

STRUBENSVALLEI EXT.24 ERF.1327

Situated In Strubensvallei

OUTLINE SCHEME REPORT FOR ROADS AND STORMWATER ON THE PROVISION OF CIVIL ENGINEERING SERVICES AND SERVICE AGREEMENTS

Prepared for



Prepared By



C-PLAN DEVELOPMENT CONSULTANTS

459 Ontdekkers Road
Florida Hills
Roodepoort

Tel: (011) 472-2277
Fax: (011) 472-2305

PO Box 6622
Westgate
1734

E-Mail: kco@iafrica.com
Web: www.cplan.co.za

**Ref No.: - 20521
October 2020**

<u>CONTENTS</u>	<u>PAGE</u>
1. Scope of Report	3
2. Description of Township	3
2.1 Locality (Annexure-A/Drawing No-20521-300)	3
2.2 Zoning (Annexure-B)	3
2.3 Description	4
2.4 Existing Services (Annexure-C)	4
2.5 Flood Lines	4
3. Design Guidelines	4
4. Stormwater Reticulation	5
4.1 Layout and Design (Annexure-D/Drawing No-20521-500)	5
4.2 Materials and Construction	5
4.3 Conclusion	6
4.4 Estimate Costs	6
5. Access Layout	6
5.1 Layout and Design (Annexure-E/Drawing No-20521-400)	6
5.2 Pavement Design	7
5.3 Materials and Construction	7
5.4 Estimate Costs	7
6. Estimate Costs	
6.1 Stormwater Cost	8
6.2 Access and Walkway Costs	9
6.3 Summary of Estimate Costs	9

Drawings

- | | |
|--------------------------------------------------------|-----------|
| • Locality Layout (Annexure-A) | 20521-300 |
| • Stormwater Reticulation Layout (Annexure-D) | 20521-500 |
| • Access Layout (Annexure-E) | 20521-400 |

1. SCOPE OF REPORT

This Report deals with the provision of Roads and Stormwater reticulation for the proposed residential development on Strubensvallei Ext.24 Erf.1327, situated in Strubensvallei within the City of Johannesburg's Metropolitan Municipal Boundary in the Gauteng Province.

Estimated Costs indicated in this Report are given for the purposes of establishing guarantee amounts and service agreements only.

Provision of the Electrical Reticulation has **not** been dealt with in this Report.

2. TOWNSHIP DESCRIPTION

2.1 Locality (Annexure-A /Drawing Number 20521-300)

The proposed residential development (Strubensvallei Ext.24 Erf.1327) is bounded by:

- Strubensvallei Ext.25 to the North,
- Metro Boulevard Servitude to the West,
- Christian De Wet to the South,
- Strubensvallei Ext.3 to the East.

2.2 Zoning (Annexure-B)

It is our client's intention to develop the proposed development to "Residential 3"
With a site area of 1.9724ha.

2.3 Description

The site is currently covered by grass and scattered trees. There is a natural slope over the Erf that falls from the North Eastern higher lying boundary to the South Western lower boundary line and drains to the South Western Boundary low point with a contour interval ranging between 44m and 32, resulting in a level difference of 12m over a distance of +- 201m which results in an average 6% fall over the Erf's.

There are no existing buildings on site and the development is affected by the proposed Metro Boulevard along the Western boundary, the planned on and off ramp to the Metro Boulevard and flood lines along the Southern Boundary.

2.4 Existing Services (Annexure-D)

Stormwater:

There is no formal stormwater system in close vicinity of the development to which the internal infrastructure can connect to.

Roads:

There is an existing asphalt road (**Fiddle Avenue**) which can be located North East of the proposed site access which will serve as the access road to the development, the asphalt road will be extended toward the site access to allow for this.

2.5 Flood Lines

The development is affected by a 100-year flood line as specified in Chapter 14, Part 3 of the Water Act (Act 36 of 1998), as required in terms of the Town Planning and Township Ordinance (Ordinance 15 of 1986)

3. DESIGN GUIDELINES

The design of the Township's services will be based on the design principles in the "Guidelines for the Provision of Engineering Services and Amenities in Residential Township Development" published by the Department of Community Development and to the City of Johannesburg requirements for Engineering Services.

A competent contractor through acceptable tender process will install all services. The General Conditions for the Works of Civil Engineering Construction, Standard Specification SABS 1200 and relevant specifications will pertain to the contract.

4. STORMWATER RETICULATION

4.1 Layout and Design (Annexure-D)

The stormwater reticulation and proposed discharge into the flood lines are shown on drawing number 20521-500.

Due to the size of the development (1.9724 ha) an attenuation structure will be implemented for this development within the property boundary lines above the 100 year flood line whereafter the attenuated stormwater will surface discharge through an energy dissipating structure within the 100 year flood line area.

Construction of the stormwater reticulation system to service the proposed development will remain the responsibility of the developer and the internal stormwater reticulation will remain private and maintained by the Section 21 Company for this development.

4.2 Materials and Construction

It is proposed that all materials, construction and testing of the stormwater reticulation comply with Johannesburg Road Agency requirements, as well as the SABS Standards.

4.3 Conclusion

It can therefore be concluded considering the location of the existing council infrastructure and the attenuated peak stormwater runoff from the post development site that the surface discharge of the stormwater at the lower lying position within the 100 year flood line will not influence the existing council infrastructure and due to the slope of the development and the position of the surrounding developments that the new developments stormwater discharge poses very little risk of flooding any other development in the surrounding areas.

4.4 Estimate Costs

The internal stormwater system will remain private and therefore maintained by the Section 21 Company. The cost included in the report is for the new proposed low point kerb inlet situated in the cul-de-sac north of the site access.

5. ACCESS LAYOUT

5.1 Layout and Design (Annexure-E)

The layout of the existing council roads and the new access to the development is shown on drawing number 20521-400.

A Traffic Impact Assessment was conducted in 2016 by Mariteng Consulting Engineers and approved by Johannesburg Road Agency in January 2017.

A copy of the approval letter is attached as a separate document for ease of reference.

The internal roads within the site will be constructed with a 60mm interlocking paving finish and upon completion maintained by the site's section 21 Company. The roads and stormwater will remain private.

The approved recommendations outlined in the approved TIA for the proposed development are as follow:

- The site access will be provided from the cul-de-sac intersecting with Fiddle Avenue.

The cul-de-sac and new section of surfaced road extending to the existing Fiddle Avenue road surface will be constructed to council standards and handed over to council upon completion and acceptance of the road infrastructure.

- One inbound lane with a minimum width of 3.0m.
- One outbound lane with a minimum width 4.5m.
- A minimum throat length of 5m is proposed.
- Provide a 2.0m paved sidewalk along the northern side of the cul-de-sac.
- Access bell mouth on local authority road to have a minimum radius of 10.0m.

5.2 Pavement Design (Access to development)

The external site access pavement layer design is proposed as:

- 60mm Interlocking Type SA laid on 20mm river sand for access,
- 150mm thick Imported C4 Sub-base compacted to 95-97% Mod AASHTO,
- 150mm thick Selected Layer min G6 compacted to 95% Mod AASHTO Density,
- 150mm thick In-situ Subgrade Layer Rip & Re-compact to 93% Mod AASHTO Density.
- 250mm thick by 250mm deep in-situ reinforced concrete cast edge beam will be provided as edge restraint between existing asphalt road and new access paving layer.
- Existing asphalt will be saw cut where required.

5.3 Materials and Construction

It is proposed that the materials, construction and testing of the roads should comply with the SABS 1200 Specifications, except insofar as the Johannesburg Roads Agency requires these varied.

Kerbing will consist of Semi mountable (Fig.7) at the access to the development. The kerbing will be in accordance with SABS 927.

5.4 Estimate Costs

Costs included in this Report is for the new surfaced site access road from the existing surfaced Fiddle Avenue Road up to the Erf boundary as well as the new 2.0m paved sidewalk along the Northern side of the cul-de-sac.

