GLEN DIRK FARM ERF 10373, CONSTANTIA

HERITAGE IMPACT ASSESSMENT: PROPOSED NEW RESIDENCE

(February 2016)

1. Introduction & Brief

1.1 Introduction

Glen Dirk Farm comprises 54,9 ha of strategic farmland surrounded by residential suburbs (Bishops Court, Klaasensbosch, Hohenhort and Alphen) on the edge of the Constantia Valley. The farm is situated between Klaassens Rd to the north/northeast, the M3 (Simon Van der Stel) freeway to the east, and Spilhaus Ave and Leith Rd (off Alphen Drive) to the southwest. This report assesses the impact of a proposed new residence on the farm indicated as 'The Site' in **Figure 01** (below).

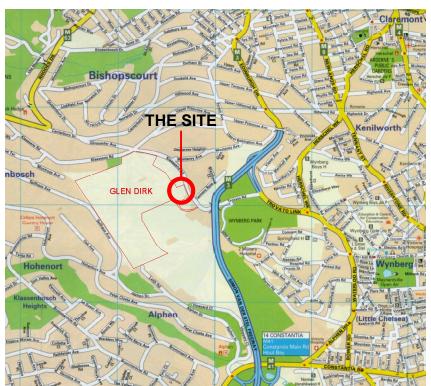


FIGURE 01: Location of the site of the proposed new residence (circled in red). The Simon Van der Stel freeway (M3) is indicated in blue to the east. Access is via Trovato Road under the M3 & then via Klaassens Rd to the site, which will not be accessible off Klaassens Road. (North is at the top of this image. Scale: each grid block represents a distance of approx. 0,9km × 0,9km).

1.2 General Background

From 2007, Glen Dirk has been the subject of a subdivision application for which a heritage impact assessment (HIA) was prepared between 2007 and 2009 as part of an environmental impact assessment (EIA) process. The recommendations contained in that HIA report were subsequently endorsed by SAHRA as the relevant heritage resources commenting authority at the time¹.

¹ At the time, SAHRA had expressed its intention to include Glen Dirk in a proposed National Heritage Site declaration. Based on a High Court judgement involving another site in the Constantia area (the so-called 'Eagles Nest' judgement), SAHRA was deemed to be the relevant commenting (heritage) authority for the Glen Dirk subdivision application in terms of NHRA S.38(8) on the basis of Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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A Record of Decision (ROD) supporting the subdivision application (with conditions), was subsequently issued by the Western Cape Provincial Department of Environment & Development Planning (DEADP) on 29 September 2009, taking into account the findings of the HIA and its endorsement by SAHRA as the relevant heritage resources authority at the time. The site in question was one of the portions supported for subdivision by SAHRA.



FIGURE 02: Aerial view of the proposed 8 subdivisions (outlined in yellow) off Glen Dirk Farm as assessed in the HIA conducted between 2007 and 2009. This HIA supported all subdivisions (with conditions), apart from Portion 6 (circled in white) at the southern end of the farm. The recommendations of the HIA were duly endorsed by SAHRA and ultimately received a positive Record of Decision by DEADP. Portion 8 (circled in red) is the site of the proposed new residence.

Although the subdivision application was eventually approved by the City of Cape Town in March 2014, it has not yet been implemented, as the decision to grant the application planning approval has been the subject of a judicial review brought by the Constantia Property Owners Association (CPOA) against the subdivision. This is how the matter currently stands.

1.3 Terms of Reference for this Report

One of the members of the family that owns Glen Dirk intends to construct a new dwelling on one of the portions earmarked for subdivision. This site, known for the purposes of the aforementioned subdivision application as Portion 8, is circled in red in **Figure 02**. Because the site is not yet subdivided from Glen Dirk,

its stated intention to declare that area alone. It is worth noting that this National Heritage Site has yet to be declared by SAHRA. In a subsequent arrangement between SAHRA and HWC, it was agreed that HWC would function as the relevant heritage authority for commenting purposes until the area of which Glen Dirk forms a part, is formally declared a National Heritage Site.

a Notice of Intent to Develop (NID) application for the proposed dwelling was submitted on 18 December 2015 to HWC. This application was required in terms of NHRA Section 38(1)(c)(i) given that the property (in its 'yet-to-be-subdivided' form) exceeds 5 000 sq m.

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In a response dated 20 January 2015(sic) (surely intended to read 20 January 2016), HWC determined that the character of the site would be changed by the proposals, and therefore that the development would be subject to a heritage impact assessment that would need to satisfy the requirements of NHRA S.38(3). It further stipulated that the HIA must have specific reference to the following:

- -Visual impacts of the proposed development; and
- -Impacts to the built environment including a detailed site development plan.

It further required that the HIA have an integrated set of recommendations and that the comments of relevant registered conservation bodies and the relevant municipality (the City of Cape Town in this instance) must be requested and included in the HIA, where provided, with proof of the requests supplied.

1.4 Methodology

This report is naturally informed by the 2009 HIA for Glen Dirk Farm. That HIA evaluated the proposed subdivision illustrated in **Figure 02**. In the course of preparing that HIA report, the historical background of Glen Dirk was researched, the site spatially analyzed, heritage hotspots and potential archaeological constraints identified and heritage-related informants formulated, the latter being the yardsticks for assessing the impacts of new single dwellings on each of the proposed subdivisions. The current report assessing the impact of the dwelling proposed for Portion 8 is therefore a logical extension of that 2009 HIA.

Heritage impacts from the proposed new dwelling on Portion 8 are therefore assessed within the context of the heritage statement and heritage informants already identified in the 2009 HIA². In addition to this, 3D montages of the proposed dwelling within its spatial context, and from viewpoints agreed to between the architect and myself have been prepared. These montages, together with the architect's site development plan have been used to assess visual impacts on Portion 8 in relation to the spatial context of Glen Dirk Farm and Klaassens Road in particular.

1.5 Assumptions & Limitations of this Study

1.5.1. The Scope & Nature of this Assessment

The 2009 HIA has already assessed Portion 8 (the site in question) and found it to be an acceptable location for new development on Glen Dirk. Consequently, this report does not re-cover ground already evaluated. The focus of this study is, therefore not to determine whether development on this site should occur, but rather to assess the nature of the proposed development in relation to Glen Dirk and relevant adjoining areas.

1.5.2. Heritage Resources within the Site

The only element of intrinsic significance on the site is an old redundant concrete reservoir. This will be retained alongside the proposed dwelling. A heritage statement on this structure was prepared as part of a separate NHRA S.34 application to HWC in April 2015 and is therefore not assessed further in this report. The environmental assessment process of which the 2009 HIA formed a part has already established that nothing of botanical significance occurs on the site. However, implications for mature trees in this location are considered.

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² ARCON, HIA Sections 8&9, June 2009.

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1.5.3. Base Information informing this Report

This report is based largely on background information contained in the 2009 HIA for Glen Dirk Farm, but with the addition of a visual impact assessment using photomontages in accordance with the requirements of HWC in its 20 January 2016 response to the NID application. Also taken into account is the heritage statement for the reservoir referred to in 1.5.2.

1.5.4. Visual Impact Assessment

A VIA by Earthworks Landscape Architects was conducted in 2008 as part of the environmental impact assessment process, of which the 2009 HIA formed a part. The findings of that report were that the placement of the proposed subdivisions including Portion 8, but excluding Portion 6, warranted a LOW significant rating, and therefore would have a low visual impact. Given that these findings, together with the findings of the HIA were duly endorsed by SAHRA and approved by DEADP, the suitability of Portion 8 as an acceptable site for future single residential development has not been revisited. The scope of the visual impact assessment in this study therefore focuses specifically on the impact of the proposed dwelling in terms of its overall massing, scale and roof configuration (see also Section 1.5.1) in relation to the rest of Glen Dirk and relevant adjoining areas.

