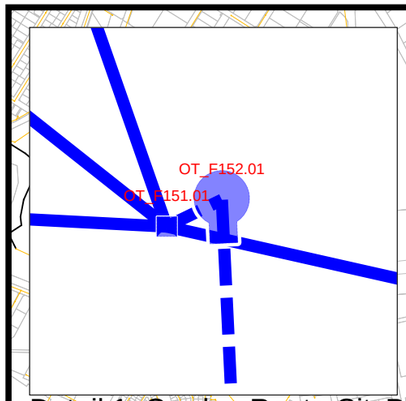
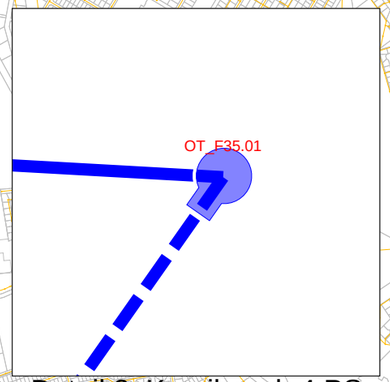
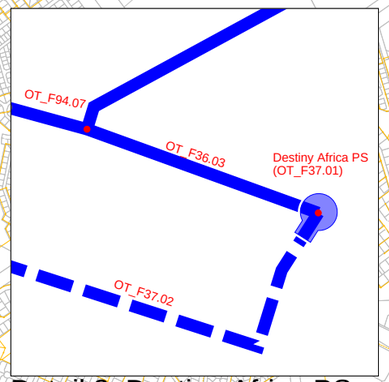


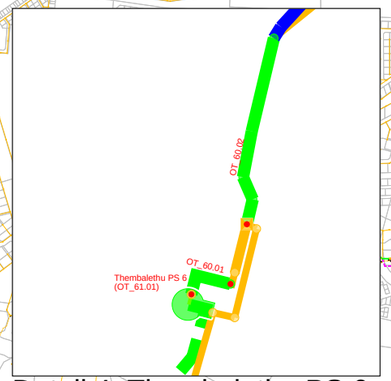
Detail 1: Garden Route CityPS



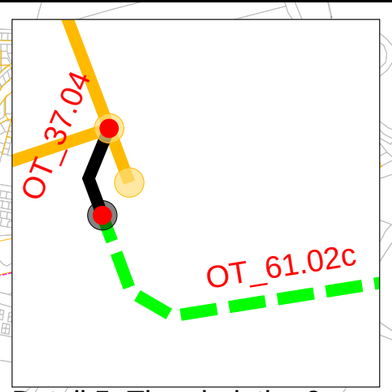
Detail 2: Kraaibosch 4 PS



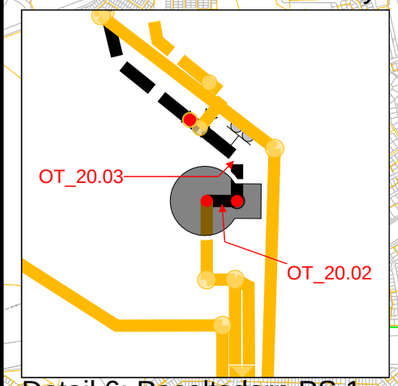
Detail 3: Destiny Africa PS



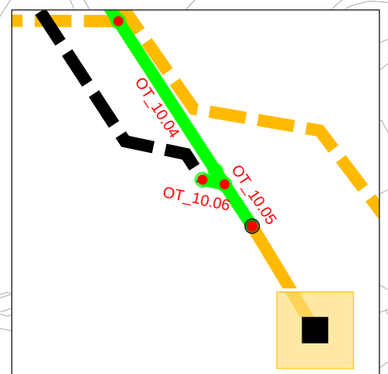
Detail 4: Thembalethu PS 6



Detail 5: Thembalethu 6



Detail 6: Pacaltsdorp PS 1



Detail 7: Outeniqua WWTW

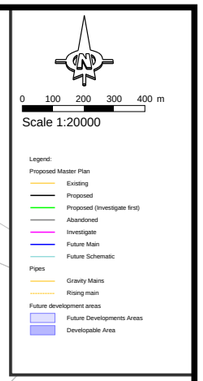


FIGURE 2 (Sewer)

Required Works:
Garden Route City
Future George Sewer System
2025-09

ANNEXURE D (DRAWINGS)

