

2011-01-19 SUPPLEMENTARY HERITAGE REPORT FOR RENOVATIONS AND REPAIRS; ROBBEN ISLAND GARRISON CHURCH.

INTRODUCTION

This report and any recommendation is provided to supplement our report of 9 January 2011. It provides the historical background to the renovation of 2004, its results and our comments.

GARRISON CHURCH

BRIEF HISTORY

Designed by the Secretary to Government, Sir John Bell in 1840. The work was executed by Major Wolfe, the Garrison Commander on the Island, in 1841. Prisoners were used as labour. The first service was held in October 1841 by Rev. Hough. During the prison period it changed from being exclusively Anglican to an interdenominational church.

RESEARCH METHODOLOGY

The document prepared by Adler Price Architects [APA] in 2000 for the 2004 restoration was looked at and follow up visits to the site were made. Copies of the state of conservation report and scope of works for 2004 are appended. The original permit application and the subsequent permit that was issued was looked at, as well as the RIM CUC recommendations submitted with the permit application. The APA "Report on 'Repair and Renovation' Commission of November 2004 detailing some of the work carried out during the restoration was also sourced. Informal discussions were held with a number of professionals and lay observers. Some information and enquiries could not be followed up because of the time constraints.

INTERIOR

Since work will only be carried out on the outside no further investigation of the interior was done. Some interior elements are mentioned to support comments on the exterior work required.

The clock work mechanism was repaired in 2004. This is now corroded and not working because of poor maintenance. Regular oiling of the gears and mechanism would have allowed the clock to still function.

EXTERIOR

In informal discussions with Andre von Hagen of Mirreile Lawson Architects, who is project managing the restoration of the WWII military installations, it would appear that the first Commander of the WWII garrison had an architectural background and that he carried out a considerable amount of renovation work during the war most likely with the aid of Cape Corps servicemen. This is important in understanding certain layers of plaster and the subsequent discovery of this in the 2004 restoration, although the 2004 research did not uncover this in their research.

The bell was refurbished and the bell platform dates from the WWII renovation.

In 1939 the two canons are still planted upside down and embedded in the tower buttresses. The building appears from available evidence to still be in a good condition.

Some time ca 1964 the church was renovated by the prisons under the direction of the then Commission for the Preservation of Natural and Historical monuments and Relics. [Historical Monuments Commission]. A record of what form the renovation took has not been researched.

