Bokkemanskloof Estate Design Manual Guidelines

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. Introduction

Bokkemanskloof Estate is now fully established and all erven have established homes built. Key challenges are to manage alterations and additions, ensuring that the estate is not densified to the detriment of open green areas and ensuring a sustainable environment. The guidelines and procedures set out in this document provide the framework within which site development and building applications can be evaluated. Compliance with these guidelines will ensure that home owners will enjoy the benefits of a well organised, secure residential area, ensuring sustainable property values and a sustainable environment.

The guidelines set out in this document are additional to any regulations or by-laws of the local Authority. All structures must comply with the National Building Regulations as prescribed in Act 103 of 1977. The Bokkemanskloof Home Owners Association reserves the right to alter or amend the design manual, if necessary, to retain the visual integrity of Bokkemanskloof Estate. All amendments will be approved by the Local Authority.

1. Application of guidelines

All Site Development Plans (SDP's) and building plans will be evaluated against the Bokkemanskloof Estate Design Manual.

2. Role of the Home Owner

The role of the homeowner is to ensure he or she complies with the intent of these guidelines in respect of the residential property and use and that property developments enhance the distinct character of the residential estate.

3. Role of the Architectural Sub Committee

An Architectural Sub Committee (hereafter referred to as the ASC) will be established in accordance with the procedures as set out in the Bokkemanskloof Constitution of the Home Owners Association (hereafter referred to as the HOA). The responsibility of the ASC will be to evaluate development applications in terms of the Design Manual. Once a building is completed in accordance with relevant rules and standards, the HOA take over and assume all functions of the ASC. The ASC will not have the power to change the guidelines. Where deviation from the guidelines is proposed in any given situation, Section D must be followed.

To ensure a representative, unbiased and well informed ASC, he ASC shall consist of (1) the estate architect or an approved professional architect; (2) the estate manager and (3) at least one representative from the Trustees.

4. Role of the Home Owners Association

The estate will be managed by a HOA whose structure, formation and responsibilities are set out in its Constitution. The proposed guidelines are supplementary to the rules, regulations and conditions set out in the Constitution and also to any other rules, regulations or conditions established by it from time to time. According to the rules set out in the Constitution, the HOA reserves the right to alter or amend the guidelines from time to time to maintain the environmental quality and distinct character of the residential estate. Any changes or modifications of the guidelines will have to be submitted to and approved by the local authority, as they may have an impact on the surrounding areas.

5. Role of the Local Authority

The final approval of all building plans (after endorsement of the HOA) lies with the Local Authority.

B. Plan Approval Procedures

1. General

- 1.1 No exterior façade, exterior windows and doors, roof or boundary wall of any building on the estate may be erected or altered without the approval of the ASC.
- 1.2 In the case of interior alterations the owner must comply with Section C of this document and any existing regulations or building bylaws with regard to such alterations. The ASC however, has the right to request a plan. Interior renovations must adhere to all requirements of Section 3 and must be in accordance with the standards of design prescribed by the ASC whether such plans apply to new or existing buildings.
- 1.3 All plans for the construction or alterations to buildings must be prepared by a professional architect, registered with the South African Council for Architects (SACAP).
- 1.4 Approval of plans by the ASC or HOA does not in any way absolve the owner from any legal requirements pertaining to building operations on the property.
- 1.5 Applications for rezoning, subdivision, consolidation or any change of land use applications must followed the rules and regulations as described under Section D.

2. Requirements for plans to be submitted

The following plans and documents are to be submitted to the ASC for approval, prior to submission to the Local Authority:

Stage 1: Concept Approval

- SG (Surveyor General) Diagram of site
- Title Deed
- Site Development Plan (SDP) with landscaping, boundary walls, swimming pool, guest parking and owners' parking areas indicated
- 2 copies of the Concept Design including 2D plans and elevations

Stage 2: Council Plans Approval

- 5 Coloured copies of final council plan drawings (one to be retained by the HOA)
- Schedule of finishes and materials
- Completed Checklist for Plan Compliance

3. Plan Approval Process

- a. <u>Annexure B</u> illustrates the required steps in the plan approval process.
- b. All documentation is submitted to the HOA, who forwards them to the ASC.
- c. A scrutiny and approval fee is payable to the Estate Architect as determined by the HOA.
- d. Stage 1 and 2 documentation may be submitted in one step. If all is in order, the ASC will approve the drawings and forward them to the HOA for its stamp of approval.
- e. The ASC may approve the plans unconditionally, requests amendments or approve a deviation (under certain conditions and with all affected neighbours approval of the deviation) from the guidelines from the HOA.
- f. The applicant will receive notification within one (1) week of the approval or if amendments are required.
- g. The ASC reserves the right to request any changes on design or finishes that may be needed in their exclusive opinion to enhance the environmental quality, or preserve the architectural style of the estate. Should this be requested, the amended plans should be resubmitted to the ASC for scrutiny. A decision regarding any dispute arising from the above point will be submitted to the HOA for a final decision.

