
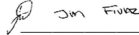




CES Development Charges Calculator				Version 3.00		June 2020		
		Erf Number	19056					
		Allotment area	George					
		Water & Sewer System	George System					
		Road network	George					
		Developer/Owner	MJ & NA.Heunes					
		Erf Size (ha)	352					
		Date (YYYY/MM/DD)	2022-09-05					
		Current Financial Year	2022/2023					
		Collaborator Application Reference	2077870					
Code	Land Use	Unit	Total Existing Right			Total New Right		
RESIDENTIAL			Units			Units		
	Single Res > 1000m² Erf	unit			1			
INSTITUTIONAL			m² Erf	FAR	m² GLA	m² Erf	FAR	m² GLA
	Pre-School (Day Care Centre)	student						100
Is the development located within Public Transport (PT1) zone?			Please select Yes					
Calculation of bulk engineering services component of Development Charge								
Service	Units	Additional Demand	Unit Cost	Amount	VAT	Total		
Roads	trips/day	296,00	R 763,82	R 226 091,70	R 33 913,76	R 260 005,46		
Sewerage	kl/day	6,39	R 43 481,05	R 277 843,91	R 41 676,59	R 319 520,50		
Water	kl/day	5,00	R 36 320,84	R 181 604,19	R 27 240,63	R 208 844,82		
Total bulk engineering services component of Development Charge payable				R 685 539,80	R 102 830,97	R 788 370,78		
Link engineering services component of Development Charge								
Total Development Charge Payable								
City of George			Developer/Owner					
Calculated (CES): JM Fivaz								
Signature : 								
Date : September 5, 2022								
NOTE : In relation to the increase pursuant to section 66(5B)(b) of the Planning By-Law (as amended) in line with the consumer price index published by Statistic South Africa) using the date of approval as the base month								
Notes:								
Departmental Notes:								

For the internal use of Finance only

Service	Financial code/Key number	Total
Roads	20160623 020158	R 260 005,46
Sewerage	20160623 018776	R 319 520,50
Water	20160623 021593	R 208 844,82
Electricity	20160623 021336	R 0,00
Transfers	20160623 019267	R 0,00
		R 788 370,78

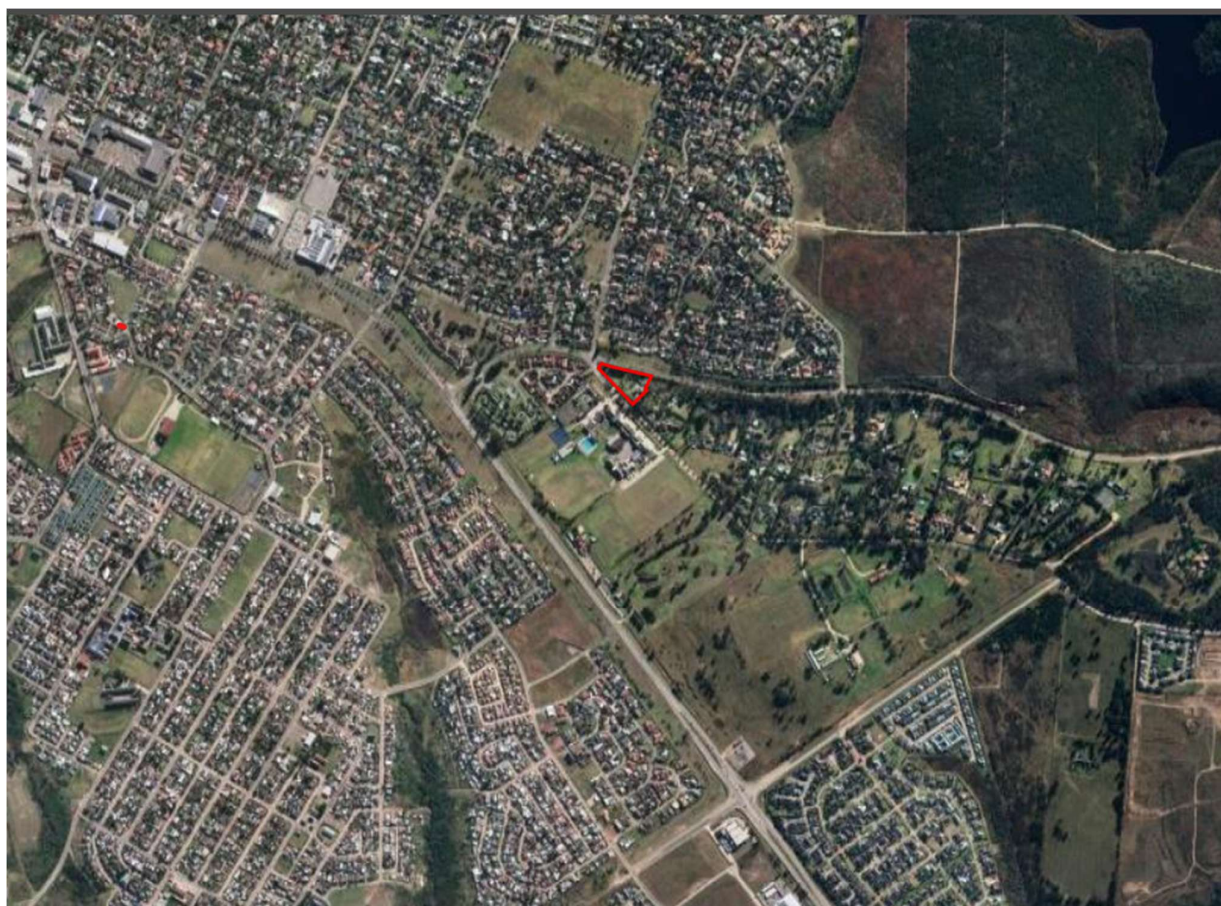


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PROPOSED REZONING & DEPARTURE FOR MJL & NA HEUNES:

**ERF 19056, 1 GLENWOOD AVENUE, GLENWOOD,
GEORGE MUNICIPALITY & DIVISION**



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1. **Power of Attorney**
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3. **Conveyancer's Certificate**
4. **Copy of Surveyor-General Diagram**
5. **Locality plan**
6. **Draft Site Development Plan**
7. **Traffic impact investigation**
8. **Stormwater management report**
9. **NID – National Heritage Resources Act, 1999**
10. **Pre-application consultation**
11. **Application form**

Aerial images:

<https://gis.elsenburg.com/apps/cfm/#>

<https://gis.george.gov.za/portal/apps/webappviewer/index.html?id=0283eccf869641e0a4362cb099290fca>

<https://www.google.com/earth/>

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**PROPOSED REZONING & DEPARTURE:
ERF 19056, 1 GLENWOOD AVENUE, GLENWOOD,
GEORGE MUNICIPALITY & DIVISION**

1. BACKGROUND INFORMATION

The registered owner of Erf 19056 George identified this property as a potential early childhood development centre and aftercare. The property has an existing dwelling house and outbuildings with a large garden. Access is from Glenwood Avenue.

Marlize de Bruyn Planning was appointed to address the requirements for the land use application in terms of the George Municipality: Land Use Planning By-law (2015) with the required power of attorney attached hereto as **Annexure 1**.

1.1 APPLICATION

This land use application for Erf 19056 George entails the following:

- Rezoning to Community Zone I (place of instruction) in terms of Section 15(2)(a) of the George Municipality: Land Use Planning By-law (2015);
- Departure in terms of Section 15(2)(b) of the George Municipality: Land Use Planning By-law (2015) for the relaxation of the following building lines:
 - Eastern side boundary building line from 5.0m to 1.9m, 0.9m, 0.015m, 1.9m & 3.0m respectively for the existing structures.

1.2 PROPERTY DETAILS

Erf 19056 George is registered to *Marthinus Johannes Lourens Heunes & Natalie Ann Heunes* with a copy of the title deed (T49715/2021) attached hereto as **Annexure 2**. No restrictive conditions were identified, which is confirmed in the Conveyancer's Certificate (**Annexure 3**) and no bond is registered for the property. The property is 6100m² in extent and zoned Agriculture Zone II – small holding.

The SG diagram, confirming the extent, is attached hereto as **Annexure 4**. This diagram refers to a sewer servitude which applies to the Erf 13050 from which the subject property was subdivided.

2. CONTEXTUAL INFORMANTS

2.1 LOCALITY

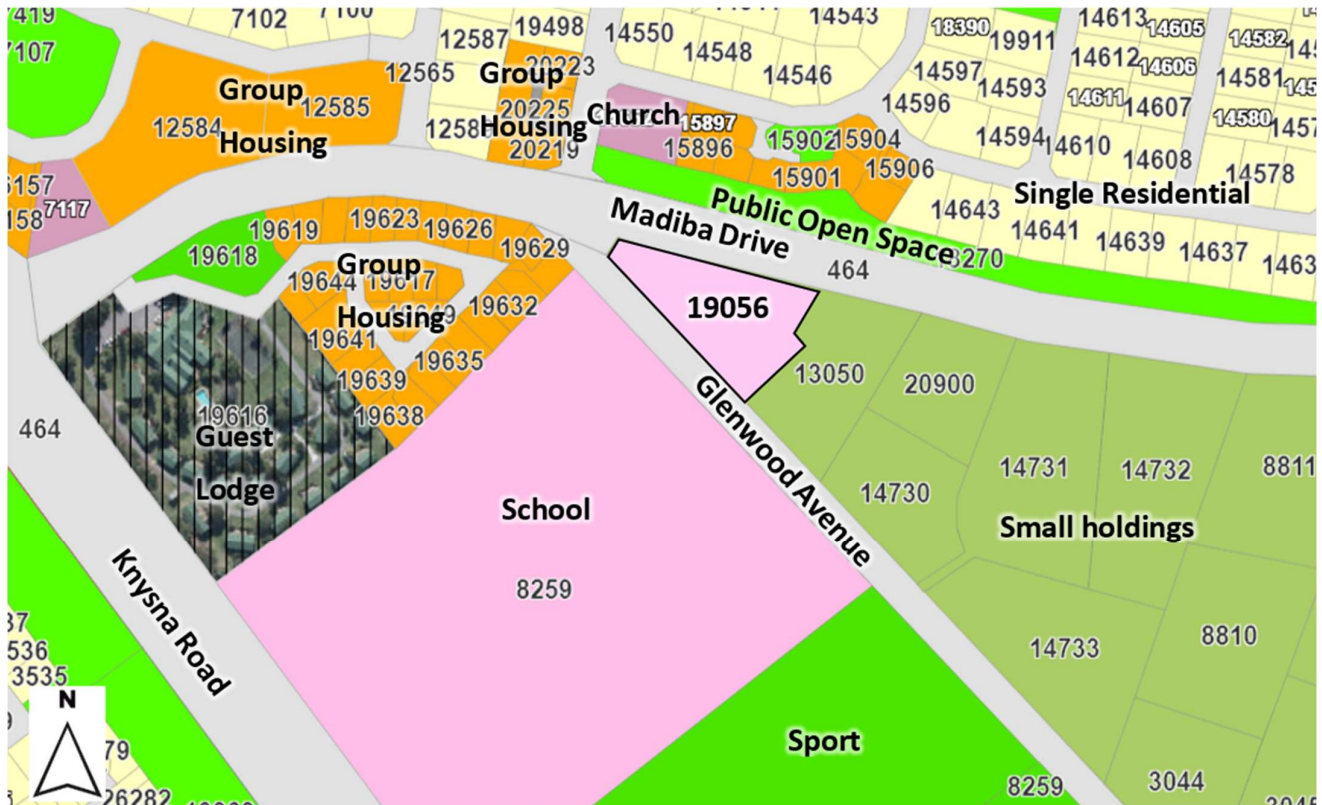
Erf 19056 George is located at the intersection of Madiba Drive and Glenwood Avenue. Glenwood House, a private school, is the southern neighbour. North of Madiba Drive is the suburb, Loeriepark. Both streets bordering onto the subject property, is provincial roads as discussed later in this motivation report.

A locality plan is attached hereto as **Annexure 5**.

2.2 ZONING & LAND USE

Erf 19056 George is zoned Agriculture Zone II in terms of the George Integrated Zoning Scheme By-law and used accordingly. The proposed rezoning will create a place of instruction where education can be provided to younger children with an aftercare. The zoning of the property will therefore change to Community Zone I and also the use of the property.

The zoning and land use plan below indicates the mix of land uses found in the area with Erf 19056 to change accordingly.



2.3 CHARACTER OF THE PROPERTY & THE AREA

The area where Erf 19056 George is located, has a mix use character with focus on various residential typologies. To the east is small holdings to the north primarily single residential properties and also group housing sites to the north and east. A guest lodge is also located close by and a church. To the south a school and sport grounds (primarily focused on golf) are found.

The proposed crèche with an aftercare facility will strengthen the education character of this area.

The proposal for Erf 19056 George is not seen as in conflict with what is found in the area.

The photo series to follow shows the property and the surrounding area.

View from the north in Van Kervel Street towards the intersection with Madiba Drive & Glenwood Avenue:



View from the east in Madiba Drive towards Erf 19056 George:



View from the east in Glenwood Avenue toward Erf 19056 George:



View from the west in Madiba Drive towards the intersection with Glenwood Avenue:



Below is a panorama image taken from the entrance to Glenwood House towards Erf 19056 George followed by a standard photo.



Following this land use application, the character of the property will change from a large residential property to that of a school with an extensive outdoor play area.

3. DEVELOPMENT PROPOSAL

It is proposed to utilise the existing structures located along the eastern side of the property for the proposed early childhood development centre and aftercare facility. The existing home will accommodate the reception, two offices, ablution, kitchen and two of the five classrooms. The outbuilding (garage) will become two classrooms. An open area with two walls, which was approved as a braai room, will be roofed and enclosed to become another classroom. From the parking area which is also the stop & drop facility, a roofed walkway is proposed leading to the reception.

The draft site development plan is attached hereto as **Annexure 6** which includes a second plan with the aerial photo as backdrop.

The proposed early childhood development centre and aftercare facility will accommodate approximately 100 children. The aftercare will be focused on Glenwood House – providing children the opportunity to walk safely across Glenwood Avenue at the pedestrian crossing to the facility proposed for Erf 19056 George. Lunch can be enjoyed, homework can be done and children can go back for e.g sport practice.

A large play area is available for children with ample parking to be accommodated within the boundaries of the property. As discussed later in this motivation report and in the traffic impact investigation conducted by *Urban Engineering*, the existing vehicular access to the property is to be moved to across the entrance to Glenwood House. This will be an entrance only with an exit only proposed more than 25m further east.

As the existing structures are to be used and as the building lines for Community Zone I is 5.0m on all boundaries, relaxation of the eastern side boundary building line is requested for the change in use of the existing structures.

4. CONSIDERATION OF THE APPLICATION

4.1 STATUTORY INFORMANTS

The criteria for the consideration of land use applications as per the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) (SPLUMA), the Western Cape Land Use Planning Act, (Act 3 of 2014) (LUPA) and the George Municipality: By-law on Municipal Land Use Planning (2015) builds on each other. SPLUMA introduced legislative and procedural changes to the management of land use planning in South Africa. The Western Cape Province followed with LUPA and thereafter George Municipality with the Municipal Land Use Planning By-law (2015). What is relevant to this land use application is discussed in the paragraphs to follow.

4.1.1 SPATIAL PLANNING & LAND USE MANAGEMENT ACT, 2013 (SPLUMA)

Section 7 of this Act sets out the five development principles that are applicable to spatial planning, land development and land use management and section 42 of SPLUMA then refers to the factors that must be considered by a municipal tribunal when considering a land use planning application, which include but are not limited to:

- Five SPLUMA development principles;
- Public interest;
- Constitutional transformation;
- Respective rights and obligations of all those affected;

- State and impact of engineering services, social infrastructure and open space requirements;
- Compliance with environmental legislation.

4.1.1.1 Five development principles

The five development principles of SPLUMA, namely spatial justice, spatial sustainability, efficiency, spatial resilience and good administration are not all directly relevant to this land use application.

Spatial justice as described in Section 7(a) of SPLUMA is relevant to this land use application as the use of land will change from residential to education providing opportunities for children.

Spatial sustainability as described in Section 7(b) of SPLUMA is relevant as the property will be used to its maximum potential considering its location and surrounding land uses. Existing structures are to be re-used. The proposal will not have any impact on the on the fiscal, institutional and administrative means of the Republic.

Prime and unique agricultural land is not affected by this land use application.

Environmental matters are not relevant due to the location of the property and the nature of the development proposal.

The effective and equitable functioning of land markets is not negatively affected by this land use application. A much needed, non-residential land use is to be provided.

It is stated that all current and future costs to all parties for the provision of infrastructure and social services in land developments must be considered. With the implementation of the proposal, the required development contributions will be made as required, and upgrades done if needed.

It is further stated in this section of SPLUMA that land development in locations that are sustainable and that limits urban sprawl, must be promoted. Erf 19056 George is a small holding located in the urban area of the George municipal area. The proposed zoning is an urban zoning which does not negatively impact on urban sprawl. The latter is not relevant to this proposal.

Efficiency as described in Section 7(c) of SPLUMA is supported. Land development should optimise the use of existing resources and infrastructure. This is possible as Erf 19056 George is an existing urban property although zoned as a small holding.

Spatial resilience as described in Section 7(d) of SPLUMA is not fully relevant to this land use application.

Good Administration as described in Section 7(e) of SPLUMA indicates the responsibilities of all involved in any land use matter.

The paragraphs above show that the land use application for Erf 19056 George supports the relevant development principles of SPLUMA.

4.1.1.2 Public Interest

Public interest is one of many factors the local authority must consider when deciding on a land use application. The public interest of this land use application is regarded as limited as it brings an educational facility to an area where a mix of residential typologies is found, a school, a church and sporting facilities. The presence of a school (Glenwood House) will be strengthened by an early childhood development centre and aftercare facility.

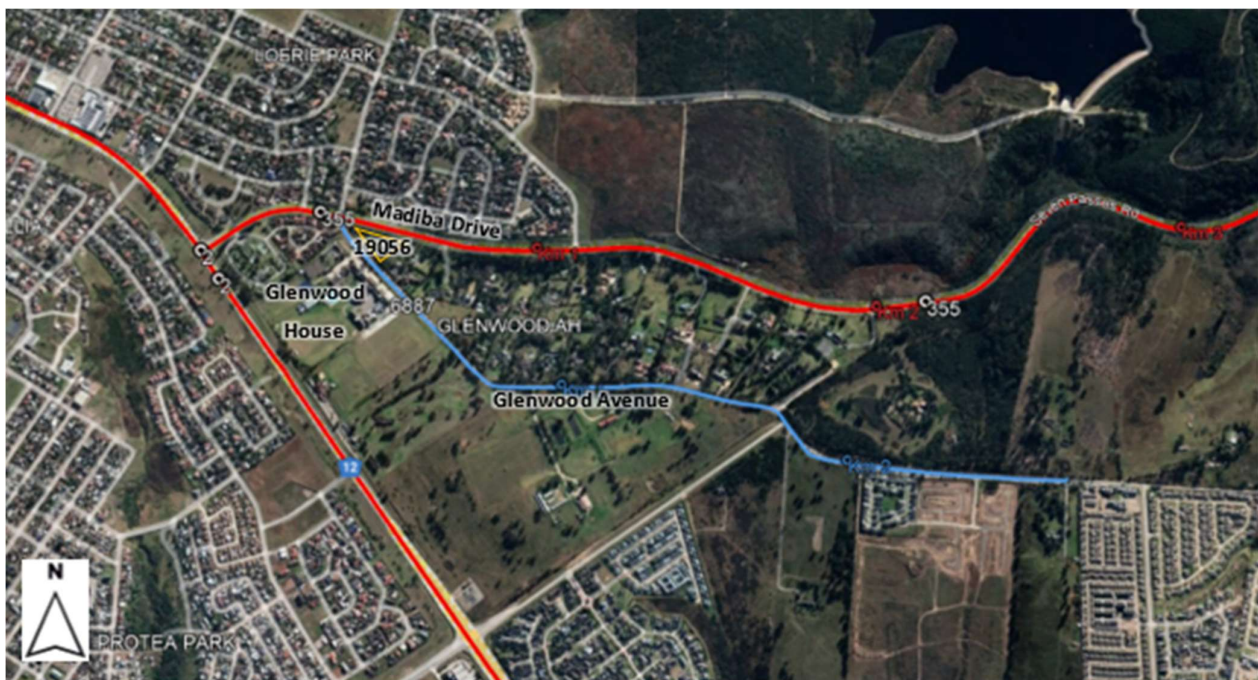
As discussed in this motivation report, the proposal will have an impact on traffic in the area, but it is also an opportunity to improve the current situation. This is to the benefit of especially the residents of Glenwood Avenue.

4.1.1.3 Municipal Engineering Services & Access

Municipal water, sewage disposal and refuse removal is available to and used by Erf 19056 George. Vehicular access to this triangular shaped property is from Glenwood Avenue. It is proposed to align the entrance to the proposed educational facility with that of Glenwood House with a separate exit more than 25m to the east.

Provincial Roads

No access to the subject property is provided from Madiba Drive. The latter and Glenwood Avenue are provincial roads. Madiba Drive is Main Road 355 and Glenwood Avenue is Minor Road 6887. Below is an extract from the Road Network Information System (RNIS) of the Department of Transport & Public Works: Road Network Management.



Traffic impact investigation

A traffic impact investigation was conducted by *Urban Engineering Consulting Civil & Structural Engineers*, attached hereto as **Annexure 7**. Traffic counts were done to determine the status quo. It was found that Glenwood Avenue (Minor Road 6887) is experiencing unacceptable poor levels of service during the morning and afternoon peaks. The traffic volumes are due to Glenwood House, a private school located on Erf 25811 George, opposite Erf 19056 George, the subject of this land use application.

According to the findings of the traffic engineer, the poor level of service is mainly due to the closure of Minor Road 6887 at kilometer 1.3 – it cannot act as a through road. *Urban Engineering* supports the rezoning of Erf 19056 George for a place of instruction on condition that the barrier in Minor Road 6887 be removed. This will significantly improve the level of service in Glenwood Avenue – Minor Road 6887. This closure is not indicated on the RNIS of the Western Cape Government. It is therefore assumed to be an unauthorized closure.

In the trip generation calculations, the traffic engineer did consider some cross integration between the proposed early childhood development centre and aftercare facility for Erf 19056 George and Glenwood House located on Erf 25811 George – some parents will have children in both schools.

It was further found that parents entering Glenwood House at the southeastern access and then exiting the school site at the northwestern access has made slight improvements to the congestion experienced here. As there are insufficient parking bays in this one-way drop-off zone, the queue of waiting parents spill over into Glenwood Avenue.

Even if an educational facility is not developed for Erf 19056 George, it was found that the level of service of the surrounding roads and the intersection will continue to deteriorate if mitigating solutions is not implemented soon.

The traffic impact investigation therefore proposes minor improvements/mitigation measures to improve mobility and increase safety for current and future pedestrians and motorists. By removing the unauthorized closure in Glenwood Avenue, an alternative approach to and from the area will be created. If only 30% of parents going to Glenwood House, comes from the east, the SIDRA analysis shows a significant improvement in the level of service of the road network of this area.

Regarding parking provision as required in terms of the George Integrated Zoning Scheme By-law, it was determined that 10 parking bays with a stop & drop facility is required. As seen on the SDP attached hereto as Annexure 6, 24 parking bays are provided within a large stop & drop facility. The minimum requirements are met with a separate entrance and exit creating a one-way system, same as found at Glenwood House. The entrance to the proposed early childhood development centre and aftercare facility is proposed to be aligned with the entrance Glenwood House.

To ensure adequate throat lengths, no access control for the entrance and exit is proposed during the morning and afternoon peak. For safety, a clear vu fence will be positioned between the parking area and the school.

The existing vehicular access to Erf 19056 George is proposed to become a pedestrian gate. Therefore, *Urban Engineering* proposes that the pedestrian crossing be moved to align with this proposed pedestrian access where proper sidewalks are provided as well.

The large trees located along the sidewalk space bordering onto Erf 19056 George, limits site distance. Therefore, it is proposed that the exit proposed for the subject property be moved $\pm 7.0\text{m}$ further east. It will improve mobility along Glenwood Avenue, increase internal stacking space with space for more parking bays within the boundaries of the school.

With the implementation of the recommendations by *Urban Engineering* the proposed educational facility for Erf 19056 George should be allowed.

Stormwater management

A stormwater management report was compiled by *Urban Engineering Consulting Civil & Structural Engineers* and is attached to this motivation report as **Annexure 8**. It was found that 65% of the property is permeable area with the remaining area covered with buildings and hardened surfaces. The design approach of the stormwater management report promotes on-site infiltration, minimizing the concentration of stormwater, maintaining current run-off levels, rainwater harvesting and the responsible discharging of stormwater.

4.1.1.4 Environmental Considerations

No environmental matters were identified that could have an impact on this land use proposal.

4.1.1.5 National Heritage Resources Act, 1999 (Act 25 of 1999)

A notice of intent to develop (NID) in terms of Section 38(1) of the National Heritage Resources Act, 1999 (Act 25 of 1999) was submitted to Heritage Western Cape - see **Annexure 9** to this motivation report. The NID concludes that the proposed development of Erf 19056 George will not have an impact on heritage resources of cultural significance.

4.1.2 WESTERN CAPE LAND USE PLANNING ACT, 2014 (LUPA)

LUPA requires that local municipalities consider the following when deciding on land use applications:

- *Applicable spatial development frameworks;*
- *Applicable structure plans;*

The applicable spatial development frameworks are discussed in Paragraph 4.2 of this motivation report.

- *Land use planning principles referred to in Chapter VI (Section 59) which is an expansion of the five development principles of SPLUMA;*

Spatial justice, spatial sustainability, efficiency, good administration and spatial resilience is discussed in Paragraph 4.1.1.1.

It is stated in this Section of LUPA that the Provincial Minister may prescribe further land use planning principles. None has been published to our knowledge that could apply to this development proposal.

Section 59(2) does provide broader guidance on what should be considered with regards to spatial sustainability which is not addressed in Paragraph 4.1.1.1 above.

➤ *For the sustained protection of the environment the following must be considered:*

- (i) natural habitat, ecological corridors and areas with high biodiversity importance;*
- (ii) the provincial heritage and tourism resources;*
- (iii) areas unsuitable for development, including flood plains, steep slopes, wetlands and areas with a high water table and landscapes and natural features of cultural significance; and*
- (iv) the economic potential of the relevant area or region.*

The above is not regarded as relevant to this proposal except for (iv). This is an opportunity to support the mixed-use character of this area and create employment opportunities at a new school.

- *Climate change adaptation and climate change mitigation strategies should be developed and considered in land use planning;*

Erf 19056 George is located in an existing urban area with mitigation measures to be implemented as provided for in the National Building Regulations & Standards Act (1977 as amended) including water tanks.

- *The provision and conservation of, and the management of the demand for, energy should be considered in land use planning;*

See foregoing paragraph.

- *The safe utilisation of land should be ensured by taking into consideration factors such as sea-level rise, storm surges, flooding, fire hazards and geological formations;*

This is not regarded as relevant to Erf 19056 George.

- *The illegal occupation of land should be discouraged with due recognition of informal land development practices;*

This is not regarded as relevant to this proposal for Erf 19056 George.

- *Development should be principle-driven and should prioritise long-term social, economic and environmental benefits over short-term benefits.*

More affordable residential opportunities are to be provided which should be regarded as a long-term social and economic benefit. As the development is within the urban edge and does not reflect urban sprawl, it has environmental benefits as well.

- *Desirability of the proposed land use;*

This is discussed in Paragraph 4.3 of this motivation report.

- *Guidelines that may be issued by the Provincial Minister regarding the desirability of proposed land use.*

No guidelines relevant to this proposal exist at present.

Consistency & Compliance

Section 19 of LUPA states the following:

19. (1) If a spatial development framework or structure plan specifically provides for the utilisation or development of land as proposed in a land use application or land development application, the proposed utilisation or development is regarded as complying with that spatial development framework or structure plan.

(2) If a spatial development framework or structure plan does not specifically provide for the utilisation or development of land as proposed in a land use application or a land development application, but the proposed utilisation or development is not in conflict with the purpose of the relevant designation in the spatial development framework or structure plan, the utilisation or development is regarded as being consistent with that spatial development framework or structure plan.

(3) If the proposed utilisation or development of land in a land use application or a land development application does not comply with and is not consistent with the relevant designation for the utilisation of land in an applicable spatial development framework or structure plan, the proposed utilisation or development deviates from that spatial development framework or structure plan.

Considering the aim of this land use application for Erf Erf 19056 George and how it relates to the goals, objectives and principles of the relevant legislation, spatial frameworks and guidelines, we found the proposal to be consistent with the provisions of these documents which includes the George Municipal Spatial Development Framework (GMSDF) – see Paragraph 4.2.2.

4.1.3 GEORGE MUNICIPALITY: LAND USE PLANNING BY-LAW, 2015

The general criteria for the consideration of applications in terms of this By-law are included in Section 65 which, inter alia, includes:

- Desirability of the proposed utilisation of land;
- Impact of the proposed land development on municipal engineering services;
- Integrated development plan, including the municipal spatial development framework, the applicable local spatial development framework and/or local structure plans;
- Relevant municipal policies;
- Western Cape Provincial Spatial Development Framework;
- Section 42 of SPLUMA (public interest, constitutionality);
- Land use planning principles transposed from LUPA; and
- Provisions of the applicable zoning scheme.

The above is addressed in the paragraphs of this motivation report as relevant.

4.1.4 GEORGE INTEGRATED ZONING SCHEME BY-LAW, 2017 (GIZS)

Erf 19056 George is zoned Agriculture Zone II (small holding) in terms of the George Integrated Zoning Scheme By-law (GIZS) (2017). The zoning of the property will change following the approval of this application for rezoning with certain departures.

The objective for Community Zone I – place of instruction – is to provide for educational facilities of all kinds, but controlled provision is made for other compatible community uses.

The proposal for Erf 19056 George complies with this objective and is focussed on early childhood development and aftercare. No possible consent uses are part of this proposal.

The proposal for Erf 19056 George complies with this objective and is focussed on early childhood development and aftercare. No possible consent uses are part of this proposal. The development parameters pertaining to floor factor, coverage and height, is not negatively affected by this land use application.

The building line on all boundaries for a place of instruction is 5.0m. This is to be relaxed as indicated in Paragraph 1.1 of this motivation report due to the position of existing structures to be used for the proposed early childhood development centre and aftercare facility.

More than ample parking is provided within the boundaries of the property with an entrance and exit. See the traffic impact investigation report by *Urban Engineering Consulting Civil & Structural Engineers* for detail in this regard. As stated in this report the exit should be moved further east by $\pm 7.0\text{m}$ and a disabled parking bay should be provided.

It is trusted that the Department of Transport & Public Works: Road Network Management will concur with the findings by the traffic engineer.

A refuse room is to be provided on the final SDP with the ideal position to be determined.

4.2 SPATIAL PLANNING INFORMANTS

4.2.1 WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (WCPSDF) (2014)

The WCPSDF aims to restructure the urban and rural landscape of the Western Cape to offer socio-economic opportunities for all. The guiding principles for the PSDF is spatial justice, sustainability & resilience, spatial efficiency, accessibility, quality & liveability in accordance with SPLUMA. The PSDF specialist study into the impact of spatial growth patterns on municipal finance has shown that past urban growth patterns are unaffordable and unsustainable. The urban edge, densification and other principles aims to have a positive impact on the sustainability of our urban areas.

Higher densities, a shift from a suburban to urban development model and more compact settlement footprints are needed for a more sustainable future. This proposal for Erf 19056 George is a non-residential urban land use needed for any growing urban area. As residential densities increase, the provision of non-residential land uses which supports the residents, should not be left behind.

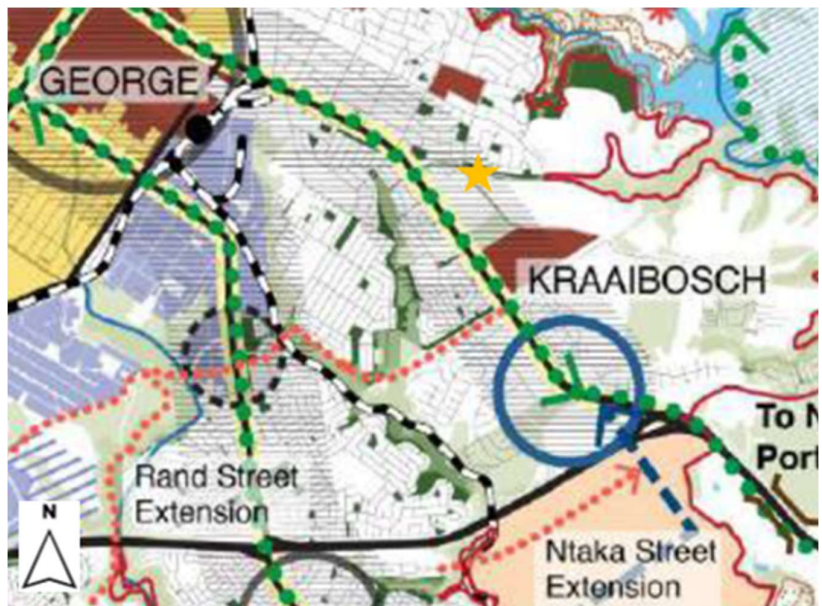
We therefore found no conflict between the subject of this land use application and the WCPSDF.

4.2.2 GEORGE MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK (GMSDF) (2019)

Erf 19056 George and Glenwood are not addressed specifically in the GMSDF. Intensification is an important theme in the GMSDF just as densification. The subject property is less than 500m from Knysna Road, one of the most important corridors in the urban area of George and borders onto Madiba Drive which becomes the Seven Passes Road, a link road through the region.

Erf 19056 George is also located within the 500m catchment zoned for intensification / proposed restructuring zone. The provision of a school here, complementing what is already located in the area is therefore found not be in conflict with the GMSDF. This proposal is therefore consistent with the GMSDF as referred to in Section 19(2) of LUPA.

To the right is an extract from the GMSDF (Map 36) showing the position of Erf 19056 George with a yellow star within the intensification area as described in the foregoing paragraph.



4.3 NEED & DESIRABILITY

Need and desirability is the balancing of various factors. **Need** depends on the nature of a development proposal and is based on the principle of sustainability. This motivation report has shown that the proposed rezoning (and departure) of Erf 19056 George will support and strengthen the character of the area. The use will change from small holding to place of instruction supporting the growing need for educational facilities in our urban area.

Desirability from a planning perspective is defined as the degree of acceptability of a proposed development on a property. The relevant factors include the physical characteristics of the property, existing planning in the area, character of the area, the locality and accessibility of the property as well as the provision of services. Another important consideration is the economic or financial impact which is only positive in this instance.

Physical characteristics of the properties

Erf 19056 George is developed with a level topography. The existing structures are to be used for the place of instruction with the existing grassed area to be the playground. The physical characteristics does not limit the proposed use of the property.

Existing planning in the area

As indicated earlier in this motivation report, this land use application was found to be consistent with the George Municipal Spatial Development Framework (GMSDF).

Character of the area

As discussed earlier in this motivation report, the proposed development of Erf 19056 George does not impact negatively on the character of the area.

Provision of services

Municipal engineering services is available to the property. The impact of this proposal on traffic is addressed by *Urban Engineering Consulting Civil & Structural Engineers (Annexure 7)* with recommendations for the consideration of the Department of Transport & Public Works: Road Network Management.

Economic impact

This proposed development of an educational facility on Erf 19056 George cannot have a negative economic impact and will create employment opportunities.

Direct impact on surrounding properties

No neighbour will be overshadowed or overlooked. The proposal complements the nature of development already found in the area.

It is our view that the need and desirability of the proposed rezoning and departures for Erf 19056 George showed no negative impacts.

4.4 PRE-APPLICATION CONSULTATION

The pre-application consultation document is attached hereto as **Annexure 10** with the following minuted with the discussion:

Town Planning

- *The proposed cheche and afterschool facilities may be reconcilable within a residential and agricultural environment.*

The relevant considerations addressed through this motivation report for this land use application, concur with this statement.

- *More detail will be required. Detailed site layout plan should be submitted.*

See **Annexure 6**.

- *Will the existing structures be utilised, or new structures proposed?*

Existing structures to be used. See Paragraph 3.

- *The extent of the land uses may be restricted to fit the character of the area.*

Noted.

- *Building lines should be addressed.*

See relevant paragraphs of this report.

- *Stormwater management plan required.*

See **Annexure 8**.

Department: Civil Engineering Services (CES)

- *Access restricted to one 8,0meter access. Drop and go facilities must be provided on the property. No parking will be allowed within the road reserve.*

Separate entrance & exit proposed – see Paragraph 4.1.1.3 and **Annexure 7**. Department of Transport & Public Works: Road Network Management to decide on proposed accesses as Glenwood Avenue is Minor Road 6887.

Stop & Drop facility provided – see **Annexure 6**.

- *DRE to be contact for comments as well, as the road is still classified as a Provincial road.*

Glenwood Avenue is Minor Road 6887. Therefore, the Department of Transport & Public Works: Road Network Management is the competent authority.

- *Safe pedestrian movement must be investigated and will form part of possible TIA/TIS*

See **Annexure 7**.

Department: Electrotechnical Services (ETS)

- *Electricity demand requirements to be pre- calculated by an Engineer in the case of food preparations are planned for the development.*

Noted. Existing kitchen to be used with limited food preparation.

5. CONCLUDING

From this motivation report, it is our opinion that the proposed rezoning of Erf 19056 George with certain departures as explained earlier in this motivation report, is consistent with all relevant considerations as prescribed by the planning legislation, spatial frameworks and guidelines. The traffic impact investigation with its recommendations, provides the opportunity to improve the traffic flow in this area for all using this road network.

The completed municipal application form is attached hereto as **Annexure 11**.



MARLIZE DE BRUYN Pr. Pln

CONVEYANCER'S CERTIFICATE

I, the undersigned

MADELEINE GOLDIE

Conveyancer of Millers Incorporated, Beacon House, 123 Meade Street, George hereby certify as follows:

1. That I have perused Deed of Transfer No T49715/2021 in respect of Erf 19056 George in the Municipality and Division of George, Western Cape Province, in extent 6100 square metres registered in the names of:

MARTHINUS JOHANNES LOURENS HEUNES

Identity Number 730912 5271 088

and

NATALIE ANN HEUNES

Identity Number 740325 0167 086

2. That the said title deed does not contain any restrictive conditions of title which prohibit:
 - Rezoning in terms of Section 15(2)(a) of the George Municipality: Land Use Planning By-law (2015) from Agriculture Zone II (small holding) to Community Zone I (place of instruction);
 - Permanent departure in terms of Section 15(2)(b) of the George Municipality: Land Use Planning By-law (2015) for the relaxation of the eastern side boundary building line from 5.0m to 1.9m, 0.015m and 3.0m for the existing structures to be used for the place of instruction.

Signed at GEORGE on this 18th of October 2021.



CONVEYANCER

MADELEINE GOLDIE

MILLERS INC.
BEACON HOUSE
123 MEADE STREET
GEORGE
6530

Prepared by me

46 blue
CONVEYANCER
MADELEINE GOLDIE (82663)

Deeds Office Registration fees as per Act 47 of 1937		
	Amount	Office Fee
Purchase Price	R 5 600 000,00	R 2157,00
Reason for exemption	Category Exemption	Exemption i t o. Sec/Reg..... Act/Proc.....



T 000049715 / 2021

DEED OF TRANSFER

BE IT HEREBY MADE KNOWN THAT

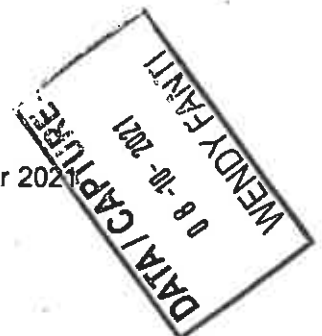
~~LAUREN SULLIVAN (89117)~~

NICOLE SHANNON MENTOOR
LPCM NUMBER 92521

appeared before me, REGISTRAR OF DEEDS at CAPE TOWN, the said appearer being duly authorised thereto by a Power of Attorney granted to him/her by

JOHANNES JACOBUS PRETORIUS
Identity Number 700327 5182 08 4
Married out of community of property

which said Power of Attorney was signed at GEORGE on 6 September 2021



And the appearer declared that his/her said principal had, on 1 September 2021, truly and legally sold by Private Treaty, and that he/she, the said Appearer, in his/her capacity aforesaid, did, by virtue of these presents, cede and transfer to and on behalf of:

MARTHINUS JOHANNES LOURENS HEUNES

Identity Number 730912 5271 08 8

and

NATALIE ANN HEUNES

Identity Number 740325 0167 08 6

Married in community of property to each other

their Heirs, Executors, Administrators or Assigns, in full and free property

ERF 19056 GEORGE

IN THE MUNICIPALITY AND DIVISION OF GEORGE, PROVINCE OF THE
WESTERN CAPE;

IN EXTENT: 6100 (SIX THOUSAND ONE HUNDRED) Square metres;

FIRST TRANSFERRED by Deed of Transfer No. T 17446/1996 with Diagram
S.G. No. 10914/1995 relating thereto and held by Deed of Transfer No. T
51594/2018.

- I. **AS regard** to the figure BCm on Diagram No. 10914/1995 hereto attached
- A. **SUBJECT** to the conditions referred to in Deed of Grant dated 15th June 1922 (George Quitrents Volume 15 No. 15).
- B. **SUBJECT FURTHER** to the following conditions contained in Deed of Grant dated 15 June 1922 (George Quitrents Volume 15 No. 15).
 2. That all existing roads and thoroughfares shall remain free and uninterrupted and that the Government or other competent authority shall have the right, when necessary, at any time to make further roads over the land in question.
 3.
- C. **ENTITLED** to the benefits of the servitude referred to in the following endorsement dated 29 December 1938 in Deed of Grant dated 15 June 1922 (George Quitrents Volume 15 No. 15) namely:

By Deed of Transfer No. 13615 dated 29 December 1938, the owner and his successor in title of the property thereby conveyed is prohibited from carrying on any trade or business or other than that of saw mill, grist mill and certain manufactures connected with a timber factory, as will more fully appear on reference to the said Deed of Transfer.
- D. **SUBJECT FURTHER** to the conditions of the servitude referred to in the following endorsement dated 7 June 1977 in Deed of Grant dated 15 June 1922 (George Quitrents Volume 15 No. 15):

Registration of Servitude

Within described land is subject to a servitude with regard to apportionment of water in terms of an order of the Water Court (Water Court District No. W10/76) dated 5.6.1977 as will more fully appear on reference to the copy of the said Order filed as K493/77S.

II. **AS regard** to the figure AmDKEFG on Diagram No. 10914/1995 hereto attached:

A. **SUBJECT** to the conditions referred to in Certificate of Uniform Title No. T 7113/1939.

B. **SUBJECT FURTHER** to the following conditions contained in Certificate of Uniform Title No. T 7113/1939:

1.

2.

3. That the Government shall at all times have the right of resuming a portion or the whole of the land if required for public purposes without payment of compensation to the proprietor, but in the event of improvements existing on the land to be resumed, such compensation as may be mutually agreed upon or, failing such agreement, as may be determined by arbitration, will be payable in respect of such improvements.

4. That in the event of the owner undertaking planting operation on the land, a clear space of ground, in no way less than 4,23 metres in width, must always be left between the boundary of any Government forests and plantations, and the external rows of trees of the municipal plantation, in order that such burning and clearing of vegetation may be carried out as may be considered necessary for the protection of the Government forests and plantations, and the government shall have the right, free of compensation, to carry out such clearing and burning operations. The government shall further have the right, free of any compensation, to make such roads and the land as may be reasonably necessary for the working of any State forests or railway plantations as adjoining the land, provided that the location of such roads shall be determined by fully agreement between both parties and failing such agreement by arbitration in the manner as provided for by Act No. 6/1882 (Cape). All such roads are to be maintained by the Government and the public of George to have the right to the reasonable use of such road.

III. **ENTITLED to** as contained in Deed of Transfer No. T 17446/1996, to a sewage servitude 2m wide over remaining of Erf 13050 GEORGE, In the Municipality and Administrative District George, Province of the Western Cape; Extent : 6466 (Six Thousand Four Hundred Sixty Six) Square metres; Held under Deed of Transfer No. T 71784/1990;

Die middellyne van welke serwituut voorgestel word deur die lyne DHJ en KH op aangehegte kaart L.G. Nr 10914/1995.

MG

WHEREFORE the said Appearer, renouncing all rights and title which the said

JOHANNES JACOBUS PRETORIUS, Married as aforesaid

heretofore had to the premises, did in consequence also acknowledge him to be entirely dispossessed of, and disentitled to the same, and that by virtue of these presents, the said

MARTHINUS JOHANNES LOURENS HEUNES and NATALIE ANN HEUNES , Married as aforesaid


their Heirs, Executors, Administrators or Assigns, now are and henceforth shall be entitled thereto, conformably to local custom, the State, however reserving its rights, and finally acknowledging the purchase price to be the sum of R5 600 000,00 (FIVE MILLION SIX HUNDRED THOUSAND RAND) .

IN WITNESS WHEREOF, I the said Registrar, together with the Appearer, have subscribed to these presents, and have caused the Seal of Office to be affixed thereto.

THUS DONE and EXECUTED at the Office of the REGISTRAR OF DEEDS at CAPE TOWN on

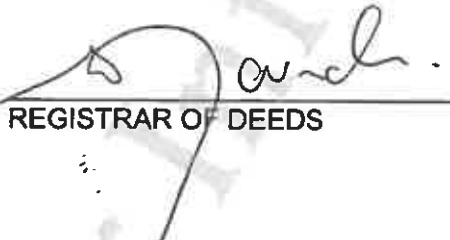
5 October

2021.



q.q.

In my presence



REGISTRAR OF DEEDS



George Municipality
York Street
George
6530

Our Ref :
MG/B van Eck/P5063 BVE J J
PRETORIUS to M J L & N A HEUNES

Your Ref :

Date :
05 October 2021

Dear Sir/Madam

TRANSFER ERF 19056 GEORGE
J J PRETORIUS TO M J L & N A HEUNES

We confirm that the above matter was registered in the Cape Town Deeds Registry on the 5 October 2021 in favour of M J L & N A Heunes.

Yours faithfully

MILLERS INCORPORATED – GEORGE



M GOLDIE

Directors: F.J Botes, B Proc LLB; Adv Dip Lab Law
M Goldie, BA LLB | S van Wyk, BA LLB; Cert Const Lit |* DR Henney, B Proc, Dip Const Lit; Dip Project
Man | LS Joubert, B Iuris LLB | T Tannous, | LLB A Voges, Nat Dip: Reg of Deeds; LLB

Associates: C A Nunn, B Com LLB, LL.M (Estate Law) | A Crous, B Com LLB | C W Fortuin, LLB

Consultants: C Kraus, BA LLB; MBA | WM van der Westhuizen, B Iuris LLB; Cert Tax Law

Level Four verified BEE contributor and a Value Adding Supplier


DR. PHATSHOAN HENNEY
ASSOCIATED LAW FIRM

Millers Incorporated
Reg No 93/02024/21
Beacon House
123 Meade Street George 6529
PO Box 35 George 6530 RSA
Docex 10 George

Telephone: (044) 874 1140
General fax: 044 873 4848
Direct fax: 044 873 4848
E-mail: jenny@millers.co.za
Website: <http://www.millers.co.za>
VAT No: 4530138249



LAND USE SPECIALISTS

GEORGE MUNICIPALITY

Att: Primose Nako : pnako@george.gov.za

And to: **MARLIZE DE BRUYN PLANNING**

Att: M de Bruyn : marlize@mdbplanning.co.za

George Office
1 Doneraile Street
George, 6529
P O Box 46, George, 6530

Telephone (044) 874 4090

Stellenbosch Consulting Chambers
95 Dorp Street
Stellenbosch

Our Ref: AHS/CVDL/S00071

Your Ref: 2077870

Date: 13 December 2021

Dear Madam,

RE: PROPOSED REZONING AND DEPARTURE: ERF 19056, 1 GLENWOOD AVENUE, GLENWOOD, DIVISION GEORGE

Introduction

1. We act in this matter on behalf of the Glenwood Conservancy (herein represented by Ingrid van Wyk in her capacity as Chairperson), as well as on behalf of Ingrid van Wyk in her personal capacity as adjacent landowner (Erf 13050) (the Objectors). All further correspondence and notices can be sent to us via email at christine@ss-consult.org.
2. During October 2021, Marlize De Bruyn Planning submitted a rezoning and departure application to the George Municipality (the Municipality) in terms of Section 15(2)(a) and (b) of the George Municipality: Land Use Planning By-Law, 2015 (the By-Law). The Application was for the rezoning of Erf 19056, George (the Property) from Agriculture Zone II (small holding) to Community Zone I (place of instruction) as well as the relaxation of the eastern side boundary building line from 5.0m to 1.9m, 0.9m, 0.015, 1.9m and 3.0m respectively for the existing structures. The application was submitted on behalf of Marthinus Johannes Lourens Heunes and Natalie Ann Heunes, the registered landowners of the Property.
3. A notice in terms of Section 45 of the By-Law was published by the Municipality in which notice was given of the Application and interested and affected parties were given an opportunity to comment thereon, which comments were to be submitted on or before 13 December 2021. These comments are therefore submitted within the allotted timeframe.

