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23 August 2026

Our Reference: 3608.2

Attention: Chris Möller

TRANSPORT IMPACT STATEMENT – STONEWOOD APARTMENTS, ERF 38791, KRAAIFONTEIN

1 BACKGROUND

This report evaluates the anticipated transport impact associated with the proposed Apartments on Erf 38791 in Kraaifontein, Cape Town.

ITS previously conducted a Transport Impact Assessment for the Stonewood development dated October 2017. This report is in support of an additional 96 apartments on the property. Please also refer to the October 2017 TIA for more detail (ITS ref 3608).

2 LOCALITY

Erf 38791 is situated to the north of the Bonnie Brae suburb in Kraaifontein. The site is located to the east of Okavango Road, north of Stonewood Drive and to the west of Sarel Van Deventer Road. Refer to **Figure 1** for the Locality Plan.

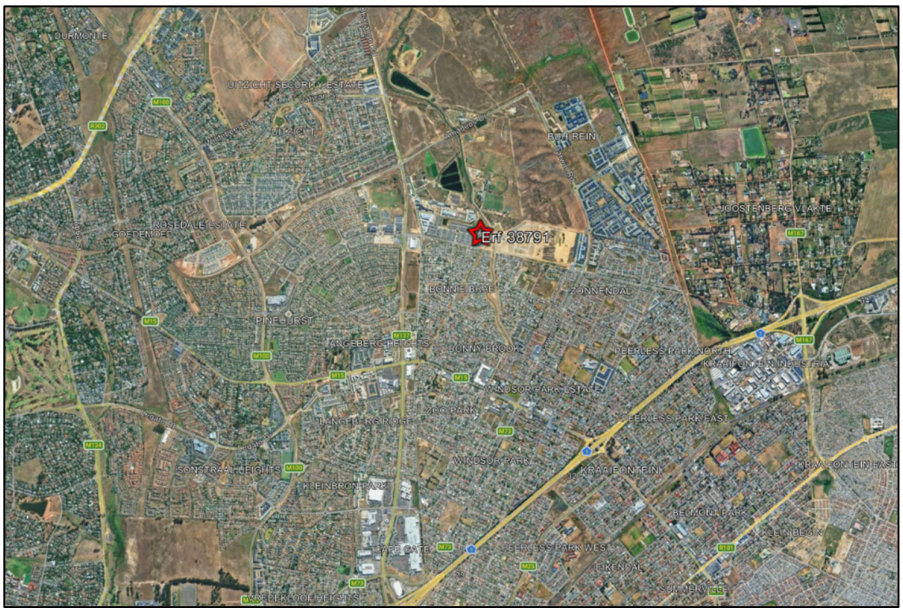

Figure 1: Locality Plan

3 DEVELOPMENT PROPOSAL

Erf 38791 was part of the larger Stonewood application evaluated in the October 2017 TIA. This portion (Erf 38791) included 90 apartments that were previously approved as part of the larger Stonewood development. It is now proposed to add an additional 96 apartments on Erf 38791 as shown on the SDP provided in Annexure A.

3.1 Trip Generation

The expected trip generation rates and associated development trips for the proposed development were derived from the Committee of Transport Officials Trip Data Manual (TMH17, COTO, 2020). Refer to Table 1:

Table 1: Trip Generation Rates

			AM Peak Hour			PM Peak Hour		
Land Use	**Size**	**Units**	**Trip Rate**	**%In**	**%Out**	**Trip Rate**	**%In**	**%Out**
220 Apartments and Flats	96	Dwelling unit	0.65	25%	75%	0.65	70%	30%

Based on the trip generation rates indicated in **Table 1**, the following trips will be generated from the new development:

Table 2: Trip Generation from Developments

Land Use	**AM Peak Hour**			**PM Peak Hour**		
	In	**Out**	**Total**	**In**	**Out**	**Total**
220 Apartments and Flats	16	47	63	44	19	63

Based on Table 2, the additional units will add 63 trips during both AM and PM Peak hours. The additional trips will have a minor impact on the external road network. Two access options will be available for residents. This will be discussed further in Section 3.3.

