2 will have a **Medium Impact** on the East Barn structure. In accordance with the suggested **Grade 3B** for this building and with reference to these plans, it is recommended that:

(6) The footprint of the Phase 1 building should be preserved, with only limited alterations to or partial demolition of the fabric of its eastern elevation wall (wall 27; Fig. 18). An effort should be made to preserve the form of this elevation and incorporate the ventilation slits, features that are part of the building's original design, into the proposed plans.

(7) Any disturbance of sub-surface deposit in the northern three-quarters of the building (Rooms 6 and 7; Fig. 20) should be subject to archaeological mitigation. This should initially comprise monitoring of works by a historical archaeologist to determine if there are any surviving internal structures and floors dating to the use of the building during Phase 1, specifically if there are any structures that would indicate the original use of this building as a wine cellar (such as free-standing pillars or similar). If archaeological structures and/or floors are identified in the course of archaeological monitoring, an on-site assessment of their preservation quality must be made by the monitoring archaeologist:

(7.a) if preservation is deemed to be poor and contexts significantly disturbed, mitigation can be limited to detailed description, photography and measured survey of structural features and/or floor surfaces, together with recording or recovery of any artefacts that may date these features;

(7.b) if preservation is deemed to be reasonable or good, mitigation should consist of a small-scale archaeological excavation and appropriate recording of exposed features, with an aim of establishing the extent, character and date of exposed structures and/or floor surfaces. This excavation should be undertaken immediately by the monitoring archaeologist and co-ordinated with the approved redevelopment works so that there is no or minimal delay to those works.

The East Barn is currently in an advance state of dilapidation and at risk of further structural

damage by exposure to the elements. The proposed plans (Appendix 2) conform to point (6) above and, subject to point (7), it is recommended that the proposed redevelopment of the East Barn be allowed to proceed as soon as possible. This will stabilise and preserve the surviving historic building fabric and ultimately result in a **positive impact** on these heritage resources.

Remains of structure to north-west

The results of the current investigation have not established the extent or character of the structure identified in the Archaeological Scoping Survey undertaken in 2007 (Patrick 2007). In accordance with the National Heritage Resources Act (No 25 of 1999) and with the proposed **Grade 3B** of the Weltevreden *werf*, it is recommended that:

(8) No disturbance of surface or sub-surface deposits should take place in the area to the west of the West Barn building (Fig. 22) before an archaeological excavation is undertaken to evaluate the extent, character, date and preservation quality of this putative structure.

It should be noted that the proposed extension to the western elevation of the West Barn building (Appendix 2) is likely to impact on this possible structure. Although this extension has apparently been removed from the proposed redevelopment (Chris Fick pers. com.), if the remaining proposed redevelopments of the West Barn or surrounding *werf* will impact in any way on the area highlighted in Figure 22 (including any alteration, removal or addition of material to that area), then mitigation according to point (8) should be a condition of approval to the proposed redevelopment.

Area to north of homestead

Although no plans have been submitted to the author, the area to the north of the homestead is the proposed site for a swimming pool (Chris Fick pers. com.). No heritage resources were identified on the ground as part of a field-walking survey of the area outlined in Figure 22. With regard to impact on heritage resources in this area, it is recommended the proposed development of a swimming pool be allowed to proceed, with the condition that:

(9) All sub-surface excavations be monitored by a historical archaeologist. In the even that any archaeological structures or deposits are uncovered in the process of these excavations, work should be stopped and time given to the monitoring archaeologist to adequately record and/or recover any archaeological material.

Approval of this development by Heritage Western Cape should also be subject to: the **Grade 3B** of the Weltevreden *werf* recommended in this report; the National Heritage Resources Act (No 25 of 1999) and other relevant legislation; and any other relevant planning regulations to be determined by Heritage Western Cape.

5. References

Clift, H., 2007. Appendix 3: Historical Research. In: S. Winter and N. Baumann, ed. 2007. *Heritage Impact Assessment Two Rivers Farm: Portions 1 to 15 of Weltevreden Farm No 1646 & Portions 5 of Jerico Farm No 1014, Groot Drakenstein*. Unpublished report prepared for Two Rivers Development Company (Pty) Ltd, pp. 108-117.

