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Transport Directorate

LOCAL AREA MANAGEMENT SOUTH REGION

DATE	02 APRIL 2024
PROJECT	HERSCHEL GIRLS SCHOOL @ KENMAR CRESCENT, CLAREMONT
REFERENCE	TNDS6433

1 INTRODUCTION

1.1 Background

The City of Cape Town's Transport and Urban Development Authority (TDA) has commissioned an investigation into the current traffic operations within the vicinity of Herschel Girls Preparatory School in Claremont. Thereafter, to investigate the potential conversion of the surrounding roads into one-way roadways to improve the traffic flow during the school peak hour traffic times. The study area is highlighted in Figure 1.

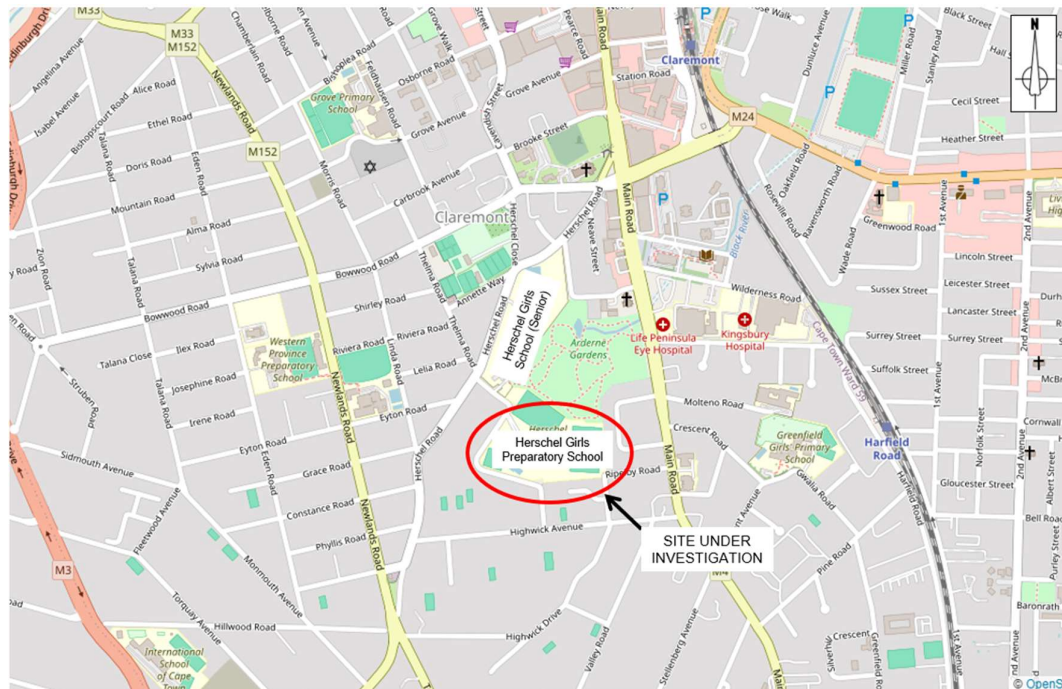


Figure 1: Locality Map

2 STATUS QUO

2.1 Existing Road Network

The investigated school site is surrounded by single residential erven and can therefore be classified as a suburban area. The land use and existing road network within the study area is illustrated in Figure 2.