1.5.5. Archaeological Potential

In the 2009 HIA report, two sites on Glen Dirk were identified as having archaeological potential, viz Portion 5 (the site of a building known to have existed by 1901) and Portion 8, containing the derelict concrete reservoir. This structure was considered to have industrial archaeological potential. The subsequent heritage statement for the reservoir prepared by myself as someone with particular experience in evaluating historic concrete structures³ is deemed to fulfil the industrial archaeological requirement for this site, particularly given that this structure is to be retained in place, albeit with alterations to its superstructure. Further archaeological investigations for Portion 8 are therefore not deemed necessary.

1.5.6. Input from Interested and Affected Parties

In consultation with HWC, the following interested/affected parties have been identified and approached for comment in the course of finalizing this HIA: the South African Heritage Resources Agency (SAHRA); the City of Cape Town (CoCT); the Cape Institute for Architecture (CIfA); The Simon van der Stel Foundation (SvdSF) and the Constantia Property Owners Association (CPOA). Approaching these bodies for comment is deemed to have met the minimum requirements agreed to with HWC for public consultation relating to this report. The SvdF has been invited to comment only because of its registration as an IAP during the previous HIA process.

2. Chronology of Kay Events to Date

In order to put this current HIA report into proper perspective, the following chronology provides an outline of the various statutory processes that have involved Portion 8 up to the present.

November 2006

ARCON is engaged by Jonathan Holtmann & Associates acting on behalf of the owners of Glen Dirk Estate (PTY) Ltd. to prepare a heritage impact assessment for proposed subdivisions and rezoning of portions of the periphery of Glen Dirk Farm. The report is required in terms of Section 38(8) of the National Heritage Resources Act (NHRA). Portion 8 is one of the sites earmarked for subdivision from Glen Dirk Farm.

³ The conservation of historic concrete structures was the subject of my Masters thesis in Conservation (built environment).

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June 2009

After an extensive public engagement process that includes input from HWC, CIFA, the CPOA, and the SvdSF, the HIA report is finalized and submitted to SAHRA as the relevant heritage resources authority in that instance. The report recommends that seven of the eight proposed subdivisions be approved subject to conditions. Portion 8 is one of these subdivisions recommended for approval.

17 June 2009

SAHRA endorses the HIA report and its recommendations. The HIA is thereafter submitted to DEADP as part of the over-arching EIA process.

29 September 2009

DEADP issues its Record of Decision supporting the proposed subdivisions after considering the HIA and input from the various interested and affected parties. It is interesting to note that although these parties, with the exception of SAHRA, expressed varying concerns with the proposed subdivisions; CIfA felt that it could support development on Portions 7 and, more notably, Portion 8 as these sites were regarded as 'trapped' and already compromised⁴. In contradiction, HWC expressed reservations regarding Portion 8 (together with portions 5 and 7) although it provided no explanation for this view⁵.

October 2009

DEADP's positive ROD is appealed by one of the adjacent landowners. The CoCT makes no decision on the appeal for 14 months.

1 April 2011

Glen Dirk Estates (PTY) Ltd withdraws the environmental application that is on appeal, as the conditions that originally triggered environmental authorization no longer apply in terms of new environmental regulations promulgated in August 2010. The applicant's intent is obviously to expedite the statutory process that has by then been in progress since June 2007.

It is then established that the amendment to the Guide Plan (Cape Metropolitan Structure Plan of 1988) has not been finalized. This is an application that needs to be made in terms of the Land Use Planning Ordinance (LUPO) with a decision that at this time can only be made by the Provincial Government Western Cape. This application comes before CoCT's East Economic Spatial Planning Committee (EESPCom) for a recommendation. The Committee recommends to the Minister to amend the Guide Plan to permit subdivisions on Portions 5, 7 & 8 only.

1 February 2012.

In response to the decision of the EESPComm, Olden and Associates Urban & Regional Planners representing Glen Dirk Estates (PTY) Ltd. Writes to the Provincial Minister's office (DEADP) urging for a fair hearing on the matter in order to present the facts of the subdivision application. Up to then, the EESPCom had refused the applicant a hearing.

23 July 2012

The Provincial Minister responds by endorsing the amendment of the Guide Plan to support all seven proposed subdivisions as recommended in the 2009 HIA. This includes Portion 8.

12 March 2014.

The CoCT approves the amendments to the Guide Plan to accommodate the subdivision application for the 7 subdivisions of Glen Dirk, including Portion 8.

Circa October 2014.

Glen Dirk Estates (PTY) Ltd is prevented from proceeding with the subdivision after it is learned that the CPOA has taken the CoCT's decision on judicial review. This matter is still pending.

⁴ Glen Dirk HIA, June 2009, p32.

⁵ It is significant that members of CIfA had visited Glen Dirk Farm during the public engagement process, whereas members of HWC had not.

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Late 2014

The family owning Glen Dirk Estate decides to construct a third dwelling on the farm for one of the daughters, choosing Portion 8 as the appropriate location because of its close proximity to another family member. As part of the feasibility study for the site, it is decided to re-cycle the old concrete reservoir to accommodate eco-friendly and environmentally sustainable support infrastructure for the house. These systems include a sunken herb garden, domestic solar power plant, rainwater storage and recycling infrastructure.

8 April 2015

An application for a permit to make the necessary alterations to the old concrete reservoir on Portion 8 is submitted to HWC. This permit is required as the reservoir is older than 60 years, and therefore subject to S.34 of the NHRA. This application includes a heritage statement on this structure, which is identified as having heritage significance.

3 July 2015

SAHRA expresses its intention to provisionally protect the Constantia-Tokai Historic Farmlands Cape Winelands Cultural Landscape as a National Heritage Site. Glen Dirk is one of the farms falling within the affected area.

2 August 2015

SAHRA's notice to provisionally protect the Constantia-Tokai Historic Farmlands lapses and no further announcements from this authority have been made up to the present. HWC accordingly remains the approving heritage authority for this HIA until such time as SAHRA decides to re-institute its intention to provide provisional protection to the affected area.

30 September 2015

A permit for the proposed work to the concrete reservoir is granted by HWC BELCom in terms of NHRA S.34. This decision is appealed by the CPOA.

18 December 2015

Because the site is not yet subdivided from Glen Dirk, a Notice of Intent to Develop (NID) application for the proposed dwelling is submitted to HWC. This application is required in terms of NHRA Section 38(1)(c)(i) given that the property (in its 'yet-to-be-subdivided' form) exceeds 5 000 sq m.

17 February 2016

HWC's Appeals Committee overturns the CPOA's appeal against the alterations to the reservoir and BELCom's decision to grant the permit to undertake this work is upheld.

2.1. Observation arising from this Chronology

Throughout the protracted interactions between interested and affected parties, CIfA and SAHRA have supported development on Portion 8. The only heritage authority not to support development on Portion 8 has been HWC for which it has never provided reasons⁶.

3. Relevant Statutory & Policy Context

This HIA is effectively an extension of the HIA of June 2009. That report included a detailed analysis of Glen Dirk Farm as a cultural landscape, and assessed the heritage impacts of the proposed subdivision of the farm as indicated in **Figure 02**. Consequently, this report is naturally informed by the studies and recommendations contained in that earlier HIA in meeting the requirements of NHRA S.38(3). Those

⁶ HWC not only failed to provide reasons for its negative position on Portions 5, 7 & 8, but also failed to send representatives to visit the site before expressing its opposition to the subdivision off of these portions. This is perplexing, particularly given that HWC's concerns relating to Portions 7 and 8 were in contradiction to the position taken by CIfA. Given that situation, it is disappointing that HWC did not see fit to at least visit the site before finalizing its position. HWC was, incidentally, the only heritage authority not to visit the site.

studies are therefore not repeated here, other than where specific references to that HIA are required. Similarly, only legislation, guidelines and policies that are relevant with regard to development on Portion 8 are discussed below.

3.1 The National Heritage Resources Act (NHRA) No 25 of 1999.

This report has been prepared in terms of NHRA Section 38(3) given that there is no over-arching EIA process as was the case with the previous HIA of 2009. Although SAHRA expressed its intention on 3 July 2015 to include Glen Dirk within a provisional protection area, the subsequent 30 day protection period in terms of NHRA S.29(5) was allowed to lapse. Consequently, HWC remains for now the relevant consenting authority for this application. SAHRA however remains a commenting authority in terms of an agreement between HWC and SAHRA.

