Conservation and Management of Historic Buildings
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Title: Conservation and Maintenance of the Old Boma Building in Bagamoyo (Tanzania).

By: Dr. Charles Lucian
School of Real Estate Studies (SRES)
Ardhi university (ARU)
P.O. Box 3516, Dar es Salaam, TANZANIA
Phone: +255 754 692494
Email: lucian@aru.ac.tz
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CONSERVATION AND MAINTENANCE OF THE OLD BOMA BUILDING IN BAGAMOYO (TANZANIA).

Dr. Charles Lucian, School of Real Estate Studies (SRES), Ardhi University (ARU),
P.O. Box 3516, Dar es Salaam, TANZANIA: Email: lucian@aru.ac.tz

Abstract

The importance of proactive and reactive maintenance of historic buildings to preserve their integrity cannot be overemphasized. Despite this recognition, a systematic maintenance approach is rarely adopted or implemented to most historic buildings. Maintenance theory currently exists, but the maintenance of historic buildings is always understated and is considered as a low-status. It is the purpose of this paper to explore the history, the values, legal protection, information and maintenance records of one of the significant historic buildings, the Old Boma in Bagamoyo, Tanzania. The paper also reports the pathology of the building and suggests the ways in which restoration should be carried out. In addition, the importance of addressing the maintenance plan properly is emphasized. Unless the maintenance of cultural heritage is well understood and given high priority, much of our culturally significant buildings will be lost to future generations

Keywords: historic building, heritage, conservation, maintenance, consolidation

1.0 Introduction

Conservation and management of historic buildings have always been a challenge in Tanzania. Conservation, as defined by many writers, is an action taken to minimize the deterioration and damage of heritage so as to avoid major restoration (Dobby, 1978 and Forster and Kayan, 2009). On the other hand, maintenance essentially means keeping the elements of a historic building functioning for as long as practicable, thereby preserving materials, craftsmanship and character (Petzet, 2004). At a minimum, a building should be maintained to a minimum performance level of Substantial Life-Safety compliance with the standards (Figure 1). The best practice for achieving the heritage conservation of a particular building should address both emergency and long term maintenance plan. The maintenance plan is for the reason of guaranteeing cost-effective way to maintain the value of the building. Furthermore, good maintenance is most effective when carried out regularly. Regular maintenance is the best way to ensure the continued conservation and future use of a building because less historic fabric is lost in regular, minimal and small-scale work than in disruptive and extensive repairs

Any historic building calling for conservation or consolidation should be thoroughly inspected and all necessary information about the building documented. Thereafter, conservation and management of the building should be related to the aesthetic and historic values**,** historical authenticity, identity, integrity of the building, and preservation of authentic patina of age, originality and surviving significant and original elements. The

traces of time and patina are important to the authenticity of the building. The original use is generally the best for conservation of the fabric, as it means fewer changes. During restoration, every attempt should be made to retain or restore as much of the original building fabric as possible so that the building continues to carry its original history.

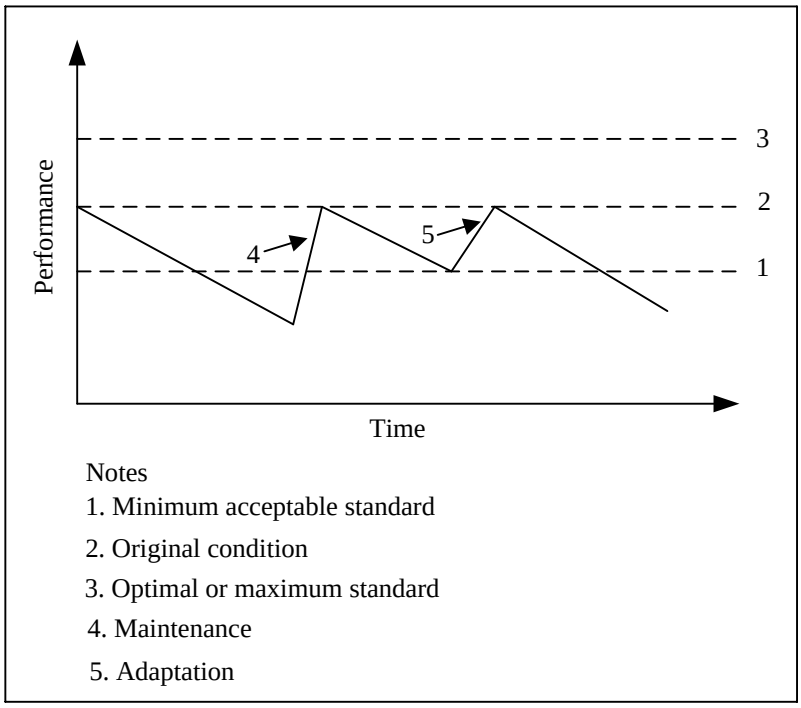

Figure 1: Influence of Maintenance and Adaptation on performance (Douglas, 2006).