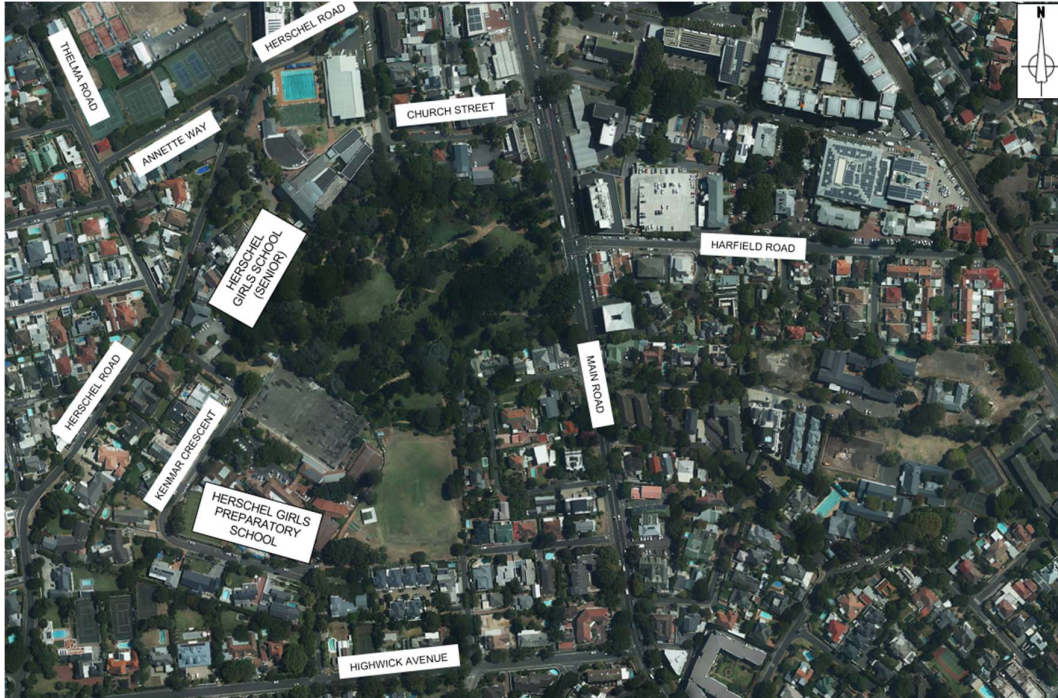


Figure 2: Existing Road Network surrounding Herschel Girls School

A description of the roads within the immediate study area is provided below.

- Kenmar Crescent is a two-way roadway (approximately 5m wide) and is classified as a Class 5 local street.
- Herschel Road is a two-way roadway (approximately 6m wide) and is classified as a Class 4 collector street.
- Highwick Avenue is a two-way roadway (approximately 6.7m wide) and is classified as a Class 4 collector street.
- Main Road is a two-way roadway (approximately 19.3m wide) and is classified as a Class 3 minor arterial road.
- Church Street is partially a two-way roadway (approximately 4.3m wide) for a distance of ± 180 metres, later becoming a one-way road (approximately 3.5m wide) for a distance of ± 50 m feeding into Main Road. Church Street is classified as a Class 5 local street.

2.2 Non-motorised Transport and Traffic Calming

There is a total of six (6) pedestrian access gates and eight (8) vehicle access gates around the vicinity of the preparatory and senior school. Most of these accesses are either permanently closed or for exclusive use of service and delivery vehicles. There are formal non-motorised transport (NMT) facilities in the form of surfaced sidewalks provided along both sides of Herschel Road. Kenmar Crescent has a surfaced sidewalk along the road edge closest to the school.

There is one speed hump along Kenmar Crescent, and two speed humps and one raised pedestrian crossing along Herschel Road. The existing traffic calming, pedestrian facilities and school accesses are highlighted in Figure 3.