HESRIV-557-R1: STREET LAYOUT

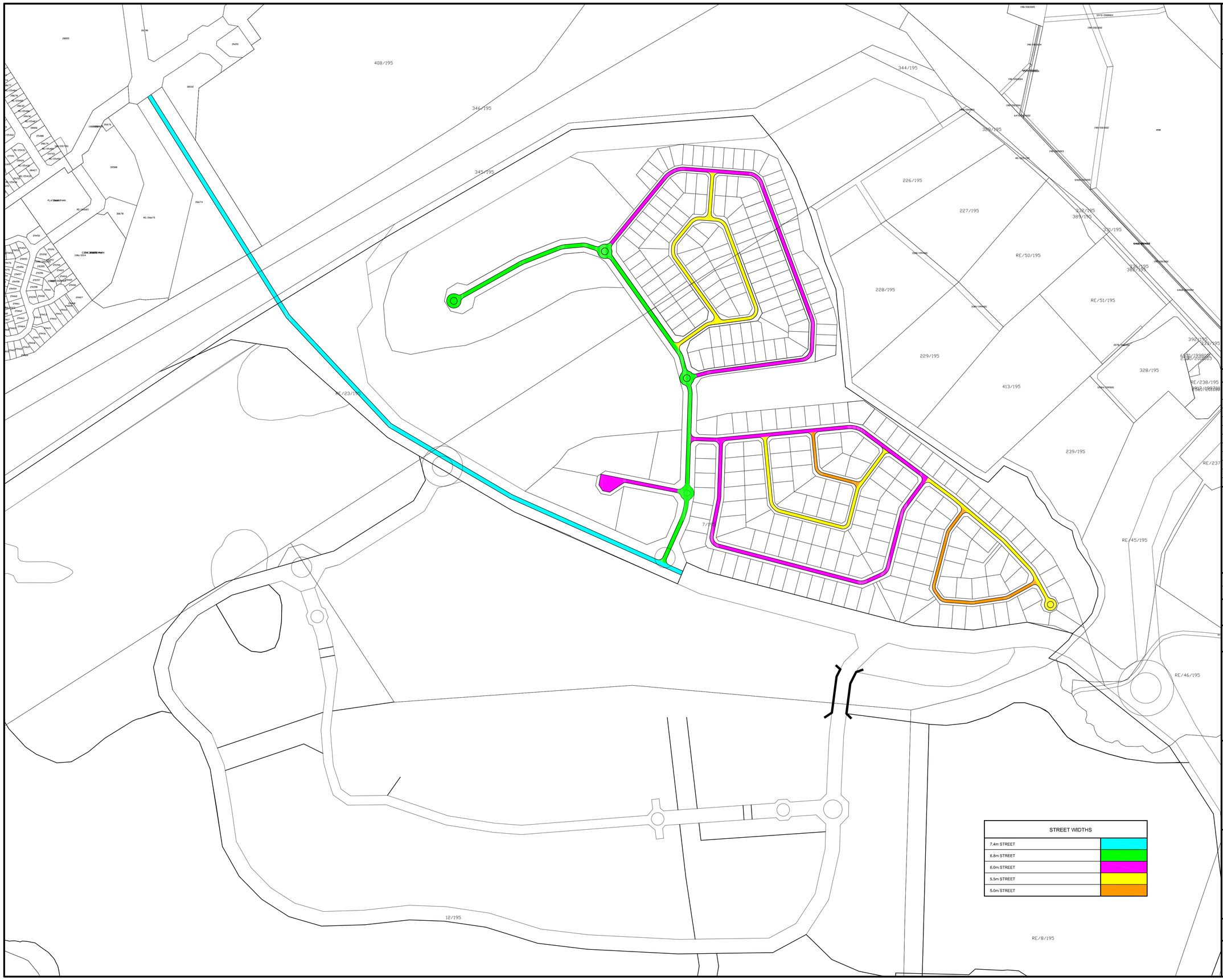
HESRIV-557-S1: PROPOSED NEW BULK SEWER

HESRIV-557-S2: PROPOSED NEW BULK SEWER

HESRIV-557-S3: PROPOSED NEW BULK SEWER

HESRIV-557-SW1: BULK STORMWATER LAYOUT

HESRIV-557-W1: PROPOSED NEW BULK/LINK WATER



VERKLEINDE SKAAL/REDUCED SCALE

0 10 20 30 40 50

50

Notas/Notes

Wysiging/Amendment

Nr. No.	Datum Date	Nagesien Checked	Deur By	Beskrywing Description

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Consulting Engineer

Datum/Date

Kliënt/Client

Datum/Date

Kliënt/Client

KIRON DEVELOPMENTS

26 Whittakers Way
BEDFORDVIEW
2008

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CIVIL ENGINEERING SERVICES FOR GARDEN ROUTE CITY PTN'S 7,8,12 AND REMAINER 23 KRAAIBOSCH No.195, GEORGE (PHASE 1)

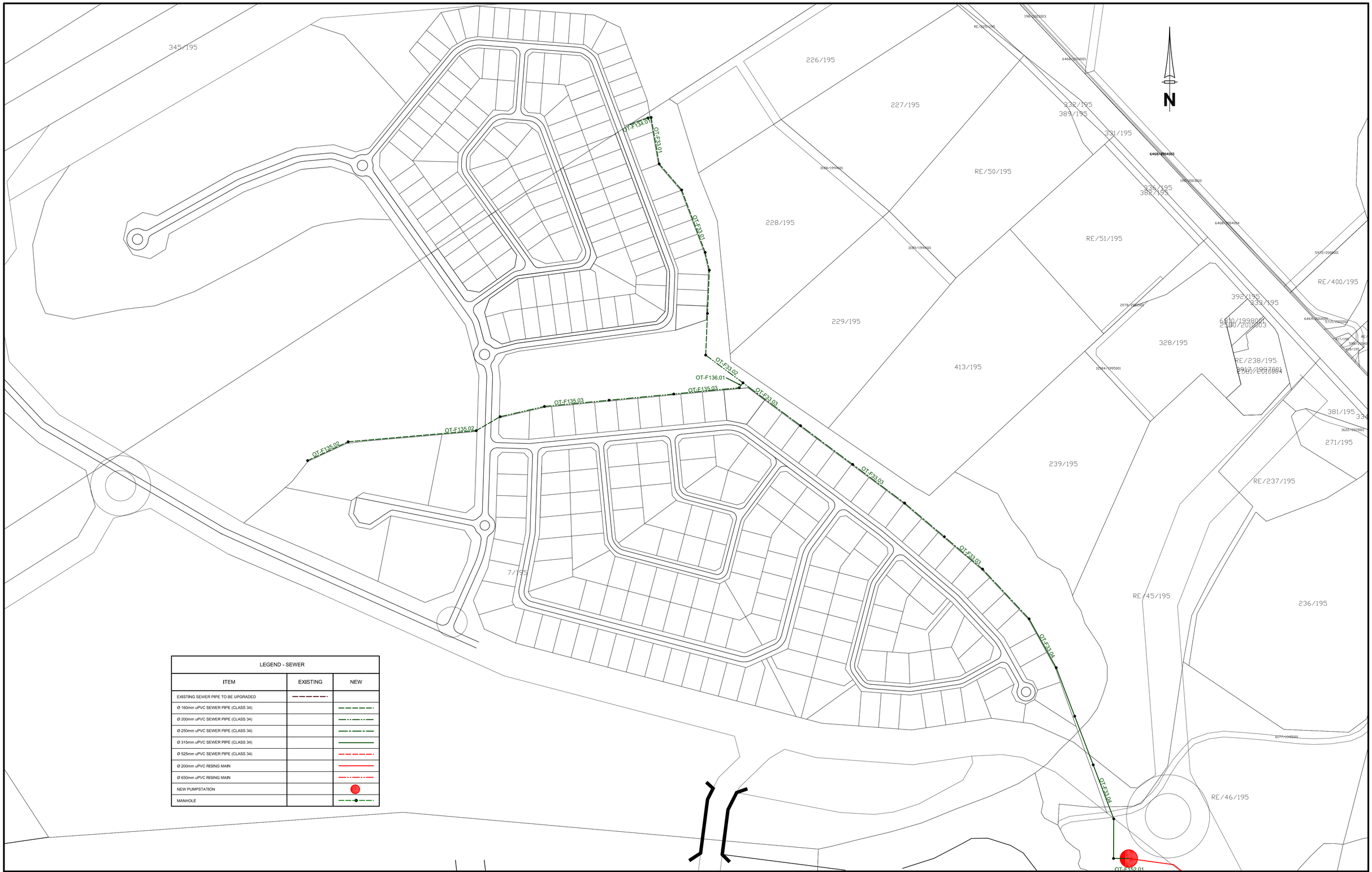
Tekening Beskrywing/Drawing description

STREET LAYOUT

Skaal/Scale	Datum/Date
1:3000	OCTOBER 2026

Tekening nommer/Drawing number

HESRIV557-R1



LEGEND - SEWER		
ITEM	EXISTING	NEW
EXISTING SEWER PIPE TO BE UPGRADED		
Ø 160mm uPVC SEWER PIPE (CLASS 34)		
Ø 200mm uPVC SEWER PIPE (CLASS 34)		
Ø 250mm uPVC SEWER PIPE (CLASS 34)		
Ø 315mm uPVC SEWER PIPE (CLASS 34)		
Ø 525mm uPVC SEWER PIPE (CLASS 34)		
Ø 200mm uPVC RISING MAIN		
Ø 650mm uPVC RISING MAIN		
NEW PUMPSTATION		
MANHOLE		