2.0 Research methodology/approach

To gather useful information of this important historic building, this study employed interpretive historic research based on literature review and case study approach. To tackle this complex challenge, much effort was directed to a comprehensive review of existing literature, on-site examination of the property, extensive photographic documentation of the material features and condition of the building, mapping the building layout and landscape features of the property, in-depth archival research to reveal the history of the property and informant interviews and written narrative. The literature review was mostly acquired from published books, research papers, seminar papers and journals mainly from the archival records of the Department of Antiquities. It was from the archival records that consistent and accurate identification of historic record to form the base drawings for a proposed program of maintenance and conservation were obtained. The literature review was supplemented with the in-depth physical investigation of the building in question to go on with the building's history. The in-depth physical observations were carried out through site survey/pilot survey where data was obtained from a visual inspection of defects at its exact location or based on building elements. Measurements, construction details, foundation survey, identification of major alterations and documentation of condition of the building elements were detailed step-by-step with sketches and digital photographs where necessary.

3.0 Information about the building

3.1 History of the building

The Boma building is found in Bagamoyo district coast region. Bagamoyo is a small wonderful historic township located within a bay along the splendid sandy beach of unpolluted water of the Indian Ocean in Coast region, at a distance of approximately 75 km, north of Dar es Salaam. Bagamoyo is one of the most fascinating towns in East and Central Africa, with a myriad of historical associations with the slave trade that drew African societies into the international Economies and promoted exports and infrastructure. Also, it boasts as one of the east Africa's largest assembly of 18th century architecture. When the German East Africa was established in 1888, Bagamoyo was chosen as their capital. In 1895 the German constructed this building as the German Boma to serve as the colonial administrative headquarters of the first capital of the German East Africa and the residence of the German Colonial Administrator. In 1910 the Germans constructed a monument of killed German soldiers during the Bushiri War (1889) uprising in front of the building. The same building also served as the regional administrative headquarters for the British colony after the Treaty of Versailles (1919) stripped Germany of its overseas empire and gave Britain a mandate to administer all of former German East Africa under the supervision of the League of Nations, with the exception of Ruanda and Burundi, which were placed under Belgian administration. Under the British rule the building was altered and the German monument was demolished and the building received the name 'English Boma' meaning British Overseas Management Administration. At independence in 1961 the Boma naturally became the District Commissioners Office and received the current name 'the Boma of Bagamoyo' in Kiswahili meaning fencing an area. The district commissioner's office was located in the Boma until the heavy rain fell in 1997 followed by a heavy crash all over Bagamoyo when the balcony joists, collapsed under the heavy loads of water and after a long period of poor maintenance

The Old Boma of Bagamoyo is a two-storey impressive building constructed in a U shape floor plan with monumental symmetry and arrangement of the rooms and spaces (Figures 5 to 7). The building exhibits strong tangible evidence of colonialism in Tanzania. The architecture of this great monument is typical of German architecture mixed with a strong unique blend of Islamic-Arabic and vernacular techniques by this period. It was a sophisticated design of an authentic resemblance of neo-classical buildings of that time in Africa with high quality workmanship and materials available locally to meet climatic condition effectively (Figures 2, 3 & 4). It has thick walls constructed of coral stones, filled with lime mortar and plastered with lime. The building is supported on an old stone foundation partly covered with concrete from the renovation in the 1970s. The slabs are of a specific German type: I-beams with vaulted stone slabs. Following the roof leakage during British rule, the original pitched roof construction was extensively altered into flat roof, thus the roofline undoubtedly changed significantly, which created maintenance problems. The balcony to the building collapsed in 1997 due to heavy weight imposed by heavy downpour (Figure 8). The Boma has beautiful, handcrafted finest handcrafted wooden doors and windows. The windows are supplemented with glass panes in wooden

shutters internally. All in all, there are no major changes in the building structures, layouts, functions and values. Though heavily vandalised, it still mostly appears as it was originally constructed (Figures 5 to 7 & 9 to 10).

