

# ARCHITECTURAL DESIGN & DEVELOPMENT CONTROL MANUAL CONTENTS

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			PAGE
1.0	INTR	RODUCTION	5
2.0	ARC	HITECTURAL DESIGN MANUAL AND LAYOUT OBJECTIVES	6
	2.1	Objective 1	6
	2.2	Objective 2	6
	2.3	Objective 3	6
3.0	ARC	HITECTURAL CONCEPT STATEMENT	6
4.0	DEV	ELOPMENT CONTROL DOCUMENTS	7
	4.1	Master Plot Layout (Diagram page 37)	7
	4.2	Plot Pedigree Diagrams (Specimen page 36)	7
	4.3	Relative Height Control Diagram (in BRE Sales Office)	7
	4.4	BRE Compliance Certificate (Specimen page 43)	7
	4.5	BRE Occupation Certificate (Specimen page 44)	8
5.0	DEV	ELOPMENT CONTROL PRINCIPLES	8
	5.1	Height Restriction	8
	5.2	Building Lines	9
	5.3	Building Components	9
	5.4	Vehicular Access	9
	5.5	Building Zone	9
6.0	ENV	IRONMENTAL DESIGN MATTERS	10
7.0	ARC	HITECTURAL ELEMENTS	10
	7.1	General	10
	7.2	Building Components	10
	7.3	Roofs	11
	7.4	Double Pitched Roof Ends	12
	7.5	Roof Overhang and Fascia	14
	7.6	Roof Lights	14
	7.7	External Walls	14

# **CONTENTS**

7.8	Boundary, Courtyard and Screen Walls	14
7.9	Columns and Pergolas	16
7.10	Awnings	16
7.11	Doors	17
7.12	Windows	18
7.13	External Shutters	19
7.14	Gable Ventilator	19
7.15	Burglar Bars	19
7.16	Gutters and Downpipes	19
7.17	Chimneys	20
7.18	Plumbing Pipes	20
7.19	TV Antennas and Satellite Dishes	20
7.20	Air Conditioners	21
7.21	External Floor Covering	21
7.22	Timber Deck	21
7.23	Balconies and Balustrades	21
7.24	Steps	22
7.25	Garages	22
7.26	Swimming Pools	23
7.27	House Names and Numbers	23

7.28
7.28

GENE	GENERAL		
8.1	Electricity	24	
8.2	Sewerage	24	
8.3	Gas Installation	24	
8.4	Water	24	
8.5	Renewable Energy	25	
8.6	Telephones	25	
8.7	Vegetation and Landscaping	25	
8.8	Siting of Buildings	25	
8.9	Floor Level	25	
8.10	Granny Flats	26	
8.11	Plan Approvals	26	
8.12	BRE Application Form for Sketch Plan Approval (Specimen page 41)	26	
8.13	BRE Application Form for Aesthetic Approval (Specimen page 42)	27	
8.14	National Building Regulations	28	

# PAGE

23

# **CONTENTS**

9.0	BUILDING ACTIVITY RESTRICTIONS					
	9.1	Contractor	28			
	9.2	Construction Deposit	28			
	9.3	Building Operations	28			
	9.4	Refuse	29			
	9.5	Toilets	29			
	9.6	Danger Tape	29			
	9.7	Deliveries	29			
	9.8	Fencing Off	29			
	9.9	Insurance	29			
10.0	THE	CONSTRUCTION ENVIRONMENTAL MANAGEMENT	29			
	PLAN					
	10.1	The Objective	30			
	10.2	The Environmental Impact Fine Structure	30			

# **ABBREVIATIONS**

ADDC Manual	- Architectural Design & Development Control Manual
AFFL	- Above Finished Floor Level
BHCC	- Bunker Hills Construction Company
BRE	- Balugha River Estate
BREAC	- Balugha River Estate Aesthetic Committee
EMP	- Environmental Management Plan
GKM	- Groot Kei Municipality
HOA	- Home Owners Association
NGL	- Natural Ground Level
NGLP	- Natural Ground Level Point (highest natural ground level point within the
	Building Zone)
PPD	- Plot Pedigree Diagram

# **ANNEXURES**

			PAGE
Annexure 1A	:	Preselected External Colour Combinations	34
Annexure 1B	:	Roof Colour Block Diagram	35
Annexure 1C	:	Plot Pedigree Diagram (PPD specimen)	36
Annexure 1D	:	Master Plot Layout	37
Annexure 1E	:	Typical Sections (Diagrams)	38
Annexure 1F	:	Standard Windows (Schedule)	39
Annexure 1G	:	Accredited BRE Contractors& Subcontractors (Current List)	40

# **ADDENDUMS**(Specimens)

Addendum 1H	:	BRE Application Form for Sketch Plan Approval (Specimen)	41
Addendum 1J	:	BRE Application Form for Aesthetic Approval of Building Plans	
		(Specimen)	42
Addendum 7A	:	BRE Compliance Certificate (Specimen)	43
Addendum 12A	:	BRE Occupation Certificate (Specimen)	44



# **ARCHITECTURAL DESIGN & DEVELOPMENT CONTROL MANUAL**

## 1.0 **INTRODUCTION:**

The Balugha River Estate (BRE) is located 25km north-east out of East London on the east coast resorts road. The estate has a natural beauty, with indigenous flora as the backdrop to the coral blue Indian Ocean. To the east the river forms the northern boundary, creating a breathtaking environment to enjoy and in which to relax.

The vision for Balugha is to create an estate that will celebrate the typical easy living lifestyle which this region is famous for - in harmony with nature, the ocean, and in visual cohesion with neighbouring homes.

The aim is to end up with an estate which will have a feeling of spaciousness and openness as you drive through the estate, with the river ultimately the focal point.

An Architectural Design and Development Control (ADDC) Manual has been developed which will have to be adhered to by all individual BRE plot owners.

The ADDC Manual is supplementary to the National Building Regulations and requirements of the local authority.

All building designs are to be designed by Architects /Technologist registered with the SACAP and presented in Sketch form to the Balugha River Estate Aesthetic Committee (BREAC). The procedure and requirements are set out under **Plan Approvals page 28** of this ADDC Manual.

All plans must be approved by the BREAC<u>prior</u> to submission to Local Authority as a condition of title.

The BREAC reserves the right to interpret this manual and approve plans at its discretion and to revise Guidelines from time to time.

Where the BREAC permits variations, these are in respect of specific site conditions, and should not be considered as a permanent amendment to this ADDC Manual.

In order for the BRE to be developed to its full potential as soon as possible, a 5 (five) year time limit from the date of transfer of the plothas been set for the completion of the house on the particular plot. The Owner undertakes to commence and complete the building within five years of the date of registration of the plot. In the case of Plot &Plan contracts, the Owner willcommence and complete construction as per the construction period stated in the Plot &Plan Agreement, that is 1 (one) year time limit from that date of transfer of the plot. Failing to do soshall entitlethe HOA (Home Owners' Association) to impose a penalty of R50, 000.00 per year, calculated pro-rata. In both instances, the building shall be finally completed within a Construction Period of 12(twelve) months from commencement.