- h. An applicant may apply for deviations and should strictly follow the process described in <u>Section D</u>.
- i. The applicant submits the final council plans that carry the stamp of approval from the HOA to the Local Authority for approval.
- j. Once all plans are approved and regulations in terms of the pre-construction phase are adhered to, construction may commence.

C. Development Rules and Regulations

1. Building Life Cycle Code of Conduct

1.1 Pre-Construction Phase

- A homeowner shall notify his or her neighbours 24 hours in advance of intended construction activity and expected noise levels, to enable neighbours to make alternative arrangements for the day.
- Existing trees, not interfering with proposed foundations and/or structures should be protected, especially during construction. Removal of existing trees will only be done with the prior written approval of the HOA.
- The contractor will provide the HOA with a list of all sub-contractors and their employees who will need access authorisation during the construction period. The said list must be updated regularly.
- 4. A vacant property must be cleaned and maintained on a regular basis to the satisfaction of the HOA. If not, the erf will be cleaned by the HOA at the expense of the owner.

1.2 Construction Phase

1.2.1 Access Control, Security and Contractors Conduct

 The contractor and/or subcontractor shall be responsible for the conduct of all persons in his employ during construction. The HOA deserves the right to deny any of the abovementioned persons' entry into the estate (temporarily or permanently) due to violation of the rules and regulations as thus stated or of the constitution. This includes violations of traffic rules and regulations imposed by the HOA.

- 2. All the contractor's and/or subcontractor's workers should enter the estate in an approved vehicle with a temporary access token. Contactors should have a name and ID number list of all their employees on site at all times.
- 3. Deliveries of supplies will be restricted to normal construction hours.
- 4. Should the HOA have any concerns with regard to the conduct of a contractor and/or subcontractor, the HOA may act as it deems necessary. It deserves the right to, after written notice, to suspend building activity until the undesirable conduct ceases. The owner, contractor and/or sub-contractor will have no recourse in the matter.

1.2.2 Construction times

- 2 Construction activity (including sawing, grinding and hammering) is only allowed from 8h00-17h00 on weekdays and is not permitted during weekends or public holidays. No construction will be allowed outside of these times, unless by prior written arrangement with the HOA and permission of neighbours. Application must be made at least (one) 1 week prior to the applicable date.
- 2 At any time outside of the normal construction hours as stipulated, the contractor is allowed one representative on site to act as watchman. This representative should have the proper I.D. to be obtained from the HOA.

1.2.3 Site Preparation and Protection

- 1. A temporary storage shed or outbuilding for materials and supplies may be used in connection with and during construction of a building, provided that it is removed from the property immediately after construction. The said store/outbuilding must be approved by the ASC.
- A portable toilet must be delivered for use by workers on site and must be placed out of sight.
 Estate ablutions may not be used by construction workers.
- 3. Reasonable cut and fill will be permitted according to the discretion of the ASC. Materials utilised for bank stablisation must be approved by the ASC.
- 4. Construction impact must be kept to a minimum. Erosion on site must be prevented by installing and maintaining erosion controls and by promptly replanting or covering cleared areas.
- 5. Limit soil compaction on site by clearly demarcating storage, parking areas and pathways and covering soil with wood chips or wooden bridges if needed. Boundaries of areas to be cleared and graded must be clearly marked.
- 6. Prevent damage to trees identified on the SDP and other valued natural features e.g. streams, plants or rocks. Fence off these priority areas (including the root zones of identified trees) to exclude people, trucks and materials and protect them from soil compaction and damage caused

by trenching, excavating, grading and stockpiling of soil or materials. <u>Refer to Annexure H: -</u> <u>Protocol For Protecting Trees During Construction.</u>

7. Potable water may not be used to dampen building sand and other building material to prevent it from being blown away' (City Water By-law Schedule 2, Water Demand Management).

1.2.4 Waste management

- No builders' rubble or construction waste shall be buried on site or in surrounding areas and will homeowners' will be liable for fines should their building contractors be found guilty of such an offence.
- All building and other rubbish must be removed in rubbish skips to be provided by the contractor.
 Rubbish must be removed at least once a week.
- 3. All construction and demolition waste should be reused, recycled or returned to manufacturer whenever possible.
- 4. The creation and use of hazardous materials/wastes on site must be minimized e.g. used motor oil, paints and solvents. Separate them from other waste streams and dispose of them safely and legally.
- 5. The disposal of pesticides, insecticides, weed killers, petrol, motor and vegetable oils, acids, paints, organic flammable solvents (turpentine, thinners etc) to the sewer or stormwater system is not allowed (from the City Waste-water By Law).
- 6. Each owner shall ensure that reasonable measure be taken to reduce dust, noise, effluent or waste pollution that may affect adjacent properties.

1.2.5 Protection of Estate property

- 1. Each owner shall ensure that all reasonable measures are taken to prevent damage to roads through any act or omissions of the contractor on site.
- 2. Materials off-loaded by a supplier must be moved onto the site by the contractor/subcontractor, ensuring that no materials are left on pavements and/or roadways.
- 3. Rubbish or sand washed onto the abovementioned areas must be removed after each day of construction.