Stadler & Swart Consult (Pty) Ltd

Registration Number: 2017/236290/07

VAT Number: 4780294585

Director: A H Swart BALLB Adv. Dip. Labour Law LLM (Planning – Environmental Law)

4. This correspondence constitutes the Objectors' comments in respect of the Application, which comments are submitted in terms of Section 50(1) of the By-Law. Section 50(1) provides as follows:

"50(1) A person may respond to a notice contemplated in sections 44, 45, 46 or 48 by commenting in writing in accordance with this section."

5. Ingrid van Wyk is the landowner of Erf 13050, which is adjacent to the Property and abuts on the side closest to where the proposed main school building is situated. She is therefore directly affected by the proposed rezoning and relaxation of the building lines. Not only will she be affected by the increased traffic occasioned by the proposed development, but she will be subjected to substantially increased noise levels occasioned by the use of the classrooms and playground area by 100 or more kids.
6. The Glenwood Conservancy (represented by Ingrid van Wyk in her capacity as Chairperson) consists of a number of landowners situated along Glenwood Avenue and in the immediate vicinity of the Property and who will specifically be affected by the increased traffic which will result from the proposed development. The Glenwood Conservancy is also in particular concerned by and against the proposal contained in the Application that Glenwood Avenue should be opened and become a through road.
7. The Objectors have instructed us to prepare these comments and objections and to highlight their concerns and objections in respect of *inter alia* the need and desirability of the development, the increased traffic and proposed opening of Glenwood Avenue and the effect the change in land use will have on the overall rural character and peaceful atmosphere of the surrounding neighbourhood and area.
8. We submit that should the Application be approved, it will have a serious detrimental effect on the aforementioned rural character and peaceful atmosphere of the surrounding neighbourhood, it will increase the traffic substantially which will make an already difficult traffic situation even more unbearable and dangerous. The Objectors submit that the Application is flawed in material respects and does not contain the required information and that it will therefore not be possible for the Municipality to approve the Application. In the paragraphs below we will deal with the reasons for the aforementioned submissions.
9. Below we will deal with:
 - 8.1 Provisions of the By-Law in respect of Land Use Applications
 - 8.2 Provisions of PAJA
 - 8.3 Current and proposed zoning of the Property

8.4 Traffic Impact Study

8.5 Motivation Report

8.6 Conclusion

Provisions of the By-Law in Respect of Land Use Applications

10. The Application submitted was for the rezoning from Agricultural Zone II to Community Zone I as well as the relaxation of the eastern side boundary building line in order to allow for a crèche with an aftercare facility.
11. The By-Law clearly sets out the information and documents which are required to be submitted as part of an application, which information constitutes mandatory provisions. These mandatory provisions are contained in Section 38, which includes a written motivation for the application based on criteria contained in Section 65. Should an application not contain the mandatory provisions, such as in this matter, the Municipality must refuse such application. Any deviations or omissions of mandatory provisions are a fatal flaw as it will result in mandatory relevant information not being considered and makes it impossible for the Municipality to make an informed decision.
12. When the Municipality considers an application, it must have regard to the criteria set out in Section 65(1). We specifically refer to the following provisions:

“65(1) When the municipality considers an application, it must have regard to the following—

- (a) the application submitted in terms of this by-law;*
- (c) the desirability of the proposed utilisation of land and any guidelines issued by the Provincial Minister regarding the desirability of proposed land uses;*
- (f) investigations carried out in terms of other laws that are relevant to the consideration of the application;*
- (k) the applicable local spatial development frameworks adopted by the Municipality;*
- (p) the policies, principles and the planning and development norms and criteria set by the national and provincial government;*

- (q) *the matters referred to in section 42 of the Spatial Planning and Land Use Management Act;*
- (r) *the principles referred to in Chapter VI of the Land Use Planning Act; and*
- (s) *the applicable provisions of the zoning scheme.”*

13. We submit that the Application falls short in material respects in that it did not contain all the relevant information and/or contained incomplete information and that subsequently the Municipality will not be in a position to properly consider the application and to have regard to all the provisions contained in Section 65(1) of the By-Law, which renders this Application fatally flawed.
14. An example is the fact that the TIA (which is an investigation carried out in terms of a law relevant to the consideration of the application (Section 65(1)(f)) is founded on a materially flawed premise and it did not take into consideration the reduced traffic loads due to Covid 19 protocols. We deal with this in more detail below. These facts alone render the TIA fatally flawed and it would be impossible for the Municipality to assess the Application in the absence of a complete and accurate TIA.

Provisions of the Promotion of Administrative Justice Act 3 of 2000 (PAJA)

15. The issuing of a land use approval, such as a rezoning and departure application, constitutes administrative action, as envisaged in terms of Section 33 of the Constitution. Section 33(1) and (2) provide as follows:

“33(1) Everyone has the right to administrative action that is lawful, reasonable and procedurally fair.

(2) Everyone whose rights have been adversely affected by administrative action has the right to be given written reasons.”

16. In Section 6 of PAJA, the grounds for judicial review are set out, which grounds can also be used to determine how a decision maker should approach any administrative decision. For example, when making a decision irrelevant considerations should not be taken into account and relevant considerations should be taken into account, decisions should not be taken arbitrarily or capriciously and any decision should be rationally connected to *inter alia* the purpose for which it was taken and the information before the administrator.
17. The Motivation Report and the TIA do not contain sufficient information in order to allow the decision maker to make an informed administrative decision which adheres to the requirements of PAJA and this in turn will render any administrative decision reviewable.

Current and Proposed Zoning of the Property

Current Zoning

18. The Property is zoned as Agricultural Zone II and as such its primary use right is that of a smallholding. The objective of this zone is described in the George Integrated Zoning Scheme By-Law (the IZS) as follows:

“The objective of this zone is to accommodate larger residential properties, which may be used for limited agriculture, but primarily serve as places of residence for people who seek a rural lifestyle...”¹

19. The contemplated utilisation of the Property will change the character of the area thereby detracting from the rural lifestyle which landowners in the vicinity of the Property have come to expect.
20. It is clear that the purpose of the Agricultural Zone II zoning is to provide an area close to town which can provide places of residence for people who seek a rural lifestyle, without having to stay out on a farm or outside the urban area.

Proposed Zoning

21. The Application entails the rezoning of the Property to Community Zone I, which has a primary use right of a “*place of instruction*”. The objective of this zone is to provide for educational facilities of all kinds, but controlled provision is also made for other compatible uses such as conference facility, institution and place of assembly.
22. The land use description of a “*place of instruction*” is of a wide ambit and includes various ancillary uses, all of which could have a tremendous impact on the surrounding area. In terms of the IZS a “*place of instruction*” is defined as follows:

“place of instruction means—

(a) a place for education or training at pre-school, school or post-school levels, including—

- (i) crèche;*
- (ii) nursery school;*
- (iii) primary school;*
- (iv) secondary school;*

¹All underlining and bold constitutes our emphasis unless stated otherwise or as is evident from the context.

- (v) college;
- (vi) university; or
- (vii) research institute; and

(b) includes the following ancillary uses—

- (i) a boarding hostel;
- (ii) sports and recreation centre;
- (iii) a civic facility for the promotion of knowledge to the community, including-
 - (aa) a public library;
 - (bb) place of worship;
 - (cc) public art gallery;
 - (dd) museum;
 - (ee) place of instruction in sport where the main objective is instruction rather than participation of the public as competitors or spectators; and

(c) does not include a reformatory or a conference facility.”

23. Considering the wide rights which a Community Zone I zoning affords the Property, it would be expected that the Application should at least deal with whether and how it was proposed to limit such rights to only allow for the uses as applied for in the Application. However, this is not the case which means that should the rezoning be approved, the Property will have a much more extensive development potential than what is dealt with in the Application and the accompanying TIA Report.

Traffic Impact Assessment Report

24. A Traffic Impact Assessment (TIA) was conducted by Urban Engineering (Pty) Ltd, the findings of which are contained in a report dated October 2021. The Objectors submit that this report is flawed in material respects and in part bases its findings and recommendations on assumptions as will be dealt with in the paragraphs that follow.
25. The TIA provides details in respect of the traffic count conducted, but fails to take into consideration the fact that due to the current Covid restrictions, Glenwood House School is not operating as per its normal schedule, ie the various grades are picked up at times which are more staggered than would otherwise have been the case. The sport and other after school activities are also staggered in a manner that would not be the case were it not for the Covid restrictions. Put differently, once the Covid restrictions are removed, the traffic at peak times would be significantly higher than is currently the case. This is something which was not at all dealt with in the TIA.

26. In order to mitigate or alleviate the increased traffic volumes which would result from the approval of the Application, the TIA relies heavily on the opening of Glenwood Avenue (OP 6887) to allow the road to function as a through road. This is motivated by the assumption that the road closure was not authorised or approved by the Western Cape Government. The recommendation contained in the TIA for the approval of the Application is based predominantly on the assumption that Glenwood Avenue would be accessible as a through road. No other mitigation measures or alternative routes are provided for or dealt with in the TIA.
27. It is to be noted that Glenwood Avenue forms part of the proposed construction and development of the road network for the greater Kraaibosch area in terms of the Kraaibosch Roads Master Plan and the Kraaibosch / Glenwood Local Structure Plan. An Environmental Authorisation (EA) in respect thereof was granted to the George Municipality on 3 March 2009 by the Department of Environmental Affairs and Development Planning.
28. Glenwood Avenue was closed due to the EA and conditions of approval, which authorisation formed part of the Roads Master Plan and was based upon detailed strategic traffic impact assessments undertaken as part of the environmental process. The Roads Master Plan was officially approved by Council which also accepted the EA with the conditions of approval. This constitutes an administrative decision which stands and has gone beyond attack.
29. We refer to the following extracts from the description of the activity contained in the EA:
- “The proposed Road Network will consist of a single Class III District Distributor (4-lane) Secondary Arterial Road (42m wide road reserve), and a series of Class IV Local distributor (2-lane) collector Roads (25m wide road reserve) as indicated in the KRMP layout plan (Figure 3.16 / Vela VKE Plan No C0964-T-C-001).*
- The proposed 4-lane Secondary Arterial Road (hereafter referred to as the “Servitude Road”) will link to Saasveld Road (Knysna – George Road) in the north, on the eastern boundary of Glenwood, and cross Knysna Road (N9) in a NE-SW orientation to intersect with Park Road in the south at Protea Park (Fig. 3.16/Vela VKE Plan No C0964-T-C-001).*
- The proposed Collector Road, in the northern quadrant will be an upgrade of Glenwood Avenue aligned along the southern boundary of Glenwood, joining Saasveld Road in the west to the proposed Servitude Road in the east.”*
30. In terms of the EA, the various upgrades and extensions were approved subject to certain conditions and we refer specifically to Conditions 4.4 to 4.6 which state as follows:

“4.4 The Servitude Road must be constructed first and be the only access for construction vehicles to enter the GKA for township developments and thereafter become the priority flow route.

4.5 No construction vehicular access is allowed on Glenwood Avenue west of the Servitude Road.

4.6 The direct link of MR 6887 (Glenwood Avenue) to the proposed north-east extension of the Servitude Road will be allowed subject to the Servitude Road intersection with Saasveld Road achieving a full geometric standard, and without compromising on the minimum access spacing requirement between the abovementioned intersections.”

31. From the above extracts it is evident that Glenwood Avenue forms part of the Kraaibosch Roads Master Plan, with upgrades being proposed. However, these upgrades are subject to conditions, specifically that the Servitude Road intersection with Saasveld Road must first achieve a full geometric standard and the minimum access spacing requirement between the two intersections must not be compromised. It follows therefore that should these conditions not first be met, it will not be possible for Glenwood Avenue to become a through road. The TIA does not at all deal with this.
32. Put differently, until full compliance and implementation of the Roads Master Plan (subject to the Environmental Authorisation with conditions of approval), it will legally not be permissible to open Glenwood Avenue and the TIA is therefore based on a fatally flawed supposition.
33. We are not in possession of any information which suggests that these conditions have been met nor whether the possibility or a timeline exists for any future compliance with these conditions. It is also not clear who will be responsible for the installation of the required infrastructure and whether a budget exists for it.
34. The Objectors submit that it is not possible to approve an application with an immediate impact and which impact can only be absorbed when certain bulk infrastructure has been installed and/or constructed and when there is still uncertainty whether such infrastructure will even be installed, such as is the case in this matter. This fact alone renders the TIA and the Application fatally flawed as the entire basis of the TIA is that Glenwood Avenue will be opened and become a through road.
35. The TIA further assumes that a fairly large percentage of parents (page 11 under 6.2: Traffic Distribution) will have kids in both schools and deals predominantly with traffic generated by parents of children in the pre-school with little or nothing being said about the traffic to be generated by parents picking up their children from the aftercare facility. No evidence is

given in support of the aforementioned supposition and as will be dealt with below, Glenwood House School has its own aftercare facility and lower grades which could to a large extent negate the supposition that a *'fairly large percentage of parents'* will have kids in both schools as it makes more sense to have the kids in the same school.

36. For the reasons above, the Objectors submit that the TIA did not contain sufficient information on which to base an informed decision regarding the approval of the Application and that the basis of the TIA was fatally flawed due to it being assumed that Glenwood Avenue would be opened and become a through road. Furthermore, the TIA did not at all deal with the traffic impact of this scale on the rural character and peaceful atmosphere of the area.

Motivation Report

37. As stated above, when the Municipality considers an application, it must have regard to the criteria set out in Section 65 of the By-Law. These criteria must form the basis of the motivation report which is submitted in support of an application. We submit that these criteria were not properly dealt with in the Application and it therefore renders the Application fatally flawed and incomplete in material respects. It would not be possible for the Municipality to properly consider the mandatory relevant factors it is required to consider if detailed information is not provided in respect of each of the factors.
38. The By-Law requires of the Municipality to *inter alia* consider the desirability of a proposed land use. In general it is considered desirable for the development restrictions imposed by the IZS to be complied with. As will be set out in more detail below, the Application fails to explain and motivate the need for the rezoning and departures applied for which will exceed the current prescribed development parameters.
39. Under 2.3 (Character of the Property & The Area), the Application states that the *"...proposed crèche with an aftercare facility will strengthen the education character of this area"* and under 4.3 (Need & Desirability) it states that *"...the proposed zoning (and departure) of Erf 19056 George will support and strengthen the character of the area. The use will change from small holding to place of instruction supporting the growing need for educational facilities in our urban area"*.
40. As stated above, the Property is zoned as Agricultural Zone II. It also forms part of an area containing properties all zoned as Agricultural Zone II, the objective of which zoning is *"...to accommodate larger residential properties, which may be used for limited agriculture, but primarily serve as places of residence for people who seek a rural lifestyle..."* Notwithstanding the fact that Glenwood House School is located opposite the Property, the character of the area would be better defined as being rural and / or residential in nature. The high traffic impact is totally inconsistent with the rural character of the area

and the agricultural uses which are allowed for by the predominantly Agricultural Zone II zoning of the properties in the immediate area.

41. The Application does not at all identify and assess the impact and effect which the proposed land use will have on adjacent and surrounding landowners. This is a material lack of information, particularly considering that a number of the surrounding landowners stable their horses on their properties and exercise them along Glenwood Avenue. Glenwood Avenue is also used by many in the community (not only Glenwood residents) for cycling, running and horse riding. This aspect is crucial to the desirability of the Application and the fact that it was not even touched upon is a significant omission.
42. In the third paragraph under 3. Development Proposal (page 6) of the Motivational Report, it is stated that the *"...proposed early childhood development centre and aftercare facility will accommodate approximately 100 children. The aftercare will be focused on Glenwood House – providing children the opportunity to walk safely across Glenwood Avenue at the pedestrian crossing to the facility proposed for Erf 19056 George."*
43. The crux of the Application appears to be to provide for a safe aftercare facility for pupils of Glenwood House School and to provide for the early childhood development grades. It is to be noted that, according to its fee structure for 2021, Glenwood House School offers after care facilities (with or without lunch) and also provides for Grade 000 (age 3 – 4), Grade 00 (ages 4 – 5) and Grade 0 (ages 5 – 6). Nowhere in the Application is mention made of this fact and neither is information provided as to whether Glenwood House School is at full capacity for these grades and / or the aftercare facility. The Objectors submit that the need of the proposed early childhood development centre with aftercare has not at all been fully motivated, nor have sufficient details been given regarding whether it will be limited to 100 kids or whether it will be expanded in the future.
44. The impact of the additional noise and disturbance which would be occasioned by at least 100 kids on the Property has not at all been identified or assessed and no mitigation measures are proposed. It is important to consider for example, what effect the noise levels may have on the horses stabled on the adjacent property. The Objectors submit that due to the fact that a relaxation of the building lines is also applied for and the buildings to be used will be right on the boundary between the two properties, this means that there will be no buffer between the proposed childhood development centre and the adjacent property. The aforementioned facts render the proposed land use undesirable.
45. No information is contained in the Motivation Report regarding possible mitigation measures in respect of the affect that the additional traffic and noise might have on the horses stabled and exercised in the area. It is important to note that in addition to the fact that a number of landowners in the immediate vicinity stable their horses on their properties and exercise same in and around Glenwood Avenue, the Glenwood Riding Club

is the preferred showing club in the Western Cape, which grounds border on Glenwood Avenue.

46. When a show is held, there is an average of 50 out of town riders with accompanying friends and family. This usually entails approximately 50 horse trailers and accompanying vehicles which of itself would increase the traffic in the area significantly. In addition, these horses would normally be exercised and/or accommodated in the area and an increase in traffic due to the proposed early childhood development centre would create a substantial problem and possible risk to the horses. This has not even been considered in the Motivation Report.
47. A risk assessment in respect of the increased traffic has also not been done in the context that the landowners in the area use Glenwood Avenue for walking and running, as well as the exercising of their horses and that any increase in the traffic would have a severe detrimental effect.
48. The Motivation Report makes mention of the fact that the proposed land use will have an impact on the traffic in area, but relies on the assumption that Glenwood Avenue was closed without authorisation and that based on the recommendation of the TIA, it will be opened to enable Glenwood Avenue to become a through road.
49. As dealt with in paragraphs 24 to 36 above, this assumption is incorrect and cannot be used as the basis for motivating the Application. No other alternative traffic mitigation proposals are offered, which constitutes a fatal flaw in the Application. Furthermore, it is not possible to simply implement the recommendations of Urban Engineering (Pty) Ltd as the opening of Glenwood Avenue is subject to the conditions contained in the EA of the Roads Master Plan.
50. It is noted that a notice of intent to develop was sent to Heritage Western Cape, however the motivation report does not contain information regarding what the inputs or comments of Heritage Western Cape were, but merely states that according to the notice of intent to develop, the proposed development does not have an impact on heritage resources of cultural significance.
51. In addition to the Land Use Planning Principles prescribed in the Land Use Planning Act 3 of 2014 (LUPA), the Municipality also has to consider the respective rights and obligations of all those affected as determined in Section 42 of the Spatial Planning Land Use Management Act 16 of 2013 (SPLUMA).
52. As far as environmental considerations were concerned, it is noted in the motivation report that no environmental matters were identified that could have an impact on the land use proposal. The Objectors submit that at the very least the Property is located near a wetland and estuary and that this should have been taken into account and dealt with in

the motivation report. In terms of the National Water Act, a 500m buffer is required around a wetland and/or estuary, which has not been provided for or dealt with in the Application. It is common cause that there was also a natural underground spring on the Property and that the current house was built over it. Nothing was said about this in the motivation report and neither does it appear to have been taken into account in respect of possible drainage or storm water issues.

53. The Application does not comply with the provisions of Section 38(1)(f) of the By-Law as it does not provide the decision maker with the information prescribed by Section 65 and the Application is therefore fatally flawed. It will not be possible for the decision maker to make an informed decision based on the information contained in the Motivation Report as aspects of material importance have not been dealt with and recommendations have been made based on assumptions.

Conclusion

54. Should the Application be approved, it will have a serious detrimental effect on the rural character and peaceful atmosphere of the surrounding neighbourhood.
55. The motivation for the Application was based largely on the assumption that Glenwood Avenue was closed without authorisation and that it can be reopened in order for it to become a through road. This assumption is erroneous as Glenwood Avenue was lawfully closed and has to legally remain closed until compliance with the conditions of the Kraaibosch Roads Master Plan EA, the timeline for the implementation of which has not been determined. No other traffic mitigation measures or solutions have been offered and it would be impossible for the Municipality to approve an application with current risk based on possible implementation of an EA at an undetermined date. This fact alone is a fatal flaw to the application.
56. When the Municipality considers an application, it must have regard to the criteria set out in Section 65(1). The Application is fatally flawed in that material and mandatory information is lacking to which the Municipality must have regard when evaluating the need and desirability of the Application. It is therefore impossible for the Municipality to comply with Section 65(1) in this matter and the Application should be dismissed.

We therefore submit that the Application should be dismissed.

Yours faithfully

STADLER & SWART CONSULTING

Per:

C M VAN DER LEEUW



Ref.: 385/G21
Municipal Ref.: 2077870

The Municipal Manager
George Municipality
PO Box 19
GEORGE
6530

25 February 2022

For attention: Mr Clinton Petersen

By E-mail

**REPLY TO COMMENTS RECEIVED: PROPOSED REZONING & DEPARTURES:
ERF 19056, 1 GLENWOOD AVENUE, GLENWOOD, GEORGE MUNICIPALITY & DIVISION**

1. The abovementioned matter refers.

The 30-day public participation process for the abovementioned land use application for Erf 1451 Wilderness ended on 14 December 2021. The 74 days for departments ended on 25 January 2022.

2. Comments were only received from **Stadler & Swart Consult** on behalf of the **Glenwood Conservancy & Ms. Ingrid van Wyk** with no comments from the Ward Councillor or the Sustainability Forum. Comments from the **Department of Transport & Public Works: Road Network Management** is expected soon. There was an impasse regarding mutual comment between this Department and the Municipality's Directorate Civil Engineering Services, which seems to be resolved now.

3. **Stadler & Swart Consult on behalf of the Glenwood Conservancy & Ms. Ingrid van Wyk (Erf 13050 George) (objection)**

3.1 *Ingrid van Wyk is the landowner of Erf 13050, which is adjacent to the Property and abuts on the side closest to where the proposed main school building is situated. She is therefore directly affected by the proposed rezoning and relaxation of the building lines. Not only will she be affected by the increased traffic occasioned by the proposed development, but she will be subjected to substantially increased noise levels occasioned by the use of the classrooms and playground area by 100 or more kids.*

Erf 19056 George was subdivided from Erf 13050 George in 1995 with the boundary close to the structures found on the subject property. The home and outbuilding of Erf 19056 is located in the north-eastern corner of the property with the home and outbuilding for Erf 13050 George located in the south-eastern corner of the property. Erf 19056 George is to make use of the existing structures for the proposed place of instruction with access from Glenwood Avenue as proposed in the land use application. The play area for the children will be on the grassed area west of the structures away from the neighbouring Erf 13050 George.

Erf 13050 George's dwelling house is located away from the border with Erf 19056 George with $\pm 37\text{m}$ in between. Glenwood House, a private school is located just south of Erf 13050 George on the opposite side of Glenwood Avenue with classrooms $\pm 70\text{m}$ away and the outbuilding located in between. Glenwood House School accommodates probably 10 times more children.

The aerial image below shows Erf 13050 George in relation to the proposal for Erf 19056 George. This aerial image must also be read with the site development plan included with the land use application. The owner of Erf 13050 George is an avid horse rider and involved with equestrian events. Therefore, her property is ideally placed close to the George Riding Club with a large area for her animals and with the house and outbuilding (including stables) located in the south-eastern corner.



Erf 13050 George is therefore already affected by a school located to the south and traffic on Glenwood Avenue. The situation regarding traffic was investigated and discussed in the traffic impact investigation report included with the land use application.

3.2 *The Glenwood Conservancy (represented by Ingrid van Wyk in her capacity as Chairperson) consists of a number of landowners situated along Glenwood Avenue and in the immediate vicinity of the Property and who will specifically be affected by the increased traffic which will result from the proposed development. The Glenwood Conservancy is also in particular concerned by and against the proposal contained in the Application that Glenwood Avenue should be opened and become a through road.*

The traffic impact investigation found that the traffic situation is unacceptable due to Glenwood House School. Glenwood Avenue is a provincial road (Minor Road 6887) and seems to have been closed without consent from the competent authority.

3.3 *The Objectors have instructed us to prepare these comments and objections and to highlight their concerns and objections in respect of inter alia the need and desirability of the development, the increased traffic and proposed opening of Glenwood Avenue and the effect the change in land use will have on the overall rural character and peaceful atmosphere of the surrounding neighbourhood and area.*

We submit that should the Application be approved, it will have a serious detrimental effect on the aforementioned rural character and peaceful atmosphere of the surrounding neighbourhood, it will increase the traffic substantially which will make an already difficult

traffic situation even more unbearable and dangerous. The Objectors submit that the application is flawed in material respects and does not contain the required information and that it will therefore not be possible for the Municipality to approve the Application. In the paragraphs below we will deal with the reasons for the aforementioned submissions.

Noted. Glenwood is a small holding area within the urban edge of George surrounded by urban development and also planned development on municipal land. The rural character is created through the extent of the properties which is between 5000m² and 1ha and also the zoning, Agriculture Zone II which makes the keeping of farm animals possible within the urban edge.

3.4 Provisions of the By-law in respect of Land Use Applications

The objector discusses the contents of the George Municipality: Land Use Planning By-law (2015) regarding especially Section 38 & 65. The objector states that the land use application submitted does not contain all relevant information and/or contained incomplete information and that subsequently the Municipality will not be in a position to properly consider the application and to have regard to all the provisions contained in Section 65(1) of the By-Law, which renders this Application fatally flawed.

An example is the fact that the TIA (which is an investigation carried out in terms of a law relevant to the consideration of the application (Section 65(1)(f)) is founded on a materially flawed premise and it did not take into consideration the reduced traffic loads due to Covid 19 protocols. We deal with this in more detail below. These facts alone render the TIA fatally flawed and it would be impossible for the Municipality to assess the Application in the absence of a complete and accurate TIA.

As the objector is not a traffic engineer, she will not be aware that the impact of covid is considered in traffic investigations. The objector should also be aware that a land use application is presented to relevant competent authorities for comment. In this instance the Department of Transport & Public Works: Road Network Management is the responsible and competent authority for Minor Road 6887 from which access is obtained to Erf 19056 George and Main Road 355 located north of the subject property.

The objector should also be aware that the Town Planning Section of the Municipality determines whether a submitted application complies with the provisions of the by-law so that a Section 38 compliance letter can be issued. At the same time the Town Planning Section is fully aware that during the application process, it might be necessary to request additional information in terms of Section 42 of the By-law. Provision is made for this in the Section 38 compliance letter.

3.5 Provisions of the Promotion of Administrative Justice Act 3 of 2000 (PAJA)

3.5.1 The objector discusses land use approvals as administrative actions as envisaged by the Constitution. Reference is made to Section 6 o PAJA where the grounds for judicial review are set out, which grounds can also be used to determine how a decision maker should approach any administrative decision. For example, when making a decision irrelevant considerations should not be taken into account and relevant considerations should be taken into account, decisions should not be taken arbitrarily or capriciously and any decision should be rationally connected to inter alia the purpose for which it was taken and the information before the administrator.

Noted

3.5.2 The Motivation Report and the TIA do not contain sufficient information in order to allow the decision maker to make an informed administrative decision which adheres to the requirements of PAJA and this in turn will render any administrative decision reviewable.

Noted

3.6 Current and Proposed Zoning of the Property

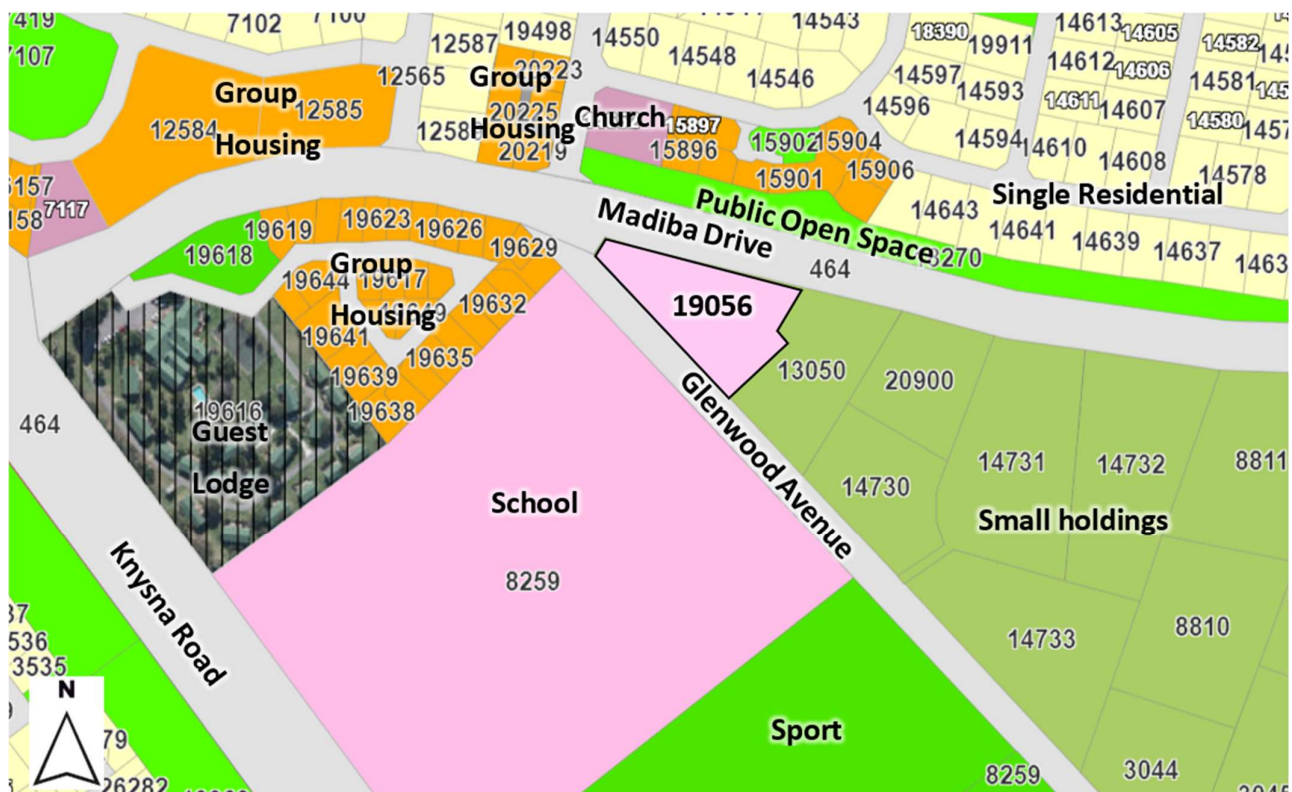
Current Zoning

3.6.1 The objector states the zoning of the property and quotes the George Integrated Zoning Scheme By-law. The objector states that the contemplated utilisation of the Property will change the character of the area thereby detracting from the rural lifestyle which landowners in the vicinity of the Property have come to expect.

It is clear that the purpose of the Agricultural Zone II zoning is to provide an area close to town which can provide places of residence for people who seek a rural lifestyle, without having to stay out on a farm or outside the urban area.

The Glenwood small holding area is surrounded by a mix of different land uses which includes single residential properties, group housing developments, a private school, sporting facilities, etc. See the land use plan from our motivation report below. As stated earlier the rural character is created through the extent of the properties which is between 5000m² and 1ha and also the zoning, Agriculture Zone II which makes the keeping of farm animals possible within the urban edge. The various residential properties located close by is significantly smaller without the option to keep farm animals.

The purpose of the small holdings is not disputed. The Glenwood small holdings are the only small holding area in the George Municipal area located within the urban edge. The other small holding areas are located outside the urban edge. This is rather significant for this area known as Glenwood.



Proposed zoning

3.6.2 The objector repeats what this land use application entails, namely a rezoning to Community Zone I – place of instruction. The objector then quotes the land use description for place of instruction and what ancillary uses are possible which could have a tremendous impact on the surrounding area. Considering the wide rights which a Community Zone I zoning affords the Property, it would be expected that the Application should at least deal with whether and how it was proposed to limit such rights to only allow for the uses as applied for in the Application. However, this is not the case which means that should the rezoning be approved, the Property will have a much more

extensive development potential than what is dealt with in the Application and the accompanying TIA Report.

What the objector fails to realise is that the motivation report discusses the development proposal which is accompanied by a site development plan. Paragraph 3 of the motivation report states the following:

'It is proposed to utilise the existing structures located along the eastern side of the property for the proposed early childhood development centre and aftercare facility. The existing home will accommodate the reception, two offices, ablution, kitchen and two of the five classrooms. The outbuilding (garage) will become two classrooms. An open area with two walls, which was approved as a braai room, will be roofed and enclosed to become another classroom. From the parking area which is also the stop & drop facility, a roofed walkway is proposed leading to the reception.'

Annexure 6 to the motivation report is a draft site development plan which shows the aim of the land use application. A final site development plan will be a condition of approval as contemplated in Section 23 of the George Integrated Zoning Scheme By-law (2015). A site development plan is described as follows in the mentioned by-law:

'Site development plan means a dimensioned plan drawn to scale that indicates details of the proposed land development, including the site layout, positioning of buildings and structures, property access, building designs and landscaping.'

Deviations from a site development is not allowed without due process. If the property owners wish to use the property for more than an early childhood development centre and an aftercare facility, they will have to submit the required land use application in terms of the George Municipality: Land Use Planning By-law (2015) with all relevant supporting information.

The objector is therefore not correct in assuming that the rezoning of Erf 19056 George to Community Zone I – place of instruction automatically allows more development rights than that of an early childhood development centre and an aftercare facility. To make the statement that the that application should at least deal with whether and how the development rights will be limited is flawed. The motivation report and traffic impact assessment deals with exactly what is applied for.

Traffic Impact Assessment Report

3.6.3 The objector is of the opinion that the traffic impact investigation is flawed. The TIA provides details in respect of the traffic count conducted, but fails to take into consideration the fact that due to the current Covid restrictions, Glenwood House School is not operating as per its normal schedule, ie the various grades are picked up at times which are more staggered than would otherwise have been the case. The sport and other after school activities are also staggered in a manner that would not be the case were it not for the Covid restrictions. Put differently, once the Covid restrictions are removed, the traffic at peak times would be significantly higher than is currently the case. This is something which was not at all dealt with in the TIA.

As stated earlier the objector is not a traffic engineer, who will not be aware that the impact of covid is considered in traffic investigations. The traffic investigation concluded that removing the closure of Minor Road 6887 at km 1.3 will greatly improve the congestion and level of service along this road. See **Annexure 7** of the motivation report for the complete traffic impact investigation.

3.6.4 In order to mitigate or alleviate the increased traffic volumes which would result from the approval of the Application, the TIA relies heavily on the opening of Glenwood Avenue (OP6887) to allow the road to function as a through road. This is motivated by the assumption that the road closure was not authorised or approved by the Western Cape Government. The recommendation contained in the TIA for the approval of the Application is based predominantly on the assumption that Glenwood Avenue would be

accessible as a through road. No other mitigation measures or alternative routes are provided for or dealt with in the TIA.

The objector's assumptions are noted.

- 3.6.5 It is to be noted that Glenwood Avenue forms part of the proposed construction and development of the road network for the greater Kraaibosch area in terms of the Kraaibosch Roads Master Plan and the Kraaibosch / Glenwood Local Structure Plan. An Environmental Authorisation (EA) in respect thereof was granted to the George Municipality on 3 March 2009 by the Department of Environmental Affairs and Development Planning.

Glenwood Avenue was closed due to the EA and conditions of approval, which authorisation formed part of the Roads Master Plan and was based upon detailed strategic traffic impact assessments undertaken as part of the environmental process. The Roads Master Plan was officially approved by Council which also accepted the EA with the conditions of approval. This constitutes an administrative decision which stands and has gone beyond attack.

We refer to the following extracts from the description of the activity contained in the EA: "The proposed Road Network will consist of a single Class III District Distributor (4-lane) Secondary Arterial Road (42m wide road reserve), and a series of Class IV Local distributor (2-lane) collector Roads (25m wide road reserve) as indicated in the KRMP layout plan (Figure 3.16 / Vela VKE Plan No C0964-T-C-001).

The proposed 4-lane Secondary Arterial Road (hereafter referred to as the "Servitude Road") will link to Saasveld Road (Knysna – George Road) in the north, on the eastern boundary of Glenwood, and cross Knysna Road (N9) in a NE-SW orientation to intersect with Park Road in the south at Protea Park (Fig. 3.16/Vela VKE Plan No C0964-T-C-001). The proposed Collector Road, in the northern quadrant will be an upgrade of Glenwood Avenue aligned along the southern boundary of Glenwood, joining Saasveld Road in the west to the proposed Servitude Road in the east."

In terms of the EA, the various upgrades and extensions were approved subject to certain conditions and we refer specifically to Conditions 4.4 to 4.6 which state as follows:

"4.4 The Servitude Road must be constructed first and be the only access for construction vehicles to enter the GKA for township developments and thereafter become the priority flow route.

4.5 No construction vehicular access is allowed on Glenwood Avenue west of the Servitude Road.

4.6 The direct link of MR 6887 (Glenwood Avenue) to the proposed north-east extension of the Servitude Road will be allowed subject to the Servitude Road intersection with Saasveld Road achieving a full geometric standard, and without compromising on the minimum access spacing requirement between the abovementioned intersections."

Par 4.5 quoted here deals with construction vehicles and not normal, everyday traffic.

From the above extracts it is evident that Glenwood Avenue forms part of the Kraaibosch Roads Master Plan, with upgrades being proposed. However, these upgrades are subject to conditions, specifically that the Servitude Road intersection with Saasveld Road must first achieve a full geometric standard and the minimum access spacing requirement between the two intersections must not be compromised. It follows therefore that should these conditions not first be met, it will not be possible for Glenwood Avenue to become a through road. The TIA does not at all deal with this.

Put differently, until full compliance and implementation of the Roads Master Plan (subject to the Environmental Authorisation with conditions of approval), it will legally not be permissible to open Glenwood Avenue and the TIA is therefore based on a fatally flawed supposition.

These statements should be addressed by the relevant officials dealing with these matters. It should be noted that discussions with the relevant officials shared that Minor Road 6887 was not closed off with permission from the Department of Transport & Public Works: Road Network Management.

3.6.6 *The Objectors submit that it is not possible to approve an application with an immediate impact and which impact can only be absorbed when certain bulk infrastructure has been installed and/or constructed and when there is still uncertainty whether such infrastructure will even be installed, such as is the case in this matter. This fact alone renders the TIA and the Application fatally flawed as the entire basis of the TIA is that Glenwood Avenue will be opened and become a through road.*

The objector's statements are noted.

3.6.7 *The TIA further assumes that a fairly large percentage of parents (page 11 under 6.2: Traffic Distribution) will have kids in both schools and deals predominantly with traffic generated by parents of children in the pre-school with little or nothing being said about the traffic to be generated by parents picking up their children from the aftercare facility. No evidence is given in support of the aforementioned supposition and as will be dealt with below, Glenwood House School has its own aftercare facility and lower grades which could to a large extent negate the supposition that a 'fairly large percentage of parents' will have kids in both schools as it makes more sense to have the kids in the same school.*

For the reasons above, the Objectors submit that the TIA did not contain sufficient information on which to base an informed decision regarding the approval of the Application and that the basis of the TIA was fatally flawed due to it being assumed that Glenwood Avenue would be opened and become a through road. Furthermore, the TIA did not at all deal with the traffic impact of this scale on the rural character and peaceful atmosphere of the area.

The objector's statements / assumptions are noted.

Motivation report

3.6.8 *As stated above, when the Municipality considers an application, it must have regard to the criteria set out in Section 65 of the By-Law. These criteria must form the basis of the motivation report which is submitted in support of an application. We submit that these criteria were not properly dealt with in the Application and it therefore renders the Application fatally flawed and incomplete in material respects. It would not be possible for the Municipality to properly consider the mandatory relevant factors it is required to consider if detailed information is not provided in respect of each of the factors.*

The objector's assumptions are noted. If the land use application submitted, including the motivation report, did not comply with the provisions of Section 65 of the planning by-law, a Section 38 compliance letter would not have been issued but a Section 40 notice. Section 38 of the planning by-law lists what information and documents must accompany a land use application. Section 38(1)(f) states that a written motivation for the application based on the criteria referred to in section 65 must form part of the submission. If Section 65 of the planning by-law was not adequately addressed a Section 40 notice would have been issued. Section 40 states that the Municipality may refuse to accept an application if the application is not in the form or does not contain the information or documents referred to in section 38.

3.6.9 *The By-Law requires of the Municipality to inter alia consider the desirability of a proposed land use. In general it is considered desirable for the development restrictions imposed by the IZS to be complied with. As will be set out in more detail below, the Application fails to explain and motivate the need for the rezoning and departures applied for which will exceed the current prescribed development parameters.*

The objector reads the motivation report selectively. It is stated that the property will be used to its maximum potential considering location and surrounding land uses while existing structures are re-used. Therefore, departure for building line is needed. It will be ineffective and unsustainable not to use available structures.

3.6.10. *Under 2.3 (Character of the Property & The Area), the Application states that the "...proposed crèche with an aftercare facility will strengthen the education character of this area" and under 4.3 (Need & Desirability) it states that "...the proposed zoning (and departure) of Erf 19056 George will support and strengthen the character of the area. The use will change from small holding to place of instruction supporting the growing need for educational facilities in our urban area".*

As stated above, the Property is zoned as Agricultural Zone II. It also forms part of an area containing properties all zoned as Agricultural Zone II, the objective of which zoning is "...to accommodate larger residential properties, which may be used for limited agriculture, but primarily serve as places of residence for people who seek a rural lifestyle..." Notwithstanding the fact that Glenwood House School is located opposite the Property, the character of the area would be better defined as being rural and / or residential in nature. The high traffic impact is totally inconsistent with the rural character of the area and the agricultural uses which are allowed for by the predominantly Agricultural Zone II zoning of the properties in the immediate area.

The objector's opinion is noted. The Glenwood small holdings cannot be viewed in isolation. It is located within the urban edge with a mix of land uses in this area. The presence of Glenwood House School is not acknowledged by the objector as the character of the area is described by her as *rural and / or residential*. The sporting facilities, adding to the mix of land uses in this section of George, is also not mentioned.

Increase in traffic has become part of George due to the growing population in the Southern Cape. What should also be noted is that a dwelling house is a primary land use right for a small holding which includes home occupation. The latter includes place of instruction for up to 6 students. Education is therefore part of the character of any area providing dwelling houses.

3.6.11. *The Application does not at all identify and assess the impact and effect which the proposed land use will have on adjacent and surrounding landowners. This is a material lack of information, particularly considering that a number of the surrounding landowners stable their horses on their properties and exercise them along Glenwood Avenue. Glenwood Avenue is also used by many in the community (not only Glenwood residents) for cycling, running and horse riding. This aspect is crucial to the desirability of the Application and the fact that it was not even touched upon is a significant omission.*

Glenwood Avenue is a public road just like all other public roads in the municipal area of George. There are other areas of George where residents ride their horses, like in Pacaltsdorp where there is also a riding club. People cycle and run along all public roads of George. To assess a change in land use considering horses, cyclists and running are not necessarily a relevant consideration. Non-motorised transport is considered but not when it is leisure/recreational activities on public roads according to our understanding. Leisure/recreational activities are supported throughout the municipal area.

The objector's comment is therefore noted.

3.6.12. *In the third paragraph under 3. Development Proposal (page 6) of the Motivational Report, it is stated that the "...proposed early childhood development centre and aftercare facility will accommodate approximately 100 children. The aftercare will be focused on Glenwood House – providing children the opportunity to walk safely across Glenwood Avenue at the pedestrian crossing to the facility proposed for Erf 19056 George."*

The crux of the Application appears to be to provide for a safe aftercare facility for pupils of Glenwood House School and to provide for the early childhood development grades. It is to be noted that, according to its fee structure for 2021, Glenwood House School offers after care facilities (with or without lunch) and also provides for Grade 000 (age 3 – 4), Grade 00 (ages 4 – 5) and Grade 0 (ages 5 – 6). Nowhere in the Application is mention made of this fact and neither is information provided as to whether Glenwood House School is at full capacity for these grades and / or the aftercare facility. The Objectors submit that the need of the proposed early childhood development centre with aftercare has not at all been fully motivated, nor have sufficient details been given regarding whether it will be limited to 100 kids or whether it will be expanded in the future.

The motivation report states that the proposed early childhood development centre and aftercare facility will accommodate approximately 100 children. Why must a statement regarding future expansion be included in a motivation report if that is not what the application is about? Erf 19056 George can only accommodate so many children. Uncontrolled expansion of this school will change the character of the area as another crèche elsewhere in George was not controlled and totally changed the character of the area.

Glenwood House – parents have not had a close by alternative for aftercare. Time will tell what the exact influence of the aftercare facility will be.

The objector's comment is noted.

3.6.13. *The impact of the additional noise and disturbance which would be occasioned by at least 100 kids on the Property has not at all been identified or assessed and no mitigation measures are proposed. It is important to consider for example, what effect the noise levels may have on the horses stabled on the adjacent property. The Objectors submit that due to the fact that a relaxation of the building lines is also applied for and the buildings to be used will be right on the boundary between the two properties, this means that there will be no buffer between the proposed childhood development centre and the adjacent property. The aforementioned facts render the proposed land use undesirable.*

It is assumed that noise is created by Glenwood House School. Noise from classrooms is limited due to what happens in classroom. As mentioned, the play area is located west of the structures and away from the structures found on Erf 13050 George. The roads surrounding the Glenwood small holding also creates everyday noise.

Having the play area away from other properties facing onto public roads, as Erf 19056 George is a corner property is a mitigation measure. The property owners investigated many properties throughout the George municipal area for the establishment of the proposed early childhood development centre and aftercare facility. Writer investigated these properties together with the property owners. Every time, until Erf 19056 George was found, parking did not comply with the zoning and engineering requirements. The location was also not always favourable. To find property in George that can be utilised for education purposes with a good location and suitable parking provision and still remaining a feasible proposal, is almost impossible. Another private school (all grades) investigated various options for years and finally gave up on the municipal area of George).

Erf 19056 George was found to suit the urban environment created here in Glenwood with a mix of land uses. Ample space is available for children to play and provide safe parking within the boundaries of the property – no need ever for sidewalk-parking.

As stated earlier it will be inefficient and unsustainable to demolish good quality structures and not re-use what is available. This will be in conflict with the principles of SPLUMA and irresponsible from a financial perspective. The structures provide a buffer for the abutting property from the play area and where vehicles park.

A grassed and landscaped area are shown on the site development plan to be left between the parking area and Erf 13050 George. This can be expanded along the boundary while still considering space to move around the buildings for safety reasons.

It was stated in the discussion of the pre-application that a detailed site layout is needed which is part of the application (site development plan) and that the extent of the land use may be restricted to fit the character of the area. As mentioned above, if not controlled, it could change the character of the area.

3.6.14. *No information is contained in the Motivation Report regarding possible mitigation measures in respect of the affect that the additional traffic and noise might have on the horses stabled and exercised in the area. It is important to note that in addition to the fact that a number of landowners in the immediate vicinity stable their horses on their properties and exercise same in and around Glenwood Avenue, the Glenwood Riding Club is the preferred showing club in the Western Cape, which grounds border on Glenwood Avenue.*

As Erf 19056 George provides more than ample parking space within the boundaries of the property with no need for sidewalk-parking is a definite mitigation measure. With many other education establishment on smaller properties, sidewalk parking is a general occurrence whether parking is provided within the boundaries of the property or not. The extent of the subject property ensure that vehicular movement should not be regarded as a problem.

As stated earlier there are already noise in the area due to non-residential land uses and traffic on existing roads. Leisure/recreational activities on public streets are not included in the land use description, namely:

Land use description: "public street" means any land, owned by or vesting in the Municipality, indicated on an approved plan, diagram or map as having been set aside as a public thorough way for vehicles and pedestrians,; and includes —

- (a) open public parking areas;**
- (b) sidewalks;**
- (c) those parts of a public place that are travelled parts;**
- (d) informal trading ; and**
- (e) appropriate and necessary street furniture and infrastructure, including reticulation networks, which does not present any threat to the safety or obstruct or inhibit free movement of pedestrians.**

This land use description does include that it is for 'vehicles and pedestrians' and reference is made to 'those parts of a public place that are travelled parts'. No reference is made to leisure/recreational activities. Road races (e.g. running, cycling) needs to get authorisation from the authorities to use roads for the purposes. Running and cycling for leisure respect the aim of public streets – it is first for vehicles and pedestrians.

The land use descriptions for public open space and private open space should be noted as it provides for leisure/recreational activities.

The George Riding Club located close by is surrounded by public streets, residential opportunities and other sporting facilities.

3.6.15. *When a show is held, there is an average of 50 out of town riders with accompanying friends and family. This usually entails approximately 50 horse trailers and accompanying vehicles which of itself would increase the traffic in the area significantly. In addition, these horses would normally be exercised and/or accommodated in the area and an increase in traffic due to the proposed early childhood development centre would create a substantial problem and possible risk to the horses. This has not even been considered in the Motivation Report.*

A risk assessment in respect of the increased traffic has also not been done in the context that the landowners in the area use Glenwood Avenue for walking and running, as well as the exercising of their horses and that any increase in the traffic would have a severe detrimental effect.

The objector's comments are noted. Without contacting the horse-riding fraternity, it is presumed that these shows occur over weekends (and also sometimes long weekends) when most schools are not operational. Was a risk assessment done and impact of traffic determined when the private school was first established on Erf 25811 George which we know as Glenwood House today? The George Riding Club has been in this location for many decades long before the private school was established or the residential development just east of the Riding Club in the greater Kraaibosch area. It is assumed that the portion of Glenwood Avenue east of the Riding Club (where the road is blocked), is also used to exercise horses as there are still some small holdings here together with the developed residential estates (Groenkloof, Kraaibosch Ridge).

