

NEW HORIZON VILLAGES

Design Code Book

The term "code" derives from "caudex," which was simultaneously the trunk of a tree and a set of laws. It is one of several terms clustering around the idea of power being resident in a sacred tree at the center of a traditional village. A code, then, is etymologically and functionally the trunk around which a settlement arranges itself.

-Patrick Pinnell, 2004

July 2007

This Code book is concerned with the external appearance and positioning of buildings and structures within the goals of the development.

These guidelines should be seen as an instrument to maintain overall design sensitivity, whilst allowing flexibility for individual expression.

The Code book is supplementary to the National Building Regulations and standard conditions pertaining to the Port Elizabeth zoning scheme and any approved amendments thereof.

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1 Architectural Character

Development Philosophy

The aim of this development is to provide affordable neighbourhood patterns consisting of neighbourhood pockets each with a neighbourhood park and sharing a central sports field. Access corridors and dedicated pedestrian & cycle routes link these pockets with various public facilities, all within walking distance. The layout addresses appropriate building densities and land uses for optimum utilization.

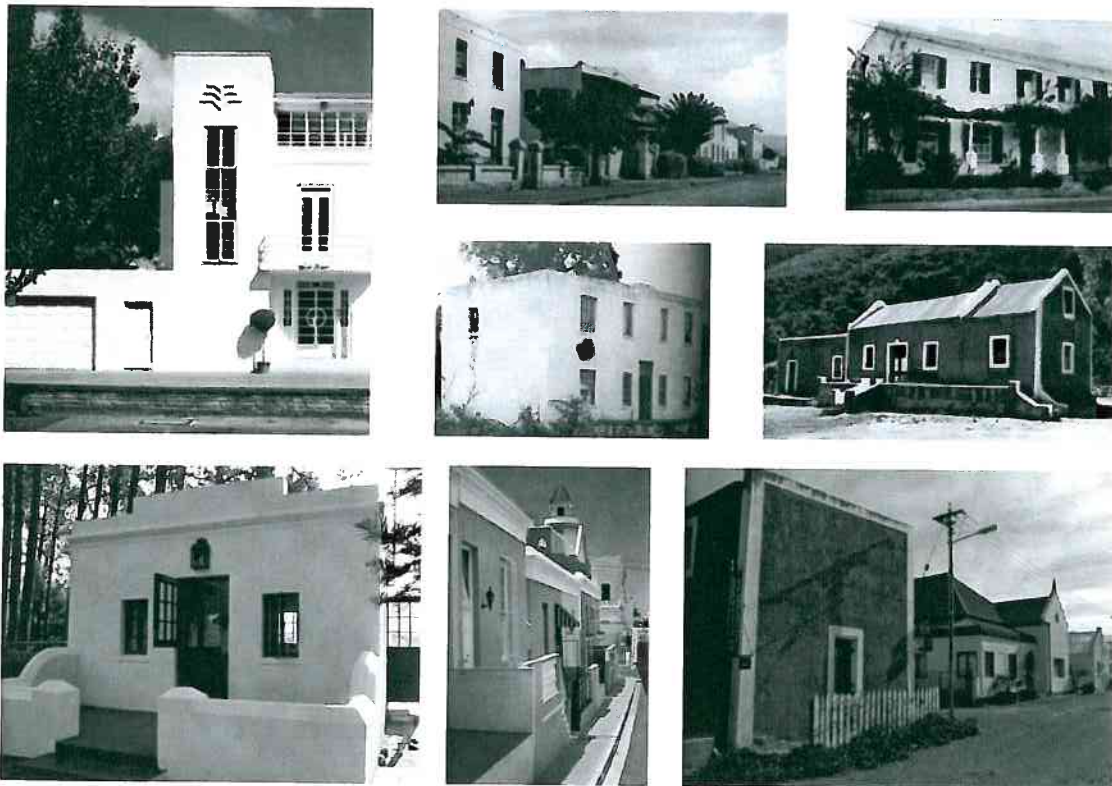
Architectural Philosophy

The architecture reflects a re-interpretation of the South African Cape Vernacular in a contemporary manner. Three main building types occur, namely single residential, rowhouses and 3 storey walk-up apartments.

Strong emphasis is placed on street and park contact from within the private frontage, whilst maintaining privacy through shutters, screens and level changes. This transition area between the public and private realm will be referred to as the "frontage zone" throughout this document.

Within the frontage zone, various frontage types, whether it be a stairway, stoep, porch or terrace will occur. These differing detailed elements, together with door & window openings, cornices, shutters, balustrades, terrace walls etc. will give individual character to each home.

Architectural variety will ensure vitality, and architectural harmony will ensure the beauty of the streetscape and the public realm.



These images serve as a precedent to the design. The intention is to re-interpret and combine various elements from these vernacular examples in a contemporary manner.