1.3 Post Construction Phase

1 The repair of any and all broken kerbs in construction of an entrance is the responsibility of the owner.

- 2 1.3.2 The owner shall be responsible for damage to plants on the sidewalks and/or damage to private or estate property.
- 3 1.3.3 All building boards must be removed within one (1) week of completion of building activities.
- 4 1.3.4 Failure to remove building rubble from a stand within two (2) weeks of completion will be deemed unreasonable and is the responsibility of the owner.

1.4 De-commissioning Phase

In the event that a building is to be demolished, the owner shall apply for permission from the ASC and HOA and submit relevant plans. The rules and regulations under the Construction Phase need to be carefully followed.

1.5 Refundable Deposit

Owners are referred to 8.2.4 of the Constitution. No plans shall be approved by the Consultant or the Trustees without payment of the required deposit.

2. The Erf

2.1 Landscaping

- 1 Reasonable cut and fill will be permitted according to the discretion of the Consultant. Materials utilised for bank stabilisation must be approved by the Consultant or the Trustees.
- 2 Excavated soil should be used for building or landscaping whenever possible rather than being removed from site.
- 3 All trees identified on the site diagram to be retained may not be removed.
- 4 Residents are encouraged to plant indigenous trees, shrubs and grasses in their gardens. The planting of invasive alien species is discouraged.

5 Alien vegetation occurring on the site that is listed in the Prohibited Alien Vegetation List (Annexure E) of the Estate, or listed as Category 1 prohibited plants in terms of The Conservation and Agricultural Resources Act (CARA) Act 43 of 1983, must be eradicated by the owner and maintenance carried out at reasonable intervals. For the management of existing alien plants or the planting of new alien plants, the Conservation and Agricultural Resources Act (CARA) Act 43 of 1983 is to be followed. 6 Planting within the private property should compliment public area planting and the planting in abutting areas.

2.2 Boundary fencing/Walling

- 1 No boundary wall may be built or renovated without submission of a plan and elevation to the ASC and approval by the HOA.
- 2 All plans must be accompanied by a SG diagram.
- 3 Boundary fencing will consist of a material approved by the ASC. No pre-cast walling of any nature will be allowed. The height of street frontage boundary fencing will be limited to 1.8m and side boundary fencing to 2.4m
- 4 Not withstanding HOA approval, all boundary wall plans must be submitted to the Local Authority if required.
- 5 No boundary wall may be higher than 2.4m on side boundaries and higher than 1.8m on street boundaries.
- 6 No boundary pegs may be removed from any owners' property as per Local Authority regulations and boundaries are to be respected at all times.

2.3 Vehicular access, parking and driveways

- 1 All driveways shall have a paved, stable, permanent surface. Please refer to Annexure A for allowed finishes and materials.
- 2 Each driveway shall lead to a lock-up parking garage for a minimum of one car and/or parking area on the erf for a minimum of two cars and a maximum of four cars.
- 3 Visible carports must be approved by the ASC within the framework of the total design of the residence and aesthetical quality of the area. No shade netting is permitted.
- 4 It is required that at least one off road visitor's parking bay should be provided on site in addition to adequate parking for the owner. This may be achieved by setting back the carport, garage or front gate to 5.0m from the carriageway or road kerb.

2.4 Swimming Pools

- 1 Swimming pools are to be constructed to the National Building Regulations.
- 2 The outside edge of any pool deck, sun terrace, or paved surfaces may not be closer than two (2) metres from any erf boundary.

- 3 Fencing of a pool area on the street or public area frontage must be in harmony with architectural design of the dwelling. No sparred steel fencing will be allowed.
- 4 Any pool area otherwise accessible from public areas must be provided with a childproof and self closing locking gate.

2.5 Boreholes

Should a homeowner wish to install a borehole on their private property, written approval is required from the Bokkemanskloof Home Owners Association and City of Cape Town before any installation work may commence or water may be extracted.

Permission must be obtained by following the below steps:

- The homeowner should establish as best he can whether there is water on his property by consulting a hydro-geologist or water diviner. This will give him an approx idea of position, depth and possible yield of the borehole This information is required by the city council. (<u>http://www.capetown.gov.za/City-Connect/Apply/Municipal-services/Water-and-</u> <u>sanitation/Apply-to-sink-a-borehole-or-wellpoint-or-use-an-alternative-source-of-water</u>)¹
- 2. The homeowner then needs to apply to the city council for permission to sink a borehole, in terms of council regulations. There is a standard laid down process for this.
- 3. Once this permission is granted the homeowner can seek permission from the estate and in doing so the homeowner needs to satisfy the Trustees that certain specific estate requirements have been (and will be) met. These are:
 - I. Provide a guarantee in writing that any damage to the road surfaces or curbs incurred by bringing the drilling equipment into the estate will be borne by the homeowner.
 - II. Drilling machinery may only be operated between the hours of 9am to 6pm Mondays to Fridays and 9am to 1pm on Saturdays. No operation of equipment is permissible on Sundays and Public Holidays.
 - III. Only electric pumps may be used for the operation of the borehole strictly no oil/diesel fuelled pumps to be used at any time. (This is to limit noise and air pollution in the estate)
- IV. Submit details in writing of all the water saving strategies that they have employed within their property (together with pictures of such water saving devices installed on their property
- 4. Once the borehole is complete and fitted with a pump it needs to be registered with the city council, a meter must be fitted and a sign to the effect that borehole water is being used on the property needs to be prominently displayed. Also accurate records must be kept of borehole water usage which records must be available for inspection by city council inspectors .This is all in terms of council regulations.