3.2 Parking Requirements

The following parking rates were used in accordance with the Municipal Planning Amendment By-Law (August 2025) to calculate the required off-street parking for the additional units. The existing 90 apartments have off-street parking provided at 1.5 bays/unit. The additional 96 apartments will also have a parking rate of 1.5 bays/unit. **Table 3** provides the required off-street parking bays for the additional units:

Table 3: Off-Street Parking Requirements

Land use	**Parking Rate**	**Size**	**Unit**	**Parking Required**
Existing Units	1.5 parking bays per unit	90	units	135 bays
New Units	1.5 parking bays per unit	96		144 bays
Total Parking Bays Required				**279 bays**

Based on **Table 3,** 144 parking bays will be required for the additional units. Along with the existing 135 bays, a total of 279 bays will therefore be provided. Refer to the Site Development Plan for the provided parking. Sufficient parking will be provided for the additional units.

3.3 Site Access

Access is proposed via a new left-in left-out access off Stonewood Drive, as indicated in the SDP. Inbound traffic from the east along Stonewood Drive will have to use the existing Stonewood Estate access. Outbound traffic with a westbound destination can turn left at the new left-in/left-out access and make a U-turn at the Sarel van Deventer Road roundabout. The left-in/left-out access will be electronically controlled and will be for residents only, visitors have to make use of the Stonewood Estate access. Refer to Annexure B for the concept drawing of the proposed left-in left-out access.

The residents making use of the existing Stonewood Estate access are expected to be low, and the impact of the trips due to the additional units is expected to be very minor on the internal roads of the existing estate.

3.4 Queueing Analysis

The left-in left-out access off Stonewood Drive will only be for residents. A remote-controlled access gate will be installed, and a 450 veh/h flow rate was assumed. The critical peak to analyse will be the PM peak hour inbound, assuming all the residents will enter at this access. Refer to Table 4 below for the summary of the queueing analysis.

Table 4: Queueing Analysis

Access Queueing Assessment		Notes
Total Volume (veh/h)	Residents only 44 Inbound Weekday PM Peak hour	
Volume distribution per Gate	100%	
Lane/Vehicle Type	Residents	
Proportion	100%	Only one access lane exists.
Traffic Volume	44	
Peak Hour Factor (PHF)	0.8	Assume
Service Flow Rate	450	Refer to Table 30 (TMH 16) - considered conservative – 450 veh/hour service flow rate
Traffic Ratio	12	Refer to Table 31 (TMH 16)
90th% Queue Length (veh)	1	Based on traffic ratio, refer to Table 31 (TMH 16)
90th% Queue Length (m)	**7**	**Based on 7m per vehicle**

Based on the queue analysis, a total queue of 1 vehicle will be present during the PM peak hour. This is a conservative approach assuming that all the residents entering will make use of this access.

4 TRANSPORT IMPACT

From the observations during the site visit it is evident that all the intersections in the vicinity of the site have sufficient capacity to accommodate the additional trips that will be generated by the proposed development. Based on the size of the proposed development and the current traffic conditions it is concluded that the traffic impact of the proposed development will be insignificant. Therefore, other than the proposed access, no specific road improvements will be required to accommodate the additional trips that will be generated by the proposed development.

5 SUMMARY AND CONCLUSIONS

This statement summarises an assessment of the transport implications of the proposed additional 96 apartments on Erf 38791 in Kraaifontein. ITS previously conducted a Transport Impact Assessment for the Stonewood development dated October 2017. This report is in support of an additional 96 apartments on the property. Please also refer to the October 2017 TIA for more detail (ITS ref 3608).