## 2.0 **ARCHITECTURAL DESIGN MANUAL & LAYOUT OBJECTIVES:**

- 2.1 **Objective 1:** The intention is to develop a unique cohesive architectural character for BRE, to combine different architectural interpretations and variety within the set design principles in order to capture a harmonious, subtropical, aesthetically pleasing architecture without the adverse effects of repetition. This ADDC Manual has therefore been developed to particularly exclude certain forms, materials and colours.
- 2.2 **Objective 2:** Each home is designed to maximise and take into account the following:
  - Privacy
  - Views
  - Wind directions
  - Sunshine
  - Topography
- 2.3 **Objective 3:**To optimise the integration of controlled development and the nature through careful planning and the conservation of the river, the beach, the coastal dunes and indigenous forest along the river bank.

# 3.0 **ARCHITECTURAL CONCEPT STATEMENT:**

3.1 The basic concept of the architecture envisaged for BRE is to capture the character of contemporary sub-tropic architecture, i.e. shaped, tiled roof, large roof overhang with strong design elements including a variety of planes, setbacks, shadows, roof details, etc. Controlled colour application to doors, windows, shutters and awnings will be implemented.

# 4.0 **DEVELOPMENT CONTROL DOCUMENTS:**

## 4.1 Master Plot Layout (Diagramon page37)

The attached **Master Plot Layout**depicts the overall BRE Plot layout and shows the different building lines, vehicular access, height restriction and basic Development Potential of each individual Plot.

## 4.2 Plot Pedigree Diagrams (PPD) (Specimen on page 36)

The above Master Plot Layout information is correlated with the Plot Pedigree Diagrams prepared for each individual plot showing the building lines, building zone, height restriction and permissible vehicular access. The PPD will also be an Annexure to the particular Plot Sales Agreement.

## 4.3 Relative Height Control Diagram (in BRE Sales Office)

The relative development control heights of all the BRE Plots are shown on the Relative Height Control Diagram together with the specified height zone, maximum ridge height, number of storeys, highest Natural Ground Level Point (NGLP)within the particular Building Zone.

The NGLP as described in item 5.1.2 must be measured on site in the presence of the BRE Project Controller and marked in white paint on the closest street kerb as the Kerb Datum Dimension between the NGLP and the specific point on the kerb. See **Diagram 1** page 10.

## 4.4 BRE Compliance Certificate (Specimen on page43)

- 4.4.1 The BRE Project Controller will issue a formal BRE Certificate of Compliance to the Owner on special request when the undermentioned stipulations and requirements of the ADDC Manual have been complied with and confirmed. The Certificate of Compliance must accompany the Sketch Plan Submission to BREAC for approval:
  - Registration of transfer of Plot in Deed Office.
  - Kerb / NGLP dimension measured and painted on sidewalk.
  - BREAC Scrutiny Fee fullypaid.
    - Note: The BRE Compliance Certificate issued, will perform as acknowledgement of receipt of prescribed BREAC Aesthetic Scrutiny Fee.

## 4.5 BRE Occupation Certificate (Specimen on page 44)

- 4.5.1 The BRE Project Controller will issue a formal BRE Occupation Certificate to the Owner when the undermentioned stipulations and requirements of the ADDC Manual and the Building Agreement have been complied with and proven:
  - Municipal Occupation Certificate issued.
  - Compliance with approved Building Plans.
  - Payment water and electricity meters and deposits.
  - Payment of Final Progress Payment to Contractor.
  - Certificate of Practical Completion issued by TPC.
- 4.5.2 The Owner will not be allowed to take occupation of the house prior to the formal issue of the BRE Occupation Certificate.

## 5.0 **DEVELOPMENT CONTROL PRINCIPLES:**

## 5.1 Height Restriction

- 5.1.1 There are 3 Height Zones applicable on BRE Plots, i.e. the 6.5m (green) zone, the 7.5m (yellow) zone and the 8.5m (brown) zone. See **Annexure 1D page 37**.
- 5.1.2 Each Plot has a NGLP which is the HIGHEST NATURAL GROUND LEVEL POINT WITHIN THE BUILDING ZONE ON THE PLOT. See **Diagram 1 page10.** Should the Owner require further verification of the NGLP, this must be certified by a professional Land Surveyor at the Owner's own cost.
- 5.1.3 The Height Zone allocated to each Plot dictates the vertical distance from the NGLP to the top of the <u>highest</u> double pitched roof ridge. Only chimneys may project through this maximum height plane. See **Diagram 2 page 11.**
- 5.1.4 The Height Zone also dictates the number of floors that may be built on any one Plot <u>under</u> the maximum height plane. Should the topography of a Plot allow for a double storey house within the height restriction allocated to the Plot, then BREAC in its sole discretion may approve such Sketch Plans. See **Annexure 1E page 38** depicting various typical sections.

## 5.2 Building Lines

Building lines depicted on Master Plot Layout, **Annexure 1D page37** and individual PPD's (specimen**Annexure 1C page 36**) defines the Building Zone of each Plot and dictates various setback principles as follows:

- 5.2.1 **Double Street Building Lines** dictate two setbacks from the Street Boundary:
  - The single or double storey house (other than a single storey garage) may be built on the wider 8m Building Line.
  - Only the single storey garage 7m wide maximum, may be built on the 6m Building Line.
- 5.2.2 **Common Side and Rear Building Lines** dictate setbacks for single and double storey houses from rear and sides of the Plot.
- 5.2.3 Alternative Street Building Linesare applicable on certain Plots with <u>alternative</u> permissible vehicular access sides and dictates a minimum <u>total</u> of 10m setbacks for the front and back setbacks added together. A <u>minimum</u> of 6m Building Line is only applicable on the selected vehicular access side.

## 5.3 Building Components

5.3.1 Building Components are rectangular Major (wider) and Minor (narrower) Components on plan, connected to one another at 90° to form the basic footprint of the house. Certain Component dimensions are restricted in order to control the height and form of the prescribed double pitch roofs. See **Diagram 3 page 11.** 

## 5.4 Vehicular Access

5.4.1 Permissible vehicular access to each Plot is shown with arrows on the Master Plot Layout and individual PPD's. Vehicular access from any other street boundary of the Plot will not be permitted.

## 5.5 Building Zone

5.5.1 The Building Zone of each Plot is defined by the Building Lines applicable to the Plot. See **Diagram 1 page 10.**The Building Components can be connected and organised within the Building Zone. The actual footprint of the house is dictated by permissible maximum width dimensions of Major and Minor Building Components.

- 5.5.2 In the case of Double Street Building Lines, the 8m Building Line defines the street side of the Building Zone.
- 5.5.3 In the case of an Alternative Street Building Line, the Building Zone can be moved on the Plot between the two streets. The 6m Street Building Line on the selected vehicular access side plus the 4m on the opposite side, totalling a minimum of 10m front and rear setbacks.

## 6.0 ENVIROMENTAL DESIGN MATTERS :

- 6.1 The optimum orientation for houses is to the north, but the river view varies from the north, north-west to the south-east and restricted sea views from certain plots towards the south and east.
- 6.2 The dominant wind direction on a seasonal and annual basis ranges from south to southeast. During winter months (June, July and August) a relatively strong north-easterly wind can occur.

