## HERITAGE STATEMENT RIM OPS

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## 1. LEGAL REQUIREMENTS

The heritage statement was commissioned BY Groenewald Preller Architects to supplement the permit application to SAHRA in terms of section 27 of the National Heritage Resources Act, 25 of 1999. The scope of the development triggers a Heritage Impact Assessment in terms of section 38 of the NHRA. Section 38(7) of the NHRA, however, exempts the development from an HIA unless SAHRA decides otherwise. An advisory was requested from SAHRA on 21 June 2011. The SAHRA Built Environment and Landscape Committee responded on 1 July 2011.

SAHRA will require a S27 Application with a heritage statement. Supporting documentation to be submitted with the application to include a Site plan, Photographs, Plan, Scope of works, Motivation and the Heritage Statement. It is advised that a management plan for the maintenance should be developed as part of the application.

## 2. INTRODUCTION

Robben Island Museum [RIM] identified the Old Power Station [OPS] as an opportunity to create space for their collection of artefacts in the Integrated Management Plan for 2007-2012. Some of the artefacts, mostly on temporary loan to the collection, are housed at the Mayibuye Centre at the University of the Western Cape. The major portion of the collection is housed in various parts of the Political Prison not open to visitors.

The collections manager for RIM/Mayibuye has provided baseline requirements for the conversion of the OPS to create a compact space to accommodate the storage of a selection of the RI collection on a permanent basis and according to acceptable museum preservation standards. This project includes the rehabilitation of the various structures that make up the Old Power Station site as well as the refurbishing of the interior.

The collection includes artifacts of organic (wooden, textiles) and inorganic (stone, metal) origin that needs to be preserved by means of a stable climate (humidity, light, temperature) and adequate safety and security. The space needs to facilitate easy retrieval and controlled access for purposes of research, education

and exhibitions and offer facilities for interventive conservation such as workshop space and the storage of materials, some combustible.

## 3. LOCATION

The OPS is located immediately behind House number 49 and the Post Office on Church Street. The main entrance faces approximately NE towards the Club House/Chief Medical Superintendents residence.

Fig. 1. Location in relation to associated landscape.



# 4. SITE PLAN



Fig. 2. Site plan showing alignment and coordinates.

## 5. FLOOR PLAN

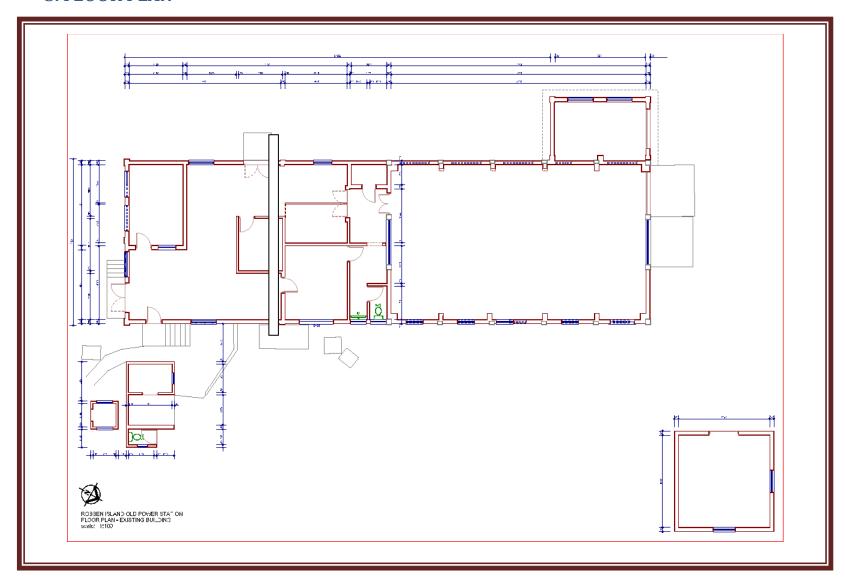


Fig.3

## 7. STATEMENT OF SIGNIFICANCE AND VALUE

The OPS supplied electricity to the expanding Village during World War II and used continuously over the next 50 years for electricity supply to the village, light house, harbor and later to the Maximum Security Prison.

#### 8. EXPANDED STATEMENT OF SIGNIFICANCE AND VALUE

#### 8.1. AESTHETIC

Much of the industrial aesthetics of the War time structure was removed in the 1970,s.