3.6.16. *The Motivation Report makes mention of the fact that the proposed land use will have an impact on the traffic in area, but relies on the assumption that Glenwood Avenue was closed without authorisation and that based on the recommendation of the TIA, it will be opened to enable Glenwood Avenue to become a through road.*

As dealt with in paragraphs 24 to 36 above, this assumption is incorrect and cannot be used as the basis for motivating the Application. No other alternative traffic mitigation proposals are offered, which constitutes a fatal flaw in the Application. Furthermore, it is not possible to simply implement the recommendations of Urban Engineering (Pty) Ltd as the opening of Glenwood Avenue is subject to the conditions contained in the EA of the Roads Master Plan.

As stated earlier, Glenwood Avenue was closed without consent from the relevant authority according to our discussions with the relevant authority. The traffic investigation was prepared by a suitable qualified professional.

3.6.17. *It is noted that a notice of intent to develop was sent to Heritage Western Cape, however the motivation report does not contain information regarding what the inputs or comments of Heritage Western Cape were, but merely states that according to the notice of intent to develop, the proposed development does not have an impact on heritage resources of cultural significance.*

Noted. The decision from Heritage: Western Cape has been provided since to the Municipality.

3.6.18 *In addition to the Land Use Planning Principles prescribed in the Land Use Planning Act 3 of 2014 (LUPA), the Municipality also has to consider the respective rights and obligations of all those affected as determined in Section 42 of the Spatial Planning Land Use Management Act 16 of 2013 (SPLUMA).*

Noted. Addressed in motivation report of land use application.

3.6.19 *As far as environmental considerations were concerned, it is noted in the motivation report that no environmental matters were identified that could have an impact on the land use proposal. The Objectors submit that at the very least the Property is located near a wetland and estuary and that this should have been taken into account and dealt with in the motivation report. In terms of the National Water Act, a 500m buffer is required around a wetland and/or estuary, which has not been provided for or dealt with in the Application. It is common cause that there was also a natural underground spring on the Property and that the current house was built over it. Nothing was said about this in the motivation report and neither does it appear to have been taken into account in respect of possible drainage or storm water issues.*

Noted. Existing structures are to be used and as stated in the motivation report, no environmental matters were identified. A stormwater management report is part of the land use application submitted.

3.6.20 *The Application does not comply with the provisions of Section 38(1)(f) of the By-Law as it does not provide the decision maker with the information prescribed by Section 65 and the Application is therefore fatally flawed. It will not be possible for the decision maker to make an informed decision based on the information contained in the Motivation Report as aspects of material importance have not been dealt with and recommendations have been made based on assumptions.*

The objector's opinion and assumptions are noted.

Conclusion

3.6.21 *Should the Application be approved, it will have a serious detrimental effect on the rural character and peaceful atmosphere of the surrounding neighbourhood.*

The objector's opinion regarding small holdings located in an area characterised by various housing typologies, guest houses, a church, a school, sporting facilities, etc within the urban edge of George is noted.

3.6.22 *The motivation for the Application was based largely on the assumption that Glenwood Avenue was closed without authorisation and that it can be reopened in order for it to become a through road. This assumption is erroneous as Glenwood Avenue was lawfully closed and has to legally remain closed until compliance with the conditions of the Kraaibosch Roads Master Plan EA, the timeline for the implementation of which has not been determined. No other traffic mitigation measures or solutions have been offered and it would be impossible for the Municipality to approve an application with current risk based on possible implementation of an EA at an undetermined date. This fact alone is a fatal flaw to the application.*

Noted and addressed earlier in this reply.

3.6.23 *When the Municipality considers an application, it must have regard to the criteria set out in Section 65(1). The Application is fatally flawed in that material and mandatory information is lacking to which the Municipality must have regard when evaluating the need and desirability of the Application. It is therefore impossible for the Municipality to comply with Section 65(1) in this matter and the Application should be dismissed.*

Noted.

4. The objector's opinions and assumptions are addressed in the paragraphs above. It is trusted that this land use application for Erf 19056 George can now be concluded successfully.

Yours Faithfully



MARLIZE DE BRUYN Pr. Pln.
E:\Mdb\Projects\2021\385_G21\Erf 19056 George_GM_PPP reply to comments received_Feb 2022.docx



Planning and Development
E-mail: town.planning.application@george.gov.za
Tel: +27 (0)44 801 9477

LAND USE PLANNING PRE-APPLICATION CONSULTATION FORM

PLEASE NOTE:

Pre-application consultation is an advisory session and is required prior to submission of an application for rezoning, consent use, temporary departure and subdivision. It does not in any way pre-empt the outcome of any future application which may be submitted to the Municipality.

PART A: PARTICULARS

Reference number: 1975440

Purpose of consultation: To discuss proposed land use application

Brief proposal: Rezoning from AZII to CZI

Property(ies) description: Erf 19056 George

Date: 11 August 2021

Attendees:

	Name & Surname	Organisation	Contact Number	E-mail
Official	Jeanne Fourie	George Municipality	0448019138	jfourie@george.gov.za
Pre-applicant	Marlize de Bruyn	Marlize de Bruyn Planning	0766340150	marlize@mdbplanning.co.za

Documentation provided for discussion:

(Include document reference, document/plan dates and plan numbers where possible and attach to this form)

____ **Copy of title deed, locality, aerial image** _____

YES	NO
-----	----

Has pre-application been undertaken for a Land Development application with the Department of Environmental Affairs & Development Planning (DEA&DP)?

(If so, please provide a copy of the minutes)

Comprehensive overview of proposal:

Erf 19056 George is an AZII-property located at the western end of the small holding area known as Glenwood. Prospective owners have identified the property as a potential crèche and aftercare. The aftercare will be for especially children from Glenwood House across the road. The number of children to be accommodated (crèche and aftercare) will depend on need, but it is proposed to be between 50 and 100. Ample space is available for a stop & drop and sufficient parking. The existing structures found on the property seem to be sufficient with minimum additions, if any, needed.

With this proposal, it will be possible to align the entrance to Erf 19056 George with that of Glenwood House. See aerial image attached.

Building lines will have to be addressed for the existing structures.

No restrictive conditions were identified in the current title deed.

PART B: APPLICATION PROCESS

(WILL FULLY APPLY ONLY ONCE LUPA REGULATIONS ARE IN FORCE)

SUBMISSION

Draft By-Law on Municipal Land Use Planning

(Workflow)

Types of applications that can be submitted in terms of Section 15 (2)

- (a) Rezoning of land
- (b) Permanent departure
- (c) Temporary departure
- (d) Subdivision of land
- (e) Consolidation of land
- (f) Amendment, suspension or removal of restrictive conditions
- (g) Permission required in terms of the zoning scheme
- (h) Amendment, deletion or imposition of condition in respect of an approval
- (i) Extension of validity period of an approval
- (j) Approval of an overlay zone
- (k) Phasing, amendment or cancellation of a subdivision plan or part thereof
- (l) Permission required in terms of condition of approval
- (m) Determination of zoning
- (n) Closure of public place or part thereof
- (o) Consent use
- (p) Occasional use

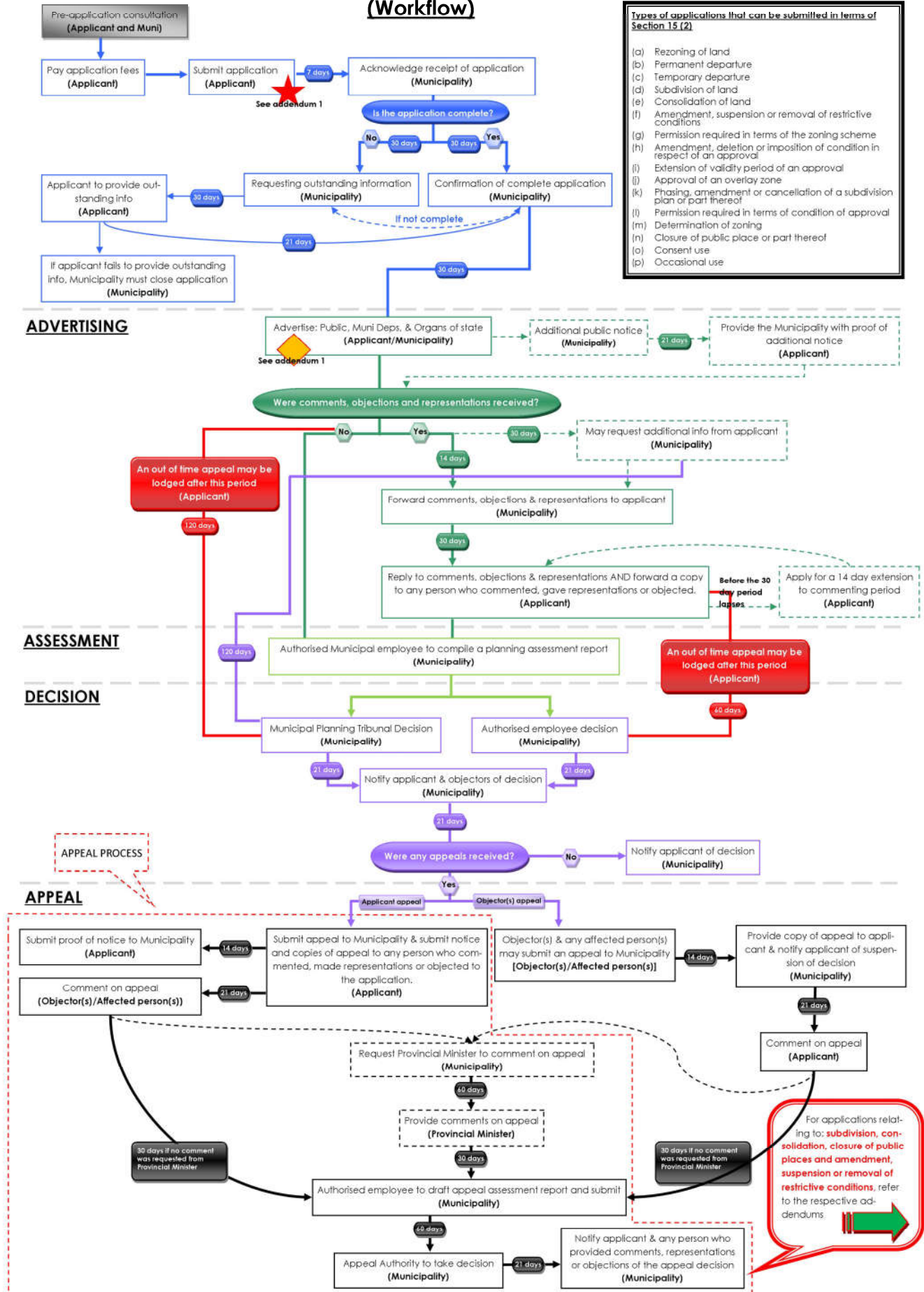
ADVERTISING

ASSESSMENT

DECISION

APPEAL PROCESS

APPEAL



PART C: QUESTIONNAIRES

SECTION A:

DETERMINATION OF APPLICATION TYPES, PRESCRIBED NOTICE AND ADVERTISEMENT PROCEDURES

Tick if relevant		What land use planning applications are required?	Application fees payable
✓	2(a)	a rezoning of land;	R4630.00
✓	2(b)	a permanent departure from the development parameters of the zoning scheme;	To be determined
	2(c)	a departure granted on a temporary basis to utilise land for a purpose not permitted in terms of the primary rights of the zoning applicable to the land;	R
	2(d)	a subdivision of land that is not exempted in terms of section 24, including the registration of a servitude or lease agreement;	R
	2(e)	a consolidation of land that is not exempted in terms of section 24;	R
	2(f)	a removal, suspension or amendment of restrictive conditions in respect of a land unit;	R
	2(g)	a permission required in terms of the zoning scheme;	R
	2(h)	an amendment, deletion or imposition of conditions in respect of an existing approval;	R
	2(i)	an extension of the validity period of an approval;	R
	2(j)	an approval of an overlay zone as contemplated in the zoning scheme;	R
	2(k)	an amendment or cancellation of an approved subdivision plan or part thereof, including a general plan or diagram;	R
	2(l)	a permission required in terms of a condition of approval;	R
	2(m)	A determination of a zoning;	R
	2(n)	A closure of a public place or part thereof;	R
	2(o)	a consent use contemplated in the zoning scheme;	R
	2(p)	an occasional use of land;	R
	2(q)	to disestablish a home owner's association;	R
	2(r)	to rectify a failure by a home owner's association to meet its obligations in respect of the control over or maintenance of services;	R
	2(s)	a permission required for the reconstruction of an existing building that constitutes a non-conforming use that is destroyed or damaged to the extent that it is necessary to demolish a substantial part of the building	R
Tick if relevant		What prescribed notice and advertisement procedures will be required?	Advertising fees payable
Y	N	Serving of notices (i.e. registered letters etc.)	R
Y	N	Publication of notices (i.e. Provincial Gazette, Local Newspaper(s) etc.)	R

Y	N	Additional publication of notices (i.e. Site notice, public meeting, local radio, website, letters of consent etc.)	R
Y	N	Placing of final notice (i.e. Provincial Gazette etc.)	R
TOTAL APPLICATION FEE* (VAT excluded):			To be determined

PLEASE NOTE: * Application fees are estimated on the information discussed and are subject to change with submission of the formal application and/or yearly application fee increase.

SECTION B:

PROVISIONS IN TERMS OF THE RELEVANT PLANNING LEGISLATION / POLICIES / GUIDELINES

QUESTIONS REGARDING PLANNING POLICY CONTEXT	YES	NO	TO BE DETERMINED	COMMENT
Is any Municipal Integrated Development Plan (IDP)/Spatial Development Framework (SDF) and/or any other Municipal policies/guidelines applicable? If yes, is the proposal in line with the aforementioned documentation/plans?			X	
Any applicable restrictive condition(s) prohibiting the proposal? If yes, is/are the condition(s) in favour of a third party(ies)? [List condition numbers and third party(ies)]			X	Conveyancer Certificate required
Any other Municipal by-law that may be relevant to application? (If yes, specify)			X	
Zoning Scheme Regulation considerations: Which zoning scheme regulations apply to this site? _____ GIZS _____ What is the current zoning of the property? _____ AZII _____ What is the proposed zoning of the property? _____ CZI _____ Does the proposal fall within the provisions/parameters of the zoning scheme? _____ No _____ Are additional applications required to deviate from the zoning scheme? (if yes, specify) _____ Yes _____				

QUESTIONS REGARDING OTHER PLANNING CONSIDERATIONS	YES	NO	TO BE DETERMINED	COMMENT
Is the proposal in line with the Provincial Spatial Development Framework (PSDF) and/or any other Provincial bylaws/policies/guidelines/documents?	X			
Are any regional/district spatial plans relevant? If yes, is the proposal in line with the document/plans?		X		

SECTION C:

CONSENT / COMMENT REQUIRED FROM OTHER ORGANS OF STATE

QUESTIONS REGARDING CONSENT / COMMENT REQUIRED	YES	NO	TO BE DETERMINED	OBTAIN APPROVAL / CONSENT / COMMENT FROM:
Is/was the property(ies) utilised for agricultural purposes?		X		Western Cape Provincial Department of Agriculture
Will the proposal require approval in terms of Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)?		X		National Department of Agriculture
Will the proposal trigger a listed activity in terms of National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)?			X	Western Cape Provincial Department of Environmental Affairs & Development Planning (DEA&DP)
Will the proposal require authorisation in terms of Specific Environmental Management Act(s) (SEMA)? (National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) (NEM:PAA) / National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEM:BA) / National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004) (NEM:AQA) / National Environmental Management: Integrated Coastal Management Act, 2008 (Act 24 of 2008) (NEM:ICM) / National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEM:WA) (strikethrough irrelevant)		X		National Department of Environmental Affairs (DEA) & DEA&DP
Will the proposal require authorisation in terms of the National Water Act, 1998 (Act 36 of 1998)?		X		National Department of Water & Sanitation (DWS)
Will the proposal trigger a listed activity in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	X		Notice of intent to develop Sec 38(1) application	South African Heritage Resources Agency (SAHRA) & Heritage Western

QUESTIONS REGARDING CONSENT / COMMENT REQUIRED	YES	NO	TO BE DETERMINED	OBTAIN APPROVAL / CONSENT / COMMENT FROM:
				Cape (HWC)
Will the proposal have an impact on any National or Provincial roads?	X			National Department of Transport / South Africa National Roads Agency Ltd. (SANRAL) & Western Cape Provincial Department of Transport and Public Works (DTPW)
Will the proposal trigger a listed activity in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations		X		National Department of Labour (DL)
Will the proposal affect any Eskom owned land and/or servitudes?		X		Eskom
Will the proposal affect any Telkom owned land and/or servitudes?		X		Telkom
Will the proposal affect any Transnet owned land and/or servitudes?		X		Transnet
Is the property subject to a land / restitution claims?		X		National Department of Rural Development & Land Reform
Will the proposal require comments from SANParks and/or CapeNature?		X		SANParks / CapeNature
Will the proposal require comments from DEFF?		X		Department of Environment, Forestry and Fishery
Is the property subject to any existing mineral rights?		X		National Department of Mineral Resources
Does the proposal lead to densification to such an extent that the number of schools, healthcare facilities, libraries, safety services, etc. In the area may be impacted on? (strikethrough irrelevant)		X		Western Cape Provincial Departments of Cultural Affairs & Sport (DCAS), Education, Social Development, Health and Community Safety

SECTION D:

SERVICE REQUIREMENTS

DOES THE PROPOSAL REQUIRE THE FOLLOWING ADDITIONAL INFRASTRUCTURE / SERVICES?	YES	NO	TO BE DETERMINED	OBTAIN COMMENT FROM: (list internal department)
---	-----	----	------------------	--

Electricity supply:			X	Directorate: Electro-technical Services
Water supply:			X	Directorate: Civil Engineering Services
Sewerage and waste water:			X	Directorate: Civil Engineering Services
Stormwater:			X	Directorate: Civil Engineering Services
Road network:			X	Directorate: Civil Engineering Services
Telecommunication services:			X	
Other services required? Please specify.			X	
Development charges:			X	

PART D: COPIES OF PLANS / DOCUMENTS TO BE SUBMITTED AS PART OF THE APPLICATION

COMPULSORY INFORMATION REQUIRED:									
Y	N	Power of Attorney / Owner's consent if applicant is not owner (if applicable)		Y	N	S.G. noting sheet extract / Erf diagram / General Plan			
Y	N	Motivation report / letter		Y	N	Full copy of the Title Deed			
Y	N	Locality Plan		Y	N	Site Layout Plan			
Y	N	Proof of payment of fees		Y	N	Bondholder's consent			
MINIMUM AND ADDITIONAL REQUIREMENTS:									
Y	N	Site Development Plan		Y	N	Conveyancer's Certificate			
Y	N	Land Use Plan		Y	N	Proposed Zoning plan			
Y	N	Phasing Plan		Y	N	Consolidation Plan			
Y	N	Abutting owner's consent		Y	N	Landscaping / Tree Plan			
Y	N	Proposed Subdivision Plan (including street names and numbers)		Y	N	Copy of original approval letter			
Y	N	Services Report or indication of all municipal services / registered servitudes		Y	N	Home Owners' Association consent			
Y	N	Copy of Environmental Impact Assessment (EIA) if applicable / Heritage Impact Assessment (HIA) / Traffic Impact Assessment (TIA) / Traffic Impact Statement (TIS) / Major Hazard Impact Assessment (MHIA) / Environmental Authorisation (EA) / Record of Decision (ROD) (strikethrough irrelevant)		Y	N	1 : 50 / 1:100 Flood line determination (plan / report)			
Y	N	Other (specify)		Y	N	Required number of documentation copies			

PART E: DISCUSSION

Town Planning:

- The proposed cheche and afterschool facilities may be reconcilable within a residential and agricultural environment.
- More detail will be required. Detailed site layout plan should be submitted.
- Will the existing structures be utilised, or new structures proposed?
- The extent of the land uses may be restricted to fit the character of the area.
- Building lines should be addressed.
- Stormwater management plan required.

CES:

- (CES - 17/08/2021) Access restricted to one 8,0meter access. Drop and go facilities must be provided on the property. No parking will be allowed within the road reserve.
- DRE to be contact for comments as well, as the road is still classified as a Provincial road.
- Safe pedestrian movement must be investigated and will form part of possible TIA/TIS

ETS:

- Electricity demand requirements to be pre- calculated by an Engineer in the case of food preparations are planned for the development.

PART F: SUMMARY / WAY FORWARD

Refer to Part E.

OFFICIAL: **Jeanne Fourie**
(FULL NAME)

SIGNED:



PRE-APPLICANT: Marlize de Bruyn
(FULL NAME)

SIGNED:

DATE: **19 August 2021**

DATE: 11 August 2021

**Please note that the above comments are subject to the documents and information available to us at the time of the pre-application meeting and we reserve our rights to elaborate on this matter further and/or request more information/documents should it deemed necessary.*

PROPOSED REZONING OF ERF 19056, GEORGE

STORMWATER MANAGEMENT REPORT

Report Number 21-123SW



Date: October 2021

Revision 0

QUALITY ASSURANCE DATA

Report Title:	STORMWATER MANAGEMENT REPORT
Client:	Outeniqua PreSchool and Aftercare (Pty) Ltd
Report Number:	21-123SW
Revision Number	Revision 0

Revision History

Date	Rev	Written By	Issued to		Distribution	Format
			Name	Institution		
26 October 2021	0	Errol Witbooi	Martin Heunis	Outeniqua PreSchool and Aftercare (Pty) Ltd	Email	.pdf
			Natalie Heunis	Outeniqua PreSchool and Aftercare (Pty) Ltd	Email	.pdf
			Marlize de Bruyn	MdB Planning	Email	.pdf

Written by:



Errol Witbooi (B.Tech)

(on behalf of Urban Engineering (Pty) Ltd)

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LIST OF ABBREVIATIONS

msl	Mean Sea Level
WCG	Western Cape Government
WGS	World Geodetic System
HDPE	High Density Polyethylene
uPVC	Unplasticised Polyvinyl Chloride
SDP	Site Development Plan
GIZSBL	George Integrated Zoning Scheme by-law
Ml	Mega Litre (1,000,000 litres)
GHPSD	Guidelines for Human Planning and Settlement Design
GLS	GLS Consulting Engineers

1 INTRODUCTION

1.1 Background

Urban Engineering (Pty) Ltd was appointed by Outeniqua Preschool and Aftercare (Pty) Ltd to prepare a stormwater management report pertaining to the proposed development. The site is situated at the intersection of MR0355 (Madiba Drive) and OP6887 (Glenwood Avenue) in the residential area known as Glenwood. The approximate site centre has WGS 84 coordinates of 33°58'6.75"S and 22°29'32.25"E. Although the site is bordered by both MR0355 and OP6887, access to the site is only via OP6887. A basic locality plan has been included as Figure 1-1 Locality Plan.



Figure 1-1 Locality Plan

1.2 Objective of this report

The objectives of this stormwater management report are to develop a strategy for the project that will identify potential solutions to reduce the volume and improve the quality of the development's stormwater runoff.

In order to use the status-quo as a benchmark, this report will also aim to calculate the predevelopment runoff quantities and will set guidelines for calculating the post-development runoff quantities in the future. This will ensure that pre- and post-development runoff volume calculations are based on the same set of rules.

1.3 Stormwater Management Principles

The underlying principle regarding Stormwater Management is that the peak runoff from the post-development site should not exceed that of the pre-developed site for the full range of storm periods (1:2 to 1:50). Mitigation measures must therefore be incorporated into the site development plan to reduce and/or attenuate the post development flows to pre-development rates.

The stormwater network should be designed to accommodate the minor storm event (1:2 year) in pipes or open channels. The major storm (1:50 year) must be managed through controlled overland flows and above ground attenuation storage in the form of grassed swales. Where piped networks are required to transport collected runoff, special attention must be given to the design of the outlet point to ensure controlled discharge will take place. The difference between a responsible and irresponsible approach to stormwater management is indicated schematically in the three figures below.

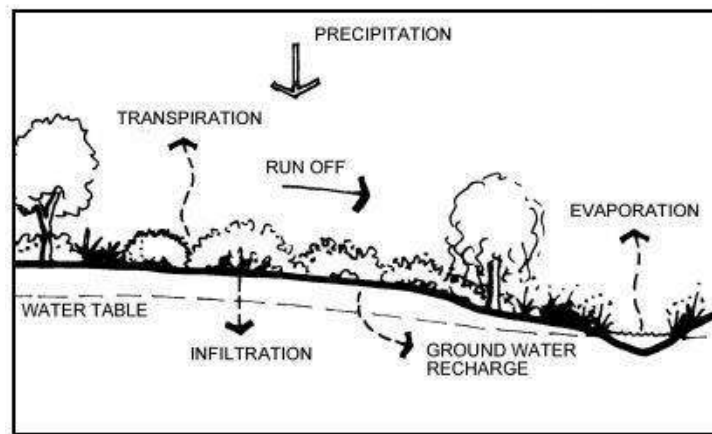


Figure 1: Natural hydrological system

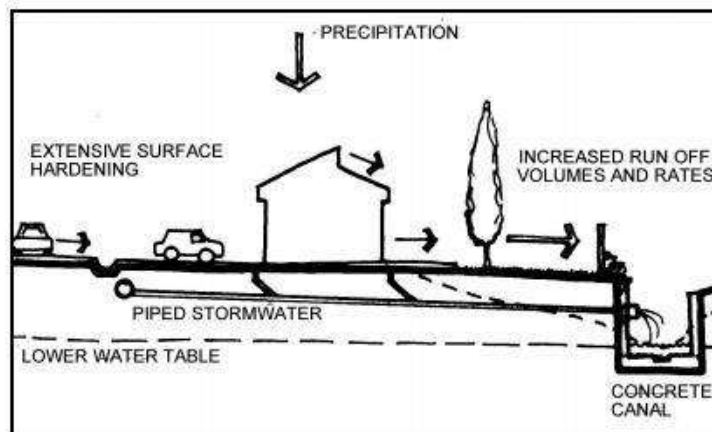


Figure 2: Stormwater management approach with little concern for the natural environment

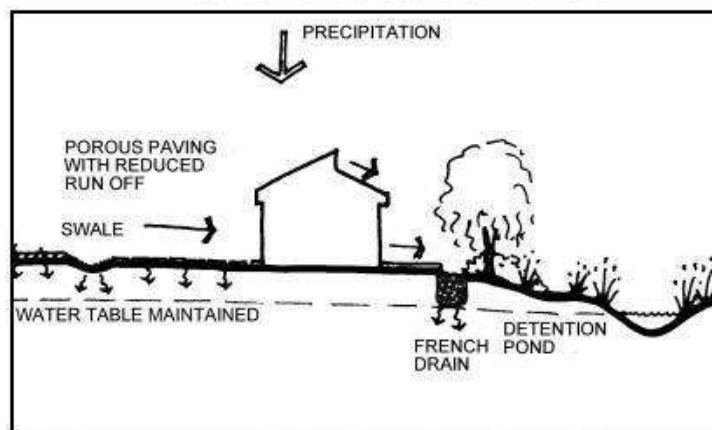


Figure 3 : Responsible approach to stormwater management

Through implementation of a Stormwater Management Plan, the impact of the new development on the natural discharge of stormwater should be mitigated and managed. Stormwater management should follow the guidelines as prescribed in UTG 4 (GUIDELINES FOR URBAN STORMWATER MANAGEMENT), as approved and reviewed by the Committee of Urban Transport Authorities, published in 1991 by the South African Department of Transport.

1.4 Site Description

The erf 19056 comprises 65% permeable area, that is lawn and landscaping, which has a high infiltration rate of stormwater. The other 35% of the erf covers impermeable, which is your buildings and hardstands. The run-off water of the buildings and hardstands areas are being directed by means of stormwater channels.

1.5 Current Stormwater Management.

Since the land is developed, the current stormwater management plan is more detailed explained at point 4.1 Pre-Development Runoff, whereby it is discussed how the stormwater is currently controlled. Most stormwater run-off simply flows overland and infiltrate into the grassland. The pervious soils and vegetation allow for large volumes of ground surface infiltration and aquifer replenishment. Infiltration is the process by which water on the ground surface enters the soil. A percentage of the run-off flows overland into a pond, which is in the neighbour's property.

2 PROPOSED DEVELOPMENT PARTICULARS

It is the owner of erf 19056's intention to convert the existing dwelling house into a new Pre-School consisting of five (5) classrooms. In order to accommodate the new proposed Pre-School, the erf first needs to be rezoned to Community Zone 1 (CZ1) with "Place of Instruction" as primary use. A Site Development Plan (SDP) was prepared by Rooted Living Solutions / PGL.Arch and has been attached as **ANNEXURE A**. For ease of reference an extract of the SDP has been attached as Figure 2-1

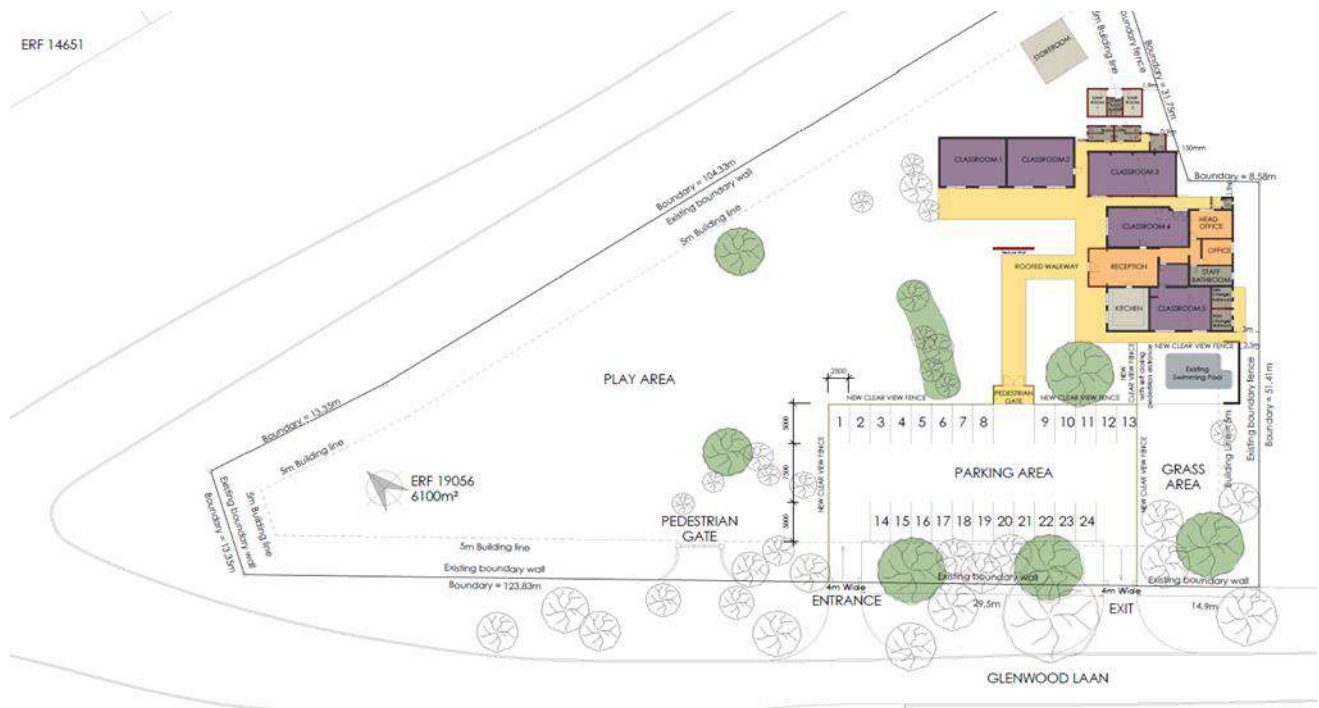


Figure 2-1 Extract of SDP

3 STORMWATER MANAGEMENT

3.1 Design Rationale

Stormwater management on site must allow the orderly discharge of stormwater from storms of both low and high severity. For minor storms with a low severity and high frequency (up to 1:10 year frequency), a pipe or channel system should be provided. This system can be termed the minor system. This system should pipe water to a point from where it can be safely discharged in a controlled manner.

For major storms with a high severity and low frequency (frequency between 1:20 and 1:50 years) the minor system, in conjunction with natural and artificial channels should form the major system. The major system also includes all surfaced roads inside the development. All roadside channels must be designed to collect and transport stormwater to a point from where it forms part of the minor system.

3.2 Rainwater Harvesting

It is envisaged that rainwater harvesting will be applied to stormwater collected from the roof of the buildings during minor storms. Emergency overflows will be included in the design of the rainwater harvesting system to allow controlled discharge of water during major storms. Harvested water can be used for general purposes such as irrigation of landscaped gardens as well as washing and general maintenance of facilities. The process of rainwater harvesting is indicated schematically in Figure 3-1. Rainwater harvesting can be applied to roofs and permeable paving and the advantage of rainwater harvesting is that it reduces the run-off coefficient for those specific areas to zero.

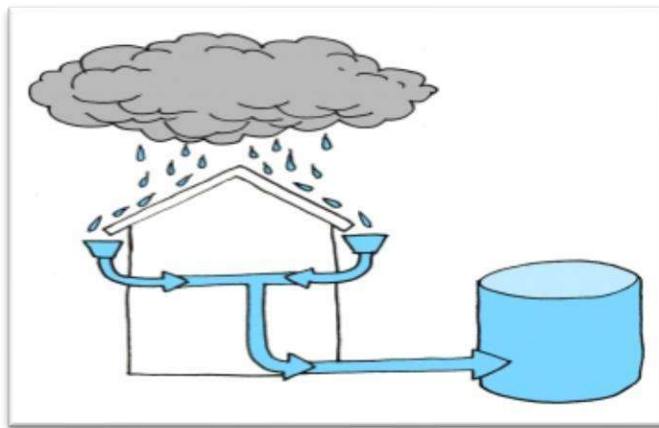


Figure 3-1 - Rainwater Harvesting

3.3 Vegetated Swales

A stormwater buffer strip should be created along the low side of the parking development. Within this buffer strip, allowance should be made for vegetated swales into which stormwater can be discharged. Vegetated swales are shallow channels that slows the stormwater run-off and directs it to an area where it can infiltrate. The swales will receive drainage from the roads, sidewalks, parking areas and all hardened surfaces. The use of plants within the swale will help to trap sediment, remove pollutants and prevent erosion. A typical detail of a swale with subsoil drainage pipe is indicated schematically below:

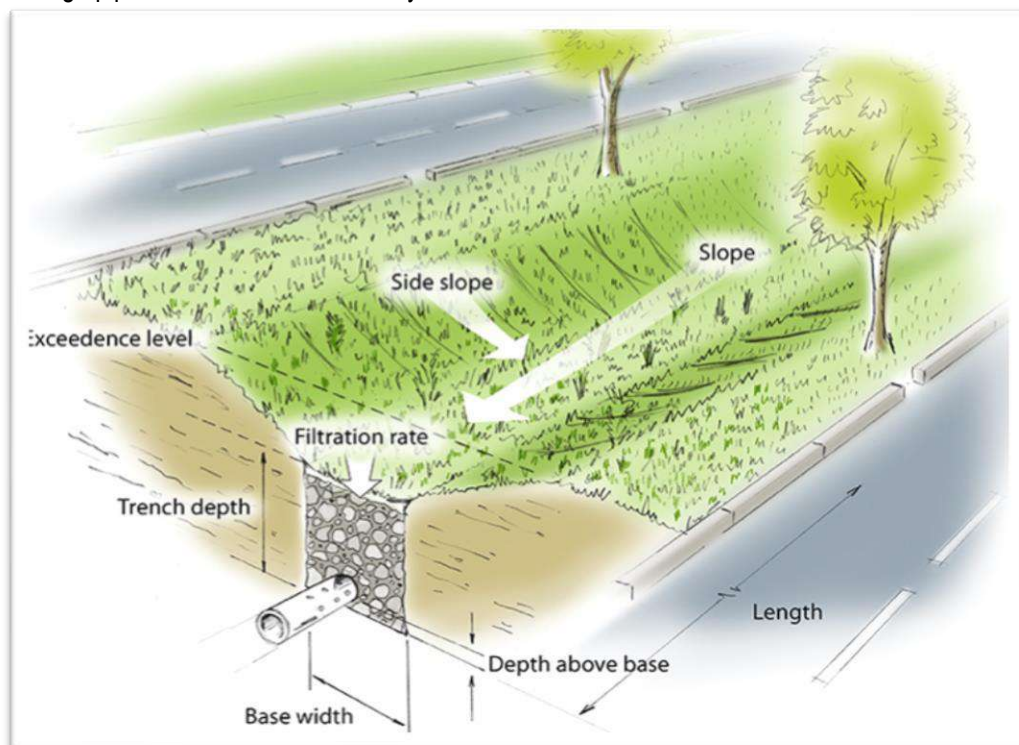


Figure 3-2 - Schematic representation of Vegetated Swale

Stepped energy dissipaters can be further incorporated into the grassed swales to help reduce stormwater

velocities and increase aquafer replenishment.



Figure 3-3 - Examples of Stepped Energy Dissipaters

3.4 Energy Dissipation

Energy dissipation blocks must be installed at all stormwater outlets. These structures assist in reducing the velocity of stormwater discharged at the outlet point. These structures can take the form of formal concrete blocks or more natural stone pitching. The application of grassed blocks could also be investigated as part of the design stage.



Figure 3-4 - Energy Dissipaters

4 FLOOD ESTIMATION

4.1 Pre-Development Runoff

Currently, the site is developed and is covered with permeable and impermeable areas or conditions (refer to Figure 4-1). The impermeable area covers 35% of the site, which is your buildings and hardstands. The general drainage philosophy of buildings is that the roof water will be drained via downpipes directly into the stormwater channels (see Figure 4-3) and conveyed to a pond. A portion of this run-off water infiltrates into the grass and the others flow towards the pond. The pond is situated at the back of the neighbour's erf (see Figure 4-2). The run-off water from the hardstands is also conveyed via the channels and natural surroundings to the pond. The permeable area covers 65% of the erf meaning at that area water mostly infiltrates.



Figure 4-1- Stormwater system

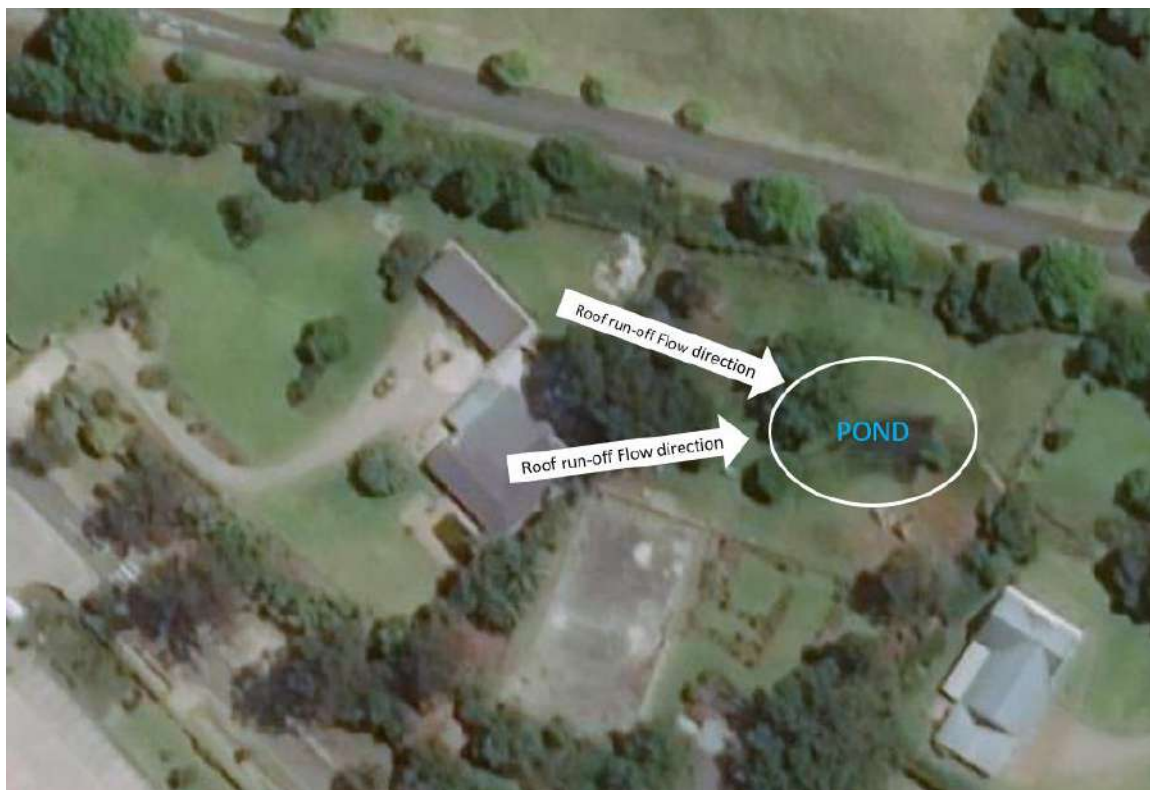


Figure 4-2 - Discharge direction

The Figures below show the current stormwater infrastructure on the erf. The stormwater channels direct the run-off water to discharge at the low points which then flow to the ponds and a portion of the water infiltrate into the grass and vegetation.



Figure 4-3 Stormwater infrastructure

Due to the relatively small catchment area ($<1\text{km}^2$) the Rational Method of flood estimation can be used to estimate pre- and post-development stormwater run-off volumes. This method, was first introduced in 1889, is still used in many engineering offices across the world. Even though it has frequently come under criticism for its simplistic approach, no other drainage design method has received such widespread use.

4.2 Post Development Runoff

In the future, parking areas and roads will be constructed of impervious materials such as asphalt or paving blocks. These infrastructures will be used to control and channelize stormwater run-off to formal in-situ channel and landscaping areas, from where stormwater will be surface discharged in a controlled manner onto the natural surroundings. The Post-development will further control the stormwater run-off flow by means of implementing rainwater harvesting systems capturing the run-off from the roofs (see Figure 4-4). Rainfall water captured in the concrete channels will be diverted towards the pond as currently occurring onsite. With the proposed post-development stormwater systems, the increase of run-off flow will most likely be small. The amount of water infiltration and run-off flow to the ponds will be similar to the predevelopment system.

Post Development flood estimation will be determined by means of the Rational Method and the volumes compared with that of the pre-development scenario.

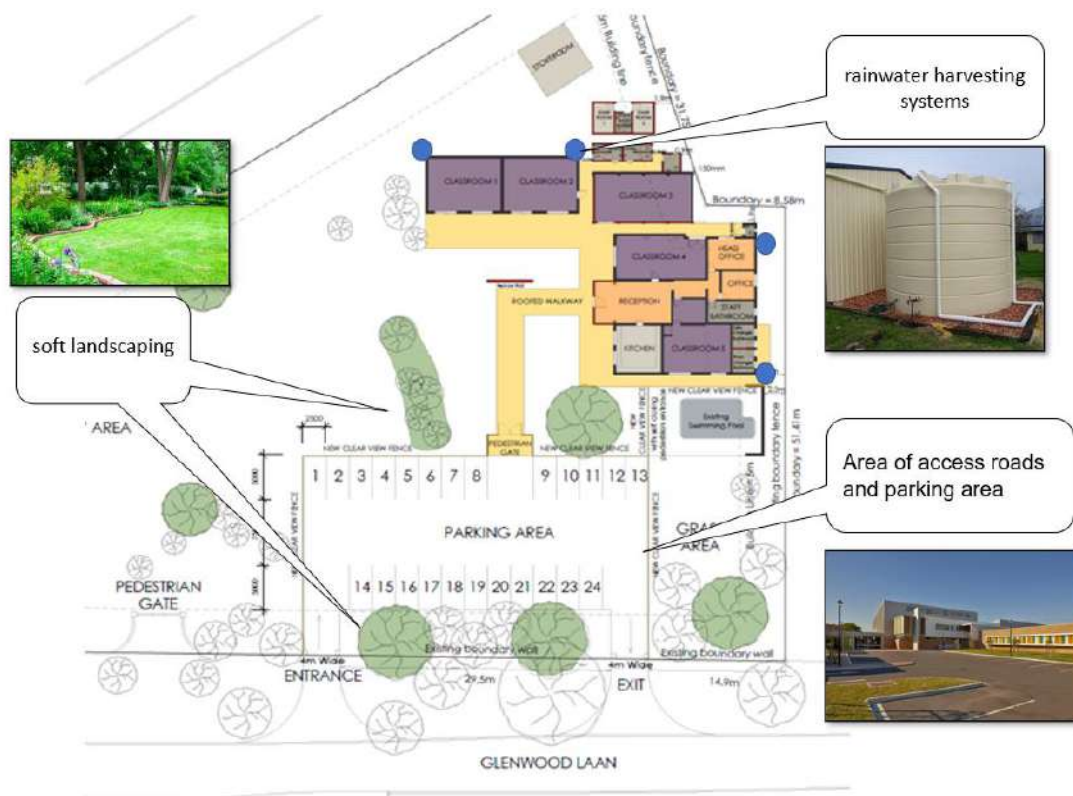


Figure 4-4 Post Development layout

5 RATIONAL METHOD

One of the identifying characteristics of the Rational Method is that the runoff resulting from any rainfall intensity, is a maximum when the rainfall intensity lasts as long or longer than the time of concentration. That is, the entire drainage area does not contribute to the peak discharge until the time of concentration has elapsed.

The formula for estimating the stormwater discharge based on the Rational Method of Flood estimation is indicated below:

$$Q = C \times i \times A$$

where: C = Runoff Coefficient
 i = Rainfall Intensity
 A = Size of Catchment Area (m^2)

5.1 RUNOFF CALCULATION

The proposed site is currently developed and can be categorised as a "Dwelling Unit".

Therefore, the proposed development is expected to control the minimum increase of the amount of stormwater runoff due to additional hard surfaces (such as parking areas and roads) being constructed. Table 5-1 shows the summary of stormwater runoff calculations. According to guidelines laid down by the City of Cape Town (CoCT), and to support Water Sensitive Urban Design Principles, all runoff from new hard surfaces created shall be treated to improve the quality of runoff and the quantity as well as the rate of runoff shall be controlled.

Description	Erf 464			
MAP (mm)	849mm			
Area	0.6ha			
Design Period	1:5 years			
Runoff (l/s)	Pre-Development		Post Development	
	Q 1:5	1:20	1:5	1:20
	9	24	10	25
Dispersal	Existing pond		Existing pond	

Figure 5-1 Runoff Calculations

6 RUN-OFF QUALITY

The possible sources of pollutants in stormwater fall into three main categories:

- Atmospheric fall-out, both wet and dry, including dust particles and transported soils.
- Erosion of catchment materials from buildings and pavements,
- Transported materials from spills and littering.

The following design principles should therefore be implemented to reduce stormwater pollution and increase run-off quality.

Energy dissipation measures at outlet structures.

Energy dissipaters, in the form of natural stone pitching or any other similar approved system, must be installed to reduce the speed of discharged stormwater at the outlets. This allows suspended solids to be deposited at the outlets and reduces the possibility of topsoil erosion.

Vegetated/Grassed Swales.

The grass and vegetation growing within the grassed swales, reduce the speed of the discharged stormwater and allow any suspended soils to be deposited in the vegetation. These swales are also capable of absorbing pollutants within certain limits. They are of value in attenuating floods and have the added advantage of producing a unique ecosystem. Exposure to UV-rays from the sun allows further disinfection of any biological pollutants that might be present in the stormwater, while the constant vegetation cover provides shade to limit any increase in water temperature. Swales should be designed and constructed with high infiltration rates in mind, to allow the stormwater to seep into the ground.

Removal of Litter

Street cleaning and manual removal of litter must take place on a regular basis.

7 STANDARDS AND SPECIFICATIONS

All materials specifications must comply with the applicable SANS specifications. All construction work must comply with at least the SANS 1200 specifications or better.

8 CONCLUSIONS

The planning of stormwater design elements must always be seen as a holistic process which incorporates much more than the infrastructural elements required in adequately dealing with stormwater. It affects a range of environmental goals and management principles and aims not only to mitigate negative impacts, but actively promote positive modifications in its application.

The design approach to be adopted for the proposed development and as discussed above, can be summarised as follows:

- Promotion of on-site infiltration.
- Minimise concentration of stormwater.
- Maintain pre-development run-off levels as far as possible.
- Enforcement of management principles.
- Identify escape routes for major floods.
- Responsible discharge of stormwater into downstream systems; and

By implementing the principles highlighted in this report, it is possible to reduce the post development runoff and the stormwater flow safely and legally.

9 REFERENCES

- 1) Guidelines for Human Settlement Planning and Design, *Department of Housing*, 2000 CSIR
- 2) Drainage Manual 5th Edition, *The South African National Roads Agency Limited*, 2006
- 3) Guidelines for Urban Stormwater Management UTG 4, *Committee of Urban Transport Authorities*, 1999.
- 4) Introduction to Flood Hydrology, *J Haarhoff and AM Cassa*, 2009.
- 5) South African Steel Construction Handbook, *The South African Institute of Steel Construction*, 1999.
- 6) South African Supreme Court of Appeal Judgement, *Pappalardo v Hau* (63/08) [2009] ZASCA 160 (30 November 2009)
- 7) City of Cape Town Management of Urban Stormwater Impacts Policy – Version 1.1, 2009.
- 8) South African Guidelines for Sustainable Drainage Systems (Armitage et al., 2013) which was based on a review of international guidelines and includes typical designs.

