Traffic Impact Study
Raslouw Ext 49
City of Tshwane
October 2023

route 2
transport strategies

cc Reg no 2005/175400/23 VAT No. 4150229096

QUALITY MANAGEMENT

Client:	Moneyline 207 (Pty) Ltd
Project Name:	Raslouw Ext 49
Project No.:	TRAF 1807
Date of Issue:	04 October 2023
Version:	001
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1 PURPOSE AND OVERVIEW

1.1 Introduction

Route^2 – Transport Strategies cc have been appointed by **Moneyline 207 (Pty) Ltd** to undertake a **Traffic Impact Statement** for the proposed **Consent Use Application** for **Raslouw Ext 49**. The Consent Use application is for a **"Sports Club"** with **6 Padel Courts, a Club House, Place of Refreshment & Children's Play Area**.

This Statement is thus in support of the application to the relevant municipal-, transport- and planning authorities.

1.2 Objectives of the Traffic Impact Statement

The objectives of the Statement are as follow:

- To determine the impact of the additional traffic generated by the proposed development on the existing road network;
- To propose measures that could be put in place to mitigate the potential impact that the additional traffic may have on the existing traffic and road conditions; and
- To provide sufficient information for the approval of the Application.

2 SCOPE OF THE REPORT

The purpose of this report is to identify the potential traffic impact on the surrounding road network. The Statement area, development trip generation, trip distribution, capacity analysis and site access requirements are assessed in the rest of this report.

2.1 Statement Area

The extent of the Statement area is driven by an estimation of the traffic that will be generated by the proposed development. The development will generate a mere **24 AM & 24 PM additional peak hour trips** and therefore only the nearest intersection which is **Baard Road & Pool Avenue (mini-circle)** was assessed.

2.2 Peak Hours Analysed

Peak morning and afternoon traffic counts were conducted on Wednesday 20 September 2023 at the intersection mentioned above.

The weekday AM (07:00 – 08:00) and PM (16:30 – 17:30) peak hour traffic are summarised in **Figures 2 & 3**. The peak hours were derived from the highest peak hour traffic that was counted during the morning and afternoon peak periods.

2.3 Assessment Scenarios

To determine the likely impact of the additional traffic, the following two scenarios were analysed:

- **Scenario 1: Existing 2023** AM and PM peak hour flows;
- **Scenario 2: Base 2023** AM and PM peak hour flows with Development Traffic.

3 SURROUNDING ROAD NETWORK

Baard Road

Baard Road is a Class 5 local access street. Access into the site is off Baard Road.

Poole Avenue

Pool Avenue is also a Class 5 local access road.

Provincial Roads Affected

No existing Provincial Roads are affected by the application although the planned K73 will run through the western portion of the site.

4 APPLICATION

The following land use is been applied for as per **Table 1** below. The proposed Site Development Plan (SDP) is attached in **Annexure B**. The Town Planning Memorandum is attached in **Annexure D**.

Table 1: Development Controls

Land Use	No
Consent Use (Sports Club) **(Site = 1,45 hectares)**	• 6 Padel Courts • Club House = 500m^2 • Place of Refreshment = 50 people • Children's Play Area

5 TRAFFIC FLOWS & TRIP GENERATION

5.1 Trip Generation

Since there is no trip rate for this type of use, a trip rate of one (1) trip per person playing was assumed. Since each of the six (6) Padel Courts can have 4 people playing at any given time there could be 24 people paying.

The predicted peak hour traffic to and from the site for is summarised in **Tables 2 & 3** below.

Table 2: AM Peak Hour Trip Generation

Land use	Extend	Units	Trip Rate	Split In	Split Out	Trips In	Trips Out	Adjusted Total in & out
Sports Club	24	People Playing	1.0	50%	50%	12	12	24

Table 3: PM Peak Hour Trip Generation

Land use	Extend	Units	Trip Rate	Split	Split	Trips	Trips	Adjusted Total in & out
				In	Out	In	Out	
Sports Club	24	People Playing	1.0	50%	50%	12	12	24

5.2 Expected Trip Distribution

The trip distribution is determined from the existing traffic volumes and assumptions made regarding the external road network turning movements. The predicted trip distribution that was used is listed below:

- 50% from the south along Baard Road.
- 50% from the north along Baard Road.

Figures 4 & 5 illustrates the **Base 2023 & Development traffic**.

5.3 Latent Rights

There are no Latent Rights Developments near the site.

6 TRAFFIC IMPACT & CAPACITY ANALYSES

6.1 Assessment Criteria

The counted intersection has been analysed using aaSIDRA traffic analysis software.

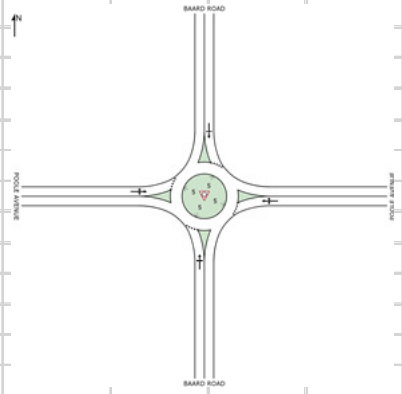
SIDRA is a computer software program that provides several performance measures including v/c ratios, delays, level of service (LOS), etc.

When elements of a road network such as intersections are analyzed, their operating conditions are described in terms of LOS. The six letters from A to F are used to indicate different LOS. LOS A indicates very light traffic with correspondingly low delays. LOS E reflects capacity conditions, with high delays and unstable flow. LOS F reflects conditions where traffic demand exceeds capacity and traffic experiences congestion and delays. Generally, LOS A to D is considered acceptable in accordance with international standards. LOS E and F on the other hand are deemed unacceptable.

A further measure of the operating conditions prevailing at any one point in a road network is the volume to capacity ratio (v/c). As the name implies it is the traffic demand volume divided by the available capacity of the roadway element. Generally, ratios of up to approximately 0.9 are internationally deemed acceptable.

Results of the aaSIDRA capacity analyses at the intersection is shown in the following sub section, with details of the outputs enclosed in **Annexure A**.

6.2 Baard Road and Poole Avenue: Intersection 1

Existing Geometry & Control	Proposed Geometry & Control
	N/A

Analyis Results & Conclosions					Intersection: BAARD ROAD / POOLE AVENUE
		Overall Operation			
Scenario	Peak	LOS	Delay(s)	V/C	Comment
SC1	AM	A	6	0.14	
SC2	AM	A	6	0.15	
SC3	AM				
SC4	AM				
SC1	PM	A	6	0.12	
SC2	PM	A	6	0.13	
SC3	PM				
SC4	PM				
Conclusion:					For all scenarios the intersection operates sufficiently with ample spare capacity.
SC1:	**Existing 2023 peak hour traffic.**				
SC2:	**Base 2023 + Development Traffic.**				
SC3:	**Base 2023 + Development Traffic + Upgrades.**				
SC4:	**Future 2028 peak hour traffic.**				
Upgrades Required:					**No**
Upgrade Responsibility:					**N/A**

7 ACCESS REQUIREMENTS

7.1 Access Location

The proposed access will remain off Baard Road with one (1) lane in and one (1) lane out.

The expected AM and PM peak hour flows through the access point will be as follow:

- AM Peak Hour: 12 inbound and 12 outbound
- PM Peak Hour: 12 inbound and 12 outbound

The document COTO TMH 16 Volume 2 was used to guide the design of the access point. The following should be provided:

- Incoming lanes 1 x 3,0m (4,5m clearance)
- Outgoing lane 1 x 3,0m (4,5m clearance)
- The 6m is sufficient for emergency vehicles.

7.2 Sight Distances

The access has approximately 200m of sight distance to the north and south.

7.3 Stacking Distance

Table 4 below gives a breakdown of the queuing analysis as per **Annexure C**.