#### 8.2. ARCHITECTURAL

Four distinct parts of the building were built in different periods. The main structure was built ca 1943 with a cooling pond. In 1972 the small building adjoining the older section on the north west corner of the front façade was built as the transformer room with the installation of the new generators. [Drawing 8132/E3, 26.6.67]. In 1987 additions were again made which gave the building and the guard house its present floor plan.[Drawing 2/8132/46, June 1987]

The general feel of and interpretation of the east elevation is congruent with that of the floor plans and architectural drawings from 1963, 1967 and 1987. The Main building appears to date from WWII. The first section of the Extension appears to have been constructed before that of the second section but after that of the Main building. The architecture is functional and has a distinct industrial resonance.

The architectural description and state of conservation of the site is produced in Report No. 1.

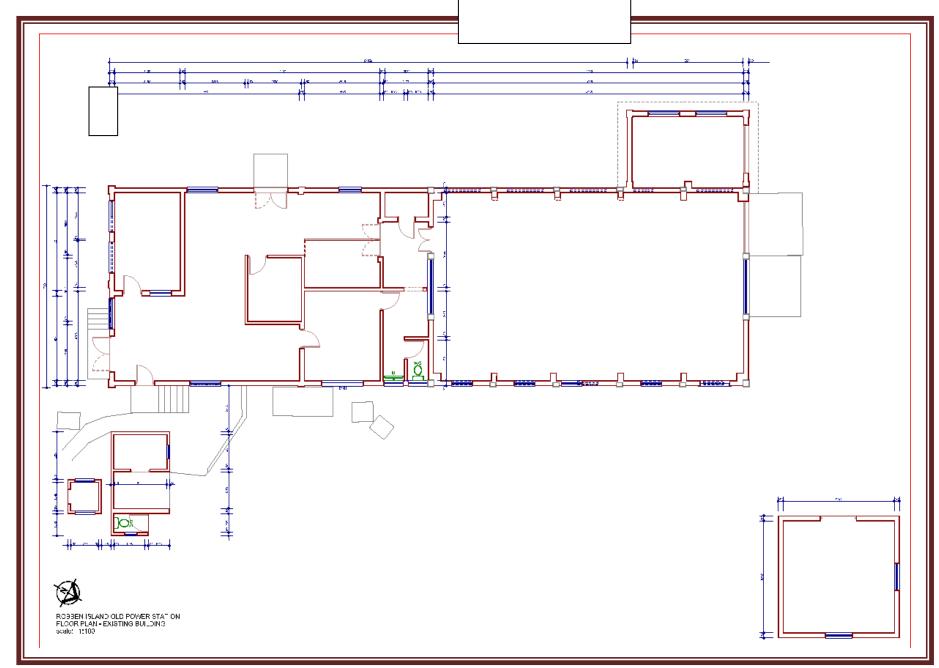


Fig.4.