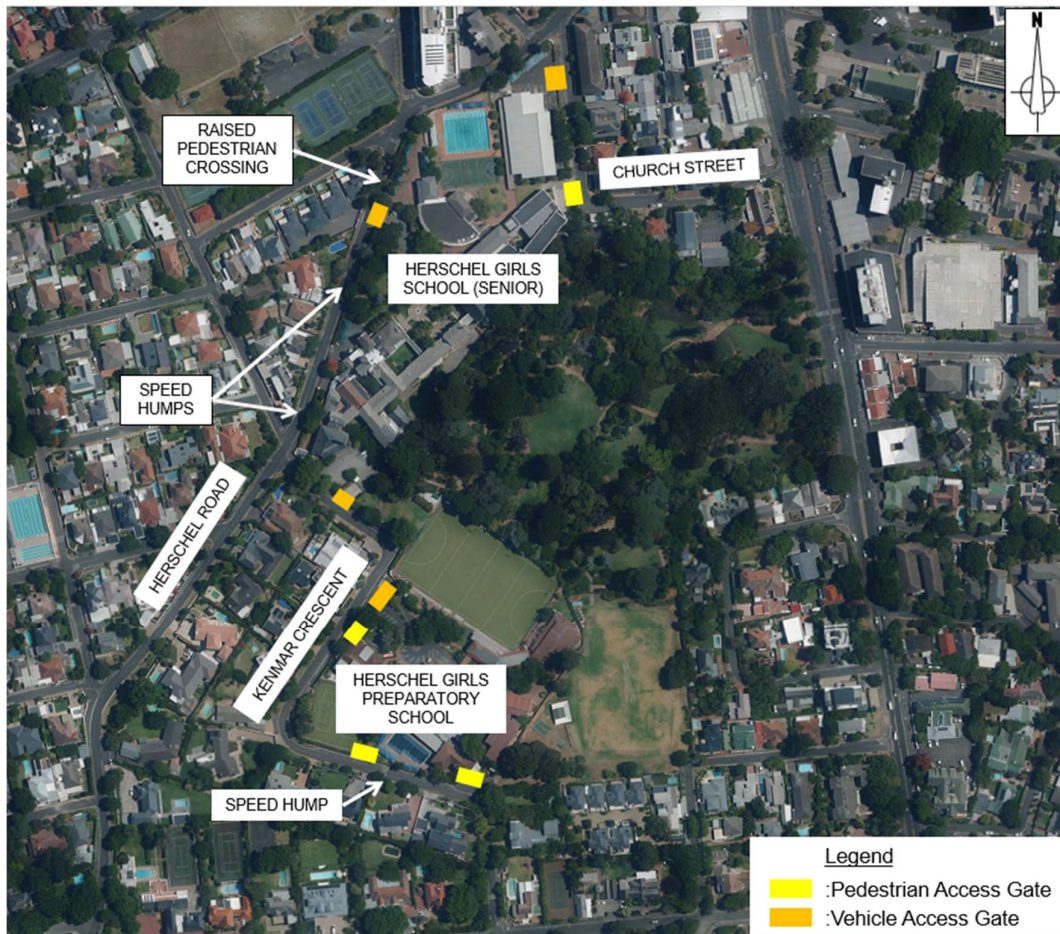


Figure 3: Existing Traffic Calming and Accesses surrounding Herschel Girls School

2.3 Site Observations

A site survey of the study area was undertaken on Friday, 27 February 2024 during the AM (06:45 - 07:30) and midday (13:00 – 15:00) peak periods. Images from the site investigation have been provided in Appendix A. The following observations were noted:

2.3.1 Traffic Operations

- There are three (3) pedestrian access gates and one (1) vehicle access gate that were utilised in Kenmar Crescent and one (1) pedestrian access gate in Church Street. The different grade groups use the different access gates. Pupils at Herschel Girls High School utilise the northern gate in Kenmar Crescent. Pre-primary school pupils utilise the access gates in the middle of Kenmar Crescent and primary school pupils utilise the southern gate in Kenmar Crescent.
- At the southern pedestrian access gate on Kenmar Crescent, there is a small drop and go facility provided.
- There are four (4) vehicle access gates that were utilised around Herschel Girls School: two (2) in Kenmar Crescent for the high school and preparatory school, one (1) in Herschel Road for those exiting Herschel High School, and one (1) in Church Street for the high school. The Church Street access was observed to be mostly used by school staff and maintenance vehicles.
- During the morning peak, staff at Herschel Girls Preparatory School set up signage at the vehicle access gate to the school to enforce a temporary one-way system in Kenmar Crescent in the eastbound/southbound direction.
- The school staff also sets up traffic cones along portions of Kenmar Crescent, specifically outside of the access gates, to prohibit illegal parking.
- During the schools' peak times, most vehicles travel southeast along Kenmar Crescent. However, due to the narrow roadway widths, further aggravated by the additional lane of parking, the few vehicles travelling in the opposite directions to the peak direction of travel need to squeeze past each other and/ or wait for each other which causes traffic congestion.
- There are higher traffic volumes during the AM peak period compared to the midday peak period.

2.3.2 Parking

- There are existing embayments with painted parking bays on the edge directly adjacent to the school in Kenmar Crescent
- Along the portion of Kenmar Crescent that runs north-south, there are vehicles that park along both sides of the road which prohibits two-way traffic flow
- At the southern most pedestrian access gate on Kenmar Crescent, there are parents that park to the east of the entrance.
- At the vehicle access gate to Herschel Girls Preparatory School, parents drive in and essentially "drop and go". The parking area within the school yard serves staff members only.

2.4 Crash Data

A review of the traffic crash data from the City of Cape Town for Kenmar Crescent that occurred in 2019, 2021, 2022 and from January 2023 to August 2023 is summarised in Table 1.

Table 1: Summary of Crash Data

Location	No of Crashes	Injury Severity			
		Fatal	Serious	Slight	No Injuries
Kenmar Crescent	7	0	0	0	14
Kenmar Crescent X Herschel	1	0	0	0	2
TOTAL	8	0	0	0	16

The total number of crashes that occurred along Kenmar Crescent is 8 crashes. All of the recorded crashes occurred between 07h00 and 17h30, which relates to daytime traffic. From the crash data, there were no fatal, serious or slight injuries. There was only 16 no injuries (damage only). During the surveyed years there were no pedestrian related crashes.