ANNEXURE A SITE DEVELOPMENT PLAN

**BACKGROUND INFORMATION DOCUMENT TO NOTICE OF INTENT TO DEVELOP (NID) IN TERMS
OF SECTION 38(1) OF THE NATIONAL HERITAGE RESOURCES ACT, 1999 (ACT 25 OF 1999)**

**PROPOSED DEVELOPMENT OF ERF 19056 (GLENWOOD), GEORGE DISTRICT AND
MUNICIPALITY**



On Behalf of: MJL Heunes

October 2021

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STÉFAN DE KOCK

PERCEPTION Planning

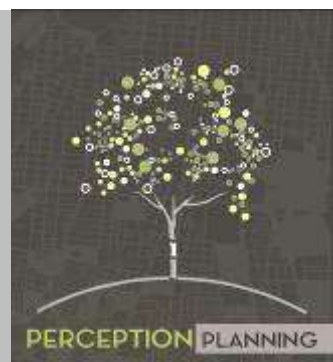
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PERCEPTION Planning

URBAN & REGIONAL PLANNING - ENVIRONMENTAL PLANNING - HERITAGE IMPACT ASSESSMENT - URBAN DESIGN

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3. Aerial image of Erf 19056
4. Extract from 1939 SG Diagram
6. 1957 Aerial imagery

REFERENCES and ACKNOWLEDGEMENTS

1. Cape Town Archives
2. George Museum Archives
3. Kathleen Schulz, Southern Cape Historian
4. Surveyor General Office

ABBREVIATIONS

1. NGSI – National Geo-Spatial Information, Department of Rural Development and Land Reform, Mowbray
2. HWC – Heritage Western Cape
3. NHRA – National Heritage Resources Act, 1999 (Act 25 of 1999)
4. HIA – Heritage Impact Assessment
5. HWC – Heritage Western Cape
6. PHS – Provincial Heritage Site

COVER: Extract from Aerial Survey 403 of 1957, Flight Strip 6, Image 3259 (Source: National Geo-Spatial Information, Department of Rural Development and Land Reform, Mowbray).

1. INTRODUCTION

PERCEPTION Planning was appointed by Marthinus Johannes Lourens Heunes (being the registered property owner) to submit to Heritage Western Cape (HWC) a Notice of Intent to Develop (NID) to in terms of Section 38(1) of the National Heritage Resources Act, 1999 (Act 25 of 1999) with relation to the proposed residential development on the subject property. Copies of the Power of Attorney, Title Deed and relevant SG Diagrams are attached as part of **Annexure 1**.

The cadastral land units subject to this application are as follows:

- Erf 19056, George District and Municipality, measuring 6,100m², registered to Marthinus Johannes Lourens Heunes and held under title deed T 49715/2021.

2. BRIEF DESCRIPTION OF STUDY AREA

The subject property (6,100m² in extent) is situated ± 2.75 km east of the George historic town centre and along the boundary between Loerie Park (predominant low density residential suburb) and Glenwood (very low density "residential estate") as illustrated with **Figure 1**.

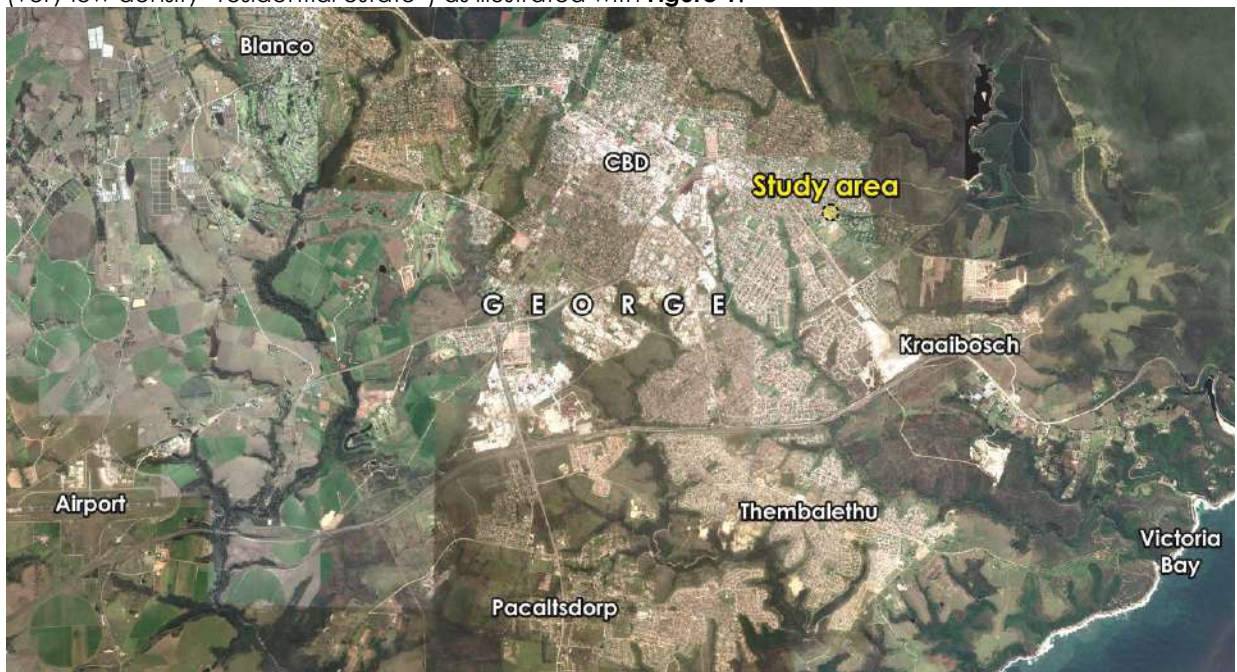


Figure 1: Study area location within broader urban context (Google Earth, 2018, as edited)



Figure 2: Present urban context within direct proximity of Erf 19056 (George ArcGIS, 2018, as edited)

The triangular-shaped corner property is defined by Madiba Drive (leading to the Nelson Mandela University George campus) to the north and Glenwood Avenue to the south (**Figure 2**). Madiba Drive was formerly named "Saasveld Road". Glenwood Avenue serves as an access road to the rest of Glenwood and the developing Kraaibosch area beyond. Current vehicular access to the property is off Glenwood Avenue via Saasveld Road and the N9/ Knysna Road.



Figure 3: Study area within its present urban context (George ArcGIS, 2018, as edited)

The property is relatively level and mostly overgrown by kikuyu grass. The modern (gabled) dwelling and associated outbuildings are situated on the easternmost portion whilst the western portion remains vacant. A row of trees line the northern boundary along Madiba Drive, the road surface of which is slightly elevated above that of Erf 19056. Several large bluegum trees were noted along the southern boundary (Glenwood Avenue) (**Figure 3**).

Save for a few small group housing complexes along Madiba Drive, existing land use within the direct proximity of Erf 19056 is slanted towards education (private secondary school) and low-to-very low density residential development (Loerie Park and Glenwood residential suburbs). Photographs of the study area and its direct environs are attached as part of **Annexure 2** hereto.

3. DESCRIPTION OF DEVELOPMENT

The proposal is for the establishment of a crèche & aftercare facility (for approximately 100 children) on the property. The facility would primarily be accommodated within the two existing buildings situated on the property though provision would also be made for e.g. outdoor children playing equipment and a parking area able to accommodate ± 23 parking bays as required by the local planning authority (i.e. George Municipality).

Implementing the proposal prompts the following land use planning application to be submitted to the local planning authority, thus triggering development activities listed in terms of Section 38(1) of the NHRA:

- Rezoning in terms of Section 15(2)(a) of the George Municipality: Land Use Planning By-law (2015) from Agriculture Zone II (small holding) to Community Zone I (place of instruction);
- Permanent departure in terms of Section 15(2)(b) of the George Municipality: Land Use Planning By-law (2015) for the relaxation of the eastern side boundary building line from 5.0m to 1.9m, 0.015m and 3.0m for the existing structures to be used for the place of instruction.

The conceptual site development plan is attached as Annexure 3 to this report.

4. STATUTORY PLANNING CONTEXT

According to the George Integrated Zoning Scheme the property is zoned Agricultural Zone II (Smallholding). According to this spatial development framework the study area is located within the urban edge and urban area of George and is indicated as being earmarked for "Rural Occupation". The subject site has not been particularly addressed in the GSDF. The proposal appears to be consistent with the overall objectives of the George SDF (May 2013).

During a pre-application consultation the planning authority considered that the "proposed cheche and afterschool facilities may be reconcilable within a residential and agricultural environment"¹.

5. HISTORIC BACKGROUND

Independent historic background research undertaken focussed on primary sources obtained through the George Museum and Cape Town Archives, Deeds Office and Surveyor General's Office.

5.1 Early establishment of George

George Town was established on land registered as a loan farm in 1760 named 'Post Rivier' in favour of Koert Grobbelaar². Jan Coetsee (Koert Grobbelaar's stepson) extended the lease until 1782 at which time Jan Coetsee died³. In 1777 the Dutch East India Company (DEIC) had made a decision to establish a new Company Post to monitor the felling of indigenous woods⁴. The DEIC annexed the farm Post Rivier in order to further establish the boundaries of the woodcutters post.

Although George was established as a town in 1811, the first freeholds were only granted in 1814 by which time the town grid had been laid out. It has not been established which surveyor was responsible for the layout of the town, but appears to have been J H Voorman⁵. Voorman's basic layout of the town, probably with some assistance of Van Kervel, is said to be similar to that of Uitenhage although with various improvements. The layout consisted of two parallel streets namely York Street (±60m wide but increasing to ±100m width at the top end) and a second, narrower Meade Street. These two streets run into a cross street, being Courtenay Street in which the main public buildings dating back to the Colonial Period were situate. Expansion of this early grid only followed much later (early 1900's) and included further street blocks added to the east of Meade Street.

6.2 Erf 19056

From a colonial perspective, the property was part of the Remainder of the Consolidated farm known as "Brakfontein" (not to be confused with the early loan farm Brakfontein 236), granted by quitrent to S Fend during September 1814⁶ and measuring 15 morgen 406 square roods (± 56ha). The diagram does not indicate any buildings on the subject property. Brakfontein was again subdivided in 1939 to create Erf 3042, which was transferred to EW Sherring during July 1939. Worthy of note is that adjoining Erf 3043 was transferred on the same date to Robert S Wood, being the likely origin of the name "Glenwood". The property former known as "Brakfontein" bordered directly onto the original George Commonage as formally framed through the relevant 1920 Surveyor General diagram⁷ (refer to **Figure 4**).

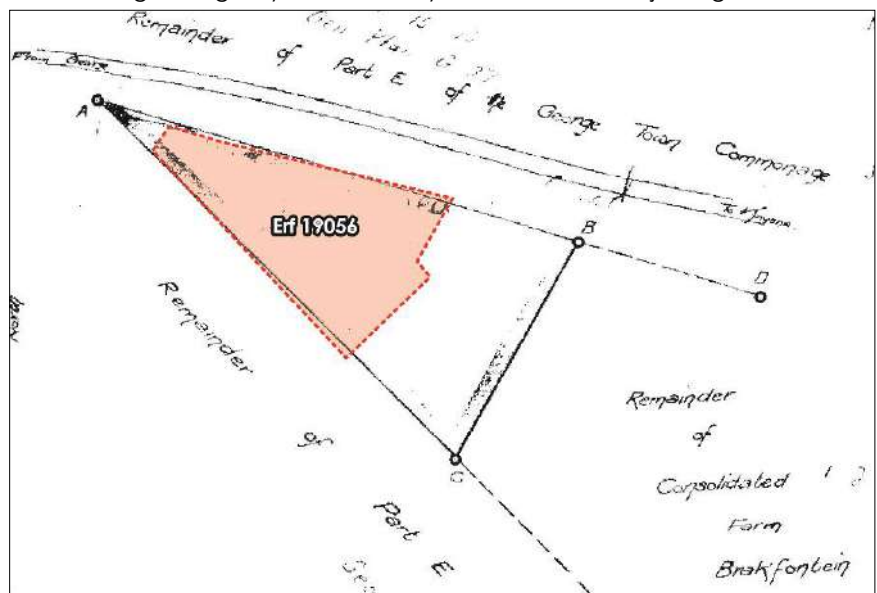


Figure 4: Approximate location of Erf 19056 in relation to former Erf 3042, which was subdivided from the remainder of the consolidated farm Brakfontein (Source: SG Diagram 2567/1939)

¹ Marilize de Bruyn Planning, October 2021

² Cape Archives (CA) RLR 15/2 pg 511

³ CA MOOC8/18.49a

⁴ CA : Resolutions : 8th July 1777

⁵ Cape Town Archives (CTA) CO 2576 1811, July 3rd. Letter from Landrost A van Kervel to Colonial Office requesting plan of Town layout compiled by Voorman to be returned as it was the only copy made.

⁶ SG Diagram 2566/1939

⁷ Cape Town Deeds Office George Quitrents 15/15. Surveyor General Diagram number B/1293/1920

Basic historical background research did not identify or highlight any other significant heritage-related aspects related to this particular portion of land. It is unlikely that detailed archival research would provide further meaningful insight into former use and/or broader understanding of heritage-related themes of the area.

7. HERITAGE RESOURCES AND ISSUES

No structures older than 60 years, potential burial and/or any potential heritage resources were noted during fieldwork undertaken on 11th September 2018. Originally a L-shaped structure with hipped roof and gabled ends, the modern main dwelling has been extended with a flat-roofed section. Similarly, the existing outbuilding with flat roof is of modern construction.

Earliest aerial imagery (1936) for the area does not show any structures on the property or its direct vicinity. Subsequent (1957) aerial imagery for the area shows the property being part of a cultivated field but devoid of any structures. Two rows of organised housing (most likely related to former Kraaibosch forestry industry) is evident directly southwest of the site on the present private school premises. Modest buildings (dwellings) together with gardens are visible a short distance northwest of the site. The alignments of Madiba Drive and Glenwood Avenue had been established at this time (**Figure 5**).

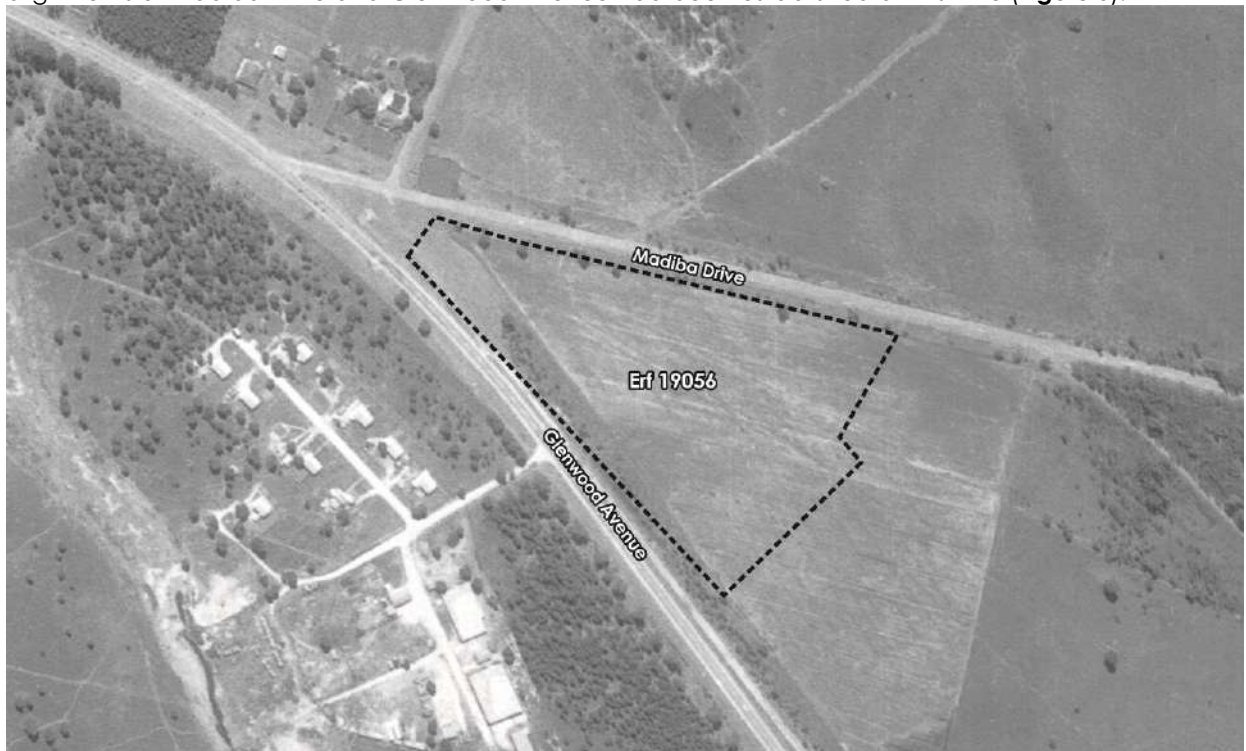


Figure 5: Extract from **1957 aerial imagery** (high resolution version) alludes to former land use on and within the direct proximity of the site (Source: Flight 203, Flight Strip 6, Image 3259)

8. RECOMMENDATION

Having regard to the above assessment it is evident that the proposed development, as outlined in Section 3 of this report, would not have an impact of heritage resources of cultural significance and that the proposal may be allowed to proceed without further heritage-related studies.

PERCEPTION Planning
20th October 2021

SE DE KOCK
Hons (TRP) EIA Mgmt (IRL) PrPin PHP

Our Ref: HM/ EDEN / GEORGE / ERF 19056
Case No: 21102009SB1021E
Enquiries: Stephanie-Anne Barnardt
E-mail: stephanie.barnardt@westerncape.gov.za
Tel: 021 483 5959



Stéfan de Kock
 perceptionplanning@gmail.com, martin.heunes1@gmail.com

RESPONSE TO NOTIFICATION OF INTENT TO DEVELOP: FINAL
In terms of Section 38(1) of the National Heritage Resources Act (Act 25 of 1999) and the Western Cape
Provincial Gazette 6061, Notice 298 of 2003

NOTIFICATION OF INTENT TO DEVELOP: PROPOSED DEVELOPMENT ON ERF 19056, GEORGE, SUBMITTED IN TERMS OF SECTION 38(4) OF THE NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)

CASE NUMBER: 21102009SB1021E

The matter above has reference.

Heritage Western Cape is in receipt of the above application. This matter was discussed at the Heritage Officers meeting held on 4 November 2021.

You are hereby notified that, since there is no reason to believe that the proposed development on Erf 19056, George will impact on heritage resources, no further action under Section 38 of the National Heritage Resources Act (Act 25 of 1999) is required.

However, should any heritage resources, including evidence of graves and human burials, archaeological material and paleontological material be discovered during the execution of the activities above, all works must be stopped immediately, and Heritage Western Cape must be notified without delay.

This letter does not exonerate the applicant from obtaining any necessary approval from any other applicable statutory authority.

HWC reserves the right to request additional information as required.

Should you have any further queries, please contact the official above and quote the case number.

.....
 Colette M Scheermeyer
 Deputy Director



Heritage Western Cape
Erfenis Wes-Kaap
ILifa leMveli leNtshona Koloni

03 Dec 2021

www.westerncape.gov.za/cas

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L Daniels
Acting Director: Civil Engineering Services
E-mail: ldaniels@george.gov.za
el: +27 (0)44 801 9278

Reference number: Erf 19056, George
Date: 23 June 2022

Enquiries: Ricus Fivaz
Tel: 044 801 9350

**THE DEPARTMENT OF TRANSPORT AND PUBLIC WORKS
ROAD NETWORK MANAGEMENT
PO BOX 2603
CAPE TOWN
8000**

ATTENTION: MR. SW CARSTENS

DEPROCLAMATION OF THE PROVINCIAL ROAD OP06887

With reference to the above-mentioned application and the Provincial letter of 9 May 2022, reference TPW/CFS/RP/LUD/REZ/UB-12/144 (Job 29110), the following:

With regards to condition 2, the George Municipality may in future be in a position to apply for the closure (Deproclamation) of the Provincial road OP06887, subject to the following:

- Upgrading of the remainder of road OP06887 to an acceptable Municipal cross section and standard.

The timing of the construction of roads included in the Kraaibosch Roads Master Plan is dictated, and financed, by private development within the Kraaibosch ring-fenced area. The construction of the remainder of Provincial road OP06887 to a Municipal standard will therefore be dependent on if and when private development occurs that requires the upgrading of this portion of road.

Yours faithfully

L Daniels
Acting Director: Civil Engineering Services



RL Daniels
Acting Director: Civil Engineering Services
E-mail: rldaniels@george.gov.za
Tel: +27 (0)44 801 9278

Reference number: Erf 19056, George
Date: 03 August 2022

Enquiries: Ricus Fivaz
Tel: 044 801 9350

**THE DEPARTMENT OF TRANSPORT AND PUBLIC WORKS
ROAD NETWORK MANAGEMENT
P.O BOX 2603
CAPE TOWN
8000**

ATTENTION: MR. SW CARSTENS

ERF 19056: APPROVAL OF DEVELOPMENT AND REZONING

With reference to the letter from Transport and Public Works dated 02 May 2022 (Ref:TPW/CFS/RP/LUD/REZ/SUB-12/144 (Job 29110) bullet point number 4, the George Municipality was requested to indicate which accesses must be approved and motivate why the designs must be approved in line with George Municipality's standards and planned development along the road.

This letter serves to confirm that the George Municipality is in support of the rezoning of Erf 19056 to a Community Zone 2 (CZ2) with primary use as Place of Instruction. The proposed development is situated in Glenwood Avenue (OP06887) of which the Western Cape Government is the Road Authority.

The George Municipality wishes to submit the Site Development Plan (SDP) and the Traffic Impact Assessment (TIA) of Erf 19056 (report number 21-123-TIA rev 1 dated July 2022) for consideration and approval. The submitted SDP and TIA linked to the proposed development is in line with both the George Municipality's bylaws, standards and the Western Cape Government Access management guidelines.


The Municipality is satisfied with the recommendations made in the report and the proposed SDP for the development. However, the George Municipality is not in support of the opening of OP06887 at kilometer 1.3 as a through road, which is in line with the recommendations of the above-mentioned TIA. This was confirmed in our letter titled Deproclamation of the provincial road OPO6887 dated 23 June 2022.

The George Municipality may however in future decide to apply for the full transfer (Deproclamation) of the Provincial Road OP06887, subject to the following:

- Upgrading of the remainder of road OP06887 to an acceptable Municipal cross section and standard.
- When private development within the Kraaibosch ring-fenced area occurs that requires the upgrading of this portion of road (to Municipal standards).

For any further queries please do not hesitate to contact Mr Ricus Fivaz on 044 801 9350.

Yours faithfully



RL Daniels

Acting Director: Civil Engineering Services





Ref: TPW/CFS/RP/LUD/REZ/SUB-12/144 (Job 29110)

The Municipal Manager
George Municipality
PO Box 19
GEORGE
6530

Attention: Ms J Fourie

Dear Madam

REZONING AND DEPARTURE: ERF 19056, GLENWOOD AVENUE, GLENWOOD, GEORGE MUNICIPALITY AND DIVISION

1. The following refer:
 - 1.1. Marilize De Bruyn Planning's letter 385/G21 dated 12 November 2021 to this Branch.
 - 1.2. Urban Engineering's traffic impact investigation 21-123_TIA Revision 0 dated October 2021.
2. Minor Road 6887 (OP06887), for which this Branch is the Road Authority, is affected by this application. OP06887 used to be a road traversing through a rural environment, typical of a road for which this Branch will be a Road Authority within the Western Cape Province. Urban development within George Municipality's development boundaries caused OP06887 to function within the Municipality's network of municipal street, which is why this Branch is not in support of the Municipality approving further developments along that road without a clear indication at which stage George Municipality will act responsibly and apply for the closure (deproclamation) of the provincial road status to accept and manage it as a municipal street.
3. This Branch offers no objection to this development to create a place of instruction (crèche with an after-care facility that must be limited to 100 children), provided that George Municipality enters into a formal agreement with this Branch that clearly stipulates at which stage OP06887 will continue to exist as street under the sole jurisdiction of George Municipality.
4. Until the process for OP06887 to cease to exist is completed in full (as per paragraph 3) will this Branch insist on the following:

- 4.1. George Municipality must indicate to this Branch which access(es) must be considered for approval – in line with George Municipality's accepted safe standards and the planned development along that road.
- 4.2. George Municipality must motivate to this Branch to consider the approval of all the designs (that must be compiled by adequately registered civil engineering professionals) affecting the OP06887 road reserve and / or the adjacent 5m Building Line (Roads Ordinance 19 of 1976).

Yours Sincerely



SW CARSTENS

For DEPUTY DIRECTOR-GENERAL: ROADS

DATE: 09 MAY 2022

ENDORSEMENTS

1. George Municipality

Attention: Ms J Fourie (e-mail: jfourie@george.gov.za)

2. Marilize De Bruyn Planning

Attention: Ms M de Bruyn (e-mail: marilize@mdplanning.co.za)

3. Garden Route Municipality

Attention: Mr JG Daniels (e-mail)

4. District Roads Engineer
Oudtshoorn

5. Mr E Burger (e-mail)

6. Mr SW Carstens (e-mail)



**Western Cape
Government**

Transport and Public Works

Vanessa Stoffels

Chief Directorate: Road Planning

Vanessa.Stoffels@westerncape.gov.za | Tel: 021 483 4669

Ref: TPW/CFS/RP/LUD/REZ/SUB-12/144 (Job 29110)

The Municipal Manager
George Municipality
PO Box 19
GEORGE
6530

Attention: Ms J Fourie

Dear Madam

REZONING AND DEPARTURE: ERF 19056, GLENWOOD AVENUE, GLENWOOD, GEORGE MUNICIPALITY AND DIVISION

1. The following refer:
 - 1.1. Marilize De Bruyn Planning's letter 385/G21 dated 12 November 2021 to this Branch.
 - 1.2. Urban Engineering's traffic impact investigation 21-123_TIA Revision 0 dated October 2021.
 - 1.3. This Branch's letter TPW/CFS/RP/LUD/REZ/SUB-12/144 (Job 29110) dated 9 May 2022 to you.
 - 1.4. George Municipality's letter Erf 19056, George dated 23 June 2022 to this Branch.
 - 1.5. George Municipality's letter Erf 19056, George dated 3 August 2022 to this Branch.
2. Minor Road 6887 (OP06887), for which this Branch is the Road Authority, remains to be affected by this application.
3. Subject to George Municipality's letters of 23 June 2022 and 3 August 2022 remains this Branch to offer no objection to this development and approves this Branch the two accesses off OP06887 at ±km0.09 LHS (a left-in only access) and at ±km0.15 LHS, subject to:
 - 3.1. Except for the two abovementioned approved accesses may no other access off the Proclaimed Provincial Road Network to this Erf 19056 be created or continue to exist.

- 3.2. (If applicable) George Municipality motivating the approval of the access designs and all infrastructure within the adjacent 5m Building Line to this Branch.
- 3.3. Advertisements visible from the Proclaimed Provincial Road Network carrying the approval of the Local Authority in terms of its approved Advertising By-Law.
- 3.4. The developer being responsible to cover all the costs towards this development where it affects the Proclaimed Provincial Road Network.

Yours Sincerely



SW CARSTENS

For DEPUTY DIRECTOR-GENERAL: ROADS

DATE: 25 AUGUST 2022

ENDORSEMENTS

1. George Municipality

Attention: Ms J Fourie (e-mail: jfourie@george.gov.za)

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Attention: Ms M de Bruyn (e-mail: marilize@mdplanning.co.za)

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5. Mr E Burger (e-mail)

6. Mr SW Carstens (e-mail)

TRAFFIC IMPACT INVESTIGATION

PROPOSED REZONING OF ERF 19056, GEORGE

Report Number 21-123_TIA



Date: July 2022

Revision (1)

EXECUTIVE SUMMARY

Erf 19056 (George, Western Cape) is currently zoned for agricultural purposes (AZ2). It is the intention of the new owner, to rezone the property to Community Zone 2 (CZ2) with primary use as *Place of Instruction*. The rezoning is required in order to accommodate the new proposed Outeniqua Pre-School, consisting of 5 classrooms. The capacity of the proposed Outeniqua Pre-School will be limited to 100 kids.

Operational analysis based on the current (Status Quo) traffic counts, indicated that Glenwood Avenue (OP6887) is currently experiencing unacceptable poor Level of Service during both the AM and NM peak hour periods. The Status Quo traffic volumes are the result of Glenwood House School, which is situated opposite the new proposed erf 19056 pre-school.

The poor status quo Level of Service is mainly attributed to the fact the OP6887 has been closed at kilometre 1.3 and can no longer acts as a through road. All motorist wanting to reach Glenwood House School therefore needs to access the school from the west, via the Madiba Drive (MR355) / Glenwood Ave (OP6887) /Van Kervel Intersection.

This report supports the development of the new proposed Outeniqua Pre-School, subject to the introduction of a furniture zone next to the pedestrian sidewalk as well as minor changes to the proposed parking layout.

The report further proposes that the closure of OP6887 at kilometer 1.3 should be removed by the relevant road authority. This will help accommodate the additional traffic generated by the proposed development by creating two approaches (East and West) to the development. This will greatly improve the current level of service along OP6887.

COVER LETTER

It is herewith certified that this Traffic Impact Investigation has been prepared according to requirements of the TMH 16 (Committee Draft 2.0 – May 2018) South African Traffic Impact and Site Traffic Assessment Manual.

This Traffic Assessment was undertaken by:

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QUALITY ASSURANCE DATA

Report Title:	PROPOSED REZONING OF ERF 19056, GEORGE
Client:	Outeniqua PreSchool and Aftercare (Pty) Ltd
Report Number:	21-123_TIA
Revision Number	Revision (1)

Revision History

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			Natalie Heunis	Outeniqua Preschool and After Care	Email	.pdf
			Marlize de Bruyn	MdB Planning	Email	.pdf
20 July 2022	1	Frans v Aardt	Zuko Vanqa	George Municipality	Email	.pdf
			Natalie Heunis	Outeniqua Preschool and After Care	Email	.pdf
			Marlize de Bruyn	MdB Planning	Email	.pdf

Prepared by:

Frans Rudolf van Aardt (B.Ing, M.Ing, Pr.Eng)
(on behalf of Urban Engineering (Pty) Ltd)

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LIST OF ABBREVIATIONS

TIA	Traffic Impact Assessment
SANRAL	South African National Roads Agency SOC Limited
RNIS	Road Networks Information System
PGWC	Provincial Government of the Western Cape
AMP	Access Management Plan
AMG	Access Management Guidelines (2016)
RAG	Road Access Guidelines (2002)
RDE	Roadside Development Environment
GLA	Gross Leasable Area
SATGRM	South African Trip Generation Rates Manual
LOS	Level of Service
DoT	Department of Transport
RDE	Roadside Development Environment
MR	Main Road
DR	Divisional Road
RNIS	Road Network Information System
GRZ1	General Residential Zone 1
SRZ1	Single Residential Zone 1
BZIII	Business Zone 3

1 INTRODUCTION

Urban Engineering (Pty) Ltd was appointed by Outeniqua Pre-School and Aftercare (Pty) Ltd to undertake a Transportation Investigation pertaining to the proposed rezoning and development of Erf 19056, George.

1.1 PROJECT BENEFIT AND CONTEXT

The site is currently zoned AZ2 (Agricultural Zone 2) and it is the intention of the new owner to change the zoning to CZ1 (Community Zone 1), with primary use as Place of Instruction. After rezoning the site, the current buildings will be converted into a new Pre-School consisting of five (5) classrooms. The development will aim to assist the current shortage of dual medium pre-school facilities within the George area.

1.2 TERMS OF REFERENCE

Transportation investigations essentially need to be undertaken in accordance with the following guidelines:

- National Land Transport Act, 2009 (Government Gazette No. 32110)
- South African Traffic Impact & Site Traffic Assessment Manual (TMH 16 Volume 1, COTO)
- Access Management Guidelines (WCG Dept. Transport and Public Works, 2020)
- Manual for Traffic Impact Studies RR 93/635 (DoT, 1995)

To better align with the recommendations of the TMH16, the Access Management Guidelines recommends that when a development is likely to generate a minimum of 50 additional vehicular trips in a highest hour of its traffic generation, (including passer-by trips) a TIA is required

1.3 PRIMARY OBJECTIVES OF THIS REPORT

This study will look at the effect of the additional traffic generated by the proposed operation, on the surrounding road network. Where necessary, the report will aim to introduce mitigation measures in order to reduce this impact at the site, as well as on the surrounding transportation network.

1.4 STUDY OBJECTIVES

The study objectives are:

- i. Assess the traffic conditions on the existing road network
- ii. Assess the traffic generation effects of the proposal (if any)
- iii. Assess the interface conditions between the road network and the proposed development
- iv. Highlight any traffic concerns resulting from the proposed development (including parking and non-motorised transport)
- v. Make recommendations

1.5 SITE INVESTIGATION

The site was visited by Frans van Aardt from Urban Engineering (Pty) Ltd on 28th September 2021. Relevant measures and inspections were taken during the site visit. A record of some of the photos taken during the site visit has been attached as **ANNEXURE A** to this report.

2 LOCALITY

The site is situated at the intersection of MR0355 (Madiba Drive) and OP6887 (Glenwood Avenue) in the residential area known as Glenwood. The approximate site centre has WGS 84 coordinates of 33°58'6.75"S and 22°29'32.25"E. Although the site is bordered by both MR0355 and OP6887, access to the site is only via OP6887. A basic locality plan has been included as Figure 2-1.



Figure 2-1 - Basic Locality Plan

3 STATUS QUO

The site is currently zoned AZ2 (Agricultural Zone 2) as indicated on the extract (Figure 3-1) from the George Municipality's online GIS viewer.



Figure 3-1 - Current Site Zoning

The OP6887 erf boundary is approximately 124m long while the MR0355 erf boundary is approximately 128m long. The erf is approximately 6,095m² in size and contains a single residential dwelling unit and garage/storage area with a combined area of approximately 380m². Access to the site is via a low volume driveway that connects directly to OP6887. The driveway is situated

approximately 95m from the OP6887/MR0355 intersection and forms a staggered intersection with the existing Glenwood House School Access (refer to Figure 3-2).



Figure 3-2 - Status Quo

4 PROPOSED DEVELOPMENT PARTICULARS

It is the owner of erf 19056's intention to convert the existing dwelling house into a new Pre-School consisting of five (5) classrooms. In order to accommodate the new proposed Pre-School, the erf first needs to be rezoned to Community Zone 1 (CZ1) with "*Place of Instruction*" as primary use. A Site Development Plan (SDP) was prepared by Rooted Living Solutions / PGL.Arch and has been attached as **ANNEXURE B**. For ease of reference an extract of the SDP has been attached as Figure 4-1.

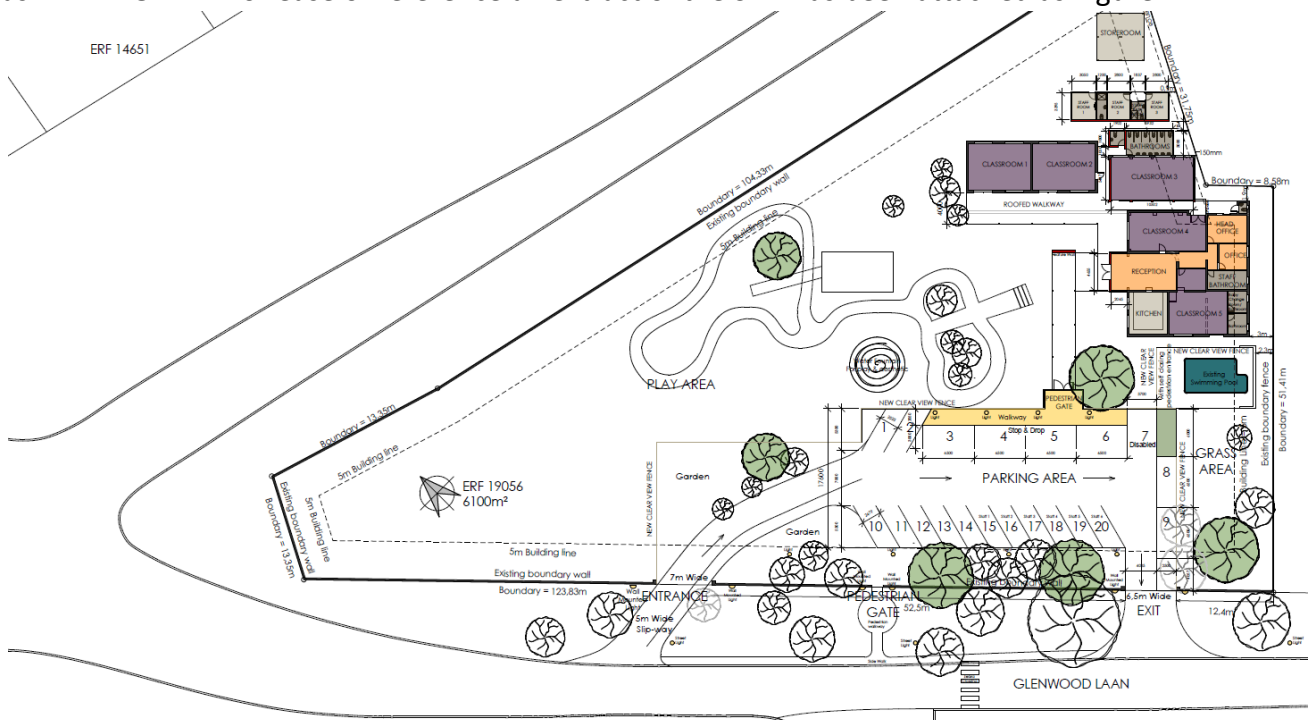


Figure 4-1 - Extract of SDP

It is important to note that the proposed SDP makes provision for a shift in the position of the current site access(driveway). The current site layout is not ideal as it is in the form of an unsafe staggered access configuration. In some cases, staggered intersections provide less points of conflict than normal crossroad configurations. This is however only true if the distance between the two minor roads are sufficient for vehicles to complete their crossing and weaving manoeuvres without causing interference to each other. In the current Glenwood School/erf 19056 scenario, this is unfortunately not the case and the relatively small distance (17m) between the two driveways result in a large intersection envelope that can cause confusion to road users and is therefore more prone to vehicular accidents. (refer to Figure 4-2)

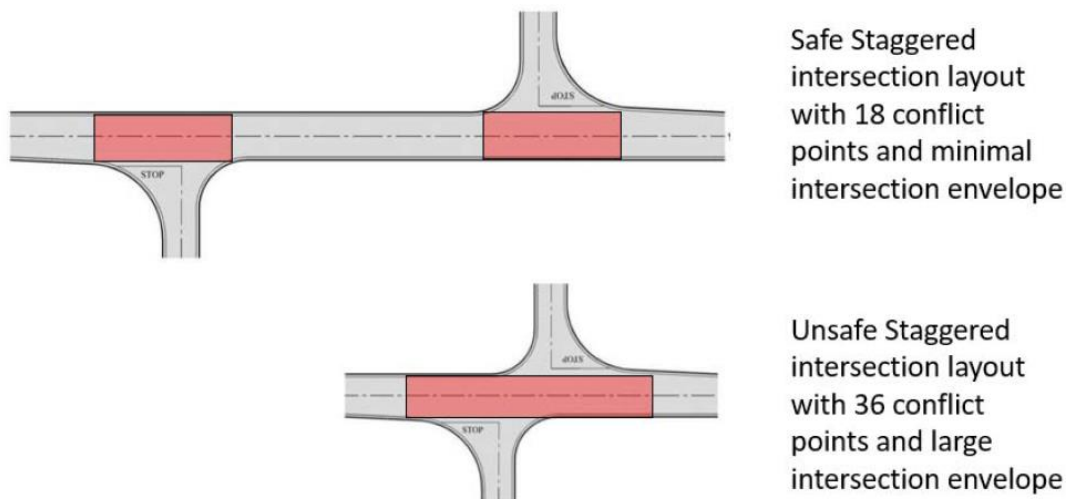


Figure 4-2 - Safe vs Unsafe Staggered Intersection Configurations

5 SURROUNDING ROAD NETWORK

Depending on which guidelines is being used, the nomenclature used in road classification varies slightly. The differences between the terms used in the 2006 Department of Transport (DoT) Guidelines and those specified in the South African Road Classification and Access Management Manual (COTO TRH 26, May 2018), are listed below:

Road Class	Function	DoT 2006 Guidelines	COTO 2012 (TRH 26 Manual)
Class 1	Mobility	Primary Distributor	Principal Arterial
Class 2		Regional Distributor	Major Arterial
Class 3		District Distributor	Minor Arterial
Class 4	Access	District Collector	Collector
Class 5		Access Road	Local Street
Class 6		Non-motorised access way	Walkway

Table 5-1 - Road Classification Nomenclature

Roadways are classified by function on the basis of the priority given to land access versus through-traffic movement. Class 1 and 2 arterial roads provide a predominantly “mobility” function and Classes 4 and 5 roads perform a collector and local “access” function.

The functions of “mobility” and “access” overlap on minor arterials (Class 3 roads). This relationship between access and mobility has been indicated schematically in Figure 5-1.

Access Management is particularly important along Principal, Major and Minor Arterials and other primary roads that are expected to provide safe and efficient movement of traffic as well as limited access to property. However, Access Management is also necessary on lower-order roadways, such as Collector Streets and Local Streets, to address safety considerations, such as sight distance and corner clearance.

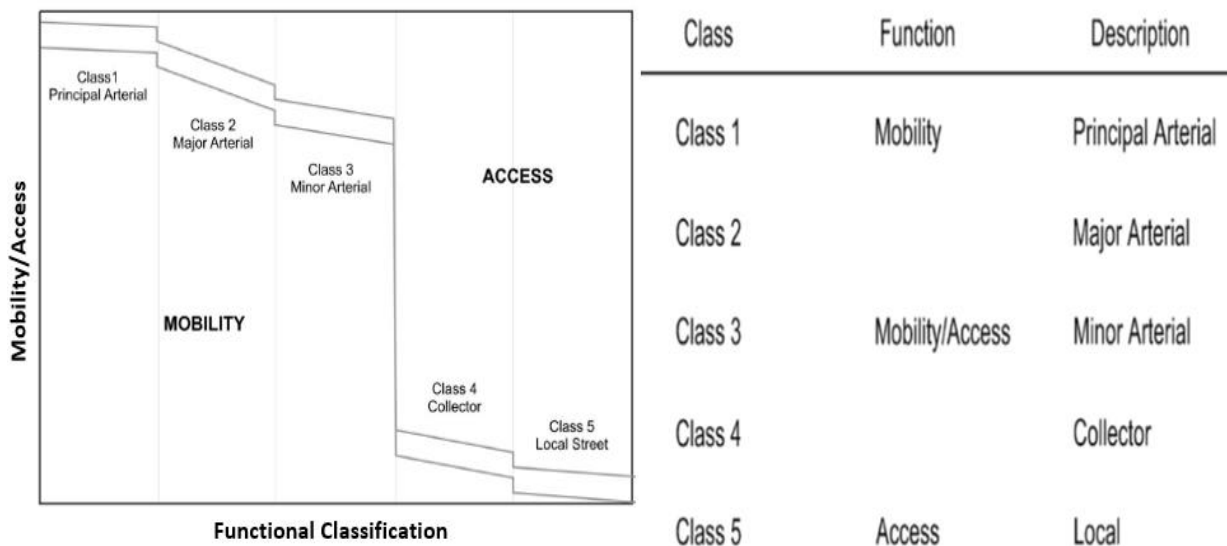


Figure 5-1 - Relationship Between Access and Mobility

5.1 MR0355 (MADIBA DRIVE)

MR0355 (Madiba Drive) falls under the jurisdiction and control of the Western Cape Government. It starts at the intersection with MR002 (Knysna Road) and runs for approximately 70km in a predominantly Eastern direction up to its termination point at the junction with National Road 2 (N2) near the Keytersnek Railway Station (just before Knysna) According to the PGWC's Road Network Information System (RNIS) website, MR0355 is classified as a **Class 3 Minor Arterial**.



Western Cape Provincial Administration Road Log Report

SUMMARY PAGES				
Road Number : MR00355 (MR355)		Start Description: Jct Mun MR2 George	End Description: Jct NR2/8 Keytersnek	End Km: 70.83
ROAD CATEGORY				
Start Km	End Km	Category		
0.00	70.83	MINOR ARTERIALS		
FUNCTIONAL CLASS				
Start Km	End Km	Class		
0.00	70.83	LEVEL3 (TERTIARY)		
RCAM CLASSIFICATION				
Start Km	End Km	Class		
0.00	2.10	U3a		
2.10	70.83	R3a		
STATUTORY WIDTH				
Start Km	End Km	Width		
2.10	70.83	25.00		
ROAD NAME				
Start Km	End Km	Road Name		
2.10	70.83	SAASVELDKYEYTERSNEK		

Figure 5-2 - RNIS extract relating to MR0355

The extent of MR0355 is indicated schematically in Figure 5-2.



Figure 5-3 - Extent of MR0355

The COTO TRH 26 Guidelines specifies the following with regards to Class 3 Minor Arterials:

Urban minor arterials would typically be required to serve traffic in most urban areas, including small towns. In cities and larger towns, the Class U3 arterials would be used to provide connections between districts of the city or town and form the last leg of the journey on the mobility road network, bringing traffic to within one kilometre of its final destination. In small towns, they would be used to provide general overall mobility to the whole town. The arterials can also be used to serve economic activity centres that are not served by Class 1 or 2 arterials.

The Class U3 arterials should also be used to serve as connectors to rural Class 3 routes. They should preferably start and stop at arterials of equal or one higher Class (2 to 3), but can connect to Class 1 principal arterials.

Minor arterials function as through routes on a district scale. While still carrying predominantly through traffic, they serve shorter distance trips with a length of around 2km but can be as short as a single block if connecting higher order routes.

The minor arterials would typically carry volumes of traffic of between 10 000 and 40 000 vehicles per day.

5.2 OP06887 (GLENWOOD AVENUE)

OP6887 (Glenwood Avenue) falls under the jurisdiction and control of the Western Cape Government. It starts at the intersection with MR00355 (Madiba Drive) and runs for approximately 2.2km in a predominantly South-eastern direction up to its termination point within the greater Kraaibosch area. According to the PGWC's Road Network Information System (RNIS) website, OP06887 is classified as a **Class 5 Local Access Road**.

Western Cape Provincial Administration Road Log Report

SUMMARY PAGES				
Road Number : OP06887 (OP6887)		Start Description: Jct MR355 George	End Description: Pieter Koen	End Km: 2.71
MEAN MONTHLY PERSIPITATION				
Start Km	End Km	MMP		
0.00	2.20	60		
ROAD CATEGORY				
Start Km	End Km	Category		
0.00	2.20	LOCAL ACCESS ROADS		
FUNCTIONAL CLASS				
Start Km	End Km	Class		
0.00	2.20	LEVEL5 (TERTIARY)		
RCAM CLASSIFICATION				
Start Km	End Km	Class		
0.00	2.71	R4a		
STATUTORY WIDTH				
Start Km	End Km	Width		
0.00	2.20	20.00		
ROAD NAME				
Start Km	End Km	Road Name		
0.00	2.20	Glenwood		

Figure 5-4 - Extract from RNIS Road Log

At the time of writing this report, OP6887 has been closed off for through traffic at approximately kilometer 1.3. The road closure is not indicated in any of the RNIS documentation pertaining to this road and therefore it is assumed that this is an unauthorized closure, not approved by Western Cape Government.

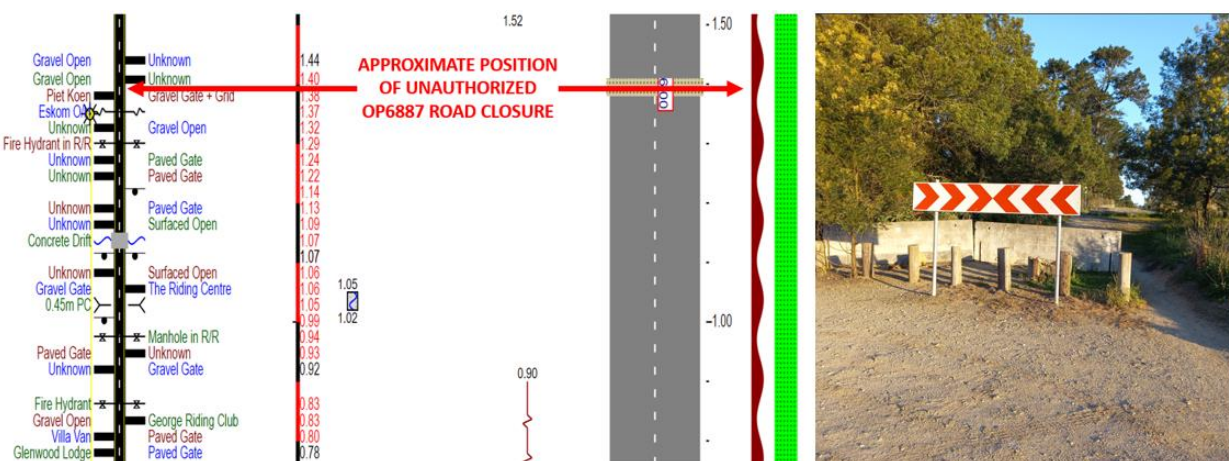


Figure 5-5 – Extract from RNIS OP6887 Strip Chart and photo of Road Closure

The consequence of the road closure is that the only way to reach the various developments and residential properties situated next to OP6887, is via the MR0355 intersection. This single entry and exit scenario places unnecessary strain on the OP6887, especially during the AM and NM Peak hour period when parents drop and collect their kids at Glenwood House School.