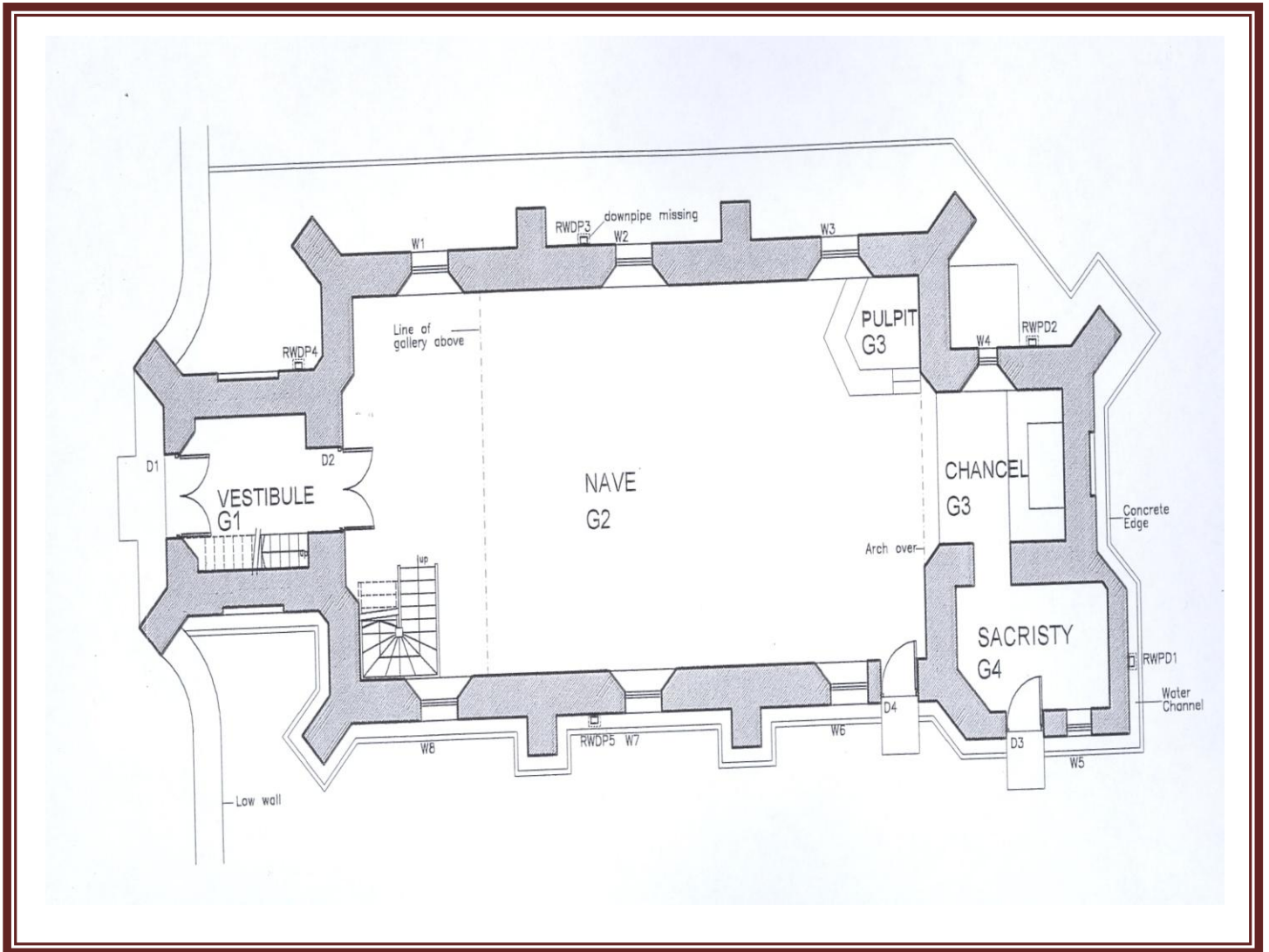
THE 2004 RESTORATION

The Architectural firm of Adler Price was commissioned in 2000 to look at the restoration of the Church and the adjoining Resource Centre.

Their specific recommendations formed part of the permit application submitted on 8 March 2004. Comments from the RIM CUC in a letter dated 22 September 2003 were also submitted with the permit application.

A permit was issued by SAHRA on 29 March 2004. The permit specified work to be carried out as per the Provisional Bill of quantities and plans numbered, 401-406, 510 and E201. The permit recognized Neville Price as the architect. A number of conditions formed part of the permit. The specific recommendations made by APA follow on page 3.

Adler Price floor plan



Report on The Garrison Church and the Resource Centre WCS 021470

Specific recommendations :

- Strip plaster and replace with waterproof admixture in panels; say 30% of exterior and all parapets, using non ferrous mesh or fibreglass tissue where required.
- Strip and redo all paintwork as necessary, replacing with limewash externally after investigating colour.
- Investigate Church Street and reinstating curved walls.
- Discuss removing gun carriages and repositioning canon.
- Flagpole, bell and clock to be repaired.
- Remove asbestos roof and replace with slate tiles or corrugated sheet metal, possibly 'zincalume' or some coated or non-ferrous sheeting.
- Flashing to be removed and replaced with no maintenance alternatives; non-ferrous metal or synthetic alternatives.
- Repair flat roofs.
- Remedial work to plaster using waterproof admixture.
- Rain water goods - replace missing downpipe and source similars to complete.
- Replace windows with original pattern timber.
- Replace D3 and D4 and repair doors D1 & D2 as necessary.
- Replace external paving and replace with slate paving.
- All internal timber to have high gloss removed.
- Repair flooring and stain as necessary to match existing.
- Replace altar fabric and all carpeting.
- Remove all timber with dry rot or beetle; treat to prevent recurrence and replace.
- Add additional material, shells etc. to external pathways.
- Reinststate cappings to perimeter walls and repair.
- Replace damaged greenery with appropriate planting.
- Investigate and modify as necessary stormwater channels.