Figure 2: Front View of the Old Boma before the collapse of the Balcony

Figure 3: Right Side View of the Old Boma before the collapse of the Balcony

Figure 4: Left Side View of the Old Boma before the collapse of the Balcony

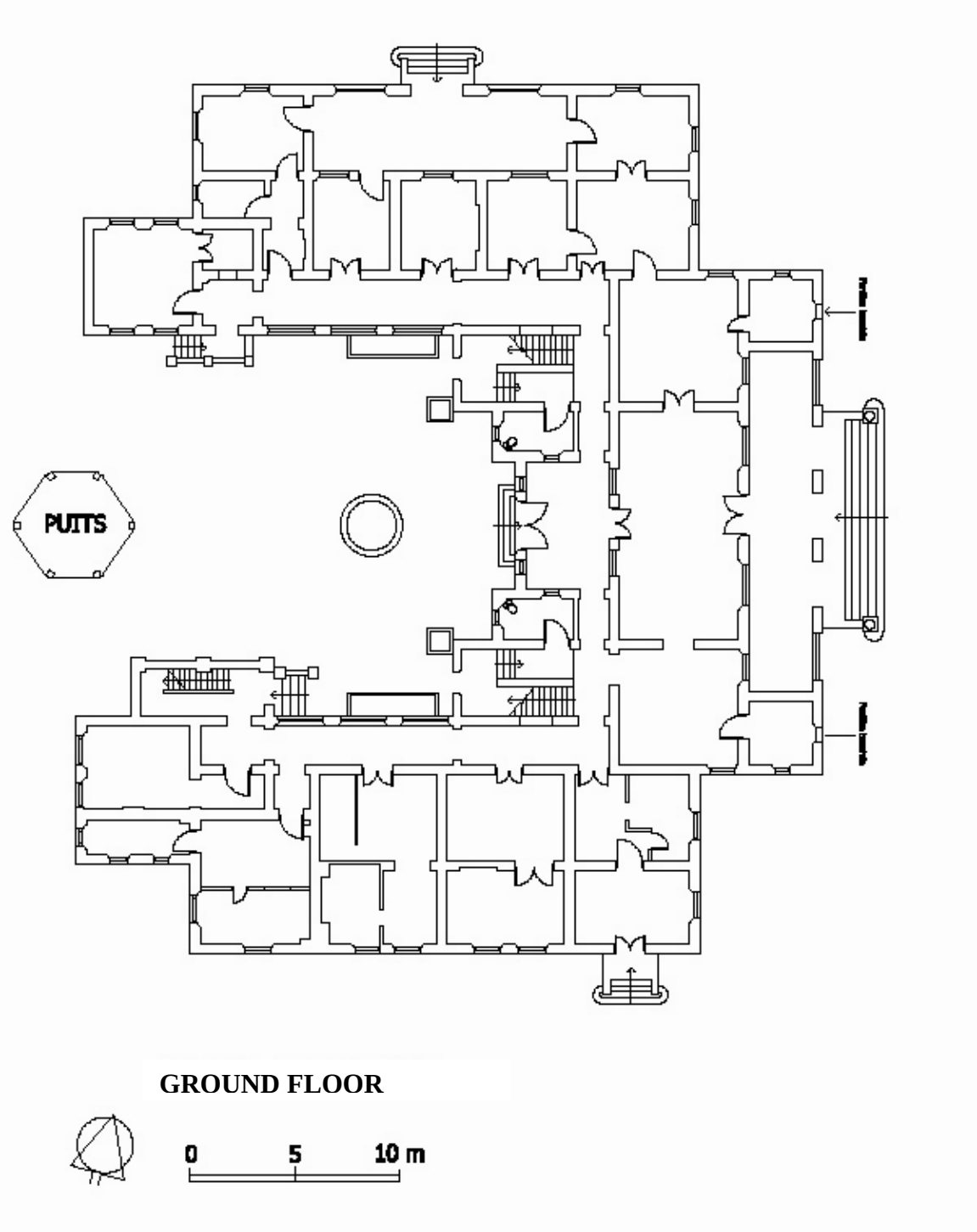

Figure 5: Ground Floor Plan of the Old Boma

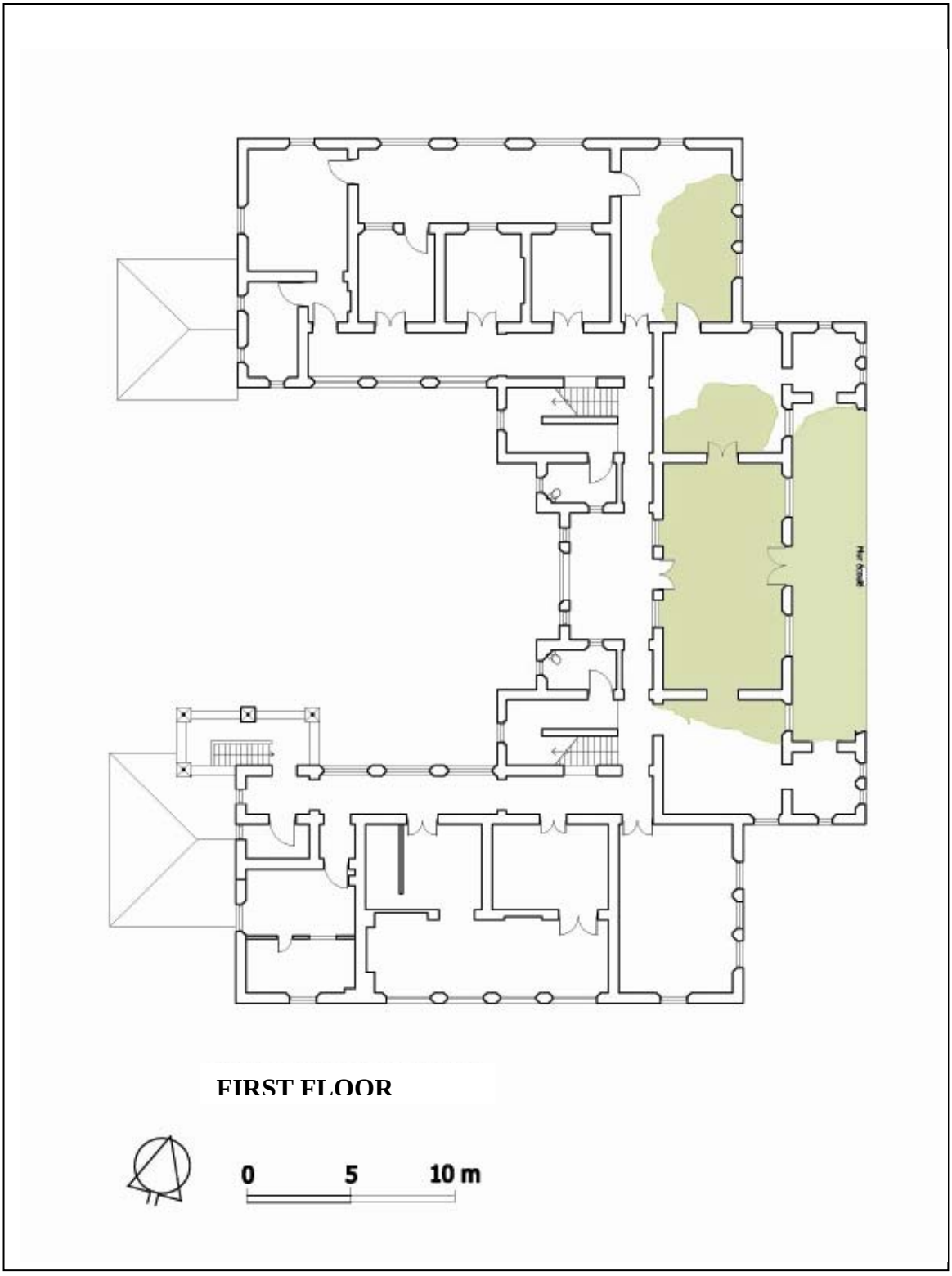

Figure 6: First Floor Plan of the Old Boma

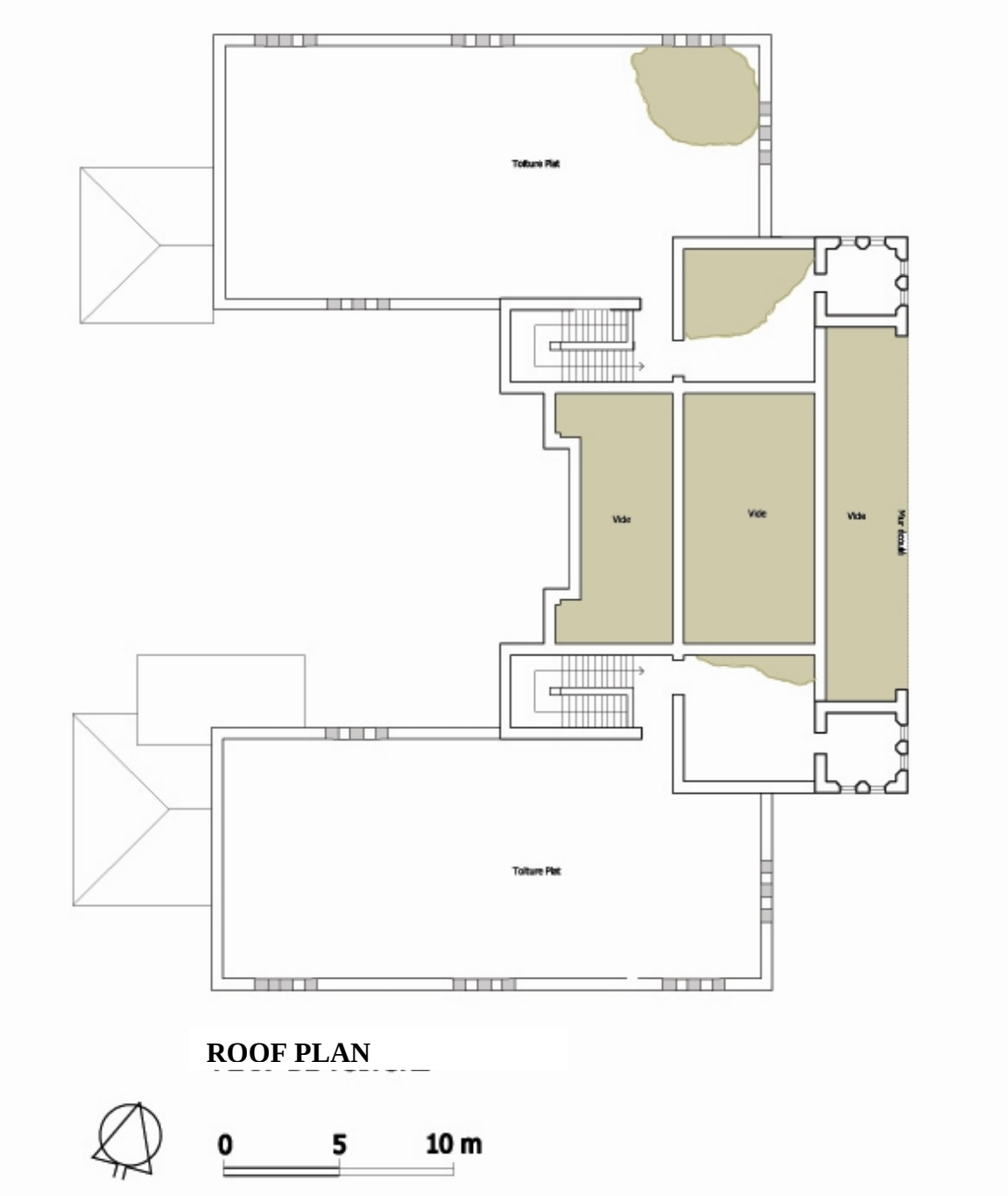

Figure 7: Roof Plan of the Old Boma

Figure 8: Front View of the Boma after the collapse of the Balcony

Figure 9: Front View of the Boma – Current situation

Figure 10: Rear View of the Boma – Current situation

3.2 Legal Protection

The national cultural heritage in Tanzania is conserved, protected and developed by the Department of Antiquities, a department in Ministry of Natural Resources and Tourism for the present and future generation and promotion of recreation and tourist attractions, and centres for education to the people. The preservation Act dates back 1964 and was amended in 1979 (published by UNESCO as the Protection of Movable Cultural Property, Collection of legislative texts) empowering the Minister to declare any place or structure of valuable national heritage for the historical, architectural, social, aesthetical or cultural value as a monument. Therefore, the building is protected with the national antiquities act of 1964 with its amendments of 1979 stating that " No person or institution whether beneficially, interested therein or not, shall do any of the following acts; destroy, injure or deface the same or make any alteration, addition or repair without a permission from the Director of Antiquities department". This means that the departments of antiquities has a big role on managing and conserving this building

3.3 Ownership and Uses

The Old Boma Building**,** like most of historic buildings in Bagamoyo, is owned and operated by the Tanzanian government. The Old Boma is presently deserted. However, after the consolidation in progress, the building can be used as a school to train craftsmen or a commercial centre (tourist hotel, museum or shops to small scale traders of arts and crafts).