Telkom and Electrical services are not included in this Report

6. ESTIMATE COST

6.1 Estimated Cost of Connection to Council Stormwater Reticulation

Description	Unit	Quantity	Rate	Amount
Clear & Grub	m	0.00	R 20.00	R 0.00
Trench Excavation	m	2.00	R 120.00	R 240.00
E/O For Intermediate	m ³	0.00	R 360.00	R 0.00
E/O For Rock	m ³	0.00	R 205.00	R 0.00
Bedding Material	m ³	0.90	R 60.00	R 54.00
Selected Fill Material	m ³	2.70	R 60.00	R 162.00
New JRA Kerb Inlet Complete	No	1.00	R 12 250.00	R 12 250.00
Directional Drilling	m	0.00	R 1 150.00	R 0.00
Connection to Existing	Sum	1.00	R 2 500.00	R 2 500.00
Subtotal				R 15 206.00
Contingencies (10%)				R 1 520.60
P & G (15%)				R 2 280.90
Subtotal				R 19 007.50
Total Excl Vat				R 19 007.50

6.2 Estimate Cost of Site Access

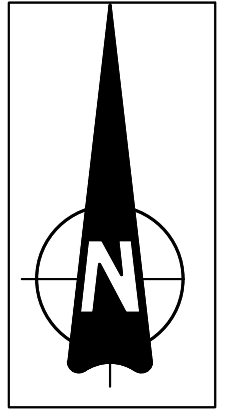
Description	Unit	Quantity	Rate	Amount
Clear & Grub	m ²	310	R 22.00	R 6 820.00
Strip 150mm topsoil	m ³	47	R 65.00	R 3 022.50
Cut to spoil	m ³	183	R 105.00	R 19 215.00
E/O For Intermediate	m ³	20	R 215.00	R 4 300.00
E/O For Rock	m ³	15	R 315.00	R 4 725.00
Preparation of In-situ Road Bed	m ²	210	R 45.00	R 9 450.00
40mm Asphalt Surface	m ²	935	R 150.00	R 140 250.00
Fig.8C kerb	m	225	R 180.00	R 40 500.00
Selected Layer	m ³	47	R 255.00	R 11 857.50
Subbase Lower (Imported C4)	m ³	78	R 545.00	R 42 510.00
Fig.12 kerb	m	120	R 155.00	R 18 600.00
Fig.7 kerb	m	32	R 170.00	R 5 440.00
60mm Pavers to JRA Spec.	m ³	240	R 160.00	R 38 400.00
Paint Makings and Signage	SUM	1	R 32 500.00	R 32 500.00
Concrete Edge Beam	m	8	R 220.00	R 1 760.00
Subtotal				R 379 350.00
Contingencies (8%)				R 30 348.00
P & G (8%)				R 30 348.00
Subtotal				R 440 046.00

6.3 Summation of Estimate Costs

Item	Quantity	Estimated Costs
6.1	Stormwater	R 19 007.50
6.2	Access and Walkway	R 440 046.00
	Total	R 459 053.50

DRAWINGS

ANNEXURE-A
LOCALITY
DRAWING NUMBER
20521-300



Untitled Map

Write a description for your map.

Legend

- Feature 1
- Strubensvallei Ext.24
- Sure Makro Travel



Google Earth

©2020 AirGIS (Pty) Ltd.
©2020 Google

DEPARTMENT	APPROVED	DESIGNATION	DATE

CONSULTING ENGINEERS	SURVEYED	DESIGNED	JOHANNESBURG WATER (PTY) LTD
G.F. JAH DEVELOPMENT CONSULTANTS 433 Orkney Road P.O. Box 9622 Rondebosch 7700 Tel: (011) 472 2877 Fax: (011) 472 2366 www.gfjah.co.za	G.HUYSAMEN OCTOBER 2020	G.HUYSAMEN OCTOBER 2020	17 HARRISON STREET MARSHALLTOWN JOHANNESBURG 2107 TEL: (011) 688-1400 FAX: (011) 688-1529
PRIVATE DRAWING No. APPROVED 20521-300 DATE	CHECKED SERVICES CHECKED GEOTECHNICAL INVESTIGATION SERVITUDES APPROVED	KC OOLJKAAS OCTOBER 2020	



CITY OF JOHANNESBURG
LOCALITY LAYOUT OF STRUBENSVALLEI EXT.24

DESIGN MANAGER	SCALE	AMENDMENTS	APPROVED DATE	DRAWING No.
	A0 1:N.T.S	A ISSUED FOR COUNCIL INFORMATION	2020/10/06	20521-300 1 OFF 1
DATE				FILE No

ANNEXURE-B
ZONING

TOWNPLANNING REQUIREMENTS:

SITE AREA = 1.9724 Ha
 ZONING = RESIDENTIAL 3
 HEIGHT = 2 STOREYS
 COVERAGE = 40%
 FAR = 0.4
 DENSITY = 40 UNITS PER Ha

* TOTAL GROUND FLOOR AREA:

TYPE A	Unit	55.00	X18	990.00
Cov Terrace	12.29	X18	221.22	
Total	67.29	X18	1211.22	
TYPE B	Unit	55.00	X18	990.00
Cov Terrace	12.29	X18	221.22	
Total	67.29	X18	1211.22	
TYPE C	Unit	77.06	X6	462.36
Cov Terrace	8.30	X6	49.80	
Total	85.36	X6	512.16	
Stairs	20.19	X3	60.57	
TYPE D	Unit	95.33	X6	571.98
Cov Terrace	11.86	X6	71.16	
Total	107.19	X6	643.14	
Stairs	23.51	X3	70.53	
TOTAL GF- 3708.84				

CARPPTS 15.40 X144 2217.60
 GATEHOUSE 22.47 X1 22.47
 TOTAL COVERAGE - 5948.91

* COVERAGE = PERMISSIBLE / 40%
 TOTAL GROUND FLOOR AREA = 3948.91m² X 100
 GITE AREA = 19724 m²

* FAR = PERMISSIBLE / 0.4
 TOTAL AREA OF BUILDINGS = 719.10 m²
 GITE AREA = 19724 m²
 = 0.36

* TOTAL FIRST FLOOR AREA:

TYPE A	Unit	58.53	X18	1053.54
Total	58.53	X18	1053.54	
TYPE B	Unit	58.53	X18	1053.54
Total	58.53	X18	1053.54	
TYPE C	Unit	77.06	X6	462.36
Cov Terrace	8.30	X6	49.80	
Total	85.36	X6	512.16	
Stairs	20.19	X3	60.57	
TYPE D	Unit	95.33	X6	571.98
Cov Terrace	11.86	X6	71.16	
Total	107.19	X6	643.14	
Stairs	23.51	X3	70.53	
TOTAL FF- 3393.48				

TYPE C
 Unit 77.06 X6 462.36
 Cov Terrace 8.30 X6 49.80
 Total 85.36 X6 512.16
 Stairs 20.19 X3 60.57

TYPE D
 Unit 95.33 X6 571.98
 Cov Terrace 11.86 X6 71.16
 Total 107.19 X6 643.14
 Stairs 23.51 X3 70.53

TOTAL FF- 1286.40

PARKING REQUIREMENTS:

REQUIRED	PROVIDED
2.0 COVERED BAYS PER UNIT =72 UNITS X2 = 144 COVERED AND 0.3 OPEN VISITORS PER UNIT =72 UNITS X 0.3 = 22 VISITORS	ACTUAL COVERED = 144 COV AND ACTUAL OPEN = 25 VISITORS
TOTAL REQUIRED = 166 BAYS	TOTAL ACTUAL = 169 BAYS
TOTAL - 3 BAYS IN HAND	

TOTAL UNITS = 72 (36.50U/HA)
 TOTAL ROOFED AREA: 10628.79

3bed/2bath - 18 UNITS
 3bed/2bath - 18 UNITS
 3bed/2bath - 18 UNITS
 3bed/2bath - 18 UNITS

FIRE DEPT COPY
 CLIENT / ARCH COPY
 MDB COPY
 SITE COPY

SCHEDULE OF RIGHTS ANNEXURE D'

PROPERTY DESCRIPTION
 Erf / Portion 1327 Site Area 1.9724 Ha
 Township STRUBENSVALLEI EXT 24 Title Deed No

ZONING INFORMATION
 Town Planning Scheme ROODEPOORT Town Planning Scheme, 1987
 Use Zone RESIDENTIAL 3 Annexure No

DEVELOPMENT CONTROL MEASURES

Permissible (with council consent)	Control	Actual
3 STOREYS	Height of Buildings	3 STOREYS
40%	Coverage	30%
0.4	Floor Area Ratio	0.36
40 DWELLINGS/HA (79.9)	Floor Area	10628.79 m ²
	Density/Dwelling Units per Ha	72 DWELLINGS (36.50 U/HA)
	No of Dwelling Units on Erf	72

PARKING

Parking Ratio per use	Area per Use	Parking Bays Required
2.00 parking bays COVERED	floor area	144 parking bays
0.3 parking bays OPEN	floor area	22 parking bays
Parking bays per 100m ²	floor area	parking bays
Parking bays per 100m ²	floor area	units parking bays
Parking bays per 100m ²	floor area	seats parking bays

TOTAL PARKING BAYS REQUIRED 166 parking bays
 TOTAL PARKING BAYS PROVIDED 169 parking bays
 Surplus / Deficit No of Parking Bays 3 parking bays