The relevant section of OP6887 has a posted speed limit of 40km as indicated in the photos below.



Figure 5-6 - Posted Speed Limit Along OP6887

The road cross section makes provision for a single lane in each direction, with edge kerbs only roughly up to first Glenwood House School access point. The relevant section of OP6887 has a surfaced road width of approximately 5.5m (2.75m per lane) and stormwater is managed by means of open, concrete lined side drains (refer to Figure 5-7).



Figure 5-7 - Road Characteristics

The road is surfaced with a bitumen-based sealer and according to the George Municipality Pavement Management System (published on the IMQS website) the relevant section of the paved flexible surfacing shown no signs of rutting (refer to Figure 5-8).

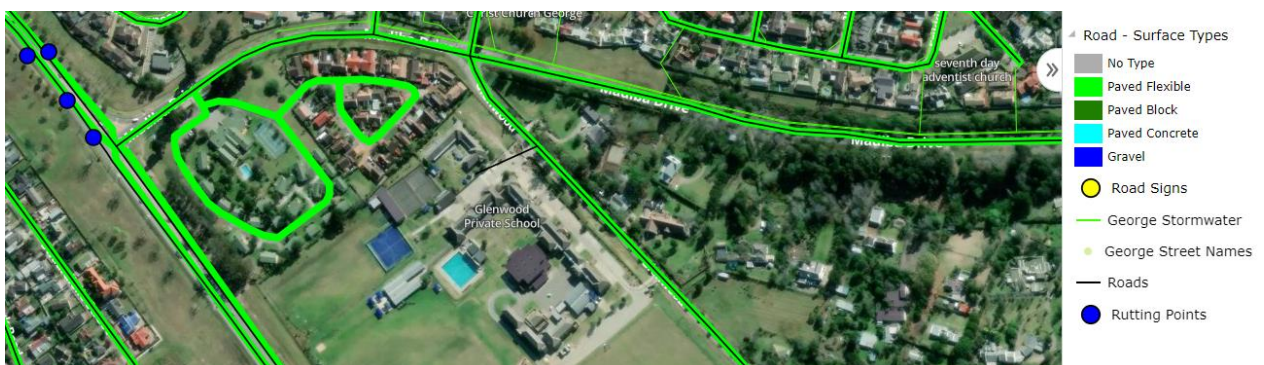


Figure 5-8 - Road Surface Type from George PMS

According to the George Municipality's PMS the current road condition classifies as "Fair", as indicated in the extract of the Pavement Condition Index report (refer to Figure 5-9).



Figure 5-9 - George Municipality Pavement Condition Index

6 TRIP GENERATION POTENTIAL

6.1 TRIP GENERATION

The trip generation potential of the site has been calculated based on the guidelines published in TMH 17 (South African Trip Data Manual, COTO May 2018). The TMH land-uses that best fits the ethos of the proposed development is that of “Pre-School”. The relevant TMH 17 definition of the land use is listed below:

565 Pre-School (Day Care Centre)

Student

A facility where care is provided for pre-schools age children. The facilities include classrooms, offices, eating areas and playgrounds.

(Discussions with the developers have revealed that the school will cater for a total of 100 students. This includes both Day Care and After Care services. The implication of this is that the Midday Peak will in reality be spread out over a larger time period. All parents will drop their kids just before school starts, but the After Care ensures that not all kids are collected immediately after school ends. The TMH17 trip generation factor for the midday period can therefore be seen as conservative in this case.) The TMH17 makes provision for a 15% reduction in traffic volumes if the site is located close to a Transit node/Corridor. However, since it is not expected that any of the pre-school students will make use of the Go George public transport service, this reduction factor was not applied to the trip generation calculation. The proximity of the pre-school in relation to Glenwood House School, does however suggest that there could be some cross integration between the two schools and there will be some cases where parents will have kids in both schools. For this reason, a 5% “Mixed Use” reduction was applied to the trip generation potential of the site. The resultant (reduced) trip generation figures are listed below:

565 Pre-School (Day Care)	Student			
Description	AM Peak	PM Peak	Friday PM	Midday
Trip Rate	0.95	0.76	0.0	0.29
IN/OUT	50:50	50:50	N/A	50:50
PHF Dev	0.85	0.80		
PHF Street	0.85	0.85		

The resultant trip generation calculation has been attached as **ANNEXURE C** to this report, but for ease of reference a summary has been included in the table below.

Land Use	Students	AM Peak		PM Peak		Midday Peak	
		IN	OUT	IN	OUT	IN	OUT
Pre-School	100	48	47	38	38	15	14
Total		95		76		29	

Table 6-1 - Summary of Trip Generation

Based on the above, the proposed site access can be classified as a High-Volume Driveway.

6.2 TRAFFIC DISTRIBUTION

Due to the unauthorized closure of OP6887 at kilometer 1.35, all the traffic with a destination along this specific section of OP6887, have to make use of the MR0355/OP6887 intersection. In the case of the proposed pre-school development, a small percentage (5%) of parents might

come from the Glenwood residential area and will therefore approach the pre-school from the east. As eluded to in the previous paragraph, it is expected that a fairly large percentage of parents will have kids in both the Pre-school and Glenwood House School. These parents are expected to exit the Pre-School Site and make their way towards the east, where they will enter Glenwood House School in order to drop-off a second child. These distributions have been indicated schematically in figures A1 to A5 in **ANNEXURE C**. The same is also true for vehicle exiting the site. Due to the current closure of OP6887 at km 1.3, 95% of these motorists are expected to make their way back towards the direction of MR0355 (Madiba Drive) after exiting the site.

7 GEORGE INTEGRATED PUBLIC TRANSPORT NETWORK

The George Integrated Public Transport Network (GIPTN) is a project aimed at providing a new and improved public transport system for George and surrounding areas. GO GEORGE is operated by the public transport operators with existing services in the George area. The aim of GO GEORGE is to provide a quality public transport service that is reliable, affordable, safe, convenient and accessible, and contributes to a better quality of life for all. At the heart of GO GEORGE is an empowerment model that sees public transport operators who were operating minibus taxi or bus services in George forming a company to deliver the new scheduled bus service in terms of a contract. The position of the site in relation to the greater GO GEORGE route map has been included as Figure 7-1 below.

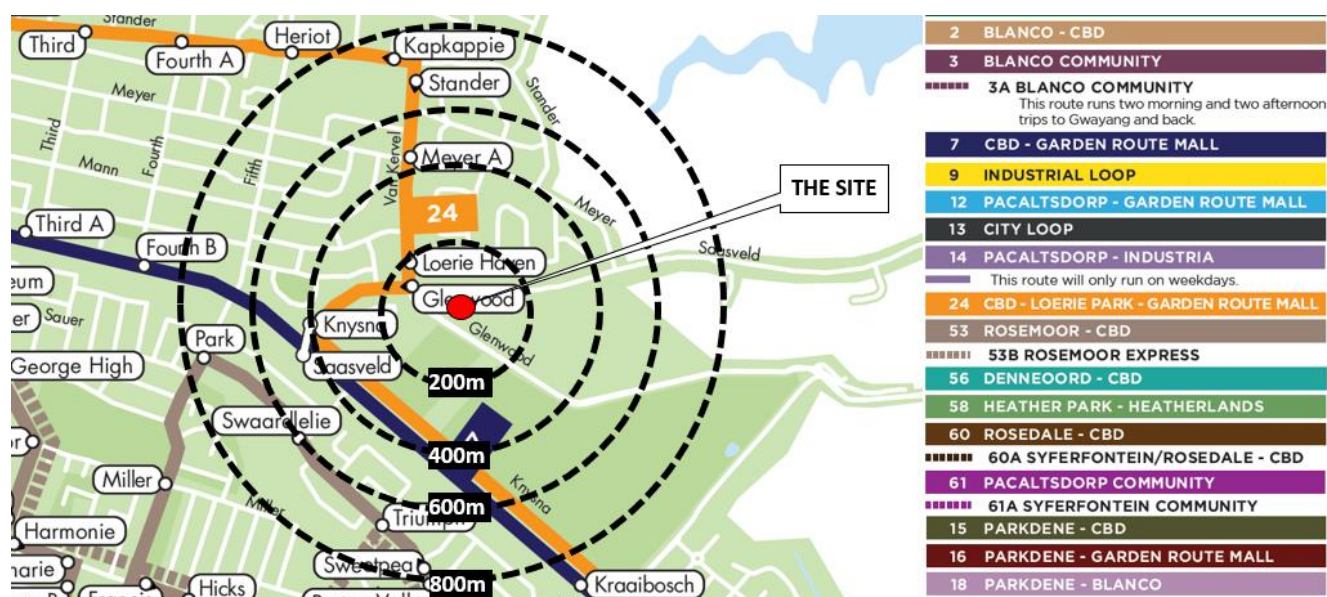


Figure 7-1 - Surrounding GO GEORGE Bus Routes

From the route map it is evident that the CDB-Loerie Park-Garden Route Mall route runs past the site in Madiba Avenue. However, as indicated in Section 6.1 of this report, the proximity of the Go George Public Transport network is not expected to have noticeable impact on the trip generation potential of the proposed pre-school as pre-school students are not expected to make use of the public transport system.

8 GLENWOOD HOUSE SCHOOL

Glenwood House School is a local private school that offers education from the Preparatory level up to Grade 12. AM peak hour traffic at Glenwood House (just like most other local schools) has been problematic over the last couple of years. One solution that Glenwood House implemented was a one-way drop-off system that is used during peak hour (AM and NM) periods. Parents wishing to drop kids off at the school, enter the facility from the Southeastern access and exit the school again

via the Northwestern access (refer to Figure 8-1). This has improved the congestion slightly, but long queue lengths are still present on OP6887, especially during the morning school run. One of the reasons for the long queue lengths is insufficient number of parking bays within the Glenwood House Parking Area. This leads to parents having to wait in line for open parking bays. Unfortunately, the distance between the parking area and OP6887 is also not sufficient to absorb the queue of waiting parents and hence the queue spills over into OP6887.

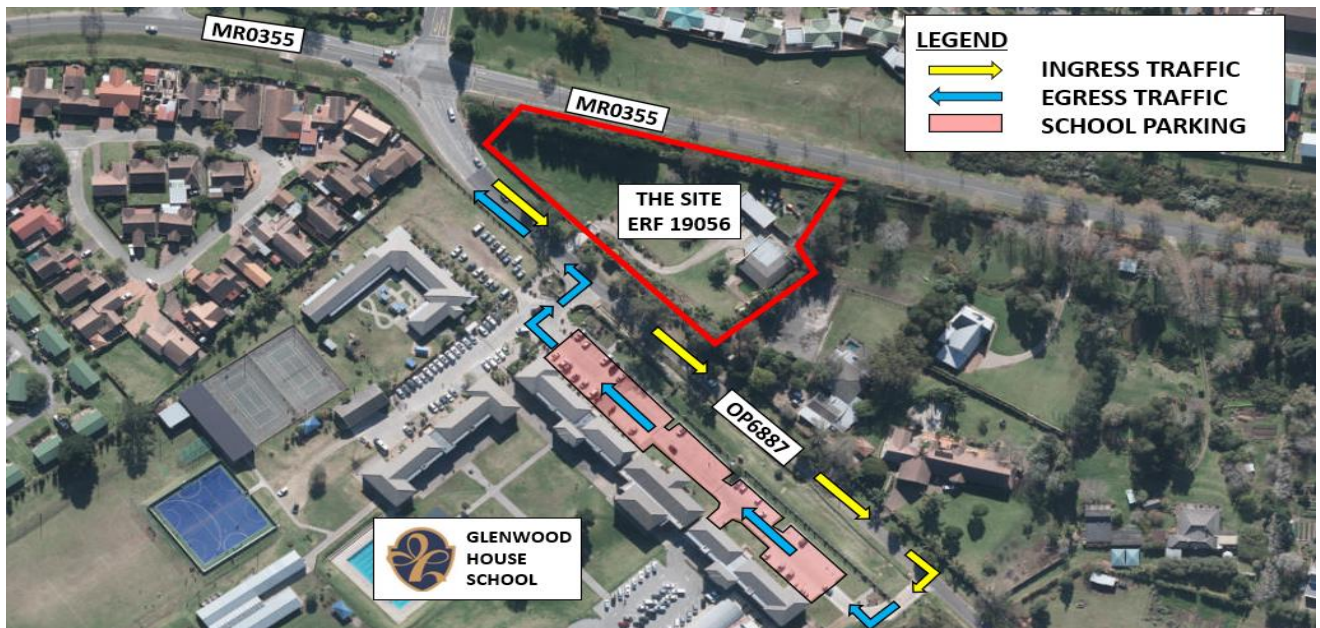


Figure 8-1 - Glenwood House Traffic Flow during AM and NM Peak Periods

9 EXISTING TRAFFIC VOLUMES

In order to determine the existing (background) traffic volumes in the vicinity of the site, two 12-hour (06:00 to 18:00) classified (Light and Heavy) traffic counts were recorded at two (2) relevant intersections on Tuesday 19 October 2021. The intersections identified for the traffic counts have been listed below:

- MR355(Madiba Drive)/Van Kervel/OP6887 (Glenwood Drive)
- OP6887(Glenwood Drive)/Glenwood House School Access

The position of the two intersections have been indicated in Figure 9-1.



Figure 9-1 - Traffic Count Positions

The raw traffic count data has been attached as **ANNEXURE D** to this report. The data was analysed and the traffic flow profile for each intersection has been included in the figures below.

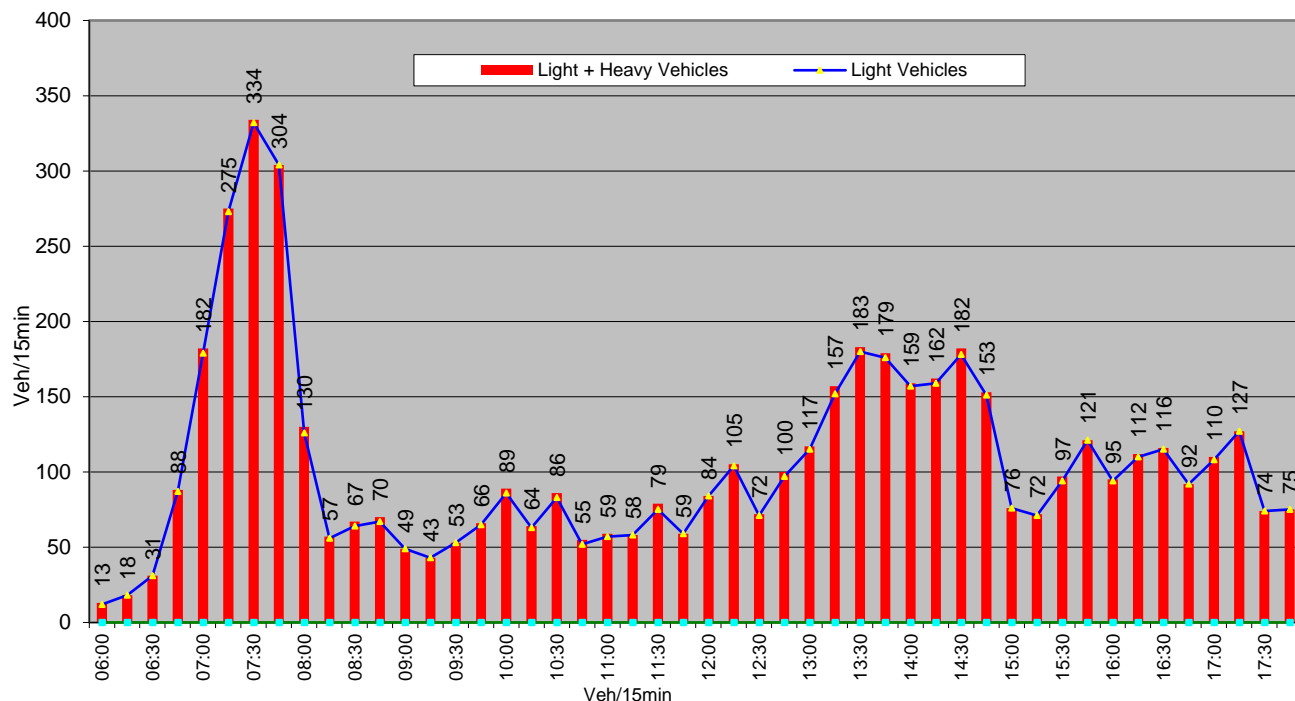


Figure 9-2 - Traffic Flow Profile - MR355/Van Kervel/OP6887

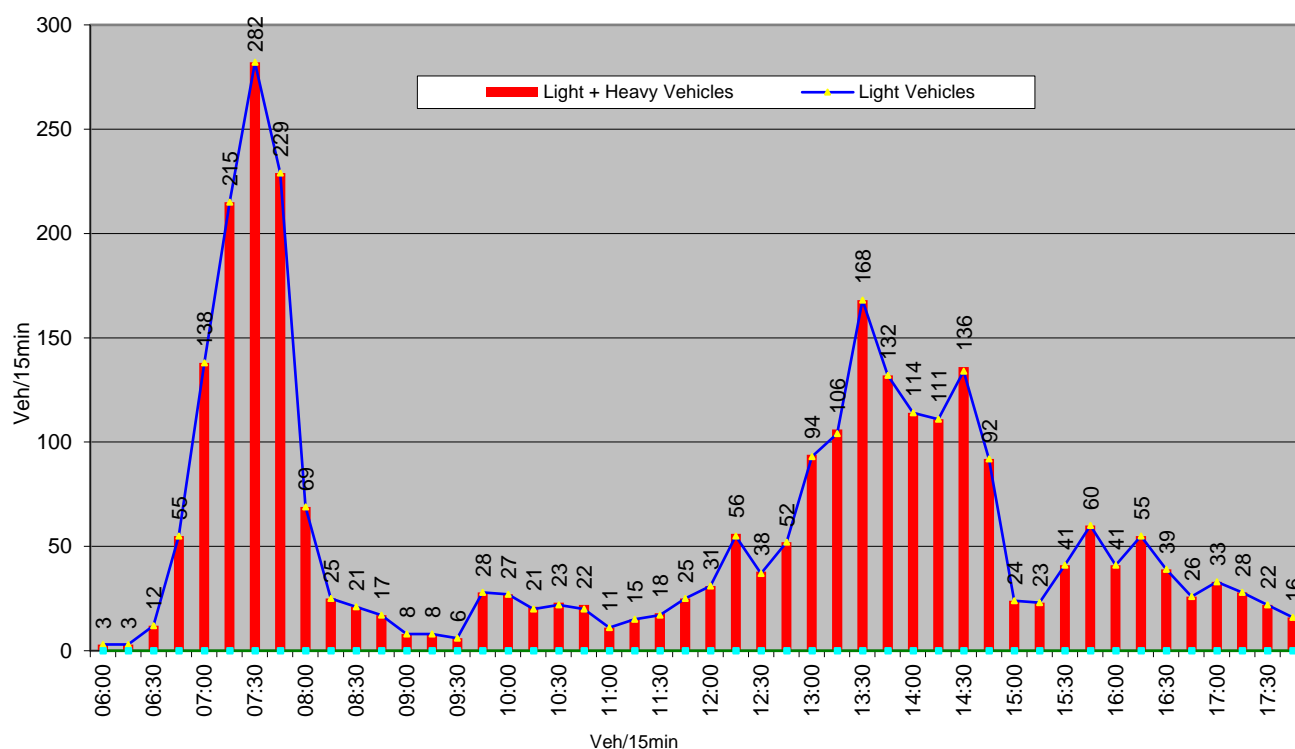


Figure 9-3 - Traffic Flow Profile - OP6887/Glenwood House School

The flow profile of both intersections indicates a pronounced spike in traffic volumes during the AM Peak Hour Period, with a second, less pronounced increased during the NM Peak Hour period. This is mainly attributed to the AM traffic volumes caused by parents dropping kids of at Glenwood House School during the morning (AM) school run. The AM and NM peak hour volumes for both intersections are listed in Figure 9-4 and Figure 9-5.

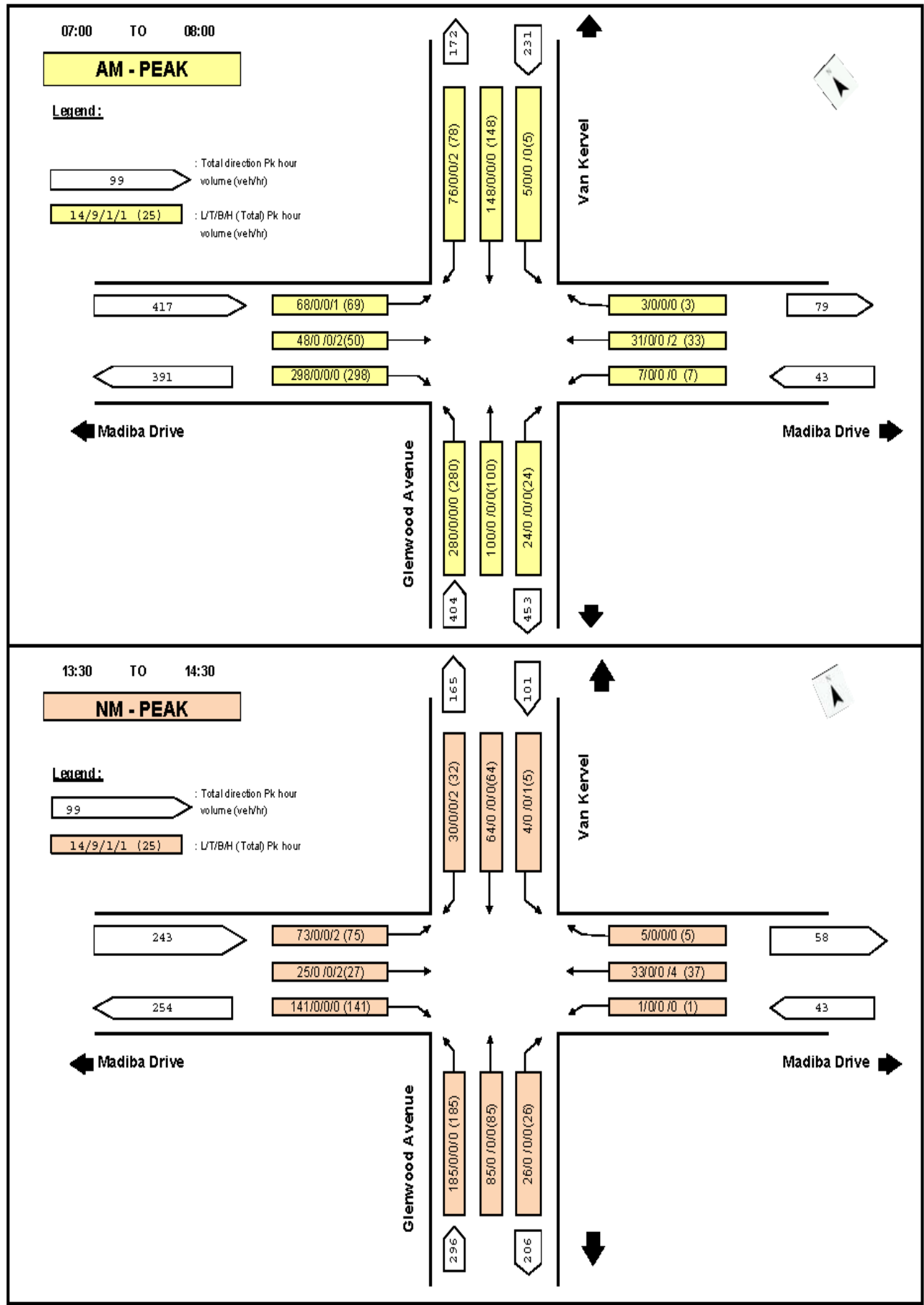


Figure 9-4 - AM and NM Peak Hour Traffic Volumes - MR0355/Van Kervel/OP6887

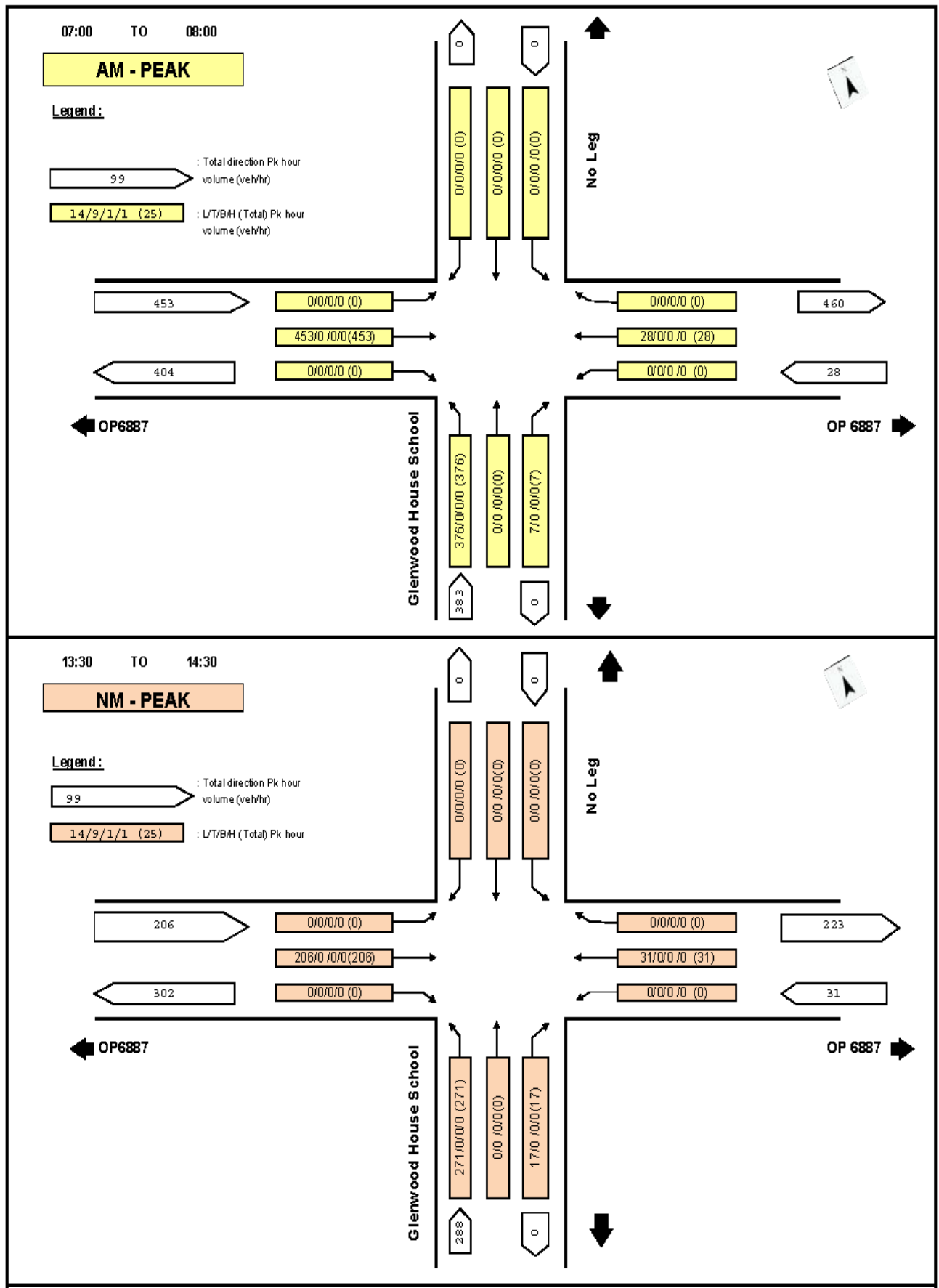


Figure 9-5 - AM and NM Peak Hour Traffic Volumes - OP6887/Glenwood House School

10 INTERSECTION OPERATIONAL ANALYSES

The operational analysis was done with the “SIDRA INTERSECTION 8” (version 8.0.5) computer aided software that is developed specifically for traffic engineering capacity analysis. When elements of a road network such as intersections are analysed, their operating conditions are described in terms of Level of Service (LOS). The six letters from A to F are used to indicate different LOS. LOS A indicates very low traffic flows 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 considered to be unacceptable.

The Average Delay is the delay in seconds that a motorist is likely to experience on an approach to the junction, while waiting for the junction to clear or other vehicles to maneuver. A further measure of the operating conditions at any 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 road element. Generally, ratios of up to approximately 0.9 are internationally considered acceptable. Values exceeding 1.0 implies saturation of the facility.

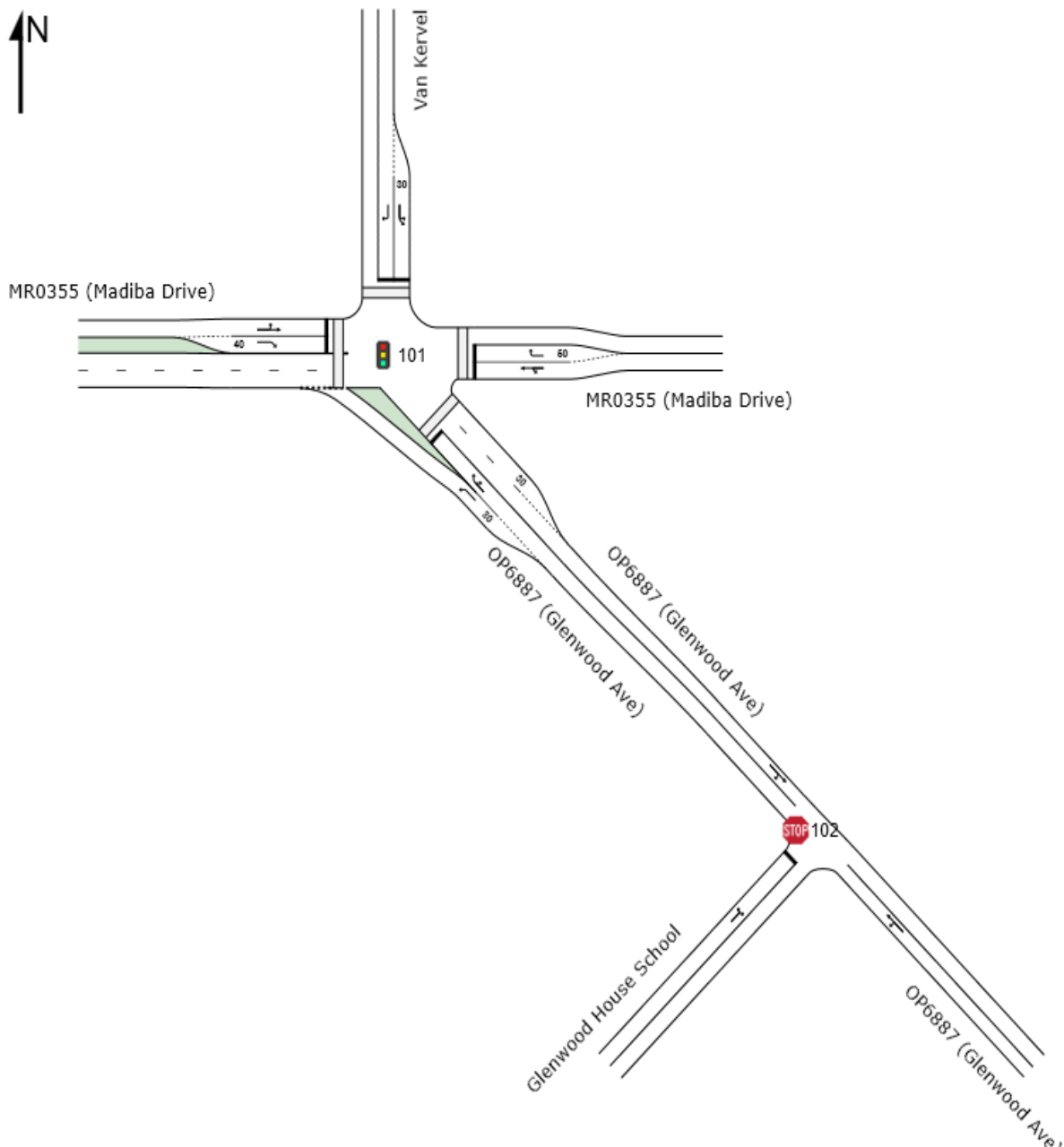


Figure 10-1 - SIDRA Intersection Layout

The SIDRA analysis was performed for the following scenarios:

- **Status Quo:** The background traffic volumes were determined for the study network in the vicinity of the site. These are the traffic volumes that are currently present on the road network.
- **No-Go Scenario:** A growth factor was applied to account for regional growth and the volumes were escalated up to the year 2026. This analysis indicates the traffic situation 5 years from now, but without the inclusion of the proposed development.
- **Operational Traffic** were estimated for the proposed development. The operational traffic volumes were added to the 2026 future traffic volumes to form the basis of the analysis, should the development be allowed to continue.

10.1 STATUS QUO

The current AM and NM Peak hour traffic volumes were used to calculate the Status Quo operational analysis. From the various site inspections, it is clear that a very real queue length problem existing during both the AM and NM peak hour periods. The SIDRA software was therefore calibrated to simulate the actual AM and NM traffic conditions based on observed queue lengths.

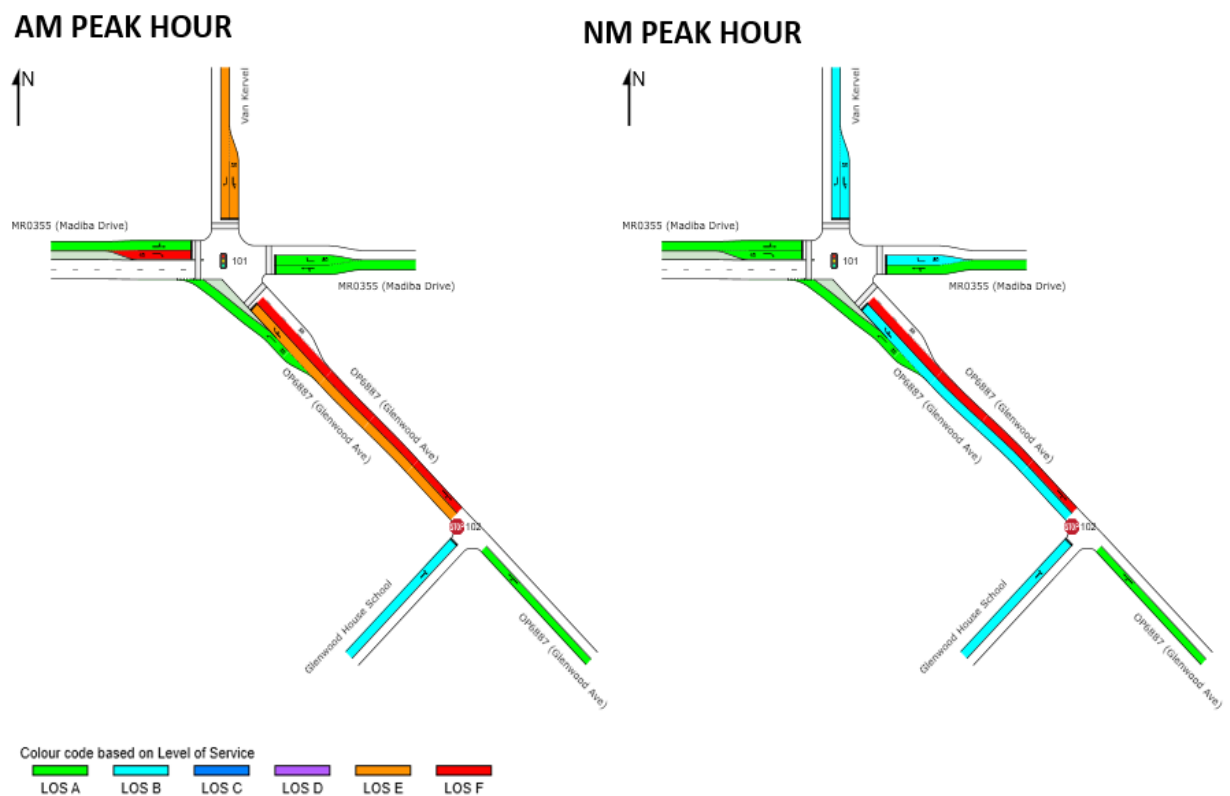


Figure 10-2 - Status Quo LOS Summary

The results of the SIDRA analyses has been attached as **ANNEXURE E**, but a summary has been included as Table 10-4.

INTERSECTION	APPROACH	MOVEMENT	2021 AM PEAK HOUR				2021 NM PEAK HOUR			
			LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
MR355/OP6887/VAN KERVEL	OP6887 (Glenwood Ave) (South East)	Left	A	0.8	0.671	31.7	A	1.5	0.302	6.5
		Through	E	59.3			B	12.0		
		Right	E	59.8			B	12.0		
	MR355 (Madiba Dr) (East Approach)	Left	A	6.7	0.027	2.1	B	10.2	0.052	1.6
		Through	A	2.5			A	6.1		
		Right	A	6.2			B	10.1		
	Van Kervel (Northern Approach)	Left	E	70.2	0.864	42.5	B	15.1	0.183	3.9
		Through	E	68.9			B	13.7		
		Right	E	60.3			B	14.8		
	MR355 (Madiba Dr) (West Approach)	Left	A	6.1	>1	244.6	A	9.8	0.431	7.2
		Through	A	2.7			A	6.4		
		Right	F	364.2			A	9.9		

Table 10-1 – MR355/OP6887/Van Kervel - Status Quo - SIDRA Results

INTERSECTION	APPROACH	MOVEMENT	2021 AM PEAK HOUR				2021 NM PEAK HOUR			
			LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
OP6887/ GLENWOOD HOUSE SCHOOL	OP6887 (Glenwood Ave) (South East)	Left	A	7.5	0.046	0	A	7.5	0.041	0
		Through	A	7.5			A	7.5		
	OP6887 (Glenwood Ave) (North West)	Through	F	1300	>1	328.3	F	509.6	>1	156.6
		Right	F	1300			F	509.6		
	Glenwood House (South West)	Left	B	12	0.351	4.7	B	3.1	0.244	3.1
		Right	F	68.8			C	3.1		

Table 10-2 - OP6887/Glenwood House - Status Quo - SIDRA Results

10.2 NO GO SCENARIO (ESCALATED 2026 TRAFFIC VOLUMES)

In order to estimate the future (2026) traffic volumes for the No-Go Scenario, the 2021 Status Quo Peak Hour traffic volumes were further increased with an annual growth factor. Reference is made to the South African Department of Transport's Manual for Traffic Impact Studies (DoT, October 1995) which provides a table with typical growth rates. This document recognises that

the method for determining traffic growth is important, but also states that there are a number of factors which influence the traffic growth rate. The approach is therefore to classify the study area with a low, average, high or extremely high growth rate. The typical growth rates are indicated in Table 10-3.

Category	Yearly Growth Rate (%)
Low	0-2.5
Average	2.5-3.5
High	3.5-6
Exceptionally high	>6

Table 10-3 - Typical Traffic Growth Rates

Based on current growth within the town of George, it was decided to apply a fairly conservative 3% annual growth rate to the Status Quo traffic volumes.

The estimated 2026 traffic volumes (for the No-Go Scenario) were calculated according to the equation below:

$$F = P \times (1 + i)^n$$

Where: F = Future Trips
P = Present Trips
n = 5 years
i = 3% Growth

The escalated (2026) background traffic volumes have been attached in **ANNEXURE C** and the revised SIDRA results as **ANNEXURE E**.

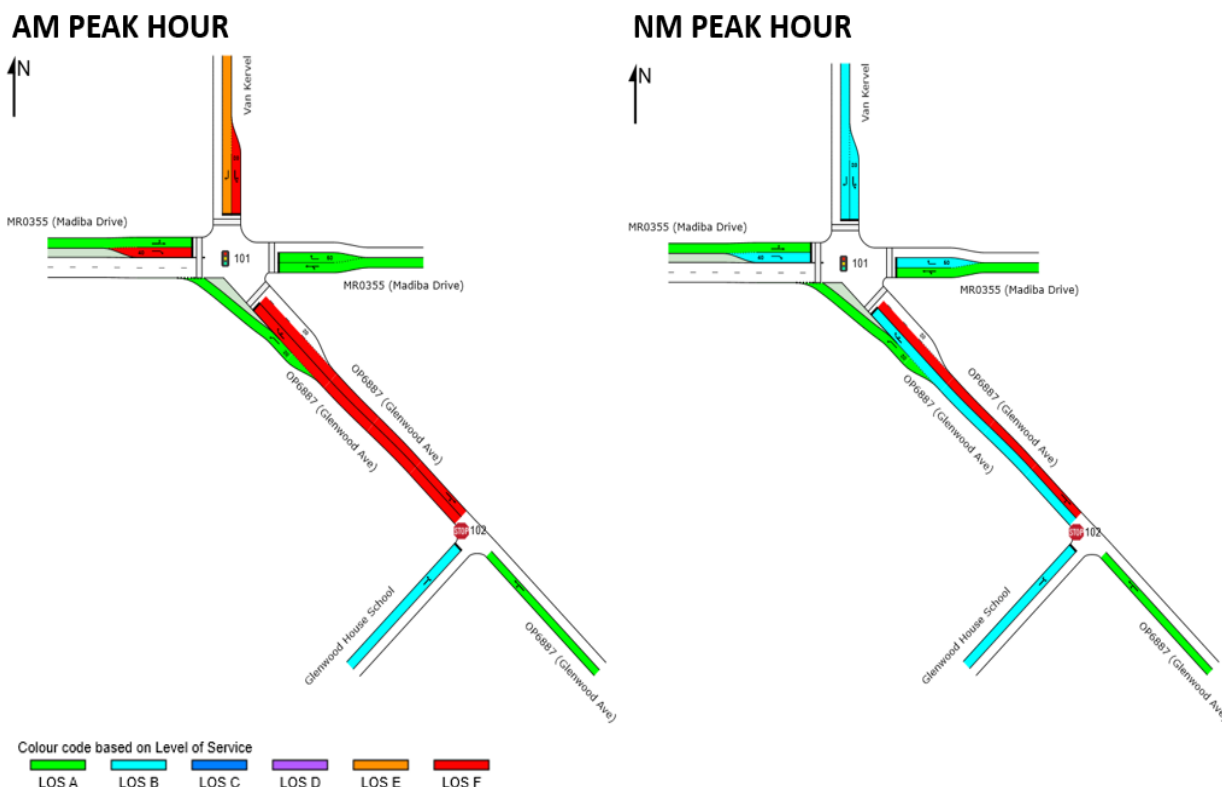


Figure 10-3 - Future (2026) LOS Summary (excl. Proposed Development)

The results of the analyses has been attached as **ANNEXURE E**, but a summary has been included as Table 10-1.

INTERSECTION	APPROACH	MOVEMENT	2026 AM PEAK HOUR				2026 NM PEAK HOUR			
			LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
MR355/OP6887/VAN KERVEL	OP6887 (Glenwood Ave) (South East)	Left	A	0.9	0.976	47.4	A	1.5	0.351	7.6
		Through	F	91.1			B	12.1		
		Right	F	91.6			B	12.7		
	MR355 (Madiba Dr) (East Approach)	Left	A	6.9	0.033	2.6	B	10.3	0.061	1.9
		Through	A	2.8			A	6.2		
		Right	A	6.6			B	10.1		
	Van Kervel (Northern Approach)	Left	F	102.5	0.996	62.1	B	15.2	0.212	4.6
		Through	F	101.1			B	13.8		
		Right	E	59.6			B	14.9		
	MR355 (Madiba Dr) (West Approach)	Left	A	6.4	>1	395.9	A	9.9	0.539	9.1
		Through	A	2.9			A	6.5		
		Right	F	790.1			B	10.8		

Table 10-4 - MR355/OP6887/Van Kervel – Future (2026) - SIDRA Results

INTERSECTION	APPROACH	MOVEMENT	2026 AM PEAK HOUR				2026 NM PEAK HOUR			
			LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
OP6887/ GLENWOOD HOUSE SCHOOL	OP6887 (Glenwood Ave) (South East)	Left	A	7.5	0.043	0.0	A	7.5	0.048	0
		Through	A	7.5			A	7.5		
	OP6887 (Glenwood Ave) (North West)	Through	F	1544	2.684	395.7	F	795.4	>1	42.6
		Right	F	1544			F	795.4		
	Glenwood House (South West)	Left	B	12.0	0.508	6.7	B	12.0	0.317	0.6
		Right	F	144.5			D	29.0		

Table 10-5 - OP6887/Glenwood House – Future (2026) - SIDRA Results

10.3 OPERATIONAL PHASE TRAFFIC

In order to determine the impact of the proposed development on the surrounding road network, the trip generation values of the proposed development were added to the future 2026 background traffic volumes. As indicated on the proposed SDP, the site access was also moved to align with the current Glenwood House School Access.

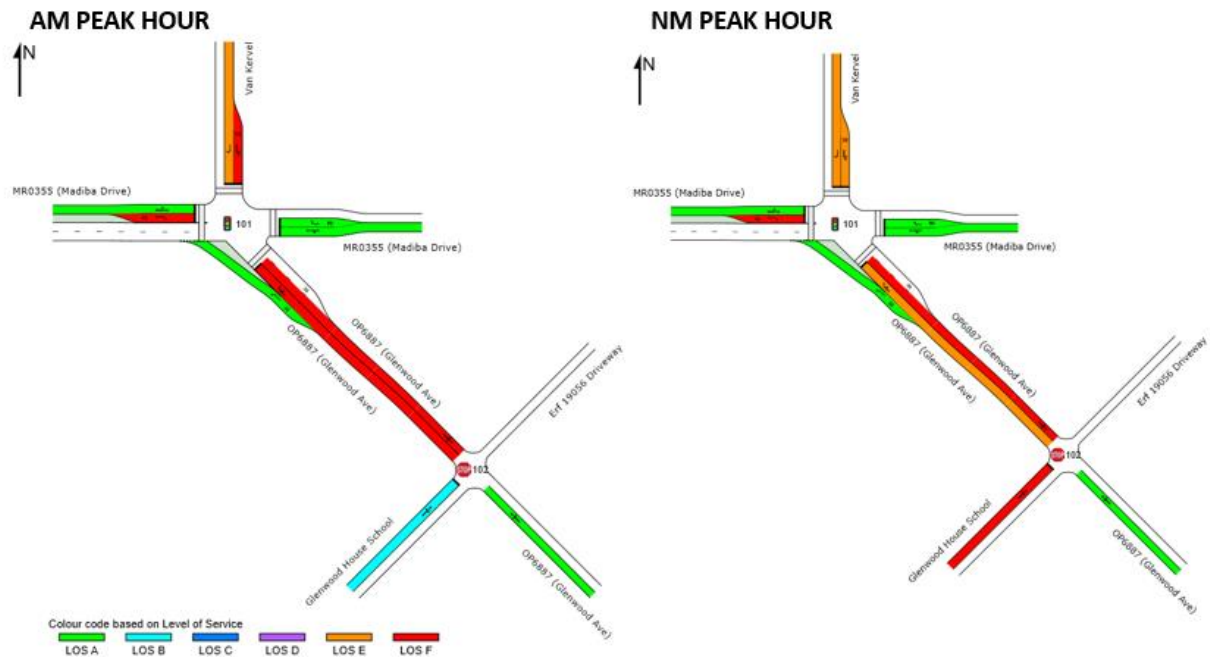


Figure 10-4 - Future (2026) LOS Summary (incl. Proposed Development)

INTERSECTION	APPROACH	MOVEMENT	2026 AM PEAK HOUR + DEV				2026 NM PEAK HOUR + DEV			
			LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
MR355/OP6887/VAN KERVEL	OP6887 (Glenwood Ave) (South East)	Left	A	1.0	1.058	142.1	A	1.6	0.380	13.6
		Through	F	196.7			B	12.2		
		Right	F	197.2			B	12.7		
	MR355 (Madiba Dr) (East Approach)	Left	A	7.3	0.034	4.6	B	10.3	0.062	3.2
		Through	A	3.2			A	6.2		
		Right	A	7.1			B	10.1		
	Van Kervel (Northern Approach)	Left	F	94.4	0.964	108.6	B	15.3	0.249	8.9
		Through	F	93.0			B	13.9		
		Right	E	57.2			B	14.9		
	MR355 (Madiba Dr) (West Approach)	Left	A	6.9	1.524	1095.3	A	9.9	0.692	24.3
		Through	A	3.4			A	6.5		
		Right	F	1026.3			B	13.5		

Table 10-6 - MR355/OP6887/Van Kervel - Future (2026) + Development - SIDRA Results

INTERSECTION	APPROACH	MOVEMENT	2026 AM PEAK HOUR + DEV				2026 NM PEAK HOUR + DEV			
			LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
OP6887/ GLENWOOD HOUSE SCHOOL	OP6887 (Glenwood Ave) (South East)	Left	D	27.9	0.111	0.1	C	16.2	0.1	0.2
		Through	A	8.4			A	7.9		
		Right	D	31.7			C	19.0		
	OP6887 (Glenwood Ave) (North West)	Left	F	4221.8	3	606.1	F	3814.5	3	2832
		Through	F	4215.5			F	3808.4		
		Right	F	4216.6			F	3809.3		
	Glenwood House (South West)	Left	F	3162.2	2	437.4	F	6563.6	4	2493
		Through	F	7332.3			F	7955.5		
		Right	F	3827.0			F	6783.8		

Table 10-7 - OP6887/Glenwood House - Future (2026) + Development - SIDRA Results

10.4 SUMMARY OF ANALYSIS

Status Quo

The status quo analysis indicated that the current AM and NM Level of Service along OP6887 is presently at an unacceptable poor level. This is purely due to the traffic generated by Glenwood House School, and the fact that 95% of motorist heading towards Glenwood House, have to make use of the MR355/OP6887/Van Kervel intersection and then drive OP6887 in a Eastern direction to reach the school. The closure of OP6887 at kilometer 1.3 means that there is no alternative route that can be used in order to reach the school.

