Landscape Design Guidelines

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INTRODUCTION

The purpose of these guidelines is to create an environmentally sensitive and integrated landscape. In addition, the intention is for the landscaping to be in harmony with the built environment, surrounding land uses and cultural landscape, while minimising the negative visual impact from the surrounding areas and, in particular, the N1. Developers and property owners are encouraged to seamlessly blend the landscape design between the individual private properties and the communal open spaces (c.o.s). Refer to Proposed Development C.O.S Landscape Concept Plan (drawing no.IP01), Sections and Site Landscape Concept Plan (drawing no. IP02). These drawings provide examples on plan and in section of the envisaged landscape.

All developers and property owners will be required to adhere to the guidelines described below. The Van Wyks River Park developers will be required to adhere to the same guidelines for the installation of the communal open spaces.

1. PLAN APPROVALS

1.1 A Landscape Plan, Plant List and Irrigation Plan are to be submitted to the Aesthetics Committee and appointed Landscape Architects for approval. These plans must accompany the architect's building plans that are submitted to the Aesthetics committee. A scrutiny fee is payable on submission. The landscape plans will be scrutinised to ensure that proposed buildings and their focal areas are sufficiently softened with trees and planting.

1.2 The Landscape plans are to be at a scale of 1:100, 1:200 or 1:250. Details on these plans must indicate contours, north, buildings, hard surfacing type and colour, pathways, fences or wall positions. Proposed trees and planting areas must be clearly shown and labelled.

1.3 The Plant List must include the scientific name of each plant as well as the bag size at the time of installation. For shrubs, groundcovers and bulbs, the

coverage must also be indicated i.e. how many plants per square metre will be installed.

1.4 Irrigation plans are to be at a scale of 1:100, 1:200 or 1:250. They must indicate the position and type of all pipes, sprinklers, cables, controllers, valves, sleeves, water points. All irrigation systems are to be automated.

2. SITE AND MAINTENANCE PRIOR TO AND DURING CONSTRUCTION

2.1 Until such time that the erf is developed and landscaped, all areas are to be mowed /brushcut a minimum of once a year in order to minimise the fire risk and keep the appearance of the development neat and tidy. The erf owner is to arrange for and pay for the mowing/brushcutting failing which, Van Wyks River Park developer or HOA will undertake the work and invoice the owner accordingly.

2.2 All erven are to be kept clear at all times of any invasive alien plants as described in the Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983) (CARA). Port Jackson (*Acacia saligna*), Rooikrans (*Acacia Cyclops*) and Wattle (*Acacia pynantha*) are highly invasive trees that have a negative environmental impact and are a safety and fire risk to the development.

2.3 No dumping of any materials on the erf is allowed. Similarly, no landfilling may take place without written approval from the Aesthetics Committee. The erf owner is responsible for the cost related to the removal of any illegally dumped rubble and/or unapproved landfill.

2.4 Prior to building construction, a fence or similar such protection measure is to be erected around the erf to prevent damage to the surrounding landscaping and/or services installed by Van Wyks River Park development. All areas which are damaged during construction will be repaired at the cost of the erf owner.

3. LANDSCAPE DESIGN REQUIREMENTS AND CONSIDERATIONS

3.1 Road, parking and pathway surfacing

3.1.1 The details of all hard surfacing materials, (type, colour, size etc), must be indicated on the Landscape Plans.

3.1.2 Premix is permitted for road surfacing.

3.1.3 The road surfaces are to be edged with a brick paver such that the road surface and edging are on the same level. Stormwater channels adjacent to the roads are to be constructed in brick. See Annexure A for examples.

3.1.4 For pedestrian crossings, road intersections, traffic circles, parking areas and other important nodes, brick pavers or cobbles must be used to create interest and definition. Sandstone, brown and grey coloured bricks, exposed aggregate pavers and cobbles are allowable.

3.1.5 Pathways along the road edge and erven are to be paved as per the options available in Item 3.1.4.

3.1.6 The following are approved brick paving and cobble manufacturers; Corobrik, INCA, Pavatile, Revelstone, Smartstone or Cape Concrete. Alternative paving manufacturers may be submitted to the development's Landscape Architects for approval.

3.1.7 Pathways within the river corridor are to be constructed from stabilised laterite with a brick edging on either side or wood chips with wooden poles used as an edging.