Table 4: Queuing Analysis

Description	Access Controls
Peak Hour Inbound Traffic Volume	12
Service Rate per Hour	200
Service Rate per Second	7.2
Traffic Intensity	0.06
Number of Entry Lanes	1
90^{th} percentile queue length (< n vehicles)	1 car
Number of Vehicles Waiting	0.1
Minimum queuing required	10m – 12m

8 PUBLIC TRANSPORT

8.1 Background

In terms of the "National Land Transport Act" (NLTA) (Act No.5 of 2009), it is required that an assessment of public transport be included in traffic impact studies.

8.2 Public Transport

The site is located along Baard Road which is well served by minibus-taxis.

8.3 Non-motorised Transport (NMT)

Not Applicable.

9 PRELIMINARY SITE TRAFFIC ASSESSMENT (STA)

The following applies for the site:

- Full access off Baard Road with one (1) lane in and one (1) lane out and a maximum stacking of 12m.
- Parking will be provided in accordance with the Tshwane Town Planning Scheme (Table G). In total 45 parking bays will be provided.
- Refuse removal will also be provided on the site.

10 CONCLUSION & RECOMMENDATIONS

The Traffic Impact Statement investigated the potential traffic related impacts and operations for the **Consent Use Application of Raslouw Ext 49** for a **"Sports Club (Padel Courts)"**.

Table 5 below summarises and concludes the outcomes of this assessment:

Table 5: Conclusions & Recommendations

Description	Conclusion & Recommendation
Zoned	Consent Use
Site Area	1,45 hectares
Coverage	9,9%
FAR	N/A
Height Zone	N/A
Trip Generation (In & Out)	24 AM & 24 PM (In & Out)
Latent Rights	None
Access Road	1 lane in 1 lane out with maximum of 12m stacking
Emergency Entry & Exit	Main Access off Baard Road
Parking Required & Provided	Town Planning Scheme: 45 provided
Refuse removal	On Site
Pedestrian Sidewalk	N/A
Public Transport	Baard Road
Impact	**No external road or intersection impact.**
Upgrades to be provided	**None**
Further requirements	**Nil**

11 REFERENCES

COTO, September 2012, TMH 17 Volume 1, "South African Trip Data Manual".

Institute of Transportation Engineers. "Trip Generation, 8th Edition, 2008".

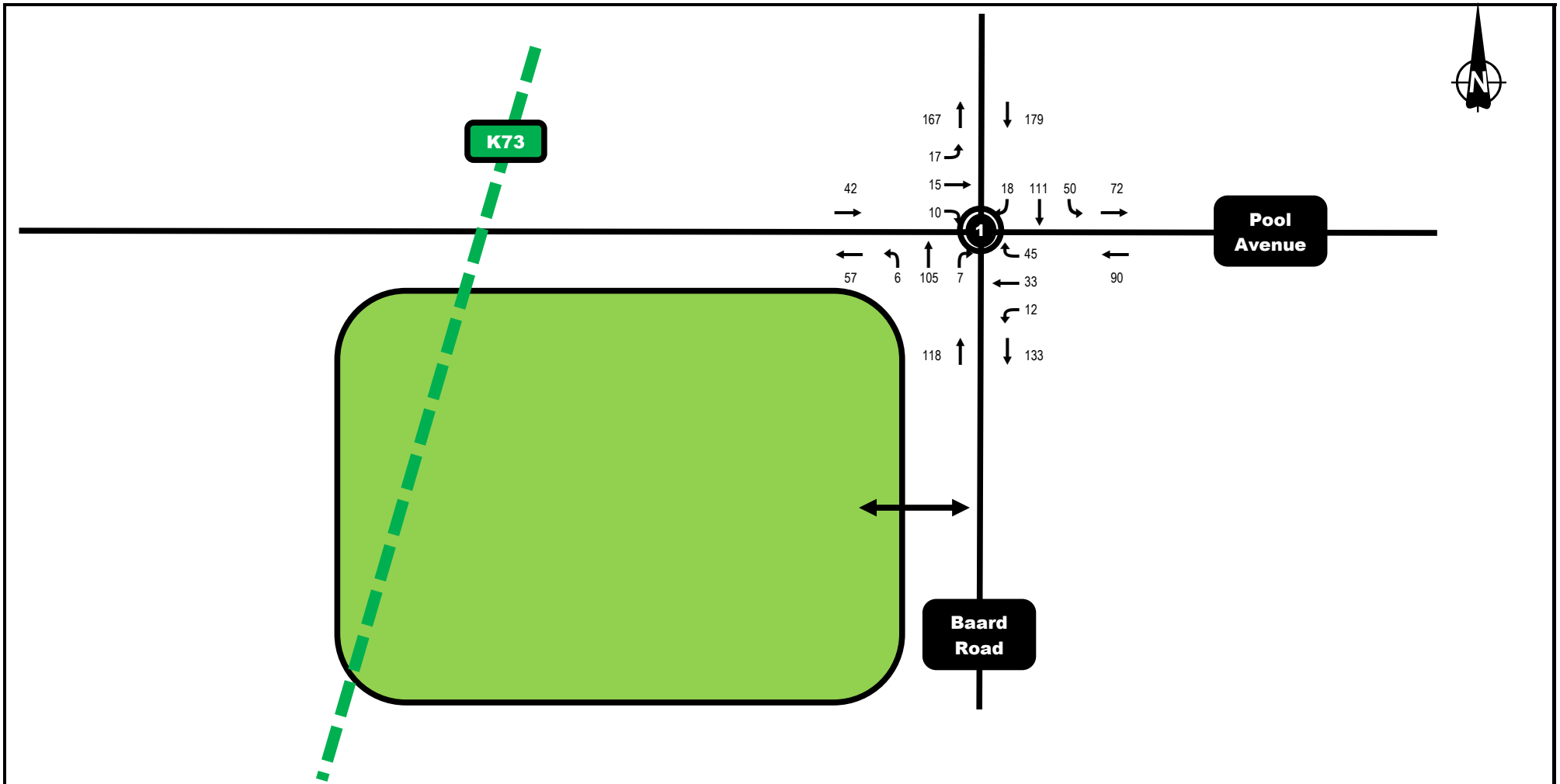
Transportation Research Board. "Highway Capacity Manual, 2010".

COTO, December 2011, TMH 26, "South African Road Classification and Access Management Manual".

National Land Transport Act (NLTA) (Act No. 5 of 2009).