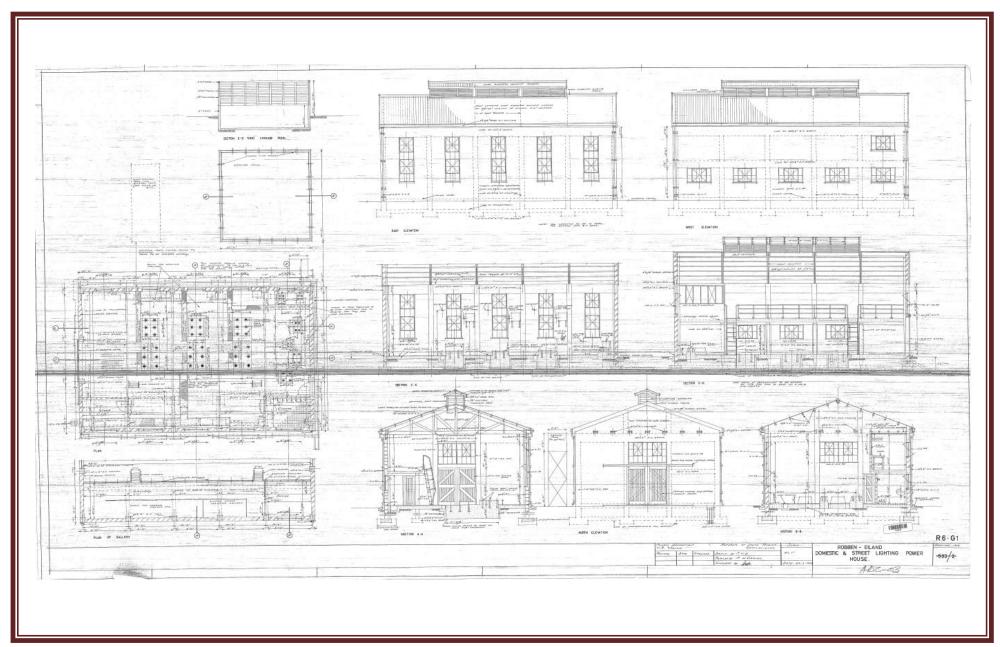


Fig.5. Ca 1943

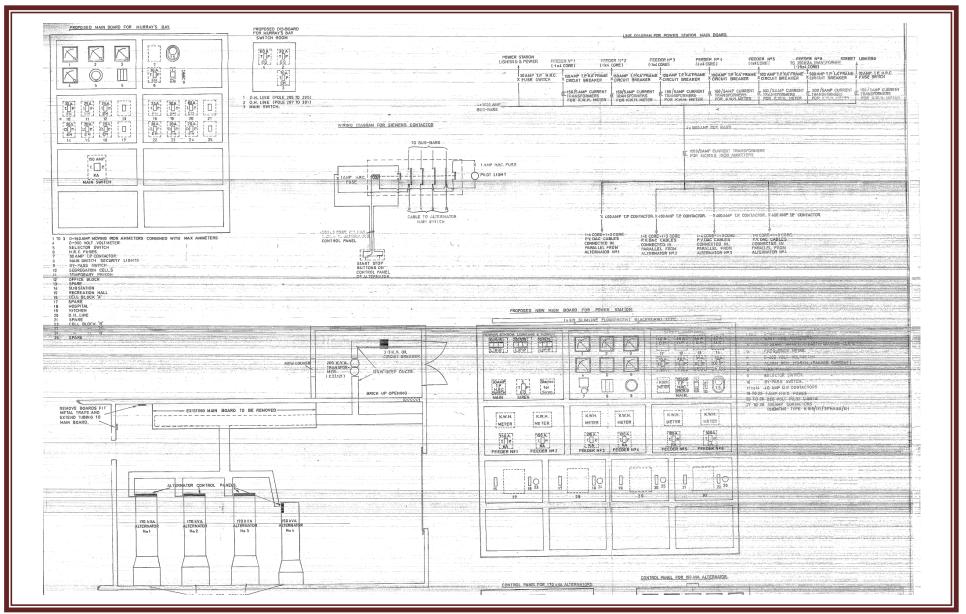


Fig.6 Ca 1972 modifications

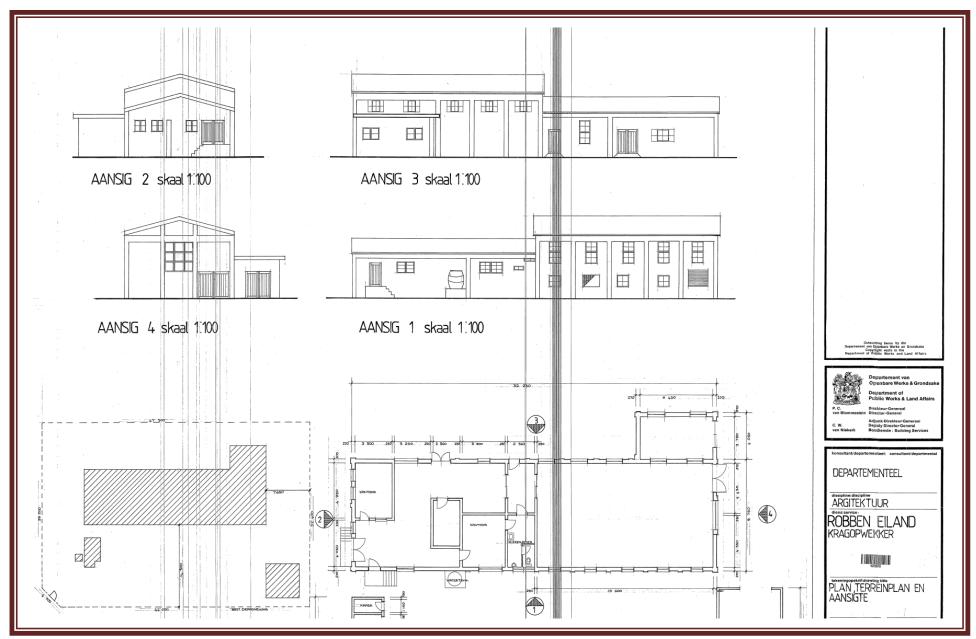


Fig. 7. Ca 1987



Fig.8. Ca 1996



Fig.9. Ca 2009



Fig. 10. Ca 2009



Fig.11. Ca 2010

#### 8.3. HISTORICAL

The OPS is situated in the NW corner of what used to be known as Retief Park. The centre piece to this park was a monument to a French saint erected in 1870. The plinth to this memorial is still extant but the urn has disappeared. The memorial formed the centre piece to the park from which a path radiated out to the cardinal points. The early prisoners' band stand was also located in the park. The band stand was demolished in ca 1964 along with the Catholic Chapel.

In ca. 1940 a road was cut or formed between the, what was the Chief Medical superintendents house and is now known as the Club House, and the position of the OPS and the Garrison Engineer's offices. This road was called Power Street and disappeared some time in the mid 1980's when it was covered up by the sports fields and the extension of the terrace from the Club House.

Before the construction program undertaken by the military, except for a small generating unit at the lighthouse for operating the light, there was no other source of electrical power on the island. It appears that everyone who had occupied the island before, had made use of candles and oil lamps.

In late 1939 Captain George Anderson was seconded from the Royal Engineers to the Union Defence Force's Directorate of Fortifications and Coastal Works. His responsibilities amongst other things would be to upgrade the Union of South Africa's coastal defence systems. Robben Island had no electrical power apart from the small generator operated by the light house keeper, Mr Auret. In late 1940, early 1941 a temporary generator was used by the builders. In mid 1941 Anderson visited the Island to arrange for additions to the temporary electrical system used by the builders. The contractor running the temporary generator at the time had connected some street lights in the village on Church Street. A faulty light switch on one of the poles had the effect of providing shocks to anyone touching the old steel telephone poles.