3.1.8 As per the zoning scheme, 4 parking bays per 100m² of building is required. Any more parking than this is considered as overflow parking. Overflow parking areas must be constructed with grass blocks and planted with Buffalo grass (*Stenotaphrum secundatum).* In addition an automated irrigation system must be installed to irrigate the grass blocks.

3.1.9 No stone chip parking areas will be permitted.

3.1.10 All surfaced driveways and entrances off the access roads require two 110mm diameter HDPE sleeves to be installed 500mm below the new surface for the irrigation system. The sleeves are to be supplied and installed at the erf owner's cost.

3.2 Shade for parking areas

3.2.1 One tree must be planted at every third parking bay if no shade structures are installed, see Annexure A for example.

3.2.2 No shade cloth structures are permitted in parking areas.

3.3 Stormwater drainage and water tanks

3.3.1 Roof and other stormwater is to be discharged into the nearest catch pit on the erf.

3.3.2 Approval is required for stormwater to be discharged from an erf into the river or retention pond. The stormwater must be piped via an underground pipe to a properly constructed outlet point or a landscaped open channel. The erf owner is responsible for the cost to reinstate or install any landscape or earthworks resulting from such a construction. Refer to item 3.9 for erven adjoining retention ponds.

3.3.3 No stormwater may be discharged into the river from sites that are occupied by companies that deal in or manufacture oil products.

3.3.4 Rain water tanks are permitted. The maximum allowable tank size is 5000L and the colour must blend in with the building wall colour or landscaping. Screening of tanks visible from the N1 and Old Paarl road is required. Screening options include vertical timber or metal trellises planted with creepers, a walled structure to match the building or dense, tall planting.

3.4 Boundary walls

3.4.1 No fences are permitted on erven boundaries other than the development perimeter fence.

3.4.2 'Werf' walls may be constructed on boundaries adjacent to roads and on river frontage boundaries. The maximum height allowable for the werf walls is 500mm measured from the natural ground level.

3.4.3 Where 'werf' walls are built on erf boundaries, the owner is responsible for the cost to fix any communal landscaping and/or irrigation that is damaged in the process.

3.4.4 Where an erf has a common boundary with Van Wyks River Park's perimeter boundary and a screen wall is be built; this wall must be set back from the perimeter boundary fence by a minimum of 2m. In addition, the erf owner must plant the space between the wall and his property boundary with plants in order to soften the visual appearance of the wall. The plants used for this purpose must cover at least half the height of the wall when they are mature and must be irrigate by means of an automated irrigation system.

3.5 Landscape structural features

3.5.1 Any landscape features (e.g. benches, bird feeders, refuse bins, boardwalks) installed in the communal open space must be secured in position, hard wearing and made from either galvanised & powder coated (green or black) metal, wood (with a natural finish) or natural stone.

3.6 Retaining walls

3.6.1 Retaining walls may not exceed 1.2m height.

3.6.2 Terraforce or similar retaining blocks will only be permitted on private erven where they are not visible from any roads. Successive retaining block rows are to be set back from each other so that the planting space is a minimum of 50mm wide.

3.6.3 Gabion retaining structures are permitted especially in the river corridor where soil stabilisation is required.

3.7 Plant species

3.7.1 Prior to development, the site to the West of Suid Agter Paarl Road has very few indigenous plants other than clumps of *Zantedeschia aethiopica* which

emerge in winter. To the East of this road, the site or erf 22 has a number of small *Olea africana* (wild olives) which are to be retained. These trees are to be accommodated in the erf's proposed site development layout. Those that can't be accommodated, should be transplanted in the winter months where possible.

3.7.2 On the N1 road reserve at erf 22 and Suid Agter Paarl Road intersection are two well established *Kigelia africana* (Sausage tree). These trees are to be preserved as they contribute to the screening of the development on erf 22.

3.7.3 The Plant List, Annexure B, are plants that are predominantly water-wise indigenous species that are suitable for this specific site. Planting proposals submitted for approval by developers and erf owners that wish to use any other species that are not on the list will require approval from the appointed Landscape Architect. Due to the historical and agricultural character of the surrounding areas, certain exotic species will also be permitted on the site to create windbreak type screening between erven, (as indicated on the Plant List, Annexure B).

3.7.4 The planting of palm trees, large-leafed plant species with a tropical character, exotic succulents and cacti is not permitted under any circumstance.