The alleged causes of the crashes during the surveyed years are mainly due to vehicles reversing, sideswiping a parked car, and driver error.

3 PROPOSED FUTURE TRAFFIC OPERATIONS

It is recommended that Kenmar Crescent be converted into a formalised one-way roadway in the eastbound and southbound direction. This will allow provision of on-street parking along the lane adjacent to the school while allowing for continuous traffic flow along Kenmar Crescent. Consequently, Kenmar Crescent would only be accessible from Herschel Road. A schematic of the concept is shown in Figure 4.

Furthermore, it should be noted that the one-way route conversion will not completely resolve the traffic congestion within the study area, but will provide a more functional system.

All the relevant signs required for the one-way route conversion within the study area are illustrated in drawing no HHO-220040-206-4313 Rev A, attached in Appendix B.

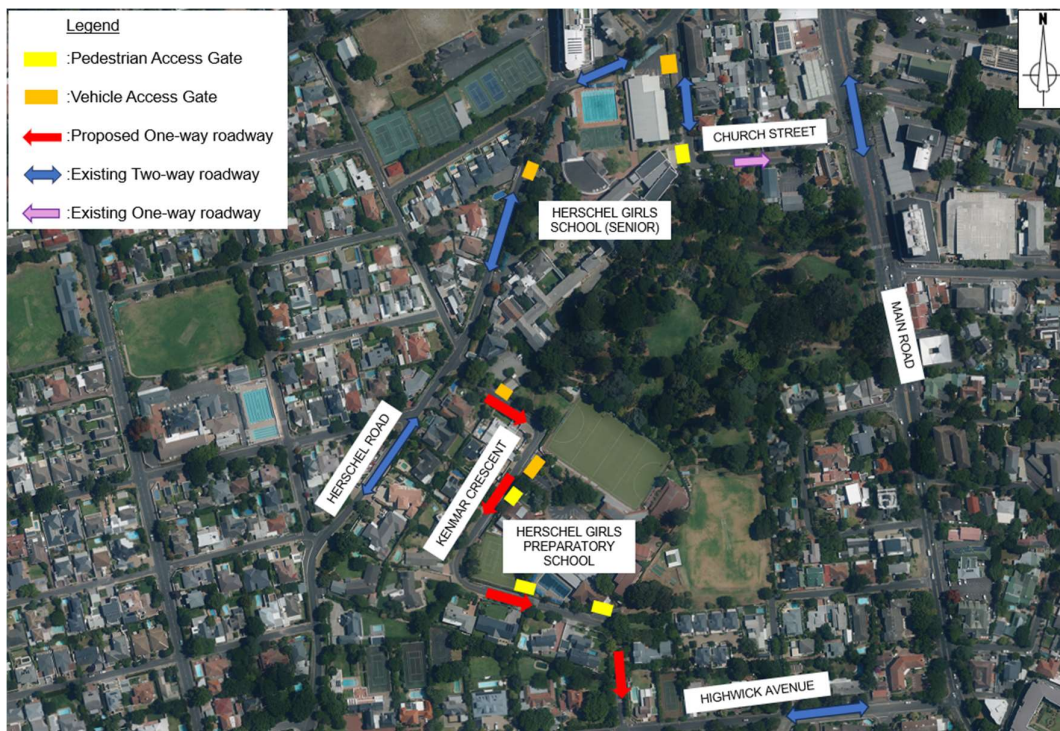


Figure 4: Proposed Layout Schematic

APPENDIX A

Site Observations



Vehicles parking on the road on Kenmar Crescent (Eastbound)



Traffic conflict along Kenmar Crescent (Eastbound)



Vehicle Driving in the wrong lane on Kenmar Crescent (Northbound)



Vehicles parking on the lane closest to the school on Kenmar Road (Eastbound)