The following can be summarised:

- **Trip Generation:** The development will generate a total of 63 trips in the AM Peak Hour and PM Peak Hour. With approximately 16 in and 47 out trips during the AM Peak hour, and 44 in and 19 out trips during the PM peak hour.
- **Impact on External Road Network:** The additional trips are expected to have a minor impact on the external road network. It is expected that only every 57 seconds a new vehicle will be added to the network.
- **Parking Requirements:** A total of 144 parking bays will be required for the development. The SDP shows sufficient parking provided on site.
- **Site Access:** Access is proposed via new left-in/left-out off Stonewood Drive and via the existing Stonewood Estate access for visitors and westbound right-turn traffic.
- **Queueing Analysis:** Under the conservative assumption of 44 inbound vehicles during the weekday PM peak and a 450 veh/h service rate, the 90th-percentile queue is one vehicle (approximately 7 m).

Based on the impact evaluation as discussed in this report, it is evident that the transport impact associated with the proposed additional 96 units on Erf 38791, in Kraaifontein, will be of low significance. Based on this assessment, it is recommended that the proposed development can be considered for approval from a transport point of view.

Yours sincerely,

Christoff Krogscheepers, Pr. Eng, M. Eng.
Director – ***Innovative Transport Solutions***

Annexure A – Site Development Plan

ERF SIZE	= 20 701,00 sq m
EX. 2 BEDROOM FLATS	= 90 flats
NEW 2 BEDROOM FLATS	= 96 flats
TOTAL FLATS	= 186 flats
FLATS PER HA	= 89.85 / HA
COVERAGE	= 5 002,09 sq m (24,16%)
BALK	= 15 908,02 sq m (0,77)
EX. UNITS	= 90 units / 1,5 = 135 parking bays
NEW UNITS	= 96 units / 1,5 = 144 parking bays
TOTAL UNITS	= 186 units = 279 parking bays
PARKING PROVIDED	= 279 parking bays

EX. BLOCK A GF	=	358,48 sq m
EX. BLOCK A FF	=	338,16
EX. BLOCK A SF	=	338,16
EX. BLOCK B GF	=	521,43
EX. BLOCK B FF	=	501,11
EX. BLOCK B SF	=	501,11
EX. BLOCK C GF	=	521,43
EX. BLOCK C FF	=	501,11
EX. BLOCK C SF	=	501,11
EX. BLOCK D GF	=	521,43
EX. BLOCK D FF	=	501,11
EX. BLOCK D SF	=	501,11
EX. BLOCK E GF	=	698,56
EX. BLOCK E FF	=	678,24
EX. BLOCK E SF	=	678,24
NEW BLOCK F GF	=	698,56
NEW BLOCK F FF	=	678,24
NEW BLOCK F SF	=	678,24
NEW BLOCK G GF	=	521,43
NEW BLOCK G FF	=	501,11
NEW BLOCK G SF	=	501,11
NEW BLOCK G TF	=	501,11
NEW BLOCK H GF	=	521,43
NEW BLOCK H FF	=	501,11
NEW BLOCK H SF	=	501,11
NEW BLOCK H TF	=	501,11
NEW BLOCK I GF	=	521,43
NEW BLOCK I FF	=	501,11
NEW BLOCK I SF	=	501,11
NEW BLOCK I TF	=	501,11
EX. BIN ROOM 1	=	32,49
NEW BIN ROOM 2	=	29,42
EX. STORE ROOM	=	21,00
TOTAL	=	15 908,02 sq m

BLOCK F, G, H and I
GROUND FLOOR LEVEL
TO BE 250 mm ABOVE
1:100 YEAR FLOOD LINE.

PHASE 4 = 4 FLOORS = 24 UNITS
BLOCK I
PHASE 3 = 4 FLOORS = 24 UNITS
BLOCK H
PHASE 2 = 4 FLOORS = 24 UNITS
BLOCK G
PHASE 1 = 3 FLOORS = 24 UNITS
BLOCK F

EX. BLOCK A = 12 FLATS
EX. BLOCK B = 18 FLATS
EX. BLOCK C = 18 FLATS
EX. BLOCK D = 18 FLATS

EXISTING FLAT DEVELOPMENT (90 flats).