2 Architectural Regulations

The aim of the architectural regulations is to regulate the street and park façade that defines the public space within the frontage zone. These regulations must be read in conjunction with the requirements indicated in the Urban Regulation and Regulation plans for each property.

The guidelines are strictly aesthetic in their intent. In cases of contradiction with local safety codes, these regulations shall be overruled, with notification given to the New Horizon Villages Design Review Panel [DRP]. In no way does compliance with these regulations exempt a structure from conformance with other applicable codes.

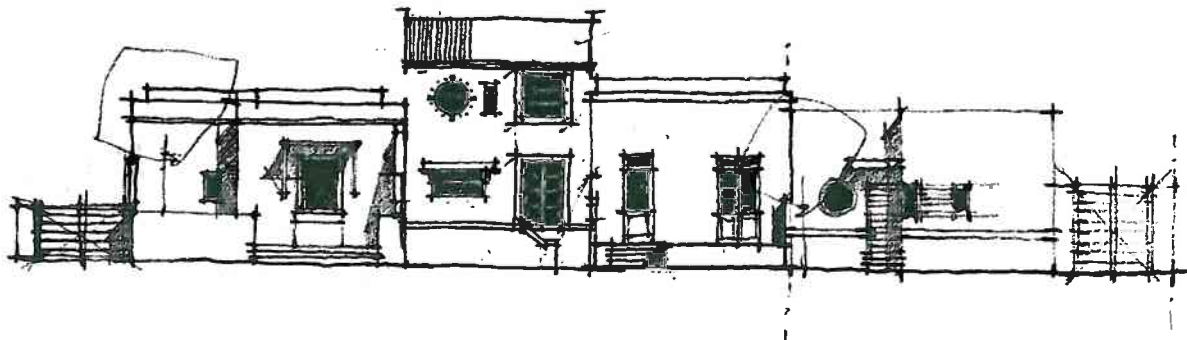
Guidelines will be updated periodically and subsequent changes will apply to all buildings which have yet to complete the schematic design phase. Building plan submissions submitted will therefore have to comply with the latest codebook regulations.

Form

General requirements

- Forms to be simple rectangular or composite rectangular linked with minor elements.

Single Residential	Rowhouses	Walk-up Apartments
<ul style="list-style-type: none"> - Single or double storey. - Major building forms to be parallel to building lines. - Major building form widths max 7m for single storey and 6.5m for double storey. - Cantilevered floor max. 1.5m deep - Main building forms to have either double pitched roofs or mono / flat roofs behind parapet walls. - Dormers only allowed on double pitched roofs when first floor wall plate height is reduced to maximum 1.5 storeys. - A wall or screen to be provided where no building wall is present on frontage line. 	<ul style="list-style-type: none"> - Single or double storey - Main building forms to have either double pitched roofs or mono / flat roofs behind parapet walls - Dormers only allowed on double pitched roofs when first floor wall plate height is reduced to maximum 1.5 storeys. 	<ul style="list-style-type: none"> - Maximum 3 storeys allowed - Mezzanine floor in roof space allowed. - Main building forms to have either double pitched roofs or mono / flat roofs behind parapet walls.



Walls

General requirements

- Walls for Buildings and yards on frontage lines to be of the same material and read as homogenous planes with limited interruptions. Where building facade is not present on frontage line, walls with openings or screens to be provided with height of minimum 600mm.
- Solid massing with subtle fine detail elements.
- External building masonry walls to be minimum 280mm cavity walls.
- Wall material to be smooth or 1st level/2nd level bagged plaster and smooth red facebrick limited to minor elements.
- Screening elements for climate control, privacy, visual impact and shading of large glass Areas. Screening materials to be timber, metal or concrete. Solid projecting horizontal elements allowed over openings and parapet walls where appropriate.
- Simple linear copings and mouldings in concrete or plastered brick to top of parapet walls to create shadow lines.

Exclusions: handiplank, shiplap, half-log timber walls and patterned plaster.

Roofs

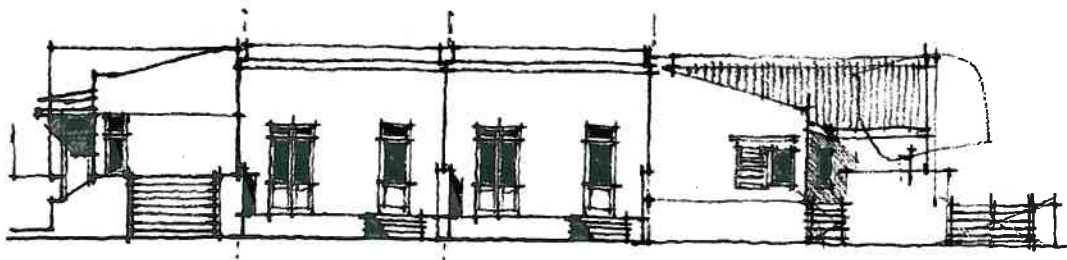
General requirements

- Roof pitch limited to max. 40 degrees on double pitched roofs and max. 20 degrees on mono-pitched roofs.
- Flat and mono-pitch roofs along streets & side boundaries to be behind parapet walls.
- Gable end roofs to be behind parapet walls. No roof overhangs on gable ends allowed.
- Roof windows/skylights allowed in traditional vertical style with natural window proportions and to follow the roof plane. Subject to DRP approval.