## 7.0 **ARCHITECTURAL ELEMENTS:**

#### 7.1 General:

7.1.1 Only one dwelling will be permitted on a plot.The Building Zone will be governed by the Building Lines on each plot.See Diagram 1 on this page.

1.2 The minimum Gross Building Area including

- 7.1.2 The <u>minimum</u> Gross Building Area including garages and covered stoeps will be 250m<sup>2</sup>.
- 7.1.3 First floors <u>excluding</u> balconies may not be more than 70% of the ground floor area <u>including</u> garages and covered stoeps.

#### 7.2 Building Components:

7.2.1 The design of the footprint of the house must be a composite of Major and Minor rectangular Building Components of various widths connected if possible at right angles to one another in order to accommodate the

#### <u>RECOMMENDATIONS, DIAGRAMS, NOTES AND</u> \* EXCLUSIONS:

Recommendation # REC-01:

Wind protected entrance doors and outside living areas are recommended.Sun protection of doors and windows is recommended.

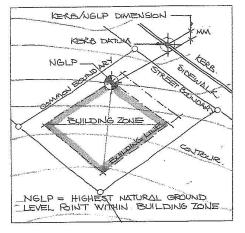


DIAGRAM 1

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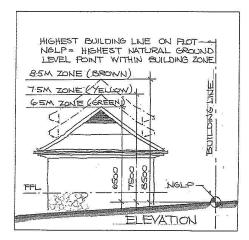
prescribed double pitched roof structures. Building components permitted to be splayed & linked via flat roofs, Sketch plan to be approved by BREAC See Diagram 3 on page 10.

- 7.2.2 A Major Component is the particular component with the bigger width that, by implication, results in a higher roof ridge. A Minor Component is the particular component with a smaller width resulting in a lower roof ridge that will form the hips and valleys with the Major Component. See Diagram 5 page 13.
- 7.2.3 The <u>maximum</u> external width of a rectangular Major Component for ground floor application is 7600mm.
- 7.2.4 The <u>maximum</u> external width of a rectangular Major Component for first floor application is 5600mm. See Diagram 7 page 13.
- 7.2.5 The <u>minimum</u> external length of a Minor Component on plan is 1500mm. See Diagram 3 on this page.
- 7.2.6 The prescribed floor to ceiling heights of Major and Minor Components are measured from top of concrete of the floor slab to underside of wall plate as shown on Typical Sections on Annexure 1E page 38.

## 7.3 **Roofs**:

The prescribed roof design is the most important aspect for capturing the envisaged architectural character.

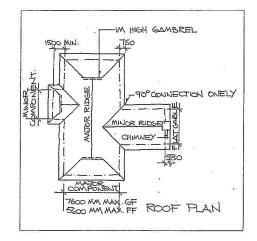
7.3.1 Shaped, double pitched roofs with slope and dimensions are depicted on Diagram 5 page
13 and are covered in prescribed groups with



**DIAGRAM 2** 

#### PROHIBITION # PRO-01:

\* CONNECTION OF MAJOR AND MINOR SECTIONS AT AN ANGLE OTHER THAN 90° IS SPECIFICALLY PROHIBITED.



#### **DIAGRAM 3**

#### Recommendation # REC-02:

Roof tiles to be laid according to suppliers specification by accredited specialist subcontractor.

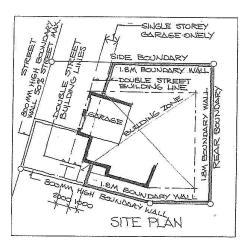
3 preselected alternative coloured cement tiles supplied by Eagle Roof Tiles. The specific through-colour roof tile allocation to groups of plots (in any of the 3 preselected tile profiles), are listed on Annexure 1A page 34 and depicted on Annexure 1B page 35.

- 7.3.2 Roof tiles of only a single selected through colour may be used on a roof.
- 7.3.3 In the case of a double storey, a single pitch roof at a lesser slope, may be used to cover the difference between the bigger width of the ground floor Component and the lesser width first floor Component. See clauses 7.1.3, 7.2.3 and 7.2.4 above.
- 7.3.4 A maximum of 25% of the ground floor footprint may be flat roofs particularly designed to link various shaped double pitched roofs or over outside living areas. Flat roofs are to be concealed behind an upstand beam maximum 425mm high with concealed rainwater outlets and downpipes.
- 7.3.5 The link between a sloping tiled roof and a flat roof to be dealt with in accordance with **Diagram 10 page 15.** The 30 degrees portion of the roof may be omitted for the width of the flat roof portion.

#### 7.4 Double Pitched Roof Ends:

The prescribed sloping roof ends may be a gable or hip type and has to comply with the following guidelines:

- 7.4.1 A flat gable end may only be used in the following cases:
  - Where the gable is used to accommodate a vertical masonry built element on the centrelines of the roof



#### **DIAGRAM 4**

## Recommendation # REC-03:

From a cost point of view it is recommended that the long sides of a Major Section be load bearing walls, as these walls will carry the major roof trusses.

## PROHIBITION # PRO-02:

\* MATCHING OF DIFFERENT COLOUR ROOF TILES ON A HOUSE IS SPECIFICALLY PROHIBITED.

## Recommendation # REC-04:

Guaranteed waterproofing and insulation should be specified for all flat roofs.

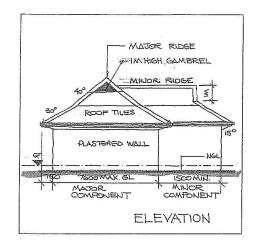
## **PROHIBITION # PRO-03:**

\* PARAPETS ON SHAPED SLOPING ROOFS ARE SPECIFICALLY PROHIBITED.

## PROHIBITION # PRO-04:

\* ANY OTHER THAN THE 30° / 40° PRESCRIBED SHAPED PITCHED ROOF IS SPECIFICALLY PROHIBITED. e.g. a fireplace and chimney or bay window. See **Diagram 17 page 21.** 

- Where the external width of the Building Component is 4.6m or less.
- If a built chimney element is not part of a flat gable end, the gable must be provided with a prescribed built in gable ventilator and / or windows. See Diagram16 page 20.
- 7.4.2 In the case of a flat gable end, the roof must extend so that the outside face of the barge board projects 530mm from the gable wall. See Diagram 19 page 22.
- 7.4.3 In the case of a hipped end, the ridge of the roof must be extended to form a vertical gambrel preferably of no less than 1000mm high. See **Diagram 5 page 13.**
- 7.4.4 Triangular vertical gambrels of the roof structure are to be filled in with horizontal timber or aluminium louvres, or fibre cement boarding. In the case of a double volume with exposed roof trusses on the inside, the gambrel can be fitted with glass panels. The finishes to be used are:
  - Louvres painted in the preselected colours. See Item 10.0 Annexure1A page 34-1.
  - Standard powder coated aluminium louvres in the specified preselected colour.
  - Fibre cement horizontal boarding painted in one of the preselected colours.