Wysiging/Amendment

Nr. No	Datum Date	Nageslen Checked	Deur By	Beskrywing/Description

VERKLEINDE SKAAL/REDUCED SCALE

0 10 20 30 40 50

50

Notas/Notes

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Nageslen Checked	

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Klient/Client
Datum/Date

Klient/Client

KIRON DEVELOPMENTS

26 Whittakers Way
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Tekening Beskrywing/Drawing description

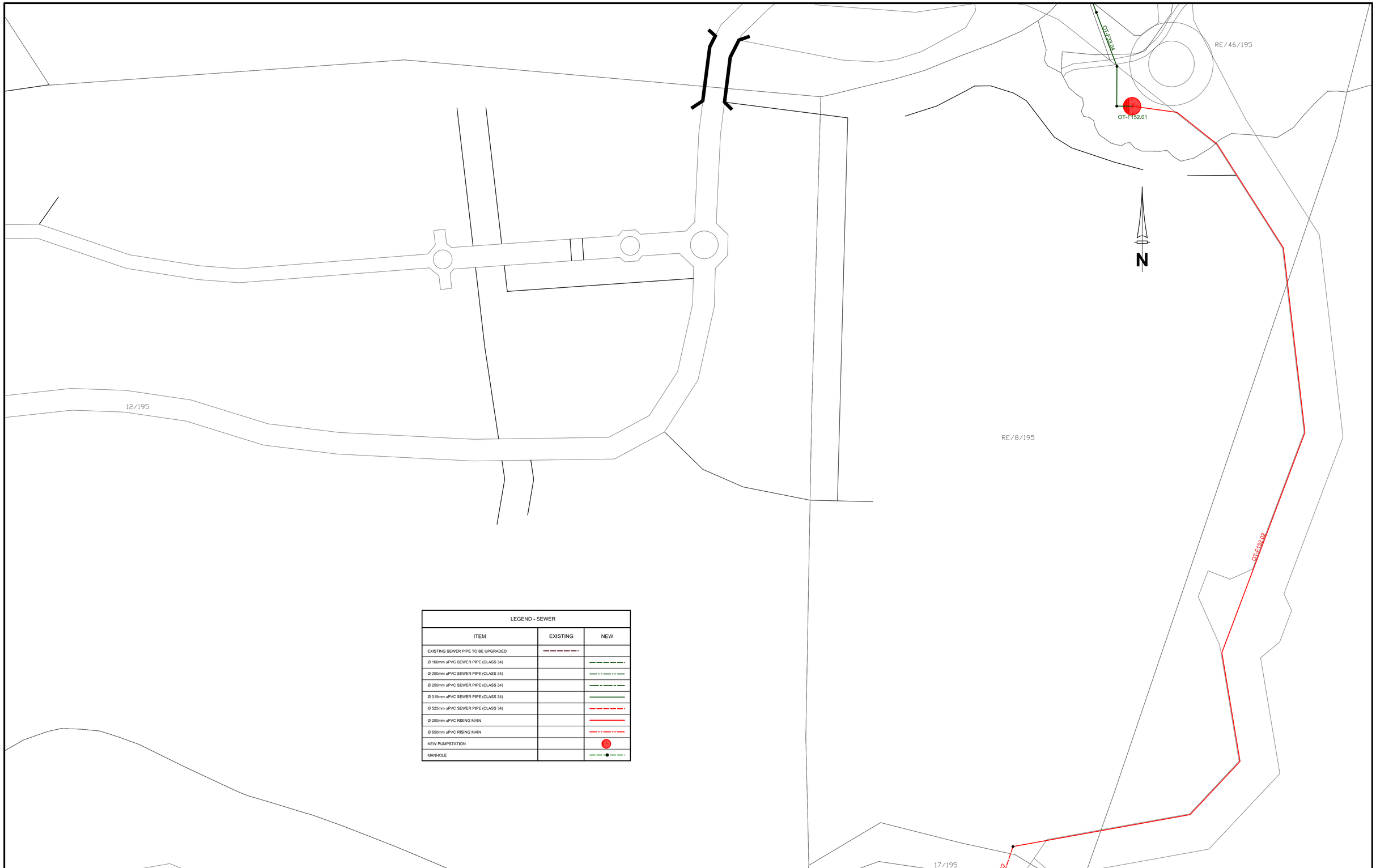
PROPOSED NEW BULK SEWER

Skaal/Scale: 1:2000

Datum/Date: JUNE 2026

Tekening Nommer/Drawing number

HESRIV-557-S1



LEGEND - SEWER		
ITEM	EXISTING	NEW
EXISTING SEWER PIPE TO BE UPGRADED		
Ø 160mm uPVC SEWER PIPE (CLASS 34)		
Ø 200mm uPVC SEWER PIPE (CLASS 34)		
Ø 250mm uPVC SEWER PIPE (CLASS 34)		
Ø 315mm uPVC SEWER PIPE (CLASS 34)		
Ø 525mm uPVC SEWER PIPE (CLASS 34)		
Ø 200mm uPVC RISING MAIN		
Ø 650mm uPVC RISING MAIN		
NEW PUMPSTATION		
MANHOLE		

Wysiging/Amendment

Nr. No	Datum Date	Nagesien Checked	Deur By	Beskrywing/Description

VERKLEINDE SKAAL/REDUCED SCALE

0 10 20 30 40 50

50

Notas/Notes

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Klient/Client
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Klient/Client
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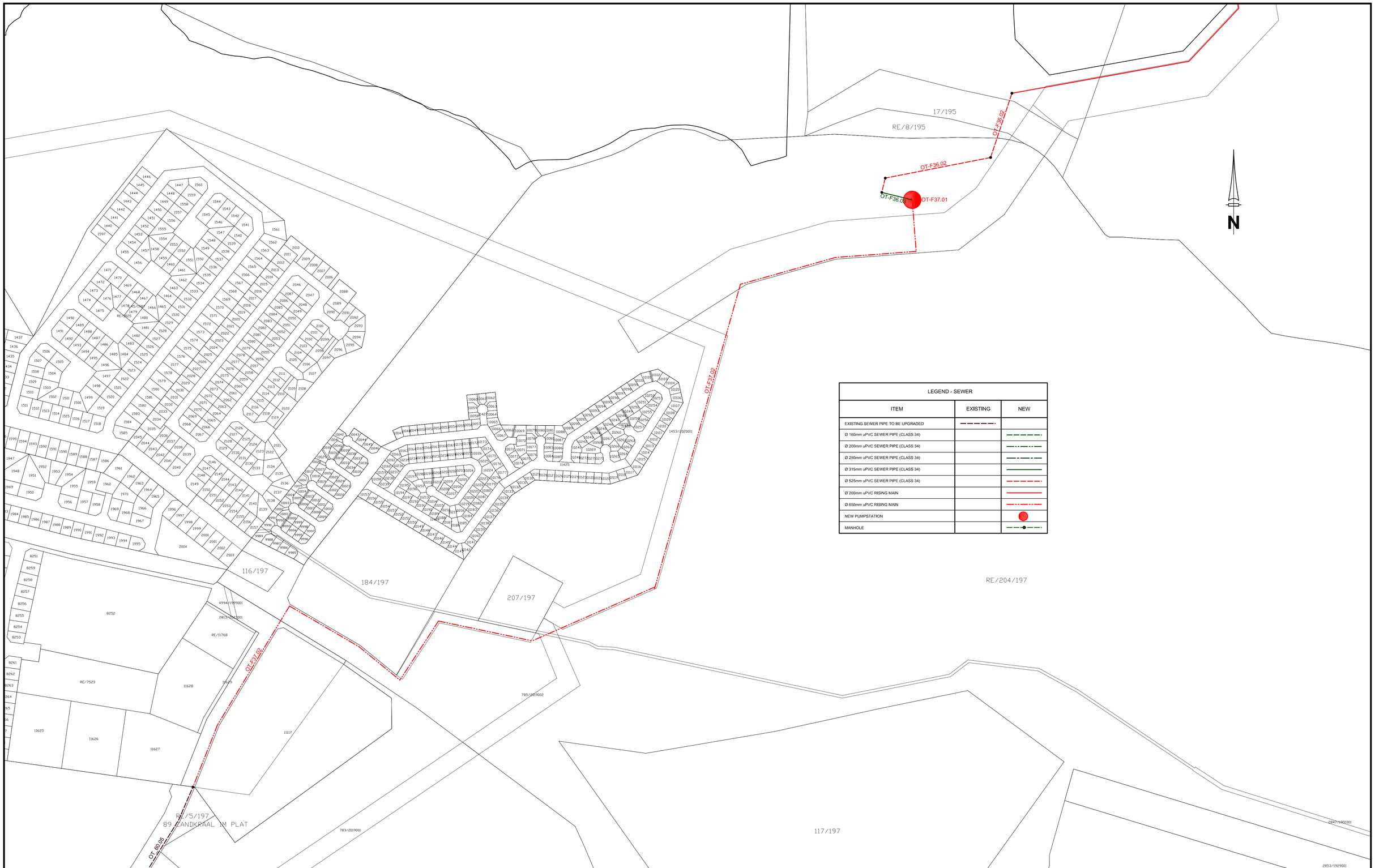
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CIVIL ENGINEERING SERVICES FOR GARDEN ROUTE CITY PTN'S 7,8,12 AND REMAINER 23 KRAAIBOSCH No.195, GEORGE (PHASE 1)

Tekening Beskrywing/Drawing description
PROPOSED NEW BULK SEWER

Skaal/Scale
1:2000

Datum/Date
JUNE 2026

Tekening Nommer/Drawing number
HESRIV-557-S2



LEGEND - SEWER		
ITEM	EXISTING	NEW
EXISTING SEWER PIPE TO BE UPGRADED		
Ø 160mm uPVC SEWER PIPE (CLASS 34)		
Ø 200mm uPVC SEWER PIPE (CLASS 34)		
Ø 250mm uPVC SEWER PIPE (CLASS 34)		
Ø 315mm uPVC SEWER PIPE (CLASS 34)		
Ø 525mm uPVC SEWER PIPE (CLASS 34)		
Ø 200mm uPVC RISING MAIN		
Ø 650mm uPVC RISING MAIN		
NEW PUMPSTATION		
MANHOLE		