Figures

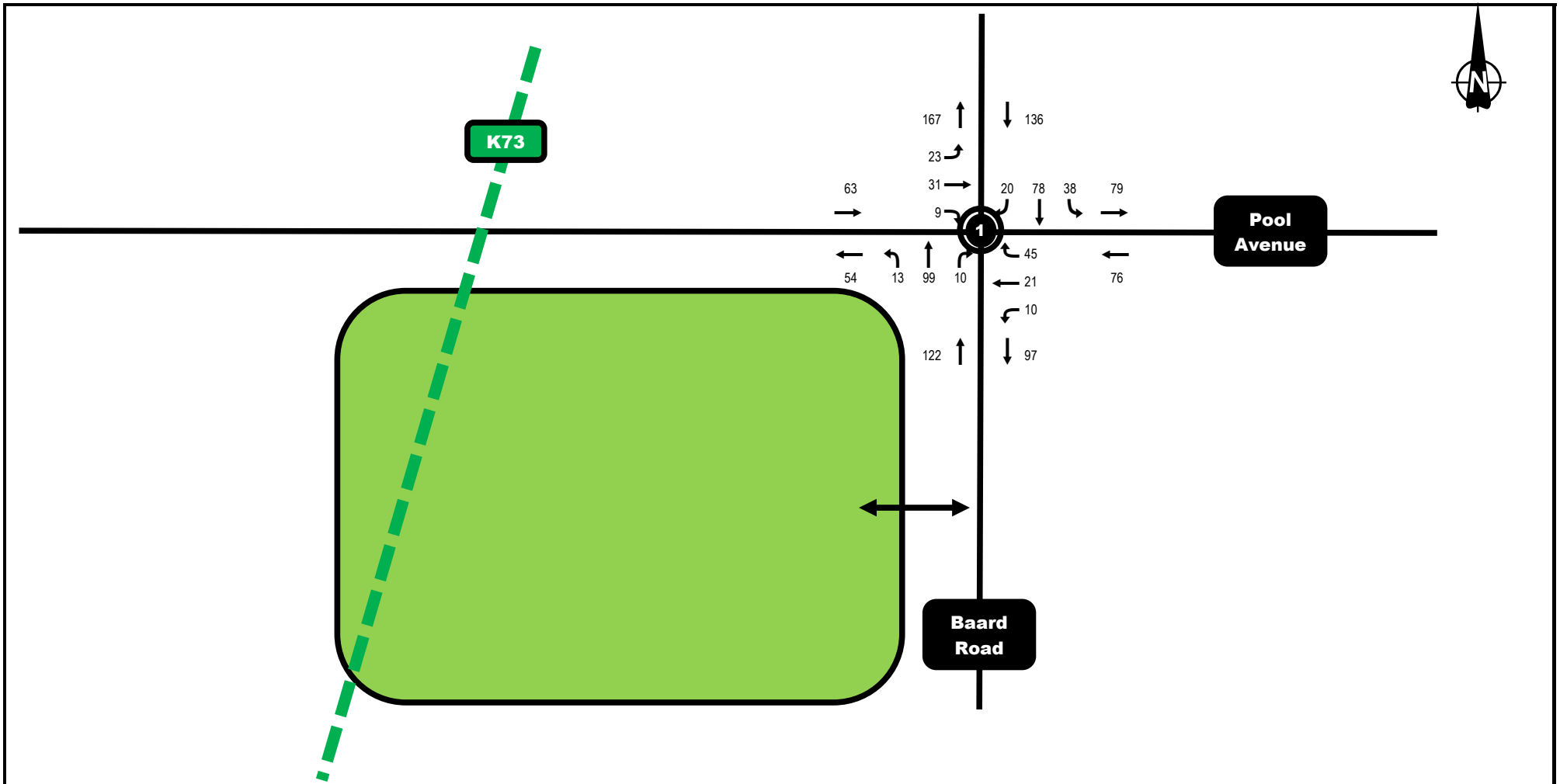
Figure 1: Locality Plan



WEEKDAY AM PEAK HOUR

Schematic

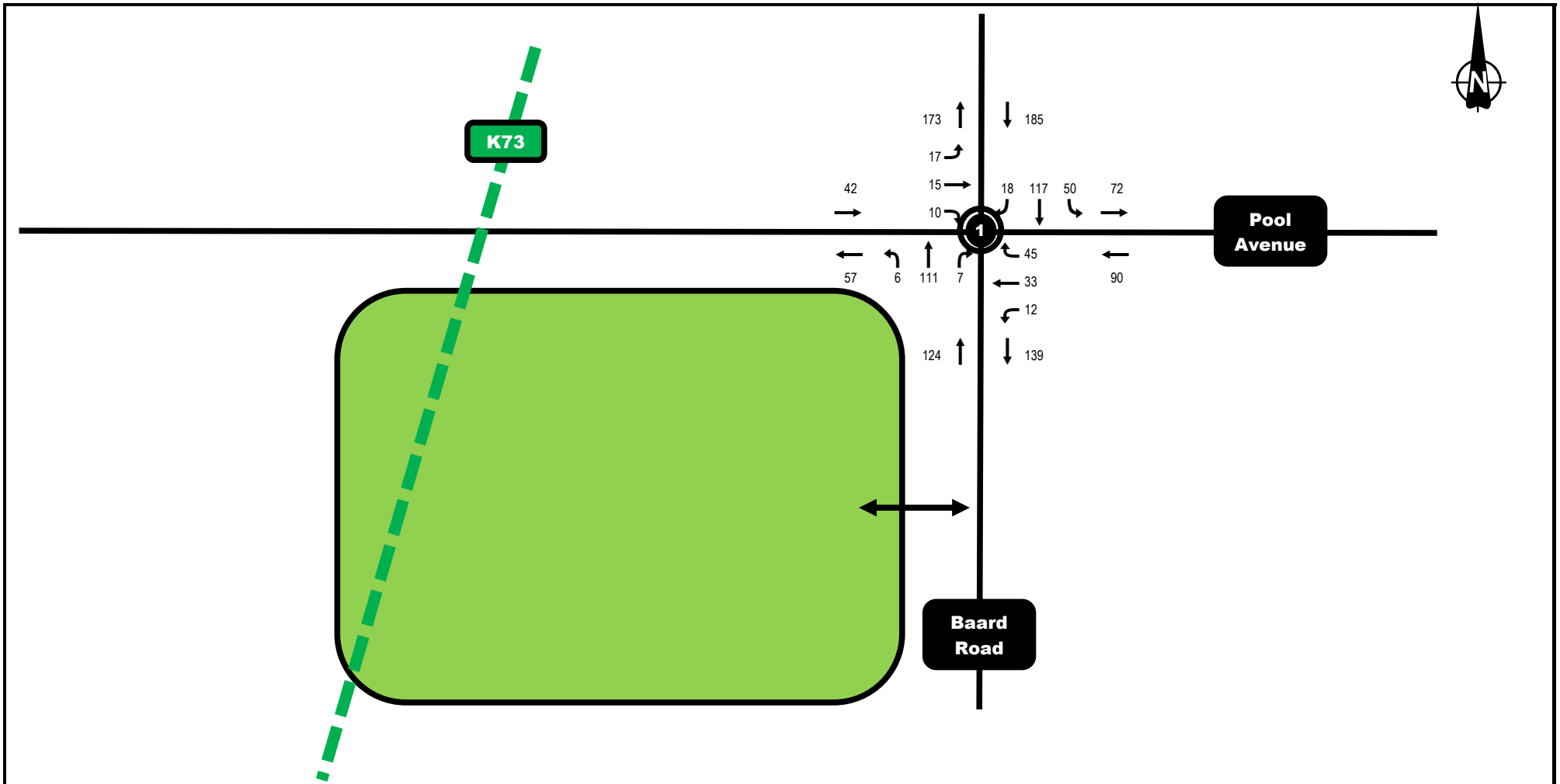
route 2 transport strategies	Raslouw Ext 49	Job Ref No: **TRAF 1807**
	Present Traffic Demand (2023)	Fig: **2**