Fransen, H., 2007. Appendix 5: Weltevreden (Groot Drakenstein); Some notes on the Heritage significance of its built structures. In: S. Winter and N. Baumann, ed. 2007. *Heritage Impact Assessment Two Rivers Farm: Portions 1 to 15 of Weltevreden Farm No 1646 & Portions 5 of Jerico Farm No 1014, Groot Drakenstein*. Unpublished report prepared for Two Rivers Development Company (Pty) Ltd, pp. 126-128.

Gertenbach, M., 2007. Appendix 4: Social-Historical Interviews; Two Rivers Estate Interviews and research on sites of historic significance. In: S. Winter and N. Baumann, ed. 2007. *Heritage Impact Assessment Two Rivers Farm: Portions 1 to 15 of Weltevreden Farm No 1646 & Portions 5 of Jerico Farm No 1014, Groot Drakenstein*. Unpublished report prepared for Two Rivers Development Company (Pty) Ltd, pp. 118-125.

Le Roux, J.G. and Le Roux, W.G., n.d. *Ons DrakensteinseErfgrond: Groot Drakenstein.* Unpublished pamphlet: Drakenstein Heemkring.

Orton, J., (in press) *The Stone Age at Delta: the evidence of artefacts.* Unpublished report prepared for Prof Mark Solms.

Patrick, M., 2007. Appendix 6: Archaeological Survey. In: S. Winter and N. Baumann, ed. 2007. *Heritage Impact Assessment Two Rivers Farm: Portions 1 to 15 of Weltevreden Farm No 1646 & Portions 5 of Jerico Farm No 1014, Groot Drakenstein*. Unpublished report prepared for Two Rivers Development Company (Pty) Ltd, pp. 129-140.

Pinto, H. & Smuts, K., in press. *Archaeological investigation of structures on the historic Solms-Delta Farm* werf.

Pinto, H., Smuts, K. and Hart T., 2009. *Archaeological Investigation of Historic Wine Cellar, Solms-Delta Farm 1460, Groot Drakenstein*. Unpublished report prepared for Solms-Delta Trust. University of Cape Town: Archaeology Contracts Office.

PPC 2011 *Pretoria Portland Cement profile.*[online] Available at: <http://http://www.ppc.co.za/pages/about_profile.cfm> [accessed 16 January 2013].

Smuts, K., 2012a. *An Archaeology of the Eighteenth and Nineteenth Century Cape Wine Economy from the Perspective of Solms Delta and Babylonstoren* . Unpublished MPhil dissertation. Cape Town: University of Cape Town.

Smuts, K., 2012b. *Report on Research Excavation of the Stables Building at Solms Delta Farm, Groot Drakenstein, Western Cape.* Unpublished report prepared for Prof Mark Solms.

Smuts, K. and Clift, H., 2009. *Babylonstoren Farm 1268 Archaeological Impact Assessment: Koornhuis.* Unpublished report prepared for Babylonstoren (Pty) Ltd.

Smuts, K. and Clift, H., 2010a. *Babylonstoren Farm 1268 archaeological monitoring report: Koornhuis*. Unpublished report prepared for Babylonstoren (Pty) Ltd.

Smuts, K. and Clift, H. 2010b *Babylonstoren Farm 1268 Archaeological Impact Assessment: stables*. Unpublished report prepared for Babylonstoren (Pty) Ltd.

Smuts, K. and Pinto, H., 2011. *Babylonstoren Farm 1268 archaeological monitoring report: stables.* Unpublished report prepared for Babylonstoren (Pty) Ltd.

Van Zyl, D.J., 1987. Economics. In: Oberholster, A.G. (ed.) *Paarl Valley 1687-1987*. Pretoria: Human Sciences Research Council, pp. 73-108.

Winter, S. and Baumann, N. 2007 *Heritage Impact Assessment Two Rivers Farm: Portions 1 to 15 of Weltevreden Farm No 1646 & Portions 5 of Jerico Farm No 1014, Groot Drakenstein*. Unpublished report prepared for Two Rivers Development Company (Pty) Ltd.