## DIAGRAM 5

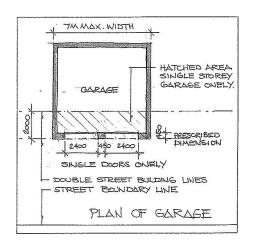


DIAGRAM 6

## PROHIBITION # PRO-05:

\* THATCH, EXPOSED CORRU-GATED IRON OR FIBRE CEMENT SHEETING IS SPECIFICALLY PROHIBITED.

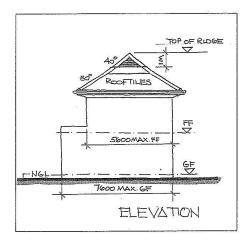


DIAGRAM 7

## 7.5 **Roof Overhang and Fascia:**

7.5.1 The face of the 300mm wide fascia board of the roof overhang is to be 750mm from the outside face of the external wall. See **Diagram 8 on this page.** The eave covering board is to be fixed at 15° to the horizontal and painted in the preselected external eaves colour specified in Item 4.0 **Annexure1A page 34-1.** 

#### 7.6 Roof Lights:

7.6.1 Any roof light must form an integral design with the roof and must specifically be shown described and submitted to BREAC for approval at Sketch Plan Stage.

### 7.7 External Walls:

- 7.7.1 Walls are to be masonry, smooth plastered and must be painted in one of the prescribed external wall colours listed with the prescribed roof tile colour shown in Items 1.0, 2.0 and 3.0 Annexure1A page34-1. Exposed concrete walls or retaining walls must be plastered and painted.
- 7.7.2 The use of locally available, natural stone is to be used in all plinths from NGL to at least GFL. In addition, natural stone could be used for screen walls and boundary walls.

#### 7.8 Boundary, Courtyard and Screen Walls

- 7.8.1 The permissible extent and height of boundary walls are depicted on **Diagram 4 page 12** are summarised hereunder. BREAC may at their discretion, approve exceptions specifically on sloping plots when levels are problematic.
  - The Rear Boundary wall can be a maximum 1.8m above NGL for the full

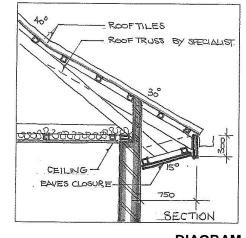


DIAGRAM 8

#### Recommendation # REC-05:

Walls which reflect strong glare could be shaded by pergolas, planting or screening.

#### Recommendation # REC-06:

Because most of the sites will be facing south, the Developers recommend and encourage the use of vertical roof lights, to allow controlled north light into the south facing rooms. Glassing in the roof lights must be non-reflective.

#### PROHIBITION # PRO-06:

\* CEMENT BUILDING BLOCKS AND OTHER ALTERNATIVE BUILDING METHODS ARE SPECIFICALLY PROHIBITED.

#### PROHIBITION # PRO-07:

\* UNPAINTED MASONRY, CON-CRETE, FACEBRICK AND ARTIFICIAL METHODS TO CREATE ROUGH TEXTURED SURFACES, E.G. SPANISH PLASTER ARE SPECIFICALLY PROHIBITED.

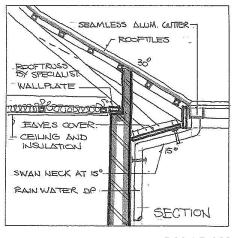
#### Recommendation # REC-07:

The same requirements will be

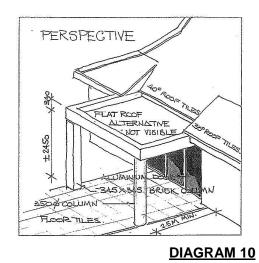
width of the Plot.

- If the house is placed on the Street Building Line, the side common boundary walls can be 1.8m above NGL from the rear boundary to a point 1m <u>short</u> of the extended Street Building Line.
- If the house is situated away from the Street Building Line, the 1.8m high common boundary wall can be built from the Rear Boundary to a point in line with the extended Street Building Line and then may return at 90° towards the house.
- The remainder of the Common Boundary walls to the Street Boundary may be 0.8m high above NGL.
- A 0.8m high boundary wall can be built for 50% of the length of the total Street Boundary and may then turn at 90° towards the house.
- 7.8.2 Boundary or screen walls could be constructed in blockwork or masonry and plastered smooth and painted in one of the prescribed external wall colours. See Items 1.0, 2.0 and 3.0 Annexure1A page34-1.
- 7.8.3 Boundary or screen walls to be designed as an integral part of the house to provide privacy for outside living areas, screen off kitchen and drying yards, water tanks and dustbin areas. Proposals to be depicted on Sketch Plans submitted to BREAC for approval.
- 7.8.4 Water storage tanks to be fully screened by internal screens or boundary walls. Position of tanks to be shown on Sketch Plans submitted to BREAC for approval.
- 7.8.5 345 x 345mm brick columns to a maximum height of 2380mm to support timber pergola

applicable on a Common Boundary between two erven and should the construction of the two neighbouring houses take place simultaneously, the cost could be shared.



**DIAGRAM 9** 



<u>Recommendation # REC-08:</u> The planting of hedges for privacy and

wind-protection is encouraged.

#### **PROHIBITION # PRO-08:**

\* CORRUGATED IRON, BARBED WIRE AND PRE-FABRICATED

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beams, may be placed on a Common or Rear boundary and integrated with the boundary wall. See **Diagram 11 on this page.** 

7.8.6 All retaining walls are to be according to Engineer's details and a maximum of 2500mm above NGL.

## 7.9 Columns and Pergolas:

7.9.1 Square columns for pergolas or support for flat reinforced concrete or alternative flat roofs are to be constructed in 345 x 345mm masonry with smooth plaster, painted in one of the prescribed external wall colours. If columns are used as a double volume entrance, A 550x550 thickening base is the be added the column

See Diagram 10 page 15.

- 7.9.2 Timber beams with slatted, wooden strips to protect patios and terraces may be used. See Diagram 11on this page.
- 7.9.3 Aluminium adjustable louvres in white may only be used if they are completely boxed-in and screened by an upstand beam 425mm high.
- 7.9.4 Round columns with a diameter of 350mm painted in one of the prescribed external wall colours, may be used as an alternative.
- 7.9.5 Pergola beams to be timber and varnished in the prescribed colour. See Item 8.0 Annexure 1A page 34-2.

## 7.10 **Awnings:**

7.10.1 No awnings are allowed.

WALLING SYSTEMS ARE SPECIFICALLY PROHIBITED.

## PROHIBITION # PRO-09:

\* ANY BRICKWORK COLUMNS OR PROJECTIONS ABOVE A HORIZONTAL OR SLOPING TOP OF BOUNDARY WALLS ARE SPECIFICALLY PROHIBITED.

## PROHIBITION # PRO-10:

\* CARPORTS, SHADE NETS IN ANY FORM ARE SPECIFICALLY PROHIBITED.

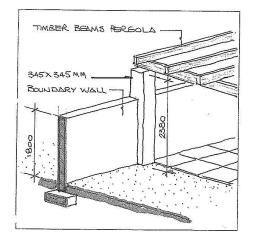


DIAGRAM 11

## PROHIBITION # PRO-11:

\* CANVAS AWNINGS ARE SPECIFICALLY PROHIBITED.