The information provided above is hereby certified to be correct and precise

NAME (PLEASE PRINT) SIGNATURE
 DATE PLAN No

FIRE NOTES

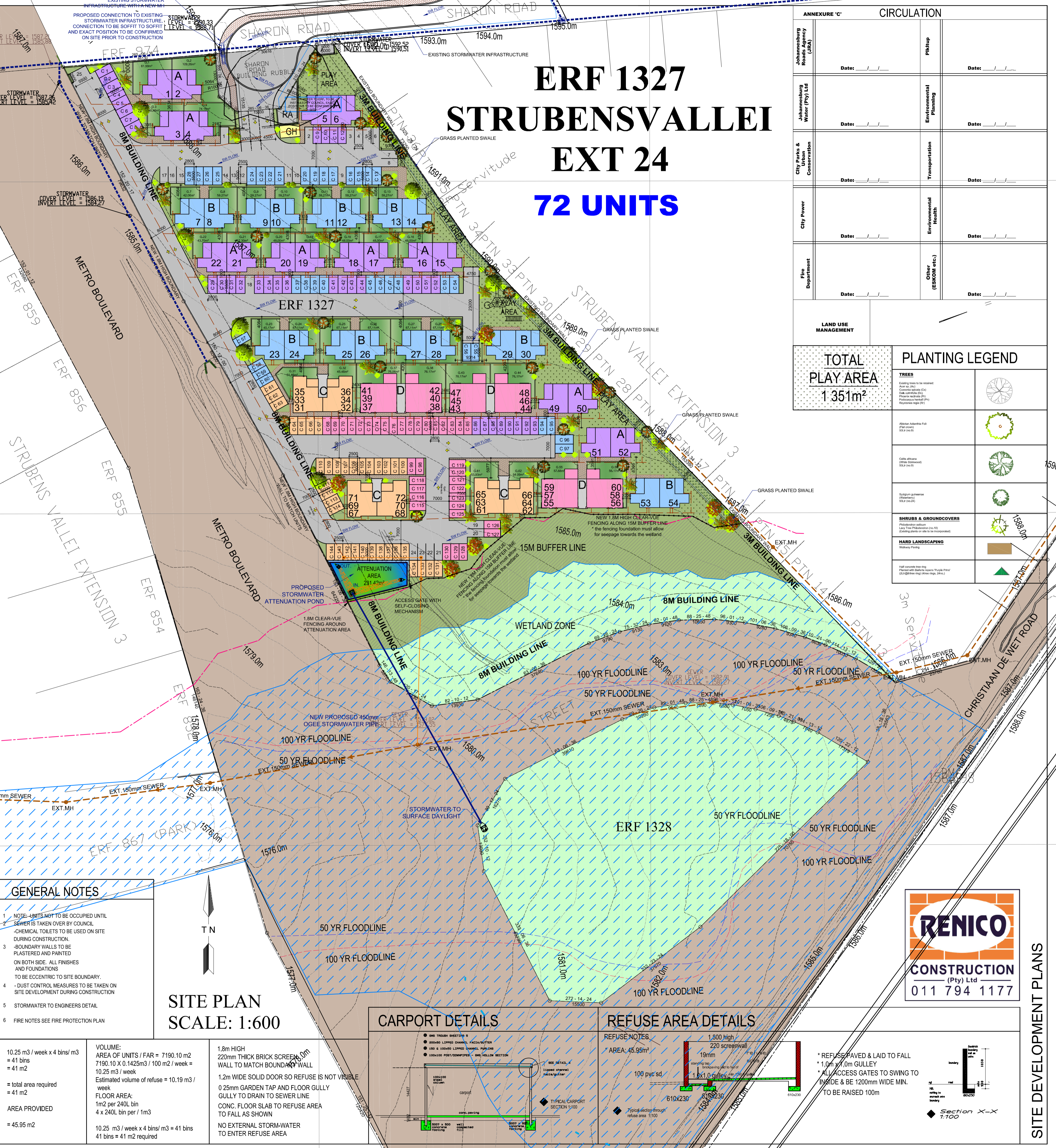
- 6 X 65mm PILLAR HYDRANT TWIN BOOSTER NON-RETURN
- 80mm UPVC PIPE CLASS 12
- 50mm UPVC PIPE CLASS 12
- 40mm UPVC PIPE CLASS 12
- 32mm UPVC PIPE CLASS 12
- 25mm UPVC PIPE CLASS 12
- 30 M FHR 2X4.5kg DCP FE
- 1 x 4.5kg DCP FE
- FIRE WALLS BETWEEN UNITS 100mm FROM BRANDERINGS

GENERAL NOTES

- NOTE: UNITS NOT TO BE OCCUPIED UNTIL SEWER IS TAKEN OVER BY COUNCIL.
- CHEMICAL TOILETS TO BE USED ON SITE DURING CONSTRUCTION.
- BOUNDARY WALLS TO BE PLASTERED AND PAINTED ON BOTH SIDE. ALL FINISHES AND FOUNDATIONS TO BE ECCENTRIC TO SITE BOUNDARY.
- DUST CONTROL MEASURES TO BE TAKEN ON SITE DEVELOPMENT DURING CONSTRUCTION
- STORMWATER TO ENGINEERS DETAIL
- FIRE NOTES SEE FIRE PROTECTION PLAN

CALCULATING THE SIZE OF A REFUSE AREA
 (G) X FA / 100 = VOLUME (M3) / WEEK

10.25 m ³ / week x 4 bins/ m ³ = 41 bins = 41 m ²	VOLUME: AREA OF UNITS / FAR = 7190.10 m ² / 0.36 = 19972.50 m ² / week = 10.25 m ³ / week	1.8m HIGH 220mm THICK BRICK SCREEN WALL TO MATCH BOUNDARY WALL
= total area required = 41 m ²	Estimated volume of refuse = 10.19 m ³ / week	1.2m WIDE SOLID DOOR SO REFUSE IS NOT VISIBLE
AREA PROVIDED = 45.96 m ²	FLOOR AREA: 1m ² per 240L bin 4 x 240L bin per 1m ³	0.25mm GARDEN TAP AND FLOOR GULLY GULLY TO DRAIN TO SEWER LINE
	10.25 m ³ / week x 4 bins/ m ³ = 41 bins = 41 m ² required	CONC. FLOOR SLAB TO REFUSE AREA TO FALL AS SHOWN
		NO EXTERNAL STORMWATER TO ENTER REFUSE AREA



ANNEXURE C' CIRCULATION

Authority	Signature	Date
Schampsburg Roads Agency (URA)		
Johannesburg Water (Pty) Ltd		
City of Johannesburg Urban & Municipal Affairs		
City of Johannesburg Environmental Health		
City of Johannesburg Fire Department		

LAND USE MANAGEMENT

TOTAL PLAY AREA 1351m²

PLANTING LEGEND

TREES	SHRUBS & GROUNDCOVERS	HARD LANDSCAPING
Symbol for tree	Symbol for shrub	Symbol for paving

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	23/11/2021	WETLAND DELINEATION ADDED
2	24/11/2021	PARKING MOVED & ATTENUATION REVISED
3	07/12/2021	BOUNDARY REVISED TO MATCH SURVEY
4	08/12/2021	LAYOUT REVISED
5	09/12/2021	PARKING REVISED
6	09/12/2021	WETLAND ZONE DESCRIPTION REVISED
7	03/02/2022	HIGHLIGHTED WETLAND AND ROADS
8	31/03/2022	SITE LAYOUT REVISED
9	23/04/2022	SITE LAYOUT REVISED
10	28/04/2022	SITE LAYOUT REVISED
11	05/05/2022	PLAY AREAS & GH, RA POSITIONS REVISED
12	11/05/2022	INTERNAL STORMWATER ADDED
13	12/05/2022	MINI-SUB SERVITUDE ADDED
14	14/05/2022	STORMWATER LAYOUT REVISED

OWNERS SIGNATURE:
ARCHITECTS SIGNATURE:

PAULINE FISHER ARCHITECTURE

PHYSICAL ADDRESS: STUDIO 102 THE RIDGE WELLNESS CNT 1 ATELIER STREET RANDPARKRIDGE
 POSTAL ADDRESS: P.O. BOX 2376 CRAMERVIEW 2060
 EMAIL: pauline@pfarch.co.za OFFICE: 011 7942570 MOBILE: 0829055512