Materials: Corrugated metal sheeting, fibre cement Victorian profile sheeting, flat concrete roofs, fibre cement tiles, concrete tiles in Double Roman and Shingle styles only. Harvey tile, Big six roof sheets allowed on mono-pitch and lean-to roofs behind parapet walls only.

Colours: Charcoal, Bovine, Light grey and Natural zincalume. Natural fibre cement is allowed if not beyond parapet and not visible from street, subject to DRP approval.

Exclusions: Big Six fibre cement sheeting on double pitched roofs, shingles, clay tiles.



Openings

General requirements [on street and park facades]

- Openings to be punched holes in wall plane and limited to vertical proportions. Circular and corner windows and windows with horizontal proportions will be considered as special features.
- Large openings/ glazed areas exceeding 2.1mX2.4m and facing towards street and park to be deep recessed and or be screened with 1.2m deep shading structure.
- Rectangular Bay windows allowed. Max width 2.4m and 900mm deep.
- Top of openings to align.
- Parking areas/ carports must have gates to complete street frontage.

Materials

- Frames: powder coated aluminium, painted hardwood.
- High front doors in painted hardwood encouraged.
- Clear and continuously frosted glass only

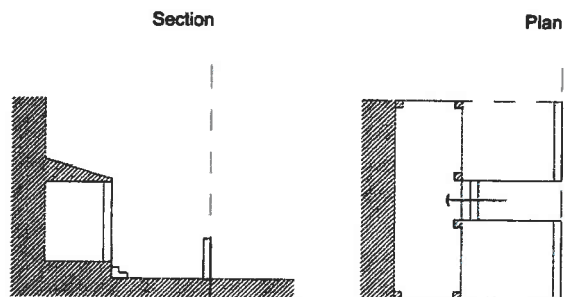
Frontages

General requirements

- Walls within frontage zone to maximum 1.6m high.
- Verandah and balconies within frontage zone and covered verandah zone to be set in 500mm from the corner of the main building.

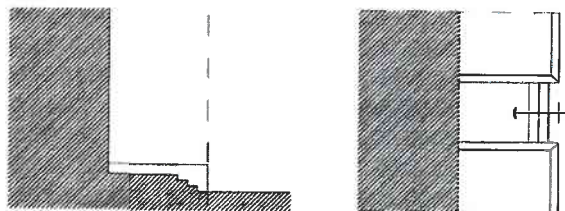
Porch

A frontage where the façade is set back from the frontage line. A covered entrance to a building, usually with a separate roof.



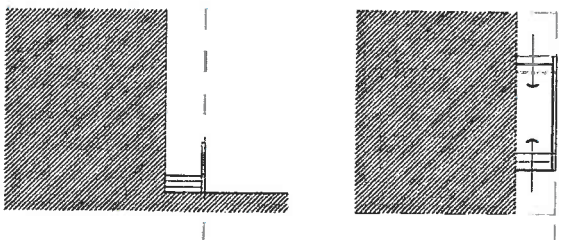
Terrace

A frontage where the façade is set back from the frontage line by an elevated terrace. This provides a buffer between the residence and nature of a urban sidewalk ensuring privacy.



Stoep

A frontage where the façade is aligned close to frontage line with the first story elevated from the sidewalk sufficiently to secure privacy for windows. Traditionally the stoep provided a formal access from the street and a place for social encounters.



Miscellaneous

Water tanks

Rain water harvesting to be an integral part of the house design.

Materials: Corrugated metal, solid brick and plaster, tanks to be screened with timber or brick walls.

Solar panels

To follow roof plane on double pitched or lean-to roofs and be screened by parapet walls on flat roofs.

Pools

May not be raised more than 300mm above ground level. Pools not allowed closer than 2m to boundary lines.

Fireplaces

Materials: all wall materials and steel.

Gutters and down pipes

Only round, square or rectangular types allowed with limited crimping.

Awnings & blinds

Limited to drop down blinds and retractable awnings in muted colours. All subject to approval.

External lighting

On street facades only downlighters allowed. Lantern type lights with frosted glass allowed at doors.

Exclusion: Flood- and up lights.

Fencing and boundary walls

Material: At single residential properties street facing walls to match house material and finish. At row houses all public fences to match house material and finish.

Sunscreens

Shading structures are encouraged over large glass areas.