(http://www.capetown.gov.za/City-Connect/Register/Water-and-sanitation/Register-a-borehole)²

The National Water Act of 1994 as amended in 2014 and Chapters 8 & 10 of the Water By-Law - Reference points 1, 2 and 3

The intention of the BHOA's oversight of borehole installations is: (i) ensure that homeowners have employed suitable water saving strategies before seeking to utilise ground water; & (ii) to manage the use of ground water by the entire estate in order to minimise our combined impact on the natural flow of ground water necessary to maintain a healthy ecosystem both inside and outside of our estate. The estate also needs to ensure that all laws and regulations set out by council and the land are also observed³.

3. The Building

The following section must be read in conjunction with the architectural "envelope" which has been developed for the placement and maximum height of all dwellings to be erected. Architects must take cognisance of the said envelope when designing a specific dwelling and this will form the basis of all building plan evaluations and approvals.

Dwellings to be erected must in all instances "fit" within the said envelope, but will exclude chimneys integral with the specific design. Any deviations from the said envelope will be evaluated on merit by the ASC.

All buildings shall conform to the Rules and Regulations of the National Building Regulations and/or any other By-laws of the Local Authority, including requirements laid down by the NHBRC for this development.

3.1 The Design Process

A systems approach, inclusive of green and passive design measures is promoted and supported.

3.2 Architectural styles

The broad description of the architectural character (s) to be adhered to can be described as falling into either "Cape Vernacular" or a "Mountain Lodge" style.

 "Cape Vernacular" architecture is broadly characterised by white or pale painted walls, vertical multi-pane window openings, simple gable ends, green or grey coloured pitched roofs (with corrugated iron type profiles), covered verandas; • "Mountain Lodge" architecture is characterised by elements such as stone and timber, rustic face brick or stone in mountain colours, thatched or grey slate roofs.

Spanish, Sardinian, Tudor or other such styles of architecture that are not consistent with the above described architectural aesthetic will not be acceptable.

3.3 Finishes

<u>Annexure A</u> attached hereto indicates in general terms the finishes, elements and colours considered acceptable and those which are specifically excluded for approval. The absence of any element, colour, material or form from the specific exclusions shall not be deemed to mean that it is therefore permitted. Any reference therein to the architects shall be deemed to be a reference to the ASC or the Trustees (whichever is applicable).

All finishing materials, colour combinations and combination of finishing materials must be submitted to the ASC for approval before the submission of building plans to the Local Authority. The abovementioned must form a harmonious whole with the surrounding residences and general area.

3.4 Minimum Building Size and Coverage

Any dwelling unit to be erected on an erf shall have a minimum floor area of 160 sq m on the ground floor. Total ground floor space will in all instances not exceed 50% of the total area of the erf. For the calculation of the aforementioned all balconies, uncovered walkways, carports, open patios and porte cochere's are excluded.

3.5 Building Lines

- 1 All building lines as stipulated in the Conditions of Establishment of this Estate or imposed by the Local Authority will be respected. Building line relaxation applications will only be considered in exceptional instances and providing that such a relaxation will in no way whatsoever encroach on the right to privacy and/or natural light of the surrounding property owners.
- 2 Side spaces are subject to a minimum of 1.5m.
- 3 Street frontage building lines shall be a minimum of 2.0m except for public roads (Blue Valley Avenue and Fynbos Close) where street building lines will be 4.5m.

4 Garages are not subject to lateral building lines but should be set back a minimum of 5m from the road kerb to allow for parking in front of the garage. Where a property is approached via a panhandle driveway, front gates should be set back 5m from the road kerb to allow for parking in front of the gate perpendicular to the road. The intention of this rule is to keep vehicles of both owners and guests of the sidewalk and out of public roadway for the safety of all.

3.6 Building Envelope

The purpose of the use of the envelope is to ensure that sites can be developed optimally – built volume or "bulk" on each site is maximized in a way that does not adversely affect neighbouring sites. The envelope is especially important in a built-up area where most owners will plan additions and renovations. Due consideration should be given to the location of elevation structures thus affording adjacent sites optimum outlook, view and privacy. Note that chimneys are allowed to protrude out of this envelope.

There are two sections to each site:

A. Non Built Area

The 2m of the site on the street boundary/boundaries and 4.5m for public roads (Blue Valley Avenue and Fynbos Close) where no building is allowed whatsoever. This ensures an open spacious and interconnected ambience to the development.