Appendix 1: Stratigraphic matrix

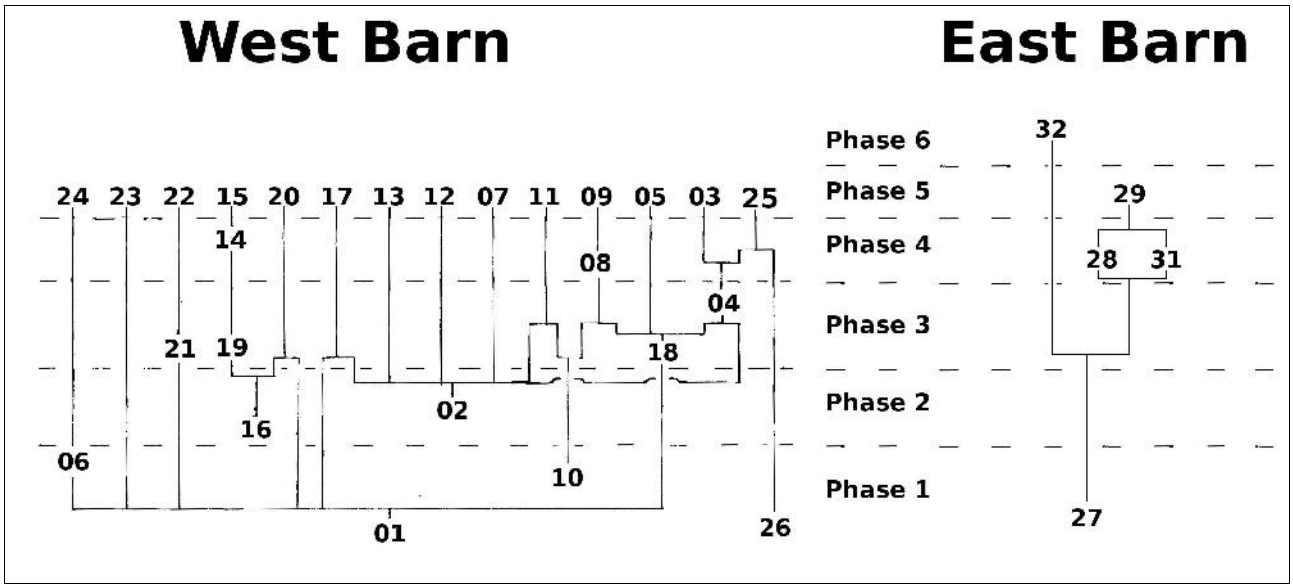

Fig. 23: Stratigraphic matrix of all recorded contexts.