On 8 April 2015, a NHRA S.34 (structures older than 60 years) application for a permit to allow alterations to the reservoir on Portion 8 was submitted to HWC. This was approved by HWC BELCom, whose decision was upheld on appeal. There are no other structures on the site older than 60 years.

Portion 8 is not considered archaeologically sensitive in terms of NHRA S.35. This was established in the course of the earlier HIA process. The industrial archaeological merits of the site have been further addressed in a heritage statement of the concrete reservoir included as part of the S.34 permit application of 8 April 2015.

3.2. The National Environmental Management Act (NEMA)

The proposed subdivision of Glen Dirk was the subject of an EIA Basic Assessment Report by Ninham Shand dated July 2006. This report concluded that none of the proposed subdivisions would have negative environmental impacts on Glen Dirk. This is due to the proposed subdivisions being located away from its sensitive central riverine corridor along the central topographical axis of the farm. Furthermore, it was determined that the land earmarked for subdivision has little value from a botanical perspective.

In August 2010, new regulations were introduced for NEMA in terms of which the proposed subdivisions no longer triggered this act. The proposed development on Portion 8 is therefore not subject to the requirements of NEMA.

3.3. The Municipal Zoning Scheme Regulations

Portion 8 still forms part of Glen Dirk Farm (Erf 10737), and therefore like the rest of the farm, is zoned for Agricultural Use. The land rights conferred by this zoning include a second dwelling as a primary use, and up to 5 additional dwelling units as a consent use. The present dwellings on the farm are the manor house and domestic staff quarters (**Figure 03**). Domestic staff quarters are not classified as a second dwelling if they are less than 50 sq m in area. However, since the domestic staff house in this instance exceeds 50sq m, the proposed new house on Portion 8 requires Council's Consent. This house also requires a departure from the 30m street and common boundary setback lines in terms of its current agricultural zoning.

3.4. The Constantia/Tokai Growth Management & Development Plan: 1992

This document is not an approved structure plan, but is still used as a basis for assessing new development in the area. The subdivision application for Glen Dirk was evaluated in terms of this document in the HIA of 2009. It is therefore addressed in this report only inasfar as it has bearing on the current proposals for Portion 8.

The following objectives, policies and actions identified in this management plan are considered relevant:

6.1.2 Regarding the control of residential developments:

- Section 11.2.1 "The study expresses the intention that residential development be firmly controlled with regard to its location, type, amount and intensity. It states that as a general principle, future residential development should be accommodated through selective sub-division with existing residential areas, where appropriate".
- Section 13.1.2: Housing objectives and principles (Areas of particular relevance are italicised for purposes of this study). These principles are numbered as appearing on the table entitled 'Housing Principles' on p108 of the study):
 - 1 As property sizes change, so the conditions that relate to the public edge of the property and the building(s) on the property should change.
 - 2 Boundary materials on the larger properties should be transparent and/or unobtrusive. On the public fronts, the public environment should extend into the privately owned space. Along the boundary, only the entrance points should be accentuated. As properties become smaller, privacy becomes a factor and boundary materials could become less transparent and harden, from vegetation against wire fences to hedge, timber, painted brick and plastered surfaces. Preference should be given to the more natural materials. Materials such as pre-cast concrete units, with or without exposed aggregates, ornamentation and face brick should be discouraged.
 - 3 Boundary materials on larger properties should as far as possible be natural (hedges, timber fences etc). In all cases the transparent and/or unobtrusive material used on the public edges of the larger properties should return for at least 10-15m along side boundaries from their intersection with the public boundary. As properties get smaller, so boundary materials can become less transparent.
 - 4 Building lines on street and public frontages should increase as properties become larger. On the larger plots, buildings should be concentrated as far away from the public frontage as possible. As the properties become smaller so the building line can reduce to the existing minimum standard. Where on an existing public edge (where) an established 'built' edge exists, any new development should respect the edge and conform to it.
 - 5 The larger the plot, the further the building should be placed from the edge of the property. As plots become smaller, flexibility in terms of placement of buildings decreases and the existing minimum standards should remain in force.
 - 6 Coverage: N/A
 - 7 Maximum building height: 2,5 storeys.
 - 8 Form and Layout: Generally pavilion type buildings, surrounded by open space. Encourage sympathetic roof profiles. In the case of smaller plots, encourage the shaping of courtyards and courts through building layout for privacy, outdoor spaces and views.
 - 9 Encourage lush landscaping. In the case of smaller plot sizes, encourage screen planting and framing of views. Preference should be given to porous surfaces and materials for hard and paved areas.
- Section 13.1.3: "Council will give favourable consideration to those development proposals which contain and give special attention to qualities where the elements, pattern and arrangement of layouts reflect a Cape theme in the form of appropriately scaled axis, vistas, foci, shared access werfs, linear and clustered tree planting and buildings, roof silhouettes, courtyards, materials and textures".
- 6.1.6 Regarding the conservation of historic buildings and their settings
 - i. *Section 12.1.2*: The objective is identified to protect and conserve the historic buildings and complexes, together with all other site-making features.

4. Site Description: Portion 8

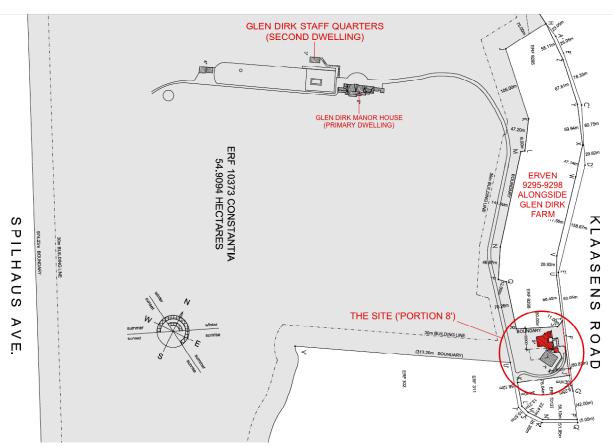


FIGURE 03: The site, i.e. Portion 8' (circled in red) in relation to a wider portion of the farm between Klaassens Road and Spilhaus Avenue (shaded in grey). Portion 8 is 'boxed in' between adjacent erven 9298 to the north, and 10127 to the south. Also indicated are the manor house (primary dwelling) and the staff quarters (considered a second dwelling as its footprint exceeds 50sq m). Refer also to Figure 09 showing an enlargement of the site.



FIGURE 04: View looking over the site towards the southwest with its fine mountain backdrops. Klaassens Road is directly behind the viewer. The reservoir is off this image to the left, with a roof sunk level with the ground at this point. (Image: Rod Gurzynski, 5 Feb 2015).

Portion 8 is located on the eastern edge of Glen Dirk alongside Klaassens Road (**Figure 03**) with which it shares a boundary. It is 'boxed in' by developed single residential erven to the north and south, and located alongside Klaassens Road. The site falls gently from the northeast to the southwest with a 1:5 to 1:6 gradient (**Figures 04 & 05**). Apart from the vaulted concrete reservoir that has been cut into the slope (**Figures 06 & 07**), the property is occupied by three particularly large flowering gums, a few oaks, chestnuts, various protea bushes various invasive alien trees and alien grasses. The site enjoys good views over the valley towards Hohenhort over the Constantia Valley with the distant Constantiaberg and Silvermine mountains beyond.



FIGURE 05: View uphill from the Glen Dirk farm gate i.e. in the opposite direction to Figure 04, looking towards the site. The tree stumps in the foreground are the remains of red river gums felled for water conservation purposes. The house on the extreme left is on adjacent erf 9298 belonging to a family member of the farm owner. One of the tall gums along Klaassens Road is visible left of centre, while the palm tree between this gum and the adjacent house is the same as on the extreme right in Figure 04. The ground cover is comprised largely of alien grass interspersed with protea bushes. (Image: Rod Gurzynski, 5 Feb 2016).