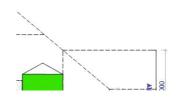
B. The Built Area

The built area has 2 subdivisions which are restricted by the maximum height of 8m. For a distance of 1m on the side ("sides" are the boundaries adjoining the street boundary) and 3m on the back ("back" is the boundary adjoining a side boundary) there is a height restriction of 2.5m

To determine the sloping envelope, a height of 5m is to be set up at points determined as follows:

- 1. Street/side condition: 6m from the street and 6m from the boundary.
- Side/back condition: 4m from the back and 2m from the side boundary. The envelope is then determined by connecting the 2.5m high side restriction through the 5m high points to a point where it reaches a plateau of 6m.

Note: All heights are measured from natural ground level (NGL) undisturbed so the envelope will change according to the site contours.





3.7 Zoning

3.7.1 General

No building shall be erected, placed or permitted to remain on any erf other than one detached singlefamily dwelling and attached garage. Buildings related to the use of the dwelling by the family are however permitted, provided that these buildings are designed and built within the architectural framework as stipulated in this document or addendums to this document. Building(s) for an additional family will only be permitted after evaluation and written approval of such an application by the ASC and the Local Authority.

3.7.2 Special residential zoned erven/group housing erven conditions and restrictions

All applications for extensions to dwellings erected on the special residential zoned erven shall be evaluated in term of the following criteria:

- The existing terms and conditions of the design manual relating to coverage (a maximum of 50%) and height (the height from the mean ground level abutting the building or the proposed building to the midpoint of the roof pitch may not exceed 6 metres) to be adhered to.
- No double storey extensions will be permitted all first floor extensions to be "attic space" accommodation using dormer windows etc. and limited to the original approved footprint of the dwelling (excluding garages).
- 3. Additions of dormer or normal windows in the roof space, or changes to the existing roof height, are subject to ALL the following conditions:
 - The height from the mean ground level abutting the building or the proposed building to the midpoint of the roof pitch may not exceed 6 metres;
 - The written consent of all affected neighbours;
 - The approval of the Trustees and the ASC.
- 4. The construction of single storey garages on site is to be encouraged to ensure adequate parking of the road.
- 5. No balconies to be permitted above ground level without the written consent of all the abutting owners first having been received.

3.8 Building height and Levels

- 1 Buildings should be designed and located to rationalise site and slope conditions. Owners are encouraged to consider the use of timber decks to account for steep level changes. Excessive "cut and fill" and excavations will not be permitted.
- 2 Roof height will be limited to a height of 6m form the average ground level to mid-point of the roof pitch. Double storey buildings will be permitted only where there is no adverse impact on neighbouring sites (to a maximum height of 8m in accordance with conditions of rezoning). Owners are encouraged to consider the use of attic space accommodation with dormer or roof windows. Large spans resulting in excessively high roof lines should be avoided.
- 3 The total height of buildings shall not exceed two (2) storeys.

3.9 Utility Connections

All utility connections will be run underground from the erf boundary to such connection points as needed. Only Local Authority approved water and sewerage utilities and lines will be allowed.

3.10 Awnings

Only awnings, canopies or shutters as approved by the ASC will be allowed.

3.11 Antennae, Aerials and Air Conditioning Units

- 1 Television aerials and satellite dishes must be fixed out of sight or as unobtrusively as possible.
- 2 No antennae or aerials (including dishes) affixed to a building shall protrude above the highest point of any building without the approval of the ASC.
- 3 Any air conditioning units on the outside of walls shall be effectively screened and camouflaged to the satisfaction of the ASC.

3.12 Garages, Outbuildings and Temporary structures

- 1 Outbuildings are allowed subject to normal local area restrictions.
- 2 Some erven in Bokkemansklof have a specific exclusion regarding the construction of second dwellings as indicated on the site diagram (<u>Annexure F</u>).
- 3 No garage, tool shed or storage room placed separately from the residence will be allowed without the approval of the ASC. Each dwelling should where possible have a private lock-up garage for a minimum of one car and additional parking area on the property for a minimum of one and a maximum of four vehicles.
- 4 Carports must be approved by the ASC within the framework of the total design of the residence and aesthetical quality of the area. No shade netting will be permitted.
- 5 No structure of a temporary nature, including a trailer, tent, shack, garage, barn, Wendy or any such building will be allowed to be stored or placed outdoors on the estate premises.
- 6 Caravans and trailers should be stored in a driveway or garage designed for that purpose and in no instances on estate property.

3.13 Laundry and refuse areas

Laundry and refuse areas must be screened with enclosing walls.

3.14 Plumbing Services

- 1 All gutters and down pipes should be unobtrusive and concealed as far as possible. All waste pipes and soil stacks must be concealed.
- 2 Allowance is made for rainwater collection and greywater/blackwater systems and piping.
- 3 Allowance is made for vent pipes of composting toilet systems.