3.4 Values

The Old Boma Building is one of the oldest standing stone structures in the conservation town of Bagamoyo. It is the very attractive structure that commands clear view of the Indian Ocean. As it has been stated before, it is the most notable reminder of the colonial

period used by both Germans and British as the first state house of the country. It also served as the District Commissioner's office after Tanzania gained its independence in 1961. Clearly, the building embraces a historical perspective in order to trace the pre-colonial**,** colonial and post-colonial independent historical values. Consequently, it represents European contact with Tanzania and European identity in the country. In addition, it binds the past and the future and provides visible evidence of the continuity between past, present and future. The building is the pedagogical in itself, thus the architectural style of that time, customs and lifestyle of the people and events associated with it and materials used can be visualized. Undoubtedly, the building has a unique archive material and it is well documented in the history of Bagamoyo town. It has a quality as a monument and cultural value in itself which evidently justify a comprehensive restoration and conservation.

3.5 Condition

The structure in case point has a very complex load carrying behaviour originating from continuous interaction of the massive and statically indeterminate walls penetrating into the sub-soil to save equally as massive foundations. The action loads are primarily carried in compression enhanced by the characteristics strength and stiffness of the materials in the massive walls aimed to disperse rather than concentrate forces. So far, the massive walls are still capable of resisting compression, tension and shear stresses from imposed load, self weight and wind loads. Luckily, the building was unwittingly overdesigned thus it has reserves of strength.

The building, like a host of other historic buildings in Bagamoyo, is badly neglected. It has therefore born too much stamp of wear and tear because of dearth of serious maintenance for centuries. The lime washed plastered walls have eroded and lost their outer skins in some areas due to the action of climate mainly wind, temperature and rain. Moreover, rain penetration has caused condensation and black mould and stains growth on the walls and slabs (Figure 11).

Most of the wooden features of the structures such as windows, doors, frames, sidings and their paints and finishes or colours defining the overall heritage value of the building are either extensively deteriorated due to decay, neglect and dry rot or completely missing due to vandalism. The windows have casements equally missing or broken (Figure 12). The slabs especially in the upper floor are badly damage to the extent that through holes and cracks are visible in some areas (Figure 13). The I-beams especially in the upper floor are deteriorated due to corrosion and extreme weathering (Figures 14 & 15). Several parts of the roof have completely collapsed (Figures 14 to 17).

The electrical systems and water systems are completely damaged and out of shape or vandalized. All fixtures and fittings are completely damaged or missing by vandals. In short, the building is beyond the minimum acceptable standard, thus endangered under threat of falling into disrepair if concerted actions are delayed. The decay has spiralled out of control and financial reach of the Government as a result of apathy neglect. The consolidation asks for multitude of millions to restore it to the original condition.