3.7.5 The following are some commonly used invasive plants that are not permitted in the landscape: *Agave Americana*, *Berberis thunbergia*, *Brachychiton populneus*, *Crataegus pubescens*, *Hakea salicifolia*, *Hedera helix*, *Populus deltoides*, *Populus nigra*, *Rosa canina*, *Schinus molle* and *Syzygium paniculatum.*

3.7.6 The use of Buffalo (*Stenotaphrum secundatum)* and Kweek (*Cynodon dactylon*) lawn is permitted. Kikuyu (*Pennisetum clandestinum*) is not allowed.

3.8 Visual impact and tree sizes (Refer to Sections and Site Landscape Concept Plan drawing no. IP02 for more detail)

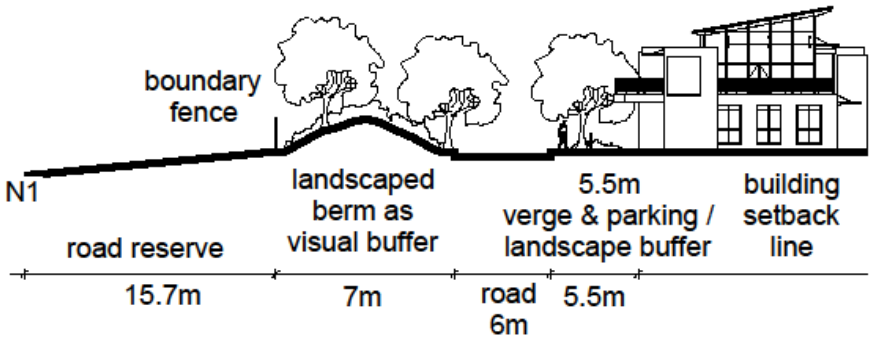
In order to reduce the visual impact of the development from sensitive view points, trees must be planted at the minimum sizes given below.

3.8.1 Tree screening of development: Screening trees are required to soften the visual impact of buildings from the N1, Old Paarl Road and each other. The building setback lines allow for tree planting in these visually sensitive views. These trees will be planted along the boundary fence in a pattern similar to that seen in the surrounding agricultural windbreaks. These trees must be supplied in a 70L bag size (or larger) and must be approximately 2.2 – 2.7m in height at the time of planting. The Van Wyks River Park developer is to plant and maintain screen trees on Erven 2,3,20, 21 & 22 as per the Development C.O.S Landscape Concept Plan drawing no. IP01. The trees

are to be planted in order to minimise the visual impact of these erven on the adjoining roads. Once the erven have been sold, it is the responsibility of the new owners to maintain the trees. If such a tree is damaged, destroyed or dies, the erf owner or developer, (whichever is applicable), must replace the tree with the same type and size of tree at his own cost.

3.8.2 Tree screening between erven: As boundary walls or fencing are not permitted for screening from adjoining erven; tree planting is encouraged. This may take the form of a windbreak as found in the surrounding agricultural landscape. These trees must be supplied in a 70L bag size (or larger) and must be approximately 2.2 – 2.7m in height at the time of planting.

3.8.3 Berm screening of development: Along sections of the road verge on the N1 boundary, earth berms are to be constructed and are to be undulating in nature. The berms will be predominately 1m high (above natural ground level) and where taller, a maximum of 2m high. The slopes are to be a maximum of 1:3. The purpose of the berms is to assist with softening the visual impact of parking areas and the ground level of buildings from the N1. The berms are to be fully planted with groundcovers and shrubs so that within 1 year the berms will look as if they were naturally there. Trees planted on the berms will provide additional height and screening of the development. The trees selected for this purpose, (see Annexure B, Plant List item 2 and 3 and Annexure C) are indigenous and their growth will provide further height and fullness to assist with the screening of buildings. At the time of planting, these trees must be supplied in a 100L bag or larger and approximately 2.7m-3.5 m in height. The spacing of trees is as per the Development C.O.S Landscape Concept Plan drawing no. IP01.