WEEKDAY PM PEAK HOUR

Schematic

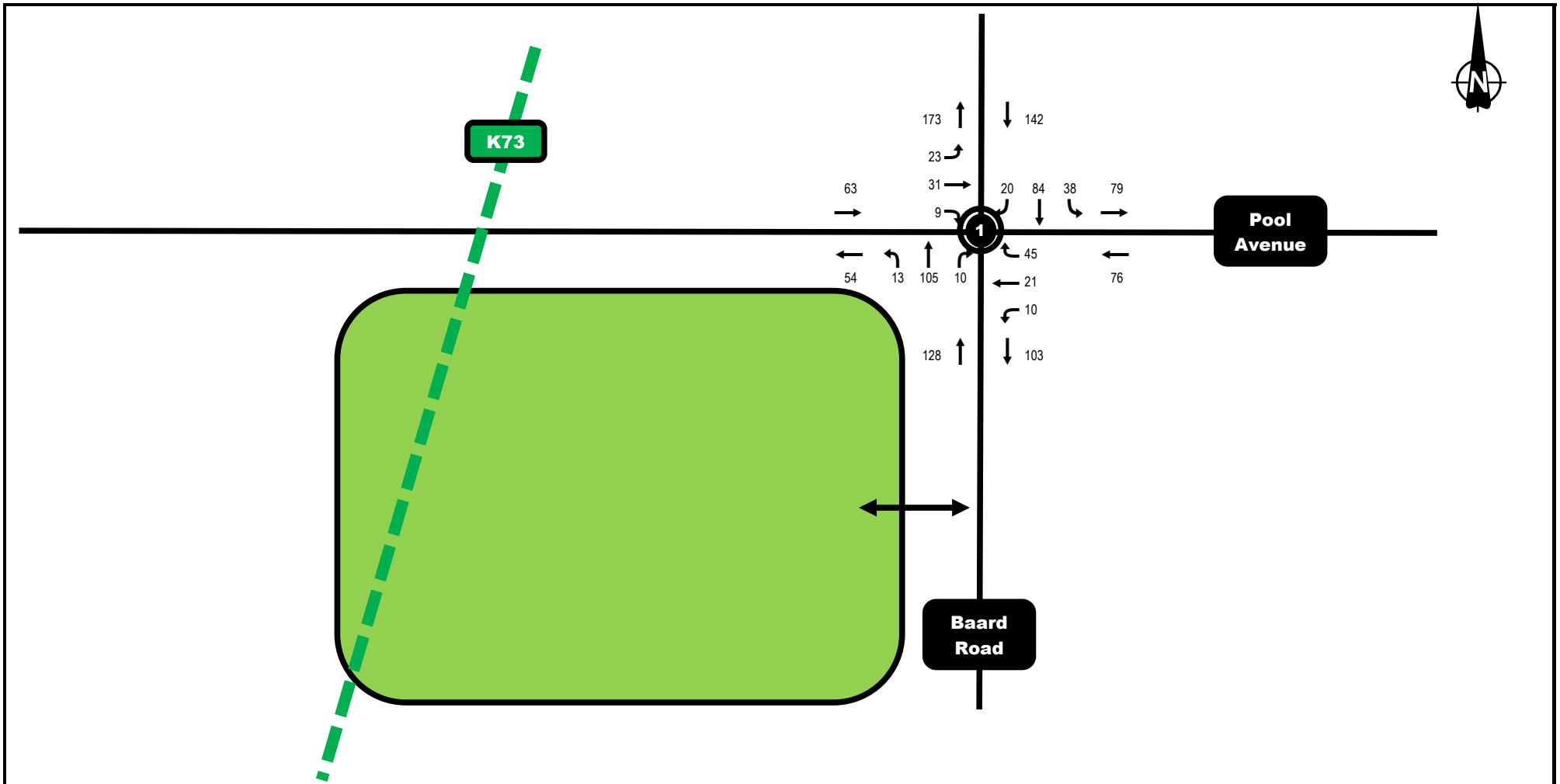
route 2 transport strategies	Raslouw Ext 49	Job Ref No: **TRAF 1807**
	Present Traffic Demand (2023)	Fig: **3**



WEEKDAY AM PEAK HOUR

Schematic

route 2 transport strategies	Raslouw Ext 49	Job Ref No: **TRAF 1807**
	Present Traffic Demand plus Development	Fig: **4**



WEEKDAY PM PEAK HOUR

Schematic

route 2 transport strategies	Raslouw Ext 49	Job Ref No: **TRAF 1807**
	Present Traffic Demand plus Development	Fig: **5**

Annexure A

MOVEMENT SUMMARY

Site: 2023AM

BAARD ROAD / POOLE AVENUE
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: BAARD ROAD											
1	L2	6	0.0	0.111	6.2	LOS A	0.6	4.0	0.28	0.54	52.5
2	T1	111	0.0	0.111	5.5	LOS A	0.6	4.0	0.28	0.54	53.1
3	R2	7	0.0	0.111	8.0	LOS A	0.6	4.0	0.28	0.54	52.9
Approach		124	0.0	0.111	5.7	LOS A	0.6	4.0	0.28	0.54	53.1
East: POOLE AVENUE											
4	L2	13	0.0	0.088	6.5	LOS A	0.4	3.0	0.32	0.61	51.6
5	T1	35	0.0	0.088	5.7	LOS A	0.4	3.0	0.32	0.61	52.3
6	R2	47	0.0	0.088	8.2	LOS A	0.4	3.0	0.32	0.61	52.0
Approach		95	0.0	0.088	7.1	LOS A	0.4	3.0	0.32	0.61	52.1
North: BAARD ROAD											
7	L2	53	0.0	0.142	5.8	LOS A	0.8	5.4	0.15	0.55	52.7
8	T1	117	0.0	0.142	5.0	LOS A	0.8	5.4	0.15	0.55	53.4
9	R2	19	0.0	0.142	7.6	LOS A	0.8	5.4	0.15	0.55	53.1
Approach		188	0.0	0.142	5.5	LOS A	0.8	5.4	0.15	0.55	53.1
West: POOLE AVENUE											
10	L2	18	0.0	0.042	6.5	LOS A	0.2	1.4	0.33	0.59	51.9
11	T1	16	0.0	0.042	5.8	LOS A	0.2	1.4	0.33	0.59	52.6
12	R2	11	0.0	0.042	8.3	LOS A	0.2	1.4	0.33	0.59	52.3
Approach		44	0.0	0.042	6.7	LOS A	0.2	1.4	0.33	0.59	52.2
All Vehicles		452	0.0	0.142	6.0	LOS A	0.8	5.4	0.24	0.56	52.8

MOVEMENT SUMMARY

Site: 2023PM

BAARD ROAD / POOLE AVENUE
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: BAARD ROAD											
1	L2	14	0.0	0.112	6.1	LOS A	0.6	4.0	0.26	0.54	52.5
2	T1	104	0.0	0.112	5.4	LOS A	0.6	4.0	0.26	0.54	53.1
3	R2	11	0.0	0.112	7.9	LOS A	0.6	4.0	0.26	0.54	52.9
Approach		128	0.0	0.112	5.7	LOS A	0.6	4.0	0.26	0.54	53.0
East: POOLE AVENUE											
4	L2	11	0.0	0.072	6.3	LOS A	0.4	2.5	0.28	0.61	51.6
5	T1	22	0.0	0.072	5.5	LOS A	0.4	2.5	0.28	0.61	52.2
6	R2	47	0.0	0.072	8.0	LOS A	0.4	2.5	0.28	0.61	52.0
Approach		80	0.0	0.072	7.1	LOS A	0.4	2.5	0.28	0.61	52.0
North: BAARD ROAD											
7	L2	40	0.0	0.115	5.9	LOS A	0.6	4.2	0.19	0.55	52.5
8	T1	82	0.0	0.115	5.2	LOS A	0.6	4.2	0.19	0.55	53.2
9	R2	21	0.0	0.115	7.7	LOS A	0.6	4.2	0.19	0.55	52.9
Approach		143	0.0	0.115	5.7	LOS A	0.6	4.2	0.19	0.55	52.9
West: POOLE AVENUE											
10	L2	24	0.0	0.063	6.5	LOS A	0.3	2.1	0.33	0.58	52.1
11	T1	33	0.0	0.063	5.8	LOS A	0.3	2.1	0.33	0.58	52.7
12	R2	9	0.0	0.063	8.3	LOS A	0.3	2.1	0.33	0.58	52.4
Approach		66	0.0	0.063	6.4	LOS A	0.3	2.1	0.33	0.58	52.4
All Vehicles		418	0.0	0.115	6.1	LOS A	0.6	4.2	0.25	0.56	52.7