Wysiging/Amendment				
Nr. No	Datum Date	Nagesien Checked	Deur By	Beskrywing/Description

VERKLEINDE SKAAL/REDUCED SCALE
0 10 20 30 40 50
50

Notas/Notes

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Nagesien Checked	

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Klient/Client
Datum/Date

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Tekening Beskrywing/Drawing description
PROPOSED NEW BULK SEWER

Skaal/Scale
1:2000

Datum/Date
JUNE 2026

Tekening Nommer/Drawing number
HESRIV-557-S3

LEGEND - STORMWATER		
ITEM	EXISTING	NEW
Ø 600 STORMWATER PIPE (OGEE 75D)		
Ø 750 STORMWATER PIPE (OGEE 75D)		
Ø 900 STORMWATER PIPE (OGEE 75D)		
Ø 1200 STORMWATER PIPE (OGEE 75D)		

POND 1
ATTENUATION VOLUME = 546.80m³
DEPTH = 1.5m

POND 2
ATTENUATION VOLUME = 1179m³
DEPTH = 1.5m

POND 3
ATTENUATION VOLUME = 3286.30m³
DEPTH = 1.5m

POND 4
ATTENUATION VOLUME = 3084.30m³
DEPTH = 1.5m

POND 5
ATTENUATION VOLUME =3285m³
DEPTH = 1.5m

POND 6
ATTENUATION VOLUME =4744,50m³
DEPTH = 1.5m

POND 7
ATTENUATION VOLUME =3699.80m³
DEPTH = 1.5m

POND 8
ATTENUATION VOLUME =2768,40m³
DEPTH = 1.8m

POND 9
ATTENUATION VOLUME =3884.30m³
DEPTH = 1.8m

POND 10
ATTENUATION VOLUME =2108.30m³
DEPTH = 1.5m

MINNING PIT
ATTENUATION VOLUME = 15,740m
DEPTH = 5m

VERKLEINDE SKAAL/REDUCED SCALE
0 10 20 30 40 50
50

Notas/Notes

Wysiging/Amendment

Nr. No.	Datum Date	Nagesien Checked	Deur By	Beskrywing Description

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Raadgewende Ingenieur
Consulting Engineer

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Klient/Client

KIRON DEVELOPMENTS

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Tekening Beskrywing/Drawing description

BULK STORMWATER LAYOUT

Skaal/Scale	Datum/Date
1:3500	AUGUST 2026

Tekening nommer/Drawing number

HESRIV-557-SW1

VERKLEINDE SKAAL/REDUCED SCALE

0 10 20 30 40 50

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Notas/Notes

Wysiging/Amendment

Nr. No.	Datum Date	Nagesien Checked	Deur By	Beskrywing Description

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Ontwerp Designed	Geteken Drawn	Nagesien Checked
AA	AA	

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Consulting Engineer — Datum/Date

Klient/Client — Datum/Date

Klient/Client

KIRON DEVELOPMENTS

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BEDFORDVIEW
2008

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CIVIL ENGINEERING SERVICES FOR GARDEN ROUTE CITY PTN'S 7,8,12 AND REMAINER 23 KRAAIBOSCH No.195, GEORGE (PHASE 1)

Tekening Beskrywing/Drawing description

PROPOSED NEW BULK WATER

Skaal/Scale	Datum/Date
1:2000	JUNE 2026

Tekening nommer/Drawing number

HESRIV-557-W1

LEGEND - WATER		
ITEM	EXISTING	NEW
EXISTING Ø 200 mm PIPE TO BE UPGRADED TO Ø 250 mm PIPE	200mm	
Ø 250 mm PIPE uPVC CLASS 12		250mm
Ø 400 mm PIPE uPVC CLASS 12		400mm
Ø 450 mm PIPE uPVC CLASS 12		450mm
CONNECT TO EXISTING		

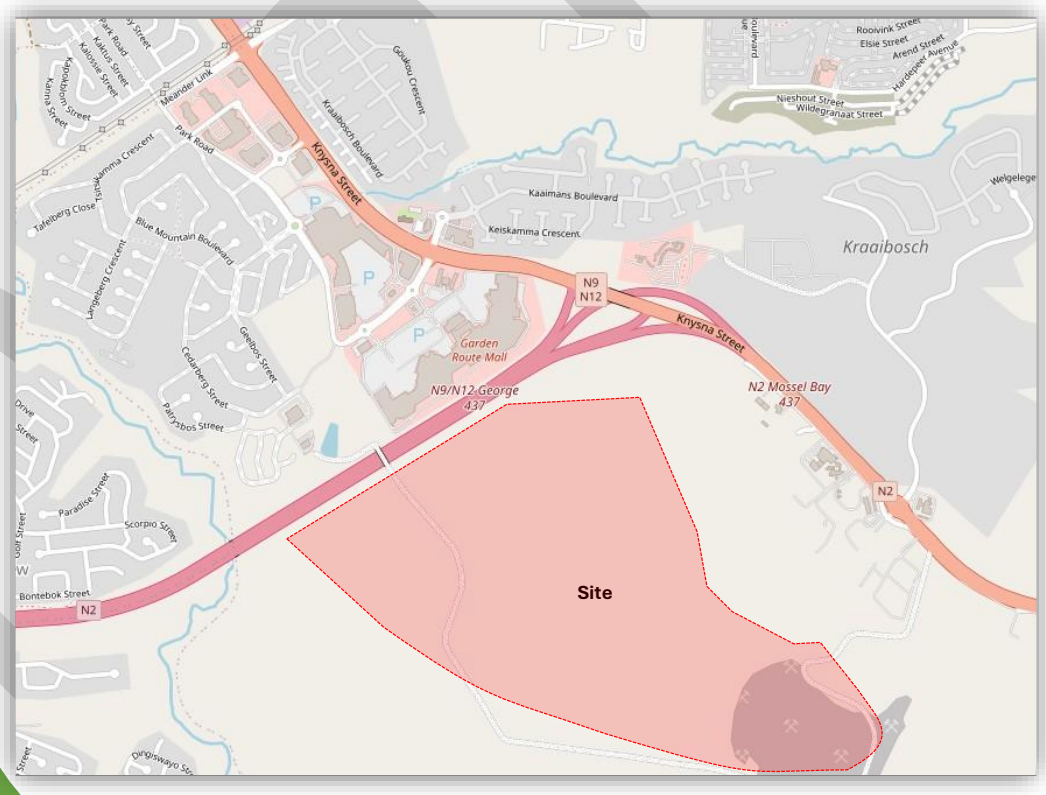
ANNEXURE 18

Garden Route City

Transport Impact Assessment

George, Western Cape

October 2026



5th Floor

Imperial Terraces

Carl Cronje Drive

Tyger Waterfront

Bellville, 7530

(021) 914 6211 (T)

e-mail: westerncape@@itsglobal.co.za

SUMMARY SHEET

Report Type	Transport Impact Assessment
Title	Garden Route City
Location	George, Western Cape
Client	Kiron Properties
Reference Number	ITS 4628
Project Team	Christoff Krogscheepers
	Inge van Tonder
Contact Details	Tel: 021 914 6211
Date	October 2026
Report Status	Second Draft
File Name	G:\4628 TIA Garden Route City, George\12 Reports\Issued\4628 TIA Garden Route City George Draft Report_IvT_2026-10-02.docx

It is herewith certified that this Traffic Impact Assessment has been prepared according to the requirements of the South African Traffic Impact and Site Traffic Assessment Manual (TMH 16 and 17).

