

EXPERTS' REPORTS:

Heritage Advisory Committee Board Minutes for Case Number : PA00168/08

Doc 02

Estratt mill-Minuti tal-Laqgħa nru.120 tal-KKWK tas-17 ta' Ottubru 2006

1. Hwejjeg Ohra

2.1 Valletta Kon-Kattidral ta' San Gwann

Is-Sur Joe Magro Conti għamel prezentazzjoni lill-kumitat ta' proġett imhejji mill-Fondazzjoni tal-Konkattidral ta' San Gwann għall-holqien ta' spazju gdid għall-Muzew ta' l-istess Kattidral. Il-kumitat ra ukoll u studja dokument intitolat *Specifications for a Design Brief for New Museum Complex*. Is-Sur Magro Conti wera t-thassib tiegħu, u l-kumitat unanimament qabel miegħu, dwar l-impatti negattivi ta' dan il-proġett, li prinċipalment huma; (1) ir-riskju car għall-istruttura tal-Kattidral ikkawzat mit-tahfir konsiderevoli hafna li huwa propost li jsir fil-qrib; (2) li dan johloq precedent għall-domandi simili fl-inhawi immedjati, u (3) ir-riskju li jigu disturbati xi reperti storici u arkeologici li jistghujnsabu fl-area li se tigi skavata.

Michael Ellul
A/Vici-Chairman

TRANSLATION Doc 02:

Extract from the Minutes of Meeting no. 120 of KKWK of 17th October 2006

1. Other Matters

2.1. Valletta, St John's Co-Cathedral

Mr. Joe Magro Conti presented the Heritage Advisory Committee (HAC) with the St John's Co-Cathedral Foundation projects to create new space for the museum of the same Cathedral. The Committee also saw and studied a document entitled Specifications for a Design Brief for New Museum Complex. Mr. Magro Conti expressed his concern, and the Committee unanimously agreed with him, about the negative impacts of this project, which are principally:

- (1) the clear risk to the structure of the Cathedral posed by the considerable excavation that is proposed to take place nearby;
- (2) the precedent being created for similar demands in the immediate vicinity, and
- (3) the risk of disturbing some historic or archaeological remains which may be found in the area to be excavated.

Michael Ellul
A/Vici -Chairman

Doc 03

Comments by HAC re document 'Specifications for the Design Brief for the New Museum Complex'

30.10.06

1] HAC understands the need to modernize the current Cathedral Museum and to have enough exhibition space to exhibit all the artifacts in the possession of the cathedral including those in storage.

2] HAC is however very much concerned that this very large underground Museum will create logistical problems for Valletta both because of the excavation itself [finds, underground tunnels, services, base of buildings etc] but also because of what will happen during the course of the work i.e. the damage to the image of such a central part of the city.

3] HAC is very concerned with the effect that the excavations may have on the cathedral structure in general and on its paintings and other fabric in particular.

4] Not enough evidence has been given to explain the need for such a large space, nor has any explanation been given as to what use the current museum space will be devoted to.

5] There is a very major concern as to the placing of air conditioning and other services in the area which would be hard to camouflage.

6] Such a proposal should include clear and specific 'traffic' flow around the museum. Such a proposal should include a visitors' management plan for the cathedral.

Dr Albert Ganado, Chairman, HAC

Doc 04

MEMORANDUM

From: Cultural Heritage Advisory Committee

To: Director General, MEPA

Extract from the Minutes of Meeting no.235 of the Cultural Heritage Advisory Committee held on 28 August 2007.

The CHAC studied the 6th Draft of the Development Brief for a Visitor's Centre and new exhibition spaces in St John's Co Cathedral and discussed the project on the basis of the information contained in this document. The committee noted that the project for the creation of new exhibition space for the museum entails two major interventions:

1. the excavations in St John Square up to façade of St John's Co Cathedral

and:

2. The roofing over of the cemetery courtyard on Merchant Street and the elimination of its current use.

With regard to **Point 1** the Committee, together with **IHM**, are of the opinion that any excavation in the immediate surroundings of the Cathedral is extremely dangerous to the structural stability of the Cathedral itself, and the proposal is therefore not acceptable, also in view of the fact that it seems that there has been no thorough and scientific study of the condition of the foundations, the existing underground structures and spaces and the nature of the geology of the area.

Regarding **Point 2**, the Committee feels that the sacred nature of the cemetery should be safeguarded and respected and that the proposed uses are not compatible with the important historical and religious nature of the site.

The Committee would also like to point out that the Development Brier does not indicate the location of spaces required for the air-conditioning plant, electrical sub-station and services which are necessarily considerable in a project of this scale.