ERF 38791

71 Private Road

TURNING CIRCLE

TRANSFORMER

BIN ROOM

STORE ROOM

DETENTION POND 1
TO ENGINEER'S DETAIL.

DETENTION POND 2
TO ENGINEER'S DETAIL.

EXISTING CHANNEL

PRIVATE OPEN AREA PLOT 70 (EXISTING CHANNEL)

CENTER LINE OF CHANNEL

1:50 YEAR FLOOD LINE

1:100 YEAR FLOOD LINE

STONEWOOD DRIVE

WALKWAY

EXISTING 1,80 m HIGH CLEARVIEW FENCE

EXISTING BOUNDARY WALL

Available SSD = 112m
Available SSD = 120m

BOUNDARY DIMENSION = 101,68 m
BOUNDARY DIMENSION = 50,38 m
BOUNDARY DIMENSION = 155,16 m
BOUNDARY DIMENSION = 45,33 m
BOUNDARY DIMENSION = 21,00 m
BOUNDARY DIMENSION = 20,01 m
BOUNDARY DIMENSION = 17,97 m
BOUNDARY DIMENSION = 17,95 m
BOUNDARY DIMENSION = 23,00 m
BOUNDARY DIMENSION = 78,73 m
BOUNDARY DIMENSION = 36,85 m
BOUNDARY DIMENSION = 30,61 m

5,00 m BUILDING LINE.
5 m BUILDING LINE.

EXISTING 7,5 m DRIVEWAY
7,5 m DRIVEWAY
NEW PARKING 195
NEW PARKING 197
EX. PARKING
NEW PARKING
PARKING
DISABLED PARKING
REMOVE PARKING

STORM WATER OVERFLOW CHANNEL

GROUND FLOOR AND SITE LAYOUT:

SCALE 1:300

- SITE AND GROUND FLOOR LAYOUT -
- SITE DEVELOPMENT PLAN -

REVISION – HERSIENING			NOTE
28/07/2026	make chances to parking and entrance make chances to storm water detention pond. make chances to dimensions make chances to entrance road	A	COPYRIGHT RESERVED ON THIS DRAWING. GIVEN DIMENSIONS TO BE TAKEN IN PREFERENCE TO SCALE.
			SCALE 1:300 DATE NOV. 25
			DESIGN ddw DRAWN ddw
			CHECKED

PROJECT	EXTENSION OF EXISTING FLAT DEVELOPMENT FOR I & C PROPERTY INVESTORS (PTY) LTD.	STAND 38791
DRAWING	GROUND FLOOR AND SITE LAYOUT	STONEWOOD MUNICIPALITY

danie de wet
– building designs –
SOUTH AFRICAN COUNCIL FOR THE ARCHITECTURAL PROFESSION – T1144
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CELL. 082-8686 219

01274 PROJECT NO.

01 A DRAWING NO.

Annexure B – Concept of Access

EXISTING FLAT DEVELOPMENT (90 flats)

EX. BLOCK E = 24 FLATS

EX. BLOCK C = 16 FLATS

PHASE 1 = 3 FLOORS = 24 UNITS

BLOCK F

BLOCK G

PHASE 2 = 4 FLOORS = 24 UNITS

BLOCK G

BLOCK H

Available SSD = 120m

Available SSD = 112m

1.4m

73m

5m

3.7m

1.5m

3.7m

1.5m

1:50 YEAR FLOOD LINE

1:100 YEAR FLOOD LINE

Stonewood Drive

Sarel Van Deventer Road

N

SCHEMATIC

PROJECT:	FIGURE:	NUMBER:
STONEWOOD, KRAAIFONTEIN	LEFT-IN, LEFT-OUT ACCESS ALTERNATIVE	A

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