MOVEMENT SUMMARY

Site: 2023AM + Development

BAARD ROAD / POOLE AVENUE
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: BAARD ROAD											
1	L2	6	0.0	0.121	6.2	LOS A	0.6	4.4	0.28	0.54	52.5
2	T1	123	0.0	0.121	5.5	LOS A	0.6	4.4	0.28	0.54	53.1
3	R2	7	0.0	0.121	8.0	LOS A	0.6	4.4	0.28	0.54	52.9
Approach		137	0.0	0.121	5.6	LOS A	0.6	4.4	0.28	0.54	53.1
East: POOLE AVENUE											
4	L2	13	0.0	0.089	6.5	LOS A	0.4	3.1	0.33	0.61	51.6
5	T1	35	0.0	0.089	5.8	LOS A	0.4	3.1	0.33	0.61	52.2
6	R2	47	0.0	0.089	8.3	LOS A	0.4	3.1	0.33	0.61	52.0
Approach		95	0.0	0.089	7.1	LOS A	0.4	3.1	0.33	0.61	52.0
North: BAARD ROAD											
7	L2	53	0.0	0.150	5.8	LOS A	0.8	5.8	0.15	0.54	52.7
8	T1	129	0.0	0.150	5.1	LOS A	0.8	5.8	0.15	0.54	53.4
9	R2	19	0.0	0.150	7.6	LOS A	0.8	5.8	0.15	0.54	53.1
Approach		201	0.0	0.150	5.5	LOS A	0.8	5.8	0.15	0.54	53.2
West: POOLE AVENUE											
10	L2	18	0.0	0.043	6.6	LOS A	0.2	1.4	0.35	0.59	51.9
11	T1	16	0.0	0.043	5.8	LOS A	0.2	1.4	0.35	0.59	52.5
12	R2	11	0.0	0.043	8.3	LOS A	0.2	1.4	0.35	0.59	52.2
Approach		44	0.0	0.043	6.7	LOS A	0.2	1.4	0.35	0.59	52.2
All Vehicles		477	0.0	0.150	6.0	LOS A	0.8	5.8	0.24	0.56	52.8

MOVEMENT SUMMARY

Site: 2023PM + Development

BAARD ROAD / POOLE AVENUE
Roundabout

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	v/c	sec		veh	m		per veh	km/h
South: BAARD ROAD											
1	L2	14	0.0	0.123	6.2	LOS A	0.6	4.4	0.26	0.54	52.5
2	T1	117	0.0	0.123	5.4	LOS A	0.6	4.4	0.26	0.54	53.2
3	R2	11	0.0	0.123	7.9	LOS A	0.6	4.4	0.26	0.54	52.9
Approach		141	0.0	0.123	5.7	LOS A	0.6	4.4	0.26	0.54	53.1
East: POOLE AVENUE											
4	L2	11	0.0	0.073	6.3	LOS A	0.4	2.5	0.29	0.61	51.5
5	T1	22	0.0	0.073	5.6	LOS A	0.4	2.5	0.29	0.61	52.2
6	R2	47	0.0	0.073	8.1	LOS A	0.4	2.5	0.29	0.61	51.9
Approach		80	0.0	0.073	7.2	LOS A	0.4	2.5	0.29	0.61	51.9
North: BAARD ROAD											
7	L2	40	0.0	0.125	5.9	LOS A	0.7	4.6	0.19	0.55	52.5
8	T1	95	0.0	0.125	5.2	LOS A	0.7	4.6	0.19	0.55	53.2
9	R2	21	0.0	0.125	7.7	LOS A	0.7	4.6	0.19	0.55	52.9
Approach		156	0.0	0.125	5.7	LOS A	0.7	4.6	0.19	0.55	53.0
West: POOLE AVENUE											
10	L2	24	0.0	0.064	6.6	LOS A	0.3	2.2	0.35	0.58	52.0
11	T1	33	0.0	0.064	5.9	LOS A	0.3	2.2	0.35	0.58	52.7
12	R2	9	0.0	0.064	8.4	LOS A	0.3	2.2	0.35	0.58	52.4
Approach		66	0.0	0.064	6.5	LOS A	0.3	2.2	0.35	0.58	52.4
All Vehicles		443	0.0	0.125	6.1	LOS A	0.7	4.6	0.26	0.56	52.7

Annexure B

SDP

A0

All requirements of municipal and other authorities concerned have to
be adhered to. Contractors and subcontractors are to check all dimensions and levels on the site before commencing with work. Figured dimensions to be taken in preference to scaled measurements and large scale detail supersede small scale drawings. The design on this drawing is the property of the designer.

General notes:
All construction work to be in accordance with the National building regulations act, 1977 and local authorities bylaws.
Contractor to verify all levels, heights and dimensions on site and to check same against drawings before putting any work in hand.
Note has to be taken that in case of any discrepancy between contract and drawings, the contract will be the bonding factor.
This drawing is not to be scaled and figured dimensions to be used. Ask architect if uncertain of dimensions.
Contractor is responsible for setting out of building.
All structural work to be designed by professional engineer.
All electrical and plumbing work to be carried out by registered artisans.
Finishing to be to client and designers satisfaction.
All work to comply with SABS specifications.
All openings exceeding 2400mm to be spanned by pre cast concrete lintels.

Schedule of rights

ERF	
ERF 55 134 BAARD STR. RASLOUW, PRETORIA 14.026m²	
ZONING	AGRICULTURE (proposed change)
HEIGHT	none
EX.FAR	0.099
NEW FAR	
COVERAGE MAX	
exising	9.9%
new	
AREA	
site	14 026m²
existing gf	553m²
outbuilding	131m²
existing total area	1 384m²
New Club Hall GF	370m²
New Club Hall FF	190m²
Club Hall Total	560m²
Club Hall Coverage	620m²
covered paddle courts	645m² (combined)
open paddle courts	430m² (combined)
security	21m²
ablution	10m²
maintenance	12m²
total additions	1678m²

Parking Schedule

ERF	
ERF 55 134 BAARD STR. RASLOUW, PRETORIA 16 318M²	
ZONE	COLOUR : Amount
Padel Court	45
TOTAL	45

No.	Date	Description

CLIENT SIGNATURE:

ENGINEERS SIGNATURE & NUMBER:

PROJECT ARCHITECT: PIETER BREYTENBACH
PR ARCH 24749908
SIGNATURE:

deter
PO Box 14062, Hatfield
Cel | 082 3317527
Tel/Fax | 012 342 5958
info@deter.co.za

PROJECT NAME:

Raslouw Padel court

Erf 55
134 Baard Str.
Raslouw, Pretoria

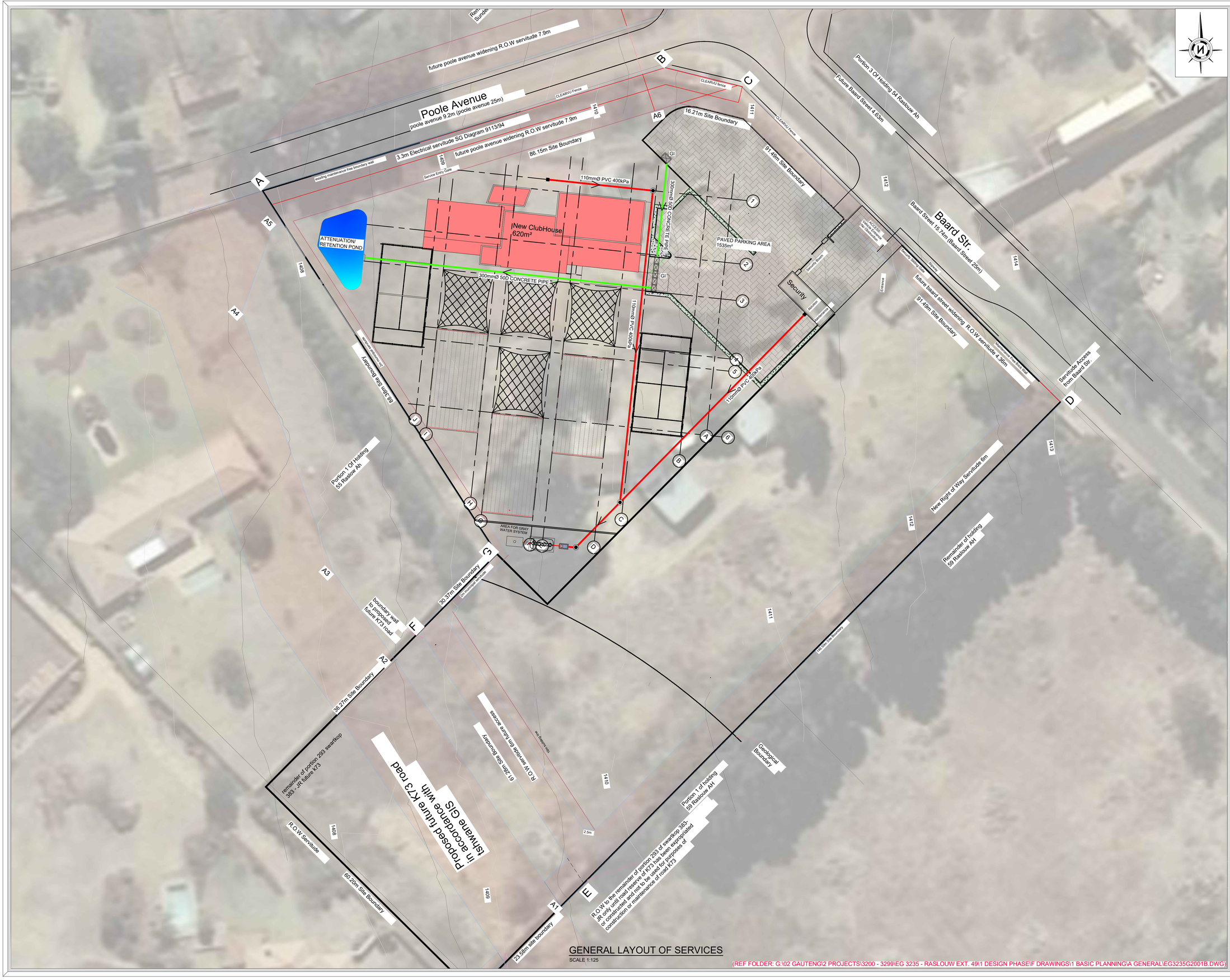
DRAWING NAME:

Site Plan

Scale	As indicated		
NUMBER:	301-801-101		
DATE:	29.08.23		
DRAWN BY:	MM	CHECKED BY:	PB

Meeting 101

Poole Avenue
poole avenue 9.2m (poole avenue 25m)
3.3m Electrical servitude SG Diagram 9113/94
future poole avenue widening R.O.W servitude 7.9m
existing maintenance free boundary wall
Remainder Of Portion 12 Of Sunderland Ridge Ah
Y= 88 179.36
Y= 28 60 124.10
Portion 1 Of Holding 55 Raslow Ah
Erf 194 of Raslouw x12
Portion 3 Of Holding 54 Raslouw Ah
Future Baard Street 4.63m
88.38m Site Boundary
2m municipal servitude
86.15m Site Boundary
16.21m Site Boundary
91.49m Site Boundary
CLEARVU Fence
Service Entry Gate
pond
Singles Courts 215m²
Colourful Court 215m²
Tournament Court 215m²
New Clubhouse 620m²
Canvas Covered Social Space
Grass Pavers
Stormwater Fall
Security
Ablution
Maintenance
Security Boom
ACCESS Vehicle Entrance No Obstruction
Entrance
Security Sliding Gate
Baard Str.
Baard Street 15.74m (Baard Street 25m)
future baard street widening R.O.W servitude 4.36m
Maintenance Free Brick Wall
Slipway
AREATOR GRAY WATER SYSTEM
Natural Grass Landscape
BH 2807 [IHC 4a]
BH 2808 [IHC 2]
BH 2509 [IHC 4a]
BH 2609/2609 [IHC 2]
BH 2506/7 [IHC 4]
BH 2411/2510 [IHC 2]
BH 2307 [IHC 4]
BH 2306 [IHC 4a]
BH 2308/9 [IHC 2]
BH 2302 [IHC 3b/4]
BH 2304 [IHC 3b/4]
BH 2102 [IHC 3b]
BH 2206 [IHC 4]
BH 2208 [IHC 4]
BH 2105/2204 [IHC 3b]
BH 2108 [IHC 4a]
BH 2210 [IHC 2]
BH 2110/2111 [IHC 2]
Zone 2 IHC 3/5//1
Zone 1 IHC 2/4//1
Proposed future K73 road in accordance with tshwane GIS
R.O.W servitude 6m future access
16m building line
2.5m
61.28m Site Boundary
R.O.W Servitude
60.20m Site Boundary
remainder of portion 293 swartkop 383 - JR future k73
boundary wall to proposed future K73 road
36.27m Site Boundary
30.37m Site Boundary
23.58m site boundary
146.50m Site Boundary
New Right of Way Servitude 6m
Servitude Access from Baard Str.
2m Municipal Servitude
R.O.W to the remainder of portion 293 of swartkop 383-JR only until road reserve of K73 has been expropriated or constructed and not to be used for purposes of construction or maintenance of road K73
Portion 1 of holding 59 Raslouw AH
Geological Boundary
Remainder of holding 59 Raslouw AH
Portion 1 Of Holding 55 Raslow Ah
North



GENERAL LAYOUT OF SERVICES
SCALE 1:125

(REF FOLDER: G:\02 GAUTENG\2 PROJECTS\3200 - 3299\EG 3235 - RASLOUW EXT. 49\1 DESIGN PHASE\F DRAWINGS\1 BASIC PLANNING\A GENERAL\EG3235G2001B.DWG)

FOR INFORMATION ONLY

Rev	Description	Date	By

AMENDMENTS

SERVICE
STORMWATER

DESIGNED	P.J. DU RANDT
DRAWN	P.J. DU RANDT
CAD FILE NAME	EG3235G2001B.dwg
CHECKED	
APPROVED	

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CLIENT
RAFIQ & HAJIRA TRUST

PROJECT
RASLOUW EXTENSION 49

TITLE
GENERAL LAYOUT OF SERVICES

DATE	AUGUST 2023		
SCALE	A/S	PAPER SIZE	A1

SCALE REF.
0.04 0.02 0 0.02 0.04
0.03 0.01 METER 0.01 0.03

CONSULTANT DWG. NO.
EG/3235/G/2/001/B

CLIENT DWG. NO.
-

Annexure C

Raslouw Ext 49

Analysis of queues at the Main Entrance

		1 Gate		2 Gates		3 Gates		4 Gates	
Peak hour traffic volume	=	12 veh / h		12 veh / h		12 veh / h		12 veh / h	
Peak hour factor	=	1		1		1		1	
Average arrival rate at peak	**Q** =	12 veh / h		12 veh / h		12 veh / h		12 veh / h	
Average service rate		**10,29** sec / veh		**10,29** sec / veh		**10,29** sec / veh		**10,29** sec / veh	
	C =	200 services/h		200 services/h		200 services/h		200 services/h	
Traffic intensity	ϕ =	0,06		0,06		0,06		0,06	
Number of channels	**N** =	1 gate		2 gates		3 gates		4 gates	
Traffic intensity per service channel	θ =	na		0,03		0,02		0,02	
Probability that n vehicles will be in the system	*n*	$P_{(x=n)}$	$P_{(x \le n)}$	$P_{(x=n)}$	$P_{(x \le n)}$	$P_{(x=n)}$	$P_{(x \le n)}$	$P_{(x=n)}$	$P_{(x \le n)}$
	P_0 =	0,94	0,06	0,94	0,06	0,92	0,08	0,91	0,09
	P_1 =	0,06	0,94	0,06	0,94	0,06	0,94	0,05	0,95
	P_2 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_3 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_4 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_5 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_6 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_7 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_8 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_9 =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_{10} =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
	P_{11} =	0,00	1,00	0,00	1,00	0,00	1,00	0,00	1,00
Average number in the system E(n)	=	0,1 vehicles		0,0 vehicles		0,0 vehicles		0,0 vehicles	
Average delay	=	19,1 seconds		0,0 seconds		0,0 seconds		0,0 seconds	
Average Vehicles per gate	=	0,1 vehicles		0,0 vehicles		0,0 vehicles		0,0 vehicles	

Annexure D

MEMORANDUM

1. APPLICATION

Application is made to the Tshwane Metropolitan Municipality ("CoT") for consent use for a padel plub with club house in terms of Clause 16 of the Tshwane Town Planning Scheme, 2008 (revised 2014) (the "Scheme") read with Section 16(3) of the City of Tshwane Land Use Management By-law, 2016 (the "By-law") on Portion 295 (a portion of Portion 293) of the farm Swartkop 383 JR (previously the Remaining Extent of Holding 55 Raslouw Agricultural Holdings).