FIGURE 06: View on the downhill side looking towards the reservoir cut into the slope of the site. The door is a later incision to make the structure useable for storage purposes. The site for the house is uphill and to the left off this image (Image: ARCON, 12 December 2015).

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FIGURE 07: View on the uphill side looking over the vaulted roof of the concrete reservoir. This structure is almost entirely surrounded by greenery. This viewpoint coincides approximately with the southern side of the proposed house. (Image: ARCON, 12 December 2015).



FIGURE 08: View looking towards the Klaassens Road boundary of the site. The concrete reservoir is behind the mound (yellow arrow) barely visible through the trees on the road edge. The approximate site of the proposed dwelling is indicated with the red arrow. (Image: Rod Gurzynski, 5 February 2015).

The site can be described as a 'lost corner' of the farm. The concrete reservoir has been used for general storage from time to time, while the site has been used as a place for dumping cut branches taken from other Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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parts of the estate. It falls within an area of the farm identified as 'disturbed' in the EIA basic assessment report (2006).

The Klaassens Road side of the property is obscured from the road by a green edge consisting of trees and saplings (**Figure 08**) with the reservoir screened by an embankmant.

5. Heritage Significance of Portion 8

The site (Portion 8) forms part of an estate of great scenic and historic significance, being a key remnant of a signature early spatial and historic land use system within Constantia/Alphen. This estate is strongly characterized by its early surviving agricultural landscape, at the centre of which is a homestead of high architectural significance designed by Sir Herbert Baker. This homestead and its setting are regarded as a rare surviving cultural landscape typology of that period, and worthy of inclusion as part of an extended (Cape Winelands) landscape of national importance. This is elaborated on in detail in Section 8 of the 2009 HIA. With regard to Portion 8 itself however, the following is concluded:

5.1. Aesthetic Significance.

Portion 8, is tucked away in one corner of the estate (**Figure 03**) where it enjoys a low visual profile in relation to the rest of the farm. This is one of the key reasons why its development was supported in the 2009 HIA and endorsed by both CIfA and SAHRA. The site does, however, contain a number of landmark exotic trees along the Klaassens Road boundary that help to provide a strong green backdrop to the eastern edge of the site. Apart from this, it has low value in contributing to the scenic quality of the remainder of the Glen Dirk estate.

5.2. Historical Significance.

Although Portion 8 forms part of a larger property that is of considerable historical significance, the site itself has no particular historical significance other than referred to in 5.3.

5.3. Technological Significance

The site does contain a structure now graded by HWC as grade IIIB⁷ and therefore deemed worthy of inclusion in HWC's heritage register. This structure is of historic technological significance related to the early use of Portland cement concrete in South Africa. There are no other structures on the site.

5.4. Scientific (Botanical) Significance

The site has no botanical significance. The area in which it is located has been identified as disturbed in the 2006 EIA, and is largely populated by invasive alien species. There are, however, a number of non-invasive exotic trees (oaks, chestnuts and gums) that are considered to be significant in terms of contributing to the importance of the broader Glen Dirk cultural landscape.

5.5. Archaeological Significance

The area occupied by Portion 8 is not deemed to have pre-colonial or historical archaeological sensitivity. Portion 8 was, however, flagged in the 2009 HIA as a site of industrial archaeological potential with regard to the old concrete reservoir. A heritage statement on this structure was accordingly prepared by myself in 2015 and this structure subsequently adopted as grade IIIB by HWC (refer 5.3).

6. Heritage Indicators for Development on Portion 8

⁷ In accordance with HWC's Guideline for Grading (2012) read in conjunction with Section 7 of the NHRA. This grading was adopted by HWC BELCOM on 30 September 2015 in accordance with a recommendation by myself in the NHRA S.34 application to undertake alterations to this structure.

Heritage indicators for the development of Portion 8 are informed by:

- the heritage statement in Section 5;
- relevant Objectives, Policies and Actions contained in the Constantia/Tokai Growth Management Plan (1992) as set out in 3.4;
- the subdivision informants as spatialized in Diagram 5 of the 2009 HIA; and
- HWC's terms of reference in response to the NID application of 18 December 2015, viz:
 - a) Visual impacts of the proposed development; and
 - b) Impacts to the built environment including a detailed site development plan.

Based on the above, the following indicators are regarded as appropriate for development on Portion 8. Where relevant, clauses from the Constantia/Tokai Growth Management Plan from which a particular informant is derived, are quoted in brackets.

6.1. The Overall Character of the Site

- a. Rural Qualities: Every effort should also be made to perpetuate and enhance the rural qualities of the site by retaining its signature trees, and using tree planting to frame and border the proposed new dwelling on the site. (Section 12.7).
- b. *Cape Theme*: The development proposals should pay special attention to reflecting a Cape theme in the form of appropriately scaled axes, vistas, foci, shared access werfs, linear and clustered tree planting, buildings, roof silhouettes, courtyards, materials and textures. (Section 13.1.3).

6.2. Historic Structures & Features

a. The Concrete Reservoir: Every effort should be made to retain, conserve and if possible recycle this redundant structure for an alternative new use. Other site-making features on the property including its signature trees, but excluding invasive alien species, should be retained wherever possible. (Section 12.1.2).

6.3. New Residential Development.

- a. Objectives & Principles: New residential development on the site should address the following (Section 13.1.2):
 - General nature of boundary materials: Boundary materials should be transparent and/or unobtrusive. On the public fronts, the public environment should extend, or appear to extend into the privately owned space. Along the boundary, only the entrance points should be accentuated. Preference should be given to the use of more natural materials. Materials such as pre-cast concrete units, with or without exposed aggregates, ornamentation and face brick would be discouraged. Razor wire is to be avoided at all costs, and electric fences visible from beyond the boundary of any new subdivision should be avoided.
 - ii Choice & application of boundary materials: Boundary materials should, as far as possible, be natural (hedges, timber fences etc). In all cases the transparent and/or unobtrusive material used on the public edges of the larger properties should return for at least 10-15m along side boundaries from their intersection with the public boundary.
 - iii Location of new buildings: Buildings should be concentrated as far away from the public frontage as possible. Where on an existing public edge (where) an established 'built' edge exists, any new development should respect the edge and conform to it.
 - iv Building Height. Maximum building height should not exceed 2 storeys or as more specifically

determined with particular attention to slope 'worst case scenarios'.

- vii Overall building form: Pavilion type buildings would be encouraged with sympathetic roof profiles. Appropriate planting should surround such buildings, the purpose being to merge as discretely as possible with the surrounding landscape.
- viii *General nature of landscaping:* Lush landscaping in keeping with the landscape character of the property, will be encouraged. Preference should be given to porous surfaces and materials for hard and paved areas.

6.4. Landscape Design

- a. *Construction on slopes exceeding 1:4*: Apart from in special cases, no proposed subdivisions should be located on slopes exceeding 1:4 in accordance with the Western Cape Provincial Guideline for the Management of Development on Mountains, Hills and Ridges in the Western Cape.
- b. General planting & buffer zones: Building setbacks of minimum 12m should be allowed along common boundaries of new subdivisions, with the overriding understanding that new buildings are to be placed as centrally on each new subdivision as possible. These setbacks should act as buffer zones, which are to retain all existing trees and, where possible, further consolidated with other tree and shrub species typical of the Constantia Valley. Such species would include pines and oaks.
- c. Lighting and services: All external lighting facing the parent property, including all agricultural areas, should be limited to low level (max 0.9m high) illuminated bollards and fittings attached to buildings, rather than free-standing poles, which should be avoided. All external light fittings are to cast light indirectly and exposed light sources should be strongly discouraged. All services including electricity and telephone lines should be concealed below ground, both within and beyond the site boundaries. The location of all electronic transmission/reception devices including TV and wireless internet antennae, satellite dishes etc must similarly be located so as to be unobtrusive with minimal impact on roof silhouettes. Similar care must be exercised with regard to solar panels, wind generators and any other forms of technology that have potential to create negative visual impacts on the environment.
- d. *General security issues:* Wherever possible, unobtrusive PIR beams and building-mounted closed circuit infra-red TV surveillance would be preferred to free-standing security walls, fences, gates and booms, particularly on common boundaries with the parent property.
- e. *Signage* including street numbers and illuminated or backlit objects (including walls of buildings), apart from normal domestic lighting and light fittings, should be avoided.

