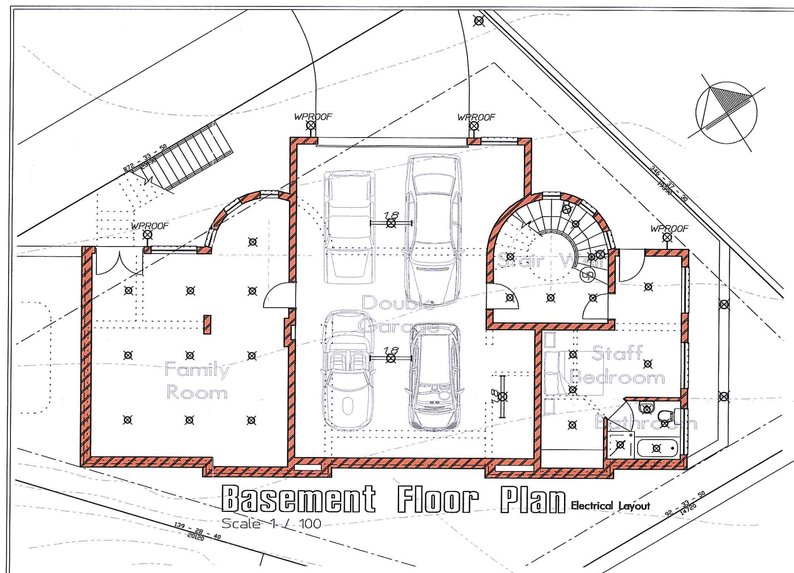


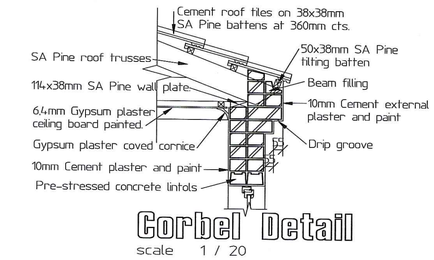
Basement Floor Plan Electrical Layout

Scale 1 / 100

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	TOTAL
1.8	FLOURESCENT LIGHT	3
	CEILING PENDANT	7
	GARDEN LIGHT	8
WPROOF	WATERPROOF WALL MOUNTED LIGHT	6
	DOWNLIGHT SURFACE MOUNT	129
	WALL LIGHT 425MM FROM FLOOR	6
	WATERPROOF POOL LIGHT	2

Totals of all Floors Pool and Garden



Corbel Detail

scale 1 / 20

Schedule of Drawings:
01 Basement Floor Plan, Electrical Layout Site Plan and Details
02 Ground Floor Plan and Pool Section
03 First Floor Plan, Electrical Layout and Window Schedule
04 Elevations
05 Sections, Ground Floor Electrical Layout and SANS 10400XA Compliance

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2015/11/16 BCA 100 COJ

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort

A.L. Vorsterloof — Director — Signature
C. Beaven — Director — Signature
20/11/15 — Date

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Walls:

5. DPC laid in long lengths to be bricked into all walls on floor level, under all window sills and bricked into parapet walls.
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Sewerage:

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CLIENT
MAGOGUDI CONSTRUCTION PROJECTS CC
Registration No: 2006/208347/23

