

Date: 14 September 2021

KZN Amafa and Research Institute
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Email: beadmin@amapmb.co.za

RE: PROPOSED DEMOLITION TO ACCOMMODATE NEW STUDENT HOUSING DEVELOPMENT AT 101 BOTANIC GARDENS RD, PORTION 12 (OF 2) OF ERF 2292 DURBAN & 105 BOTANIC GARDENS RD, PORTION 2 OF ERF 2292 DURBAN.

Please find below report to read in conjunction with Application form A (Structures) and application for 99 Botanic Gardens Road.

C. SIGNIFICANCE:

1. Original date of construction:

Little documentary evidence of the original construction of the building is available comprised a conjoined and mirrored construction for 101 and 105 Botanica Gardens Rd. While currently separately registered properties since 1923 the original deed of erven is dated 1899.

The oldest plans of the building on record at eThekweni Municipality for 101 Botanic Garden date back to alterations and additions approved in 1999 but notable errors are evident in respect of the description of adjacent properties as well as the description of the two floor plans. Given the dates of previous title deeds it appears likely that the existing structures date back to at most 1923 making the age of the building approximately 98 years.

105 Botanic Gardens like number 101 has no drawings on record available other than that for a boundary wall addition approved in 2005.

2. Historical Significance:

The buildings in their current form, functions as student housing having been used as business residence prior to that and residential dwelling originally. Other than the age of the building no specific evidence can be found to support the historical significance as defined by the value it adds to the pattern of history of the macro or micro context and environment.



The following applies to 105 Botanic Gardens:

- The structures and property are not protected in terms of Section 42, 43, 44 of the KZN Amafa and Research Institute Act (5 of 2018)
- The structure is not a listed and permanently protected structure
- The structure is not a heritage landmark
- The structure is not a provincial landmark
- No special protections in place

The following applies to 101 Botanic Gardens:

- The structure is a listed and permanently protected structure identified in the City of Durban, Town Planning Scheme Regulations, Appendix 7, Annexure B
- The structure is not a heritage landmark
- The structure is not a provincial landmark

3. Architectural Significance:

The building form and articulation is typical of that characterising a substantial number of late Victorian/Early Edwardian style of residential dwelling units developed in the early 1900's on the Berea.

The architecture of the combined facades of 101 and 105 are typical of the Union period in vernacular style. It is noted that at the time of listing the building was identified as not being intact with partial architectural significance relating to intrinsic design, building type, style and detailing with no significant value as it pertains to environmental and context, local technologies and condition.

The building was characterized by an *“expressed stairway, front veranda and a parapet with pediment”* (Professor B. Kearney, 1984), and at the time of assessment noted as *“not intact”*.

The original architecture of the building defining characteristics has been largely and marred through various alterations and additions untrue to the original style, damage by the elements & building occupants, lack of maintenance and general disrepair. In addition, there is no specific and identifiable cultural identity that can be traced.

Some of the elements characterising the original architecture are tabled below and current status are as follows:

Original	Existing
Plastered copings, cornices, mouldings, walls	The most prominent effect of the disrepair and lack of maintenance is to the plastered finish to all external walls.
Front door and fanlight, sliding sash windows including cills. Plastered details including quoins, string cornices, cornices, mouldings, pilasters, entablatures, door and window cases, pediments and parapets.	Combination of original timber sliding sash and side hung hinged casement and casement cottage pane timber windows most of which are borer infested or have rot in addition recent additions include aluminium casement windows. Roof parapets still in place however the structural condition of these is considerably compromised.
Triangular pediment gable rising above the roof slab over the central entrance to each unit.	Gable still remains with noticeable surface damage.

Vertical bias design and construction	Existing structural walls remain but some particularly to the rear of the units show considerable cracks & leaks arising from foundation settlement, delamination of roof slab waterproofing and poor builder's work.
Verandahs with precast concrete columns of Tuscan Doric form running the length of the front façade.	Asbestos roofed veranda now enclosed on 101 to form rooms retaining only an access to the front door of each unit. Classical colonnade and front space with boundary wall obscured by the addition of window and fences to the later.
Symmetrical arrangement of windows flanking the entrance and side elevations.	Enclosure of the veranda on 101 has compromised the original symmetry.
Front door flanked by adjacent windows and fanlight above.	Timber doors remain but largely borer infested.
Mirror image side and rear elevations	Various alterations and additions have rendered most of the original symmetry defining building character obsolete.
Timber staircase access to roof	Staircase in 101 removed and staircase in 105 substantially rotten, presenting a health and safety risk.

3. Urban Setting & Adjoining Properties:

The properties are situated at 101 & 105 Botanic Gardens Road, Berea, Durban and in addition to 99 Botanic Gardens are owned by a single owner.

The urban setting is characterised by low to medium density residential apartment buildings, converted residential homes now operating as boarding houses and business premises as well as some remaining residential dwellings on a busy arterial route linking mixed use areas on both sides of Berea Rd. While the Berea style as well as late Victorian and early Edwardian style architecture is evident in some of the remaining properties along this street the evolution of the area over the years has also resulted in the development many block of medium density blocks of flats of more recent construction.