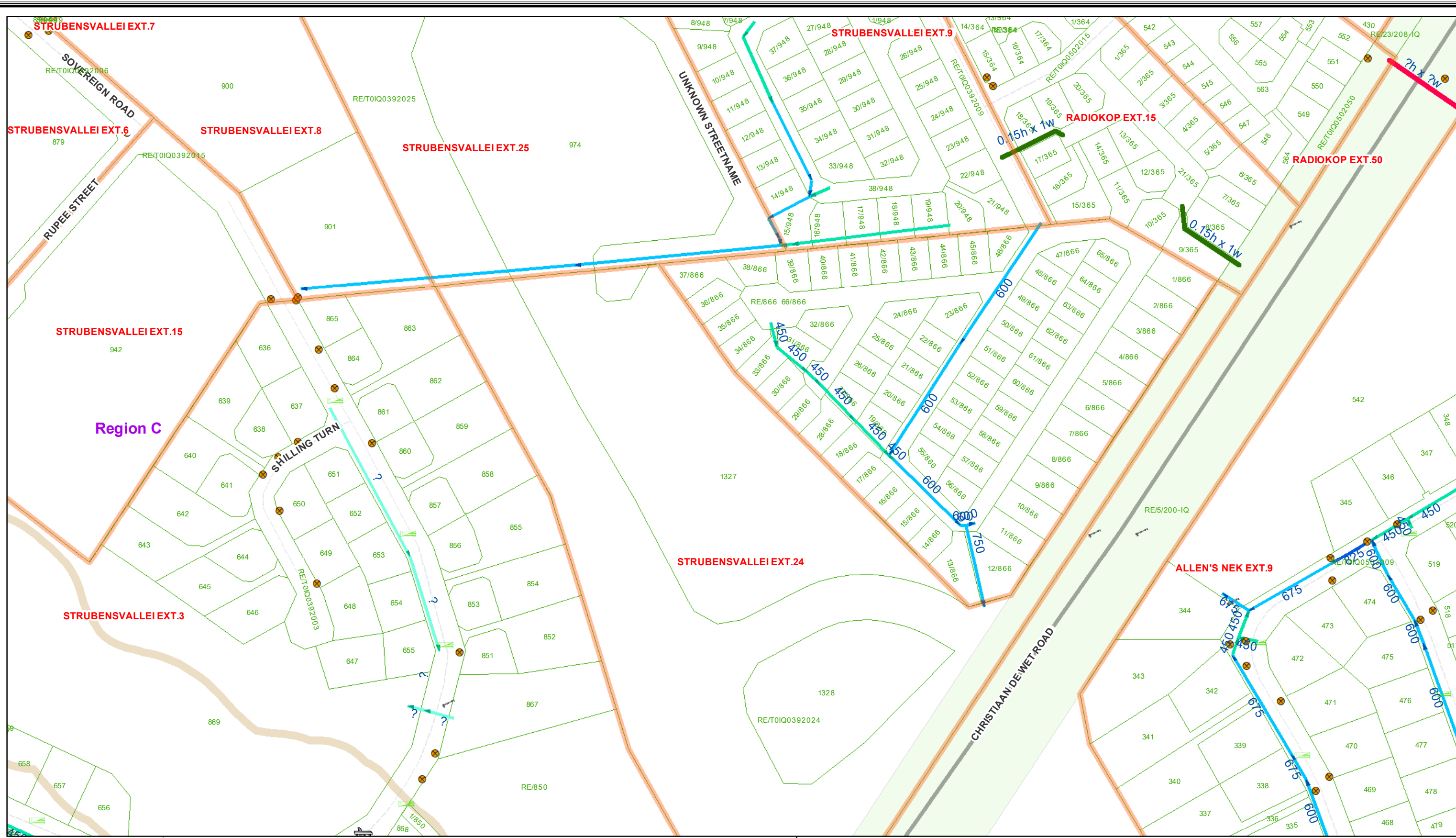
CLIENT
 PROPOSED NEW DEVELOPMENT ON STAND 1327 STRUBENSVALLEI EXT 24 FOR: RENICO CONSTRUCTION

DRAWING
 SITE DEVELOPMENT PLANS

DRAWN BY PF **DATE** 14/05/2021 **SCALE** 1:600

JOB No. 1327-SV **DRAWING No.** 1327-SDP01 **REV.** 14

ANNEXURE-C
EXISTING SERVICES



JRA Stormwater Reticulation

LEGEND		S'water Inlets		Stormwater Assets		CULVERTS		Hazards	
	NATIONAL		INLET MANHOLE		Channels		CULVERT		High Hazard
	PROVINCIAL		JUNCTION BOX		Natural Channels		LINED CHANNEL		Medium Hazard
	MOTORWAY		KERB OUTLET		Conduit		UNLINED CHANNEL		Low Hazard
	MAJOR ROADS		MANHOLE		Erosion Protection Structure		DRAIN		Floodline_100yr
	INDUSTRIAL		OUTLET MANHOLE		Inlets		UNDEFINED		
	LOCAL ROADS		UNDEFINED		Manholes				
	GRAVEL								
	PRIVATE								
	Rea Vaya (BRT)								
	TRUNK ROUTE								
	COMPLIMENTARY								
	FEEDER ROUTE								
	Township								
	Gauteng_Road_Reserve								

**** PLEASE NOTE:**
 THIS IS NOT A WAY-LEAVE APPROVAL
 INFORMATION SUPPLIED BY THIS OFFICE
 IS NOT GAURENTED. ALL INFORMATION
 MUST BE CONFIRMED ON SITE BEFORE
 WORK COMMENCES.

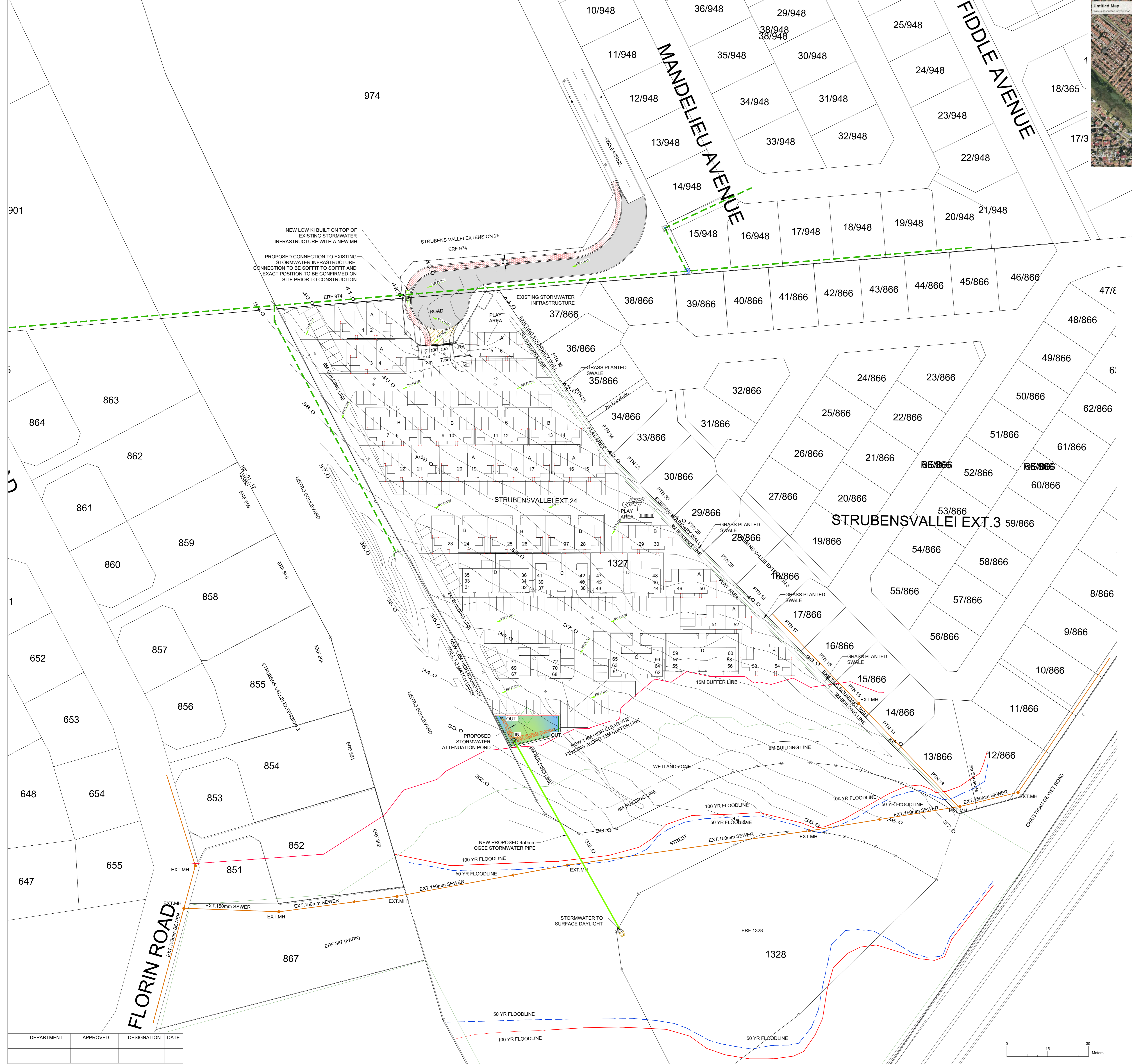
1:2,000

City of Johannesburg
 Johannesburg Roads Agency
 Road Asset Management Systems:

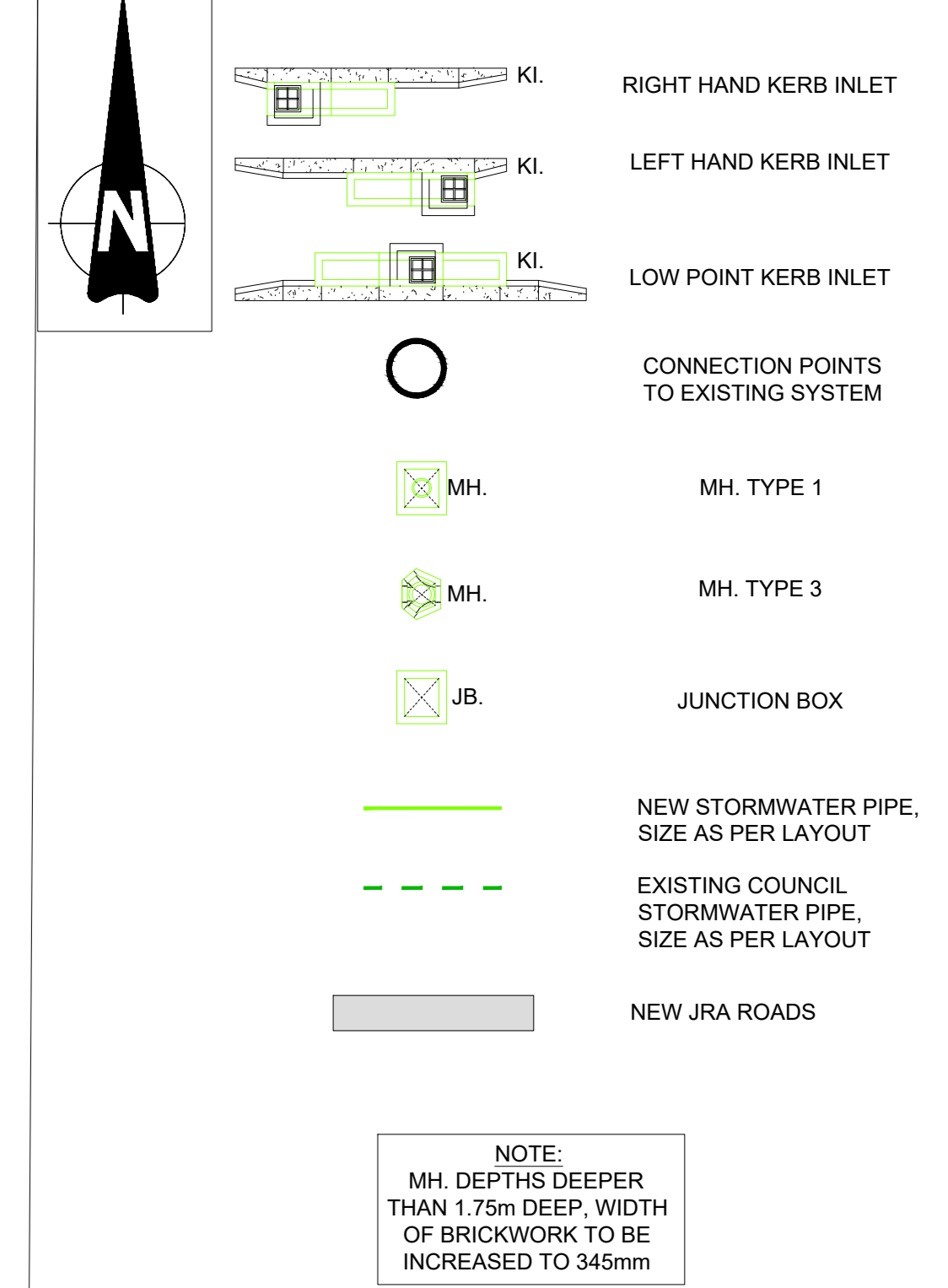
Telephone : +2711 298 5019
 e-mail : servicesinfo@jra.org.za
 Compiler : Ron Segenhout
 Projection: Transverse Mercator (Lo 29)
 Datum: Hartebeeshoek 94 (WGS84 Ellipsoid)
 Map Size: A3
 Workspace :
 L:\08\000 - ArcMap Templates\A3 Templates - Way-lines.mxd
 29/09/2020 08:04:30



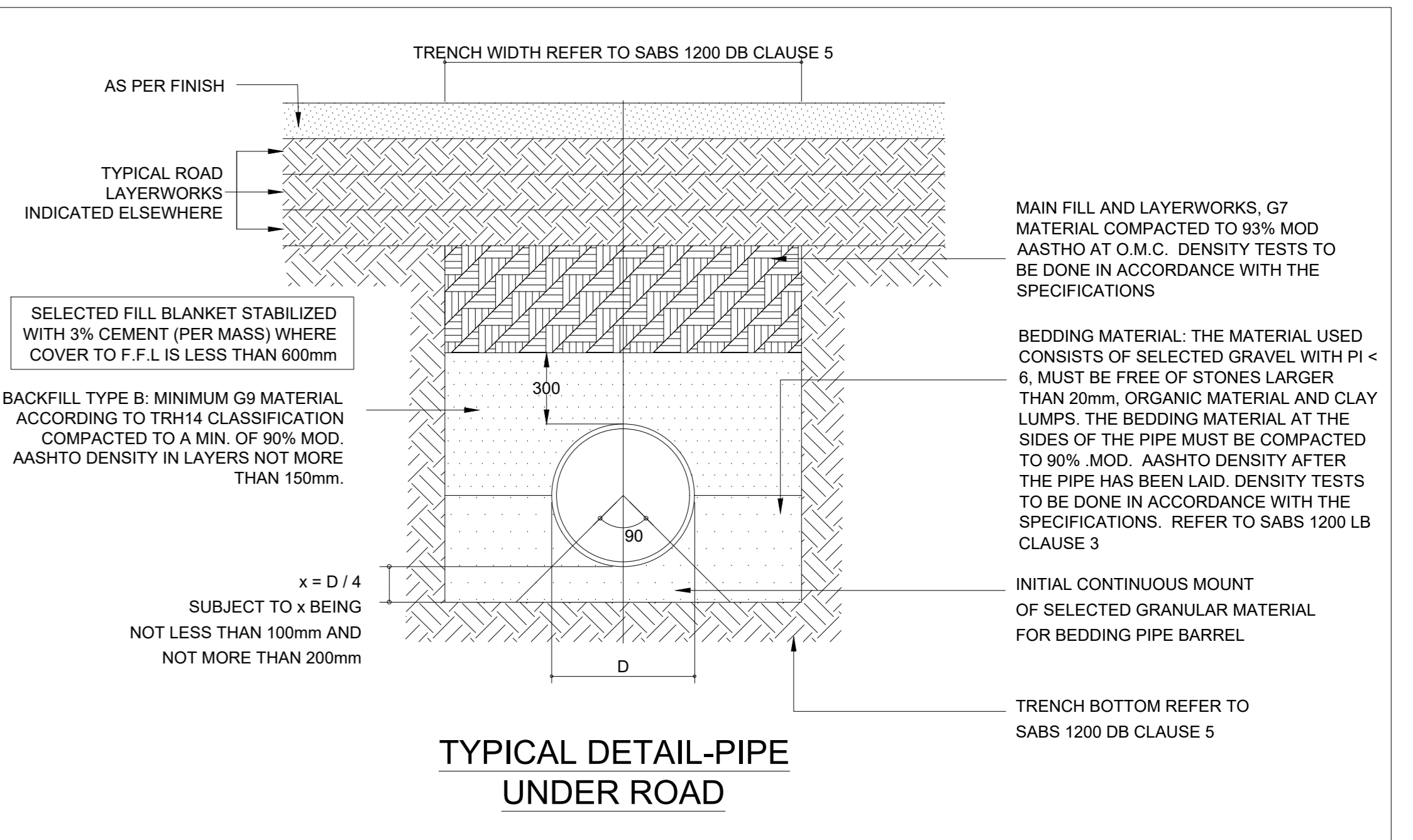
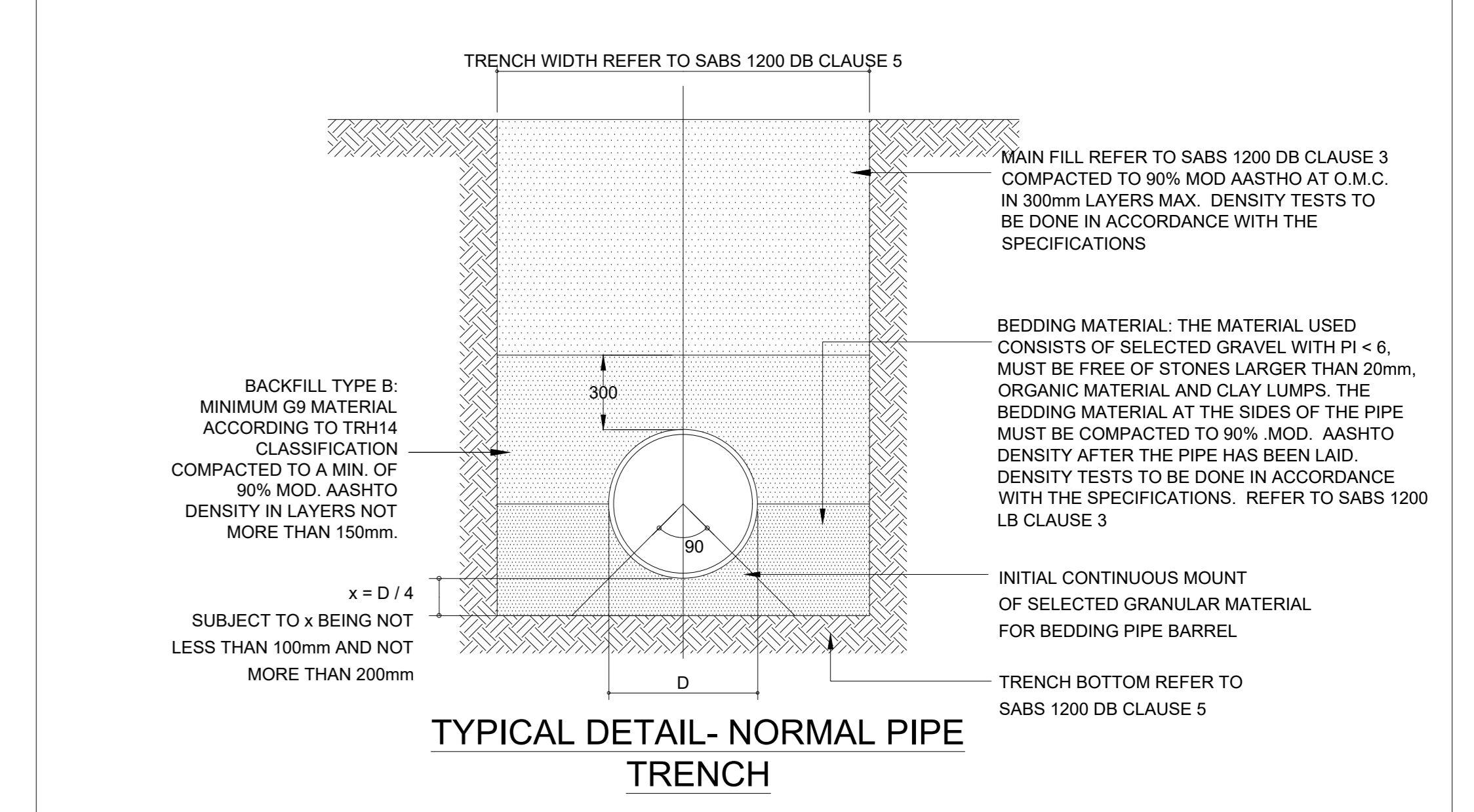
ANNEXURE-D
STORMWATER RETICULATION LAYOUT
20521-500