PROJECT
Proposed Residence on Stand 692 Allens Nek Extension 21

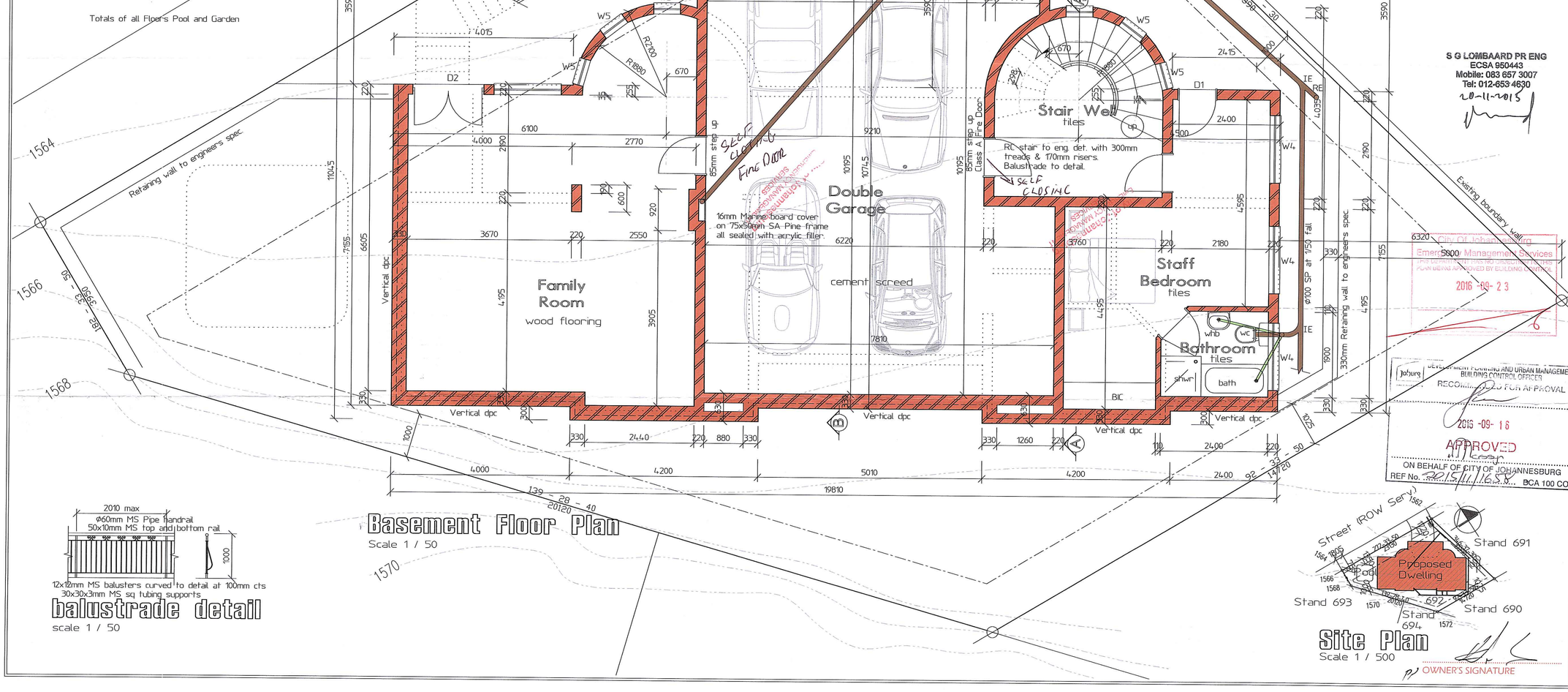
DRAWING TITLE:
Ground Floor Plan

DRAWING NUMBER: 01 - 1/5

DATE: November 2015
AREA: 492,8M²
SCALE: As shown
DRAWN BY: Carel

Carel Ackermann
2 Karee Street
Wilropark
Tel/Fax 764 5365
Cell 082 5777387
SnrPrArchT Reg. No. ST0003

S G LOMBAARD PR ENG
ECSA 950443
Mobile: 083 657 3007
Tel: 012-653 4630
20-11-2015



Basement Floor Plan

Scale 1 / 50

balustrade detail

scale 1 / 50

Site Plan

Scale 1 / 500

OWNER'S SIGNATURE

City Of Johannesburg
Emergency Management Services
THIS DEPARTMENT HAS NO OBJECTION TO THIS PLAN BEING APPROVED BY BUILDING CONTROL
2016 -09- 23

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
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REF No. 2015/11/16 BCA 100 COJ