Materials: Painted timber, steel, concrete, canvas awnings.

Utilities

Air-conditioning units, waste pipes to be screened. Aerials and satellite dishes to be below roof line. Stack pipes to be concealed and not to be visible from street.

Garages, carports and parking

On site parking to be provided for at least one car. Flat or mono-pitch carport roofs to be behind parapet walls.

No double garage except on street frontage exceeding 12m.

Drying Yards

To be a fully enclosed area screened from the road. Walls max. 2m high.

Refuse area

To be integrated or to be attached to build structures.

Finishes

Colours to be selected from approved palette.

Verandah columns and pergolas

To be square or rectangular timber, painted mild steel, brick and plaster matching house.

Exclusion: Pre-cast columns.

Balustrades

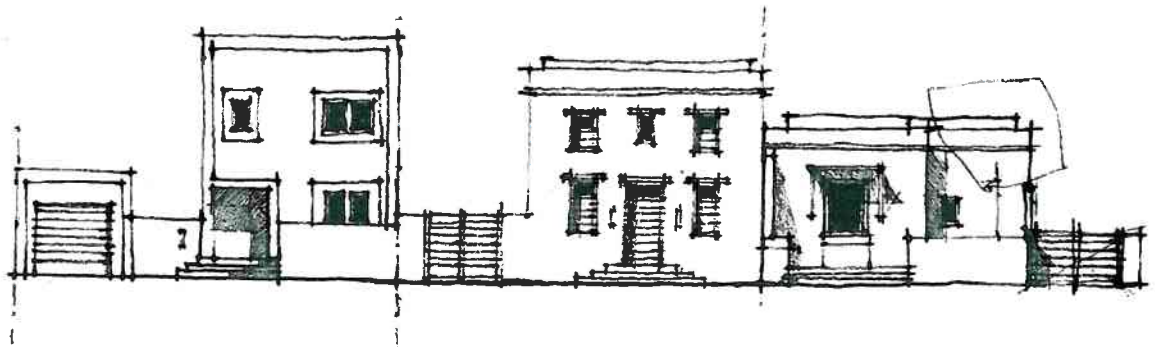
To be stainless steel, painted mild steel, natural timber and plastered brick.

Burglar bars

Only allowed on the inside of windows.

Shutters

To have the same proportions as the doors and windows.



3 Landscape Regulations

Objective

- Conservation of the existing and valuable vegetation community: Rowallan Park Grassy Fynbos.
- Rehabilitation as defined by legislation, “restoring an area, not to its previous condition, but to a functional or proper condition, which condition needs to comply with the requirements of sustainable development”
- Community through design. Sharing public spaces and community grounds requires respect and a certain amount of responsibility. Regulations define public and private needs and relevant actions.

Management Actions

Avoidance

Due to the poor conditions of the native vegetation all measures should be taken to care and protect the current condition of the soil. Dumping, leeching and construction methods which employ such practices are to be prohibited. Suggested methods to avoid further degradation are mentioned within Section 7: “Environmental Management Plan” of the Scoping Report.¹

Mitigation

Suggested mitigations are to be formed in response to any loss or destruction on site. Mitigations should be cited and compiled from vegetation, wildlife, visual and others applicable reports.

Rehabilitation and restoration

Areas designated as “naturalized planting” or existing vegetation are to be planted with specimens from Rowallan Park Grassy Fynbos community. If none are available, restios and other available fynbos-type species should be used. The height of natural planting should not exceed 800mm.

Enhancement

Every effort should be made to enhance the existing environment. Each owner is responsible for the condition of his erf, this responsibility should be made known through education and community awareness.

¹“An Environmental Investigation for the Rezoning of Erven 3 & 4 Parsonsvei From Undetermined to Residential Use”, Geological and Environmental Services, December 2005.

Regulations for Residential Properties Abutting Public Space

Properties bordering street frontage

- Suggested planting list to be compiled from existing inventory—owners are prohibited from using invasive plant species.
- Foundation planting to be restricted to shrub and groundcover only.
- Paving and other hard surfaces should be limited in colour and type to coincide with architectural standards. All amended or additional paving is subject to review.
- Irrigation and fertilization or soil amendments to be reviewed

Properties bordering public green space

- All planting outside of the perimeter wall to be similar in type and species to that of the green space which the erf abuts. For urban and plaza type public spaces privately owned vegetation is restricted to potted plants. Naturalized parks and public spaces prohibit invasive and noxious species.
- Any disturbance to wetland areas and drainage ways is PROHIBITED.
- Shrubs higher than 300mm are prohibited near private entries from public green space

Pedestrian Links and Pathways

- Suggested planting list to be compiled from regionally sensitive and accepted species. Use of invasive or noxious species is to be prohibited.
- Planting to coincide with existing vegetation and; i.e. listed grasses to be used; trees and shrubs to be consistent.
- Barrier or buffer planting to be restricted in height and type, landscape designs to be reviewed.
- Irrigation methods and fertilization to be reviewed.