LOCALITY NTS.



- STORMWATER NOTES:**
1. ALL WORK TO BE DONE IN ACCORDANCE WITH RELEVANT SABS 1200 SPECIFICATIONS.
 2. ALL BEDDING TO BE CLASS 'B'.
 3. PIPE TRENCHES TO BE BACKFILLED IN 150 LAYERS AND COMPACTED TO 93% MOD. AASHTO.
 4. BEDDING TO BE COMPACTED TO 90% MOD. AASHTO.
 5. PIPES TO BE LAID CROWN TO CROWN.
 6. ALL WORK TO COMPLY WITH LOCAL AUTHORITY'S REQUIREMENTS.
 7. CONTRACTOR TO CONFIRM INVERT LEVELS OF EXISTING STORMWATER MANHOLES/CHANNEL AT CONNECTION POINTS, PRIOR TO CONSTRUCTION OF STORMWATER RETICULATION COMMENCING.
 8. ALL STORMWATER PIPES AND INLETS ARE POSITIONED ACCORDING TO AVAILABLE SURVEY INFORMATION AND MAY REQUIRE ADJUSTMENT AS INSTRUCTED BY THE ENGINEER TO SUIT CONDITIONS ON SITE.
 9. ACCESS TO PRIVATE PROPERTIES IS TO BE MAINTAINED AT ALL TIMES.
 10. THE CONTRACTOR IS TO SEARCH FOR AND CONFIRM POSITIONS AND DEPTHS OF ALL SERVICES BEFORE COMMENCING WORK. PROTECTION OF SERVICES DURING CONSTRUCTION SHALL REMAIN THE CONTRACTORS RESPONSIBILITY.



DEPARTMENT	APPROVED	DESIGNATION	DATE

CONSULTING ENGINEERS	SURVEYED	DESIGNED	DESIGNED
 CityPlan Development Consultants 488 Oshana Street Johannesburg 2107 Tel: (011) 472 2017 Fax: (011) 472 2006 www.cityplan.co.za	G. HUYSAMEN OCTOBER 2020	G. HUYSAMEN OCTOBER 2020	G. HUYSAMEN OCTOBER 2020

JOHANNESBURG ROADS AGENCY	DESIGNED	CHECKED	SERVICES CHECKED	GEOTECHNICAL INVESTIGATION	SERVITUDES
 66 Pixley Seme Street (Previously Sauer Street) c/o: Rahima Moosa Street Johannesburg 2107 2000 TEL: (011) 298-5000 FAX: (011) 298-5178	G. HUYSAMEN OCTOBER 2020	K. OOLJKAAS OCTOBER 2020	G. HUYSAMEN OCTOBER 2020	G. HUYSAMEN OCTOBER 2020	G. HUYSAMEN OCTOBER 2020