Figure 11: Condensation and black mould and stains growth on the walls and slabs

Figure 12: Deteriorated Windows

Figure 13: Damaged Floor with the Through Hole

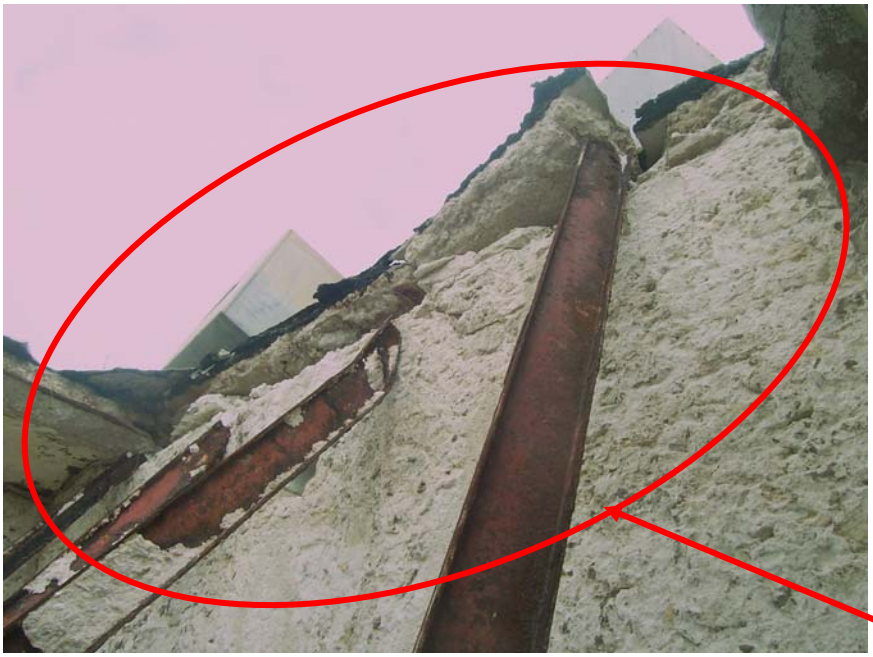

Figure 14: Part of collapsed Roof exposing corroded I-beams

Figure 15: Part of Collapsed Flat Roof

Figure 16: Fraction of Collapsed Flat Roof

Figure 17: Part of Collapsed Flat Roof to be replaced with Pitched Roof

Figure 18: Part of the upper floor slab completely under restoration

4.0 Description of Special maintenance Requirements

For many years the Boma has never received intensive restoration. In May 2009, the city of Humburg, Germany initiated and financially supported the restoration of the building together with the Ministry of Infrastructure Development in collaboration with the Ministry of Natural Resources and Tourism. The restoration run for two months and it stopped temporarily due to mismanagement. Before the halt of the restoration, the exterior worn out limestone and flaking plasterwork was imperfectly noted as a fundamental part for restoration. However, to respect the character and integrity of the original structure, materials similar to the original ones were used to fill the lacunae so as to preserve structural, typological and colour characteristic of historic renders. Some materials were obtained from the ruins of old deserted houses which are not listed by the government as part of our cultural heritage. This is in line with the Venice Charter which stresses the importance of setting, respect for original fabric, precise documentation of any intervention, the significance of contributions from all periods to the building's character, and the maintenance of historic buildings for a socially useful purpose (ICOMOS, 1966, BSI, 1998 and ICOMOS, 1999). The restoration was carried out by skilled local craftsmen under the supervision of specialized resident engineer in conservation. However, the restoration was carried out in absence of systematic restoration schedule and maintenance costs. It is our opinion that the maintenance plan should have started with the main load carrying structures such as walls, beam and slabs instead of minor work like face-lift.

After fortification of the property by strengthening the walls, beam and slabs, the parts of the collapsed roof should come next at the top agenda of consolidation. Already, props have been used to stabilize the floor and roof slabs during the consolidation. Some parts of the collapsed flat roof are to be replaced with the pitched roof covered with corrugated iron sheets (Figure 17). However, as a temporary measure, we recommend the whole roof to be temporary covered with the transitory pitched roof to guard the structure against adverse weather elements such as rain, sun and wind. Fortunately, already parts of the slabs have been completely removed and replaced with the new compatible materials (Figure 18). However, it is vital that the conservation of the entire slabs is executed to the letter rather than in piecemeal fashion as is the case in point. Furthermore, the deteriorated windows and door elements call for complete replacement matching the old in form and detailing.

5.0 Conclusion

Conservation of historic buildings like the Old Boma of Bagamoyo is very crucial for the preservation of our heritage. Before commencement of a coherent conservation plan it is imperative to identify among others the historical quality, knowledge and quantity values, the utility value, nominal value and symbolic value of the building. Mostly, the identification of the historical quantity values will raise a number of questions about construction details, authenticity, originality, reversibility, condition, patina etc. The identification of values combined with the prognosis of defects will provide a framework

for conservation or restoration plan. The conservation should as much as possible preserve most of the values of the building.

As it has been brought to light by this paper, the building in question calls for intensive restoration before the values attached to it are completely lost in disrepair. The restoration is already long overdue and therefore very costly, thus concerted efforts from various stakeholders are urgently desirable before it falls in complete disrepair. Unfortunately, conservation as well as maintenance plans attract little attention in Tanzania. Therefore, it is the central task for Tanzanian government and all stakeholders to collaborate together by sharing best practices, ideas and expertise in order to stimulate greater awareness of maintenance and conservation culture in the heritage sector and to increase confidence in the use of historic places.

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