The sites are within 200m walking distance to Durban University of Technology (DUT) Steve Biko Rd Campus, 1.3km to DUT ML Sultan Campus, 3 km to UKZN Durban Campus, 350m to Chris Ntuli/Berea Rd, 1.1km to the Warwick Triangle and 700m to Musgrave and Berea Centre respectively. The urban and social character is largely defined by the proximity to the various tertiary institutions and resultant large resident student population.

In terms of the current General Land Use Management regulations all sites are zoned General Residential 2. Both sites have an existing 50% permissible development coverage and 1.2 permissible floor area ratio.

A narrow rear panhandle lane forms the access from Botanic Lane past no 105 to no 101 and 99.

101 Botanic Gardens Rd:

The Site is comprised of a single land portion of 297m², being the remainder of Portion 12 of Erf 2292 of Durban. Located on the Berea within 2km to the CBD the site is bounded by 105 Botanic Gardens to the North East and 99 Botanic Gardens to the South West. The dominant façade is orientated North West on Botanic Gardens Road while the vertical length abuts 105 and the exposed South West elevation is within

1500mm of the boundary to number 99. The existing building covers approximately 41% (121m²) of the site and a floor area ratio of 0.77 (236m²) of the permissible 1.2 (356.4m²).

105 Botanic Gardens Rd:

The site borders the corner of Botanic Gardens Road and Botanic Lane and is comprised of a single land portion of 457m² of which 181m² forms part of the Botanic Lane, road reserve. The existing building covers approximately 27% (121m²) of the site and a floor area ratio of 0.77 (236m²) of the permissible 1.2 (548.4m²).

D. PROPOSED WORK:

2. Motivation for proposed work:

Having purchased the properties at 101 and 105 Botanic Gardens Rd in addition to 99 Botanic Gardens Rd in their current state of disrepair in 2019 and 2020 respectively the Clients intent is to consolidate the three sites to develop a quality medium density Student Housing complex in keeping with the scale and density of the existing surrounding residential development and in line with the regulations as set out in the policy approved in July 2019 by the eThekweni Municipality's Economic Development and Planning Unit and fully compliant with the Higher Education Act, 1997 (Act No. 101 of 1997), The Policy on the Minimum Norms and Standards for Student Housing at Public Universities.

Under the existing zoning of General Residential 2 the development of “Boarding House” for which student housing is classified, is permitted under the primary use without the need for any special consent applications other than that of Amafa in respect of the demolition, alterations or additions to the existing structures.

Therefore, the objective of this application is to determine the feasibility of an approval for the complete demolition of the existing structures in order to proceed with a design proposal to responsibly maximise the development potential across the three adjacent properties of 99, 101 and 105 Botanic Gardens Road.

The eThekweni Municipality policy’s objective is to *“help house students closer to their respective campuses; provide management tools for the municipality to be able to better facilitate and manage the provision of private-sector student accommodation; ensure that the design of new student accommodation does not degrade the privacy and amenity of abutting residential land uses and respect the existing character of the area; to provide appropriate parking for student accommodation and ensure student accommodation embodies principles of good urban design, sustainability, affordability and durability.”*

The Client wishes to ensure full compliance for safe occupation and provision of quality built and social environment that does not compromise any bylaws or compromise the environment and streetscape etc. To this end careful SWOT analysis has been undertaken by the appointed professionals to date. The following strength and opportunities have been identified and it is the intent that these will be used to inform any design proposals going forward.

Strengths:	Location	Ease of access to DUT, ML Sultan and UKZN campuses, public transport routes, supermarkets and malls & CBD
	City strategic plan	Within an area earmarked by the city for student accommodation development.

	Applicable present	In the immediate context of similar development/building uses.
	Area	High demand area.
Opportunities	Meeting demand/need	The nature of the development addresses a need and demand for student housing.
	Affordable housing	Affordable but quality student housing accommodation.
	Improved aesthetic	Opportunity to create a building/s which improve the existing aesthetic and character of the area.
	Improved urban fabric	Opportunity to respond albeit with a new building to elements of the historical context of the area in respect to the relationship to the street edge in order to support improved visibility and active street edge space.
	Sustainable design	Sustainable design solutions to reduce ongoing maintenance costs and improve general efficiency of the building operation.
	Appropriate environment	Development which offers and improved environment which supports student learning, living conditions and access to amenities.
	Precedent	Opportunity to be a catalyst project and set a positive precedent and standard for developments of a similar nature which are otherwise occurring without the necessary stakeholder engagement, approvals and regulations.