3.15 Lighting

- 1 Outside lighting of the site and buildings must be low key and unobtrusive. Please refer to <u>Annexure G: Guide to External Lighting</u>.
- 2 Home owners are encouraged to use energy efficient lighting e.g. Compact Fluorescent or LED lights.
- 3 Outside lighting of the site and buildings must be low key and unobtrusive. External lighting must be designed to improve security while saving energy and preventing light pollution (light trespass, glare and sky glow) that disrupts ecosystem functions, human health and astronomical observation.
- 4 External lights must be angled downwards and/or shielded to prevent light escaping above a 90 degree angle and causing light pollution. This will enhance security by enabling light to be concentrated and directed exactly where it is needed and by reducing blinding glare and harsh shadows where the criminals could hide.
- 5 Upward facing lights are not allowed.
- 6 Warm White or yellow bulbs should be used for external lights as these are the most night time friendly for wildlife and stars. Shielded lights typically using lower wattage bulbs and save energy.
- 7 External and security lighting must be fitted with a motion sensor and/or placed on a timer that turns them off at night when external spaces are not in use. Motion sensors, add to security by alerting homeowners to intruders after dark and stop energy wastage by keeping the lights off when they aren't needed.

3.16 Signage

- 1 No illuminated signage is permitted.
- 2 No lettering or numbers larger than 300mm height is permitted.

3.17 Burglar Bars and Alarms

- 1 Bars must be unobtrusive and placed internally.
- 2 Alarms should preferably be silent (i.e. sirens excluded).
- 3 Faulty alarms (continuous false alarms) must be repaired as soon as possible.

3.18 Alternative Energy Systems

- 1 Homeowners are encouraged to install Solar Hot Water Systems especially in new buildings and alterations that require hot water. (This is a draft City Bylaw, soon to be mandatory).
- 2 Homeowners are encouraged to make use of alternative energy solutions e.g. Solar PV and Small/domestic wind turbines. A specialist must be used to site wind systems.

3.19 Piping and Electrical Insulation and Sheathing

Avoid PVC piping. Instead use halogen free, linear low-density polyethylene (LLDPE), thermoset crosslinked polyethylene (XLPE) or and HDPE (High Density Polyethylene).

3.20 Energy Efficiency

- 1 Homeowners encouraged to fit energy saving CFL or LED lighting.
- 2 Insulate the geyser + hot water pipes and install a geyser timer.
- 3 Install an efficient Water Heater system e.g. a Solar Water heater or point of use water heater, or retrofit geysers with eco geyser elements.
- 4 Design Hot water systems for water efficiency by minimising the pipe run between the hot water heater and point of use.
- 5 Install energy efficient equipment. (e.g. gas appliances).
- 6 Make use of passive solar design strategies for space cooling + heating e.g. adjustable shading, insulated thermal mass and cross ventilation.
- 7 To choose energy efficient active climatic control systems e.g. fans, extractors, evaporative coolers, absorption coolers, heat exchange systems and solar underfloor heating systems, efficient gas or wood heaters for building heating and cooling needs.

3.21 Water Efficiency

- 1 Homeowners are encouraged to fit low-flow showerheads and kitchen and bathroom sink tap aerators.
- 2 Install ultra-low or dual flush toilets or water saving and flush control devices in the cisterns. Alternatively look at installing composting toilets.
- 3 Use water-efficient appliances.
- 4 Install rainwater tanks to collect water coming off the roof.
- 5 Install a greywater system to collect water from the handwash basins and shower and use it to irrigate the garden. Alternatively look at a black water system to treat sewage and waste water.
- 6 Install a chlorine free swimming pool, this is much healthier for humans and backwash water is non toxic to the environment. Alternatively recycle backwash water.
- 7 Cover swimming pools in summer to reduce evaporation loss.
- 8 Use efficient irrigation systems and follow the city guidelines for watering times.

3.22 Solar Panel Installations

All new solar panel installations shall, as much as reasonably possible, comply with the following guidelines:

- a. Solar panels shall lie flat on the roof allowing for mounting brackets, cables and pipes;
- b. No part of the panel or the mountings shall protrude past the edge of the roof;
- c. No part of the panel or the mountings shall break the sky line of the existing roof as shown on the last approved building plans;
- d. Comply with City of Cape Town regulations and by-laws if required;
- e. Submit building plans to the City of Cape Town should it be required.

Any deviation from these guidelines shall follow the following route:

- a. Proposed deviations to be motivated in writing to the HOA;
- b. Draw up construction plans showing positioning and relevant elevations of the installation;
- c. Obtain written sign-off from affected and abutting neighbours;
- d. Submit drawings to aesthetics committee Architect Michael Kornmuller, the estate manager and the member of the trustees who will approve the plans/drawings and request a signed copy for retention by the BHOA.

This guideline shall apply only to solar panel installations ordered and installed after 30 May 2017.

3.23 Wind Turbines

The BHOA supports the use of renewable energy. Construction and installation of any form of wind harvesting for electricity generation is permitted as contemplated in 3.18 (2) but only after obtaining prior approval from the ASC.