Draft

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2 Purpose of Study 1

3 Locality 1

4 Land Use 2

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6 Existing Roadways 2

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11 Approved Developments/ Latent Rights 5

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REPORT - SUMMARY TABLE

This transport impact assessment is reported only in a summary table format instead of a traditional report to assist review and interpretation of the results. This summary table includes all the relevant information. It should be sufficient for the review and interpretation of the expected transport impacts as well as the comprehension of the required measures to mitigate the transport impact. If any more detail is required, please contact the authors.

ANNEXURES

Annexure A: Figures
Annexure B: Tables

ABBREVIATIONS

COTO	Committee of Transport Officials
Ha	Hectare
HCM	Highway Capacity Manual
LOS	Level of Service
NMT	Non-motorised Transport
SQM	Square Meters (m^2)
TIA	Transport Impact Assessment
V/C	Volume to Capacity Ratio
WCG	Western Cape Government

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Transport Impact Assessment

Garden Route City, George, Western Cape

1 Background	This report summarises an assessment of the transport-related impacts expected as part of the proposed Garden Route City Phase 1 development planned in George. The purpose of this assessment is to identify potential constraints within the surrounding road network and recommend appropriate mitigation measures where applicable.
2 Purpose of Study	The purpose of this study is to determine the transport impacts of the proposed Phase 1 of the development. The assessment is done by considering all the completed developments within Eden Meander, and all the latent developments in the area. It also considers the existing transport system as improved over recent years.
3 Locality	The proposed development will be located in the southern quadrant of the N2 Kraaibosch Interchange. The site is bounded by the N2 to the north and east and the Thembalethu residential area to the west. Refer to **Figure 1** for the locality map.

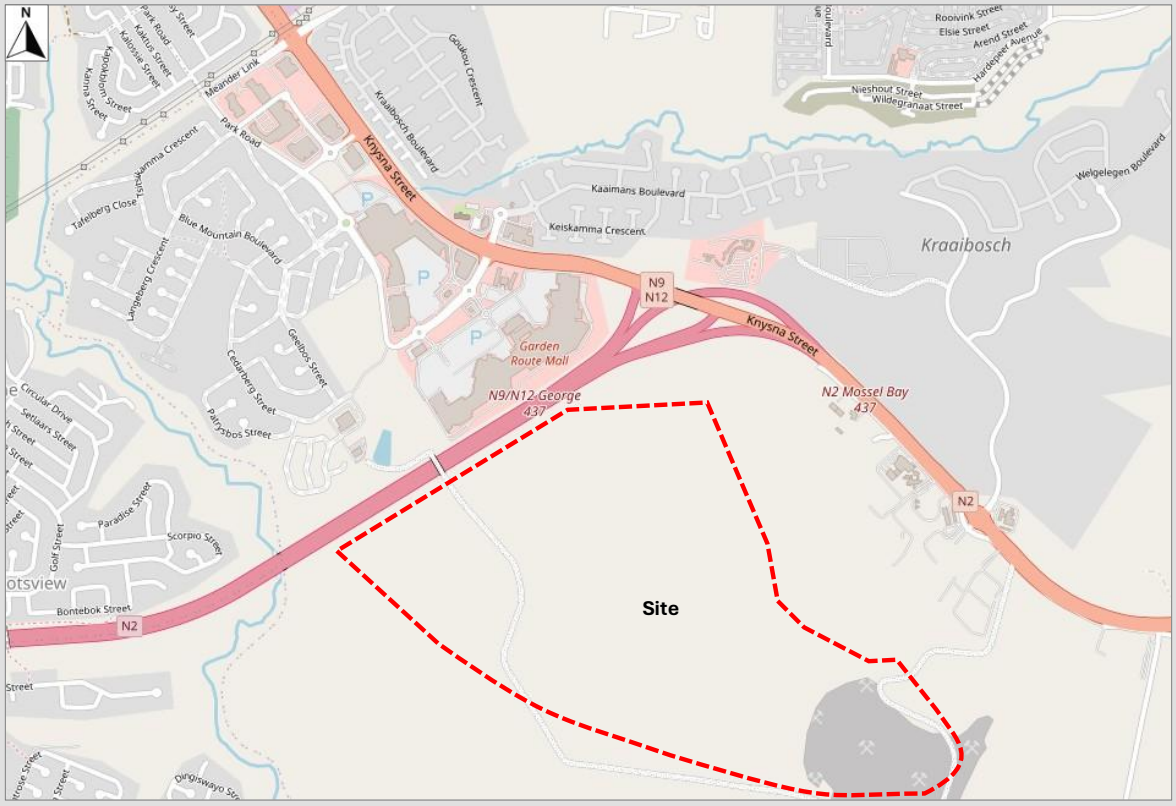


Figure 1: Locality Plan

4 Land Use	**Existing Land Use:** The site is currently vacant, with a quarry and sand mine activities on the eastern edge of the site.
	
	Proposed Land Use: The planned development will include the following:
	• Medium density residential: 299 units
	• Low density residential: 281 units
	• Mixed-use (~3.1 ha):
	  ○ Creche
	  ○ Sports Complex
	  ○ Medical Centre
	  ○ Convenience Shopping
	The mixed-use precinct detail will be determined at site development plan level, and for this report it was assumed that the total erf size was divided equally between the four land uses. Further assumptions on the Gross Leasable Area (GLA) for the various land uses will be discussed in Section 14 of the report.
	The above will be Phase 1 of the development. Subsequent Traffic Impact Assessments (TIA) will be undertaken for the phases that will follow.
	
	Refer to **Figure A1** in Annexure A for the subdivision plan for Phase 1.

5 Existing Access	Currently, the site area is served by two informal gravel road accesses: • The first is a narrow bridge over the N2 that links local gravel roads south of the N2 to the area south-west and north of the N2. • The existing quarry gains access from a narrow gravel road which in turn intersects with the southern approach of the N2 / Engen roundabout.
6 Existing Roadways	The existing roadways in the site vicinity are described below. The road classification is based on the George Comprehensive Integrated Transport Plan (CITP) 2023-2028 (George Municipality, August 2024). Refer to **Figure 2** for the road classification of George. **N2**: Class 1 Freeway. Two lanes per direction, 120km/h speed limit, with a median, no on-street parking and no sidewalks. **Knysna Road (TR210)**: Class 2 Major Arterial. Two lanes per direction, 80km/h speed limit, no on-street parking, with a median and sidewalks on both sides of the road for most of its length. Sidewalks are absent for a section between Saint George's Road and Madiba Drive. **Saint George's Road west of Knysna Road**: Class 5 collector road. Two lanes per direction, 60km/h speed limit, no on-street parking and sidewalks on both sides of the road. **Park Drive**: Class 5 local road. Single lane per direction, 60km/h speed limit,

	no on-street parking, no median and sidewalks on both sides of the road. Park Drive splits into a dual carriageway with a median for 150m northwest and southeast of the roundabout access to the Garden Route Mall. **Garden Route Mall Access Road**: Class 5 local road. It comprises of a dual carriageway road with two lanes per direction, 60km/h speed limit, no on-street parking and sidewalks on both sides of the road **Platinum Drive**: Class 5 Collector Road. Single lane per direction, 60km/h speed limit, no on-street parking, no median and sidewalks on both sides of the road.