The SWOT Analysis and conditional assessment has also highlighted a number of concerns relating to the existing building structures. The findings of the conditional assessment are as follows:

- The existing timber floors, and substructure are extensively rotted and borer infested and in the majority of the areas on the Upper Ground Floor have been replaced with plywood boards while the original timber joists below remain.
- The existing staircase in 105 Botanic Gardens does not comply with the current SANS 10400 building regulations in terms of the structural design, fire and public safety. There is no longer a staircase remaining in 101 to access the roof and the opening in the roof slab currently leaking.
- Deflection in the rotting and borer infested timber roof structure over the veranda and enclosed balcony members is causing the asbestos sheeting above to move, sink into low spots, in some cases resulting in cracks causing water ingress. Timber roof structure designs are typically done for a maximum of 20 years, and these trusses have been standing for much longer and have therefore exceeded their lifespan for appropriate "repair" while the asbestos presents a health and safety risk due to the movement.
- The current nails that have been used in all timber trimmings and structure are rusting thereby causing further concern regarding the structural integrity.
- Barge boards to front veranda delaminating and rotting, pvc gutters warped, cracked and loose.
- Evidence of substantial vertical shear cracks on existing walls and in particular the dividing wall between 101 and 105 as well as across the roof slab. Repair work will require deconstruct of the relevant walls which will likely compromise the overall stability of the structure and this will be highly labour and cost intensive.

- Repairs of the nature described above cannot be guaranteed and therefore poses a risk for compliance for the building overall.
- Significant foundation settlement to the rear of the property.
- High water table in the area and the existing lower ground floor areas display considerable damage from rising damp through the slab and horizontal ingress through the foundation walls. Piling is recommended for any new development on the sites for which the vibrations made affect the existing buildings causing further structural damage therefore the associated costs are variable and unfeasible.
- Cracks to roof slab and delamination of the existing waterproofing.
- General concern for health and safety and fire risk due to the existing partitions, poor ventilation, building failure and high occupancy levels of students in the existing buildings.

3. Detail the alterations/additions/restorations proposed:

The following drawings of the proposal refer:

D21-001-0000: Site Plan & Area Schedule

D21-001-1000: Basement & Ground Storey Plan

D21-001-1001: First & Second Storey Plan

D21-001-2000: Sections

D21-001-3000: Elevations & 3D Views

This application seeks approval for complete demolition of the existing structures with a view to developing across the sites for the creation of a new 4 storey, 140 bed student residence.

The new proposed basement level housing limited student parking (13 bays), laundry and garden areas in addition to 9 double x 1 x single rooms, common kitchen and ablution facilities is intended to replicate the existing lower ground level resulting in the height of the building from the dominant façade of Botanic Gardens Road, rising a total of 2 storeys above ground level and thereby relating in scale to the surrounding medium density residential apartment blocks.

The building is conceptualized as a courtyard development over no 99, 101 and 105 Botanic Gardens, provided that a notarial tie or consolidation of the sites in approved in due course. Two blocks containing modular student rooms compliant with the Higher Education Act, 1997 (Act No. 101 of 1997), The Policy on the Minimum Norms and Standards for Student Housing at Public Universities, will flank a central courtyard off which common required student housing facilities, vertical circulation routes and secure entry/exit points will be located.

The design proposal is done in compliance to all the current development constraints in particular a 7.5m setback from Botanic Gardens Rd, which provides the opportunity for the provision of open garden area/social space along the street edge.

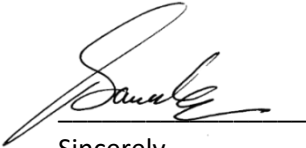
All rooms bound an external perimeter wall ensuring that all spaces will have access to natural light and ventilation thereby eliminating the need for energy intensive mechanical systems. The building envelope is a simple masonry frame comprising concrete columns, supported on piled foundations, suspended slabs and masonry brick walls of which those internally will be plastered and painted while external facades articulated to include a combination of exposed satin face brick, plaster and paint as well as feature textured wall over the front entrance which is defined by a steel pergola with timber lattice frame. Charcoal powder coated aluminium framed windows with top hung opening sections will punctuate the facades with horizontal aluminium louvres shading the north west. The building will be topped with a timber roof structure and profiled prepainted roof sheeting.

While the proposed development poses some challenges, we believe the opportunities for the development of the site outweigh any challenges as these can be overcome with proper risk mitigation at each stage of the project.

TJ Architects (Pty) Ltd has extensive experience in the design and management of student housing developments in keeping with the Higher Education Act, 1997 (Act No. 101 of 1997), The Policy on the Minimum Norms and Standards for Student Housing at Public Universities.

The site development proposal in due course will be further developed to further improve significant urban fabric, addresses specific user needs and requirements and mitigates all risk for occupants and neighbours. All done in a manner intended to drastically improve sense of place and space, support operational efficiency, enhance the aesthetics and improve overall function while balancing compliance, cost and time-

We trust that this meets with your approval.



Sincerely

Jodi Davids-Harber (Pr.Arch 20897)

For and on behalf of TJ Architects (Pty) Ltd

References:

- *National Resources Heritage Act No, 1991 (Act No.25 of 1999)*
- *Michelle Jacobs & Brian Kearney, The Berea Style: The Architecture of William Murray-Jones and Arthur Ritchie Mckinley including the Brazilian Journal of Murray-Jones, Durban Heritage Trust, 2018*
- *City of Durban, Town Planning Scheme Regulations, Appendix 7, August 2009*
- *Brian Keaney, Sense of Fashion! Victorian Architecture in Durban, Natalia v14 article p69-86, <https://natalia.org.za>, accessed: 03 September 2021*