## Recommendation # REC-09:

The use of vines or indigenous climbing plants on pergolas is strongly recommended.

## PROHIBITION # PRO-12:

\* ALL OTHER COLUMN TYPES E.G. PRECAST GREEK STYLE AND OTHERDIAMETER DIMENSIONS ARE SPECI-FICALLY PROHIBITED.

## **PROHIBITION # PRO-13:**

## 7.11 **Doors:**

- 7.11.1 Standard BRE Door Schedule will be made available to Architects on special request.
- 7.11.2 There are two standard lintol heights for doors:
  - Higher H28 Door Series (28 brick courses).
  - Lower L25 Door Series (25 brick courses).
  - The preferred height is 2380mm (28) above top of concrete floor slab to make provision for a 255mm openable, secure fanlight above normal door (and window) height.
- 7.11.3 Garage doors must be horizontal slatted doors in the preselected colour. See item 8.0 Annexure 1A page 34-2. Double and single garage doors at 2.4m and 4.8m wide will be permitted.
- x.x.x Glass sliding doors to a maximum of 2.7m can only be installed under a standard BRE 750mm roof overhang and eaves detail depicted on Diagram 8 page 14.
- 7.11.4 Timber front entrance door of not less than 1.5m wide (preferably horizontal slatted) front doors, kitchen doors as well as French doors to be varnished in preselected colour. See Item 8.0 Annexure1A page 34-2.
- 7.11.5 Should a wind lobby outside the front door be created with an aluminium / glass door, the latter must be set back by at least 1.5m from the outside walls of minor or major building components facing the street.
- 7.11.6 Powder coated aluminium sliding doors to be in the preselected colour, and is not to exceed 5250mm in width. It is recommended that all

\* COVERING A PERGOLA WITH ANY SHADECLOTH OR ROOF MATERIAL IS SPECIFICALLY PROHIBITED.

#### PROHIBITION # PRO-14:

\* ALL AWNINGS ARE SPECIFICALLY PROHIBITED.

#### Recommendation # REC-10:

Garage door clear height of 2380mm for standard 4x4 vehicles should be specified.

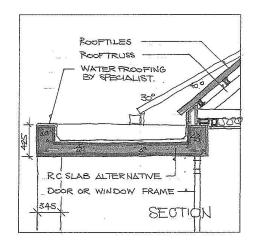


DIAGRAM 12

### PROHIBITION # PRO-15:

## PROHIBITION # PRO-16:

\* ANY FORM OF WINDOW PANELS IN GARAGE DOORS ARE SPECIFICALLY PRO-HIBITED.

### PROHIBITION # PRO-17:

\* EXTERNAL STEEL DOOR FRAMES AND NATURAL (SILVER COLOURED) ANODISED ALUMINIUM SLIDING DOORS ARE SPECIFICALLY PRO-HIBITED.

## PROHIBITION # PRO-18:

\* ARCHED DOORS AND WINDOWS

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sliding doors, if facing the street, to be protected under a roof setback at least 2.5m from the outside face of the covered area.

See Diagram 10 page 15.

- 7.11.7 Brick piers of minimum 450mm wide to be built between all doors / windows.
- 7.11.8 Powder coated aluminium folding stack doors to be in the preselected colour. The door must be in increments of 750mm panels in odd numbers to a maximum width of 5250mm (7 x 750mm) and if facing the street, must be protected under a roof setback at least 1.5m from the outside face of the covered area. See Diagram 10 page 15.

#### 7.12 Windows:

- 7.12.1 Standard BRE Window Schedule will be made available to Architects / Technologist on special request.
- 7.12.2 There are two standard lintol heights for windows:
  - The Higher H28 Window Series (28 brick courses). See Diagram 14 on page 19.
  - The Lower L25 Window Series (25 brick courses). See Diagram 15 on page 19.Both Window Series or a combination of Series, may be used in a house.
  - The standard window heights are determined by multiples of 85mm brick courses (shown in brackets) and standard windows are shown on Annexure 1F page 39.
- 7.12.3 The standard window widths in both the Higher and Lower Series are 650mm, 900mm,

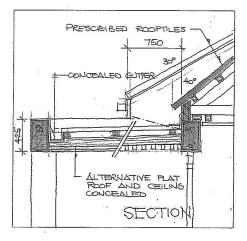
ARE SPECIFICALLY PROHIBITED.

#### PROHIBITION # PRO-19:

\* GLASS FRONT DOORS ARE SPECIFICALLY PROHIBITED ON THE OUTSIDE FACADE OF THE HOUSE, EXCEPT IF THE DOOR IS PLACED AT LEAST 1.5M FROM THE OUTSIDE FACADE.

#### **PROHIBITION # PRO-20:**

\* GLASS SLIDING DOORS ON A GABLE END OF A BUILDING COMPONENT OR UNDER A FLAT ROOF IS SPECIFICALLY PROHIBITED.



#### DIAGRAM 13

#### PROHIBITION # PRO-21:

\* PLASTER BANDS AROUND DOORS AND WINDOWS ARE SPECIFICALLY PROHIBITED.

### PROHIBITION # PRO-22:

\* WHITE UPVC WINDOWS, WINBLOKS, TIMBER, STEEL AND COTTAGE PANE WINDOWS ARE SPECIFICALLY PROHIBITED. 1250mm and 1850mm (maximum width). These sizes are a guide line, and maximum widths not to be exceeded.

- 7.12.4 For cost saving purposes, all windows are to be powder coated aluminium finished in <u>one</u> <u>only prescribed colour</u> listed in Item 6.0 Annexure1A page 34-2.
- 7.12.5 The use of non-standard windows will be more expensive and is not recommended.
- 7.12.6 Corner Windows will be allowed at the discretion of BREAC

#### 7.13 **External Shutters:**

7.13.1 Framed, powder coated aluminium sliding shutters in the prescribed colour with horizontal louvres can be used. See Item 10.0 Annexure1A page 34-2.

#### 7.14 **Gable Ventilator:**

7.14.1 Powder coated aluminium gable ventilators to be built in on the centre line of all flat gables in the exact position shown on Diagram 16on page 20. The standard size is 300 x 510mm and the prescribed colour in Item 6.0 Annexure1A page 34-2.

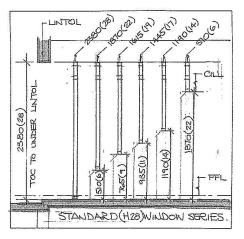
#### 7.15 Burglar Bars:

7.15.1 Internal grid-pattern purpose made to suit the dimensions of the window to be used.

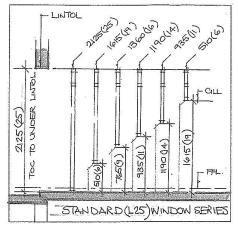
#### 7.16 Gutters and Downpipes:

7.16.1 All gutters and downpipes to be from seamless aluminium extrusion in the prescribed colour set out in Item 7.0 Annexure1A page 34-2.