Appendix 2: Proposed redevelopment plans

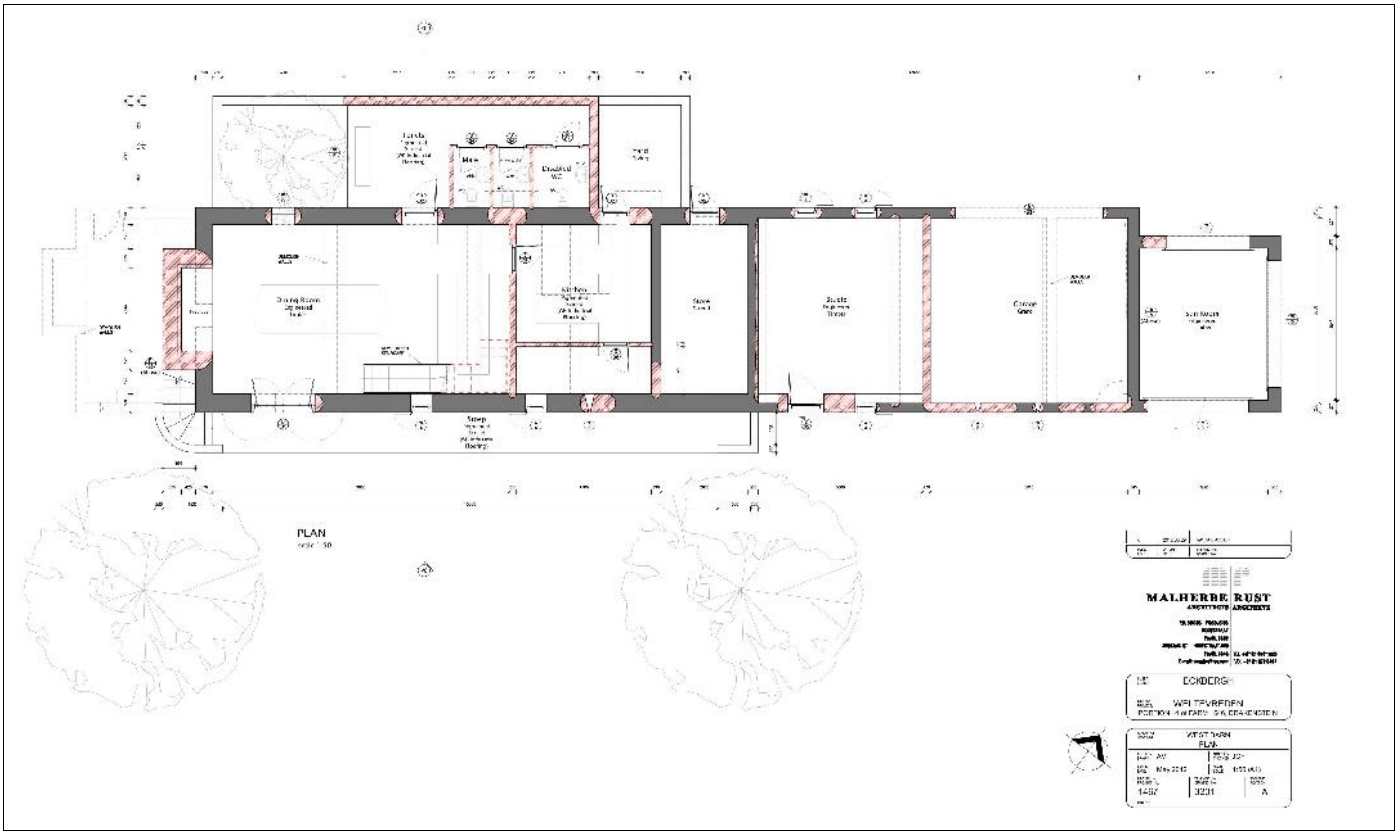

Fig. 24: Plan of proposed redevelopment of West Barn. © Malherbe Rust Architects