DURING RESTORATION

As with any restoration of this kind hidden problems crop up and slow the speed of work and also have cost implications. The final restoration report stipulates the interventions and mitigation of a number of problems. We summarise and provide our own conclusions on the aspects that relate directly to the proposed current exterior repairs and renovations:

1. Deterioration from their initial report in 2002 had advanced to such an extent that the front door had to be replaced instead of the minor repairs initially envisaged.
2. Opening up of covered areas showed that the problems were far more serious than anticipated.
3. Substantial flat areas of the exterior had been replastered using cement plaster.
4. Mouldings, narrow areas, parapets and finials were mostly a combination lime mortar and some cement patching. These were in a deteriorated condition.
5. Large areas of hollow, loose, badly cracked or deteriorated plaster was stripped under the auspices of APA from the soft red clay brick walls. The mortar appears to be the classic combination of burnt lime and sand used in the 1800's and earlier.
6. Stripped areas were covered with a weak cementitious plaster by APA because of the predominance of cement plaster already used.
7. Non ferrous, alkali resistant mesh was used in areas where structural repair work was necessary. It has not been possible with the time at our disposal to isolate these areas.
8. Parapet walls were plastered using a cementitious admixture and non woven geo textile fabric to avoid problems arising from the failure to provide preventative maintenance.
9. Asbestos cement 'Canadian' pattern roof sheeting was removed and replaced with factory coated corrugated iron.
10. The rotten valley gutter was replaced.
11. Cast iron gutters were salvaged and where possible supplemented with new replicas manufactured from fiberglass because of cost constraints in using

cast iron. Our site inspection has revealed that all of the down pipes are 'plastic' and that no cast iron elements remain. Cast iron would not have been a readily available and inexpensive material at the time of construction of the building in 1840. Inexpensive cast iron in quantity only became available from ca 1870 after British industry converted wholesale to the Bessemer smelting process. The cast iron elements must be traced to verify this. Our site inspection also revealed that the gutter hoppers are beaten lead. This correlates to the lead elements that were removed from the old roofing and flashing of the church. This suggests that large quantities of lead formed part of the roof and gutters. This lead was used in casting new counter weights for the clock mechanism by the clockmaker Mr Arthur Hill of Bothasig. Inspection of the counterweights corroborates this.

12. All finials and parapets were replastered and waterproofed.
13. Existing windows were replaced entirely with Iroko. Windows are painted with thixotropic paint. This was intended to last for up to seven years before repainting.
14. The cannon were rust treated and repositioned muzzle downward. While this may have been historically correct for a certain era, the decision went against the recommendation of the RIM CUC. The remains of the foundations of the reconstructed gun carriages can still be seen and require interpretation. Best heritage practice requires that if any element is removed that it be recorded and interpreted accordingly. The permit conditions stipulated that the Burra Charter [Australia ICOMOS] should be used in the process. The interpretation process is incomplete.
15. Missing elements of the boundary wall piers were reinstated contrary to the recommendations of the RIM CUC.

Some debate followed during the process of restoration between DPW, RIM, SAHRA and APA as both RIM and DPW appear to have wanted to change specifications midstream and in contravention of the SAHRA permit.

A particular debate was the tinting of the wall panels between each buttress on the exterior. APA maintained that their research showed that the panels were tinted grey. This alleviated the glare from the pure white limewash that was normally used while at the same time creating an optical illusion as the scale and aspect of

the building. While stripping the plaster APA could find no remnants of this tinting. This may be because previous renovations, particularly that from WWII may have removed this layer from the building.