No Go

Even without the addition of the proposed Pre-School on erf 19056, the analysis indicates that (at a very conservative 3% growth rate), the LOS of the surrounding roads and intersections intersection will simply continue deteriorating if mitigating solutions are not implemented soon.

Operational Phase

The operational phase analysis made provision for the fact that some of the parents will have kids in both Glenwood House School and the proposed pre-school on erf 19056, by reducing the trip generation rate of the pre-school by 5%. However, even with the reduction in trip generation rates will the additional traffic generated by the proposed Pre-School on erf 19056 result in totally unacceptable poor level of service along the surrounding road network. Some form of mitigation measures will therefore be required in order to deal with the additional traffic.

10.5 MITIGATION MEASURES

From the various analysis, it follows that the biggest problem with regards to Level of Service is due to the fact that there is only one way to reach Glenwood School House. The unauthorized road closure on OP6887 means that all the visitors to Glenwood house school must approach the school from the west by firstly negotiating the MR355/OP6887/Van Kervel intersection and then drive eastwards along OP6887 towards Glenwood house School. The best way to reduce the current and future congestion along OP6887 is provide an alternative approach by removing the unauthorized closure on OP6887, thereby allowing parents to approach Glenwood House School from the east (driving westwards along OP6887). It is expected that after dropping their kids at the school, these motorists will still exit the site and continue to make their way in a westward direction toward the MR355/OP6887/Van Kervel Intersection. Since these parents will mostly make left turn movements, it is expected that they will help to drastically improve the LOS along OP6887 as well as the MR355/OP6887/Van Kervel Intersection. Assuming that 30% of the current Glenwood House School traffic will approach the school from the east once OP6887 has been reopened, the SIDRA analysis indicates a remarkable improvement in the LOS of the surrounding road network as indicated in Table 10-8 below.

INTERSECTION	APPROACH	MOVEMENT	2026 AM PEAK HOUR + DEV				2026 NM PEAK HOUR + DEV			
			LEVEL OF SERVICE	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)	LEVEL OF SERVICE (LOS)	AVE DELAY (seconds)	V / C RATIO	AVE QUEUE (m)
MR355/OP6887/VAN KERVEL	OP6887 (Glenwood Ave) (South East)	Left	A	2.1	0.439	16.0	A	1.6	0.326	12.9
		Through	B	12.4			B	11.1		
		Right	B	12.9			B	11.6		
	MR355 (Madiba Dr) (East Approach)	Left	B	10.3	0.066	3.3	B	11.0	0.068	3.4
		Through	A	6.2			A	6.9		
		Right	B	10.1			B	10.9		
	Van Kervel (Northern Approach)	Left	B	15.4	0.267	9.6	B	13.9	0.114	4.4
		Through	B	14.0			B	12.5		
		Right	B	15.4			B	13.8		
	MR355 (Madiba Dr) (West Approach)	Left	A	10.0	0.654	21.7	B	10.7	0.357	9.3
		Through	A	6.6			A	7.3		
		Right	B	12.6			B	10.4		
OP6887/ GLENWOOD HOUSE SCHOOL	OP6887 (Glenwood Ave) (South East)	Left	A	8.8	0.383	0.1	A	8.7	0.098	0.1
		Through	A	7.6			A	7.6		
		Right	A	9.0			A	8.8		
	OP6887 (Glenwood Ave) (North West)	Left	D	33.5	0.421	58.4	D	31.5	0.385	47.3
		Through	D	25.5			C	21.2		
		Right	F	53.1			E	45.2		
	Glenwood House (South West)	Left	B	12.3	0.106	14.7	B	12.2	0.285	9.3
		Through	C	15.4			B	13.1		
		Right	C	19.2			C	17.3		

Table 10-8 - SIDRA analysis after opening OP6887 for through traffic

The improvement in network LOS is clearly visible in Figure 10-5 below.

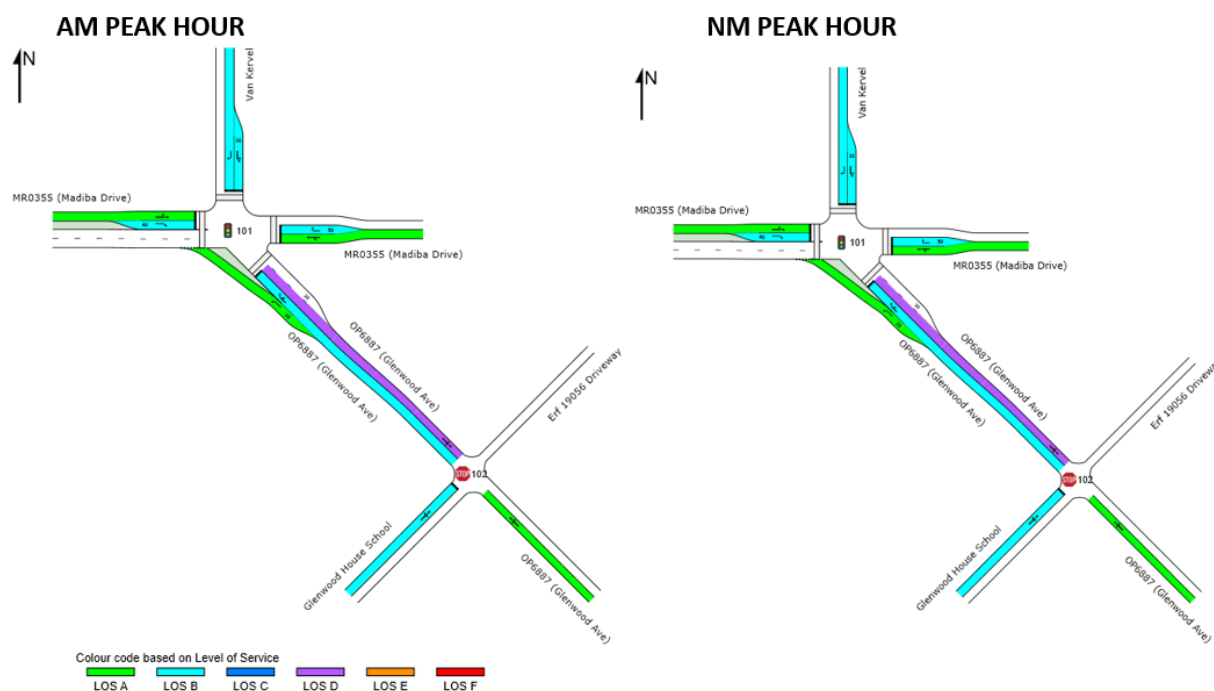


Figure 10-5 - Future (2026) LOS Summary after opening OP6887 for through traffic

11 PARKING

11.1 PARKING SPECIFICATIONS

George Municipality's Integrated Zoning Scheme By-Law is very clear regarding parking related definitions and specifies the following:

Page 10- *"an area measuring not less than 5 metres x 2.5 metres for perpendicular or angled parking and 6 metres x 2.5 metres for parallel parking that is clearly identified and demarcated for the parking of one motor vehicle and may be provided in the form of a garage or carport that is accessible for easy and safe vehicle movement;"*

Page 27: *"Off-street parking space must be provided on the property for which is required"*

Clause 43 (1) *"As an alternative to compliance with the off-street parking requirements in terms of this zoning scheme, an owner may, with the approval of the Municipality—*

- a) *acquire an area of land sufficient for the permanent parking requirements elsewhere, in a location approved by the Municipality; or*
- b) *acquire permanent rights to a parking facility or portion of a parking facility elsewhere, in a location approved by the Municipality, and must register a notarial tie or servitude against that land or parking facility to link the properties concerned for the purpose of parking, and the owner must cause the parking concerned to be constructed and maintained in accordance with the Municipality's requirements and approval.*

Clause 44: Combined parking requirements

“If two or more uses combine to share a common parking area, the Municipality may approve parking requirements that provide less than the quantum of the parking required for individual uses provided that-

- c) the Municipality is satisfied that the utilisation of the same parking area by the different uses types or activities in the zones will not result in a concurrent use of the parking area; and*
- d) bays intended for combined uses may not subsequently be reallocated to other uses without the approval of the Municipality.”*

Clause 46: - Parking layout requirements

“The following parking layout requirements apply unless otherwise stated in this zoning scheme:

- a) Parking layout configurations, minimum dimensions and ramps to a parking area must be in accordance with this zoning scheme;*
- b) The layout of any parking area, except for parking in Single Residential Zone I, Single Residential Zone III and General Residential Zone I, must ensure that vehicles can readily leave the site without reversing across the sidewalk, unless otherwise approved by the Municipality;*
- c) A tandem bay accommodating two motor vehicles is regarded as one bay for the purposes of this zoning scheme, except for single residential zones, where a tandem bay is regarded as two bays;”*

11.2 GEORGE MUNICIPALITY’S INTEGRATED ZONING SCHEME BY-LAW

The George Municipality’s Integrated Zoning Scheme By-Law provides the following definitions for the *“Place of Instruction”* land use:

- (a) a place for education or training at pre-school, school or post-school levels, including—
 - I. crèche;
 - II. nursery school;
 - III. primary school;
 - IV. secondary school;
 - V. college;
 - VI. university; or
 - VII. research institute; and
- (b) includes the following ancillary uses—
 - I. a boarding hostel;
 - II. sports and recreation centre;
 - III. a civic facility for the promotion of knowledge to the community, including-
 - (aa) a public library;
 - (bb) place of worship;
 - (cc) public art gallery;
 - (dd) museum;
 - (ee) place of instruction in sport where the main objective is instruction rather than participation of the public as competitors or spectators; and
- (c) does not include a reformatory or a conference facility.

The GIZSBL defines a Crèche as follows:

“crèche” means the use of a portion of a dwelling house or outbuildings by the occupant to provide day care, pre-school, play group or after-school care services for children.

Development parameters:

- The services provided must primarily be day care and educational, and not medical services.
- The services may not operate outside the hours 6:00 to 18:00.
- The dominant use of the dwelling house must remain for the living accommodation of a single family.
- Not more than 20 children may be registered at a time, or on the property at any time.
- Parking and access must be provided in accordance with this by-law.

Since a creche is limited to only 20 children, the site will have to be rezoned to place of instruction. However, the GIZSBL parking requirements applicable to creche will still be relevant as indicated in Table 11-1.

Land Use	Normal Areas	PT1 Areas	PT2 Areas
Place of Instruction (other than school/day care centre/crèche)	1.5 bay per classroom /office plus 1 per 6 students	1.5 bay / classroom/ office plus 1 per 10 students	1.5 bay / classroom/ office plus 1 per 20 students
Crèche (includes day care centre)	1 bay per 10 children plus 1 stop and drop facility	1 bay per 10 children plus 1 stop and drop facility	1 bay per 10 children plus 1 stop and drop facility

Table 11-1 – Minimum Off-Street Parking Requirements

Based on the proposed development capacity of 100 students (kids), the resultant (minimum) parking requirement is therefore calculated as 10 bays (100 divided by 10) plus stop and drop facility.

11.3 PARKING OFFERING

The proposed SDP (refer to ANNEXURE B) makes provision for a total of 20 onsite parking bays. Four (4) of the 20 parking bays are allocated towards the drop and go facility. Bays 8 and 9 are perpendicular to the traffic flow and are deemed not effective. A revised parking layout that meets the requirements of the GIZSBL in terms of “number of bays” has been included as Figure 11-1 below.

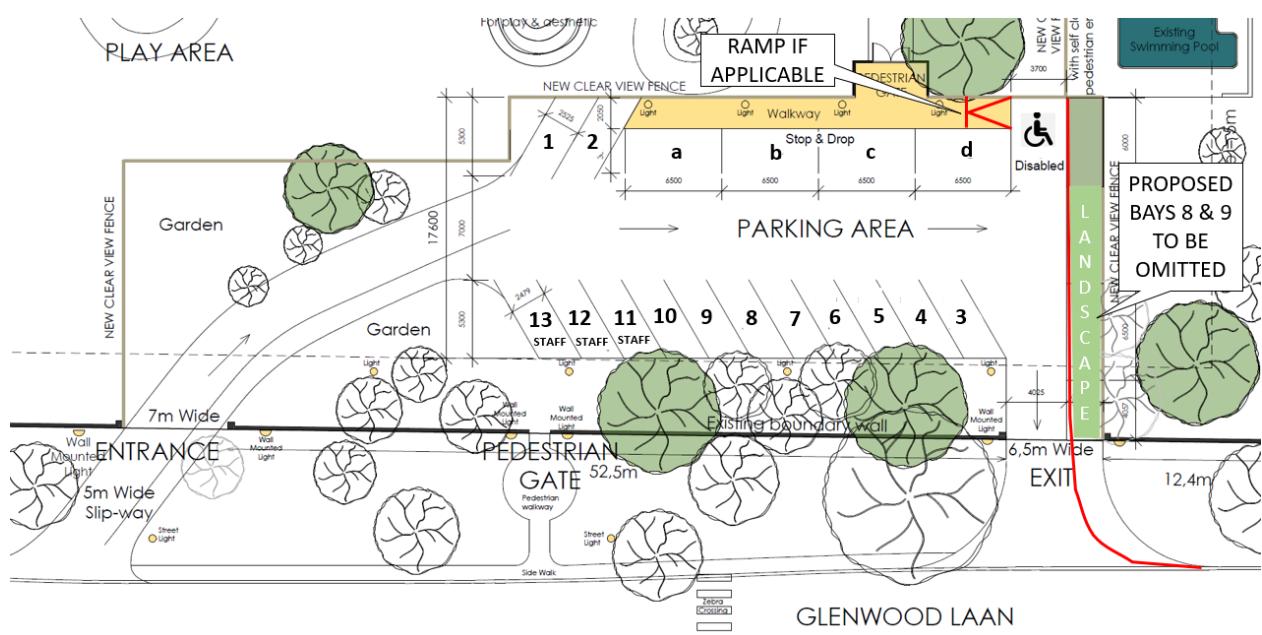


Figure 11-1 - Proposed Parking Layout

12 THROAT LENGTHS

Access control has a direct impact on the ingress and egress throat lengths. The provision of adequate throat length is important for safe and efficient traffic operation of the road system. It is therefore important that no form of access control be implemented during the AM and NM Peak Hour periods. Parents wanting to drop-off or collect their kids from the school should be allowed to enter the premises without having to stop at a boundary gate or boom. In order to protect the kids within the pre-school, a ClearView fence has been erected between the parking area and the school, thereby eliminating the need for access control at the property boundary.

12.1 DRIVEWAY WIDTHS

Driveway widths should adhere to the general guideline below.

Type of carriageway crossing	Minimum Width	Maximum Width
Single entrance or exit way	2,7m	4,0m
Combined entrance and exit way	5,0m	8,0m

Table 12-1 – Recommended Driveway Widths

13 UNIVERSAL ACCESSIBILITY AND PEDESTRIAN ROAD SAFETY

According to the SA Department of Social Development's White Paper on the Rights of Persons with Disabilities (December 2015), **Universal Access** is defined as: *"The removal of cultural, physical, social and other barriers that prevent people with disabilities from entering, using or benefiting from various systems of society that are available to other citizens & residents"*. The same document defines **Universal Design** as: *"The design of products, services and environments to be usable by all people, to the greatest extent possible, without the need for personal adaptation or special design"*.

At the heart of Universal Accessibility (UA) compliance, is a concept that moves away from a single car, single driver situation, towards a more pedestrian friendly environment that is safe for use by all road users (including and especially special needs persons). George municipality has adopted a UA policy that aims at creating safer and more pedestrian friendly verges along its transportation corridors.

The basis of universal design arises from the premise that humans function in a certain way in order to perform basic activities. These activities support a person in carrying out his/her daily tasks, and effectively result in the individual being able to be part of society or excluded from it. In this context, mobility refers to the movement of individuals rather than the vehicle speeds required to reach distant destinations. Guaranteeing the ease of movement for all people including those who are sighted, blind, or partially sighted, those who use a wheelchair, pushchair or pram – is paramount. People who are deaf, people with learning disabilities, children and the elderly are the most vulnerable road users. Mobility patterns are age-related and governed by cognition, in addition to personal circumstance created by disability. The universal design movement has been active in South Africa for the past 40 years or so and resulted in the South African Constitution that acknowledges disability and gender as issues in the Bill of Rights. Now additional emphasis has been given by South Africa when it signed the United Nations Convention on the Rights of People with Disabilities (2007). This action requires the engineering profession to become aware of the problems that traditional approaches to planning and constructing the built environment cause people in their everyday lives.

13.1 PEDESTRIAN SAFETY

It is expected that all kids at the pre-school will be escorted by their parents into the safe zone created by the ClearView fence, separating the parking area from the school. It is not expected that any pre-school kids will make use of pedestrian sidewalks unsupervised. However, since it is assumed that a percentage of the parents will have kids in both Glenwood House School as well as Outeniqua Pre-School, a proper, safe and dedicated crossing point is required to move from the proposed development on erf 19056 over OP6887 towards Glenwood House School. There is already an existing pedestrian crossing just after the Glenwood House School exit. In order to limit the number of conflict points experienced when pedestrians cross the road, it is recommended that the existing crossing position remains in its current position as indicated on the SDP.

Where practically possible, the walkway should not be placed directly up against the road edge, but a furniture zone should be created between the road edge and the sidewalk, increasing the safety of those making use of the walkways. This notion is further advocated in The Neighbourhood Planning and Design Guide (Department of Human Settlements, July 2019) also known as “The Red Book” in which the cross section included as Figure 13-1, is proposed.

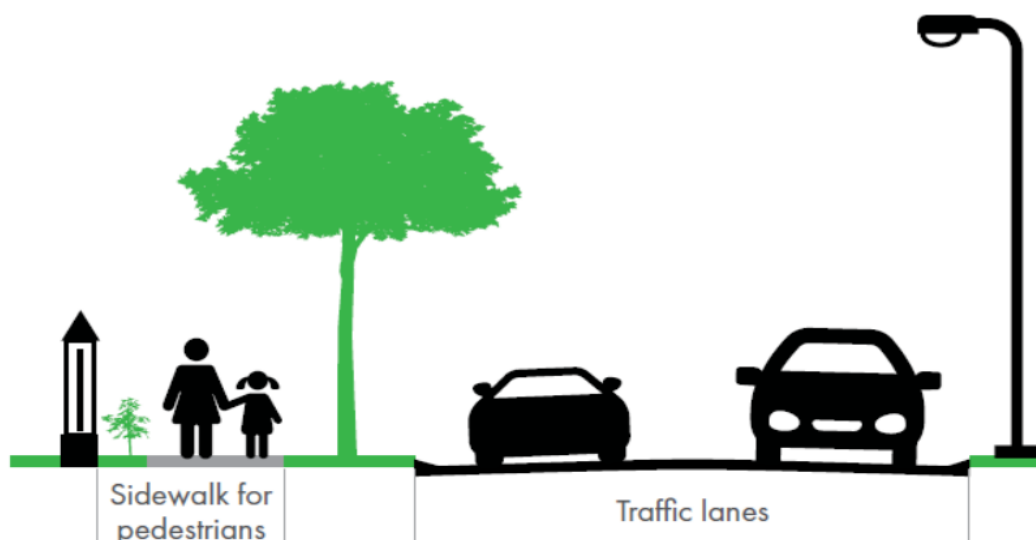


Figure 13-1 - Proposed Roadside Environment Cross Section

This proposed SDP makes provision for a new pedestrian gate and sidewalk. It is recommended that the road verge makes provision for both a furniture zone and sidewalk as indicated schematically in Figure 13-2 below

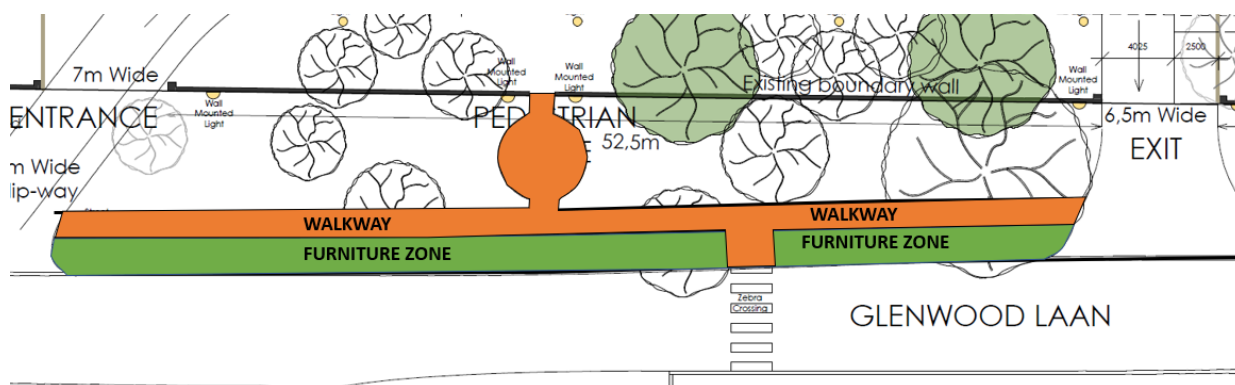


Figure 13-2 - Proposed Road Verge showing both Walkway and Furniture Zone

14 SUMMARY

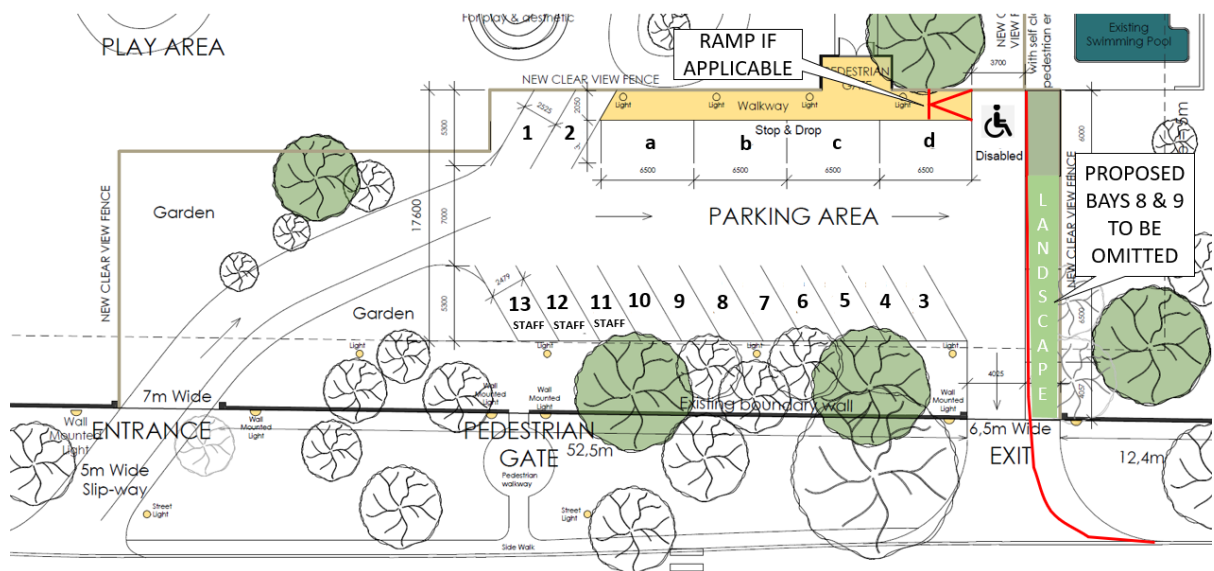
In short, the various components of this Transportation Investigation can be summarised as follows:

1. It is the developer's intention to develop a new pre-school that can house up to 100 kids on erf 19056. The pre-school will consist of the following:
 - 5 x Classrooms
 - 1 x Reception
 - 1 x Kitchen
 - Various smaller spaces such as bathrooms, change rooms and storerooms
2. It is envisaged that very little changes will be required to the existing structures in order to accommodate the proposed pre-school. The bulk of the changes will be internal changes
3. The proposed development is situated across the road from Glenwood House School. Instead of working against the already established Glenwood House School, it is the developer's intention to work together with Glenwood House to cooperate with Glenwood House in order to create synergy opportunities between the two educational facilities.
4. Based on the GIZSBL, a minimum of 10 parking bays are required. The proposed SDP indicates 20 parking bays, but a revised parking layout has been proposed in this TIA. The revised layout makes provision for 13 normal (skew) parking bays, 1 additional disabled bay and 4 parallel bays in the drop and go zone.
5. Access to the site is proposed via a one-way parking system consisting of dedicated ingress and egress points, situated approximately 55m from each other.
6. SIDRA analysis indicates that the surrounding road network is currently operating at poor levels of service. This is mainly attributed to the unauthorised closure of OP6887 at kilometre 1,3, preventing any through movement along OP6887.
7. SIDRA analysis indicates that removing the OP6887 closure at kilometre marker 1.3 will greatly improve congestion and level of service along OP688, especially during the AM and NM Peak hour periods.
8. Traffic counts were recorded on Tuesday 19 October 2021 at both the MR355/OP6887/Van Kervel intersections and the Glenwood House Access Point. Detailed analysis has been included as Section 9 of this report.
9. The proposed SDP makes provision for a new pedestrian walkway, but the sidewalk is situated directly next to the road edge and does not make provision for a furniture zone as per the recommendations of the Neighbourhood Planning and Design Guide.
10. Since no form of vehicular access control will be implemented during normal operating hours throat lengths are not applicable.

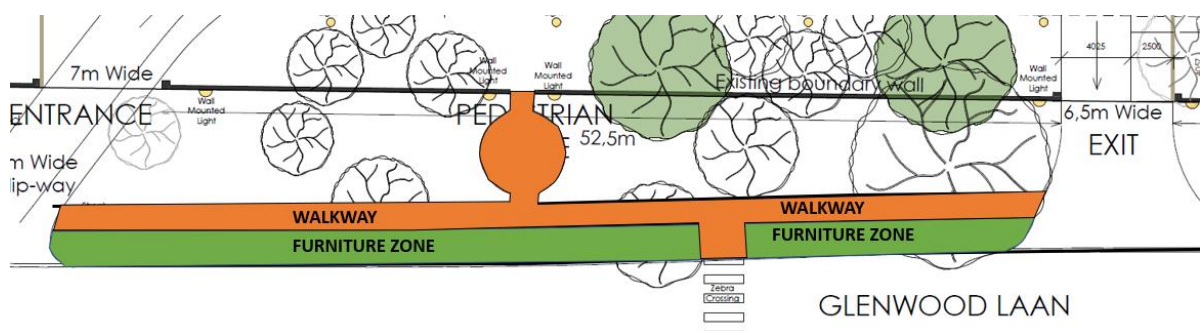
15 RECOMMENDATIONS

Based on the findings of this report, the proposed development of erf 19056 into a pre-school with the capacity to accommodate 100 kids, should be allowed to continue, following implementation of the following recommendations.

- a. The proposed parking layout should be revised as follows: (refer to Section 11 of this report):
 - i. Parking bays 8 and 9 to be omitted.
 - ii. Parking bays 3,4,5 and 6 are dedicated towards the Drop-and-Go zone and should not be counted as part of the parking bay offering.
 - iii. If applicable, a UA compliant ramp should be created between the disabled parking bays and the walkway leading to the pedestrian gate.
 - iv. The maximum width of the exit lane should be limited to 4m as per the GIZSBL specification pertaining to Driveway Widths



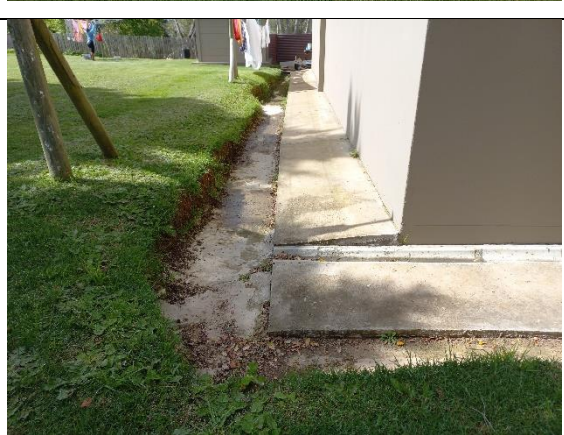
- b. The proposed pedestrian sidewalk should be moved away approximately 1,5m from the road edge to create a furniture zone between the road edge and the sidewalk zone (as indicated schematically below).



In addition to the above, it is highly recommended that the unauthorised closure of OP6887 at kilometre 1,3 should be removed to allow OP6887 to once again function as a through road (refer to Section 10.5 of this report). Since this process is completely outside the control of the developer, it should not be seen as a development condition, but rather a upgrade by the relevant road authority that will greatly help to improve the current poor level of service experienced on OP6887 during both the AM and PM Peak hour periods.

ANNEXURE A

SITE PHOTOGRAPHS



ANNEXURE B

SITE DEVELOPMENT PLAN



NOTA:
ALLE MATES EN VLAKE MOET EERS OP
TERREIN GEKONTROLEER WORD VOORDAT
DAAR NET ENIGE BOUWERK BEGIN WORD.
ALLE FONDAMENTE EN BETONWERK MOET
DEAR N INGENIEUR ONTWERP WORD.
PLANNIE MOET EERS DEUR MUNISIPALITEIT
GOEDKEUR WORD VOOR DAAR MET BOUWERK
BEGIN WORD.

ANY DISCREPANCIES OR CONTRADICTIONS MUST
IMMEDIATELY BE POINTED OUT TO Camilla Engar
FOR CORRECTIONS OR EXPLANATIONS BEFORE
ANY CONSTRUCTION PROCEEDS

Rooted Living Solutions
Architect
Camilla Engar
021 064 085 0482
021 064 085 0482
RootedLivingSolutions@gmail.com
Architecture • Landscape • Design

IN COLLABORATION WITH

PGL ARCH
PIETER LIEBENBERG
021 1371

PROJECT
SITE DEVELOPMENT PLAN
For proposed Crèche
ERF 19056
Glenwood laan

FOR CLIENT APPRAISAL

SITE DEVELOPMENT PLAN

DATE
07 - 07 - 2022

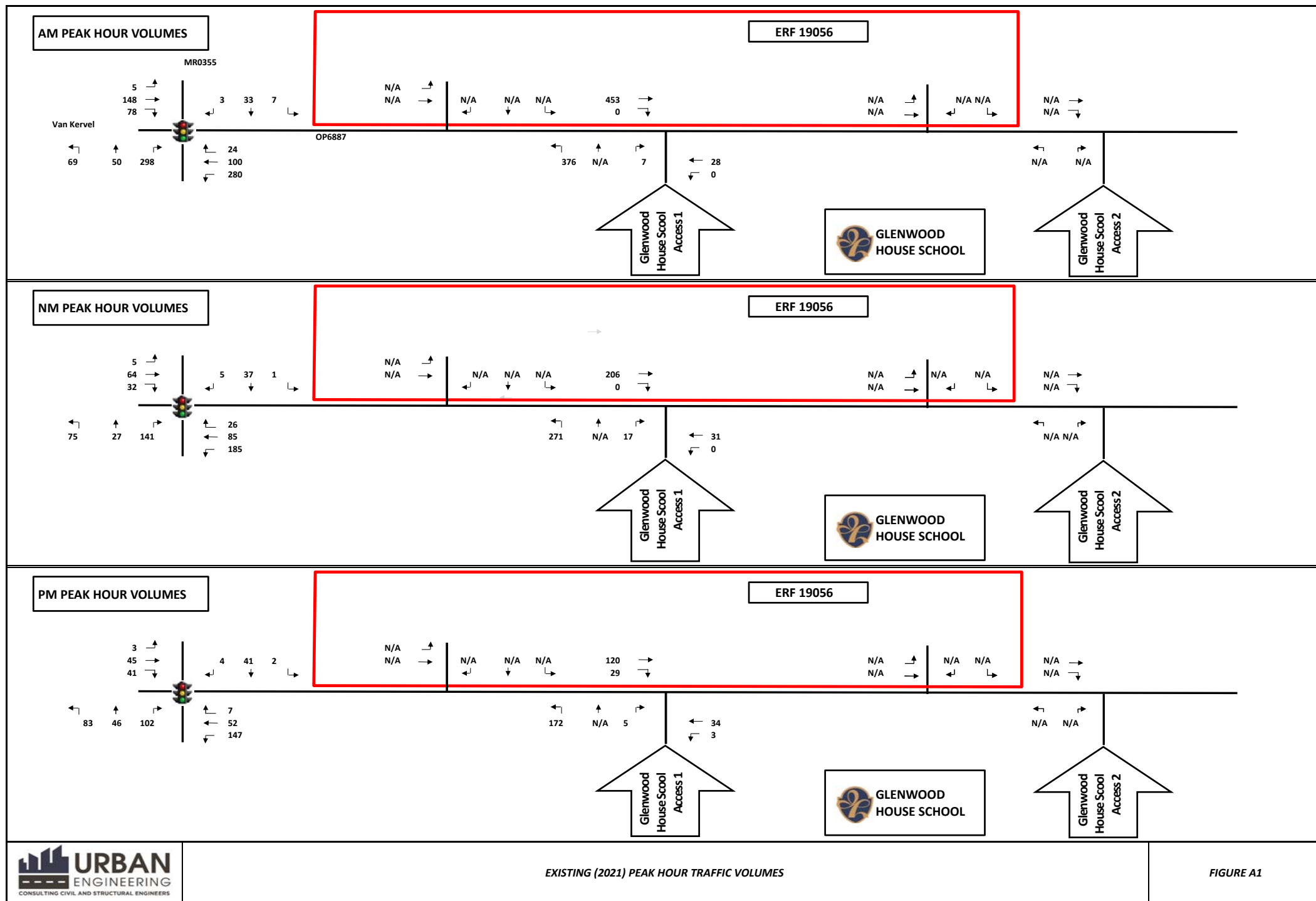
SCALE
As shown

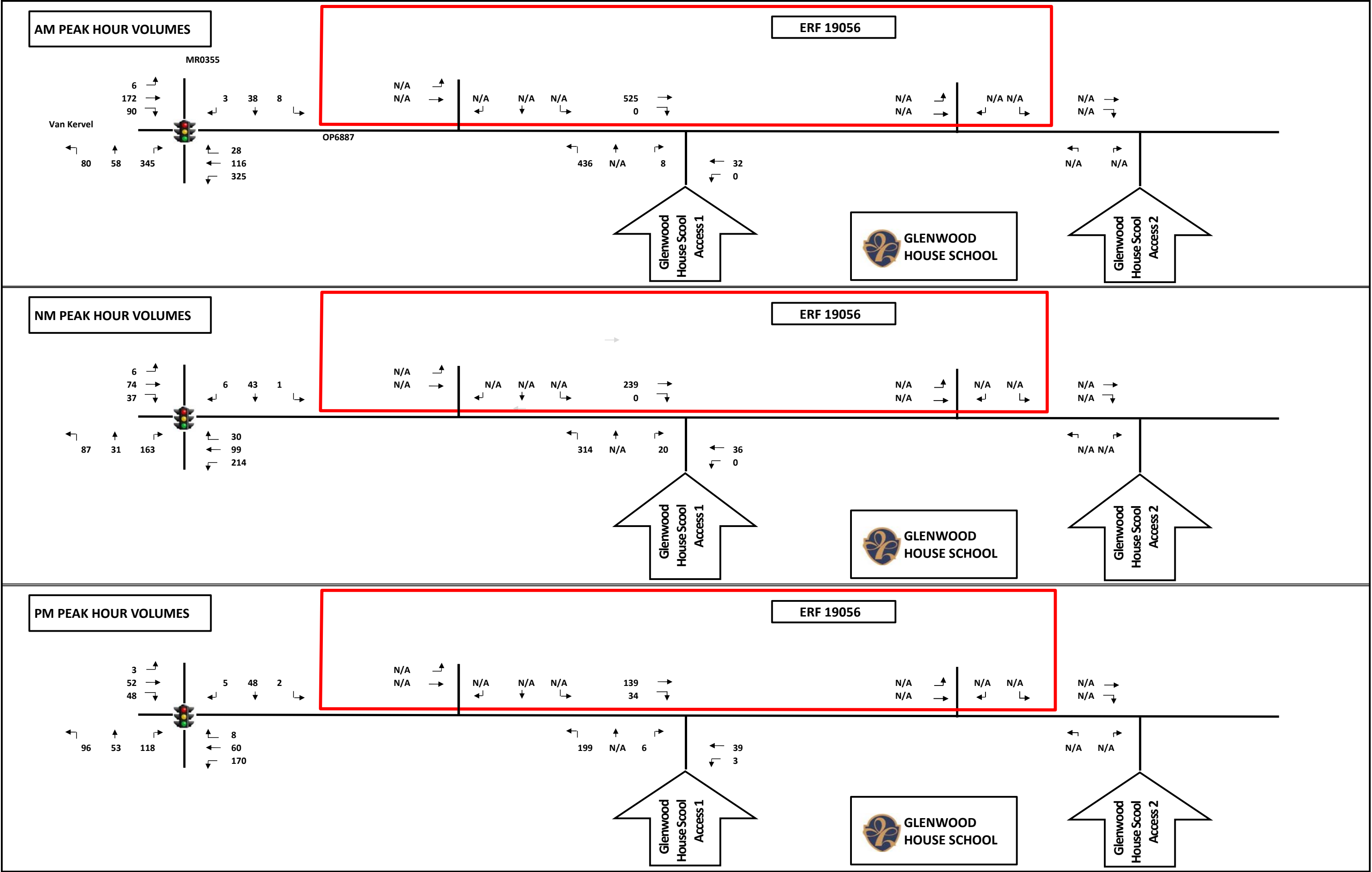
OWNER
W

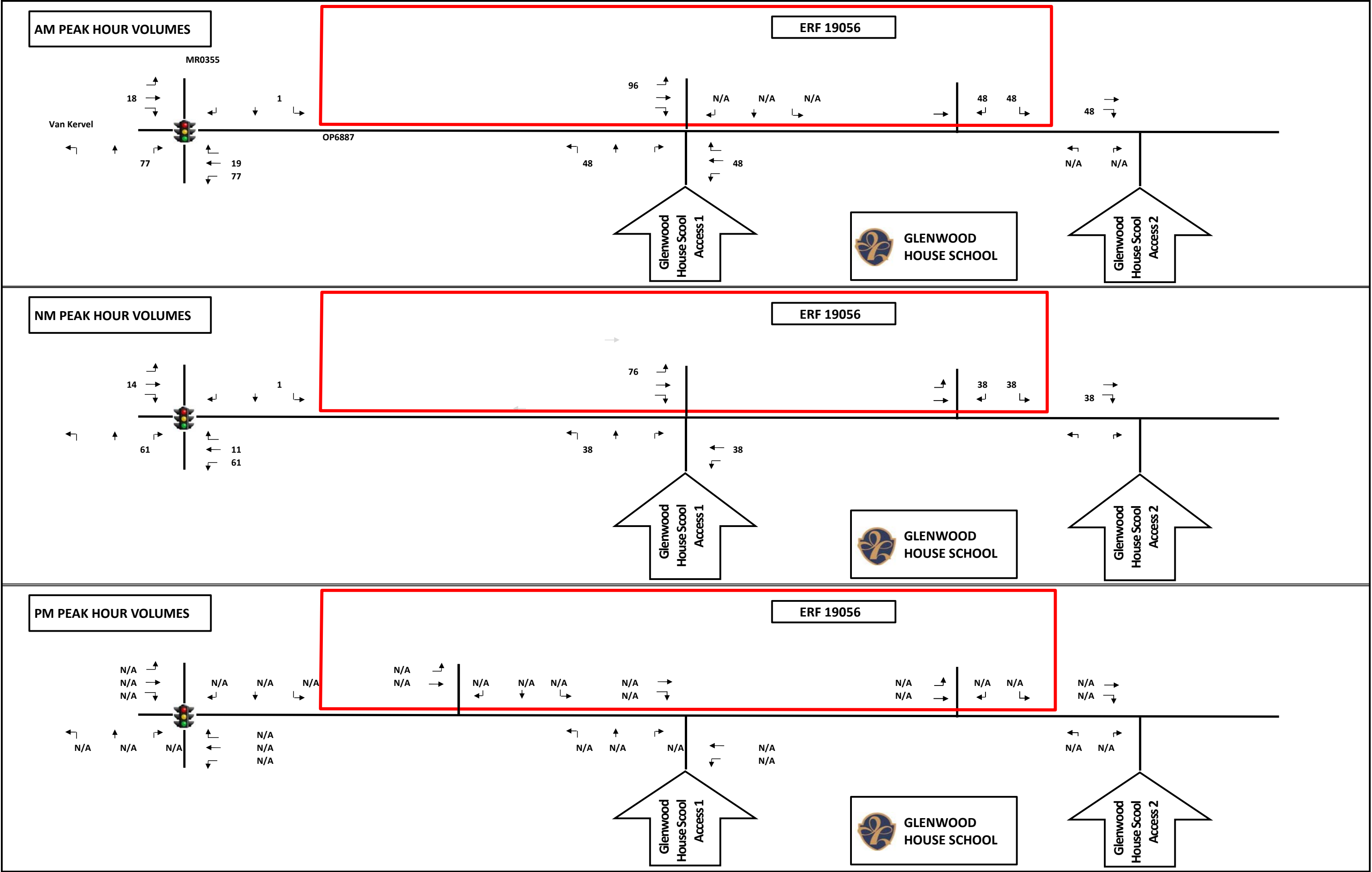
ANNEXURE C

TRIP GENERATION CALCULATIONS

Development	Size/Number of Units	Unit	AM Peak	PM Peak	Friday PM	Midday	Evening	Saturday	Sunday	Size Adj. Factor	Mixed-Use Development?	Low Car Ownership?	Very Low Car Ownership?	Transit Nodes / Corridors?	AM Peak	PM Peak	Friday PM	Midday	Evening	Saturday	Sunday
Service Industry		100 m² GLA	0.9	0.9		0.9		0.15		1	N	N	N	N	0	0	0	0	0	0	0
Heavy Industry/Manufacturing		100 m² GLA	0.5	0.7						1	N	N	N	N	0	0	0	0	0	0	0
Mining		1 Employee								1	N	N	N	N	0	0	0	0	0	0	0
Industrial Area (Park)		100 m² GLA	0.8	0.8				0.4		1	N	N	N	N	0	0	0	0	0	0	0
Manufacturing		100 m² GLA	0.6	0.6				0.3		1	N	N	N	N	0	0	0	0	0	0	0
Warehousing and Distribution		100 m² GLA	0.5	0.5				0.15		1	N	N	N	N	0	0	0	0	0	0	0
Mini-Warehousing		100 m² GLA	0.15	0.25		11.75		0.4	0.3	1	N	N	N	N	0	0	0	0	0	0	0
Single Dwelling Units		1 D/Unit	1	1				0.5	0.5	1	N	N	N	N	0	0	0	0	0	0	0
Apartments and Flats		1 D/Unit	0.65	0.65				0.35	0.35	1	N	N	N	N	0	0	0	0	0	0	0
Student Apartments and Flats		1 D/Unit	0.2	0.3				0.15	0.15	1	N	N	N	N	0	0	0	0	0	0	0
Townhouses (Simplexes & Duplexes)		1 D/Unit	0.85	0.85				0.45	0.45	1	N	N	N	N	0	0	0	0	0	0	0
Multi-Level Townhouses		1 D/Unit	0.75	0.75				0.4	0.4	1	N	N	N	N	0	0	0	0	0	0	0
Retirement Village		1 D/Unit	0.35	0.35		0.4		0.2	0.2	1	N	N	N	N	0	0	0	0	0	0	0
Old-Age Home		1 D/Unit	0.15	0.2		0.35		0.3	0.35	1	N	N	N	N	0	0	0	0	0	0	0
Recreational Homes		1 D/Unit	0.15	0.25				0.35	0.35	1	N	N	N	N	0	0	0	0	0	0	0
Hotel, Residential		1 Unit	0.5	0.5		0.25		0.7	0.55	1	N	N	N	N	0	0	0	0	0	0	0
Hotel, Resort		1 Room	0.3	0.4						1	N	N	N	N	0	0	0	0	0	0	0
Guest House		1 Room	0.45	0.45				0.25	0.25	1	N	N	N	N	0	0	0	0	0	0	0
Golf Course		1 Course	40	50				80	80	1	N	N	N	N	0	0	0	0	0	0	0
Casino		100 m² GLA	0.85	5		3.25	6.25	3		1	N	N	N	N	0	0	0	0	0	0	0
Amusement Park		1 Ha	0.5	10				47	44	1	N	N	N	N	0	0	0	0	0	0	0
Sport Stadium		1000 Seat		150			270	170		1	N	N	N	N	0	0	0	0	0	0	0
Health & Fitness Centre		100 m² GLA	5	9.5						1	N	N	N	N	0	0	0	0	0	0	0
Public Primary School		1 Student	0.85	0.3		0.35				1	N	N	N	N	0	0	0	0	0	0	0
Public Secondary School		1 Student	0.75	0.25		0.35				1	N	N	N	N	0	0	0	0	0	0	0
Private School		1 Student	0.8	0.3		0.35				1	N	N	N	N	0	0	0	0	0	0	0
University/College		1 Student	0.2	0.2		0.25				1	N	N	N	N	0	0	0	0	0	0	0
Places of Public Worship (Weekend)		1 Seat	0.05	0.05					0.65	1	N	N	N	N	0	0	0	0	0	0	0
Places of Public Worship (Weekday)		1 Seat	0.05	0.05						1	N	N	N	N	0	0	0	0	0	0	0
Pre-School (Day Care)	100	1 Student	1	0.8		0.3				1	Y	N	N	N	95	76	0	29	0	0	0
Cemetery		1 Ha	0.2	0.2		4		8		1	N	N	N	N	0	0	0	0	0	0	0
Public Hospital		1 Bed	1.5	1.45		1.5		1	1	1	N	N	N	N	0	0	0	0	0	0	0
Private Hospital		100 m² GLA	1.65	1.5		1.6	1.7			1	N	N	N	N	0	0	0	0	0	0	0
Nursing Home		1 Bed	0.2	0.2		0.3		0.4	0.35	1	N	N	N	N	0	0	0	0	0	0	0
Medical Clinic		100 m² GLA	6	6		4.2		7.8		1	N	N	N	N	0	0	0	0	0	0	0
Offices		100 m² GLA	2.1	2.1				0.45	0.15	1	N	N	N	N	0	0	0	0	0	0	0
Home Offices & Undertakings		1 House	6.5	6.5		7				1	N	N	N	N	0	0	0	0	0	0	0
Medical Consulting Rooms		100 m² GLA	8	8		8		3.9	0.45	1	N	N	N	N	0	0	0	0	0	0	0
Business Centre (Park)		100 m² GLA	1.5	1.5						1	N	N	N	N	0	0	0	0	0	0	0
Conference Centre		1 Seat	0.5							1	N	N	N	N	0	0	0	0	0	0	0
Building Materials		100 m² GLA	2.8		5.5			11	5	1	N	N	N	N	0	0	0	0	0	0	0
Hardware and Paint Store		100 m² GLA	1.15		5.2			12	10	1	N	N	N	N	0	0	0	0	0	0	0
Nursery (Garden Centre)		100 m² GLA	1.4	3	4.1			4		1	N	N	N	N	0	0	0	0	0	0	0
Shopping Centre		100 m² GLA	0.6		3.4			4.5		2.615	N	N	N	N	0	0	0	0	0	0	0
Bulk Trade Centre		100 m² GLA	1.1		1.5	0.9		3.9		1	N	N	N	N	0	0	0	0	0	0	0
Motor Dealership		100 m² GLA	2.2		2.3	5.1		2.2		1	N	N	N	N	0	0	0	0	0	0	0
Furniture Store		100 m² GLA	0.2	2.1	0.5	1.3		2.5	1	1	N	N	N	N	0	0	0	0	0	0	0
Restaurant, Quality (Sit-Down)		100 m² GLA	0.75	11.8		9.8	9	11	9	1	N	N	N	N	0	0	0	0	0	0	0
Restaurant, Family (Sit-Down)		100 m² GLA		8			10	20	25	1	N	N	N	N	0	0	0	0	0	0	0
Fast Food		100 m² GLA	45	50		30	55			1	N	N	N	N	0	0	0	0	0	0	0
Filling Station		1 Station								1	N	N	N	N	0	0	0	0	0	0	0
Vehicle Fitment Centre		100 m² GLA	3	4.3				5.2		1	N	N	N	N	0	0	0	0	0	0	0
TOTAL TRIPS GENERATED															95	76	0	29	0	0	0
															76						