6.5. Integrated Landscape Plan

An integrated landscape plan is to be considered a crucial component of the new development. It should be drawn up as an integral part of the architectural proposals incorporating the reservoir into the development. This plan should include the following:

- i Proposed positions and extents of building footprints;
- ii Details and positions of planting patterns including accurate positions of trees;
- Nature and designs of walls (including typical sections through retaining walls showing mitigation of visual impacts, fences and other possible physical barriers where/if applicable;
- iv Design and finishes of road surfaces and pathways; and
- v Indications of changes to the existing levels including locations of any cut and fill patterns and building platforms.

6.6. Architectural Design

a. The architecture of the development should express an appropriate, pragmatic response to the local rural context in terms of overall massing, domestic scale and roofscape configuration. This would Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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include preference for gable-ended plain unadorned symmetrical double pitch roofs of approximately 30-35° with truss spans preferably not exceeding 7m and mono-pitch lean-to's including verandas.

- b. Architectural design should address the following:
 - i Architectural expression: Producing integrated landscaping and architecture that merges with (as opposed to commanding) its setting, i.e. deriving expression from conservation-minded and resource-efficient responses to local microclimate, topography and physical context, instead of being simplistic stylistic borrowings from elsewhere.
 - Orientation relative to predominant slopes: Arranging buildings with eaves lines running parallel with, rather than at right angles to the natural contours; and avoiding, or minimizing, the use of gable ends facing down predominant slopes;
 - vi Use of verandas and lean-to's: Incorporating verandas or lean-to structures, particularly on the downhill side of a subdivision, so as to act as scaling elements.
 - vii *Cuts into the hillside:* Avoiding deep cuts into the hillside where possible, and where unavoidable, ensuring that these cuts are mitigated with screen planting and carefully constructed stepped embankments merging with the surrounding natural landforms;
 - viii Wall finishes: Using simple external wall and floor surfaces deriving their adornment from the natural and honest use of materials including local stone, simple plaster trim, all in light tones reflecting the surrounding topography and vegetation. Face brick is to be avoided at all costs. Large glass expanses could be used on the understanding that they would be in the shadow line of a canopy overhang of at least 2,5m, and that the building as a whole would be screened with buffer planting as in paragraph 6.4b (General planting & buffer zones).

7. Design Performance Priorities for Development on Portion 8

The following key priorities are identified as important performance benchmarks for establishing appropriate development, with particular emphasis on visual impact, and should be read in conjunction with the design indicators in the preceding **Section 6**.

7.1. General Priorities

- **Priority 1**: Achieving development that, in the first instance, reflects a positive and sensitive response to the local landscape with particular reference to distinctive topographical features (e.g. ridge lines, tree belts and architectural focal points), slope gradient, slope orientation, and biophysical resources including exotic plants and trees traditionally associated with the area, and signature spatial relationships. The underlying purpose is to ensure that the parts of the new building facing the parent property have as low a visual profile as possible.
- **Priority 2:** Achieving development that reflects a uniformity of scale and pattern that will not intrude beyond mature tree canopy lines in the Medium to Long Term, nor is at odds with the natural contours of the property.
- **Priority 3:** Achieving a composite development skyline that does not detract from surrounding natural features, with particular attention to the orientation of eaves lines and gable ends, the strategic use of hipped or other scaled-down roof ends, and determining appropriate maximum roof heights.
- **Priority 4**: Ensuring that new development patterns are contextually appropriate within the receiving rural environment, particularly with regard to extent, density, grouping, massing, scale and overall envelope characteristics.

Priority 5: Introducing new development (including planting) that strengthens and consolidates existing natural edges.

Priority 6: Ensuring new development has an architectural language deriving expression from appropriate, conservation-minded and resource-efficient responses to local microclimate, topography and physical context.

8. The Proposed Development on Portion 8.

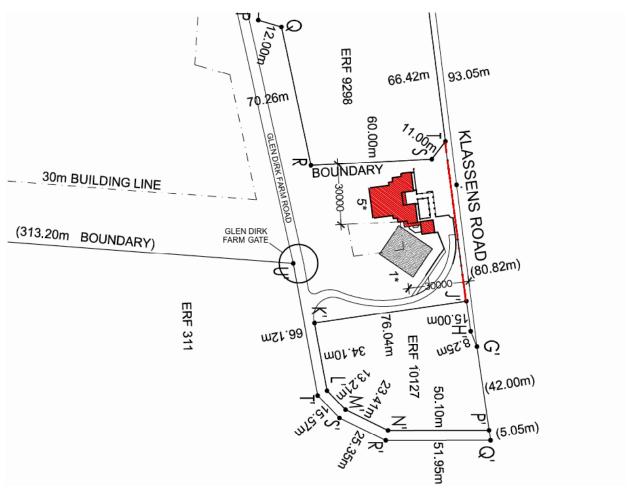


FIGURE 09: Site location with development footprint of the proposed house with adjacent reservoir (in grey) below. This diagram is an enlargement of Figure 03. (Diagram: Rod Gurzynski Architects).

8.1. The Proposals (Refer Architect's Motivation: Annexure A)

The proposals are for a single storey dwelling with low environmental impact and a high degree of self-sufficiency with regard to water, waste, electricity and food production. The scheme is intended to be a model of contemporary conservation practice and eco-sensitivity.

8.1.1. Documentation

This assessment report refers to the following documentation, copies of which are attached to this report:

Rod Gurzynski, Architect:

Erf Plan

Dwg No 65.00 Rev C

Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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Site + Roof Plan

House Plan

House Elevations

House Sections

Dwg No 65.02 Rev H

Dwg No 65.03 Rev H

Dwg No 65.04 Rev F

Base Levels and Heights

Dwg No 65.04.2

Dwg No 65.05 Rev E

Site Development Plan

including landscape plan Unnumbered Dated 18 February 2016

Artgun

3D Photomontages

VP01 from the Glen Dirk farm gate looking towards the site.

VP01 Rev 1 from the Glen Dirk farm gate looking towards the site with additional trees.

VP02 long distance view from the gate at the southern entrance to the estate off Leith Road.

VP03 long distance view from the centre of the lower vineyard.

VP04 Rev 2 looking down from Cannery Row towards the site on Klaassens Road



FIGURE 10: The site location for the proposed house with adjacent reservoir below. North is approximately to the top of this image (Google Earth, December 2015).

8.1.2. The Proposed Dwelling

The massing of the dwelling is conceived by the architect as a series of interconnecting sheds (**Figure 11**) in order to break down the massing of the structure. The largest of these sheds will be 14m long with a width of 7m. It will also have the highest roof at 6m from base level to roof apex. This is 2m below the maximum 8m height permitted for a second or third dwelling in terms of the site's agricultural zoning. Low, flat roof slabs over utility spaces with 2,5m ceiling heights link the various shed roofs.

To accommodate the 1:5 to 1:6 gradient of the site, the house has a cut and fill section in relation to the existing ground level (**Figure 12** and **Dwg 65.04**) with the floor of the house more dug in than exposed. This Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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translates to the structure being 1,5m below grade at its highest point of the site, and 1m above grade at its lowest point. This means that on average, the floor level of the house will be below grade. This is intentional, in order to reduce visual impacts while reducing traffic noise from Klaassens Road. The noise is to be further buffered by raised planters and screen planting.