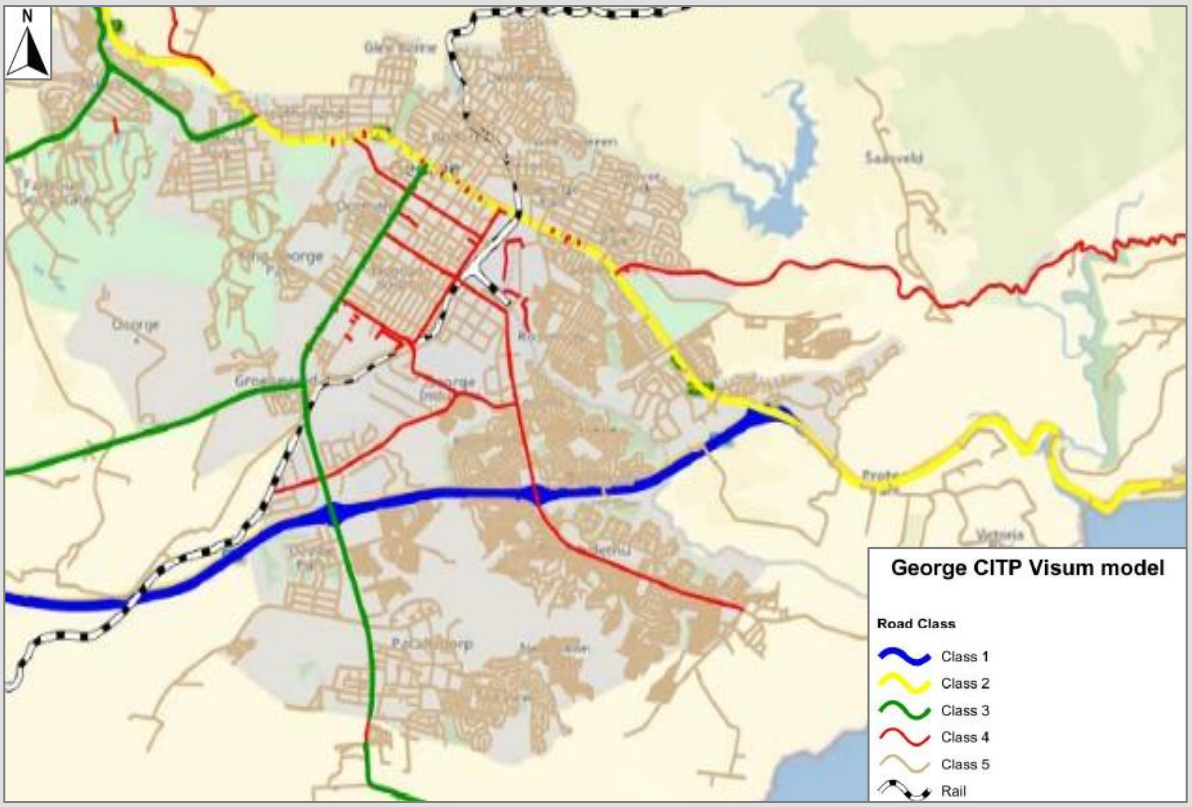


Figure 2: Road Hierarchy for George, as used in the Base Year of the Transportation Model (George CITP, 2024)

7 Analysis Hours	The following peak periods were included as part of this investigation: • Weekday a.m. peak period (07:00 - 09:00) • Weekday p.m. peak period (16:30 – 17:30)
8 Scenarios Analysed	The following traffic scenarios were analysed: • **Scenario 1**: 2026 Existing Traffic Conditions – Based on existing 2025 counted traffic volumes.

	• **Scenario 2**: 2031 Background Traffic Conditions – *Based on Scenario 1 traffic volumes PLUS the expected trips from the future land uses and latent developments. Further discussed in Section 11. No background growth was applied.* • **Scenario 3**: 2031 Total Traffic Conditions – *Based on Scenario 2 traffic volumes PLUS the expected trips from the Garden Route City development.*
9 Study Intersections	The following intersections were evaluated: **Intersection 1:** Knysna Road/St George's Road - Signalised Intersection **Intersection 2:** Knysna Road/Partial Mall Access - Partial Intersection **Intersection 3:** Knysna Road/Park Road (Mall Access) - Signalised Intersection **Intersection 4:** Knysna Road/N2 Off-Ramp - Priority Control **Intersection 5:** Knysna Road/N2 On-Ramp - Priority Control **Intersection 6:** St George's Road/Park Road – Priority Control **Intersection 7:** Park Drive/ Blue Mountain Village Construction Road - Priority Control **Intersection 8:** Park Drive/Blue Mountain Village Access - Roundabout **Intersection 9:** Park Drive/ Platinum Drive – Future roundabout **Intersection 10:** N2/Rademachers - Roundabout Refer to **Figure 3** for the location of the study intersections. Refer to Annexure A, **Figure A2,** for the lane configurations and controls of the study intersections.

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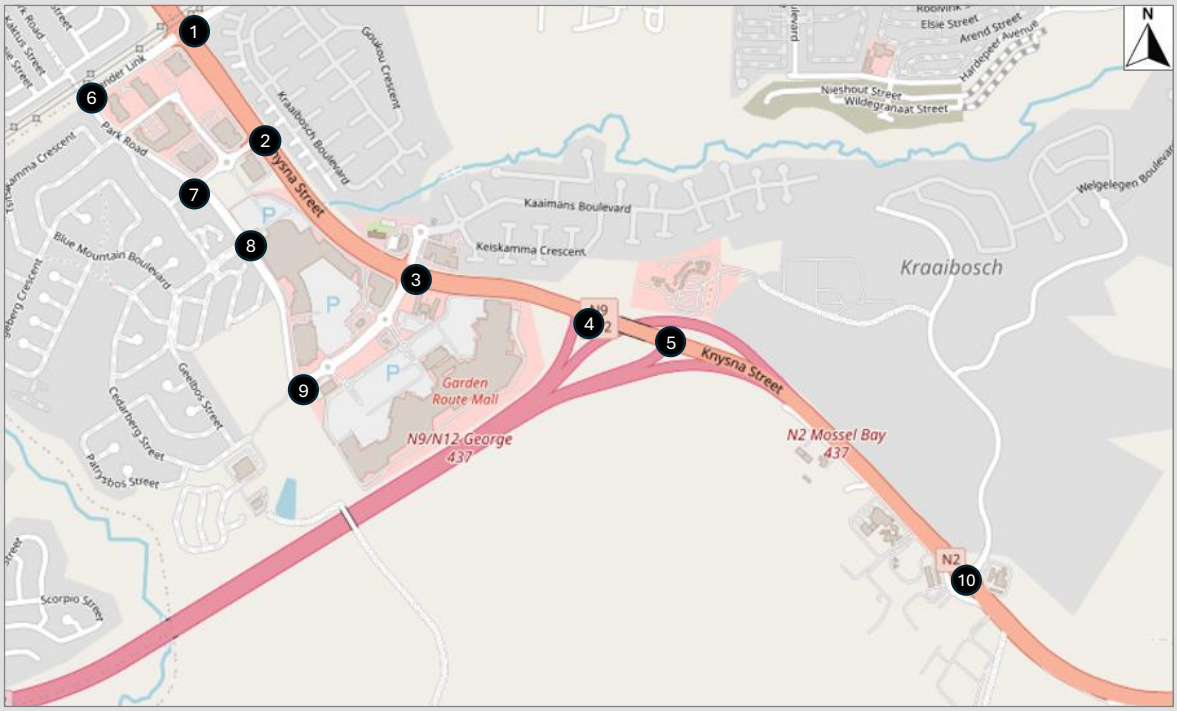


Figure 3: Intersection Count Locations

10 Existing Intersection Operations	The 2026 Existing Traffic conditions are based on existing intersection geometries, controls and counted traffic volumes. Historical traffic counts were used and adjusted based on the latest Kraaibosch Roads Master Plan and Cost Apportionment Model (SMEC, December 2025). Refer to **Figure A2** for the existing lane configurations and controls. Refer to **Figures A3** and **A4** for the existing a.m. and p.m. peak hour traffic volumes and operations, respectively. Based on the Existing Traffic capacity analysis results as well as on-site observations, the following can be concluded: All the study intersections currently operate at acceptable Levels-Of-Service (LOS), and therefore, no upgrades are proposed from a capacity analysis point of view.
11 Approved Developments/ Latent Rights	There are several in-process and planned developments in the immediate vicinity. These developments are: • Garden Route Mall • Meulenzicht Estate • Oude Meulen • Sweetpea • George Campus • Greater Kraaibosch Area • Open Erven in Eden Meander Precinct • Residential Development on Erf 28005, Eden Meander

The in-process development which will have the most significant impact on the traffic operations around Eden Meander is the development of the Greater Kraaibosch Area and the George Campus. All the above planned and in-process developments were added as background trips for Scenario 2. The trips for the Kraaibosch, George Campus and Sweetpea were obtained from the Kraaibosch Roads Master Plan and Cost Apportionment Model (SMEC, 2025) and the Meulenzicht Estate and Oude Meulen trips were obtained from Innovative Transport Solutions (Pty) LTD (Project No. 4730, 2025).