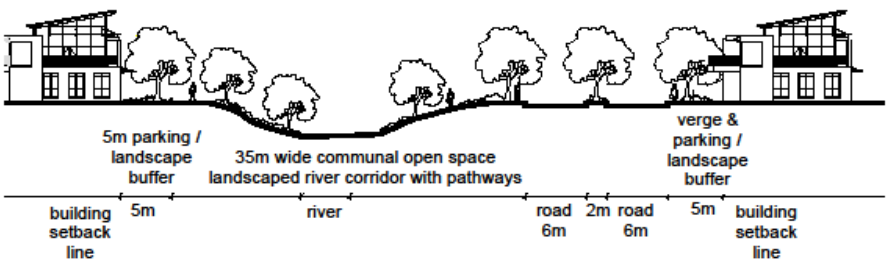


3.8.4 Avenue trees: Trees that line the roads are very important because they define the access routes, form the backbone of the landscaping and are highly visual while at the same time assisting with visual screening of the development from the N1. As they form an edge to the roads and are planted in fairly straight rows, they complement the pattern created by the surrounding agricultural windbreaks. In addition, they must allow vehicle movement beneath. For the above reasons, at the time of planting, avenue trees must be in a 100L bag or larger and approximately 2.7m-3.5 m in height. See Annexure B, Plant List item 1 for examples. The spacing of trees is as per the Development C.O.S Landscape Concept Plan drawing no. IP01.

3.8.5 Focal points: Where instant visual screening or a natural focal element is required, mature trees with a minimum height of 4m and well developed canopies must be planted. As these mature trees are costly, they will only be used in strategic positions. See Annexure B, Plant List item 1 for examples.

3.8.6 Scaling and shade: The planting of trees to emphasis architectural elements e.g. entrance areas is encouraged. This also improves the height relationship between natural and built elements ("scaling") and has the added benefit of reducing the visual impact of the building. Planting shade trees will create areas of natural cooling for parking bays and for recreational areas. These trees must be in a 70L bag size and approximately 2.2 – 2.7m in height at the time of planting.

3.8.7 River corridor trees: The trees selected for these areas, (see Annexure B, Plant List item 2 and 3 and Annexure C), are indigenous, have a growth habit suited to the proposed environment and can accommodate high soil moisture levels. At the time of planting, these trees must be in a 70L bag and approximately 2.2 – 2.7m in height. The spacing of trees is as per the Development C.O.S Landscape Concept Plan drawing no. IP01.



3.9 River realignment (Refer to the Proposed Development C.O.S Landscape Concept Plan)

3.9.1 The site has been filled with imported material and the current stream channel has been altered and is ecologically degraded. An aquatic assessment concluded that restoring the stream to its original course is a sustainable and ecologically merit worthy option for future development of the site.

3.9.2 It is proposed that the river is realigned so that it follows its original water course within a corridor ranging from 55m at its widest point to 26m at the main bridge crossing. A further 5m buffer between buildings and property boundaries along the river frontage is required.

3.9.3 The original watercourse material will be placed on the floodplain. This cut to fill operation will bring the 1:100 year floodline back into the realigned channel.

3.9.4 Erven adjoining the retention pond are encouraged to discharge stormwater into the pond so that they have the maximum effect. Refer to item 3.3.

3.9.5 All earthworks, shaping and weir or bridge construction related to this must be in accordance with the relevant consultant's recommendations. The Proposed Development C.O.S Landscape Concept Plan indicates the river at its lowest level i.e. in summer and is only a conceptual indication.

3.9.6 A pathway along the river is to be constructed. The path is both for recreational purposes and to provide a shorter walking route from the entrance of the development to some of the erven.

3.9.7 The river corridor is to have lawn areas for recreational use as well as planting areas which will improve the general aesthetics and rehabilitate the river ecosystem to its natural state. See Annexure B, Plant List item 5 and Annexure C for examples.

3.10 Road verge

3.10.1 A pedestrian pathway of a minimum 1.2m wide is to be constructed along the main access routes.

3.10.2 Planting areas are to be installed as indicated on the Proposed Development C.O.S Landscape Concept Plan.

3.10.3 See Annexure B, Plant List item 5 and Annexure C for examples of planting along road verges.

4. LANDSCAPE AND IRRIGATION INSTALLATION AND MAINTENANCE

4.1 Irrigation systems

4.1.1 All erven and common open spaces are to have irrigation systems which systems must be automated.

4.2 Landscape and irrigation contractors

4.2.1 In order for the landscape and irrigation installation to be of a high quality, all landscape contractors must be members of SALI and irrigation contractors members of LIA. All work and materials are to comply with the relevant association's standards and specifications.

4.3 Maintenance

4.3.1 The Van Wyks River Park developer or HOA is responsible for ensuring that communal open spaces such as the road verges, riparian areas and berms are properly maintained.

4.3.2 The maintenance of private erven is each owner's responsibility.

ANNEXURE A: Examples of fencing, grass blocks, paving and parking

ANNEXURE B: Plant List

ANNEXURE C: Examples of landscaping for river corridor, berm, roads and erven