The development will consist of the following:

- 6 Padel courts (a combination of tennis and squash courts with glass walls);
- A club house consisting of a meeting room, office, kitchen and toilets - 500 m²;
- Place of refreshment for 50 persons;
- Children's play area.

The place of refreshment will only be used by padel players and their guests.

A padel court is used on an hourly basis by 4 players at a time, which amounts to 24 players when all 6 courts are fully occupied. The 24 players finished with their games and the next 24 players and will use the place of refreshment while waiting for their turn.

Padel's growing popularity in South Africa can be attributed to several factors, including its accessibility, the social aspect of playing doubles, and the fact that it is a fun and easy sport to learn for players of all ages and skill levels.

Padel has become popular due to three factors, it is easy, simple, and fun.

These factors help anyone of all ages and abilities enjoy the sport. Padel is a great workout that's fun, social, accessible, and challenging all at once. It's a lifestyle that doesn't differentiate between sexes, ages, or levels. Players of other racquet sports can easily understand and play padel because it features the same movements and strokes as tennis, squash, and badminton.

Padel is easier to play and learn than tennis because less physical strength and technical capacities are demanded and there is a fantastic combination between your brain, challenged to its limits and your body that has to move a lot, but not necessarily as accurately as in tennis.

Due to the growing security risks of travelling on the road at night for long distances, more and more people are choosing the social aspect of Padel and staying “close to home” choosing to enjoy a light meal at the place of refreshment after their social match.

The location of the property is ideal in that is it on a corner property with great visibility yet not on a busy main road so can still be a regarded as quiet and private.

This memorandum is to motivate the application in terms of:

- sections 7 and 42 of the Spatial Land Use Management Act, 2013 (“SPLUMA”);
- section 9(1)(b) of the City of Tshwane Land Use Management By-law, 2016;
- national policy
- provincial policy
- integrated development plan
- municipal policy
- sustainability

2. PROPERTY PARTICULARS

2.1. LOCALITY

The Property is situated on the corner of Poole Avenue and Baard Street in Raslouw Agricultural holdings.

2.2 TITLE DEED

The Property is registered in the name of the Rafiq and Hajira Tayob Trust, is 1,4533 ha in extent and the bond had been cancelled (paid).

2.3 EXISTING ZONING

The Property is zoned “Agricultural” in terms of the Scheme.

2.4 CURRENT USE

A dwelling with outbuildings exist on the Property – all structures will be demolished.

3. MERITS OF THE APPLICATION

Any motivation for an application related to land use or a change thereof, is based on the following three elements:

3.1 POLICY AND LEGISLATION

3.1.1 NATIONAL DEVELOPMENT PLAN ("NDP")

In its Overview of the NDP, the National Planning Commission finds that:

- Too few people work;
- Infrastructure is poorly located, under-maintained and insufficient to foster higher growth;
- Spatial patterns exclude the poor from the fruits of development.

The NDP proposes to create jobs by:

- Realizing an environment for sustainable employment and inclusive economic growth;
- Promoting employment in labour-absorbing industries.

Strategies to reverse the spatial effects of apartheid include:

- Moving jobs and investment towards dense townships that are on the margins of cities. Building new settlements far from places of work should be discouraged, chiefly through zoning regulations responsive to government policy.

The strategy to enhance social cohesion includes reducing of poverty and inequality by broadening opportunity through economic inclusion, education and skills, and specific redress measures.

Targets for human settlements are:

- More people living closer to their places of work;
- Better quality public transport;
- More jobs in or close to dense, urban townships.

The following applicable critical actions are noted from the NDP:

- A strategy to address poverty and its impacts by broadening access to employment, strengthening the social wage, improving public transport and raising rural incomes;
- Boost private investment in labour-intensive areas, competitiveness and exports, with adjustments to lower the risk of hiring younger workers;
- Public infrastructure investment at 10% of Gross Domestic Product (GDP) financed through tariffs, public-private partnerships, taxes and loans and focused on transport, energy and water;
- Interventions to ensure environmental sustainability and resilience to future shocks;
- New spatial norms and standards – densifying cities, improving transport, locating jobs where people live, upgrading informal settlements and fixing housing market gaps;
- Reduce crime by strengthening criminal justice and improving community environments.

Overarching principles for spatial development should conform to the following:

- Spatial justice – the unfair allocation of public resources between areas must be reversed;
- Spatial sustainability – sustainable patterns of consumption and production should be supported, with emphasis on the protection of the natural environment and walkable neighbourhoods;
- Spatial resilience – ecological systems should be protected and replenished;
- Spatial quality – the aesthetic and functional features of housing and the built environment need to be improved;
- Spatial efficiency – productive activity and jobs should be supported, and burdens on business minimised.

The application complies with the following proposals:

- *Optimizing the use of available infrastructure;*
- *The promotion of private investment.*

3.1.2 GAUTENG SPATIAL DEVELOPMENT FRAMEWORK, 2011

The GSDF proposes shared, equitable, sustainable and inclusive growth and development. The Provincial Government seeks to:

- Provide a clear future spatial structure to accommodate sustainable growth and development;
- Specify spatial objectives for municipalities to ensure realisation of the future provincial spatial structure;
- Propose plans that municipalities have to prepare in order to reach these objectives;
- Provide a common set of shared planning principles for municipalities to use in their planning;
- Enable and direct growth.

The Gauteng City Region aims to promote development based on sustainable principles:

- Reducing private mobility in favour of safe, convenient and affordable public transport and non-motorised transport;
- Reducing present rates of non-renewable energy usage;
- Reducing the rates of energy used in the manufacturing of goods, delivery thereof and the importation of goods;
- Integrating open space systems into the city region with quality of life as the fundamental objective for development patterns;
- Increasing the intensity of urban form with mixed use development with the view to restrict the expansion of the present urban footprint;
- Promoting equal access to opportunity for all.

3.1.3 INTEGRATED DEVELOPMENT PLAN ("IDP")

An IDP had been adopted by the CoT in terms of Section 35(1) of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000).

The status of an IDP is:
"35. (1) An integrated development plan adopted by the council of a municipality—

(a) is the principal strategic planning instrument which guides and informs all planning and development, and all decisions with regard to planning, management and development, in the municipality;

(b) binds the municipality in the exercise of its executive authority, except to the extent of any inconsistency between a municipality's integrated development plan and national or provincial legislation, in which case such legislation prevails; and

(c) binds all other persons to the extent that those parts of the integrated development plan that impose duties or affect the rights of' those persons have been passed as a by-law.

The application had been submitted with the motivation based on this policy document. One of the most important foci of municipalities is the development of their economic bases.

Every municipality has an obligation of creating a conducive environment to attract investments to its area of jurisdiction.

The purpose of the IDP is to describe the planning and implementation processes that will be followed by the CoT to deliver on the developmental agenda through being a developmental municipality. Furthermore, this document gives meaning to a balanced and developmental approach in the development of the five strategic objectives, namely:

- Co-operative governance and informed decision-making,
- Social and environmental sustainability,
- Advanced economic growth,
- Optimised infrastructural services, and
- Organisational excellence.

Key Performance Indicators will be developed in line with the following Key Performance Areas:

- Promote Good Governance, Sustainable, Effective and Efficient Administration
- Ensure Effective Service Delivery
- Develop Capacity of Councilors and Staff
- Promote Social Development and Alleviate Poverty
- Promote Local Economic Development

3.1.4 METROPOLITAN SPATIAL DEVELOPMENT FRAMEWORK

The Tshwane MSDF had been approved in 2012**.**

In the Council report, it is recorded that the purpose of the MSDF is ” *to provide a spatial representation of the City Vision and to be a tool to*

integrate all aspects of spatial (physical) planning such as land use planning; planning of pedestrian, vehicular and other movement patterns; planning regarding buildings and built-up areas; planning of open space systems, planning of roads and other service infrastructure; as well as to guide all decision-making processes regarding spatial (physical) development.