Fig. 11a. Ca 1920. The area where the OPS is now situated is parkland with large close knit trees



Fig.12. Ca 1939 showing site before war time construction

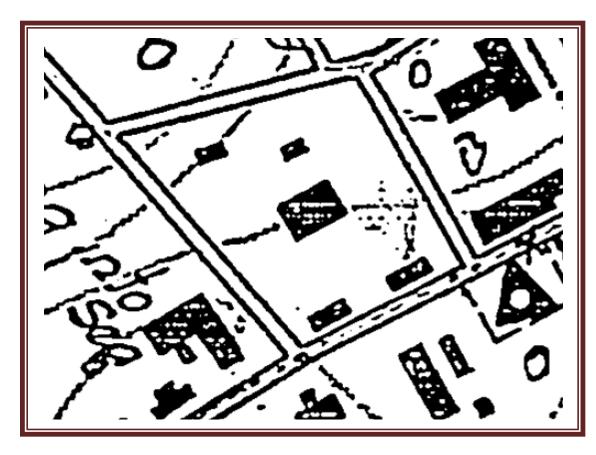


Fig.13.
Landscape
Ca 1955.
Triangle is
Garrison
Church

In mid 1941 Anderson was tasked with designing a domestic power station and reticulation network for the existing village and new houses being built along shearer Avenue. The completed design was forwarded to the Authorities Committee in Pretoria for the necessary funds to be allocated. His original design provided for 3 diesel driven alternators. Anderson's design was sent to the Cape Town City Electrical Engineer, Mr. Eastman, to vet the design. This design would not be built until 1943. In the meantime he placed foundations and pillars with corrugated iron sheeting for the walls and roof.

The war being well on its way by then he had to go scrounging in Johannesburg for second hand equipment and only two generators were installed. The truck switchgear was manufactured in Johannesburg and sent down to Cape Town. The captain of the fishing vessel who transported the switchgear to Robben Island dropped two crates of these overboard. Anderson and two of his crew dived to save the crates and opened them to dry the equipment. Some of this was sent to the City of Cape Town Electricity Department to dry out and test.

The Vichy French on Madagascar surrendered in November 1942 and were brought to Robben Island as prisoners of war. Anderson was responsible for providing electricity and security flood lighting in the prison enclosure. The Vichy French appear not to have been too friendly towards him while he was working near the enclosures.

With the completion of the domestic electrical system, its performance and construction was equal to that of Cape Town. The power station operated 24 hours per day with three shifts.