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## DIAGRAM 14



#### DIAGRAM 15

#### Recommendation # REC-11:

That all soffits to external doors and windows to be 2830mm (28 brick courses) AFFL in order to create the opportunity for a secure openable ventilation opening above door height.

#### PROHIBITION # PRO-23:

\* PREFABRICATED TIMBER SHUTTERS WITH <u>SMALL</u> LOUVRES OR ADJUSTABLE PVC LOUVRES AND IMITATION SHUTTERS ARE SPECIFICALLY PROHIBITED. 7.16.2 All gutters are to be fixed to a 300mm fibre cement fascia board. Downpipes are to follow the 15<sup>o</sup> slope and fixed hard up to the sloping eaves board. See **Diagram 9 page 15.** 

### 7.17 Chimneys:

- 7.17.1 Exposed chimneys built in brickwork, contemporary in design, plastered smooth, painted the same colour as the rest of the exterior of the house in any of the prescribed colours. See **Diagram 17 onpage 21.**
- 7.17.2 Only prescribed black stainless steel cowls by Jetmaster (or equal) will be permitted. See Diagram 18 page 21.
- 7.17.3 The chimney for internal fireplaces may project through the height restriction plane governed by the particular ridge height.
- 7.17.4 Chimneys on external walls are to project to the outside 530mm from the face of the gable wall. The chimney above the roof is to be a maximum of 860mm wide on the gable elevation.
  See Diagram 19 page 22.

## 7.18 Plumbing Pipes:

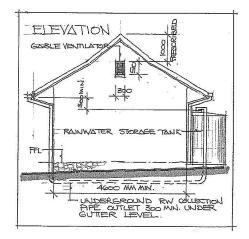
7.18.1 Soil and vent pipes are to be built into walls or vertical ducts. Plumbing pipes must be fully concealed.

### 7.19 T.V. Antennas and Satellite Dishes:

7.19.1 No protrusion of television or radio aerials, satellite dishes above parapet walls will be permitted.

#### Recommendation # REC-12:

Special attention recommended dealing with wind noise from shutters and garage doors.



#### DIAGRAM 16

#### PROHIBITION # PRO-24:

\* EXTERNAL BURGLAR BARS, TRELLIDOR / EXPANDA GATE / ROLLER SHUTTERS ARE SPECIFICALLY PROHIBITED.

#### **PROHIBITION # PRO-25:**

\* PVC AND FIBRE CEMENT GUTTERS AND DOWNPIPES ARE SPECIFICALLY PROHIBITED.

## PROHIBITION # PRO-26:

\* TERRACOTTA POT, FIBRE CEMENT OR ROTATING STEEL COWLS ARE SPECIFICALLY PROHIBITED. 7.19.2 The proposed location of the satellite dish must be indicated on the Sketch Plan drawings submitted to the BREAC for approval.

#### 7.20 Air Conditioners:

- 7.20.1 Air conditioners may be used. The vents, however, are not to be visible from street or public areas. Window units may not be used.
- 7.20.2 Air conditioning equipment positions to be integrated with the design of the house and submitted for Sketch Plan approval by BREAC.

#### 7.21 External Floor Covering:

- 7.21.1 Square tiles only in clay, slasto, sandstone, non-slip tiles or cobbles and brick paving can be used.
- 7.21.2 Concrete paving slabs may only be used in drying or kitchen yards which are fully surrounded by screen or boundary walls.

#### 7.22 Timber Deck:

7.22.1 Timber decks may be specified for outside living areas.

### 7.23 Balconies and Balustrades:

- 7.23.1 To be designed as an integral part of the house and shown on Sketch Plans submitted to BREAC for approval.
- 7.23.2 Any low balustrade wall must be maximum 450mm high above the finished floor, with powder coated aluminium, stainless steel or timber handrail in preselected colours. See Diagram 20 on page 22.

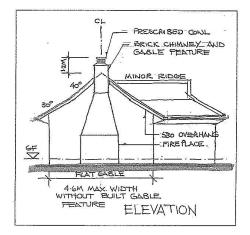
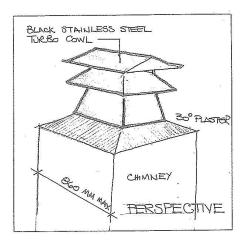


DIAGRAM 17

#### PROHIBITION # PRO-27:

\* EXTERNALLY VISIBLE SOIL, SEWER AND VENTILATION PIPES ARE SPECIFICALLY PROHIBITED.



#### DIAGRAM 18

#### PROHIBITION # PRO-28:

\* AIR CONDITIONING EQUIPMENT VISIBLE FROM THE STREET IS SPECIFICALLY PROHIBITED.

#### PROHIBITION # PRO-29:

\* FREEFORM SLASTO, CRAZY PAVING, PREMIX AND CHIP AND SPRAY ARE SPECIFICALLY PROHIBITED.

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- 7.23.3 Stainless steel cables with 100mm gaps in combination with timber handrail will be permitted.
- 7.23.4 The balustrade walls can be solid brickwork a maximum of 450mm high, plastered and painted in preselected varnish described in Item 8.0 Annexure1A page 34-2.

## 7.24 Steps:

7.24.1 All external steps to be built in masonry work and covered with floor tiles to match except where decking occurs

## 7.25 Garages:

- 7.25.1 To be designed as an integral part of the house and architectural guidelines.
- 7.25.2 Covering of driveways from kerb to garage doors to be in light grey interlocking cement pavers only.
- 7.25.x Single storey garages may be built between two Double Street Building Lines where applicable and shown on DCP and PPD's.
- 7.25.x In the case where a garage is built on the 6m Street Building Line, any habitable first floor component must be set back to at least the 8m Street Building Line.
- 7.25.4 Timber garage doors to be slatted horizontally, varnished in preselected colour. See Item 8.0
   Annexure1A page 34-2.
- 7.25.5 Powder coated aluminium garage doors to be horizontally slatted in the preselected colour. See Item 11 Annexure 1A page 34-2.

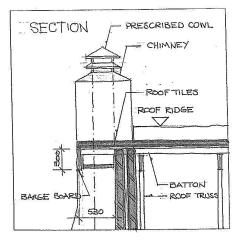


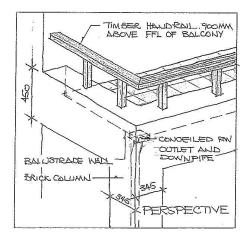
DIAGRAM 19

## PROHIBITION # PRO-30:

\* WROUGHT IRON, GLAZING, STEEL OR ALUMINIUM PANELLING FOR BALU-STRADING ARE SPECIFICALLY PROHIBITED.

## Recommendation # REC-13:

316L stainless steel specification for cables is strongly recommended.



#### DIAGRAM 20

## PROHIBITION # PRO-31:

\* STREET FACING STEPS IN TIMBER IS SPECIFICALLY PROHIBITED.

## **PROHIBITION # PRO-32:**

*	FREE	STANDING	PRE-
FABRICATED		CARI	PORTS,

## 7.26 Swimming Pools:

- 7.26.1 To be designed inside Building Zone and as an integral part of the outside living area, surrounded by approved paving or timber decking, screen walls or boundary wall and specifically depicted on the Sketch Plans submitted to BREAC for approval.
- 7.26.2 Above ground level pools or porta pools only allowed in areas screened off from the street and neighbours.
- 7.26.3 All pool pumps and filters to be positioned within the Building Zone and screened off. The positions to be indicated on Sketch Plans submitted to BREAC for approval.