AFTER RESTORATION

On 17 February 2005 the Environmental Conservation Co-ordinator for Robben Island Museum, Shaun Davies, provided a report to the Manager: SAHRA Western Cape Regional Office, Beverly Crouts. The report is summarized as follows:

1. Towards the end of 2004 the Garrison Church was handed back to the museum by APA and the contractor Bambana Management Services.
2. Both were confident that the project was successful.
3. In the beginning of 2005 Shaun Davies reports that the paint started peeling from the exterior and the interior of the building.
4. The contractor and a paint specialist visited the site on 10 February 2005.
5. Paint and plaster samples were collected for analysis. The paint specialist indicated that tests would be needed to confirm his first impression of the problem.
6. The paint specialist was of the immediate opinion that the problem was because of the high salt content of the water used by the contractor during mixing of the plaster.
7. The tests were to have been done at the CSIR centre at the University of Stellenbosch.
8. The results would be forwarded to the contractor who would then forward these to the Principal Agent [assumed to be APA] for the attention of DPW.
9. Shaun Davies made a specific request for a 'Method Statement' outlining how the problem would be dealt with and the time lines involved.
10. Shaun Davies correctly predicted that this would pose future problems for any work undertaken on Robben Island.
11. In his estimation at the time was that it was still fortunate that the period of 3 months in which the contractor would be required to make good any defects had not yet expired and that the 10% retention fee would not be released until this was done.

COMMENTS

It would, in our opinion and at this time, be highly inadvisable and detrimental to the long term sustainable conservation of the building, if the proposed work as specified for the RIM Village Regeneration Project by the RIM Conservation Architect and the contractor were to be implemented based on the following:

1. Recommendations by the RIM CUC were either totally ignored or where they were taken up they were not taken to their conclusion. Certain aspects of these recommendations need to be revisited and would in our opinion have been the more prudent option to follow in the process.
2. Any repair or renovation of the Church would, in our opinion, be in contravention of the policy and other provisions of the 2007-2012 management plan submitted to UNESCO and the World Heritage Convention Centre in Paris.
3. Certain conditions of the original SAHRA permit have not been met to date.
4. The trail of the tests from the paint specialist to the CSIR to the contractor to the principal agent to DPW must be investigated and the results be provided before any work is undertaken. If the plaster mix has a high concentration of salt then this must be carefully looked at and remedial action carefully thought through.
5. The original specification was for lime wash on the walls. In the absence of the Provisional Bill of Quantities our personal observations are that a matt acrylic was used. Informal discussions with the Indawo site foreman, Mr Bowers, and a colleague, Mr Booysen indicated that they thought that masonry primer, a sealant and then the acrylic was applied in certain areas, in other areas only an acrylic layer is evident, while in others it would appear that a lime mortar was applied over a water proof layer/ bonding medium to harder concrete elements.
6. The weak cementitious plaster appears to have suffered the most damage and careful thought needs to be given to any remedial action.
7. From a conversation between the architect Neville Price and Ms Sonja Warnich of the SAHRA WC Office it became patently clear that APA as the principal agent were and still are unaware of the problem. It would be prudent to obtain as much information and the cooperation of Mr Price in

determining exactly what was done with the additional photographic evidence we assume they must have that was not included in the final restoration report.

8. There is substantial damage to the interior. A number of factors may be responsible for this but it would be highly inappropriate to only deal with the exterior at this time. The building and its associated landscape must be treated holistically.
9. Maintenance issues highlighted by APA have still not been resolved. For example the box gutter on the Northern side of the Church was blocked before the 2004 restoration. This gutter has again presented this problem. It would appear that the gutter may need to be investigated for its efficiency.
10. The gutter 'hoppers' are beaten lead. Lead is toxic and must be treated appropriately without losing the integrity of this particular element.
11. New materials were introduced in the 2004 restoration and this must be taken into account with any proposed work.
12. Items were replaced and some features were reinstated. The extent of this needs more research and 'applying ones mind' to what needs to be done.