In November 1942 the then South African Railways and Harbours [SAR & H] requested an electricity supply to the lighthouse. Negotiations were finalized in about November 1943. On 20 April 1944 the cables to connect the light house had been laid by Defence but the SAR & H did not have their end linked as yet.. In typical beaurocratic fashion it took almost two years for the light house to be supplied by the OPS when the connection was completed in February of 1944. Much hinged around negotiations on procedure for reading the metre and cost per

unit. The cost per unit was fixed at 2d in March 1943 with the connection costing £12. In 1953 the SAR&H also requested to be included in the proposed investigation into the laying of the underwater cable.

With the Korean War almost a year old, having reached a stalemate, the use of the island for defence of the Cape started to scale down. In April 1949 the operation of the Old Power Station was handed over to the Union Department of Public Works [UDPW], although the costs of running the Power Plant was still covered by the UDF budget. The cost of supply to the lighthouse had gone up from 2d to 9.6d. Shortly after taking over the UDPW, in about October 1952, the possibility of laying an under water cable from Blouberg to the Island was being considered. The laying of the cable was widely reported in the press at the time. The SAR&H appeared quite concerned at this point and hastened to stake their claim to a supply from the under water cable. In the event it would take the UDPW more than 6 years in their investigations and by the time the prisons took over the idea was quite dead.

The main reason for investigating the laying of the cable was financial as by this time the costs of operating the Power Station had escalated considerably. Ageing machinery could be retired and used as a standby source. The monthly costs of running the plant amounted to approximately £1000. The Electricity Supply Commission [ESCOM] would make available their Blaauwberg substation as the point from which to lay the cable. The supply would then be charged at a fixed rate of £132 per month. The laying of the cable from Blaauwberg to the Island was estimated by SAFIMEX to be between £14 000 and £19 000. In all the costs of the capital outlay would be recovered within two years from the savings of £725 per month estimated if the plant was no longer operated.

#### **8.4. SOCIAL**

Electricity and lighting expands people's ability to extend their activities. During the war electricity powered lighting for the dances held in the John Craig Hall, as well as providing opportunity for film shows and general socialisation.

For the warders and their families extra mural activities, dances, parties, films and later television would not have been possible without the Power Station.

The Power Station played a major role in the activities of the prisoners on the Island. Lighting was used as a form of control and of punishment. Prisoners would be rewarded with extended light hours for good behaviour or later on for studying. Search and spotlights provided night time vigilance against escape. The ability of light as a source of punishment should not be underestimated.

#### 8.5. TECHNOLOGICAL

Anderson's original design for the Village Power Station and reticulation was based on a low tension generating system operating at 380/220 volts 50 cycles with a three phase four wire network with an earthed neutral. A single phase connection would be provided to each house, balancing house against house and street against street. This was unlike the more expensive system used in Cape Town where a three phase four wire connection to each house was the norm. Calculations on the basis of installed loading less a diversity factor was used to size the overhead conductors. Again unlike the rule of thumb used by Cape Town, which was a relic from the past. Murray's Bay harbour and wharf had been completed by this time so Anderson included in his design an underground cable with the two necessary transformers to the harbor at 11 000v to compensate for loss of transmission. [Anderson, p.178]

Provision was made for three diesel driven alternators in the power station with truck mounted control panels for the alternators and distribution feeders, as well as an earth leakage detection and indicator panel. [Anderson,p.178]

The two Paxman diesel engines sourced by Anderson in Johannesburg had no alternators. He eventually sourced two old 200 HP slip ring motors, which he had rebuilt, fitted with exciters and rewound as alternators for direct coupling to the two diesel engines. [Anderson, p.178]

Two other power plants were also erected, one to exclusively serve the gun batteries and another to serve the SWAN radio station. In 1943 Anderson was allotted the task of completing installation of diesel generators in the underground engine room for the 9.2" gun battery. [Anderson p. 193]

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**INTRINSIC** 

## PROPOSED CONSERVATION POLICIES

Appropriate minimal intervention. [do as much as is necessary and as little as possible]

Appropriate and sustainable alternate use strategy. ['use it or lose it']

Appropriate, effective, efficient and sustainable maintenance.

Use of appropriate construction materials, paint and cladding to fit historic fabric.

Appropriate interpretation and presentation within the associated landscape.

## **CONSERVATION CHALLENGES**

**THREATS** 

Weather and weathering

**Plants** 

Animals

Fire

Pollution
OPPORTUNITIES
Tourism
Education
Research
Risk mitigation & disaster prevention:

Humans -tourism, vandalism, theft