Private courtyards and gardens

- Suggested planting list to be compiled from regionally sensitive and accepted species. Use of invasive or noxious species is to be prohibited. Large trees with aggressive root systems are prohibited.
- Potted specimens and container gardening to be restricted to suggested planting list.
- Water features shall be filtered and limited in size and use.
- Braai areas are to be regulated in size and scope—these are to be reviewed independently depending on boundaries and exposure.
- Retention or removal of topsoil is to be discouraged and is subject to review.
- Irrigation using harvested rainwater or similar techniques is encouraged. Location of rainwater storage tanks is subject for review if visible by the public.

Regulations for Public Landscaping

Public Parks: Urban

- All tree planting to be clear-stemmed to a height of 2.1m to ensure visibility of sightlines & walking surface.
- Surface treatment to be maintained as level and compact.
- Gravel to be stabilized.
- Paving to be level and accommodate drainage.

Public Parks: Naturalistic

- All vegetation to be similar in type and species to the existing Rowallan Park Grassy Fynbos.
Invasive species to be prohibited—alien species such as *Acacia* spp or *Eucalyptus* spp to be removed.
- Wetland and drainage ways to be marked “Restricted Access”. All swimming and other such activities to be prohibited in stormwater flow and retention areas.

Public Parks: Playing Fields

The playing field is a crucial and costly part of the public park. The objective is to provide a safe, healthy open play area conducive to running and throwing. If the field falls into a state of disrepair it will lose its true function and will become a dusty, rutted, misused pitch.

- The Playing field is for use with sport activities or open play and is to be level with a minimum crowned surface of 1%.
- *Cynodon*, Kweek or other such type grass should be used as lawn. Irrigation is mandatory.
- Maintenance to include mowing, reseeding, fertilizing and grading.

Street Planting: Shrubs

- All planting to be restricted to 300mm max height within all road reserves. In cases of grass-like vegetation or perennial flowers, dead or brown foliage must be removed.
- Planting schemes which provide cover or screening must be avoided in all public spaces.

Street Planting: Trees

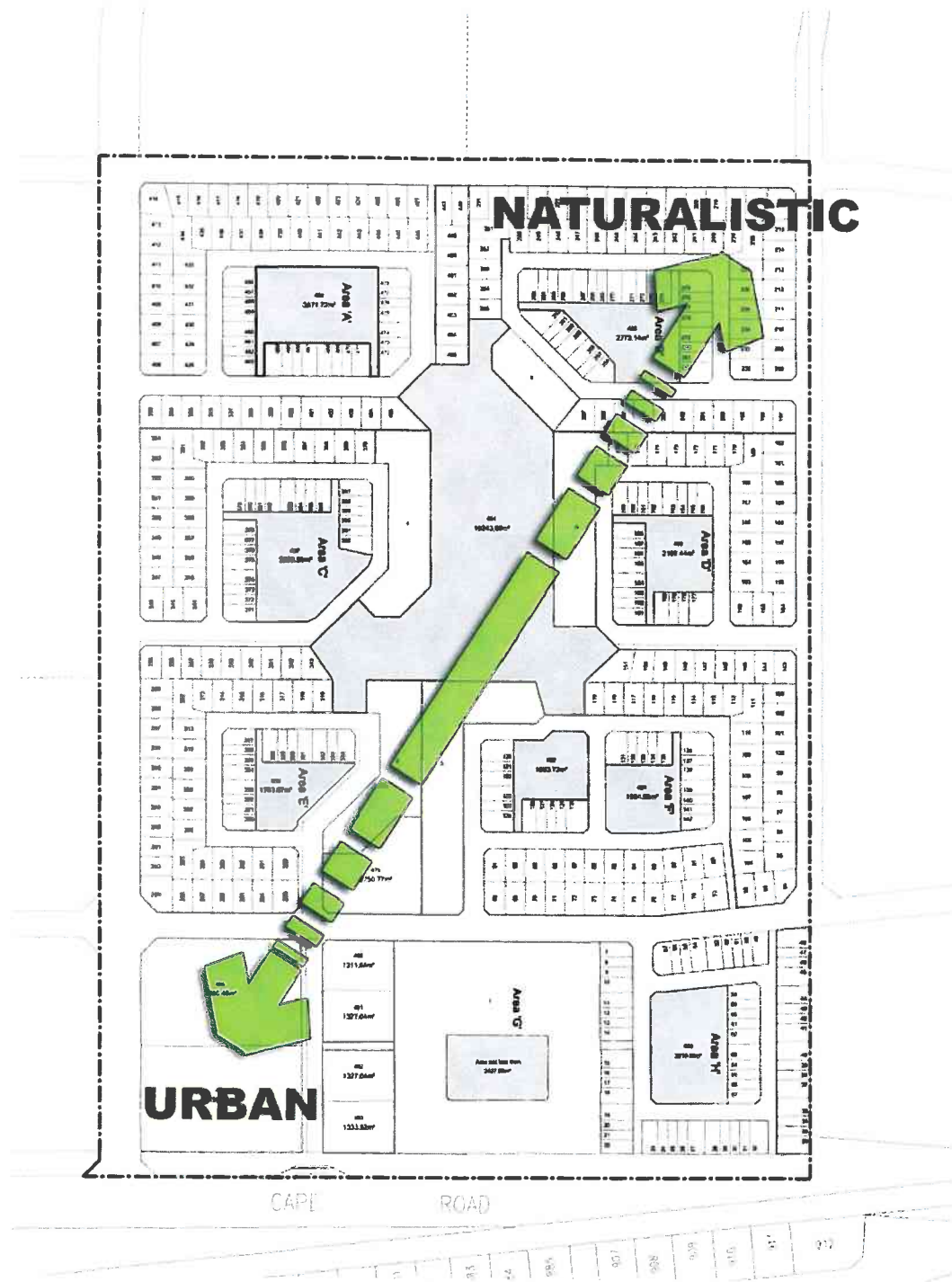
- Tree spacing to be according to auto circulation.
- Trees should occur within designated parallel parking area.
- Street trees are prohibited in cases where the garage or designated erf parking is to occur.
- Spacing is to be no more than 12m and no less than 8m.