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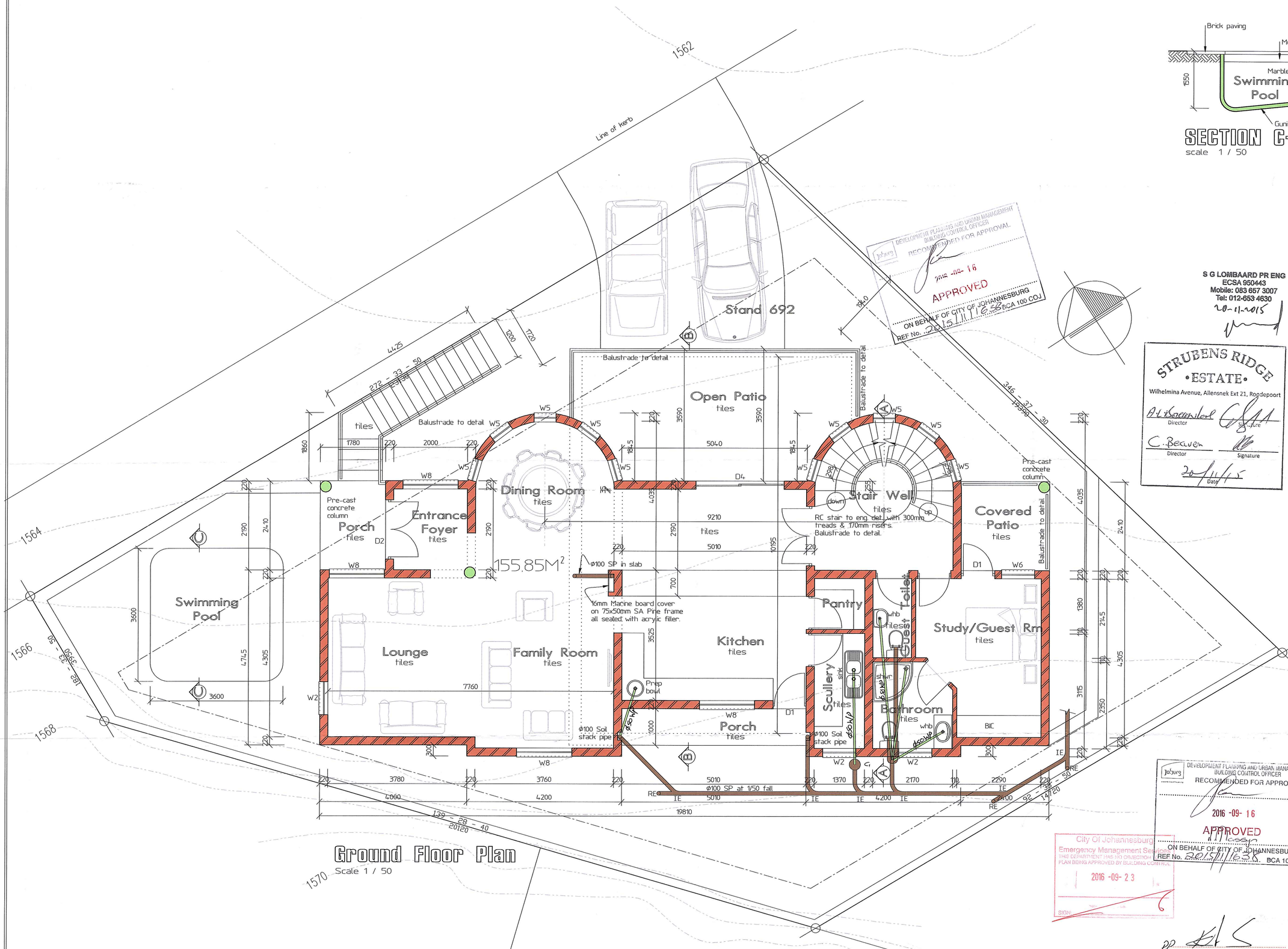
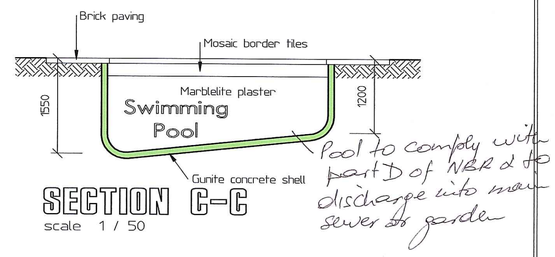


Ground Floor Plan
Scale 1 / 50



SECTION C-C
scale 1 / 50

Pool to comply with part D of NBR & to discharge into main sewer or garden

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2015-11-16
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2015/11/1638/BCA 100 COJ

S G LOMBAARD PR ENG
ECSA 950443
Mobile: 083 657 3007
Tel: 012-653 4630

20-11-2015

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort

A.L. Strubensloed — Director — Signature
C. Beeuwsecker — Director — Signature
28/11/15 — Date

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CLIENT
MAGOGUDI CONSTRUCTION PROJECTS CC
Registration No: 2006/208347/23

PROJECT
Proposed Residence
on Stand 692 Allens Nek
Extension 21

DRAWING TITLE:
Ground Floor Plan

DRAWING NUMBER: 02 - 2/5

DATE: COJ November 2015
AREA: 492,8 M²
SCALE: As shown
DRAWN BY: Carel

Carel Ackermann
2 Karee Street
Wilropark
Tel/Fax 764 5365
Cell 082 5777387
SnrPrArchT Reg. No. ST0003

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2016 -09- 16
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2015/11/1638/BCA 100 COJ

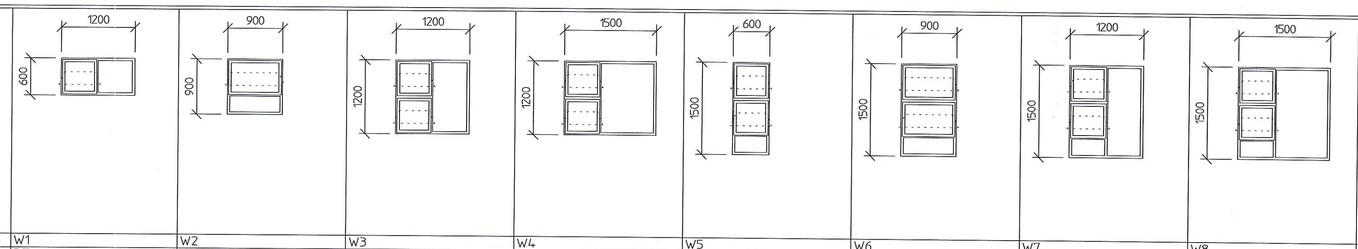
City Of Johannesburg
Emergency Management Services
THIS DEPARTMENT HAS NO OBJECTION TO THE PLAN BEING APPROVED BY BUILDING CONTROL
2016 -09- 23
SIGN:

OWNER'S SIGNATURE

CLIENT COPY
2015

Window Schedule

General:
All windows as seen from outside.
Burglar bars fitted to all opening panels.
Wispeco NPB 2 or equal and approved.