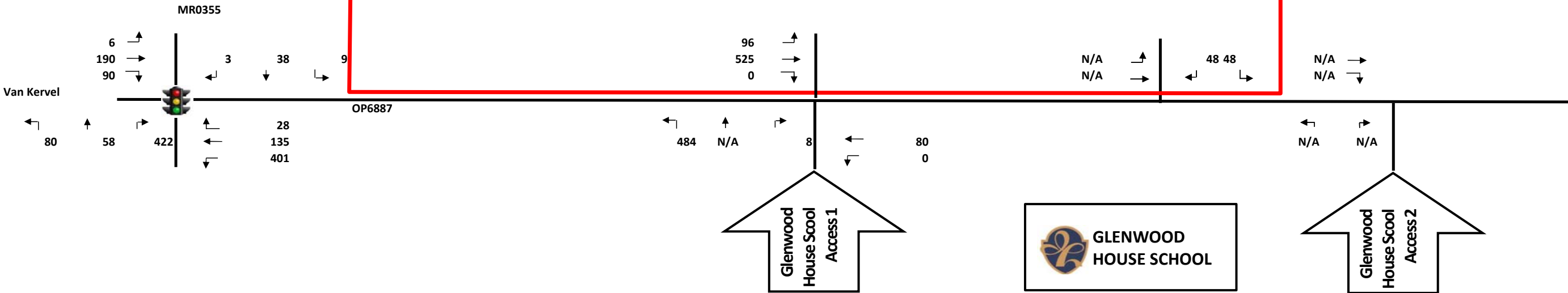






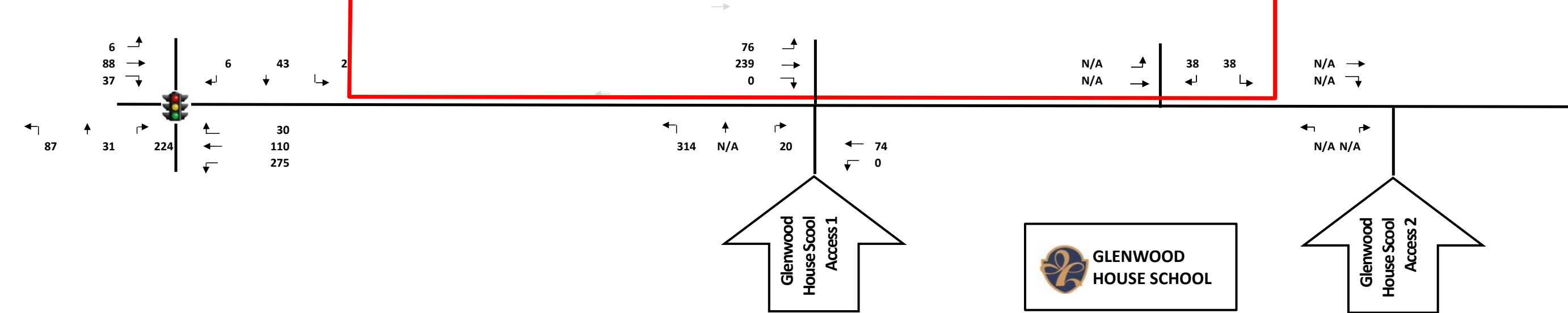
AM PEAK HOUR VOLUMES

ERF 19056



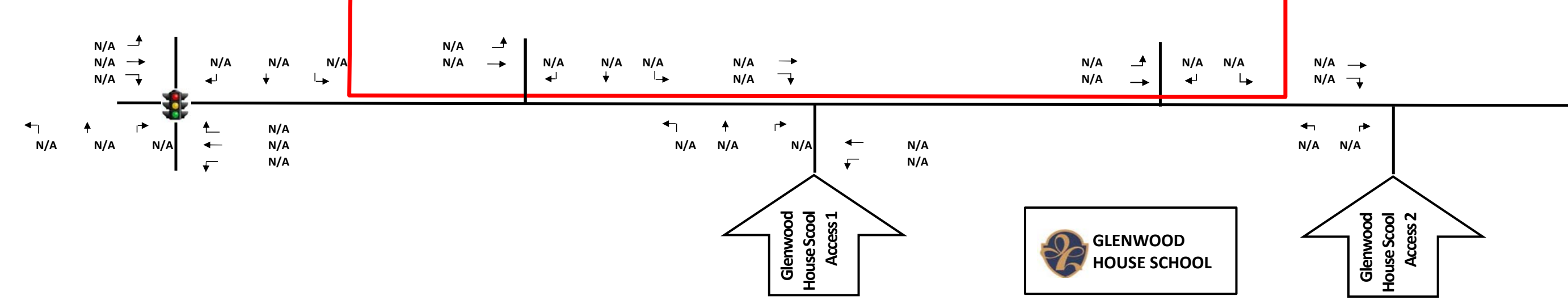
NM PEAK HOUR VOLUMES

ERF 19056



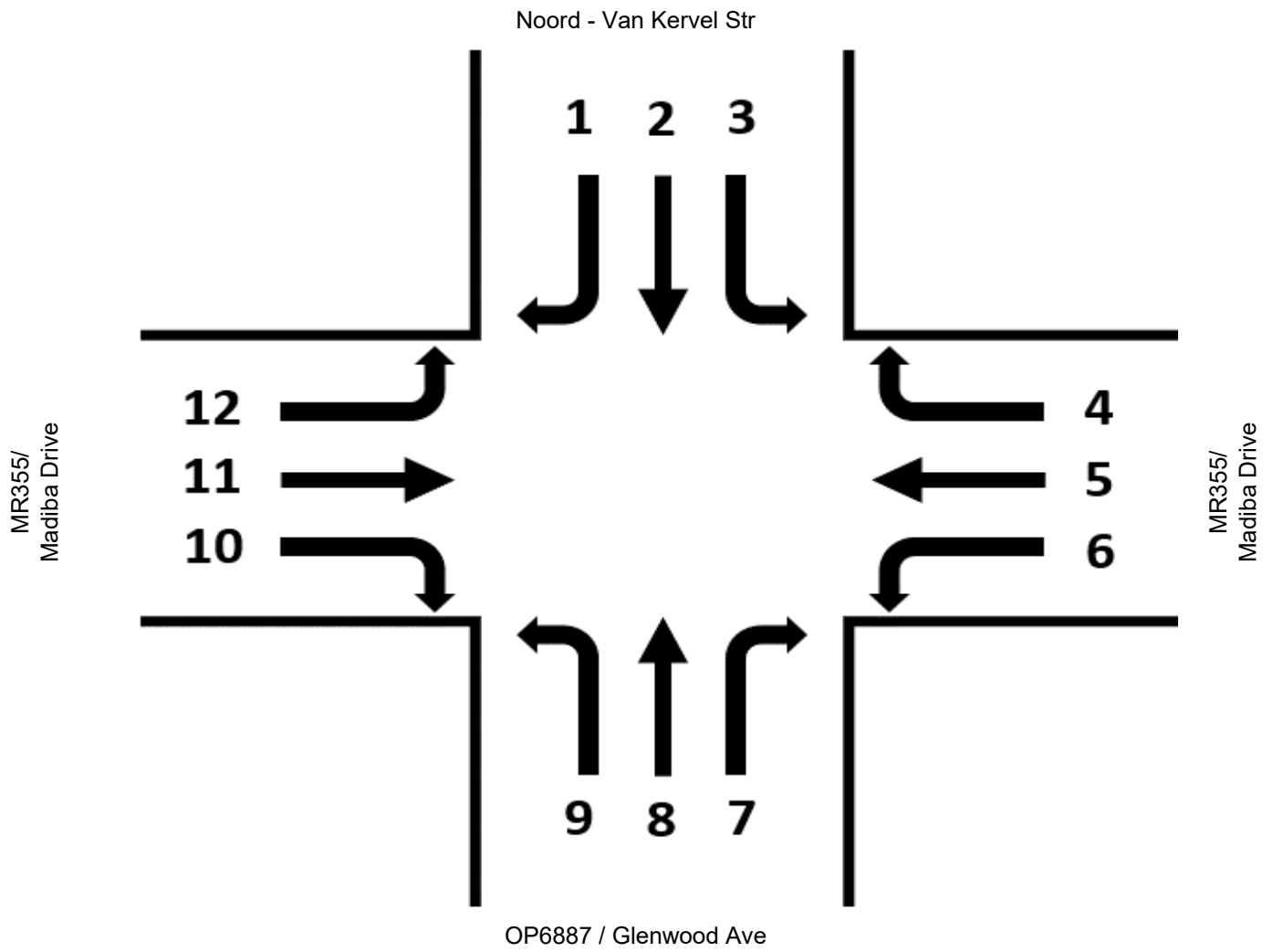
PM PEAK HOUR VOLUMES

ERF 19056



ANNEXURE D

TRAFFIC COUNT DATA



Verkeerstelling/Traffic Count

Projek Naam: Glenwood Pre-School
 Plek/Location: Madiba Dr / Van Kervel / Glenwood Ave
 Datum/Date: 19/10/2021
 Teller/Counter: JE Giewelaar









Tyd	VAN KERVEL STREET						MADIBA DRIVE					
	1		2		3		4		5		6	
	L	S	L	S	L	S	L	S	L	S	L	S
06:00 - 06:15	2	1	0	0	0	0	0	0	2	0	0	0
06:15 - 06:30	9	1	1	0	0	0	0	0	4	0	0	0
06:30 - 06:45	14	1	4	0	0	0	0	0	9	0	0	0
06:45 - 07:00	22	1	19	0	0	0	0	0	13	0	1	0
07:00 - 07:15	37	2	45	0	1	0	1	0	17	0	2	0
07:15 - 07:30	56	2	99	0	4	0	3	0	31	1	4	0
07:30 - 07:45	69	3	128	0	5	0	3	0	34	2	5	0
07:45 - 08:00	98	3	167	0	5	0	3	0	44	2	8	0
08:00 - 08:15	117	4	170	0	6	0	3	0	49	3	8	0
08:15 - 08:30	123	4	174	0	6	0	3	0	50	4	8	0
08:30 - 08:45	136	5	178	0	7	0	4	0	55	4	8	0
08:45 - 09:00	148	5	179	0	7	0	5	0	66	4	9	0
09:00 - 09:15	167	5	179	0	8	0	5	0	76	4	9	0
09:15 - 09:30	175	5	179	0	8	0	5	0	79	4	9	0
09:30 - 09:45	189	5	181	0	8	0	6	0	89	4	9	0
09:45 - 10:00	202	5	195	0	8	0	7	0	95	5	11	0
10:00 - 10:15	213	5	195	0	8	0	7	0	101	7	12	0
10:15 - 10:30	225	5	198	0	10	0	7	0	105	7	12	0
10:30 - 10:45	235	6	200	0	10	0	8	0	124	7	13	0
10:45 - 11:00	246	6	200	0	10	0	8	0	134	8	13	0
11:00 - 11:15	258	6	201	0	11	0	8	0	141	8	13	0
11:15 - 11:30	270	6	202	0	11	0	9	0	152	8	13	0
11:30 - 11:45	291	7	208	0	13	0	9	0	163	10	13	0
11:45 - 12:00	299	7	208	0	15	0	9	0	170	10	16	0
12:00 - 12:15	310	7	210	0	17	0	11	0	180	10	16	0
12:15 - 12:30	317	7	222	0	18	0	11	0	193	10	18	0
12:30 - 12:45	323	7	225	0	18	0	12	0	197	10	20	0
12:45 - 13:00	338	7	238	0	19	0	12	0	206	10	21	0
13:00 - 13:15	345	7	262	0	19	0	13	0	211	10	21	0

13:15 - 13:30	355	7	269	0	19	0	13	0	224	11	21	0
13:30 - 13:45	358	7	294	0	19	0	13	0	227	13	21	0
13:45 - 14:00	367	7	314	0	20	1	14	0	242	14	21	0
14:00 - 14:15	378	8	320	0	23	1	17	0	250	14	22	0
14:15 - 14:30	385	9	333	0	23	1	18	0	257	15	22	0
14:30 - 14:45	396	9	342	1	25	1	19	0	262	16	23	0
14:45 - 15:00	409	10	357	1	25	1	19	0	278	16	23	0
15:00 - 15:15	417	10	364	1	26	1	21	0	289	16	24	0
15:15 - 15:30	424	11	366	1	26	1	23	0	299	16	24	0
15:30 - 15:45	431	11	372	1	27	1	23	0	308	16	24	0
15:45 - 16:00	441	11	374	1	27	1	23	0	331	16	24	0
16:00 - 16:15	448	11	383	1	28	1	24	0	345	17	24	0
16:15 - 16:30	463	11	389	1	28	1	26	0	354	17	25	0
16:30 - 16:45	479	11	391	1	28	1	26	0	375	17	25	0
16:45 - 17:00	498	11	394	1	28	1	26	0	381	17	25	0
17:00 - 17:15	518	11	400	1	29	1	26	0	389	19	25	0
17:15 - 17:30	537	11	405	1	32	1	26	0	406	19	26	0
17:30 - 17:45	544	11	407	1	33	1	26	0	415	19	26	0
17:45 - 18:00	566	11	409	1	33	1	28	0	422	19	26	0

Verkeerstelling/Traffic Count

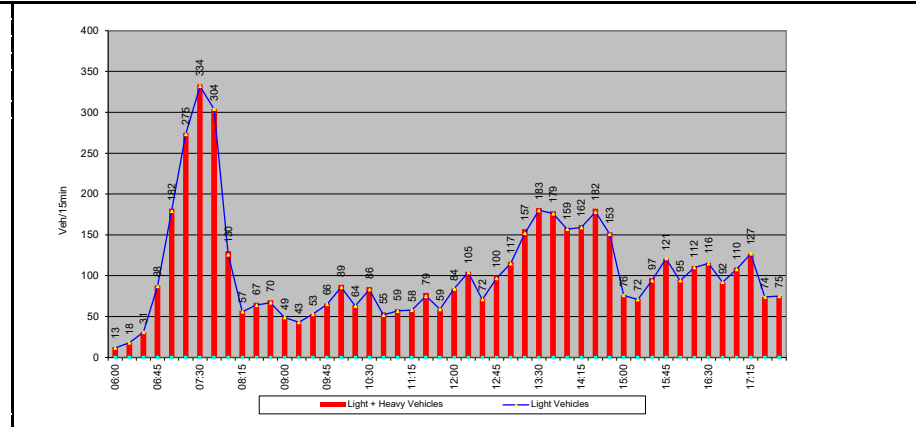
Projek Naam: Glenwood Pre-School
 Plek/Location: Madiba Dr / Van Kervel / Glenwood Ave
 Datum/Date: 19/10/2021
 Teller/Counter: JE Giewelaar



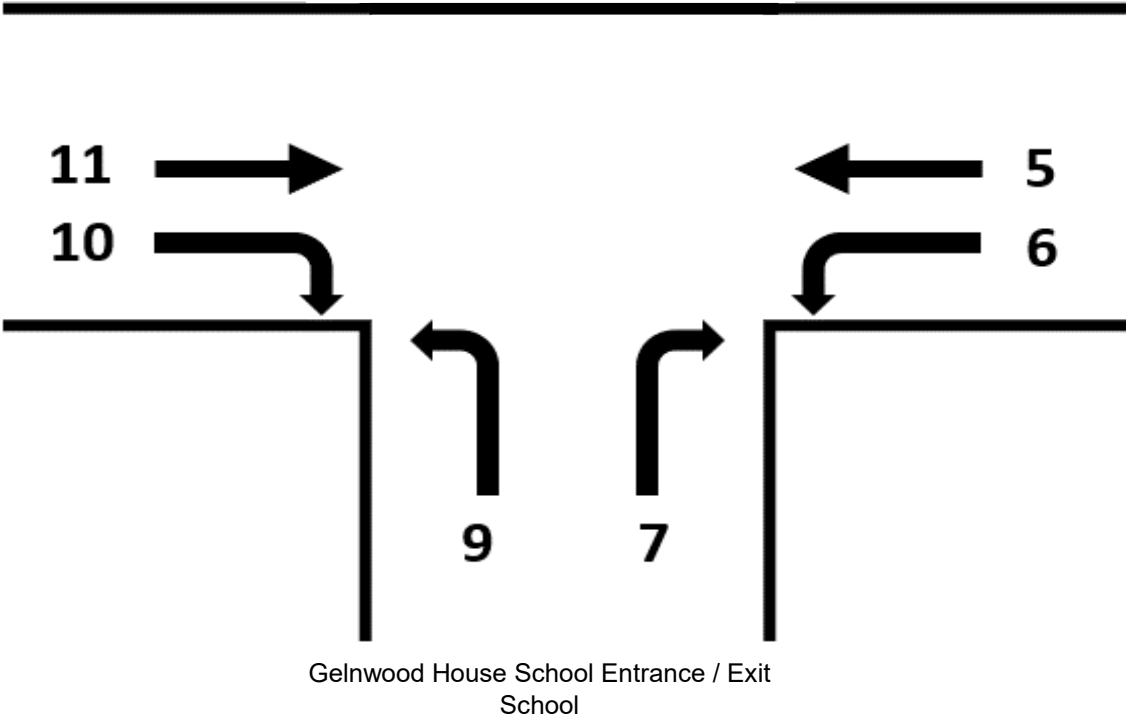
Tyd	GLENWOOD AVENUE						MADIBA DRIVE					
	7		8		9		10		11		12	
												
	L	S	L	S	L	S	L	S	L	S	L	S
06:00 - 06:15	0	0	0	0	1	0	2	0	1	0	4	0
06:15 - 06:30	0	0	0	0	1	0	4	0	4	0	7	0
06:30 - 06:45	2	0	0	0	4	0	8	0	7	0	13	0
06:45 - 07:00	5	0	3	0	20	0	25	0	15	1	25	0
07:00 - 07:15	25	0	14	0	48	0	75	0	24	3	38	0
07:15 - 07:30	27	0	36	0	112	0	144	0	32	3	52	1
07:30 - 07:45	29	0	77	0	204	0	259	0	45	3	74	1
07:45 - 08:00	29	0	103	0	300	0	323	0	63	3	93	1
08:00 - 08:15	29	0	116	0	331	0	345	0	75	5	113	1
08:15 - 08:30	30	0	116	0	344	0	352	0	87	5	125	1
08:30 - 08:45	31	0	118	0	348	0	362	0	99	6	136	2
08:45 - 09:00	33	0	120	0	350	0	371	0	115	8	146	3
09:00 - 09:15	34	0	120	0	353	0	374	0	122	8	151	3
09:15 - 09:30	35	0	120	0	354	0	379	0	133	8	165	3
09:30 - 09:45	37	0	120	0	354	0	381	0	142	8	178	3
09:45 - 10:00	39	0	120	0	361	0	383	0	150	8	188	3
10:00 - 10:15	40	0	124	0	377	0	396	0	161	8	211	4
10:15 - 10:30	40	0	127	0	385	0	400	0	171	9	228	4
10:30 - 10:45	40	0	128	0	396	0	407	2	188	9	242	4
10:45 - 11:00	40	0	130	1	403	1	414	2	197	9	248	4
11:00 - 11:15	42	0	130	1	404	1	415	2	212	10	265	5
11:15 - 11:30	44	0	130	1	408	1	423	2	219	10	277	5
11:30 - 11:45	45	0	131	1	416	1	424	3	226	10	294	5
11:45 - 12:00	46	0	132	1	420	1	437	3	231	10	309	5
12:00 - 12:15	52	0	133	1	428	1	445	3	244	10	330	5
12:15 - 12:30	53	0	133	2	433	1	481	3	251	10	350	5

12:30 - 12:45	53	0	141	2	448	1	487	4	261	10	366	5
12:45 - 13:00	54	0	152	2	461	1	501	4	266	12	380	6
13:00 - 13:15	54	0	165	2	473	1	537	5	268	13	395	6
13:15 - 13:30	59	0	168	4	498	1	596	5	276	15	417	6
13:30 - 13:45	70	0	193	4	562	1	624	5	281	15	433	7
13:45 - 14:00	79	0	213	4	592	1	670	5	289	16	450	7
14:00 - 14:15	80	0	238	4	643	1	700	5	291	17	466	7
14:15 - 14:30	85	0	253	4	683	1	737	5	301	17	490	8
14:30 - 14:45	85	0	274	5	746	1	774	5	310	18	509	8
14:45 - 15:00	86	0	282	5	786	1	792	5	326	18	533	9
15:00 - 15:15	87	0	289	5	790	1	802	5	336	18	547	9
15:15 - 15:30	88	0	297	5	792	1	812	5	344	18	568	9
15:30 - 15:45	90	0	305	5	810	1	819	5	355	20	593	10
15:45 - 16:00	92	0	309	5	838	1	840	5	368	20	611	10
16:00 - 16:15	99	0	314	5	855	1	848	5	374	20	630	10
16:15 - 16:30	100	0	320	5	866	1	873	5	383	21	655	11
16:30 - 16:45	103	0	334	5	871	1	888	5	392	21	685	12
16:45 - 17:00	105	0	336	5	880	1	898	5	406	21	712	12
17:00 - 17:15	110	0	339	5	894	1	903	5	423	21	741	12
17:15 - 17:30	110	0	342	5	902	1	914	5	450	21	774	12
17:30 - 17:45	110	0	345	5	910	1	921	5	462	21	800	12
17:45 - 18:00	112	0	347	5	916	1	925	5	470	21	820	12

Site Layout :

[illegible]

Gelnwood Avenue/OP6887
(Western Approach)



Gelnwood Avenue/OP6887
(Eastern Approach)

Verkeerstelling/Traffic Count

Projek Naam: Glenwood Pre-School
 Plek/Location: Glenwood House School Entrance / Exit
 Datum/Date: 19/10/2021
 Teller/Counter: JE Giewelaar









Tyd	N/A						GLENWOOD AVE					
	1		2		3		4		5		6	
	L	S	L	S	L	S	L	S	L	S	L	S
06:00 - 06:15	0	0	0	0	0	0	0	0	1	0	0	0
06:15 - 06:30	0	0	0	0	0	0	0	0	1	0	0	0
06:30 - 06:45	0	0	0	0	0	0	0	0	4	0	0	0
06:45 - 07:00	0	0	0	0	0	0	0	0	9	0	0	0
07:00 - 07:15	0	0	0	0	0	0	0	0	18	0	0	0
07:15 - 07:30	0	0	0	0	0	0	0	0	26	0	0	0
07:30 - 07:45	0	0	0	0	0	0	0	0	30	0	0	0
07:45 - 08:00	0	0	0	0	0	0	0	0	37	0	0	0
08:00 - 08:15	0	0	0	0	0	0	0	0	45	0	0	0
08:15 - 08:30	0	0	0	0	0	0	0	0	49	0	0	0
08:30 - 08:45	0	0	0	0	0	0	0	0	51	0	0	0
08:45 - 09:00	0	0	0	0	0	0	0	0	56	0	0	0
09:00 - 09:15	0	0	0	0	0	0	0	0	57	0	1	0
09:15 - 09:30	0	0	0	0	0	0	0	0	58	0	2	0
09:30 - 09:45	0	0	0	0	0	0	0	0	59	0	2	0
09:45 - 10:00	0	0	0	0	0	0	0	0	63	0	2	0
10:00 - 10:15	0	0	0	0	0	0	0	0	65	0	4	0
10:15 - 10:30	0	0	0	0	0	0	0	0	66	0	4	0
10:30 - 10:45	0	0	0	0	0	0	0	0	69	0	5	0
10:45 - 11:00	0	0	0	0	0	0	0	0	75	0	5	0
11:00 - 11:15	0	0	0	0	0	0	0	0	77	0	5	0
11:15 - 11:30	0	0	0	0	0	0	0	0	81	0	5	0
11:30 - 11:45	0	0	0	0	0	0	0	0	87	0	5	0
11:45 - 12:00	0	0	0	0	0	0	0	0	91	0	8	0
12:00 - 12:15	0	0	0	0	0	0	0	0	97	0	11	0
12:15 - 12:30	0	0	0	0	0	0	0	0	99	1	11	0
12:30 - 12:45	0	0	0	0	0	0	0	0	104	1	11	0
12:45 - 13:00	0	0	0	0	0	0	0	0	108	1	11	0
13:00 - 13:15	0	0	0	0	0	0	0	0	115	1	11	0

13:15 - 13:30	0	0	0	0	0	0	0	0	120	3	11	0
13:30 - 13:45	0	0	0	0	0	0	0	0	123	3	11	0
13:45 - 14:00	0	0	0	0	0	0	0	0	126	3	11	0
14:00 - 14:15	0	0	0	0	0	0	0	0	135	3	11	0
14:15 - 14:30	0	0	0	0	0	0	0	0	151	3	11	0
14:30 - 14:45	0	0	0	0	0	0	0	0	158	3	11	0
14:45 - 15:00	0	0	0	0	0	0	0	0	164	3	13	0
15:00 - 15:15	0	0	0	0	0	0	0	0	169	3	14	0
15:15 - 15:30	0	0	0	0	0	0	0	0	174	3	14	0
15:30 - 15:45	0	0	0	0	0	0	0	0	178	3	14	0
15:45 - 16:00	0	0	0	0	0	0	0	0	187	3	17	0
16:00 - 16:15	0	0	0	0	0	0	0	0	194	3	17	0
16:15 - 16:30	0	0	0	0	0	0	0	0	202	3	17	0
16:30 - 16:45	0	0	0	0	0	0	0	0	205	3	17	0
16:45 - 17:00	0	0	0	0	0	0	0	0	212	3	17	0
17:00 - 17:15	0	0	0	0	0	0	0	0	225	3	17	0
17:15 - 17:30	0	0	0	0	0	0	0	0	226	3	17	0
17:30 - 17:45	0	0	0	0	0	0	0	0	228	3	18	0
17:45 - 18:00	0	0	0	0	0	0	0	0	230	3	18	0

Verkeerstelling/Traffic Count

Projek Naam: Glenwood Pre-School
 Plek/Location: Glenwood House School Entrance / Exit
 Datum/Date: 19/10/2021
 Teller/Counter: JE Giewelaar



Tyd	ENTRANCE / EXIT SCHOOL						N/A					
	7		8		9		10		11		12	
												
	L	S	L	S	L	S	L	S	L	S	L	S
06:00 - 06:15	0	0	0	0	0	0	0	0	2	0	0	0
06:15 - 06:30	0	0	0	0	0	0	2	0	3	0	0	0
06:30 - 06:45	0	0	0	0	2	0	3	0	9	0	0	0
06:45 - 07:00	0	0	0	0	19	0	3	0	42	0	0	0
07:00 - 07:15	2	0	0	0	69	0	3	0	119	0	0	0
07:15 - 07:30	4	0	0	0	149	0	3	0	244	0	0	0
07:30 - 07:45	6	0	0	0	280	0	3	0	389	0	0	0
07:45 - 08:00	7	0	0	0	395	0	3	0	495	0	0	0
08:00 - 08:15	7	0	0	0	431	0	11	0	512	0	0	0
08:15 - 08:30	7	0	0	0	441	0	21	0	513	0	0	0
08:30 - 08:45	7	0	0	0	446	0	34	0	514	0	0	0
08:45 - 09:00	7	0	0	0	447	0	41	0	518	0	0	0
09:00 - 09:15	7	0	0	0	450	0	42	0	520	0	0	0
09:15 - 09:30	7	0	0	0	451	0	46	0	521	0	0	0
09:30 - 09:45	7	0	0	0	452	0	49	0	522	0	0	0
09:45 - 10:00	8	0	0	0	457	0	58	0	531	0	0	0
10:00 - 10:15	8	0	0	0	476	0	61	0	532	0	0	0
10:15 - 10:30	9	0	0	0	486	0	66	1	535	0	0	0
10:30 - 10:45	9	0	0	0	495	0	72	2	538	0	0	0
10:45 - 11:00	9	0	0	0	498	2	77	2	544	0	0	0
11:00 - 11:15	9	0	0	0	499	2	79	2	550	0	0	0
11:15 - 11:30	9	0	0	0	501	2	82	2	556	0	0	0
11:30 - 11:45	9	0	0	0	505	2	84	2	561	1	0	0
11:45 - 12:00	9	0	0	0	507	2	92	2	569	1	0	0
12:00 - 12:15	9	0	0	0	510	2	95	2	585	1	0	0
12:15 - 12:30	12	0	0	0	519	2	96	2	625	1	0	0

12:30 - 12:45	14	0	0	0	538	2	96	2	636	2	0	0
12:45 - 13:00	14	0	0	0	558	2	96	2	664	2	0	0
13:00 - 13:15	21	0	0	0	577	2	96	2	724	3	0	0
13:15 - 13:30	32	0	0	0	599	2	96	2	790	3	0	0
13:30 - 13:45	41	0	0	0	702	2	96	2	843	3	0	0
13:45 - 14:00	48	0	0	0	758	2	96	2	909	3	0	0
14:00 - 14:15	48	0	0	0	826	2	96	2	946	3	0	0
14:15 - 14:30	49	0	0	0	870	2	96	2	996	3	0	0
14:30 - 14:45	52	0	0	0	947	3	96	2	1043	4	0	0
14:45 - 15:00	53	0	0	0	990	3	119	2	1060	4	0	0
15:00 - 15:15	53	0	0	0	997	3	125	2	1065	4	0	0
15:15 - 15:30	53	0	0	0	1003	3	133	2	1069	4	0	0
15:30 - 15:45	53	0	0	0	1027	3	140	2	1075	4	0	0
15:45 - 16:00	53	0	0	0	1052	3	155	2	1083	4	0	0
16:00 - 16:15	53	0	0	0	1069	3	163	2	1092	4	0	0
16:15 - 16:30	53	0	0	0	1084	3	187	2	1100	4	0	0
16:30 - 16:45	53	0	0	0	1103	3	194	2	1110	4	0	0
16:45 - 17:00	53	0	0	0	1109	3	200	2	1117	4	0	0
17:00 - 17:15	53	0	0	0	1118	3	205	2	1123	4	0	0
17:15 - 17:30	53	0	0	0	1128	3	215	2	1130	4	0	0
17:30 - 17:45	54	0	0	0	1137	3	220	2	1134	4	0	0
17:45 - 18:00	54	0	0	0	1145	3	222	2	1138	4	0	0

Site Layout :

[illegible]

ANNEXURE E

SIDRA RESULTS

MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2021 AM)]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	7	0,0	0,046	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,1
5	T1	28	0,0	0,046	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,5
Approach		35	0,0	0,046	7,5	NA	0,0	0,0	0,00	0,86	0,00	45,4
NorthWest: OP6887 (Glenwood Ave)												
11	T1	12	0,0	2,829	3324,1	LOS F	371,4	1856,9	1,00	8,48	9,02	0,7
12	R2	376	0,0	2,829	3324,1	LOS F	371,4	1856,9	1,00	8,48	9,02	0,5
Approach		388	0,0	2,829	3324,1	NA	371,4	1856,9	1,00	8,48	9,02	0,5
SouthWest: Glenwood House School												
1	L2	376	0,0	1,434	989,0	LOS F	256,5	1795,5	1,00	0,94	5,78	1,3
3	R2	7	0,0	1,434	5388,9	LOS F	256,5	1795,5	1,00	0,94	5,78	1,3
Approach		383	0,0	1,434	1069,4	LOS F	256,5	1795,5	1,00	0,94	5,78	1,3
All Vehicles		806	0,0	2,829	2108,7	NA	371,4	1856,9	0,96	4,56	7,09	0,8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2021 NM)]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,041	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,1
5	T1	31	0,0	0,041	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,2
Approach		32	0,0	0,041	7,5	NA	0,0	0,0	0,00	0,86	0,00	45,2
NorthWest: OP6887 (Glenwood Ave)												
11	T1	1	0,0	1,503	968,2	LOS F	127,7	638,4	1,00	5,13	5,34	1,1
12	R2	206	0,0	1,503	968,2	LOS F	127,7	638,4	1,00	5,13	5,34	1,4
Approach		207	0,0	1,503	968,2	NA	127,7	638,4	1,00	5,13	5,34	1,4
SouthWest: Glenwood House School												
1	L2	271	0,0	0,254	12,0	LOS B	1,1	7,8	0,09	0,94	0,09	5,1
3	R2	17	0,0	0,254	22,4	LOS C	1,1	7,8	0,09	0,94	0,09	5,1
Approach		288	0,0	0,254	12,6	LOS B	1,1	7,8	0,09	0,94	0,09	5,1
All Vehicles		527	0,0	1,503	387,6	NA	127,7	638,4	0,44	2,58	2,15	2,6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2026 AM + Dev)]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,111	27,9	LOS D	0,1	0,5	0,06	0,82	0,06	35,2
5	T1	80	0,0	0,111	8,4	LOS A	0,1	0,5	0,06	0,82	0,06	35,0
23	R2	1	0,0	0,111	31,7	LOS D	0,1	0,5	0,06	0,82	0,06	44,4
Approach		82	0,0	0,111	9,0	NA	0,1	0,5	0,06	0,82	0,06	35,1
NorthWest: OP6887 (Glenwood Ave)												
27	L2	96	0,0	3,323	4221,8	LOS F	606,1	3217,8	1,00	5,22	12,96	0,4
11	T1	275	0,0	3,323	4215,5	LOS F	606,1	3217,8	1,00	5,22	12,96	0,4
12	R2	250	0,0	3,323	4216,6	LOS F	606,1	3217,8	1,00	5,22	12,96	0,4
Approach		621	0,0	3,323	4216,9	NA	606,1	3217,8	1,00	5,22	12,96	0,4
SouthWest: Glenwood House School												
1	L2	484	0,0	2,694	3162,2	LOS F	437,4	3062,0	1,00	3,02	21,33	0,5
31	T1	1	0,0	2,694	7332,3	LOS F	437,4	3062,0	1,00	3,02	21,33	0,1
3	R2	8	0,0	2,694	3827,0	LOS F	437,4	3062,0	1,00	3,02	21,33	0,5
Approach		493	0,0	2,694	3181,4	LOS F	437,4	3062,0	1,00	3,02	21,33	0,5
All Vehicles		1196	0,0	3,323	3501,6	NA	606,1	3217,8	0,94	4,01	15,53	0,5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2026 AM + Dev) Mitigation]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,106	8,8	LOS A	0,0	0,1	0,02	0,85	0,02	36,1
5	T1	80	0,0	0,106	7,6	LOS A	0,0	0,1	0,02	0,85	0,02	35,9
23	R2	1	0,0	0,106	9,0	LOS A	0,0	0,1	0,02	0,85	0,02	45,8
Approach		82	0,0	0,106	7,6	NA	0,0	0,1	0,02	0,85	0,02	36,0
NorthWest: OP6887 (Glenwood Ave)												
27	L2	96	0,0	0,421	33,5	LOS D	10,0	58,4	0,42	0,16	0,58	1,9
11	T1	120	0,0	0,421	25,5	LOS D	10,0	58,4	0,42	0,16	0,58	1,8
12	R2	12	0,0	0,421	53,1	LOS F	10,0	58,4	0,42	0,16	0,58	1,8
Approach		228	0,0	0,421	30,3	NA	10,0	58,4	0,42	0,16	0,58	1,8
SouthWest: Glenwood House School												
1	L2	484	0,0	0,383	12,3	LOS B	2,1	14,7	0,24	0,88	0,24	5,1
31	T1	1	0,0	0,383	15,4	LOS C	2,1	14,7	0,24	0,88	0,24	0,6
3	R2	8	0,0	0,383	19,2	LOS C	2,1	14,7	0,24	0,88	0,24	5,1
Approach		493	0,0	0,383	12,4	LOS B	2,1	14,7	0,24	0,88	0,24	5,1
All Vehicles		803	0,0	0,421	17,0	NA	10,0	58,4	0,27	0,67	0,31	3,6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2026 AM)]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,043	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,1
5	T1	32	0,0	0,043	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,2
Approach		33	0,0	0,043	7,5	NA	0,0	0,0	0,00	0,86	0,00	45,2
NorthWest: OP6887 (Glenwood Ave)												
11	T1	20	0,0	3,740	4955,9	LOS F	557,6	2788,2	1,00	8,98	9,66	0,5
12	R2	505	0,0	3,740	4955,9	LOS F	557,6	2788,2	1,00	8,98	9,66	0,3
Approach		525	0,0	3,740	4955,9	NA	557,6	2788,2	1,00	8,98	9,66	0,4
SouthWest: Glenwood House School												
1	L2	436	0,0	1,644	1317,1	LOS F	319,2	2234,7	1,00	1,17	7,54	1,1
3	R2	8	0,0	1,644	4609,8	LOS F	319,2	2234,7	1,00	1,17	7,54	1,1
Approach		444	0,0	1,644	1376,4	LOS F	319,2	2234,7	1,00	1,17	7,54	1,1
All Vehicles		1002	0,0	3,740	3206,8	NA	557,6	2788,2	0,97	5,25	8,40	0,5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2026 NM + Dev)]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,100	16,2	LOS C	0,0	0,2	0,04	0,83	0,04	35,8
5	T1	74	0,0	0,100	7,9	LOS A	0,0	0,2	0,04	0,83	0,04	35,4
23	R2	1	0,0	0,100	19,0	LOS C	0,0	0,2	0,04	0,83	0,04	45,3
Approach		76	0,0	0,100	8,1	NA	0,0	0,2	0,04	0,83	0,04	35,5
NorthWest: OP6887 (Glenwood Ave)												
27	L2	76	0,0	3,096	3814,5	LOS F	537,5	2832,1	1,00	5,54	12,51	0,4
11	T1	239	0,0	3,096	3808,4	LOS F	537,5	2832,1	1,00	5,54	12,51	0,4
12	R2	250	0,0	3,096	3809,3	LOS F	537,5	2832,1	1,00	5,54	12,51	0,4
Approach		565	0,0	3,096	3809,6	NA	537,5	2832,1	1,00	5,54	12,51	0,4
SouthWest: Glenwood House School												
1	L2	314	0,0	4,566	6563,6	LOS F	356,1	2493,0	1,00	2,85	19,62	0,3
31	T1	1	0,0	4,566	7955,5	LOS F	356,1	2493,0	1,00	2,85	19,62	0,0
3	R2	20	0,0	4,566	6783,8	LOS F	356,1	2493,0	1,00	2,85	19,62	0,3
Approach		335	0,0	4,566	6580,9	LOS F	356,1	2493,0	1,00	2,85	19,62	0,3
All Vehicles		976	0,0	4,566	4464,8	NA	537,5	2832,1	0,93	4,25	13,98	0,4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2026 NM + Dev) Mitigation]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,098	8,7	LOS A	0,0	0,1	0,02	0,85	0,02	36,1
5	T1	74	0,0	0,098	7,6	LOS A	0,0	0,1	0,02	0,85	0,02	35,7
23	R2	1	0,0	0,098	8,8	LOS A	0,0	0,1	0,02	0,85	0,02	45,8
Approach		76	0,0	0,098	7,6	NA	0,0	0,1	0,02	0,85	0,02	35,8
NorthWest: OP6887 (Glenwood Ave)												
27	L2	76	0,0	0,385	31,5	LOS D	8,2	47,3	0,40	0,14	0,52	1,7
11	T1	119	0,0	0,385	21,2	LOS C	8,2	47,3	0,40	0,14	0,52	1,6
12	R2	12	0,0	0,385	45,2	LOS E	8,2	47,3	0,40	0,14	0,52	1,7
Approach		207	0,0	0,385	26,4	NA	8,2	47,3	0,40	0,14	0,52	1,7
SouthWest: Glenwood House School												
1	L2	314	0,0	0,285	12,2	LOS B	1,3	9,3	0,19	0,91	0,19	5,1
31	T1	1	0,0	0,285	13,1	LOS B	1,3	9,3	0,19	0,91	0,19	0,6
3	R2	20	0,0	0,285	17,3	LOS C	1,3	9,3	0,19	0,91	0,19	5,1
Approach		335	0,0	0,285	12,5	LOS B	1,3	9,3	0,19	0,91	0,19	5,1
All Vehicles		618	0,0	0,385	16,6	NA	8,2	47,3	0,24	0,64	0,28	3,2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY



Site: 102 [Glenwood House Access (2026 NM)]

New Site

Site Category: (None)

Stop (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
4	L2	1	0,0	0,048	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,1
5	T1	36	0,0	0,048	7,5	LOS A	0,0	0,0	0,00	0,86	0,00	45,2
Approach		37	0,0	0,048	7,5	NA	0,0	0,0	0,00	0,86	0,00	45,2
NorthWest: OP6887 (Glenwood Ave)												
11	T1	10	0,0	1,833	1549,5	LOS F	182,6	912,9	1,00	6,52	7,09	1,0
12	R2	239	0,0	1,833	1549,5	LOS F	182,6	912,9	1,00	6,52	7,09	0,9
Approach		249	0,0	1,833	1549,5	NA	182,6	912,9	1,00	6,52	7,09	0,9
SouthWest: Glenwood House School												
1	L2	314	0,0	0,344	12,0	LOS B	1,5	10,5	0,11	0,93	0,11	5,1
3	R2	20	0,0	0,344	34,7	LOS D	1,5	10,5	0,11	0,93	0,11	5,1
Approach		334	0,0	0,344	13,4	LOS B	1,5	10,5	0,11	0,93	0,11	5,1
All Vehicles		620	0,0	1,833	630,0	NA	182,6	912,9	0,46	3,17	2,91	1,9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2021 AM)]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	280	0,0	0,211	0,8	LOS A	1,7	12,2	0,17	0,14	0,17	19,9
23a	R1	100	0,0	0,671	59,3	LOS E	7,4	51,8	1,00	0,86	1,07	15,1
23b	R3	24	0,0	0,671	59,8	LOS E	7,4	51,8	1,00	0,86	1,07	15,3
Approach		404	0,0	0,671	18,8	LOS B	7,4	51,8	0,42	0,36	0,45	18,1
East: MR0355 (Madiba Drive)												
4b	L3	7	0,0	0,027	6,7	LOS A	0,5	3,4	0,21	0,24	0,21	39,0
8	T1	33	6,1	0,027	2,5	LOS A	0,5	3,4	0,21	0,24	0,21	38,6
9	R2	3	0,0	0,003	6,2	LOS A	0,0	0,2	0,22	0,52	0,22	37,5
Approach		43	4,7	0,027	3,5	LOS A	0,5	3,4	0,21	0,26	0,21	38,6
North: Van Kervel												
10	L2	5	0,0	0,864	70,4	LOS E	9,9	69,6	1,00	1,06	1,39	22,8
7a	L1	148	0,0	0,864	69,1	LOS E	9,9	69,6	1,00	1,06	1,39	22,9
12	R2	78	2,6	0,428	60,3	LOS E	4,5	31,9	0,98	0,77	0,98	24,1
Approach		231	0,9	0,864	66,2	LOS E	9,9	69,6	0,99	0,96	1,25	23,3
West: MR0355 (Madiba Drive)												
1	L2	69	1,4	0,080	6,1	LOS A	1,4	10,3	0,23	0,39	0,23	38,2
2	T1	50	4,0	0,080	2,7	LOS A	1,4	10,3	0,23	0,39	0,23	38,1
12a	R1	298	0,0	1,049	220,5	LOS F	48,2	337,7	1,00	2,05	2,57	11,7
Approach		417	0,7	1,049	158,9	LOS F	48,2	337,7	0,78	1,58	1,90	14,6
All Vehicles		1095	0,6	1,049	81,5	LOS F	48,2	337,7	0,67	0,95	1,16	17,7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P3	East Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P4	North Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P1	West Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
All Pedestrians		200	54,3	LOS E			0,95	0,95	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2026 AM + Dev)]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	401	0,0	0,307	1,0	LOS A	3,0	20,8	0,20	0,16	0,20	19,9
23a	R1	135	0,0	1,058	196,7	LOS F	20,3	142,1	1,00	2,45	2,67	9,5
23b	R3	28	0,0	1,058	197,2	LOS F	20,3	142,1	1,00	2,45	2,67	9,6
Approach		564	0,0	1,058	57,6	LOS E	20,3	142,1	0,43	0,82	0,91	15,1
East: MR0355 (Madiba Drive)												
4b	L3	9	0,0	0,034	7,3	LOS A	0,6	4,6	0,24	0,27	0,24	38,7
8	T1	38	10,8	0,034	3,2	LOS A	0,6	4,6	0,24	0,27	0,24	38,3
9	R2	3	0,0	0,003	7,1	LOS A	0,0	0,3	0,25	0,52	0,25	37,1
Approach		50	8,2	0,034	4,2	LOS A	0,6	4,6	0,24	0,28	0,24	38,3
North: Van Kervel												
10	L2	6	20,0	0,964	94,4	LOS F	15,4	108,6	1,00	1,39	1,81	19,8
7a	L1	190	0,0	0,964	93,0	LOS F	15,4	108,6	1,00	1,39	1,81	19,9
12	R2	90	6,3	0,405	57,2	LOS E	5,0	36,9	0,97	0,77	0,97	24,6
Approach		286	2,4	0,964	81,8	LOS F	15,4	108,6	0,99	1,19	1,55	21,2
West: MR0355 (Madiba Drive)												
1	L2	80	2,7	0,097	6,9	LOS A	1,9	13,9	0,26	0,41	0,26	37,9
2	T1	58	7,4	0,097	3,4	LOS A	1,9	13,9	0,26	0,41	0,26	37,7
12a	R1	422	0,0	1,524	1026,3	LOS F	156,5	1095,3	1,00	4,83	6,43	3,3
Approach		560	1,1	1,524	774,7	LOS F	156,5	1095,3	0,82	3,74	4,91	4,2
All Vehicles		1460	1,2	1,524	335,6	LOS F	156,5	1095,3	0,68	2,00	2,55	7,9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P3	East Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P4	North Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P1	West Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
All Pedestrians		200	54,3	LOS E			0,95	0,95	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2026 AM + Dev) Mitigation]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	401	0,0	0,365	2,1	LOS A	1,8	12,9	0,57	0,48	0,57	19,8
23a	R1	135	0,0	0,439	12,4	LOS B	2,3	16,0	0,92	0,73	0,92	18,7
23b	R3	28	0,0	0,439	12,9	LOS B	2,3	16,0	0,92	0,73	0,92	19,0
Approach		564	0,0	0,439	5,1	LOS A	2,3	16,0	0,67	0,55	0,67	19,5
East: MR0355 (Madiba Drive)												
4b	L3	9	0,0	0,066	10,3	LOS B	0,4	3,3	0,64	0,52	0,64	37,5
8	T1	38	10,8	0,066	6,2	LOS A	0,4	3,3	0,64	0,52	0,64	37,1
9	R2	3	0,0	0,005	10,1	LOS B	0,0	0,2	0,65	0,58	0,65	36,0
Approach		50	8,2	0,066	7,2	LOS A	0,4	3,3	0,64	0,52	0,64	37,1
North: Van Kervel												
10	L2	6	20,0	0,267	15,4	LOS B	1,4	9,6	0,88	0,72	0,88	34,7
7a	L1	95	0,0	0,267	14,0	LOS B	1,4	9,6	0,88	0,72	0,88	35,0
12	R2	90	6,3	0,253	15,4	LOS B	1,2	8,9	0,88	0,73	0,88	34,2
Approach		191	3,6	0,267	14,7	LOS B	1,4	9,6	0,88	0,73	0,88	34,6
West: MR0355 (Madiba Drive)												
1	L2	80	2,7	0,188	10,0	LOS A	1,4	10,0	0,68	0,63	0,68	36,7
2	T1	58	7,4	0,188	6,6	LOS A	1,4	10,0	0,68	0,63	0,68	36,6
12a	R1	211	0,0	0,654	12,6	LOS B	3,1	21,7	0,86	0,88	1,09	35,5
Approach		349	1,8	0,654	11,0	LOS B	3,1	21,7	0,79	0,78	0,93	35,9
All Vehicles		1154	1,5	0,654	8,5	LOS A	3,1	21,7	0,74	0,65	0,78	25,3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P3	East Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P4	North Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P1	West Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
All Pedestrians		200	9,6	LOS A			0,80	0,80	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2026 AM)]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 120 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	325	0,0	0,249	0,9	LOS A	2,3	16,0	0,19	0,15	0,19	19,9
23a	R1	116	0,0	0,976	100,4	LOS F	11,8	82,6	1,00	1,78	2,00	12,9
23b	R3	28	0,0	0,976	100,9	LOS F	11,8	82,6	1,00	1,78	2,00	13,0
Approach		469	0,0	0,976	31,5	LOS C	11,8	82,6	0,44	0,65	0,74	17,1
East: MR0355 (Madiba Drive)												
4b	L3	8	0,0	0,033	6,9	LOS A	0,6	4,2	0,22	0,25	0,22	38,9
8	T1	38	10,8	0,033	2,8	LOS A	0,6	4,2	0,22	0,25	0,22	38,5
9	R2	3	0,0	0,003	6,6	LOS A	0,0	0,3	0,23	0,52	0,23	37,3
Approach		49	8,4	0,033	3,7	LOS A	0,6	4,2	0,22	0,26	0,22	38,5
North: Van Kervel												
10	L2	6	20,0	0,996	118,1	LOS F	15,9	111,7	1,00	1,54	2,07	17,6
7a	L1	172	0,0	0,996	116,7	LOS F	15,9	111,7	1,00	1,54	2,07	17,6
12	R2	90	6,3	0,467	59,6	LOS E	5,1	37,9	0,98	0,78	0,98	24,2
Approach		268	2,5	0,996	97,6	LOS F	15,9	111,7	0,99	1,28	1,71	19,4
West: MR0355 (Madiba Drive)												
1	L2	80	2,7	0,095	6,4	LOS A	1,8	12,9	0,24	0,40	0,24	38,1
2	T1	58	7,4	0,095	2,9	LOS A	1,8	12,9	0,24	0,40	0,24	37,9
12a	R1	345	0,0	1,227	502,4	LOS F	86,9	608,0	1,00	3,24	4,22	6,1
Approach		483	1,3	1,227	360,2	LOS F	86,9	608,0	0,78	2,43	3,08	8,1
All Vehicles		1269	1,4	1,227	169,5	LOS F	86,9	608,0	0,68	1,45	1,82	12,4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P3	East Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P4	North Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
P1	West Full Crossing	50	54,3	LOS E	0,2	0,2	0,95	0,95	
All Pedestrians		200	54,3	LOS E			0,95	0,95	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2026 NM + Dev)]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	275	0,0	0,237	1,6	LOS A	1,0	7,0	0,49	0,40	0,49	19,8
23a	R1	110	0,0	0,380	12,2	LOS B	1,9	13,6	0,91	0,72	0,91	18,7
23b	R3	30	0,0	0,380	12,7	LOS B	1,9	13,6	0,91	0,72	0,91	19,0
Approach		415	0,0	0,380	5,2	LOS A	1,9	13,6	0,63	0,51	0,63	19,5
East: MR0355 (Madiba Drive)												
4b	L3	2	0,0	0,062	10,3	LOS B	0,4	3,2	0,64	0,49	0,64	37,8
8	T1	43	10,8	0,062	6,2	LOS A	0,4	3,2	0,64	0,49	0,64	37,4
9	R2	6	0,0	0,010	10,1	LOS B	0,1	0,4	0,65	0,60	0,65	36,0
Approach		51	9,1	0,062	6,8	LOS A	0,4	3,2	0,64	0,50	0,64	37,2
North: Van Kervel												
10	L2	6	20,0	0,249	15,3	LOS B	1,3	8,9	0,88	0,72	0,88	34,8
7a	L1	88	0,0	0,249	13,9	LOS B	1,3	8,9	0,88	0,72	0,88	35,0
12	R2	37	6,3	0,104	14,9	LOS B	0,5	3,5	0,85	0,69	0,85	34,4
Approach		131	2,7	0,249	14,2	LOS B	1,3	8,9	0,87	0,71	0,87	34,8
West: MR0355 (Madiba Drive)												
1	L2	87	2,7	0,161	9,9	LOS A	1,2	8,4	0,67	0,64	0,67	36,5
2	T1	31	7,4	0,161	6,5	LOS A	1,2	8,4	0,67	0,64	0,67	36,4
12a	R1	224	0,0	0,692	13,5	LOS B	3,5	24,3	0,88	0,93	1,18	35,2
Approach		342	1,3	0,692	12,0	LOS B	3,5	24,3	0,81	0,83	1,00	35,6
All Vehicles		939	1,4	0,692	9,0	LOS A	3,5	24,3	0,73	0,65	0,80	26,0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P3	East Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P4	North Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P1	West Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
All Pedestrians		200	9,6	LOS A			0,80	0,80	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2026 NM + Dev) Mitigation]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	275	0,0	0,238	1,6	LOS A	1,0	7,0	0,49	0,41	0,49	19,8
23a	R1	110	0,0	0,326	11,1	LOS B	1,8	12,9	0,87	0,69	0,87	18,8
23b	R3	30	0,0	0,326	11,6	LOS B	1,8	12,9	0,87	0,69	0,87	19,2
Approach		415	0,0	0,326	4,8	LOS A	1,8	12,9	0,62	0,50	0,62	19,5
East: MR0355 (Madiba Drive)												
4b	L3	2	0,0	0,068	11,0	LOS B	0,4	3,4	0,68	0,51	0,68	37,5
8	T1	43	10,8	0,068	6,9	LOS A	0,4	3,4	0,68	0,51	0,68	37,1
9	R2	6	0,0	0,011	10,9	LOS B	0,1	0,4	0,69	0,60	0,69	35,7
Approach		51	9,1	0,068	7,5	LOS A	0,4	3,4	0,68	0,52	0,68	37,0
North: Van Kervel												
10	L2	6	20,0	0,114	13,9	LOS B	0,6	4,4	0,82	0,67	0,82	35,2
7a	L1	44	0,0	0,114	12,5	LOS B	0,6	4,4	0,82	0,67	0,82	35,5
12	R2	37	6,3	0,089	13,8	LOS B	0,5	3,3	0,81	0,68	0,81	34,7
Approach		87	4,0	0,114	13,2	LOS B	0,6	4,4	0,82	0,68	0,82	35,1
West: MR0355 (Madiba Drive)												
1	L2	87	2,7	0,176	10,7	LOS B	1,2	8,9	0,71	0,66	0,71	36,2
2	T1	31	7,4	0,176	7,3	LOS A	1,2	8,9	0,71	0,66	0,71	36,1
12a	R1	112	0,0	0,357	10,4	LOS B	1,3	9,3	0,77	0,70	0,77	36,3
Approach		230	2,0	0,357	10,1	LOS B	1,3	9,3	0,74	0,68	0,74	36,2
All Vehicles		783	1,6	0,357	7,5	LOS A	1,8	12,9	0,68	0,57	0,68	24,9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P3	East Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P4	North Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P1	West Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
All Pedestrians		200	9,6	LOS A			0,80	0,80	