Utility/Irrigation boxes

- Group utility and access lids in secondary thoroughfares. All access point locations to be reviewed and approved.
- Irrigation lids to be marked as such and installed perpendicular to nearest paved edge. Multiple lids must be evenly spaced and square.

Street Furniture and Lighting

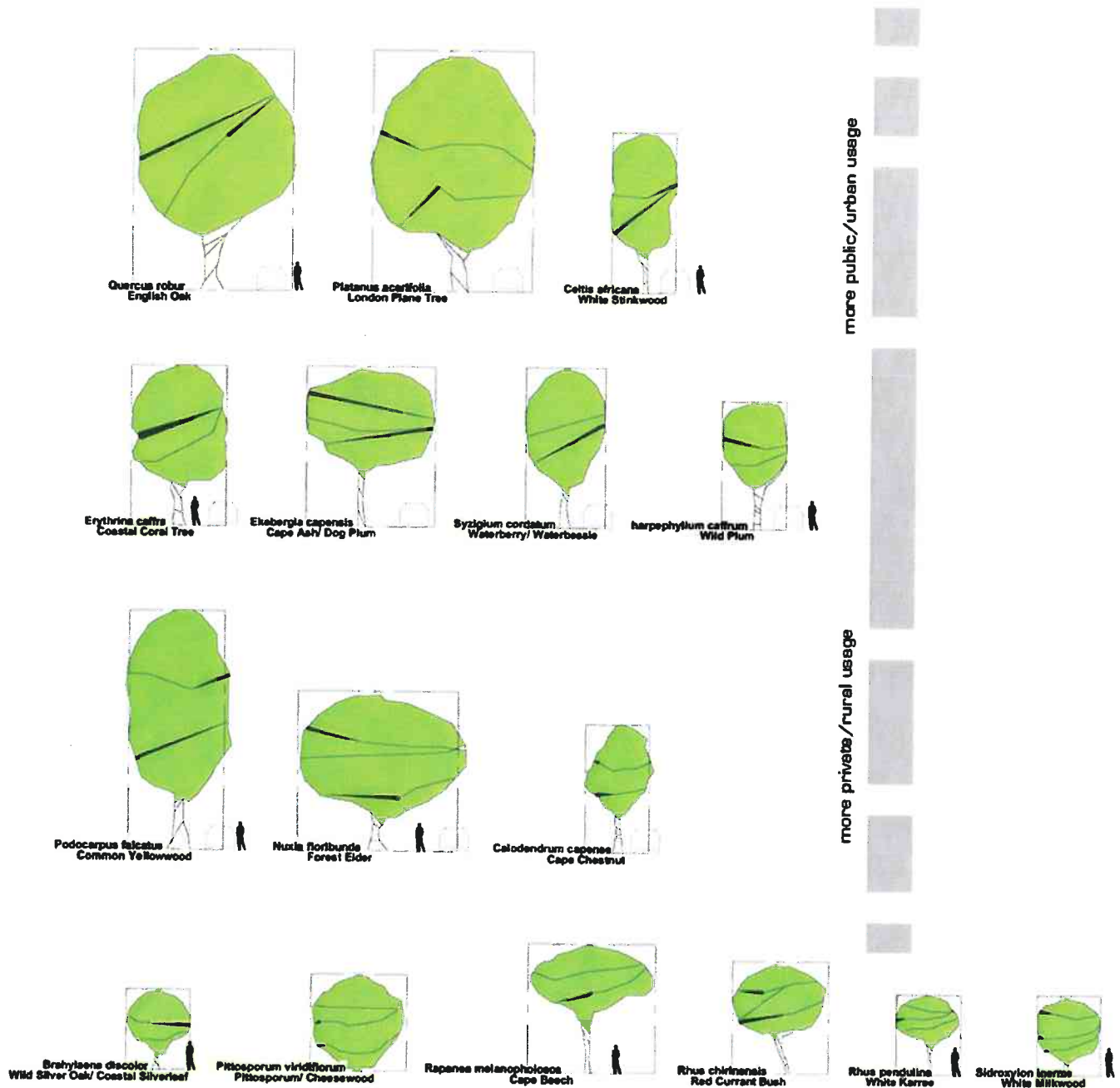
- Street furniture should coincide with architectural style & materials. Durability & simplicity are primary characteristics. Wood or non-conductive material to be used for seating area.
- Waste bins are to be provided along pedestrian routes and around public gathering areas.
- Seating is to be provided for in public gathering areas for the purpose of supervision and rest. Minimal usage is to prevent loitering and sleeping on furniture.
- Lighting should coincide with architectural style and materials. Durability and simplicity are primary characteristics.
- Street lights to be non-direct in nature and should be proportional to use.
- Bollard/ Path lighting to be durable, low voltage, and consistent with architectural themes.
- Lighting should occur at regular intervals along pedestrian and auto-traffic routes.