Window Number	W1	W2	W3	W4	W5	W6	W7	W8
Cat. Number	PT126	PT99	PT1212	PT1512	PT615	PTT915	PTT1215	PTT1515
Description	Standard awning type aluminium window.	Standard awning type aluminium window.	Standard awning type aluminium window.	Standard awning type aluminium window.	Standard awning type aluminium window.	Standard awning type aluminium window.	Standard awning type aluminium window.	Standard awning type aluminium window.
Number off	1	3	2	3	Z1	2	1	5
Glass	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations
Furniture	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium
Finish	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium

Window Schedule

General:
All windows as seen from outside.
Burglar bars fitted to all opening panels.
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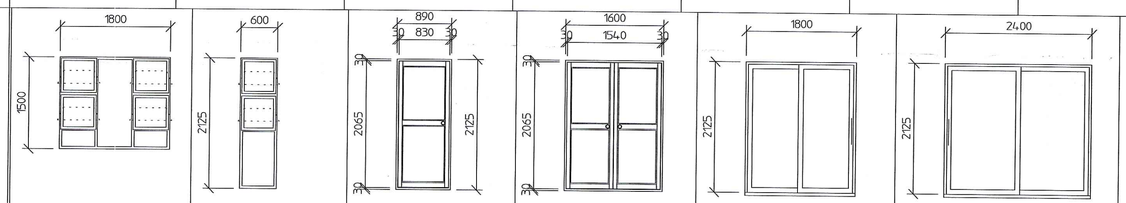
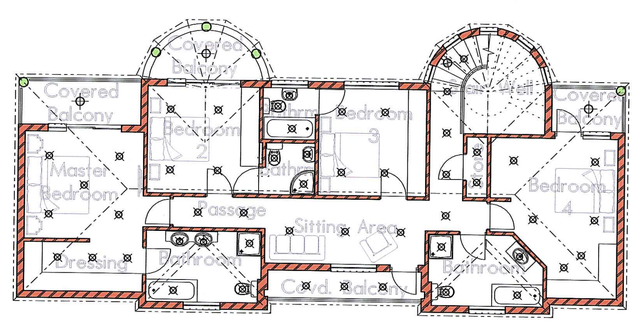


Window Number	W9	W10	D1	D2	D3	D4
Cat. Number	PTT1215/PT615	SL621	SINGLE DOOR	DOUBLE DOOR	SD18210X	SD2421X0
Description	Standard awning type aluminium window.	Standard awning type aluminium sidelight.	Standard aluminium single door (Olympia – 725 Series)	Standard aluminium double door (Olympia – 725 Series)	Standard aluminium sliding door (650 Series)	Standard aluminium sliding door (650 Series)
Number off	1	2	5	2	2	1
Glass	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations	See Fenestration Calculations
Furniture	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium
Finish	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium	Powder coated aluminium