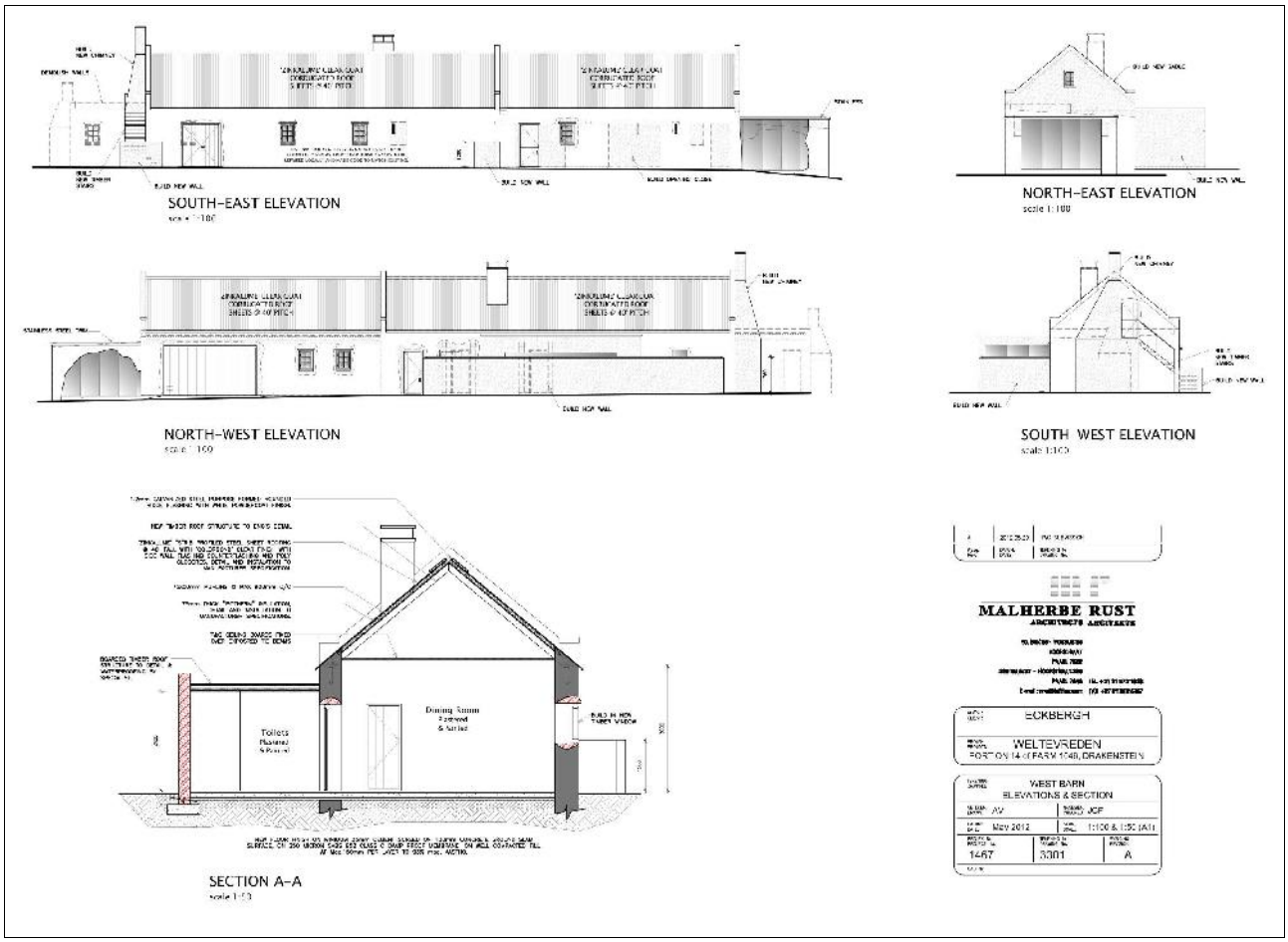

Fig. 25: Elevations of proposed redevelopment of West Barn. © Malherbe Rust Architects