The report also confirms that "the MSDF aims to address the following towards the achievement of the City vision:

- *Addressing social needs*
- *Restructuring of a spatially inefficient City*
- *Promotion of sustainable use of land resources*
- *Strategic direction around infrastructure provision*
- *Creating opportunities for both rural and urban areas*
- *Guiding developers and investors as to appropriate investment localities*
- *Rural management programmes to improve livelihoods and stimulate Employment*

The spatial vision is to become a spatially efficient Capital City that is Sustainable, Competitive and Resilient. The detail of this being:

- ***Sustainability:** optimal use of land through densification, infill and consolidation, spatially integrated giving equal opportunity; correct spatial imbalances, create sustainable settlements and social equity;*

- ***Competitive:** investor confidence by ensuring a well-managed built environment through enforcement of relevant legislation, quality built environment, maintenance and management of infrastructure, strategic investment in infrastructure focus areas targeting broad-based economic growth;*

- ***Resilience** through innovation and adaptability (not putting all our eggs in one basket), maximizing all spatial opportunities, in turn maximizing economic growth opportunities through strategic investment decisions."*

The application complies with the objectives of the MSDF.

3.1.5 REGIONAL SPATIAL DEVELOPMENT FRAMEWORK (RSDF)

The RSDF is an integral part of the IDP:

"35(2) A spatial development framework contained in an integrate development plan prevails over a plan defined in section 1 of the Physical Planning Act, 1991 (Act No.125 of 1991)."

The Property falls within a "Suburban Densification Zone" indicated by the RSDF for Region 4, with a density of 25 dwelling-houses per hectare.

The proposed development complies in all respects with the policy proposals quoted above.

3.2 THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT, 2013 ("SPLUMA")

3.2.1 APPLICATION OF DEVELOPMENT PRINCIPLES

In terms of Section 6 of SPLUMA:

"1. The general principles set out in this Chapter apply to all organs of State and other authorities responsible for the implementation of legislation regulating the use and development of land, and guide –

(a) the preparation, adoption and implementation of any spatial development framework, policy or by-law concerning spatial planning and the development or use of land;
(b) the compilation, implementation and administration of any land use scheme or other regulatory mechanism for the management of the use of land;
(c) the sustainable use and development of land;
(d) the consideration by a competent authority of any application that impacts or may impact on upon the use and development of land; and
(e) the performance of any function in terms of this Act or any other law regulating spatial planning and land use management.

2. Notwithstanding the categorisation of principles in this section, all principles contained in this Act apply to all aspects of spatial development planning, land development and land use management."

3.2.2 DEVELOPMENT PRINCIPLES

In order to comply with the general principles for land development as contemplated in Section 7 of SPLUMA, the application needs to be evaluated in terms of:

(a) The principle of spatial justice

This principle places certain obligations on municipal policy and administrative practices. Provisions to redress the access to and include disadvantaged communities and persons in spatial development frameworks and policies, spatial planning mechanisms, including land use schemes, land development procedures and the functioning of the Municipal Planning Tribunal are the responsibility of the municipality. Current policies and the land use management scheme of the municipality conform to this principle.

(b) The principle of spatial sustainability

The municipality is capable to process and consider land use applications.

This principle requires that the private sector's involvement in land development should be encouraged and that there should not be interference in the normal operation of the free market mechanism. This is evident when reference is made to the fact that the developer intends to develop the land in an open market in general compliance with this provision.

The development will function in a urban area, contributing to the optimized usage of services and land within demarcated boundaries as defined by the urban edge, resulting in a viable mixed use community.

(c) The principle of efficiency

This principle relates to both private and public sectors. Access roads and existing infrastructure are optimized as existing networks are available. Obligations are placed on the municipality to apply decision-making and application procedures with minimal negative effects with adherence to

prescribed time-frames. In this regard the decision-making authorities are committed to efficient and effective procedures to facilitate speedy development.

(d) The principle of spatial resilience

This principle places certain obligations on municipal spatial plans, policies and land use management systems to be flexible in order to ensure sustainable communities sensitive to economic and environmental impacts. The Property is not situated in an area where such communities exist.

(e) The principle of good administration

The application procedure prescribed in the Scheme provides for notification to interested and/or affected parties. The public will been afforded the opportunity to inspect supporting documentation in respect of the development proposal, object and submit comments, thereby allowing for adequate public consultation and participation as required in the relevant legislation.

3.2.3 SECTION 42(1)(c)

(i) The public interest

The public interest will be determined by the public participation process. Negative comments will be addressed in terms of the legislation at a hearing.

(ii) The constitutional transformation imperatives and related duties of the State

The duties of the State and the CoT include the constitutional obligation to ensure that all have equal access opportunities to development to comply with transformation goals.

(iii) The facts and circumstances relevant to the application

These elements relate to the need of the proposed development and the supporting policies thereto. The

application complies with the provisions of the town planning scheme with available and sustainable services.

(iv) The respective rights and obligations of all those affected

All affected and interested parties have the right to exploit and accept development in a free market economy, provided it conforms with policy and legislation. The CoT is obliged to process such applications in a responsible and effective manner to the benefit of all concerned.

(v) The state and impact of engineering services, social infrastructure and open space requirements

Engineering services are adequate with sufficient capacity. The proposed relaxation will not require additional social infrastructure and recreational facilities that are provided for.

(vi) Any factors that may be prescribed, including timeframes for making decisions

The timeframes for the processing of the application is enshrined in the By-law and decision-making will be effected within the period as prescribed.

3.3 CITY OF TSHWANE LAND USE MANAGEMENT BY - LAW, 2016 ("BY- LAW")

3.3.1 SECTION 9(1)(b)

The need of a proposed development relates to market factors that will determine the economical viability thereof. The existing infrastructure of Raslouw and the expansion possibilities thereof is supportive of the need for the optimum use of services.

Recreational facilities are supportive of a healthy suburban environment and are compatible with the current and envisioned development pattern of Raslouw.

Desirability is determined by the suitability of the Property to the proposed development. Access, engineering services, sustainability and impact are determining factors.

The development will be low-key in impact as possible noise will be mitigated with the enclosed courts.

The development will comply with the responsibility of the CoT to ensure that it is harmonious and co-ordinated in such a way to most effectively tend to promote the health, safety, good order, amenity, convenience and general welfare of the area in which it is proposed.

3.4 SUSTAINABILITY

3.4.1 ECONOMIC SUSTAINABILITY

The Property falls in an area where urbanization is increasing. This proposed township will contribute to the development of the area.

3.4.2 ENGINEERING SERVICES

Municipal services are available and sustainable, as addressed in the engineer's services reports.

3.4.3 TRAFFIC IMPACT STATEMENT

Access and egress will be from Baard Street. Traffic to be generated by the proposed development is less than 50 trips per peak hour.

3.4.4 ENVIRONMENTAL

The proposed development is not a listed activity in terms of Listing Notice 1, 2 and 3 of the Environmental Impact Assessment Regulations, 2014 published under the National Environmental Management Act (NEMA), 1998 (Act 107 of 1998, as amended). Authorization for exemption from the provisions of NEMA had been obtained to ensure an integrated approach. No site sensitivities could be identified.

3.4.5 GEOLOGY

The Property is not underlain by unstable geology as concluded in the Geotechnical Report. Proposed buildings will be constructed subject to the requirements contained therein.

3.4.6 FLOOD LINES

The Property will not be affected by floods representing the maximum flood levels likely to be reached with an expected frequency of 1 every 50years and 1 every 100 years, as contained in Section 44 of the Water Act (Act 36 of 1998).

4. CONCLUSION

The application complies with the RSDF, Principles of SPLUMA, the development trend and the requirements of need and desirability.