Landscaping Gradient: Urban to Naturalistic

Suggested Planting List

Trees: for use in Road Reserves, designated tree locations and private erf.



Note: Awareness and common sense are two factors which will prevent misuse and abuse of any tree type. All trees have innate characteristics such as roots, branches, leaves, and these qualities must be considered at all times. Tree size and habit vary depending on environment and genetics. There are few trees which require no maintenance; unfortunately, in this case, they are all alien, invasive and illegal to propagate and harbour. All the specified trees require a certain amount of maintenance and if neglected can cause damage to property and possibly injury.

Shrubs: Suggested Shrubs and Groundcovers

Buddleja saligna	False Olive
Carissa macrocarpa	Natal Plum/ Big Num Num
Olea europaea subsp.	Africana Wild Olive
Plumbago auriculata	Plumbago
Rhus crenata	Dune Crow Berry
Tecomaria capensis	Cape Honeysuckle
Bauhenia galpinii	Pride of the Cape
Callistemon viminalis	Weeping bottlebrush
Hibiscus	Hibiscus
Viburnum	Viburnum
Dietes grandiflora	Wild Iris
Dietes bicolour	Dietes
Eriocephalus africanus	Wild Rosemary
Limonium spp	Paper Flowers
Pelargoniums	Pelargonium varieties
Plectranthus spp.	Plectranthus
Protea spp.	Protea
Watsonia spp	Watsonia
Zantedeschia aethiopica	Arum lily
Fuchsia spp.	Fuchsias
Raphiolepis indica	Indian Hawthorne
Carpobrotus delictiosa	Hottentots vygie
Clivia spp.	Bush Lily
Gazania spp.	Gazania
Geranium incanum	Carpet Geranium
Kniphofia praecox	Red Hot Poker
Tulbaghia acutiloba	Wild Garlic
Agapanthus africanus	Agapanthus
Clematis brachiata	Traveler's Joy
Felicia amelloides	Blue Marguerite
Krantz Aloe	Aloe arborescens
Homocladium platycladum	Ribbon Bush
Coleonema pulchrum	Confetti Bush
Gaura lindheimeri	Butterfly bush
Jasminum multipartum	Star Jasmine

Criteria for shrubbery is such that there are several other acceptable varieties. Please refer to your local nurseryman for a list of invasive and noxious species. All planting is subject to review pending visual impairment, or aesthetic controversy.

Use of native vegetation is encouraged. Suggested planting can be referenced from the Rowallan Park Grassy Fynbos inventory in Table 2.1 of the Vegetation Assessment.²

² "Vegetation Assessment of Erven 3 & 4, Parsonsvale, Port Elizabeth" Jamie Pote, December 2005

Alien invasive plants prohibited as listed in the Vegetation Assessment 2

Eucalyptus spp Gum
Acacia mearnsii Black Wattle
Acacia saligna
Acacia cyclops Rooikrans
Agave sisalana Sisal
Agave americanum Century Plant

Additional prohibited

Australian myrtle
Wattles (black, long-leafed, silver, etc)
Bramble
Guavas
Honey Mesquite
Inkberry
Lantana
Oleander
Pampas Grass
Poplar
Red Sesbania
Rock Hakea
Syringa or Persian Lilac

Orchard/Fruit Bearing Trees

Recommended Fruit bearing trees

Citrus (Naval and Valencia variety recommended)
Macadamia Nuts
Peaches
Nectarines
Pomegranates
Almonds
Avocados
Figs

4 Urban Regulations

Town Planning Requirements

These urban regulations may be superceded only by the regulating plan.