3.24 Water Tanks and Reservoirs

All new water tank and reservoirs installations shall, as much as reasonably possible, comply with the following guidelines:

- a. Water reservoirs constructed from any other material but plastic, vinyl, corrugated metal, any grade of polymer or stainless steel could be classified as a building structure and should follow the normal guideline applicable to all buildings;
- b. Water tanks and reservoirs to be installed completely underground is deemed exempt from these guidelines as long as the installation remain completely underground;
- c. Water tanks and reservoirs shall be positioned as far as practically possible hard up against the erf boundary wall/fence/hedge etc;
- d. Water tanks and reservoirs shall not exceed two meter in height (approved height of boundary walls) including the plinth or platform;
- e. Allowed colour options: Black, Grey (charcoal), Green & Brown (including light brown)

Any deviation from these guidelines shall follow the following route:

- a. Proposed deviations to be motivated in writing to the HOA;
- b. Submit installation plans or drawings showing positioning and relevant elevations of the installation;
- c. Obtain written sign-off from affected and abutting neighbours;

D. Legal Aspects and Penalties

1. Building Regulations

1.1 Building operations, in terms of the approved plan may not exceed twelve (12) months in duration as from the commencement of work.

- 1.2 Any future improvements to exterior finishes of the property or any other structures shall conform to the approved plans of the original work. Any such improvements will be subject to all the submission, approval and other requirements contained in this document.
- 1.3 No construction work (including electrical sawing, grinding and excessive hammering) may be carried out on weekends and public holidays and construction may only take place on weekdays between 08h00 and 17h00.
- 1.4 Control of all contractors and sub-contractors operations is the responsibility of the owner.
- 1.5 All building work shall be executed and finished to a standard and appearance commensurate with the average standard of the dwellings in Bokkemanskloof Estate. The site and surrounds shall be thoroughly cleared of all builders' rubble and refuse.
- 1.6 Strict control of littering of the site and surrounds must be ensured during the construction period.
- 1.7 No work shall be considered complete for the purposes of these presents unless and until the ASC are satisfied that the work has been affected strictly in accordance with the approved plans, specifications and schedule of finishes and all litter, rubble and rubbish has been cleared from the site and surrounds and all damage caused has been rectified.

2. Deviations from the Design Manual Prior to Plan Approval

- 2.1 No deviations from this Design Manual will be permitted without the prior <u>written</u> consent of the ASC, HOA, all affected neighbours and, if necessary, the Local Authority.
- 2.2 A home owner may request a deviation from the guidelines in writing from the ASC.
- 2.3 The home owner must provide all his direct neighbours with a copy of such request to deviate from the Design Manual to enable them to comment and provide their written approval.
- 2.4 All neighbours must sign their approval on the proposed plan to deviate and be provided an opportunity to comment. In case where a new neighbour has moved in on a property recently purchased, but the property has not been transferred to his or her name, the neighbour will also be given an opportunity to comment and sign the plans, so as not to penalise the new neighbour on his or her new property for possible hold ups at the Deeds Office.
- 2.5 The plan with the request to deviate must then be submitted to the ASC.
- 2.6 After consideration of such application and considering responses from neighbours, the ASC shall recommend in writing to the HOA that a variation be granted.
- 2.7 When no objections are received, the HOA will be entitled to permit variations from the rules and regulations contained in this manual. However, any such variations shall not be construed as permitting similar variations in the future, unless specifically otherwise authorised by the HOA; any

variation which is authorised by the HOA shall be effective until it has been approved by the Local Authority.

3. Deviations from Approved Plans

- 3.1 No deviations from the approved plans, specifications of schedule of finishes (hereinafter referred to as "approved plans" or "plans") will be permitted without the prior <u>written</u> consent of the ASC, HOA, all neighbours and, if necessary, or the Local Authority.
- 3.2 Should a homeowner plan to deviate, the same process must be followed as described under section D.2
- 3.3 The HOA, in consultation with the ASC, may instruct Council Building Inspectors to issue a stop works order in the event of any unauthorised deviations.
- 3.4 The HOA shall be entitled to enforce by means considered reasonable and practical in their sole discretion, the rectification of any such deviations from the approved plans, including withholding of consent to transfer or by withholding consent to further improvements or works of any nature.
- 3.5 The HOA shall be entitled to impose fines in respect of deviations from plans including unauthorised future alterations or additional works. Such fines shall be published by the HOA in accordance with 20 and/or 42 of the Constitution. Any fine so imposed shall be a debt due to the Association and shall be recoverable as set out in the Constitution.

4. Applications for rezoning, subdivision, consolidation or land use changes.

- 4.1 No applications for rezoning, subdivision, consolidation or any change of land use applications shall be made without the prior written consent of all neighbours, the ASC and the HOA.
- 4.2 The procedure outlined under Section D.2 must strictly be followed for applications as discussed under Section D.4.

5. Procedure to address contraventions and penalties

- 5.1 Any deviation of the rules and regulations contained in this Design Manual will be subject to payment of a penalty fine, the value of which will be determined by the HOA. Such fines shall be published by the HOA in accordance with 20 and/or 42 of the Constitution. Any fine so imposed shall be a debt due to the Association and shall be recoverable as set out in the Constitution.
- 5.2 A homeowner affected by a deviation from the guidelines by another homeowner should report the matter in writing to the Trustees for comment.