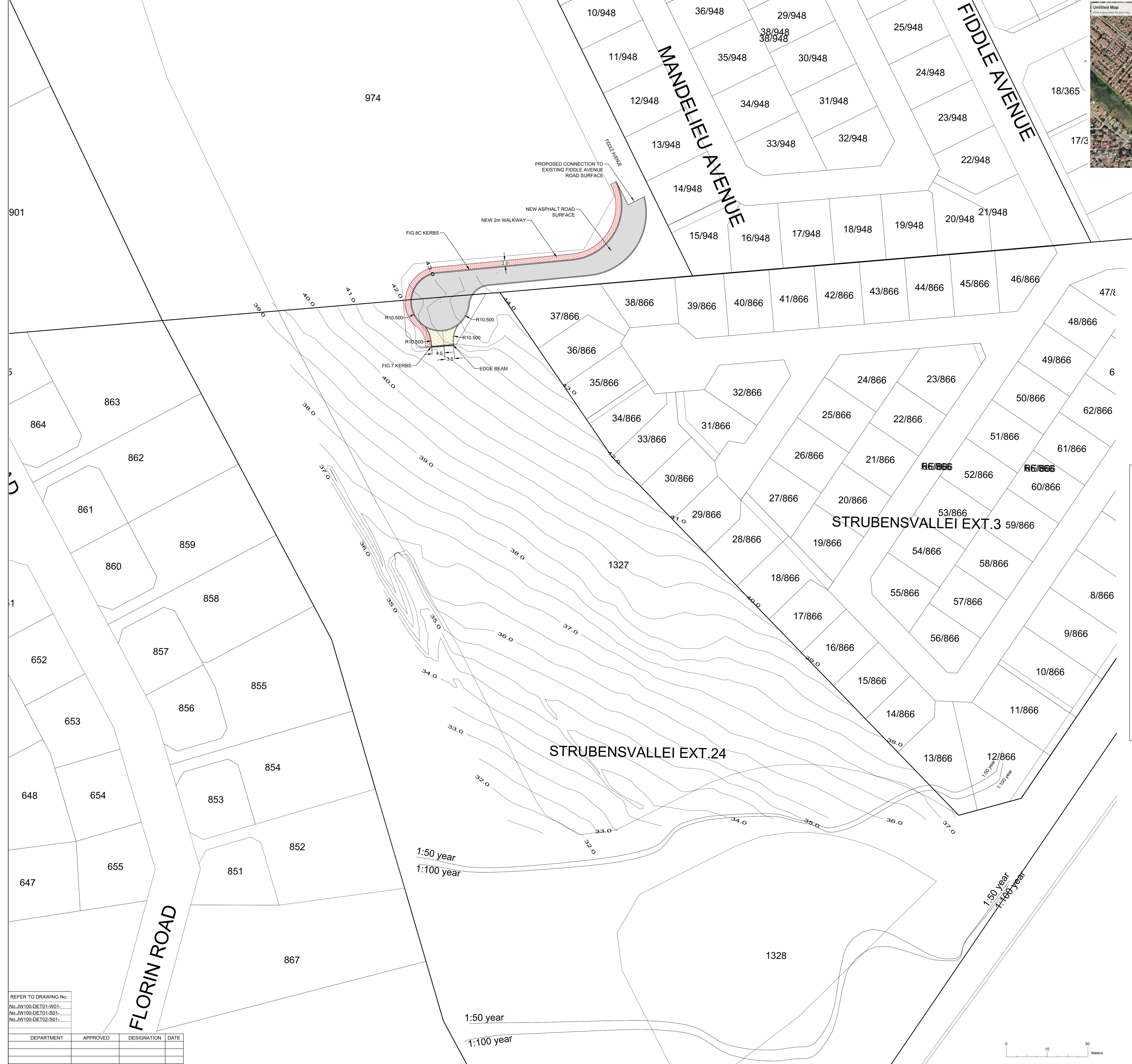
CITY OF JOHANNESBURG

STORMWATER LAYOUT FOR THE NEW PROPOSED DEVELOPMENT ON STRUBENSVALLEI EXT.24

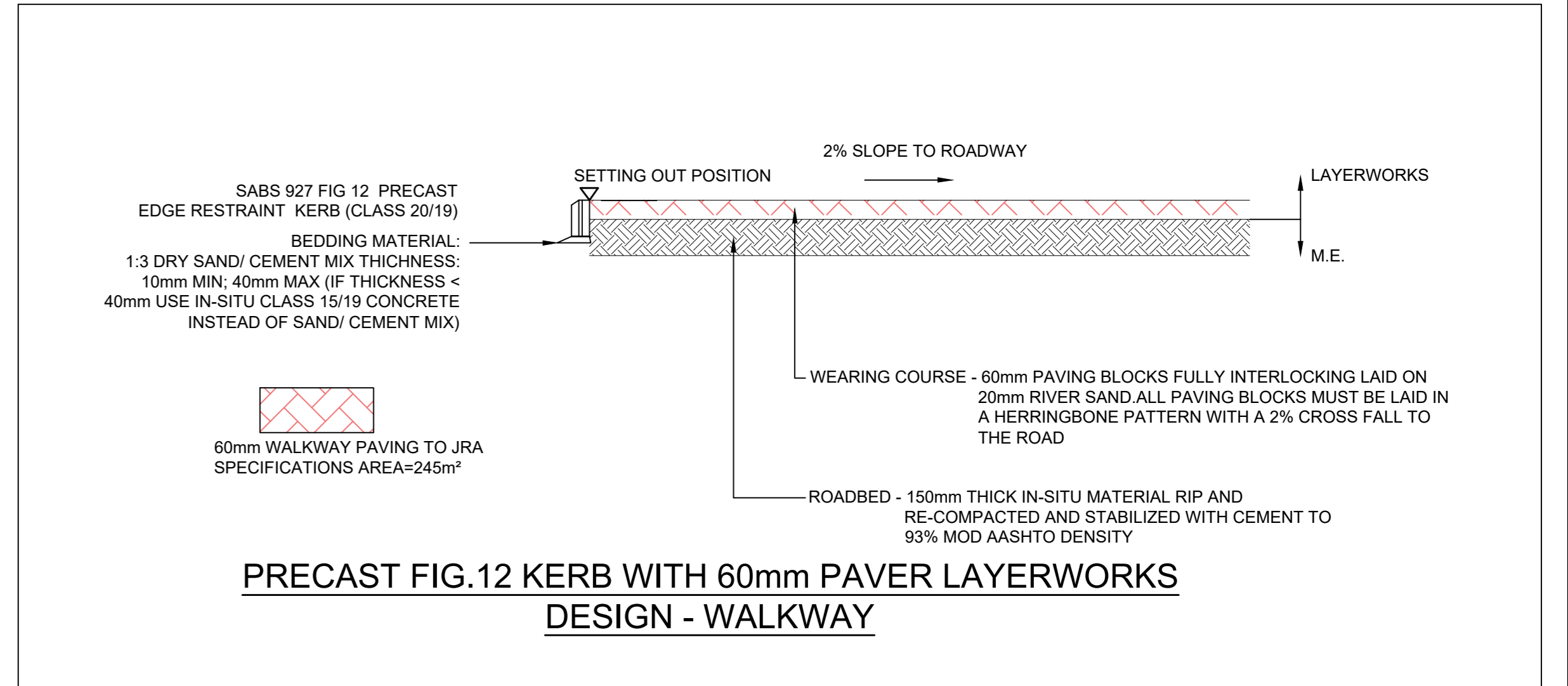
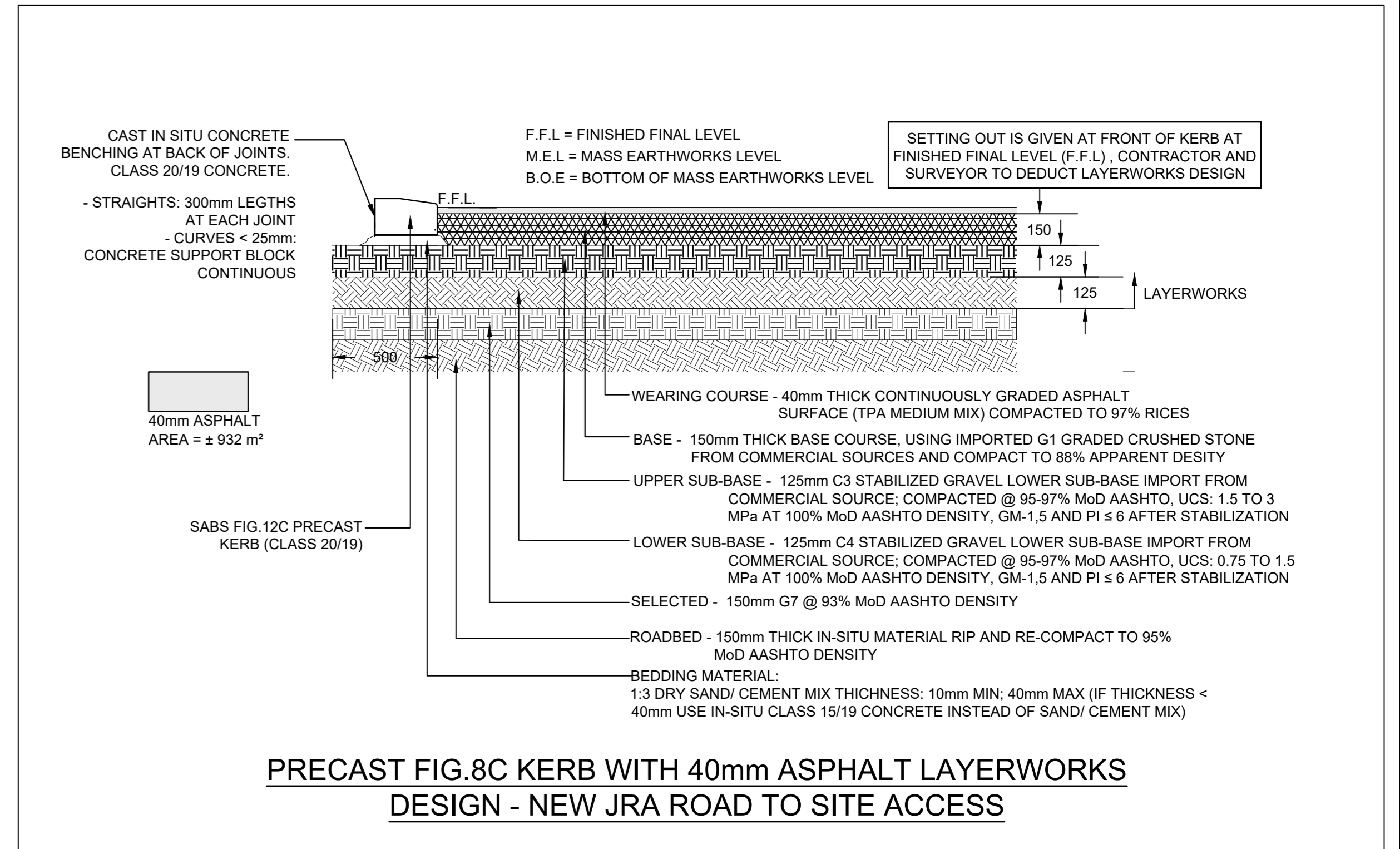
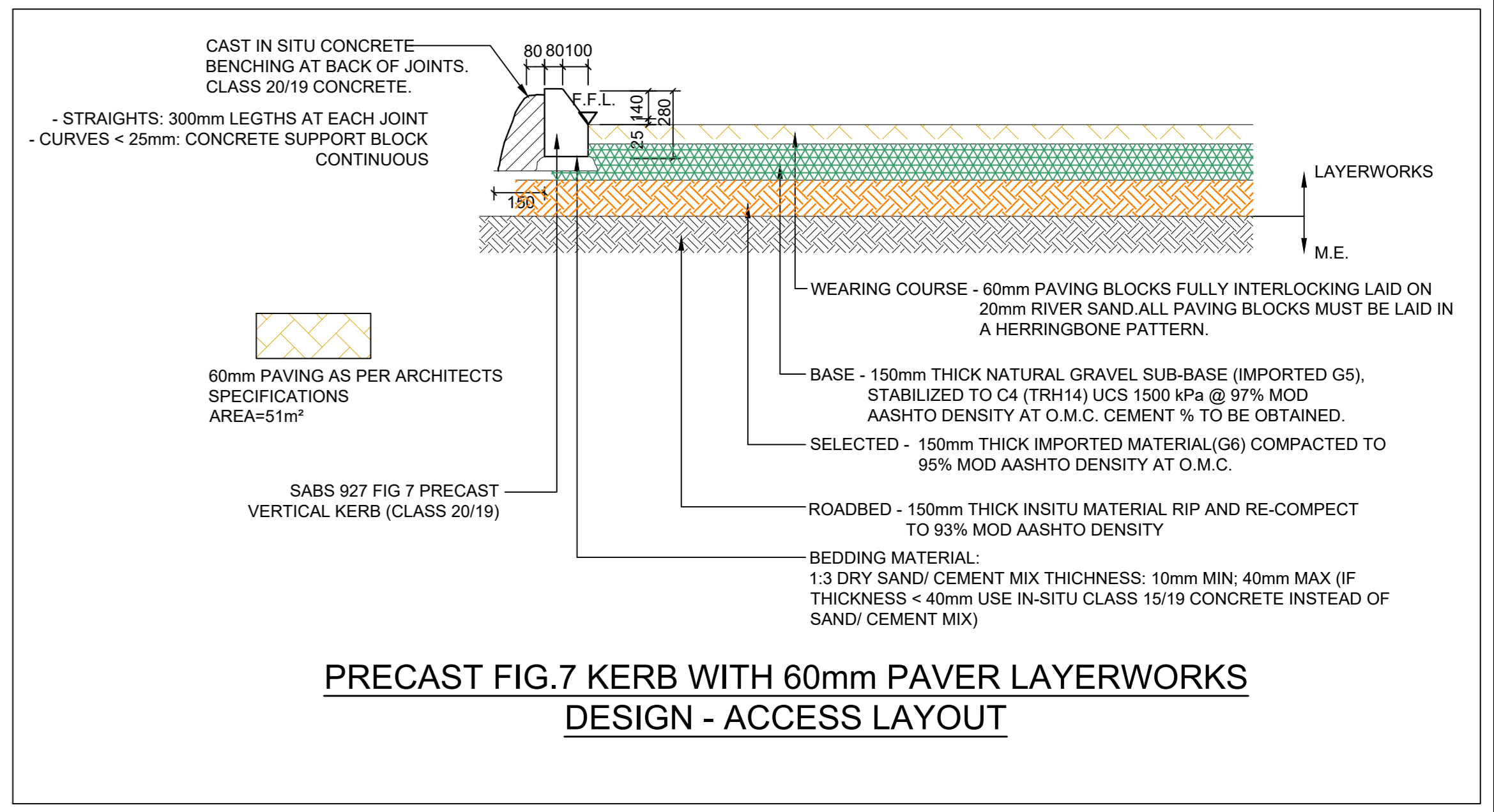
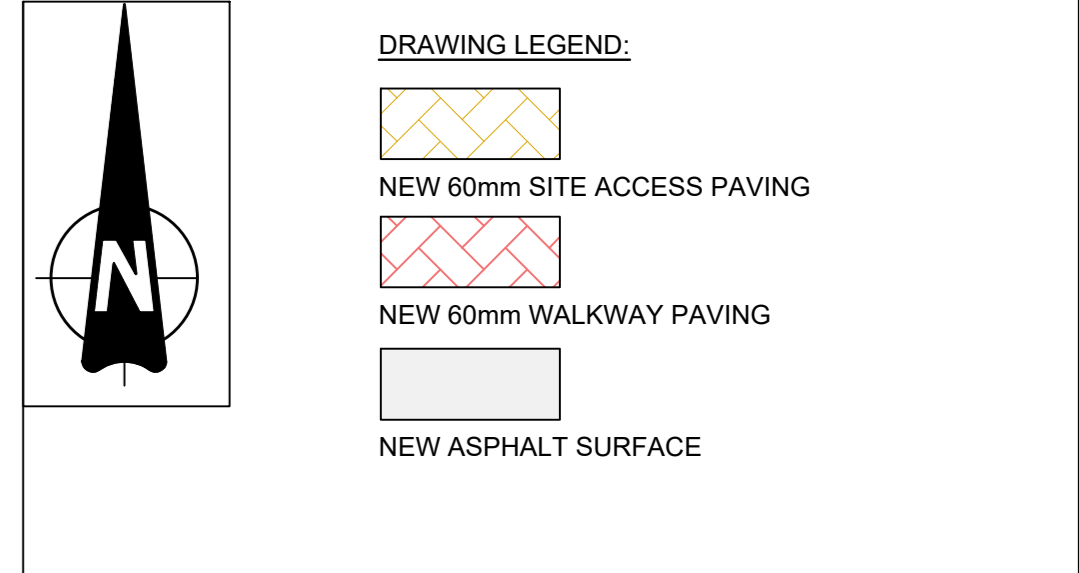
DESIGN MANAGER	SCALE	AMENDMENTS	APPROVED	DATE	DRAWING No.
	A0 1:500	A ISSUED FOR COUNCIL APPROVAL		2020/10/13	20521-500 1 OFF 1
					FILE No