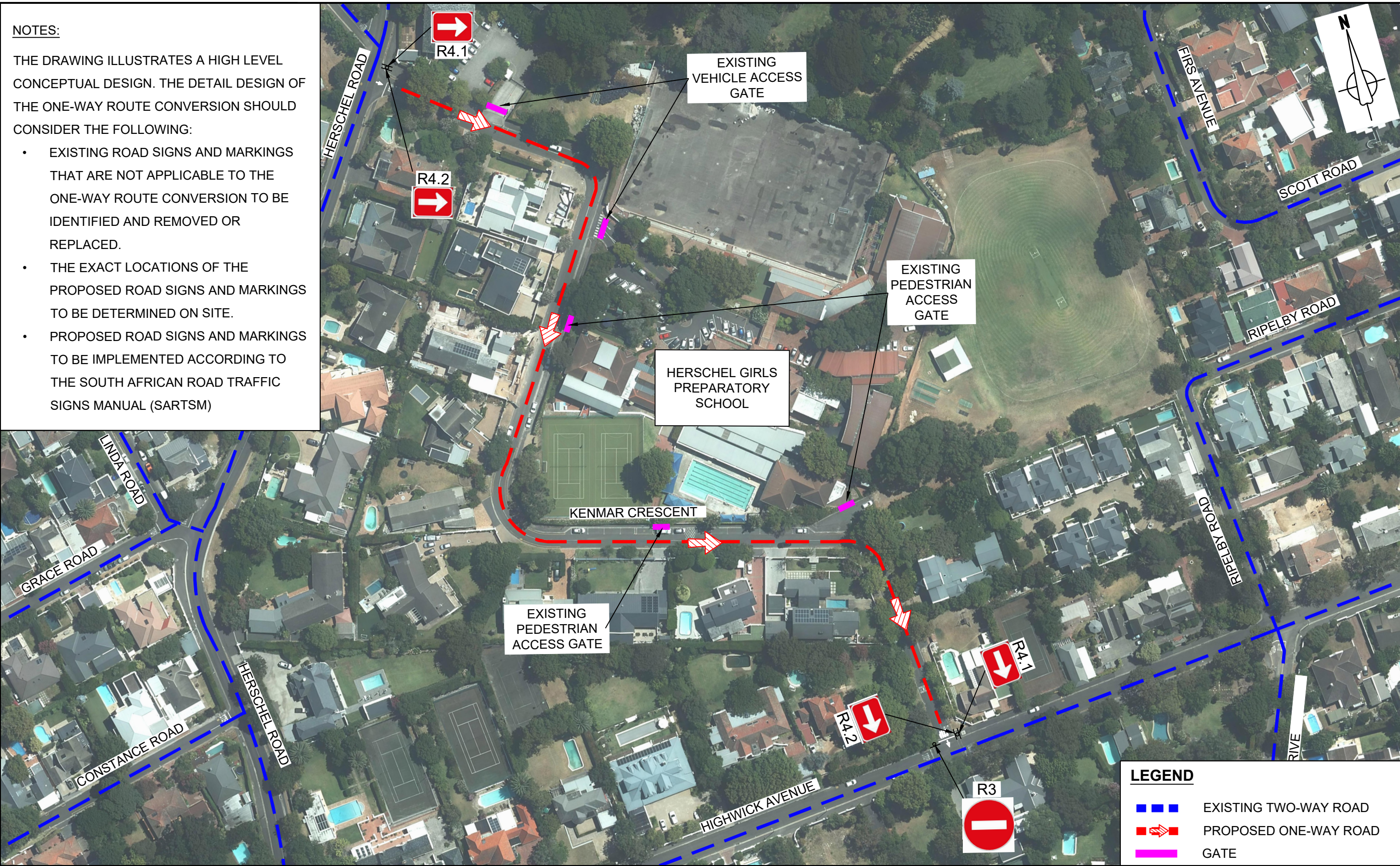
Herschel Girls Preparatory School enforcing a temporary one-way roadway on Kenmar Road (Southbound & Eastbound).

APPENDIX B

NOTES:

THE DRAWING ILLUSTRATES A HIGH LEVEL CONCEPTUAL DESIGN. THE DETAIL DESIGN OF THE ONE-WAY ROUTE CONVERSION SHOULD CONSIDER THE FOLLOWING:

- EXISTING ROAD SIGNS AND MARKINGS THAT ARE NOT APPLICABLE TO THE ONE-WAY ROUTE CONVERSION TO BE IDENTIFIED AND REMOVED OR REPLACED.
- THE EXACT LOCATIONS OF THE PROPOSED ROAD SIGNS AND MARKINGS TO BE DETERMINED ON SITE.
- PROPOSED ROAD SIGNS AND MARKINGS TO BE IMPLEMENTED ACCORDING TO THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL (SARTSM)



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288C TRAFFIC ENGINEERING SERVICES
SOUTH REGION

DRAWING TITLE

TNDS6433
HERSCHEL GIRLS PREPARATORY SCHOOL
TRAFFIC ACCOMMODATION
CONCEPTUAL DESIGN

SCALE

1 : 1500 @ A3

DATE

02/04/2024

DRAWING NO.

HHO-220040-206-4313

REV

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