## 7.27 House Names and Numbers:

7.27.1 Black anodised aluminium lettering 150mm maximum height, or 150 x 150 glazed tiles with numbers or letters in approved colour plastered in, are to be used.

## 7.28 Solar Heating:

7.28.1 Solar heating units on the roof to be screened off totally by parapet walls or other roofs. Alternatively, the proposed position and fixing details of solar panels or water heaters to be fully integrated with roof design and clearly shown on the Sketch Plan Drawings submitted to BREAC for approval. PERSPEX OR FIBRE GLASS SHEETING IS SPECIFICALLY PROHIBITED.

## **PROHIBITION # PRO-33:**

\* PRE-FABRICATED GARAGES, STEEL OR PATTERNED GARAGE DOORS ARE SPECIFICALLY PROHIBITED.

## **PROHIBITION # PRO-34:**

\* UPVC DOORS ARE SPECIFICALLY PROHIBITED.

## **PROHIBITION # PRO-35:**

\* ALL OTHER LETTERING OR OTHER EXTERNAL DECORA-TIONS ON STREET FACING SIDE ARE SPECIFICALLY PROHIBITED

## 8.0 **GENERAL:**

## 8.1 Electricity:

- 8.1.1 Electricity will be provided by Eskom via HOA for which a formal application must be made to the HOA for the connection to the supply.Electrical cables must be hidden.
- 8.1.2 Prepaid electricity meter will be installed. A basic electricity availability fee will be included in monthly home owner's levy.

## 8.2 Sewerage:

- 8.2.1 All erven will be serviced by a waterborne pressurised sanitary system operated and maintained by the HOA.
- 8.2.2 A basic sewerage availability fee will be included in monthly home owner's levy.

## 8.3 Gas Installation:

- 8.3.1 Gas installation drawings designed by a registered specialist to be submitted with the Building Plans for approval by GKM Fire Brigade.
- 8.3.2 An inspection and testing of the gas installation is a prerequisite for the required Gas Installation Compliance Certificate and will be a prerequisite for the issue of the BRE Occupation Certificate.

## 8.4 <u>Water:</u>

- 8.4.1 Water for household purposes sourced from BRE boreholes and treated through on-site reverse osmosis installation, is provided via pressurised reticulation network. Prepaid meters will be installed to manage consumption of each household.
- 8.4.2 The owner to each house to provide rainwater collection tank(s) with a capacity of 10,000 litres for garden irrigation, car washing, etc. The tanks must be screened off.

## 8.5 **Renewable Energy:**

- 8.5.1 Solar panels and solar water heaters must be integrated in the roof design, installed at the same angle as the sloping roof and submitted for approval by the BREAC at Sketch Plan Stage. Some available devices recommended to be incorporated in the design are:
  - Gas hobs / electric ovens
  - Solar heated geysers
  - Motion activation switches on all external lights.
  - Air conditioners on time limited switches.
  - Insulation of roofs, ceiling and walls (where practical possible)
  - Dual WC flushing systems
  - Grey water management

## 8.6 <u>Telephones:</u>

8.6.1 Telephone cables must be hidden.

## 8.7 Vegetation and Landscaping:

8.7.1 Only indigenous plants and trees may be utilised in the landscaping of gardens.Gardens on the street facing side of the property should be simple and in keeping with the natural environment and without decorative elements such as dwarfs, wagon wheels and the likes.

## 8.8 Siting of Buildings:

8.8.1 In order to promote good neighbourliness and a coherent scheme, Home Owners and Designers are encouraged to consult with their neighbours when planning their homes and when siting the outbuildings. Consideration should be taken when locating entertainment and servant's quarters to respect your neighbours' privacy. The BREAC's decision on this matter will be binding on all parties concerned.

## 8.9 Floor Level:

- 8.9.1 Finished floor level (Ground Floor) is to be a maximum of 300mm above Natural Ground Level at the highest point within the Building Zone (NGLP). The purpose of this restriction is to control the height of the buildings and to minimise the height of buildings.
- 8.9.2 Any retaining wall or boxed in void resulting from a sloping site to have maximum height of 2.5m above NGL.

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## 8.10 Granny Flats:

8.10.1 Granny flats must be totally integrated with the design of the houseand may have a separate entrance and must be specifically shown on Sketch Plans submitted to BREAC for approval. Separate cottages are specifically prohibited.

## 8.11 Plan Approvals:

- 8.11.1 In order to keep the quality of design as high as possible, it is a requirement that only Architects / Technologists registered with the South African Institute of Architect Professionals (SACAP) may design and submit drawings to BREAC for approval. Furthermore, it will be a requirement that the SACAP registration number of the Architect / Technologist be filled in on the prescribed BREApplication Form for Approval of Sketch Plans and the BRE Application Form for Aesthetic Approval.See**Addendums 1H page 41-1 and 1J page 42-1.**
- 8.11.2 The Architectural Design & Development Manual, being a condition of subdivision, has statutory authority and must be read together with the particular PPD. The approval of plans in terms of the Manual will be the responsibility of the BREAC who will act in their sole discretion in terms of the constitution of the Balugha River Estate Home Owners Association.
- 8.11.3 A R3,000.00 BREAC Aesthetic Scrutiny Fee will be payable to BREAC <u>prior</u> to submission of the Sketch Plans. The Aesthetic Scrutiny Fee allows for one scrutiny of revision of the Sketch Plans by the Architect to achieve compliance.
- 8.11.4 TPA will issue the BRE Compliance Certificate (Addendum 7A [specimen] page 43) on compliance by the Client of all items listed in clause 4.4.1 page 7.

## 8.12 BRE Application Form for Sketch Plan Approval

- 8.12.1 The BRE Application Form for Sketch Plan Approval (Addendum 1H [specimen] page411) to be filled in, signed by the Owner and the Architect / Technologist and submitted with 3 sets of the Sketch Plans to BREAC for approval.
- 8.12.2 BREAC will not consider the application for Sketch Plan Approval without receipt of the formally issued BRE Compliance Certificate.
- 8.12.3 BREAC will confirm reasons for the decline or conditional approval of Sketch Plans within
   21 (twenty-one) working days of receipt of the required Form, Drawings and Compliance Certificate.

8.12.4 The BREAC will scrutinize the applications for Sketch Plan approval in terms of the BRE Development Control and Architectural Guidelines and if compliant in general terms, approve the Sketch Plan <u>subject</u> to certain comments and adjustments if required. The adjustments are to be worked into Building Plans for final approval and sign off by the BREAC <u>prior</u> to submission to the Local Authority for Building Plan Approval. Two stamped copies of the Sketch Plans will be returned to the Owner together with the comments and adjustments required.