The following trips were included as part of the Background Scenario:

Table 1: Background Development Trips

	AM Peak Hour Trips		PM Peak Hour Trips	
Development	**In**	**Out**	**In**	**Out**
Meulenzicht	57	170	159	68
Oude Meulen	120	348	324	140
Sweetpea	18	51	48	21
Kraaibosch	1 087	2 307	2 307	1 087
George Campus	1 119	361	1 117	1 593
Open Erven Eden Meander including Proposed Hospital	396	231	521	549
Residential	23	54	54	23
Offices	49	12	49	12
Erf 28005, Eden Meander	111	332	287	155
TOTAL	**2 980**	**3 866**	**4 866**	**3 838**

12 Future Road Network

The Georgy Municipality Roads Master Plan, showing the proposed future links, is provided in **Figure 4**. The following planned roads were included as part of this study:

- The northward extension of St George's Road to link to Madiba Drive.
- The extension of the Mall Access Road into the Kraaibosch/Glenwood area to link to Madiba Road.
- The extension of Welgelegen Road across the Modderrug River to link into the Kraaibosch area.

However, at the time of this report, the timeline for the construction of these roads is unknown.

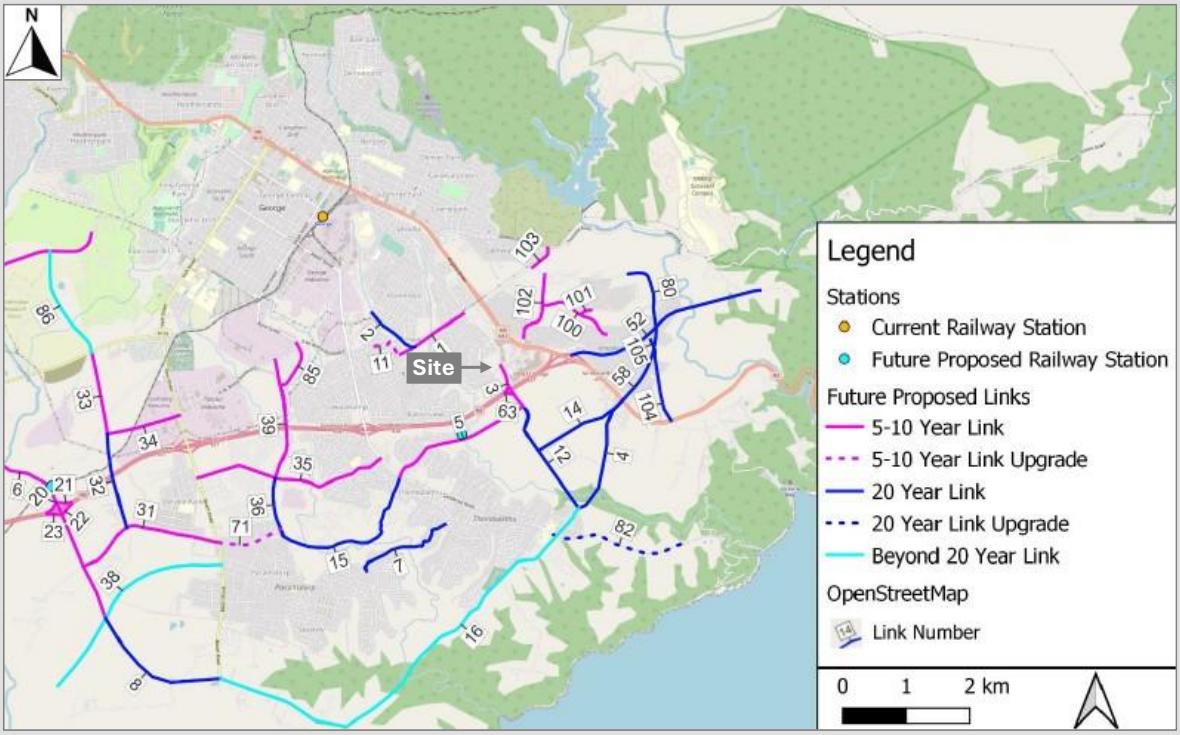


Figure 4: George Municipality Roads Master Plan 2023 - Time Horizons (CITP, George, 2024)

13 Background Traffic Conditions

The 2031 Background Traffic volumes were calculated by adding the anticipated trips from the future developments planned in the immediate site vicinity to the Existing Scenario.

Refer to **Figure A2** for the existing lane configurations and controls used for the Background traffic analysis. Refer to **Figures A5** and **A6** for the background AM, PM and Saturday midday peak hour traffic volumes and operations.

Based on the Background Traffic capacity analysis results, it is expected that all study intersections will continue to operate at acceptable levels-of-service and delay, except the following intersections:

- **Int. 1 Knysna Road/Saint George's Road:**
  This intersection is operating unacceptably during the AM peak hour. It is recommended to add a protected right-turn phase on the north and south approaches. It is also recommended to change the southbound through to a shared through and right-turn lane from the Kraaibosch area side.
- **Int. 3 Knysna Road/Park Road:**
  It is recommended to add protected right-turn phases on the east, west and south approaches.
- **Int. 4 N2 Off-Ramp/Knysna Road**:
  It is proposed to have two lanes along Knysna Road (N12) eastbound through this intersection.

- **Int. 9 Platinum Drive/Park Road:**
  It is proposed to upgrade this intersection to a single circulating roundabout with single approach lanes on all approaches.
- **Int. 5 N2 O2-Ramp/Knysna Road**: This intersection is expected to operate at longer delays, resulting in a LOS F for both peak hours. No upgrades are proposed. The right turn lane turning towards the N2 has been lengthened to approximately 200 m. The storage length is sufficient to accommodate the 95th percentile queue length at this intersection for both the a.m. and p.m peak hours.

It is important to note that the upgrades provided above will be due to the background developments and not as part of the development on the Garden Route City.

The recommended upgrades also align with the Kraaibosch Roads Master Plan and Cost Apportionment Model (SMEC, 2025) report. Refer to **Figure A7** for the proposed upgrades for this scenario. Refer to **Figures A8** and **A9** for the expected intersection operations after the proposed upgrades are in place.

14 Trip Generation Rates and Development Trips

The trip generation rates and resulting development trips were derived from the *South African Traffic Trip Data Manual* prepared by the Committee of Transport Officials (COTO, 2013). The trip rates and the corresponding estimated trips for the proposed development are presented below. **Table 2** summarises the trip generation rates applied in this assessment.

Table 2: Trip Generation Rates

		AM Peak Hour		PM Peak Hour	
Land Use	**Code**	**Base Rate**	**Adj. Rate**	**Base Rate**	**Adj. Rate**
Residential	COTO 220	0.65	0.59	0.65	0.59
Residential	COTO 210	1.00	0.90	1.00	0.90
Creche	ITE 565	13.11	11.14	13.29	12.63
Sport Complex	ITE 492	1.52	1.52	3.80	3.80
Medical Centre	COTO 720	8.00	7.20	8.00	8.00
Convenience Shopping	COTO 820	2.54	2.28	14.37	12.93

Refer to **Table B1** and **Table B2,** Annexure B, for more details on the trip generation. A mixed-use reduction factor was applied between the land uses.

The mixed-use erf (30 111 m^2) was divided equally among the 4 land uses, and the following percentages of the divided erf sizes were assumed for the GLA of the various land uses:

- Crèche: GLA is 15% of the assumed erf size,
- Sport Complex: GLA is 35% of the assumed erf size,
- Medical Centre: GLA is 40% of the assumed erf size,
- Convenience Shopping: GLA is 40% of the assumed erf size.