5.3 The Trustees should reply within seven (7) days of receiving such notification with a reasonable

ELEMENT	ACCEPTABLE MATERIALS/FORM	SPECIFIC EXCLUSIONS
Plan/	Maximise natural light, allow for passive heating and cooling.	
Form	• Orientate building to north to take advantage of sun angles and	
	maximise solar gain.	
	• Orientation should take into account surrounding context and	
	prevailing winds.	
External	• Painted bagged block work or brickwork (imperial brick size only)	Bright or primary colours
Walls	 Alternative walling made from recycled or composite materials e.g. Cape Brick recycled masonry bricks, Hydraform and earth walls (adobe bricks, sandbags, straw bales, rammed earth). 	Unpainted block or brickwork (excepting selected face brick)
	 All to be finished to appear plastered and painted (in white or pale shades). 	Painted bagged block work "(maxi"
	Cladding in natural stone	brickwork
	Natural or painted timber or fibre cement clapboarding	"Log type" construction
	• Walls finished with low VOC and VOC free paints where possible.	 "Calsica" face brick other than natural colours
	• Concrete made with fly ash and recycle aggregate base to be	
	used in foundations and other concrete work.	
Roof	Double pitched, hipped or gable ends	Mono pitch roofs
Forms	Lean to roofs	Low roof pitches
	Veranda roofs	Flat roofs
	Dormer windows	Reproductions or imitations of "Cape
	Minimum 30 Deg pitch	Dutch" gables
Roof	 Flat profile composite roofing materials made of recycled materials. 	Concrete or clay roof tiles
Materials	• Light coloured roofs, grey + white to minimize thermal gain.	Mitred or scalloped fibre cement tiles
	Planted roof gardens.	• "IBR" or large profile fibre cement sheeting
	 Roof Membranes that are PVC free e.g. TPO (Thermoplastic polyolefin) or EPDM (ethylene propylene diene monomer) membranes. 	(E.g. "Big six)
	• Thatch, timber or asphalt shingles, natural or square cut fibre	
	cement slate , flat profile concrete tiles,	
	• Galvanized iron or fibre cement small profile corrugated roof	
	sheeting	
Insulation	Use eco friendly, non-toxic insulation for roof and walls e.g. Isotherm (recycled PET plastic) or recycled paper insulation	
Roof and	 (Thermguard). Avoid products made from glass fibre/mineral wool e.g. Aerolite. 	
Wall	 Avoid products made norm grass indeprimeral wool e.g. Aerone. Consult SANS 204 for recommended R- Value for the Cape Region the greater the 'R-value', the more effective is the insulation. 	
Finishes	 All paints + sealants both interior and exterior should be as far as possible non-toxic, VOC free or low VOC. 	
Wood	 All wood used in building e.g. for roof, windows, doors and other structures should be sourced from sustainable well-managed sources. Preferably have an FSC certification. 	•
	• Homeowners are encouraged to use reclaimed or recycled wood.	
	• Wood to preferably be treated with Boron rather than toxic VOCs	

suggestion as to how they will address the deviation. Annexure A: Schedule of Finishes

	like CCA, creosote, TBTO +PCP (Pentachlorophenol).	
	• Wood to be sealed or painted with non-toxic, VOC free or low	
	VOC finishes	
Windows	Allow for steel windows with painted frames.	Bright primary colours
	• Allow for composite materials e.g. recycled plastic and wood composites	Reflective glass
	 Allow for double or triple glazed windows. Advised to follow SANS 204 Energy efficiency regulations for recommended insulation for glass. 	Glass blocks
	 Advise to have adjustable external shading on north, east and west windows. 	
	 Draught seal windows and doors thoroughly. 	
	Square or vertical double-square proportions	
	Natural or painted hard-wood, PVC or aluminium frames	
	• Brown, grey or white colours	
Doors	Allow for steel frames,	Bright primary colours (Except as approved
	• Allow for composite materials e.g. recycled plastic and wood composite	by the ASC).
	Square or vertical double square proportions	
	Natural or painted hardwood	
	PVC or aluminium frames	
	Brown, grey or white colours	
Driveways/	Clay or cement brick pavers, cobblestones	Untinted concrete driveways
Pathways	Texture or exposed aggregate cement paving slabs	Uncoloured asphalt or "chip and spray"
	• Colour tinted concrete, clean gravel or "laterite" driveways	
	Hardwood timber boardwalks or railway sleeper pathways	
	Allow for permeable/ porous paving e.g. terracrete	
Boundary	• Plastered and painted block or brickwork in white or pale colours.	Pre-cast concrete fencing/walling
walls,	Painted, bagged imperial size brickwork	("Vibracrete").
Fences	Selected face brick and natural stone	 Unpainted brick or block work (Except for selected face brick).
&	Treated natural or painted timber fencing	Profiled sheet metal
accessories	• Painted pre-cast concrete fencing posts with treated natural or	
	painted timber infill panels	
	Wire mesh fencing with screening vegetation.	
	 For wooden fences and finishes see – Wood Finishes 	

Annexure B: Plan Approval Process

Annexure C: Checklist for Plan Compliance

REFERENCES

- 1. K. Küsel, Managing Architect HOMEVISIONTM, B. Arch (Cum Laude) (Pret), MSc (Cum Laude) (Pret), PRArch (SACAP), MIArch (CIFA). November 2009
- 2. M.Kornmuller, Michael Kornmuller Achitecture, B.Arch, PRArch. September 2011