## 8.13 BRE Application Form for Aesthetic Approval of Building Plans

- 8.13.1 The BRE Application Form for Aesthetic Approval of Building Plans (ADDC Manual Addendum 1H) to be filled in, signed by the Owner and the Architect / Technologist and submitted with 5 sets of the Building Approval Drawings required by BREAC for approval and sign off. Two sets of the drawings to be coloured in according to the Groot Kei Municipality (GKM) requirements.
- 8.13.2 BREAC will not approve and sign off Building Plans Approval if all the conditions of the Sketch Plan Approval were not fully incorporated in the Building Plans. If Building Plans do not conform to conditions of Sketch Plan approval, then additional fees will be payable to the Architect for second scrutiny at recommended SACAPhourly tariffs.
- 8.13.3 BREAC will confirm decline or approval of Building Plans within 21 (twenty-one) working days of submission and confirm when the plans are ready for collection.
- 8.13.4 One set of the signed off Building Plans will be retained by BREAC for record purposes.
- 8.13.5 Building Plans, duly stamped and signed by the BREAC, must be submitted to the GKM for approval. A copy of the Building Drawings approved by the GKM must be submitted to the BREAC for checking and record purposes.
- 8.13.6 On receipt of the Building Drawings approved by GKM and Construction Deposit in terms of **Item 9.2 page31**, no site establishment, excavation or building work may start prior to formal site handover by TPC.
- 8.13.7 A formal BRE Occupational Certificate will be issued by BRE Project Controller to ensure conformance to approval. The inspection will be done within 7 days of a written application by the Owner.
- 8.13.8 The BREAC may approve fully motivated waivers of any mandatory specifications under special conditions where waivers are considered justifiable by BREAC.

## 8.14 National Building Regulations:

- 8.14.1 Should any provision in this Architect Design Manual be regarded as contrary to National Building Regulations (SANS 10400) then the National Building Regulations shall prevail.
- 8.14.2 The Design Guidelines are to be read in conjunction with the Local Authority Rules and Regulations as well as the SANS 10400 (National Building Regulations). Any discrepancies that may originate between the above must be reported to BREAC for ruling.

## 9.0 **BUILDING ACTIVITY RESTRICTIONS:**

The undermentioned restrictions have been adopted to ensure that the least possible disruption is caused to residents by building activities. All restrictions are applicable to main contractors and subcontractors and must be read in conjunction with Item 10 (EMP) page 32:

- 9.1 <u>Contractor</u>: The panel of accredited BRE Contractors and contact details are shown on Annexure 1G page 40. The Owner must submit the name of the Contractor to BREAC for approval. If an Owner wishes to add a Contractor to the Accredited BRE Contractors Panel, the name and credentials of a new Contractor must be submitted to BREAC. BREAC will consider the recommended Contractor and make the decision in its own discretion and revise the Panel if necessary on an annual basis.
- 9.2 <u>Construction Deposit:</u> A refundable Construction Deposit of R20,000 and revised from time to time by the HOA must be paid by each owner before any building activities may commence. This deposit will be held in a trust by HOA to make good any damage caused by the builder, owner, etc. during construction and where they fail to rectify the situation e.g. rubble removal, damaged kerbing, public sidewalks, landscaping and community services. The construction deposit (or portion thereof) will be refunded to the applicant upon request, after completion of the building construction and after the inspection by the Project Controller. The Contractor must adhere to the following requirements for Contractors as laid down from time to time by HOA.
- 9.3 **Building operations:** Only allowed from 07:00 to 18:00 normal week days and 08:00 to 13:00 on Saturdays.

- 9.4 **<u>Refuse:</u>** The contractor to provide facilities for refuse storage which must be removed on a weekly basis. *Burning of refuse on site is specifically prohibited*. Regular removing of building rubble must be done by the contractor. The roadway and pavement must be kept clean of material, rubble and sand at all times.
- 9.5 <u>**Toilets:**</u> The contractor to provide a chemical toilet for use by the workmen for the duration of the building contract.
- 9.6 **Danger tape:** The building site, i.e. the erf handed to the contractor for building operations, must be demarcated with danger tape. Under no circumstances must the building activities be extended beyond the erf boundaries.
- 9.7 **Deliveries:**The BRE roads were designed to carry maximum loads of 6 tons. Any damage to roads due to overloading of delivery vehicles may lead to a claim for damages against the particular responsible Plot Owner.
- 9.8 **Fencing Off:**Hoarding or shade cloth to fence off building site to be shown on Building Approval drawings.

### 9.9 Insurance:

- Insurance against damage of roads and kerbs by the contractors to be taken out in favour of the BRE HOA.
- Contractors to supply copies of all-risk insurance to the BRE HOA together with the notice of the contracted starting and completion dates for the building process.

# 10.0 <u>THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN</u> (EMP)

The Construction Environmental Management Plan outlines measures to be implemented by the Contractor in order to minimise any potential environmental degradation. It should serve as a guide for the Contractor and the construction workforce on their roles and responsibilities concerning environmental management on the construction site and provide a framework for environmental monitoring throughout the construction period. Measures to control potential environmental impacts during the construction phase are specified. Except where otherwise stated, all these control measures shall apply throughout the construction period and, as part of the project contract, the Contractor shall adhere t these measures at all times.

## 10.1 The Objective:

- Prevent any adverse impacts upon the surrounding environment including the natural fauna, flora, air quality, soil quality and water quality.
- Minimise the ecological footprint of the upgrade process of the route on the surrounding environment.

10.2	<u>The Ei</u>	nvironmental Impact Fine Structure:	Per Incident
	•	Littering and poor housekeeping	R 250.000
	•	Not complying with any site instruction	R1 000.00
	•	Not locking temporary gates after working hours	R1 000.00
	•	Not maintaining / using silencers on noisy plant equipment /	
		vehicles	R1 000.00
	•	Not maintaining / using waste bins / skips	R1 000.00
	•	Not wearing overall, safety boots, hard hat and / or reflective jacket	R1 000.00
	٠	Spilling oil or diesel and not applying immediate clean-up measures	
			R1 000.00
	•	Failure to have Material Safety Data Sheets for all substances and	
		chemicals on site	R1 000.00
	٠	Making an authorised fire	R1 000.00
	٠	Not using chemical toilet	R1 000.00
	٠	Not maintaining / using chemical toilets	R1 000.00
	•	Overstepping construction perimeter / laydown areas	R1 000.00
	•	Causing deliberate erosion	R1 000.00
	•	Damaging protected / demarcated plants	R1 000.00
	•	Not bunding diesel tanks	R1 000.00
	•	Hunting or attempted hunting of any animal	R2 000.00
	•	Killing of any animal (including birds and snakes)	R2 000.00
	•	Not maintaining dust suppression	R1 000.00
	•	Presence of alcohol / drugs or drunken / drugged behaviour	R1 000.00
	•	Washing of any vehicles on site	R1 000.00
	•	Unauthorised sleeping on site (excluding security guard)	R1 000.00
	•	Servicing and vehicle outside the designated service area	R1 500.00
	•	Presence of any degreasing agent on site	R2 000.00
	•	Causing siltation in the estuary	R2 000.00
	•	Illegal dumping of waste and / or rubble on site and / or off site	R2 000.00
	•	Presence of any banned substance on site	R2 000.00