Michael Ellul
A/Vici-Chairman

PA168/08 - CHAC mtg 349 bid-data 29/07/08

Illum saret prezentazzjoni taz-zewg progetti godda alternattivi rigward l-applikazzjoniet (PA167/08 & PA168/08) dwar il-Kon Katidral ta' San Gwann fejn kienu prezenti Ms Cynthia Degiorgio, Mr Paul Attard u il-perit Bencini ghall-applikant u Mr Mark Anthony Mifsud ghall-SCH. Il-kumitat jirrakkomanda li il-case officer ghandu jikkonsulta l-EIA Team dwar jekk dan il-progett jikkwalifikax ghal-EIA jew xi studju iehor fejn ghandhom jigu ikkonsidrati b'mod partikolari, l-oggezzjonijiet tas-CHAC fiz-zewg minuti immarkati Doc 2/3/4 fil- PA167/08 & PA168/08. F'kas ta' dan, il-Kumitat qed jitlob lill-Mepa jistabbilixxi it-Terms of Reference biex isiru l-istudji. L-SCH ghandhom jibghatu il-kummenti taghhom bil-miktub.

Translation:

PA 168/08 – Cultural Heritage Advisory Committee (CHAC) meeting dated 29.07.08

Today the two new alternative projects re. the applications (PA167/08 & PA 168/08) for the St John's Co-Cathedral were presented. Ms. Cynthia Degiorgio, Mr. Paul Attard and Architect Bencini were present for the applicant, and Mr. Mark Anthony Mifsud for for the Superintendence of Cultural Heritage. The Committee recommends that the Case Officer should consult the EIA Team as to whether this project qualifies for an EIA or other studies where the CHAC objections marked Doc 2/3/4 in PA167/08 & PA168/08 are to be specifically

considered. In this case, the Committee asks MEPA to establish Terms of Reference in order to carry out these studies. The Superintendence asks to be sent the comments in writing.

LEGAL LEVEL OF PROTECTION given to St John's Co-Cathedral

Grade 1: Buildings of outstanding architectural or historical interest that shall be preserved in their entirety. **Demolition or alterations which impair the setting or change the external or internal appearance, including anything contained within the curtilage of the building, will not be allowed.** Any interventions allowed must be directed to their scientific restoration and rehabilitation. Internal structural alterations will only be allowed in exceptional circumstances where this is paramount for reasons of keeping the building in active use.

GEOLOGICAL OVERVIEW OF THE ST JOHN'S CO-CATHEDRAL PROJECT

The problem is related to permissible risk in view of the importance of St John's. The following are the geological problems of excavation:

1. Tension cracks in rocks (technically called joints) would be expected to be common at the top of Sceberras Hill where St John's is located.
2. Joints (tensional features) in rock may be expected to decrease with depth, because of greater confining pressure. However, the structural geology of Valletta is also affected by numerous faults of Late Miocene age which are poorly studied. These are clearly visible wherever there are rock outcrops in Valletta. These faults have created stresses in the rocks which release jointing. An example of deep jointing is found in the tunnel linking the Floriana car park to the waterfront. The roof of the tunnel shows classic cases of wedge failure of rock which occurred during or after tunnelling, indicating the presence of joints even at deep levels.
3. Increasing depth of excavation increases risk of failure sometimes at an exponential trend. Deep excavation increases the likelihood of encountering joints. In addition, deep excavation can 'daylight' large blocks that become loose, and may remove 'keystones' with catastrophic consequences to nearby buildings.
4. If during excavation, a sizeable joint oriented in a particular direction (there are elaborate techniques to determine this) is exposed, an entire wedge of rock may fail, causing catastrophic damage to the Cathedral. There have been several instances when this happened in Malta, e.g. during excavation of Sliema car park, in St Paul's Bay, when two women died buried under rubble etc...
5. Globigerina Limestone is a soft rock and may deform in a brittle as well as ductile manner. Even if we are spared mass failure, creating a void will alter stresses in the rock and cause slow deformation which will increase damage to the Cathedral structure in the form of tension cracks (kunsenturi) in the church. This may ruin Mattia Preti's painting on the vault.
6. The excavation will alter the local hydrology ie. pathways taken by rain water in rock and may result in a localised temporary build up of water along the walls of the completed (damp sealed) underground structure. This increase in humidity will be disastrous for the Cathedral, causing increased salt crystallisation.

7. Core sampling, the system commonly used by MEPA is totally inadequate for a case like this as a fissure or joint can easily be missed. Similarly, more high-tech radar techniques cannot penetrate beyond a certain depth. The only reliable method of geological survey in cases such as these is an investigation trench that goes down the FULL DEPTH of the final excavation, however a four-storey trench is very unsafe and no geologist will risk his life to go down such a trench. Such trenches are usually about 5m deep, at most.

These issues are very delicate and cannot be concluded overnight e.g., it took years of study before a ground intervention on the leaning Tower of Pisa was concluded and surely St John's Cathedral is as precious to us as the Tower of Pisa. A superficial approach such as core sampling would be ludicrous and would ignore the complex and intense population of faults in the area. We cannot have that at St John's, especially since this is a masonry building unlike modern buildings with reinforced structures.

In conclusion I believe the level of risk being taken is too high and a risk assessment seems to be lacking. I am not at all convinced about the effectiveness of MEPA's EIA methodology for site investigation prior to excavation.

**Peter Gatt,
Geologist**