DATE	SCALE	AMENDMENTS	APPROVED	DATE	DRAWING No.

ANNEXURE-D
ACCESS LAYOUT
20521-400



LOCALITY NTS.



REFER TO DRAWING No:
 No. JW100-DET01-W01-
 No. JW100-DET01-S01-
 No. JW100-DET02-S01-

DEPARTMENT	APPROVED	DESIGNATION	DATE

CONSULTING ENGINEERS	SURVEYED	DESIGNED	G. HUYSAMEN	OCTOBER 2020	JOHANNESBURG ROADS AGENCY
DRAWN	CHECKED	SERVICES CHECKED	KC OOLJKAAS	OCTOBER 2020	66 Pixley Seme Street (Previously Sauer Street) Johannesburg 2000 TEL: (011) 298-5000 FAX: (011) 298-5178
PRIVATE DRAWING No. 20521-400	APPROVED	DATE			

CITY OF JOHANNESBURG
 ROAD AND ACCESS LAYOUT FOR THE NEW PROPOSED DEVELOPMENT ON STRUBENSVALLEI EXT.24

DESIGN MANAGER	SCALE	AMENDMENTS	APPROVED	DATE	DRAWING No.
	A0 1:500	A ISSUED FOR COUNCIL APPROVAL		2020/10/13	20521-400 1 OFF 1
					FILE No



City of Johannesburg
Johannesburg Roads Agency

75 Helen Joseph Street
Cnr. Harrison Street
Johannesburg
2001

P/Bag X70
Braamfontein
South Africa
2017

Tel +27(0) 11 298 5000
Fax +27(0) 11 298 5178
www.jra.org.za
www.joburg.org.za

Tel: (011) 298-5000
Fax: (011) 298-5066

12/3/S29-24
R. Jagmohun

C-Plan Civil Engineers (Pty) Ltd
459 Ontdekkers Road
Florida Hills
Johannesburg
1709

23 October 2020

Email: gerhard@cplan.co.za

Attention: G Huysamen

Sir,

ERF 1327 STRUBENSVALLEI EXTENSION 24: OUTLINE SCHEME REPORT

We refer to the Outline Scheme Report dated 13 October 2020 received on the 21 October 2020, the JRA wish to comment as follows:

1. The Traffic Impact Assessment (TIA) undertaken by Mariteng Consulting Engineers, was approved by the JRA as per correspondence dated January 2017. The Developer shall be responsible for any road upgrades as recommended in the TIA.
2. Access to the development shall be obtained from Fiddle Avenue. Fiddle Avenue shall be extended to the proposed development (cul-de-sac).
3. The internal road network shall remain private and will not be maintained by the Council.
4. A 2m wide paved sidewalk shall be constructed along the property frontage and proposed roadway.
5. It is proposed that existing stormwater infrastructure will be modified to a kerb inlet at the proposed cul-de-sac, to convey stormwater runoff from the roadway into the existing stormwater network north of the site.
6. The proposed internal stormwater management was not included in the report.
7. An on-site attenuation pond is proposed. The proposed attenuation pond volume is **680m³**. The attenuation pond must be grassed, fenced-off and shall remain private.
8. Cost estimates for external engineering services has been included in the report (**Stormwater = R19 007.50 ex VAT and Roads = R440 046.00 ex VAT**).

Your Outline Scheme Report is hereby supported. We await the detail design of the roads and stormwater which must be submitted for approval prior to the commencement of any construction.

Disclaimer:

All road upgrades to be undertaken by the developer or his representatives, the cost thereof, will not be refunded back to the developer by the Johannesburg Roads Agency (JRA) or the City of Johannesburg (CoJ) unless these upgrades were discussed and agreed upon in writing by both parties upfront, before any construction commences. The mere fact that the detail design drawings or Traffic Impact Studies have been approved, does not bind the JRA or the CoJ to any agreement.

It should also be noted that if any upgrades are undertaken by the developer to any roads or storm-water on behalf of CoJ or the JRA, the developer will be entitled to an off-set against their external engineering services contributions as per section 49(4) of SPLUMA, provided these services are required to be upgraded to resolve background capacity problems, and not as a result of his/her impact of the development. These upgrades are to be discussed with the officials of the JRA and agreement in writing is to be obtained from the JRA to the off-set of such contributions, before any construction commences on site.

If the amount for the upgrade/construction exceeds the contributions payable, the balance thereof will not be refunded to the developer and the construction is then carried out at the developers own cost.

Yours faithfully



R Jagmohun Pr Tech Eng
Engineer: Development Control (Private)
rjagmohun@jra.org.za
(011) 491 5606