

ARCHAEOLOGICAL EXPOSURE OF AN IRRIGATION CHANNEL, AVENUE HOUSE MOWBRAY

Prepared for

Trevor Thorold Architects

March 2001



Prepared by

Tim Hart

Archaeology Contracts Office

Department of Archaeology
University of Cape Town
Private Bag
Rondebosch
7701

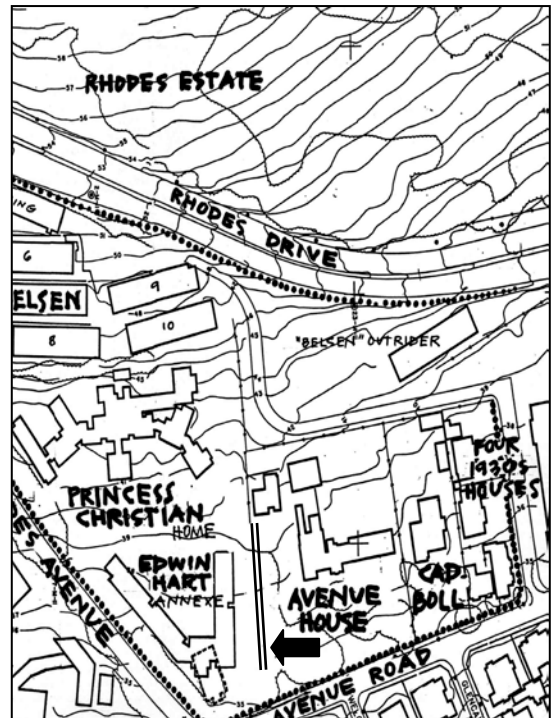
Phone (021) 650 2357

Fax (021) 650 2352

Email TJG@beattie.uct.ac.za

1. INTRODUCTION

The Archaeology Contracts Office of the University of Cape Town was commissioned by Trevor Thorold Architects (on behalf of their client, University of Cape Town) to carry out exploratory excavations on the site of an old irrigation furrow that runs along the boundary of what is now the Avenue House property. The Conservation Development Consortium (CDC) (2000) established the possible existence of the feature during the Stage 1 Heritage Impact Assessment of the Avenue Precinct in Mowbray, Cape Town. The University of Cape Town has proposed a redevelopment of properties, which it owns in the area (including Avenue House). The purpose of this study was to determine if any original fabric of the canal exists, and if so offer some options with respect to its conservation.



Location of the furrow (after CDC 2000)

According to the Drake and Brain survey of 1902, the irrigation canal is marked *servitude sluit*. It was fed by what appears to have been a significant donga or ditch that ran directly east off the lower slopes of Devils Peak. Upon reaching the rear (west) side of the Avenue House property it was canalised along the southern boundary, then under Avenue Road into Mowbray. The precise age of the feature is unknown, however there is a strong possibility that it relates to the old Welgelegen Estate -a freeburgher farm established during the late 17th century but subdivided and suburbanised after the mid-19th century.

An initial site inspection of the Avenue House property revealed that the alignment of the canal was marked by a distinct depression along the south side of the garden as far as the outbuildings and rear yard to the west (Plate 1 shows the depression under vegetation at left). Close to Avenue Road, the depression leads to a modern cement and brick culvert to divert water under the road.



2. METHOD

Initially, three trial excavations were positioned to section the depression along its length to check for evidence of original fabric. The most easterly and central excavations produced evidence of a cobbled furrow with fragments of lime plaster still adhering in places. The most westerly excavation revealed that the same furrow was lined with crude concrete blocks. Having established that there was original fabric present, the client requested that the full extent of the fabric be established as this could have an implication for the planning of any new development. This proved to be a straightforward archaeological task that involved excavating out the recent overburden (refuse and humus), then sweeping the cobbled surfaces for photography.

3. FINDINGS

- The furrow exists between the avenue house outbuilding (west) and the culvert that diverts flow under Avenue Road (east). The actual length of surviving furrow is estimated to be 55m.
- The upslope section of the furrow between the outbuilding and the directly adjacent to the front of Avenue House (20m) is built from homemade concrete blocks arranged to form a "v" shaped channel augmented on the sides with quartzite (TMS) stones. (Plate 2 shows the concrete furrow leading into later cobble furrow). The upper portion of the channel is quite deeply buried and lies at a depth of 700mm - 1200mm below the current land surface.



- At a point adjacent to the front of Avenue House the construction method of the furrow changes to a cobble base of shallow "V" form some 750mm wide.

In some places lime mortar can be seen indicating a possible 18th century date. (Plate 3 shows a detail of the cobbled furrow).

- The cobble furrow shows much evidence of repair with a variety of materials ranging from Dutch bricks, English frog bricks and Portland cement. The most easterly (lower 30m) section of the furrow has a curved base and also shows evidence of lime mortar and repairs.



- There is good evidence that soil has been transported onto the site to raise the garden level of Avenue House. In the lower (east) section, the soil has been held back from the furrow by a corrugated iron shoring, fragments of which are still visible, but highly corroded. Furthermore there is an appreciable difference in elevations between the land surface of Avenue House Garden, and the property to the south, which is lower. (Plate 4 shows the corrugated iron sheet behind 1m scale).



- We believe that the upper west portion of the furrow made from concrete blocks represents a late 19th early 20th century alteration - possibly a repair of an eroded portion or an adjustment to cater for human-made changes to the local topography. The eastern section of the furrow is possibly 18th century and is remarkably well preserved.
- To date work has been restricted to the Avenue House front garden. There is a possibility that sections of the furrow may be found on land to the west of Avenue House and as well as to the east of Avenue Road, adjacent to Rhodes Avenue.

4. CONCLUSION

A well-preserved portion of a cobbled irrigation furrow exists along the southern boundary of the Avenue House property. The furrow was probably built during the 18th century to lead water off the slopes of Devils Peak into what used to be parts of the old Welgelegen agricultural lands, now occupied by suburban Mowbray. Thus, the remaining portion of the furrow symbolises Mowbray's rural origins and is therefore a heritage resource of local significance. (Plate 5 shows a view of the furrow from the culvert, westwards).



5. RECOMMENDATIONS

- The CDC (2000) report that “the historical furrow along the south boundary is a remnant of the Welgelegen Farm's agricultural landscape. It presents design opportunity and should be incorporated into the development if possible.” The archaeological excavations have revealed that portions of the furrow are very well preserved and would be well suited to incorporation within a new development.
- The stretch of cobbled furrow between the Avenue Road culvert and adjacent to the front of Avenue house is best suited to conservation on account of its original quality.
- The west section of the furrow built from concrete blocks represents a later building phase. It is desirable that as much as the furrow be conserved as possible, however, if sections of the furrow need to be demolished it is best that the concrete block portion be sacrificed rather than the cobbled portion.
- The exposed furrow should be surveyed onto plans of any proposed development of the area.
- In terms of the South African Heritage Resources Act of 1999, the furrow is a protected structure, and may only be altered or demolished in terms of a permit issued by SAHRA.

6. REFERENCES

Aikman, H. Harris, S. Pistorius, P.& Thorold, T. (the Conservation Development Consortium) 2000. Heritage Impact Assessment of University of Cape Town: Avenue Precinct. Unpublished Report prepared for the University of Cape Town.