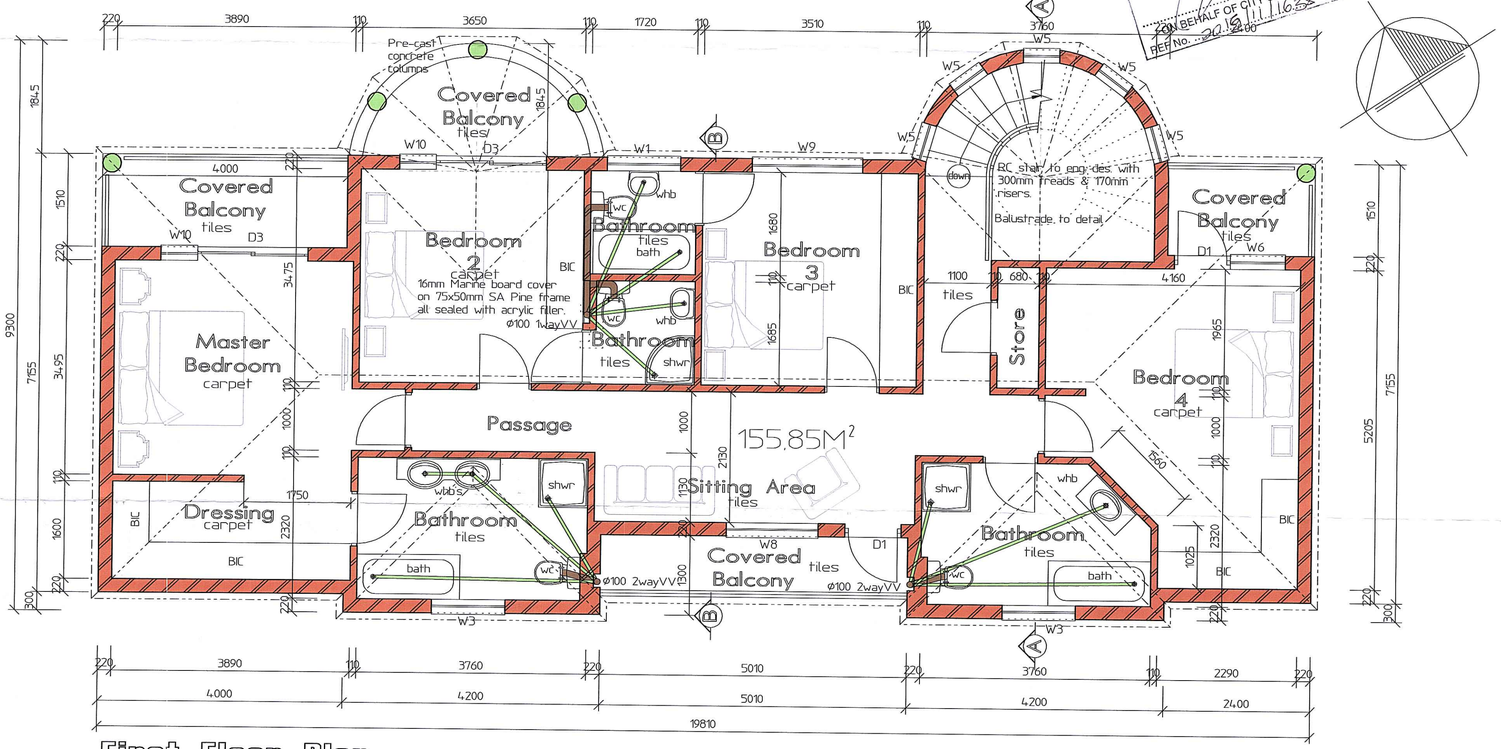
First Floor Plan
Electrical Layout

Scale 1 / 100

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	TOTAL
	FLOURESCENT LIGHT	3
	CEILING PENDANT	7
	GARDEN LIGHT	8
WPROOF	WATERPROOF WALL MOUNTED LIGHT	6
	DOWNLIGHT SURFACE MOUNT	129
	WALL LIGHT 425MM FROM FLOOR	6
	WATERPROOF POOL LIGHT	2

Totals of all Floors Pool and Garden



First Floor Plan
Scale 1 / 50

General notes:

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APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2015/11/1638 BCA 100 COJ
2400

Joburg DEVELOPMENT PLANNING AND URBAN MANAGEMENT BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2016 -09- 16
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2015/11/1638 BCA 100 COJ

City Of Johannesburg
Emergency Management Services
THIS DEPARTMENT HAS NO OBJECTION TO THIS PLAN BEING APPROVED BY BUILDING CONTROL
2016 -09- 23

S G LOMBAARD PR ENG
ECSA 950443
Mobile: 083 657 3007
Tel: 012-653 4630
20-11-2015

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
A.L. Bezuidenhout — Director — Signature
C. Beeuwsaert — Director — Signature
20/11/15 — Date

OWNER'S SIGNATURE

CLIENT
MAGOGUDI CONSTRUCTION PROJECTS CC
Registration No: 2006/208347/23

PROJECT
Proposed Residence on Stand 692 Allens Nek Extension 21

DRAWING TITLE:
First Floor Plan and Window Schedule

DRAWING NUMBER: 03 - 3/5

DATE:	AREA:
November 2015	492.8M²
SCALE: As shown	DRAWN BY: Carel

Carel Ackermann
2 Karee Street
Wilropark
Tel/Fax 764 5365
Cell 082 5777387
SnrPrArchT Reg. No. ST0003

CLIENT COPY.