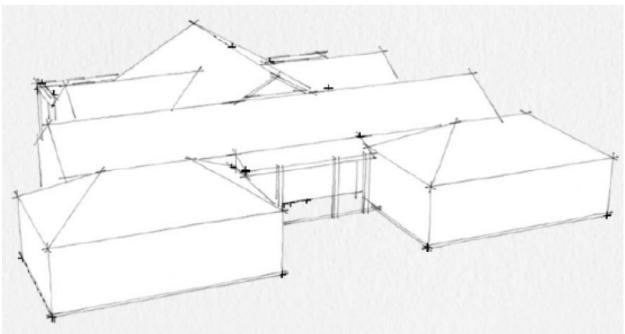


FIGURE 11: Architects' concept of interconnecting sheds to break up the massing of the building. This view is from the Klaassens Road side. (Rod Gurzynski Architects, 18 February 2016).



FIGURE 12: Architects' model of the site from the west (Glen Dirk Estate side) showing the proposed house and adjacent reservoir partly converted to accommodate a sunken kitchen garden. (Rod Gurzynski Architects, 18 February 2016).

The roofs of the sheds are to be grey-black slated, pitched at 30 degrees and without gable pediments. The main roof will be the only one with a gable end facing towards the view side, i.e. to the southwest. The smaller roofs will present eaves only. The two sheds flanking the entry courtyard are hipped in order to reduce the scale of the building at the entry point (**Figure 11**). A low flat-slab porch with pillars will extend beyond the main gable towards the view side. This will further reduce the apparent height of the building from the estate side (**Figure 13**).

Walls are to be plastered and painted white or off-white, and the timber doors, windows and shutters painted white. These colours will match the existing houses on either side of Portion 8, as well as the walls of

the Glen Dirk manor house. There is, however, no visual connection between the site and the manor house. Patios with timber pergolas for shade vines are to be attached to the main living areas. The vines are intended to further soften the profile of the building. There will be no walls separating the house from the rest of the estate in order to promote spatial continuity.

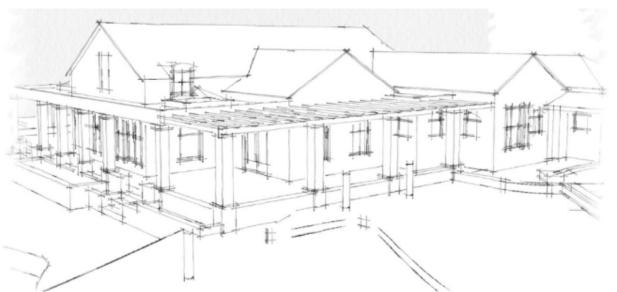


FIGURE 13: Architects' 3D sketch illustrating the use of pergolas as scaling elements to the building. This view is from the southwest (Glen Dirk farm road) side of the building. (Rod Gurzynski Architects, 18 February 2016).

8.1.3. The Concrete Reservoir

The proposed alterations to the concrete reservoir do not form part of this assessment. Those alterations have already been approved by HWC in terms of an earlier S.34 application. The proposed work will include the removal of part of the reservoir roof closest to the house for use as a sunken kitchen garden accessed by a ramp descending 1m to the sunken level. Bricks recycled from the demolished portion of the vaulted roof are to be used to close in the open side of the structure exposed by the partial removal of the roof. The remainder of the fabric will be repaired and left as is to provide accommodation for rainwater tanks and solar panels (refer to the S.34 motivation and heritage statement for the reservoir: **Annexure B**).

8.1.4. Landscaping & Trees

Apart from a number of thirsty red river gums removed from the site in 2015, no other trees have, or will be cut down to make way for the dwelling, or other works on the site. The remaining trees, including a number of tall flowering gums and oaks, are to be retained and supplemented by a range of indigenous trees. **Figure 14** shows the proposed site development and landscape plan, including trees to be retained and new trees to be planted. A larger copy of this drawing is attached to this report with the architect's other drawings.

Access to the property will not be off Klaassens Road but via an access driveway from the panhandle road leading to the Glen Dirk farm gates. This gravel driveway will are around the reservoir to reach the new house on its eastern (Klaassens Road) side. Trees will be planted along this driveway, forming a visual buffer to the neighbouring property.

Reed-bed ponds will be established for purifying and recycling grey water from the house. The water will be used for irrigation purposes. A fruit orchard could, if necessary, be established along the Glen Dirk farm road on the downside of the reed bed ponds. The ponds themselves are intended to attract bird and aquatic life.

The boundary along Klaassens road will be enclosed with a metal rod palisade fence painted green for the first 35m and then a solid masonry wall 1.8m high with piers painted white for the next 30m. This is to Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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provide a visual and traffic noise barrier. The last 15m will revert to a palisade. The Klaassens road edge of the site is already heavily planted with existing trees and saplings.



FIGURE 14: Architects' site and landscape plan of the proposed development. The trees in blue-green are existing. The trees in grass green are proposed new plantings. A larger copy of this drawing is attached to this report with the architect's other drawings. (Rod Gurzynski Architects, 18 February 2016).

9. Assessment of Impacts from Development on Portion 8.

To re-iterate HWC's requirements for this HIA in terms of HWC's response of 20 January 2016 to the NID application:

This report must satisfy the requirements of NHRA S.38(3) with the added stipulation that it make specific reference to the following:

- -Visual impacts of the proposed development; and
- -Impacts to the built environment including a detailed site development plan.

HWC further required that the HIA have an integrated set of recommendations and that the comments of relevant registered conservation bodies and the relevant municipality (the City of Cape Town in this instance) must be requested and included in the HIA, where provided, with proof of the requests supplied.

- 9.1. Satisfying the requirements of NHRA S.38(3)
- a) The identification and mapping all the heritage resources in the area affected.

Response: This has been comprehensively undertaken as part of the HIA of 2009. A copy of Diagram 05 from that study is attached to this report.

b) An assessment of the significance of such resources in terms of the heritage criteria set out in Section 6.2 or prescribed under Section.7.

Response: This has been comprehensively undertaken as part of the HIA of 2009 for the site as a whole. Significance with regard to Portion 8 in particular, is addressed in Section 5 of this report.

- c) An assessment of the impact of the development on such resources.
- Response: This requirement is addressed in Section 8 (this section) of this report using the heritage indicators and design performance priorities in Sections 6 and 7as yardsticks.
- d) An evaluation of the impact of the development on heritage resources relative to the sustainable social and economic benefits to be derived from the development.

Response: This is an application for the construction of a simple domestic dwelling, and therefore such benefits do not apply in this instance.

e) The results of consultation with communities affected by the communities affected by the proposed development and other interested parties regarding the impact of the development on heritage resources.

Response: This document is being circulated in draft form for comment to CIfA, SAHRA, the CoCT, the CPOA and the SvdSF before finalization and submission to HWC as relevant heritage resources authority.

- f) If heritage resources will be adversely affected by the proposed development, the consideration of alternatives. Response: The identification of Portion 8 for development is the result of a thorough HIA conducted in 2009. Portion 8 was one of the portions identified for future development in that study, precisely because it minimized impacts on heritage resources. Alternatives, other than those contemplated in the design development of the proposed house, have therefore not been considered.
- g) Plans for mitigation of any adverse effects during and after completion of the proposed development. Response: The architect has considered mitigation of potential adverse effects during the design development of the proposals, and the proposals iteratively adjusted accordingly.
 - 9.2. Visual Impacts of the Proposed Development

Visual impacts are addressed in Section 8.4 of this report

9.3. Impacts on the Built Environment including a detailed Site Development Plan

The proposals will not involve impacts on the built environment, other than indirectly with regard to the proposed alterations to the concrete reservoir, which is to be recycled for use as a sunken kitchen garden, natural energy and water recycling plant. Proposals for this work have been approved by HWC.

9.4. Assessment of Visual Impacts

This assessment simply measures the performance of the development proposals against the design indicators as set out in Section 6 of this report, and the design performance priorities set out in Section 7 of this document. An assessment is provided against each one of these criteria.

9.4.1. The Overall Character of the Site

a. **Rural Qualities**: Every effort should also be made to perpetuate and enhance the rural qualities of the site by retaining its signature trees, and using tree planting to frame and border the proposed new dwelling on the site.

Assessment: The architect's site development plan (incorporating a landscape plan) indicates that no trees will be lost in the course of constructing the new house. Provision is also made for fairly extensive Draft HIA Report: Proposed new residence adjacent to Klaassens Drive, Glen Dirk Farm, Erf 10373 Constantia.