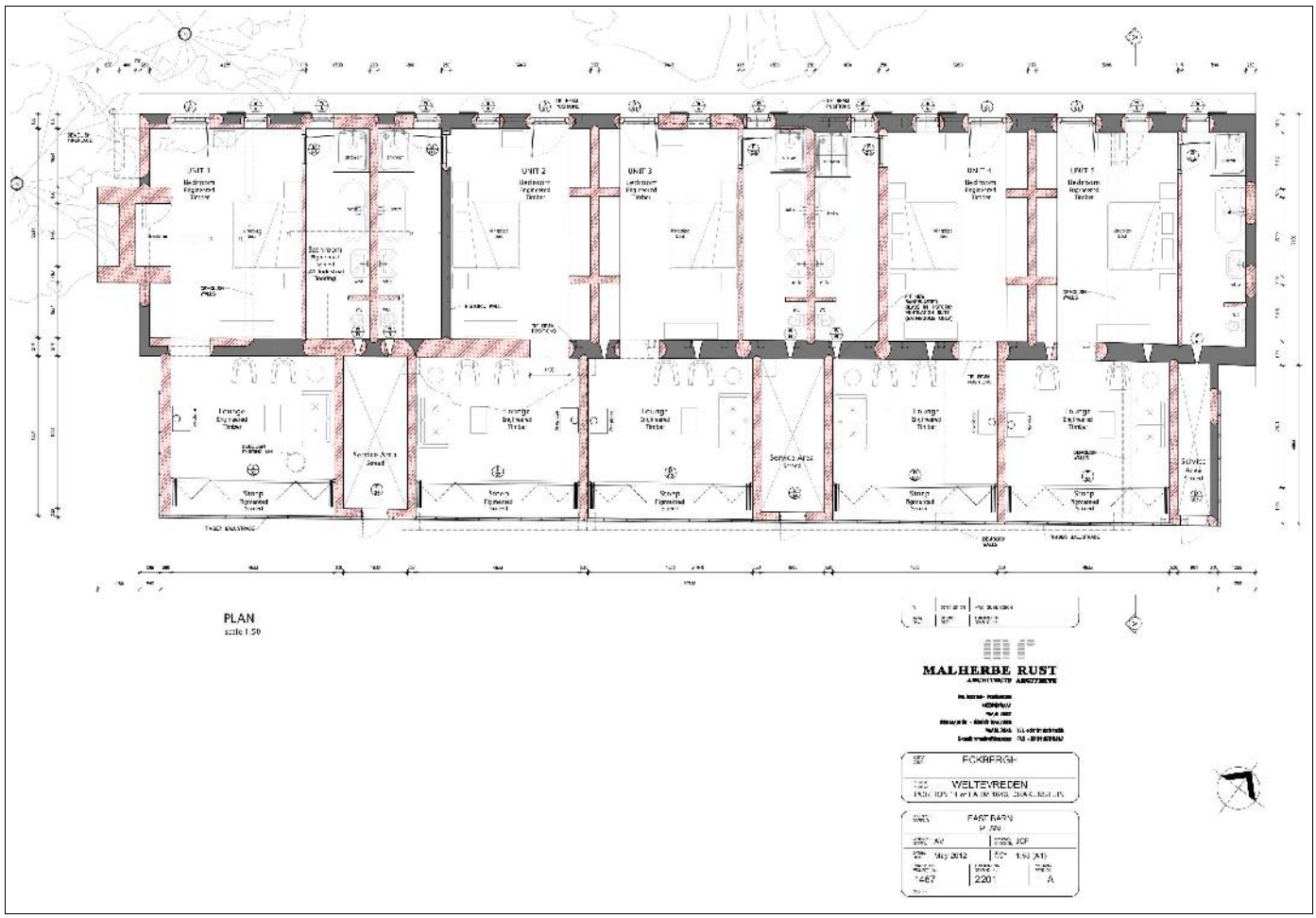

Fig. 26: Plan of proposed redevelopment of East Barn. © Malherbe Rust Architects

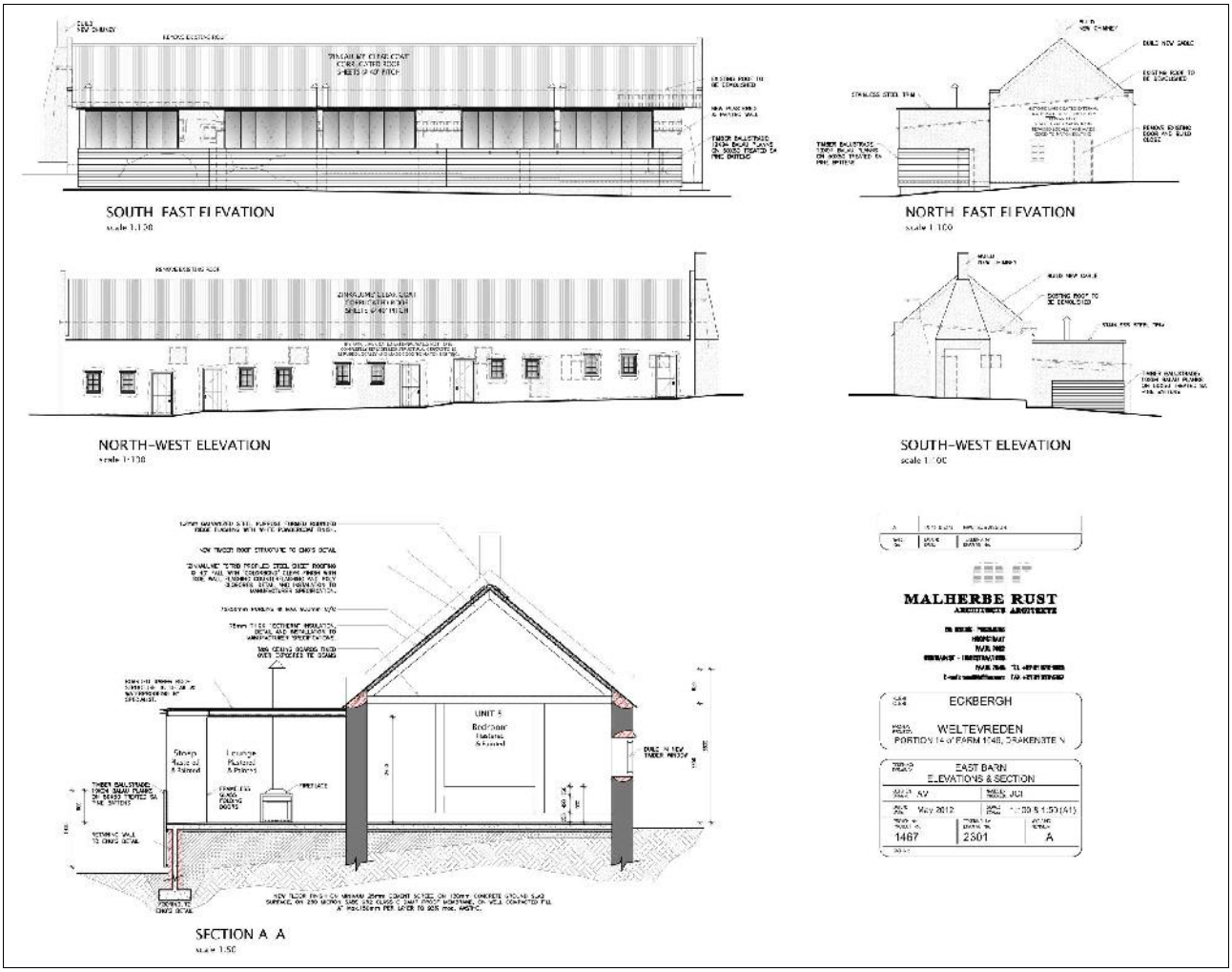

Fig. 27: Elevations of proposed redevelopment of East Barn. © Malherbe Rust Architects

Appendix 3: Record of Decision issued by Heritage Western Cape

Case No: 120731JW30M

File No: HM/FRANSCHHOEK/WELTEVREDEN FARM/PTN 14 OF FARM 1646

Enquiries: Jonathan Windvogel

E-mail: jwindvog@pgwc.gov.za

Tel (021) 483 9736

Date: 21 September 2012

iLifa leMveli leNtshona Koloni
Erfenis Wes-Kaap
Heritage Western Cape

Malherbe Rust Architects
P. O. Box 85
PAARL
7622

CASE NUMBER: 120731JW30M

APPLICATION FOR PROPOSED ALTERATIONS AND ADDITIONS, WELTEVREDEN FARM, PTN 14 OF FARM 1646, R45 FRANSCHHOEK.

The application for the above has reference.

Kindly note that your application for a permit in terms of **Section 34** of the National Heritage Resources Act (Act 25 of 1999) for restoration to the above mentioned property was tabled at the meeting of the Built Environment and Landscapes Committee (BELCom) of **19 September 2012**.

The Committee resolved that:

- There is no objection to rezoning the site back to Agricultural I with a consent use for guest facilities.
- A phase I Archaeological assessment focusing on the werf and the above ground structures must be conducted with the view to inform future work.
- The proposals are approved in principle and must be further resolved taking into account the new grading and the outcome, of the archaeological study.

NOTE:

- This decision is subject to an **appeal period of 14 working days.**
- The applicant is required to inform any party who has expressed a *bona fide interest* in any heritage-related aspect of this record of decision. The appeal period shall be taken from the date of being informed. It should be noted that for an appeal to be deemed valid it must refer to the decision, it must be submitted by the due date and it must set out the grounds of the appeal. Appeals must be addressed to the official named above and it is the responsibility of the appellant to confirm that the appeal has been received within the appeal period.

Should you have any further queries, please contact the official above and quote the case number.