S G LOMBAARD PR ENG
ECSA 950443
Mobile: 083 657 3007
Tel: 012-653 4630
20-11-2015

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
Director
Signature
C. Beaven
Director
Signature
20/11/15
Date

City Of Johannesburg
Emergency Management Services
2016 -09- 23
SIGN:

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2016 -09- 16
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 2015/11/1638 BCA 100 COJ

OWNER'S SIGNATURE

CLIENT
MAGOGUDI CONSTRUCTION PROJECTS CC
Registration No: 2006/208347/23

PROJECT
Proposed Residence on Stand 692 Allens Nek Extension 21

DRAWING TITLE:
Elevations

DRAWING NUMBER: 04 - 4/5

DATE: November 2015

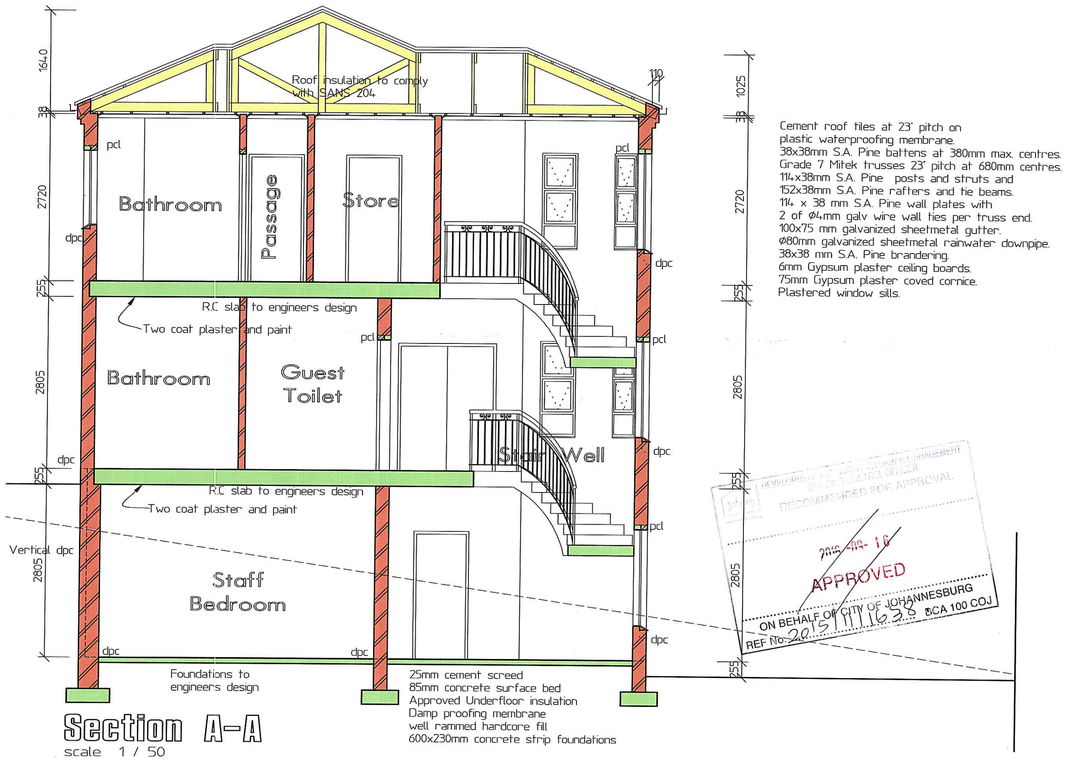
AREA:

SCALE: As shown

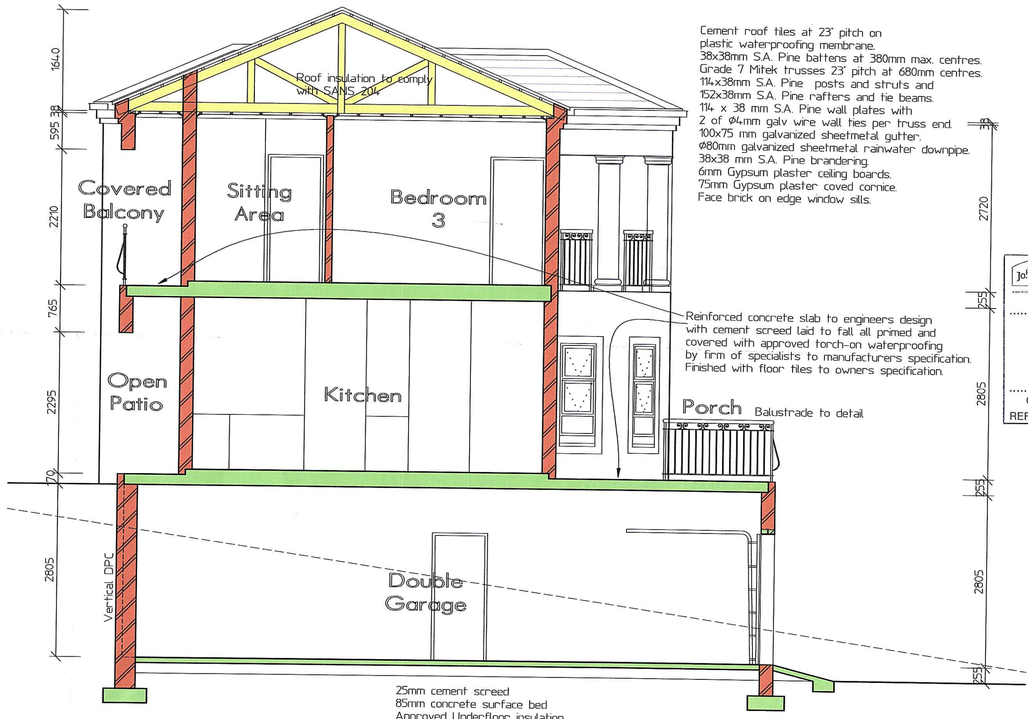
DRAWN BY: Carel

Carel Ackermann
2 Karee Street
Wilropark
Tel/Fax 764 5365
Cell 082 5777387
SnrPrArchT Reg. No. ST0003

CLIENT COPY



Section A-A
scale 1 / 50



Section B-B
scale 1 / 50

DEVELOPMENT PLANNING AND URBAN MANAGEMENT
BUILDING CONTROL OFFICER
RECOMMENDED FOR APPROVAL
2016 -09- 16
APPROVED
ON BEHALF OF CITY OF JOHANNESBURG
REF No. 20151111163381 BCA 100 COJ

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7Ø	FLOURESCENT LIGHT	3
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	WALL LIGHT 425MM FROM FLOOR	6
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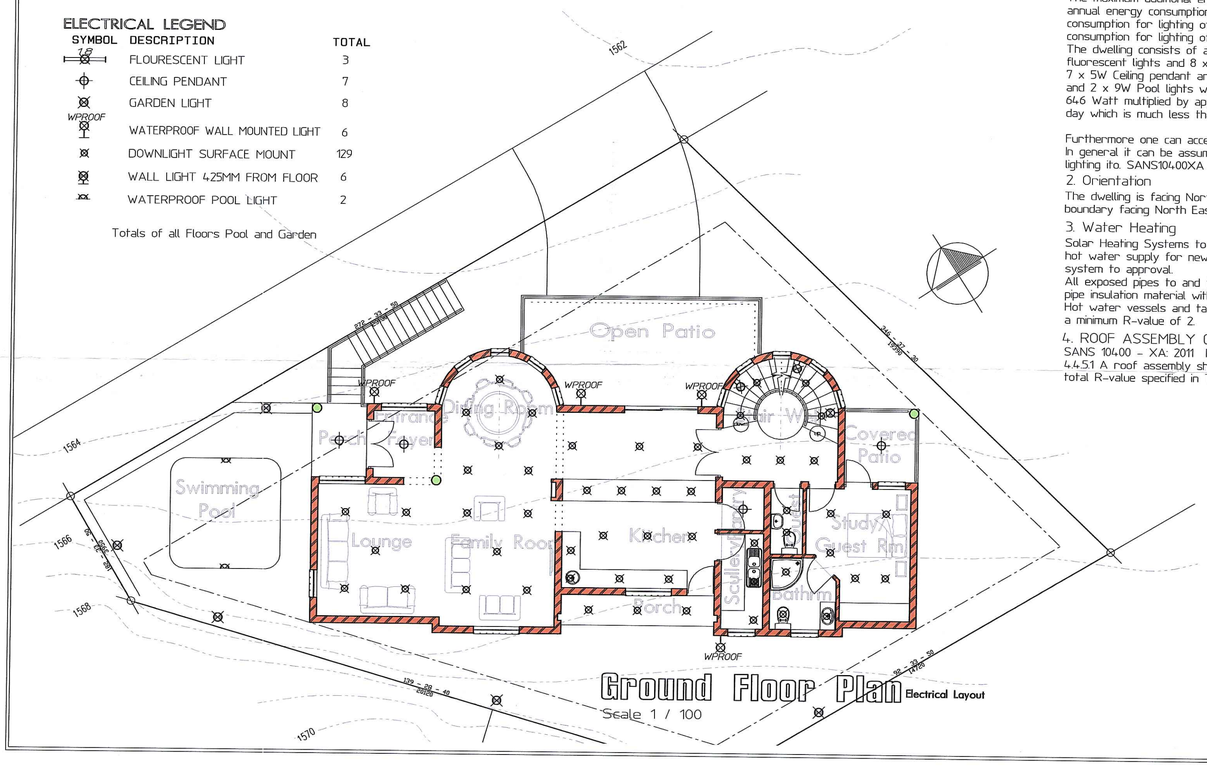
Totals of all Floors Pool and Garden