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planting of new trees. Photomontages of the proposed house from Glen Dirk Estate (VP's 02 & 03 on Diagram 03) also clearly indicate that the house will be totally obscured from most of the Glen Dirk estate.

Significance of Impact⁸ on Rural Qualities: POSITIVE-LOW negative.

b. *Cape Theme:* The development proposals should pay special attention to reflecting a Cape theme in the form of appropriately scaled axes, vistas, foci, shared access werfs, linear and clustered tree planting, buildings, roof silhouettes, courtyards, materials and textures. (Section 13.1.3).

Assessment: The design of the house involves the adoption of domestically scaled massing involving simple double pitch roofs, lean-to's, colonnaded verandas and a courtyard spaces (Figure 11). Materials and textures are simple with little adornment.

Significance of Impact responding to Cape Theme: LOW-MED positive

9.4.2. Historic Structures & Features

a. The Concrete Reservoir: Every effort should be made to retain, conserve and if possible recycle this redundant structure for an alternative new use. Other site-making features on the property including its signature trees, but excluding invasive alien species, should be retained wherever possible.

Assessment: The development of the site involves the re-cycling of the reservoir building. These proposals have been approved by HWC.

Significance of Impact on the reservoir as historic structure: LOW-MED negative

9.4.3. New Residential Development.

- a. Objectives & Principles: New residential development on the site should address the following:
 - i *General nature of boundary materials*: Boundary materials should be transparent and/or unobtrusive. On the public fronts, the public environment should extend, or appear to extend into the privately owned space. Along the boundary, only the entrance points should be accentuated. Preference should be given to the use of more natural materials. Materials such as precast concrete units, with or without exposed aggregates; ornamentation and face brick would be discouraged. Razor wire is to be avoided at all costs, and electric fences visible from beyond the boundary of any new subdivision should be avoided.

Assessment: There will be no boundary wall or fence separating the development from the rest of the Glen Dirk estate. The boundary wall along Klaassens Road will incorporate stretches of palisade fencing. (Dwg 65.05 read in conjunction with montage VP04 on Diagram 04). Where solid walls are required to reduce traffic noise, this will be simple plastered brickwork with capped pillars in accordance with other boundary walls on Klaassens Road. There will be no razor wire and electric fencing, if used, will not be visible from the road.

Significance of Impact on boundary edges: NONE-LOW negative

ii Choice & application of boundary materials: Boundary materials should, as far as possible, be natural (hedges, timber fences etc). In all cases the transparent and/or unobtrusive material used on the public edges of the larger properties should return for at least 10-15m along side boundaries from their intersection with the public boundary.

Assessment: As for ai. There will be no walls along the other boundaries. Significance of Impact on boundary edges: NONE-LOW negative

iii Location of new buildings: Buildings should be concentrated as far away from the public frontage as possible. Where on an existing public edge, (where) an established 'built' edge exists;

^{8 &#}x27;Significance of Impact' refers to the impact of an intervention measured against the significance of the affected heritage resource.

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any new development should respect the edge and conform to it.

Assessment: A built edge already exists along Klaassens Road. The new house will be set back over 20m from Klaassens Road with the garage set back less, i.e. 13,7m. There will be trees and shrubs in between. This side of the house will be sunk 1m into the slope thereby lowering its visual profile from Klaassens Road (refer Dwg 65.04 read with montage VP04 on Diagram 04).

Significance of Impact re location of the building: NONE-LOW negative

iv *Building Height*: Maximum building height should not exceed 2 storeys or as more specifically determined with particular attention to slope 'worst case scenarios'.

Assessment: The house will be single storey with a maximum roof height from mean internal floor level of 6m, i.e. 8m below the maximum height requirement for second and third dwellings within an agricultural zoning (refer Dwg's 65.03 & 65.04).

Significance of Impact re building height: NONE-LOW negative

vii *Overall building form:* Pavilion type buildings would be encouraged with sympathetic roof profiles. Appropriate planting should surround such buildings, the purpose being to merge as discretely as possible with the surrounding landscape.

Assessment: The proposed house is a pavilion building with simple pitch and lean-to roof profiles. The house will be surrounded by trees (refer site development/landscape plan: Figure 14).

Significance of Impact re house design: MED positive

viii *General nature of landscaping:* Lush landscaping in keeping with the landscape character of the property, will be encouraged. Preference should be given to porous surfaces and materials for hard and paved areas.

Assessment: Landscaping will be lush with the extensive planting of new trees. Surfaces will be gravel and reinforced grass (refer to the site development/landscape plan).

Significance of Impact regeneral nature of landscaping: HIGH positive

9.4.4. Landscape Design

a. Construction on slopes exceeding 1:4: Apart from in special cases, no proposed subdivisions should be located on slopes exceeding 1:4 in accordance with the Western Cape Provincial Guideline for the Management of Development on Mountains, Hills and Ridges in the Western Cape.

Assessment: The site has a slope of between 1:5 and 1:6. Significance of Impact re slopes exceeding 1:4: NONE

b. General planting & buffer zones: Building setbacks of minimum 12m should be allowed along common boundaries of new subdivisions, with the overriding understanding that new buildings are to be placed as centrally on each new subdivision as possible. These setbacks should act as buffer zones, which are to retain all existing trees and, where possible, further consolidated with other tree and shrub species typical of the Constantia Valley. Such species would include pines and oaks.

Assessment: The setback along the common boundary with erf 9298 is less than 12m as a result of not being able to place the house in the centre of the site. This is due to the location of the reservoir, which is being retained. Setbacks from all other boundaries exceed 12m by a considerable margin. The house on erf 9298 belongs to a family member of the owner and is set back considerably more than 12m on that side of the boundary. Existing boundary planting comprising mature oaks, gums and chestnuts will be strengthened by additional tree planting. The net result is a reduced setback that will not impact significantly on the area.

Significance of Impact re general planting and buffer zones: NONE-LOW negative

c. Lighting and services: All external lighting facing the parent property, including all agricultural areas, should be limited to low level (max 0.9m high) illuminated bollards and fittings attached to buildings, rather than free-standing poles, which should be avoided. All external light fittings are to cast light indirectly and exposed light sources should be strongly discouraged. All services including electricity and telephone lines should be concealed below ground, both within and beyond the site boundaries. The location of all electronic transmission/reception devices including TV and wireless internet antennae, satellite dishes etc must similarly be located so as to be unobtrusive with minimal impact on roof silhouettes. Similar care must be exercised with regard to solar panels, wind generators and any other forms of technology that have potential to create negative visual impacts on the environment.

Assessment: The nature of proposed external lighting is unknown. However, given that this development is intended to be a model for employing natural energy and water recycling solutions, light spillage towards the parent property is not expected to be high given that the house is largely obscured from most of Glen Dirk estate (refer VP's 02 & 03 on Diagram 03). There will be no overhead lines given that the site will be generating most of its own power. Solar panels will be mounted on the roof of the reservoir where they will be largely obscured by existing planting (refer Figure 07).

Significance of Impact re lighting and services: NOT FULLY KNOWN

d. *General security issues:* Wherever possible, unobtrusive PIR beams and building-mounted closed circuit infra-red TV surveillance would be preferred to free-standing security walls, fences, gates and booms, particularly on common boundaries with the parent property.

Assessment: Security measures for the property have yet to be established. Significance of Impact re general security issues: UNKNOWN

e. *Signage* including street numbers and illuminated or backlit objects (including walls of buildings), apart from normal domestic lighting and light fittings, should be avoided.

Assessment: There will be no driveway facing onto Klaassens Road and, therefore no illuminated street numbers or other signage.

Significance of Impact re signage: NONE

9.4.5. Architectural Design

a. The architecture of the development should express an appropriate, pragmatic response to the local rural context in terms of overall massing, domestic scale and roofscape configuration. This would include preference for gable-ended plain unadorned symmetrical double pitch roofs of approximately 30-35° with truss spans preferably not exceeding 7m and mono-pitch lean-to's including verandas.