Maximum Coverage and Floor Areas

The maximum coverage allowed (or footprint) of all roofed buildings (including verandahs, canopies, etc) is specified as a percentage of the area of the stand. A primary and secondary building zone applies to each erf in accordance with the regulation plan. The double storey floor area is a prescribed factor of the actual coverage area.

The Maximum Coverage and Floor Factor: Coverage is limited to 70% on all erven smaller than 500 sqm with a floor factor of 1.4.

Double Volume

Double volume will count as one floor area provided the area does not exceed 20% of the ground floor area of the house only (i.e. excluding verandahs, patios, garages, carports, gazebos, laundries, etc.) Any excess double volume will count as 2x the floor area.

Loft

A loft is considered a storey if the side walls extend above the floor. In this case, the floor would be included in the Maximum Floor Area calculation. If roof space is used the area is not added to the total floor area.

Building Envelope and Building Lines

Each property has a specified building zone within which construction must take place as indicated in the regulation plans.

Verandahs, balconies, patios, staircases, gazebos, pergolas, built-in braais, barbeques and pools or any other structure more than 300 mm high are in general considered to be part of the building structures and must be within the building lines.

Beacon and Building Certificates

Prior to the start of construction the Building Contractor must obtain a Beacon Certificate from the appointed Land Surveyors.

Maximum Building Height

Single Residential:

- The maximum building height may not exceed 8.0 meters above natural ground level.

Row Houses:

- The maximum building height may not exceed 8.0 metre above natural ground level.

Walk-up Apartments:

- The maximum building height may not exceed 12.0 metre above natural ground level and is limited to three storeys.

Consolidation of Stands

Application must be made to the Review Panel and written approval obtained before an application is made to the local authority.

Regulation Plans

Each property has a specific building zone within which construction must take place. A specific Regulation Plan exists for each property regulating usage areas within this zone. A copy of this regulation plan is available from the developer and must be attached to each submission to the Review Panel.

5

Design Review

Plan Submission Requirements

Plan approval process

The registered architect / technician must submit all building plans to the New Horizon Villages Design Review Panel for approval and then to the local authority before construction work commences. Scrutiny fees are payable. Alterations / amendments required after approval must be submitted to the Design Review Panel for approval prior to construction.

Information required for submission to DRP

The following information is required when submitting plans for approval:

- Architectural specification sheet showing coverage and floor areas, finishing schedules and information on registered owner.
- Copy of Regulation plan
- Copy of Concept plan
- Contour plan/ site plan with building footprint and building lines, showing existing buildings on adjoining sites
- Roof plan
- Dimensioned floor plans to scale 1:100 or 1:50.
- All elevations and sections with heights
- Position of driveway, paving and hard surface finishes.
- Location of retaining structures.
- Storm water management detail
- Detail drawings for special features and finishes.
- Bulk earthworks – cut and fill section
- Prescribed SACAP project form signed by owner and architect.
- Architect to sign all plans and specification sheets.
- Prescribed Owner's Declaration or letter from architect confirming appointment for Supervision

Note:

No approvals will be given for "future" additions or future phases.

Rowhouses to be submitted per group/set.

Special condition

Building plan submission to comply with the latest New Horizon Villages design code book regulations. The Design Review Panel reserves the right to interpret this manual and approve plans at its discretion. Variances to the architectural regulations may be granted on the basis of architectural merit.

6

Definitions

Definitions

Balcony

Open area on the first floor.

Building Line

The line defining the area measured from the boundary of a stand within which no building or other structure, except a fence, may be erected.

Canopy

Solid roof over outside door or staircase.

Coverage

The total ground area occupied on a stand by roofed or covered structures such as the house, garage, verandah or gazebo. Measured at the external limit of the supporting walls or pillars.

Note: the area under a timber-floored balcony or cantilevered balcony is included in this calculation.

See also 'Pergola' definition below.

Deck

Open area on the ground floor with a timber floor.

Double Storey Factor

The amount by which the maximum allowable coverage is multiplied to determine the maximum allowable combined floor area for all covered structures on a stand.

Dwelling

A self-contained group of rooms with not more than one kitchen, used for the living accommodation and housing of a single family, together with associated outbuildings. Commonly called a "house".

Footprint

The area covered by structures at ground level.

Pergola

A garden structure with an open wood framed flat roof often latticed. To qualify as an unroofed structure a minimum of 2/3 of the plan area must remain open to the sky and the top of the structure must be absolutely flat.

Verandah

A roofed open gallery attached to the exterior of a building on the ground or first floor.