Ground Floor Plan Electrical Layout
Scale 1 / 100

1 Lighting and Power

In terms of Table 12 - SANS 204 the maximum annual Energy demand for lighting is 5 W/m² and the maximum annual Energy consumption for lighting is 5 kWh/m2
The Total Floor area is 492.8M²
The maximum additional energy demand for lighting is therefore 2.464kW and the maximum annual energy consumption for lighting is 24.64 kWh. An average additional monthly energy consumption for lighting of 205.33kWh is allowed. Therefore an average energy consumption for lighting of 6.844 kWh per day is allowed.
The dwelling consists of a total number of 25 rooms with a total number of 3 x 30W fluorescent lights and 8 x 7W Garden Lights and 6 x 7W LED external wall light and 7 x 5W Ceiling pendant and 129 x 3W downlighters and 6 x 3W wall mounted lights and 2 x 9W Pool lights will be in use. The total energy demand for lighting is therefore 64.6 Watt multiplied by approximately 6 hours per day gives a total of 3.876 kWh per day which is much less than the 6.844 kWh allowed per day.

Furthermore one can accept that all lights will not be switched on at the same time. In general it can be assumed that the performance requirement regarding lighting ito. SANS10.400XA is satisfied.

2. Orientation

The dwelling is facing North East. The stand is placed with long boundary facing North East dictating the orientation of the dwelling.

3. Water Heating

Solar Heating Systems to be installed to supplement at least 50% of the hot water supply for new bathrooms. (SANS 204 4.5.2) Type of hot water system to approval.
All exposed pipes to and from hot water cylinders shall be insulated with pipe insulation material with an minimum R-value of 1.
Hot water vessels and tanks shall be insulated with a material achieving a minimum R-value of 2.

4. ROOF ASSEMBLY CONSTRUCTION

SANS 10400 - XA: 2011 Paragraph 4.4.5
4.4.5.1 A roof assembly shall achieve the minimum total R-value specified in Table 7 for the direction of heat flow.

Table 7 - MINIMUM TOTAL R-VALUES OF ROOF ASSEMBLIES

	CLIMATIC ZONES					
	1	2	3	4	5	6
MINIMUM REQUIRED TOTAL R-VALUE (m^2K/W)	3.2	2.7	3.7	2.7	3.5	
DIRECTION OF HEAT FLOW	up	up	down & up	up	down	up

Climatic Zone [1] Johannesburg
Roof type [X] Cement roof tiles

The R-value for Cement roof tiles including membrane resembles that of Clay tiles

Table 9 - Clay (concrete) tile roof assemblies

1	2	3	4	5	6	7
Description	Climatic zones					
	1	2	3	4	5	6
Direction of heat flow	up	up	down & up	up	down	up
R-Value (m^2 K/W) of roof covering material	0.35				0.48	0.35
R-Value (m^2 K/W) of ceiling	0.05					
Required added value of insulation	3.30	2.80	2.30	3.30	2.17	2.80

Proposal: To achieve the resistivity of 3.3 for a concrete tile roof, one of the following is recommended:
1. Pink Aerolite Glasswool thermal and acoustic ceiling insulation with a minimum thickness of 135mm which have a R-value of at least 3.3 or
2. A combination of Pink Aerolite and reflective foil provided that the R-value of the combination is greater than 3.3 or
3. Isotherm ceiling insulation with a minimum thickness of 145mm which have a R-value of at least 3.3.

Note: The above-mentioned points are a recommendation only. Any approved insulation can be used on condition that the thermal resistivity of the material is more than 3.3.

IT IS CONCLUDED THAT THE DESIGN COMPLIES WITH THE REQUIREMENTS OF SANS 10400XA:2011 IF THE ABOVE CONDITION IS MET.

City Of Johannesburg
Emergency Management Services
THIS DEPARTMENT HAS NO OBJECTION TO THIS PLAN BEING APPROVED BY BUILDING CONTROL
2016 -09- 23
SIGN

S G LOMBAARD PR ENG
ECSA 950443
Mobile: 083 657 3007
Tel: 012-653-4630
20-11-2015

STRUBENS RIDGE
•ESTATE•
Wilhelmina Avenue, Allensnek Ext 21, Roodepoort
A.J. Vorsterlaan Director Signature
C. Beaver Director Signature
Date

OWNER'S SIGNATURE

CLIENT
MAGOGUDI CONSTRUCTION PROJECTS CC
Registration No: 2006/208347/23

PROJECT
Proposed Residence on Stand 692 Allens Nek Extension 21

DRAWING TITLE:
Sections,

DRAWING NUMBER: 05 - 5/5

DATE:	AREA:
November 2015	
SCALE:	DRAWN BY:
As shown	Carel

Carel Ackermann
2 Karee Street
Wilropark
Tel/Fax 764 5363
Cell 082 5777387
SmPrArchT Reg. No. ST0003

CLIENT COPY