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

MOVEMENT SUMMARY

 **Site: 101 [MR355/OP6887 (2026 NM)]**

New Site

Site Category: (None)

Signals - Fixed Time Isolated Cycle Time = 30 seconds (Site Practical Cycle Time)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: OP6887 (Glenwood Ave)												
21a	L1	214	0,0	0,185	1,5	LOS A	0,7	5,2	0,47	0,38	0,47	19,8
23a	R1	99	0,0	0,351	12,1	LOS B	1,8	12,4	0,90	0,71	0,90	18,7
23b	R3	30	0,0	0,351	12,7	LOS B	1,8	12,4	0,90	0,71	0,90	19,1
Approach		343	0,0	0,351	5,6	LOS A	1,8	12,4	0,63	0,51	0,63	19,4
East: MR0355 (Madiba Drive)												
4b	L3	1	0,0	0,061	10,3	LOS B	0,4	3,1	0,64	0,48	0,64	37,8
8	T1	43	10,8	0,061	6,2	LOS A	0,4	3,1	0,64	0,48	0,64	37,4
9	R2	6	0,0	0,010	10,1	LOS B	0,1	0,4	0,65	0,60	0,65	36,0
Approach		50	9,3	0,061	6,7	LOS A	0,4	3,1	0,64	0,50	0,64	37,3
North: Van Kervel												
10	L2	6	20,0	0,212	15,2	LOS B	1,1	7,5	0,87	0,71	0,87	34,8
7a	L1	74	0,0	0,212	13,8	LOS B	1,1	7,5	0,87	0,71	0,87	35,0
12	R2	37	6,3	0,104	14,9	LOS B	0,5	3,5	0,85	0,69	0,85	34,4
Approach		117	3,0	0,212	14,2	LOS B	1,1	7,5	0,86	0,70	0,86	34,8
West: MR0355 (Madiba Drive)												
1	L2	87	2,7	0,161	9,9	LOS A	1,2	8,4	0,67	0,64	0,67	36,5
2	T1	31	7,4	0,161	6,5	LOS A	1,2	8,4	0,67	0,64	0,67	36,4
12a	R1	163	0,0	0,503	10,3	LOS B	2,0	14,2	0,79	0,74	0,81	36,3
Approach		281	1,6	0,503	9,8	LOS A	2,0	14,2	0,74	0,70	0,75	36,4
All Vehicles		791	1,6	0,503	8,4	LOS A	2,0	14,2	0,71	0,60	0,71	26,3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians									
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate	
P5	SouthEast Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P3	East Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P4	North Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
P1	West Full Crossing	50	9,6	LOS A	0,0	0,0	0,80	0,80	
All Pedestrians		200	9,6	LOS A			0,80	0,80	

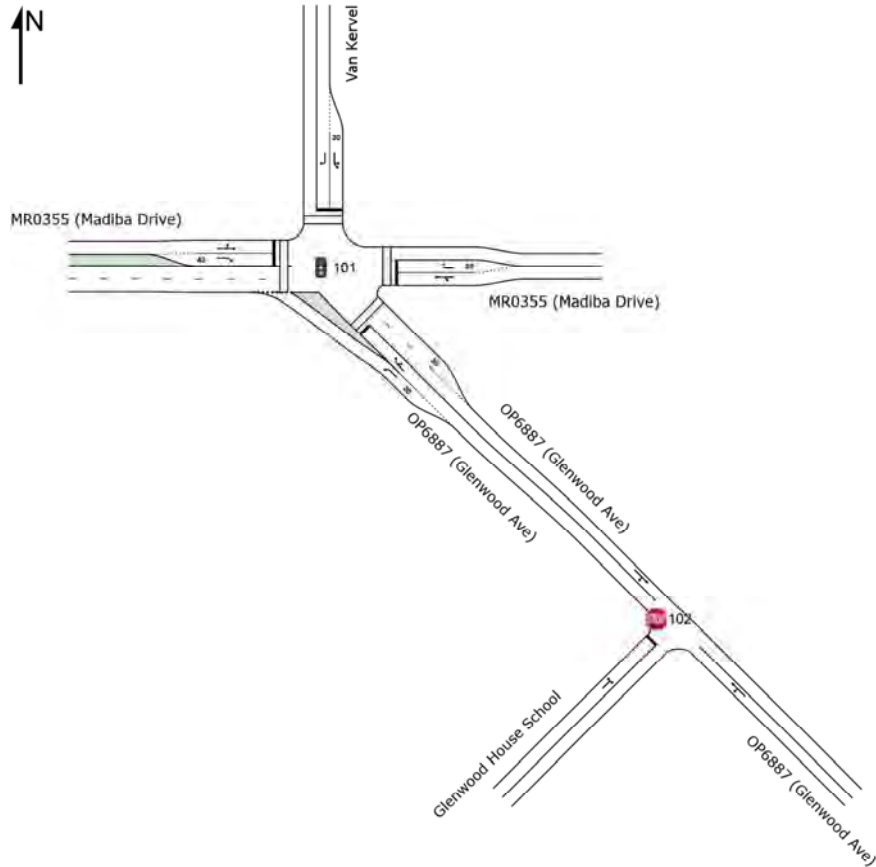
Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

NETWORK LAYOUT

Network: N101 [2026 NM]

New Network

Network Category: (None)



SITES IN NETWORK

Site ID	CCG ID	Site Name
101	NA	MR355/OP6887 (2026 NM)
102	NA	Glenwood House Access (2026 NM)

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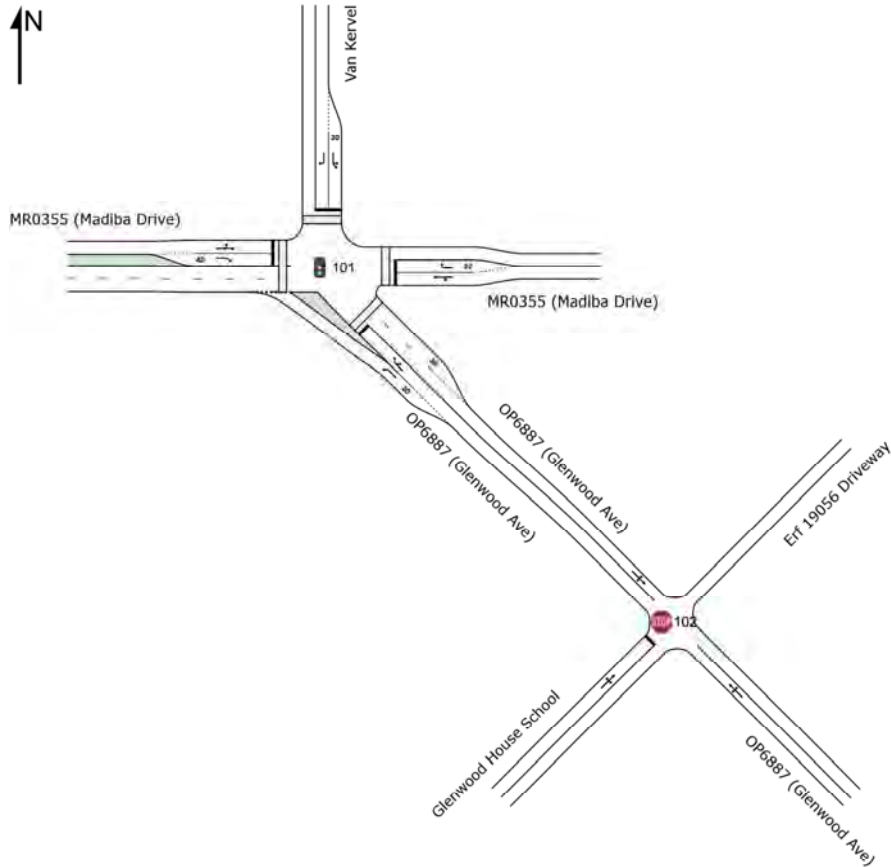
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NETWORK LAYOUT

Network: N101 [Future AM + Dev + Mitigation]

New Network

Network Category: (None)



SITES IN NETWORK		
Site ID	CCG ID	Site Name
101	NA	MR355/OP6887 (2026 AM + Dev) Mitigation
102	NA	Glenwood House Access (2026 AM + Dev) Mitigation

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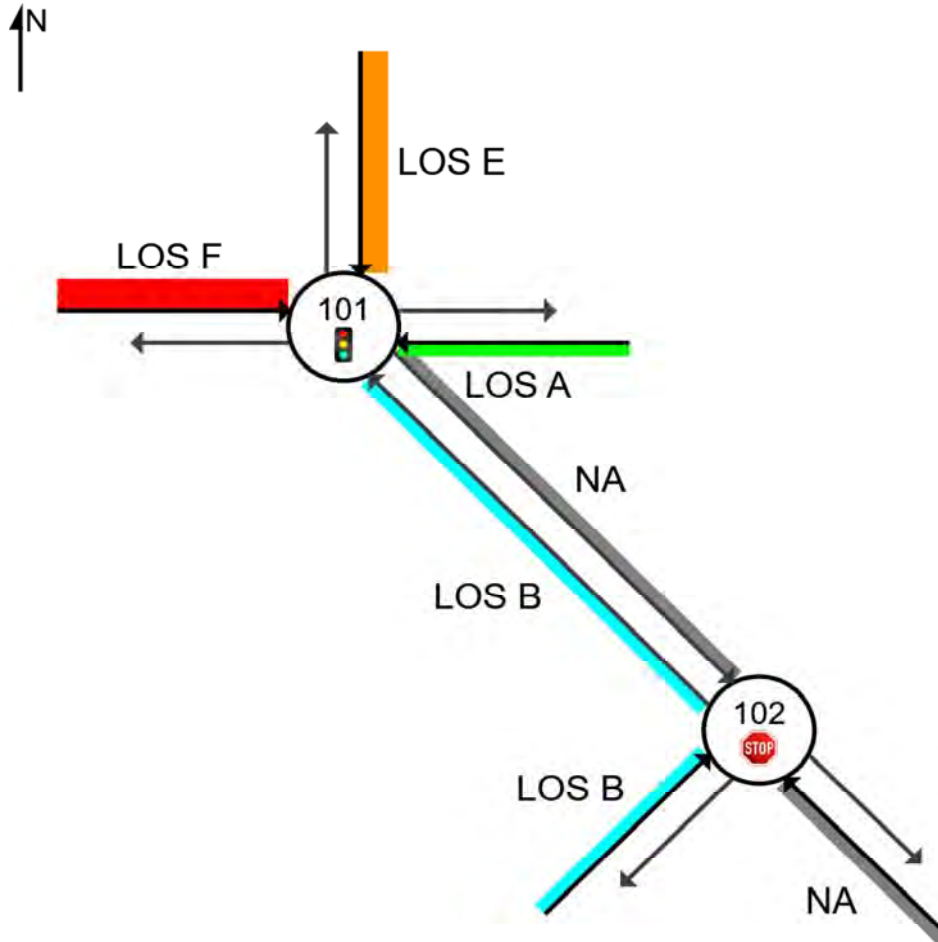
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

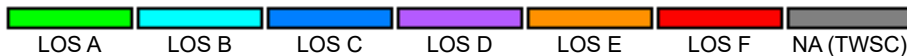
Network: N101 [2021 AM]

New Network

Network Category: (None)



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Delay model settings are specified for individual Sites forming the Network.

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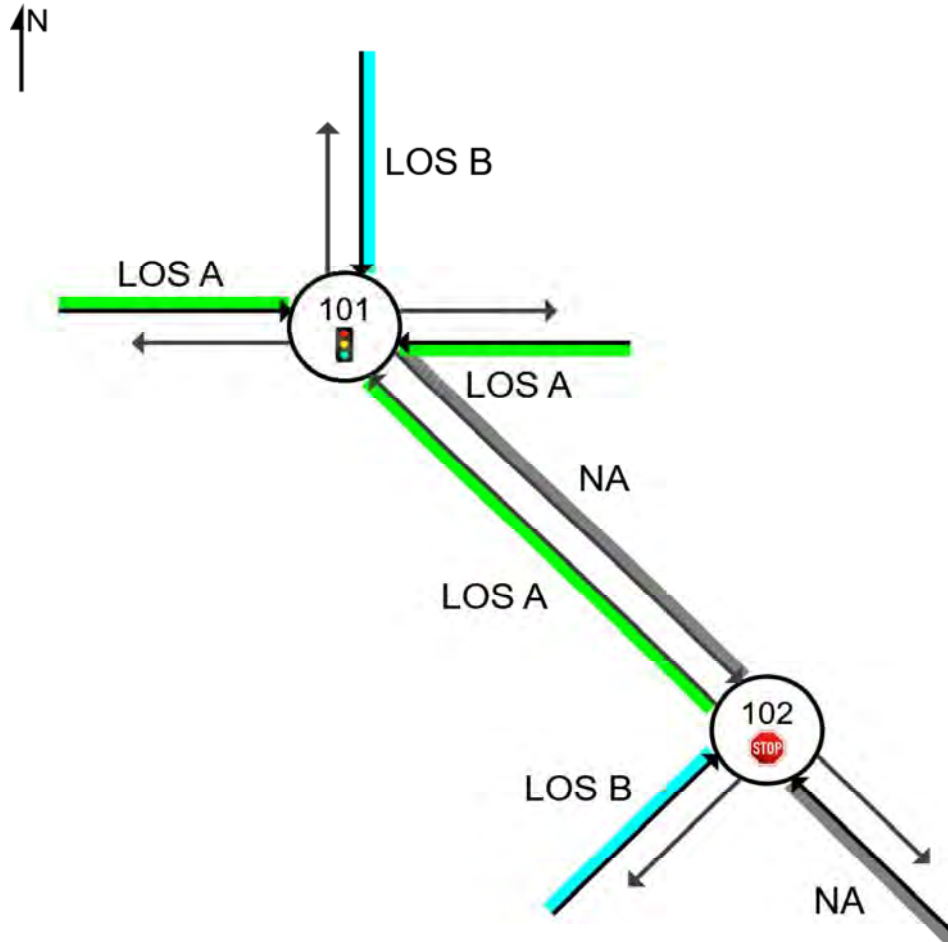
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

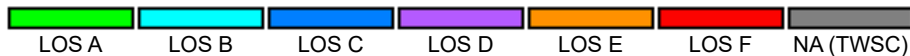
Network: N102 [2021 NM]

New Network

Network Category: (None)



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Delay model settings are specified for individual Sites forming the Network.

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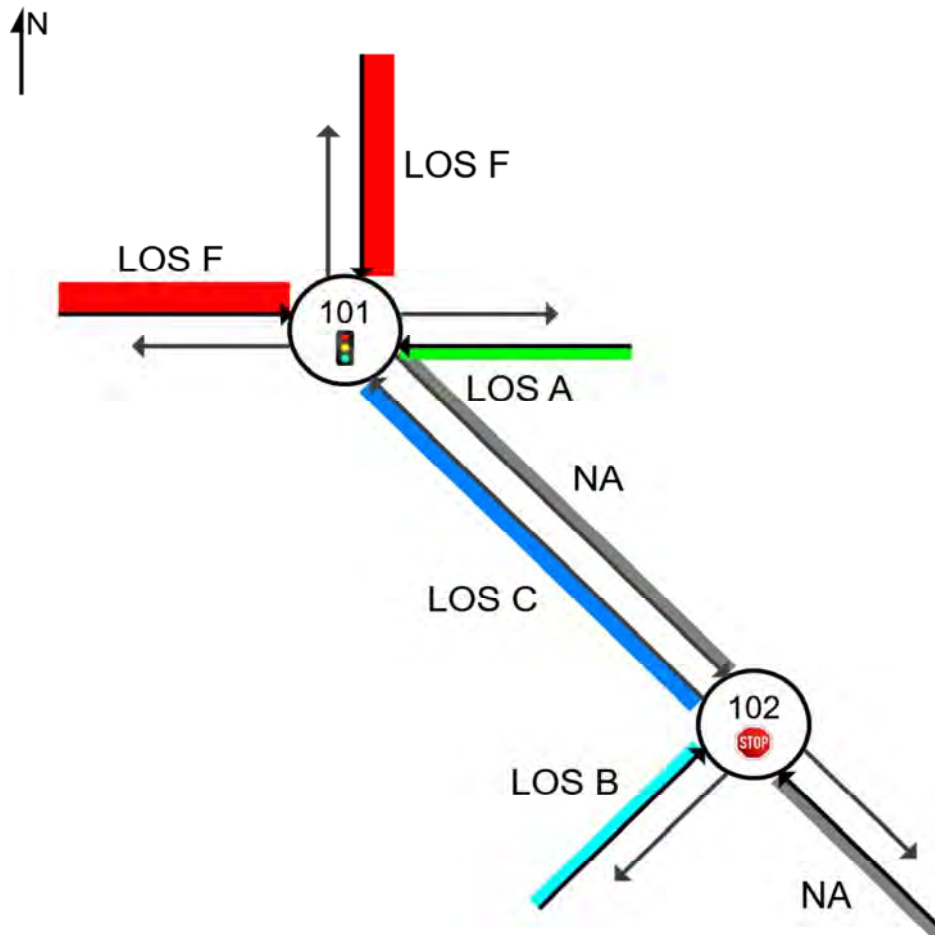
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

📍 Network: N101 [2026 AM]

New Network

Network Category: (None)



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Delay model settings are specified for individual Sites forming the Network.

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Organisation: URBAN ENGINEERING | Processed: Friday, 22 October 2021 15:46:51

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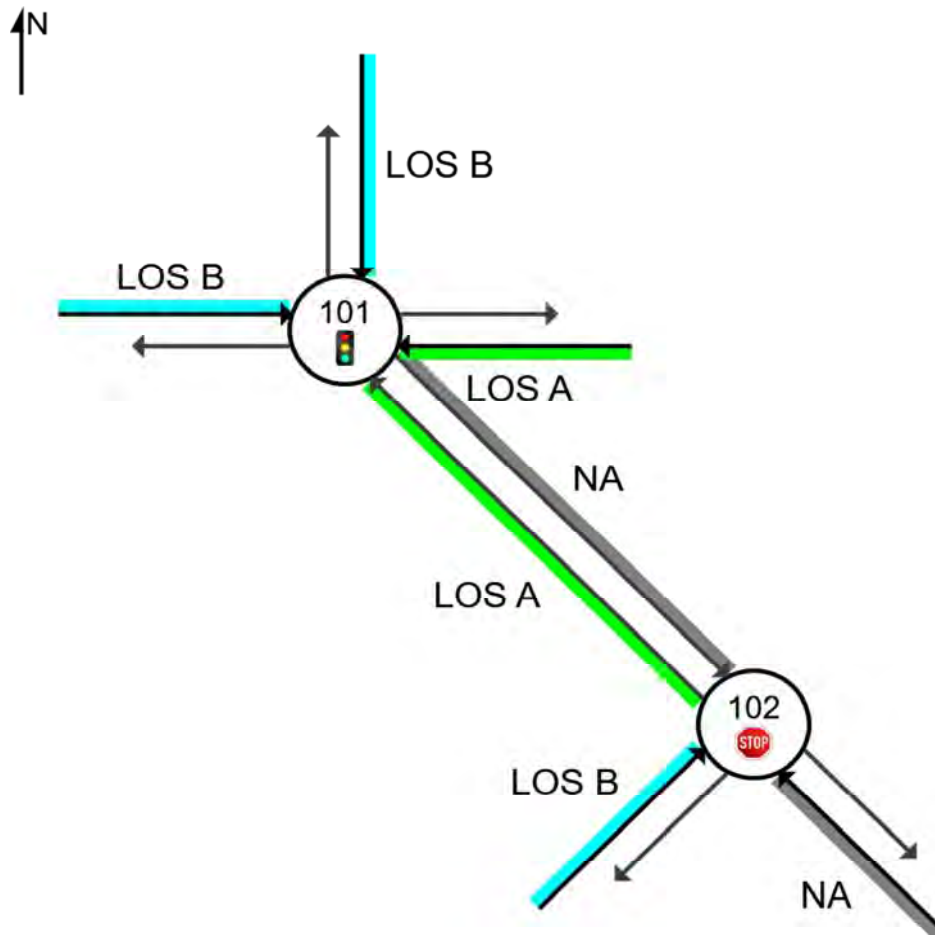
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

Network: N101 [2026 NM]

New Network

Network Category: (None)



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F	NA (TWSC)
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Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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Organisation: URBAN ENGINEERING | Processed: Friday, 22 October 2021 15:52:11

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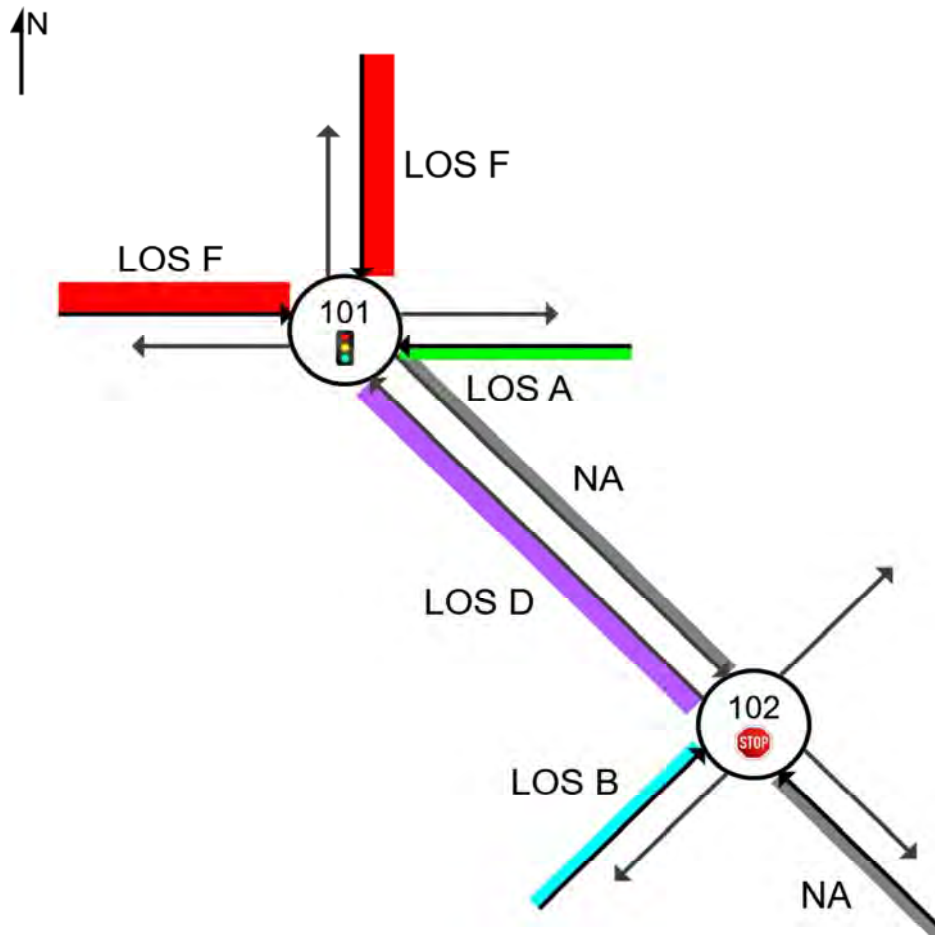
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

Network: N101 [Future AM + Dev]

New Network

Network Category: (None)



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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Delay model settings are specified for individual Sites forming the Network.

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Organisation: URBAN ENGINEERING | Processed: Monday, 25 October 2021 08:37:11

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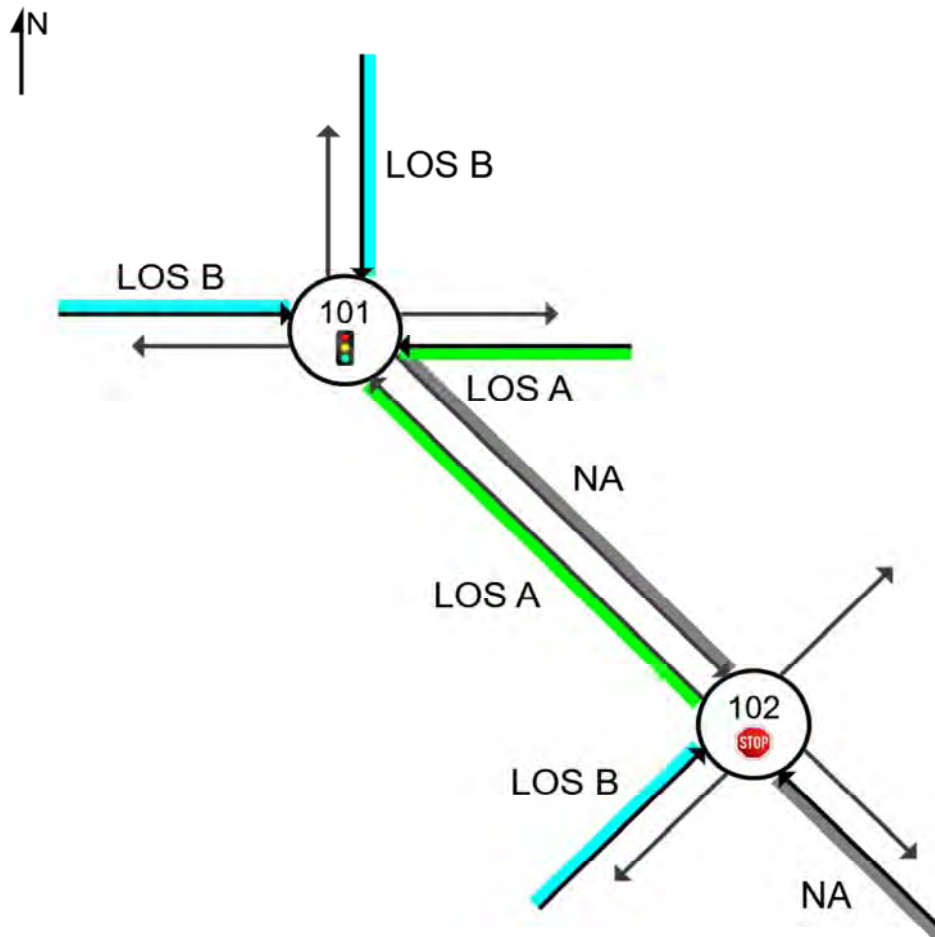
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

Network: N101 [Future AM + Dev + Mitigation]

New Network

Network Category: (None)



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Delay model settings are specified for individual Sites forming the Network.

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Organisation: URBAN ENGINEERING | Processed: Monday, 25 October 2021 19:17:00

Project: C:\Users\frans\OneDrive - UE\Urban Engineering (Pty) Ltd\UE - UrbanCloud\Projects\21-123 TIA Outeniqua Pre-School\3_Working\SIDRA\Outeniqua Pre-School.sip8

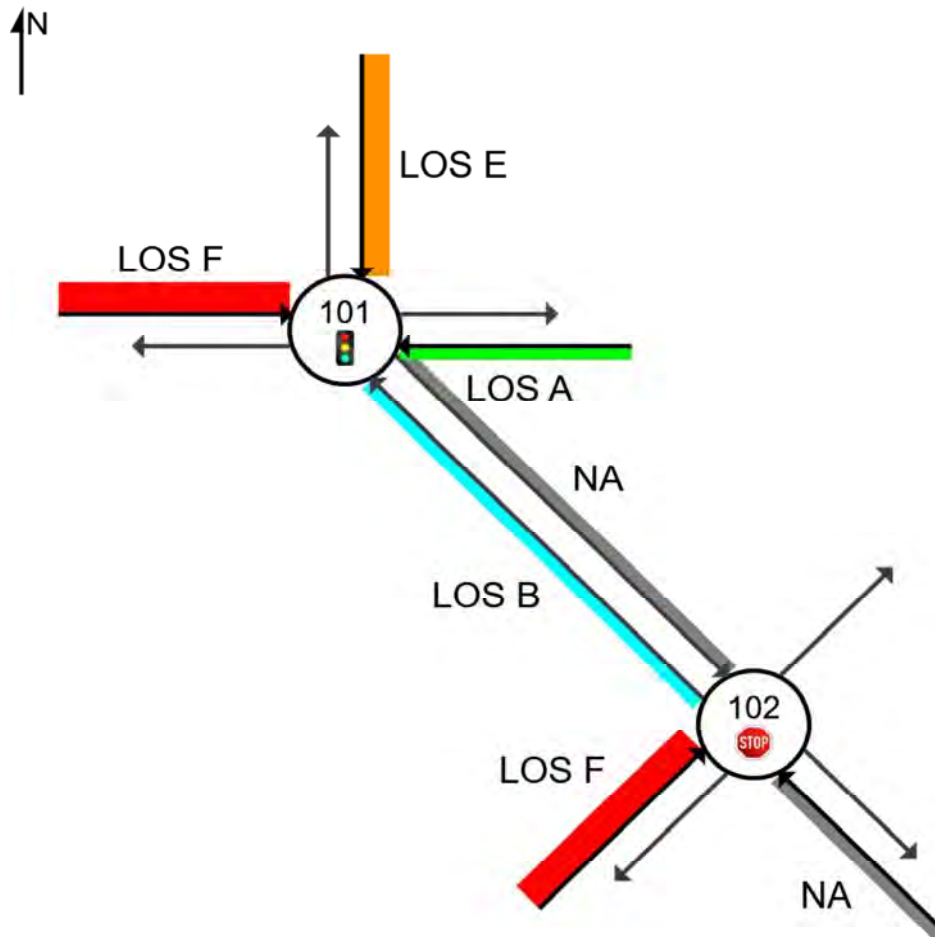
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

📍 Network: N101 [Future NM + Dev]

New Network

Network Category: (None)



Colour code based on Level of Service



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Organisation: URBAN ENGINEERING | Processed: Monday, 25 October 2021 08:37:13

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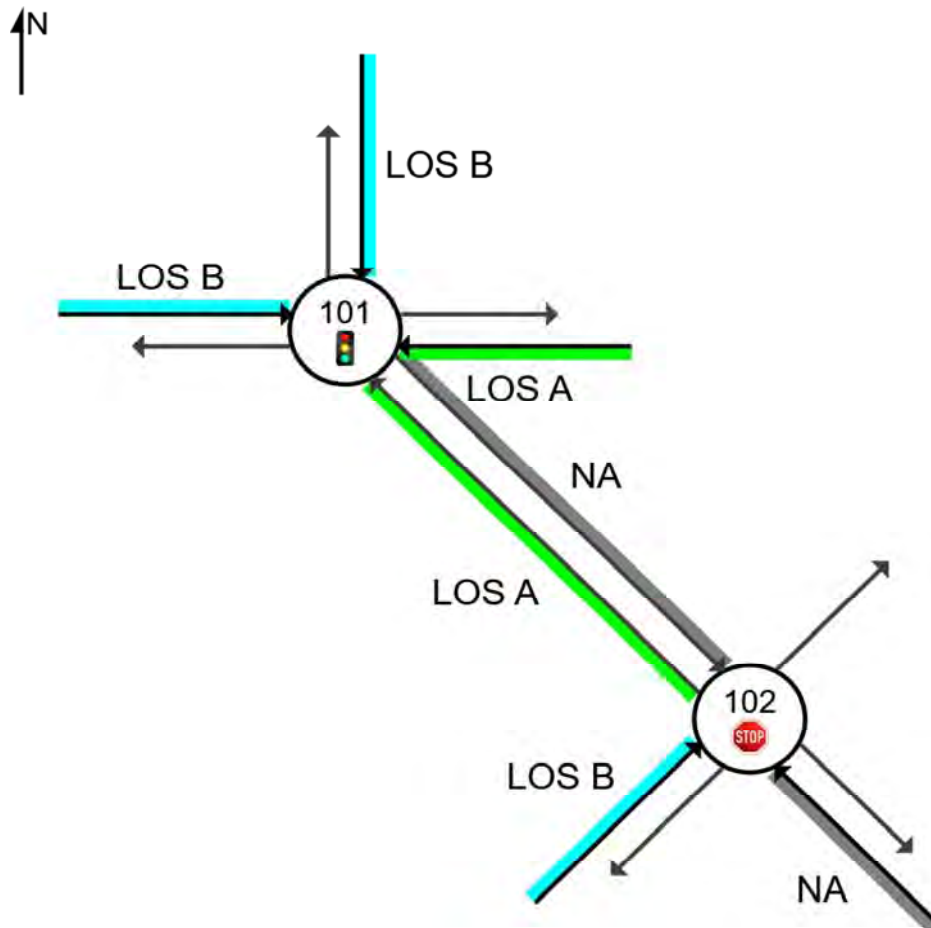
APPROACH LEVEL OF SERVICE

Approach Level of Service for Network Sites

Network: N101 [Future NM + Dev + Mitigation]

New Network

Network Category: (None)



Colour code based on Level of Service



Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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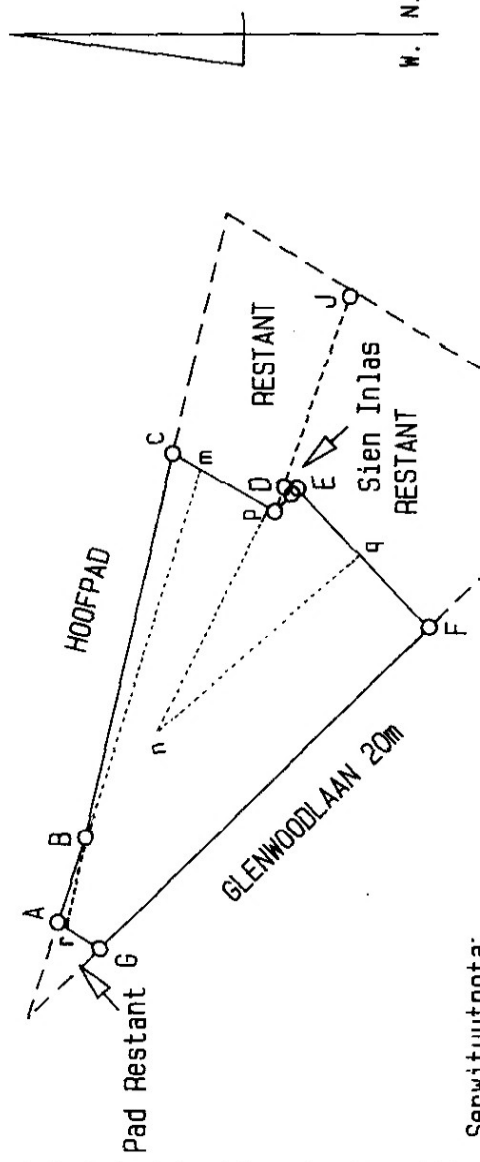
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SYE Meter	RIGTINGS -HOEKE	KÖÖRDINATE	
		Y	Stelsel Lo. 23° X
	Konstante	+	0,00 +3 700 000,00
AB	23,91	A	+ 46 938,66 + 59 940,38
BC	104,33	B	+ 46 915,88 + 59 947,67
CD	31,75	C	+ 46 814,29 + 59 971,39
DE	8,58	D	+ 46 829,36 + 59 999,33
EF	51,41	E	+ 46 823,42 + 60 005,52
FG	123,83	F	+ 46 860,30 + 60 041,33
GA	13,35	G	+ 46 945,74 + 59 951,70
SERWITUUTGEGEWENS			
DH	6,95	H	+ 46 822,89 + 60 001,87
HJ	53,82	J	+ 46 772,14 + 60 019,77
DK	6,43	K	+ 46 824,91 + 60 003,97
KH	2,91		

BAKENBESKRYWING:
Alle bakens is 12mm ysterpen

Alle bakens is 12mm ysterpen



Serwituutnota:

Die lyne D H J en K H stel voor die middellyn van n vuilrioolserwituut 2,00 meter wyd oor die Restant

SKAAL 1 : 2 000

Die figuur A B C D E F G

stel voor 6100 vierkante meter grond synde

ERF 19056 n GEDEELTE VAN ERF 13050, GEORGE

geleë in die Munisipaliteit en

Administratiewe Distrik George

Provinsie van die Wes Kaap

Opgemeet in November 1995

deur my

A.LOUW (PLS0356) Professionele Landmeter

Hierdie kaart is geheg aan

Leër Nr. S/8775/55

Nr. 117446/1996
gedateer
t.g.v.

Nr. 6380/86

M.S. Nr. E 3469/95

Transport/Grondbrief

Komp.BL-700/X5 (1755)

t.g.v.

Nr. 1988 - - 26424

Registrateur van Aktes

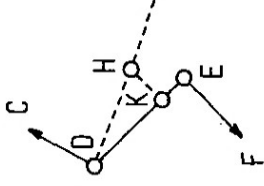
L.G. Nr.

10914/1995

Goedgekeur

Landmeter-Generaal
1996-01-09

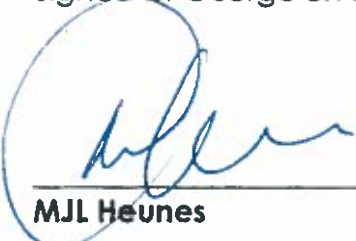
INLAS SKAAL 1:500



POWER OF ATTORNEY

We, **Marthinus Johannes Lourens Heunes (730912 5271 088) & Natalie Ann Heunes (740325 0167 086)**, the registered owners of **Erf 19056, George Municipality and Division, Western Cape Province**, hereby authorise Marlice de Bruyn of *Marlice de Bruyn Planning* to submit the necessary land use application for the property in terms of Section 15(2) the Land Use Planning By-law.

Signed at George on the 18/10.....2021.



MJL Heunes



NA Heunes

Witness 



Application Form for Application(s) Submitted in terms of the Land Use Planning By-Law for George Municipality

NOTE: Please complete this form by using: Font: Calibri; Size: 11

PART A: APPLICANT DETAILS

First name(s)	Marlize				
Surname	De Bruyn				
SACPLAN Reg No. (if applicable)	A1477/2011				
Company name (if applicable)	Marlize de Bruyn Planning				
Postal Address	PO Box 2359				
	George	Postal Code	6530		
Email	marlize@mdbplanning.co.za				
Tel		Fax		Cell	0766340150

PART B: REGISTERED OWNER(S) DETAILS (if different from applicant)

Registered owner	MJL & NA Heunes				
Address	1 Glenwood Avenue				
	Glenwood, George	Postal code	6530		
E-mail	Martin.heunes1@gmail.com				
Tel		Fax		Cell	084 468 4448

PART C: PROPERTY DETAILS (in accordance with Title Deed)

Property Description [Erf / Erven / Portion(s) and Farm number(s), allotment area.]	Erf 19056 Geoerge					
Physical Address	1 Glenwood Avenue					
GPS Coordinates	-33.968 22.492		Town/City		George	
Current Zoning	AZII	Extent	6100m ²	Are there existing buildings?	Y	N
Current Land Use	Residential					
Title Deed number & date	T49715/2021					
Any restrictive conditions prohibiting application?	Y	N	If Yes, list condition number(s).			
Are the restrictive conditions in favour of a third party(ies)?	Y	N	If Yes, list the party(ies).			
Is the property encumbered by a bond?	Y	N	If Yes, list Bondholder(s)?			
Has the Municipality already decided on the application(s)?	Y	N	If yes, list reference number(s)?			
Any existing unauthorized buildings and/or land use on the subject property(ies)?	Y	N	If yes, is this application to legalize the building / land use?	Y	N	
Are there any pending court case / order relating to the subject property(ies)?	Y	N	Are there any land claim(s) registered on the subject property(ies)?	Y	N	
PART D: PRE-APPLICATION CONSULTATION						
Has there been any pre-application consultation?	Y	N	If Yes, please complete the information below and attach the minutes.			
Official's name	J Fourie	Reference number	Erf 19056 George	Date of consultation	11 August 2021	

PART E: LAND USE APPLICATIONS IN TERMS OF SECTION 15 OF THE LAND USE PLANNING BY-LAW FOR GEORGE MUNICIPALITY & APPLICATION FEES PAYABLE

***Application fees that are paid to the Municipality are non-refundable and proof of payment of the application fees must accompany the application.**

BANKING DETAILS

Name: **George Municipality**
 Bank: **First National Bank (FNB)**
 Branch no.: **210554**
 Account no.: **62869623150**
 Type: **Public Sector Cheque Account**
 Swift Code: **FIRNZAJJ**
 VAT Registration Nr: **4630193664**
 E-MAIL: **msbrits@george.gov.za**
 *Payment reference: **Erven _____, George/Wilderness/Hoekwil...**

PART F: DETAILS OF PROPOSAL

Brief description of proposed development / intent of application:

- **Rezoning to Community Zone I (place of instruction) in terms of Section 15(2)(a) of the George Municipality: Land Use Planning By-law (2015);**
- **Departure in terms of Section 15(2)(b) of the George Municipality: Land Use Planning By-law (2015) for the relaxation of the following building lines:**
 - **Eastern side boundary building line from 5.0m to 1.9m, 0.9m, 0.015m, 1.9m & 3.0m respectively for the existing structures.**

PART G: ATTACHMENTS & SUPPORTING INFORMATION FOR LAND USE PLANNING APPLICATIONS

Please complete the following checklist and attach all the information relevant to the proposal. Failure to submit all information required will result in the application being deemed incomplete.

Is the following compulsory information attached?

Y	N	Completed application form			Y	N	Pre-application Checklist (where applicable)	
Y	N	Power of Attorney / Owner’s consent if applicant is not owner			Y	N	Bondholder’s consent	
Y	N	Motivation report / letter			Y	N	Proof of payment of fees	
Y	N	Full copy of the Title Deed			Y	N	S.G. noting sheet extract / Erf diagram / General Plan	
Y	N	Locality Plan			Y	N	Site layout plan	
Minimum and additional requirements:								
Y	N	N/A	Conveyancer’s Certificate		Y	N	N/A	Land Use Plan / Zoning plan

Y	N	N/A	Proposed Subdivision Plan (including street names and numbers)	Y	N	N/A	Phasing Plan
Y	N	N/A	Consolidation Plan	Y	N	N/A	Copy of original approval letter (if applicable)
Y	N	N/A	Site Development Plan	Y	N	N/A	Landscaping / Tree Plan
Y	N	N/A	Abutting owner's consent	Y	N	N/A	Home Owners' Association consent
Y	N	N/A	Copy of Environmental Impact Assessment (EIA) / Heritage Impact Assessment (HIA) / Traffic Impact Assessment (TIA) / Traffic Impact Statement (TIS) / Major Hazard Impact Assessment (MHIA) / Environmental Authorisation (EA) / Record of Decision (ROD) (strikethrough irrelevant)	Y	N	N/A	1 : 50 / 1:100 Flood line determination (plan / report)
Y	N	N/A	Services Report or indication of all municipal services / registered servitudes	Y	N	N/A	Required number of documentation copies
Y	N	N/A	Any additional documents or information required as listed in the pre-application consultation form / minutes	Y	N	N/A	Other (specify)

PART H: AUTHORISATION(S) IN TERMS OF OTHER LEGISLATION

Y	N/A	National Heritage Resources Act, 1999 (Act 25 of 1999)	Y	N/A	Specific Environmental Management Act(s) (SEMA)
Y	N/A	National Environmental Management Act, 1998 (Act 107 of 1998)			(e.g. Environmental Conservation Act, 1989 (Act 73 of 1989), National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004),
Y	N/A	Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970)			National Environmental Integrated Coastal Management Act, 2008 (Act 24 of 2008),
Y	N/A	Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013)(SPLUMA)			National Environmental Management: Waste Act, 2008 (Act 59 of 2008),
Y	N/A	Occupational Health and Safety Act, 1993 (Act 85 of 1993): Major Hazard Installations Regulations			National Water Act, 1998 (Act 36 of 1998)
Y	N/A	Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA)	Y	N/A	(strikethrough irrelevant)
Y	N	If required, has application for EIA / HIA / TIA / TIS / MHIA approval been made? If yes, attach documents / plans / proof of submission etc. N/A	Y	N/A	Other (specify)

Y	N	<i>If required, do you want to follow an integrated application procedure in terms of section 44(1) of the Land-Use Planning By-law for George Municipality?</i>
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SECTION I: DECLARATION

I hereby wish to confirm the following:

1. *That the information contained in this application form and accompanying documentation is complete and correct.*
2. *The Municipality has not already decided on the application.*
3. *I'm aware that it is an offense in terms of section 86(1)(d) to supply particulars, information or answers in an application, knowing it to be false, incorrect or misleading or not believing them to be correct.*
4. *I am properly authorized to make this application on behalf of the owner and (where applicable) copies of such full relevant Powers of Attorney/Consent are attached hereto.*
5. *I have been appointed to submit this application on behalf of the owner and it is accepted that correspondence from and notifications by the Municipality in terms of the by-law will be sent only to me as the authorised agent and the owner will regularly consult with the agent in this regard (where applicable).*
6. *That this submission includes all necessary land use planning applications required to enable the development proposed herein.*
7. *I confirm that the relevant title deed(s) have been read and that there are no restrictive title deed restrictions, which impact on this application, or alternatively an application for removal/amendment/suspension forms part of this submission.*
8. *I am aware of the status of the existing bulk services and infrastructure in the subject area and that I am liable for any possible development charges which may be payable as a result of the proposed development.*
9. *I acknowledge that in terms of the Protection of Personal Information Act (POPIA) all correspondence will be communicated directly and only to myself (the applicant). No information will be given to any third party and/or landowner (if the landowner is not the applicant). I herewith take responsibility to convey all correspondence to the relevant parties.*

Applicant's signature:



Date:

October 2021

Full name:

Marlize de Bruyn

Professional capacity:

Professional Planner

SACPLAN Reg. Nr:

A1477/2011