Assessment: The simple roof shapes, lean-to's, unadorned 30° double pitch roofs and 7m truss spans of the proposed house are in accordance with this guideline, i.e. in sympathy with the traditional Cape Theme of the region (refer Dwg no 65.03).

Significance of Impact re architectural expression: HIGH positive

- b. Architectural design should address the following:
 - Architectural expression: Producing integrated landscaping and architecture that merges with (as opposed to commanding) its setting, i.e. deriving expression from conservation-minded and resource-efficient responses to local microclimate, topography and physical context, instead of being simplistic stylistic borrowings from elsewhere.

Assessment: The house has been designed to be a model of energy efficiency, eco-friendliness and self-sufficiency. Its architectural expression is the natural result of addressing the issues in 8.4.5.b. the building enjoys a low physical profile and has been designed not to command the landscape (refer Dwg no 65.04 viewed with VP1 & VP04).

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Significance of Impact re architectural expression: HIGH positive

Orientation relative to predominant slopes: Arranging buildings with eaves lines running parallel with, rather than at right angles to the natural contours; and avoiding, or minimizing, the use of gable ends facing down predominant slopes;

Assessment: The building has been oriented to capitalize on the nature of the topography (refer Figure 12).

Significance of Impact re predominant slopes: MED positive

iii Use of verandas and lean-to's: Incorporating verandas or lean-to structures, particularly on the downhill side of a subdivision, so as to act as scaling elements.

Assessment: The building incorporates veranda and lean to structures including on the downhill side of the site (refer to Dwg. no 65.03 and Figure 13).

Significance of Impact re use of verandahs and lean-to's: HIGH positive

iv *Cuts into the hillside:* Avoiding deep cuts into the hillside where possible, and where unavoidable, ensuring that these cuts are mitigated with screen planting and carefully constructed stepped embankments merging with the surrounding natural landforms;

Assessment: The building has been designed to cut 1m into the slope at its highest point. This is regarded as not excessive and, indeed beneficial, as it enables the profile of the building to be lowered by 1m

Significance of Impact re cuts into the hillside: LOW positive

viii *Wall finishes:* Using simple external wall and floor surfaces deriving their adornment from the natural and honest use of materials including local stone, simple plaster trim, all in light tones reflecting the surrounding topography and vegetation. Face brick is to be avoided at all costs. Large glass expanses could be used on the understanding that they would be in the shadow line of a canopy overhang of at least 2,5m, and that the building as a whole would be screened with buffer planting as in paragraph 8.4.4.b (*General planting & buffer zones*).

Assessment: The house employs simple finishes and plaster trim, all in light tones. VP1 and VP04 provide an indication of the envisaged result.

Significance of Impact re wall finishes: HIGH positive

9.5. Impacts Measured against Performance Priorities

Priority 1: Achieving development that, in the first instance, reflects a positive and sensitive response to the local landscape with particular reference to distinctive topographical features (e.g. ridge lines, tree belts and architectural focal points), slope gradient, slope orientation, and biophysical resources including exotic plants and trees traditionally associated with the area, and signature spatial relationships. The underlying purpose is to ensure that the parts of the new building facing the parent property have as low a visual profile as possible.

Assessment: HIGH performance

Priority 2: Achieving development that reflects a uniformity of scale and pattern that will not intrude beyond mature tree canopy lines in the Medium to Long Term, nor is at odds with the natural contours of the property.

Assessment: HIGH performance

Priority 3: Achieving a composite development skyline that does not detract from surrounding natural features, with particular attention to the orientation of eaves lines and gable ends, the strategic use of hipped

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or other scaled-down roof ends, and determining appropriate maximum roof heights.

Assessment: MED-HIGH performance

Priority 4: Ensuring that new development patterns are contextually appropriate within the receiving rural environment, particularly with regard to extent, density, grouping, massing, scale and overall envelope characteristics.

Assessment: HIGH performance

Priority 5: Introducing new development (including planting) that strengthens and consolidates existing natural edges.

Assessment: HIGH performance

Priority 6: Ensuring that new development has an architectural language deriving expression from appropriate, conservation-minded and resource-efficient responses to local microclimate, topography and physical context.

Assessment: HIGH performance

9.6. Interim Conclusions

The development proposals for the site perform very well against the design indicators in Section 6 of this report. The house will have a very low visual impact on most parts of the Glen Dirk estate and a low-key impact on Klaassens Road. Significances of impact consequently range from LOW negative to HIGH Positive with all impacts therefore well within acceptable levels. This is not surprising, given that Portion 8 has been identified as one of the sites enjoying the lowest visual profiles on the estate, while the new house has been consciously designed with the heritage indicators in mind. The only aspects of the development proposals that could not be assessed are visual impacts from external lighting (at night), and visual impacts from security installations.

10. Engagement with Interested & Affected Parties.

Before being finalized for submission to Heritage Western Cape (HWC), this report is being circulated to the following parties:

- The South African Heritage Resources Agency (SAHRA) in terms of an agreement with HWC;
- The Cape Institute for Architecture (CIfA), whose comment was sought as part of the 2009 HIA process;
- The Constantia Property Owner's Association (CPOA), whose comment was sought as part of the 2009 HIA process, and the more recent S.34 application for the proposed alterations to the reservoir on the site:
- The City of Cape Town (CoCT); and
- The Simon van Der Stel Foundation (SvdSF) because of their previous interest and comments in response to the 2009 HIA.

This list of parties to be invited to comment has been discussed with HWC who has endorsed the list. These parties have 30 days to comment before feedback is considered, summarized and this report finalized and submitted to HWC.

11. Interim Conclusions and Recommendations.

The proposed development of Portion 8 has been carefully conceived by the architect to minimize negative visual impacts on the landscape. The architecture of the building and landscape design of the property do indeed achieve this. Two factors remain largely unknown, i.e. exterior lighting, particularly with regard to visual impacts on the Glen Dirk estate side of the property, and potential impacts from security measures.

The development performs very well against the heritage performance priorities as set out in this report. It is consequently concluded that the proposed new development on Portion 8 will have an overall minimal heritage impact on its surrounding context as part of an area envisaged as a national heritage area, with minimal impact on the heritage significance of the Glen Dirk Estate in particular.

Having met HWC's requirements in response to the NID application for this development, including the requirements of NHRA S.38(3), I recommended that this report and the following recommendations be approved by HWC:

That the proposed development of Portion 8 of Glen Dirk Farm, erf 10373, Constantia, as indicated in the documentation listed in Section 8.1.1. in this report, be approved subject to the following conditions:

- i) That proposals for the external lighting of the building facing onto the Glen Dirk Estate and neighbouring Chart Farm be submitted for endorsement to the CoCT (Environmental Management: Heritage Resources Section) as part of the local authority building plans submission process;
- ii) That proposals for any security installations, satellite dishes and antennae visible from Klaassens Road and Glen Dirk Estate be submitted for endorsement to the CoCT (Environmental Management: Heritage Resources Section) as part of the local authority building plans submission process; and
- iii) That should any archaeological remains be uncovered during construction on the site, that HWC be immediately notified in terms of NHRA S.35(3).

GRAHAM JACOBS 22 February 2016

12. Main Sources

ARCON Architects & Heritage Consultants

Glen Dirk Farm, Erf 10373 Constantia. Heritage Impact Assessment Report, June 2009.

MLH Architects & Planners; F Todeschini; B Gasson & P Louw

Constantia-Tokai Valley Local Area Growth Management and Development Plan, 1992

Todeschini, Fabio & Jean Blankenberg

Tangible Heritage Resources in the Constantia-Tokai Valley; Towards a Conservation Management Plan for this portion of the Cape Winelands Cultural Landscape; Phase 1 Report Volume, February 2007.

13. Annexures

- A. Architect's motivation for development on Portion 8.
- B. NHRA S.34 motivation and heritage statement for alterations to the reservoir on Portion 8.
- C. Diagram 5 from the June 2009 HIA. This diagram indicates the significant elements, spatial relationships and subdivision informants on and beyond Glen Dirk Estate.