Yours faithfully

AB Hall
(CEO: Heritage Western Cape)

Appendix 4: List of Photographs on CD-ROM

Photograph	Description
IMG_6155	view of Garage 1 looking west, West Barn
IMG_6157	view of Garage 1 looking east, West Barn
IMG_6158	view of Garage 1 looking east, West Barn
IMG_6160	Section 1, West Barn
IMG_6161	Section 1, West Barn
IMG_6164	Section 1 south end, West Barn
IMG_6166	Section 1 north end, West Barn
IMG_6167	Section 2 north end, West Barn
IMG_6168	Section 2 north end, West Barn
IMG_6170	Section 2 north end with detail of plaster render on doorway 18, West Barn
IMG_6171	Section 2 north end with detail of plaster render on doorway 18, West Barn
IMG_6172	Section 2 north end with detail of plaster render on doorway 18, West Barn
IMG_6173	Section 2 south end, West Barn
IMG_6174	Section 2 south end, West Barn
IMG_6175	Section 2 south end, West Barn
IMG_6177	Section 2 south end, West Barn
IMG_6178	Section 2 south end, West Barn
IMG_6179	Section 3, West Barn
IMG_6180	Section 3, West Barn
IMG_6182	Section 3, West Barn
IMG_6183	Section 4, West Barn
IMG_6184	Section 4 south end, West Barn
IMG_6187	Section 4 north end, West Barn
IMG_6189	Section 4 detail of plaster on doorway 19, West Barn
IMG_6190	Section 5, West Barn
IMG_6191	Section 5 south end, West Barn
IMG_6193	Section 6, West Barn
IMG_6195	Section 7, West Barn
IMG_6196	Section 8, West Barn
IMG_6198	Section 9, West Barn
IMG_6199	Section 10, West Barn
IMG_6200	Section 10, West Barn
IMG_6201	Section 10, West Barn
IMG_6202	Section 10, West Barn
IMG_6203	Section 10, West Barn
IMG_6204	East end of wall 26 looking west, West Barn
IMG_6205	Dilapidated Structure at northern end of West Barn, looking west
IMG_6206	West end of wall 26 looking east, West Barn
IMG_6207	Double doorway to north elevation of Dilapidated Structure, West Barn
IMG_6208	Section 11, East Barn
IMG_6211	Section 11, East Barn
IMG_6212	East end of wall 31 overlying wall 27, looking east, East Barn
IMG_6213	East end of wall 31 overlying wall 27, looking east, East Barn
IMG_6214	Northern wall 32 of Room 8 looking south, East Barn
IMG_6215	northern end gable of East Barn, looking south
IMG_6216	Eastern elevation wall 27 with afdak pillar 32, looking west, East Barn
IMG_6217	Collapsed eastern elevation wall 27, looking west, East Barn

Photograph	Description
IMG_6218	Section 12, East Barn
IMG_6219	Section 13, East Barn
IMG_6220	Section 13, East Barn
IMG_6221	Section 14, East Barn
IMG_6222	Section 15, East Barn
IMG_6223	Eastern elevation wall 27, looking east, East Barn
IMG_6224	Eastern elevation wall 27, looking south-east, East Barn
IMG_6241	East elevation of West Barn, looking north-west
IMG_6242	West elevation of West Barn, looking east
IMG_6243	West elevation of West Barn, looking east
IMG_6244	East elevation of West Barn, looking west
IMG_6245	East elevation of West Barn, looking south-west
IMG_6246	Dilapidated Structure at northern end of West Barn, looking west
IMG_6247	concentration of sandstone boulders to west of West Barn, looking south
IMG_6248	concentration of sandstone boulders to west of West Barn, looking west
IMG_6249	concentration of sandstone boulders to west of West Barn, looking south
IMG_6250	concentration of sandstone boulders to west of West Barn, looking south
IMG_6251	Dilapidated Structure at northern end of West Barn, looking west
IMG_6252	Dilapidated Structure at northern end of West Barn, looking west
IMG_6253	Dilapidated Structure at northern end of West Barn, looking north
IMG_6254	Sample of artefacts exposed during vegetation clearing of area to west of West Barn
IMG_6255	Sample of artefacts exposed during vegetation clearing of area to west of West Barn
IMG_6256	Panorama of werf, looking north-east