More detail on the mixed-use precinct will be determined at the site development plan level.

Refer to **Table 3** for the expected development trips.

Table 3: Expected Development Trips

Peak Hour	In	Out	Total
AM Peak Hour	369	522	**891**
PM Peak Hour	727	574	**1 301**

See **Figures A10** and **A11** for the expected trip generation for the AM and PM peak hours distributed on the network.

15 Trip Distribution

The expected trip distribution of new development trips is based on existing traffic volumes and patterns along Frankie Fredericks Street. Based on these existing traffic patterns, the following split was used to calculate the trip distribution of new development trips:

- 20% of trips to/from the site along Knysna Road to George CBD
- 10% of trips to/from the N2 towards Knysna Road
- 10% of trips to/from the east of Saint George's Road
- 20% of trips to/from the N2 towards Mossel Bay
- 15% of trips to/from the north along Park Road
- 25% of trips to/from the Eden Meander Precinct

Refer to **Figures A10** and **A11**, **Annexure A,** for the distribution of the new development trips through the study intersections.

16 Site Access and Access Control	The main access to Phase 1 of the development will be via the bridge over the N2 and will connect to the extension of Park Road and the Platinum Drive/Park Road intersection. The bridge will be widened to accommodate one lane per direction. The gravel road that connects the quarry/mine operations to the service road next to the N2 will be used as a construction/emergency access.
17 Total Traffic Conditions	Refer to **Figure A12** for the lane configurations and controls used for the total traffic analysis. Refer to **Figures A13** and **A14** for the total a.m. and p.m. peak hour traffic volumes and operations. Based on the Total Traffic capacity analysis results, it is expected that all study intersections will continue to operate at acceptable levels-of-service and delay. The following recommendations are provided for the intersections as part of **Phase 1** of the development: • **Int. 9 Platinum Drive/Park Road:** It is proposed to upgrade this intersection with the fourth leg of Park Road that will extend towards the bridge over the N2. • Further upgrades will include the bridge over the N2 with one lane per direction. • **Int. 5 N2 On-Ramp/Knysna Road**: This intersection is expected to operate at longer delays, resulting in a LOS F for both peak hours. No upgrades are proposed. The right turn lane turning towards the N2 has been lengthened to approximately 200 m. The storage length is sufficient to accommodate the 95th percentile queue length at this intersection for both the a.m. and p.m peak hours. Any signalisation/upgrades at this intersection will be abortive in the future when the N2 is extended. Therefore, no upgrades are proposed at this intersection. It is also required to dual Park Road between Blue Mountain Boulevard and Saint George's Road as part of **Phase 1** of this development. *Subsequent phases of the development will require more detailed Transport Impact Assessments. However, the following high-level capacity analysis provides an indication of the remaining capacity available over the N2 bridge beyond Phase 1. The analysis indicates that the N2 bridge can accommodate a total of 2 000 vehicle trips per peak hour, with the following directional split:* • *Morning peak hour: 1 500 outbound and 500 inbound trips.* • *Afternoon peak hour: 1 500 inbound and 500 outbound trips.* *Based on the total trips generated by Phase 1, approximately 1 120 vehicle trips during the morning peak hour and 700 vehicle trips during the afternoon peak hour remain available over the N2 bridge. These figures represent the remaining capacity across both directions combined, subject to the*

	directional limits indicated above. *Based on the assumed residential trip generation rates, the total bridge capacity equates to approximately 1 800 residential units. Phase 1 comprises 580 residential units, leaving an indicative allowance of approximately 1 220 additional residential units. This allowance is subject to confirmation of the final land-use mix and the trips generated by the mixed-use component, which also contribute towards the available bridge capacity.* *The development allocation for subsequent Phases (excluding Phase 1) is subject to the dualling of Park Road and the upgrading of the Park Road/Platinum Drive roundabout to a double-lane roundabout.* This conclusion assumes that the background traffic conditions include all planned developments within George, as reflected in the Kraaibosch Roads Master Plan and Cost Apportionment Model (SMEC, December 2025), together with the proposed residential development on Erf 28005 (the former proposed Makro site), south of Park Road.
18 Pedestrians and Cyclists	There are sidewalks along all of Platinum Drive and Park Road in the vicinity of the site. It is proposed that, with the extension of Park Road to the bridge, sidewalks be provided along the extension of Park Road.
19 Public Transport	Based on the George Municipal Spatial Development Framework Parking Areas map (George CITP, 2024), the site is not located within a PT1 area. The Go George bus service has a major terminal along the Mall Access Road as well as a PTI (public transport interchange) for minibus taxis. The site vicinity is serviced by six Go George routes that travel either along Park Road, Knysna Road or the N2 to and from the terminal point along the Mall Access Road. The Go George routes and the minibus taxi routes are provided in **Figure 5**. It is recommended that the GoGeorge Bus routes be extended to form part of the Garden Route City development in the future.

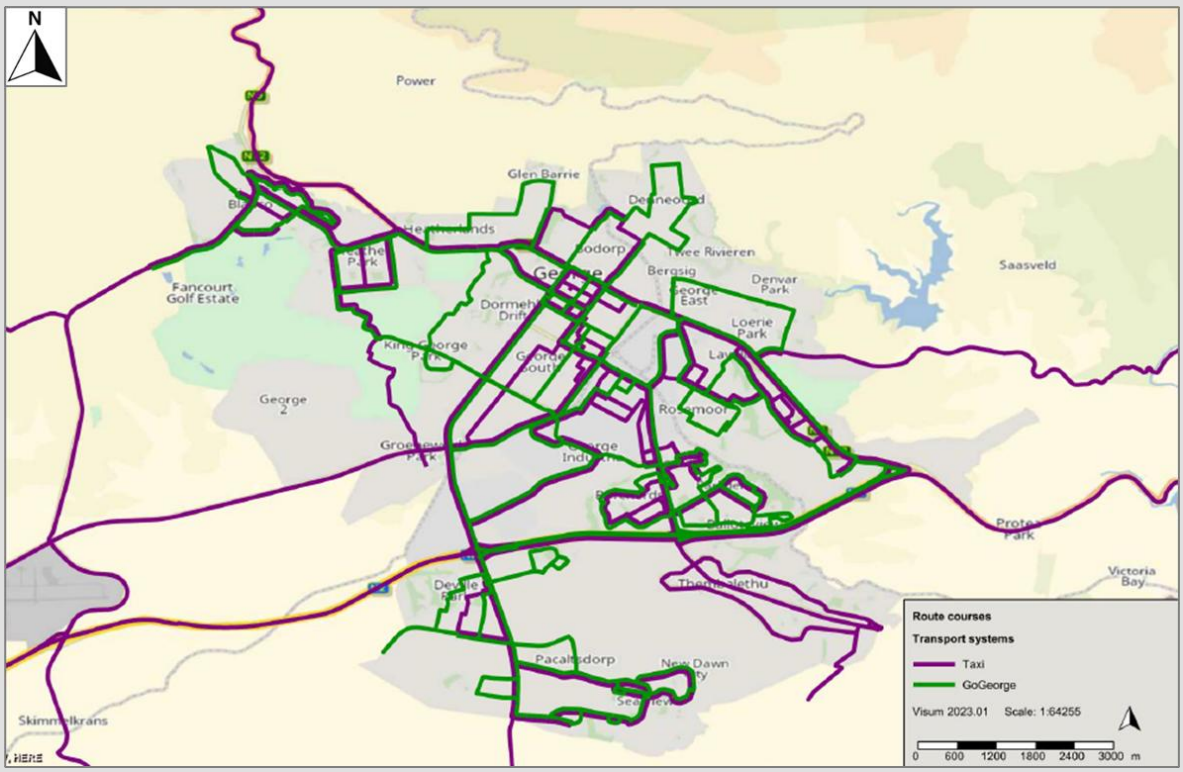


Figure 5: Public Transport Routes for the GO GEORGE and Minibus Taxi Transport Systems (Zoomed In). (Source: George CITP, 2024)

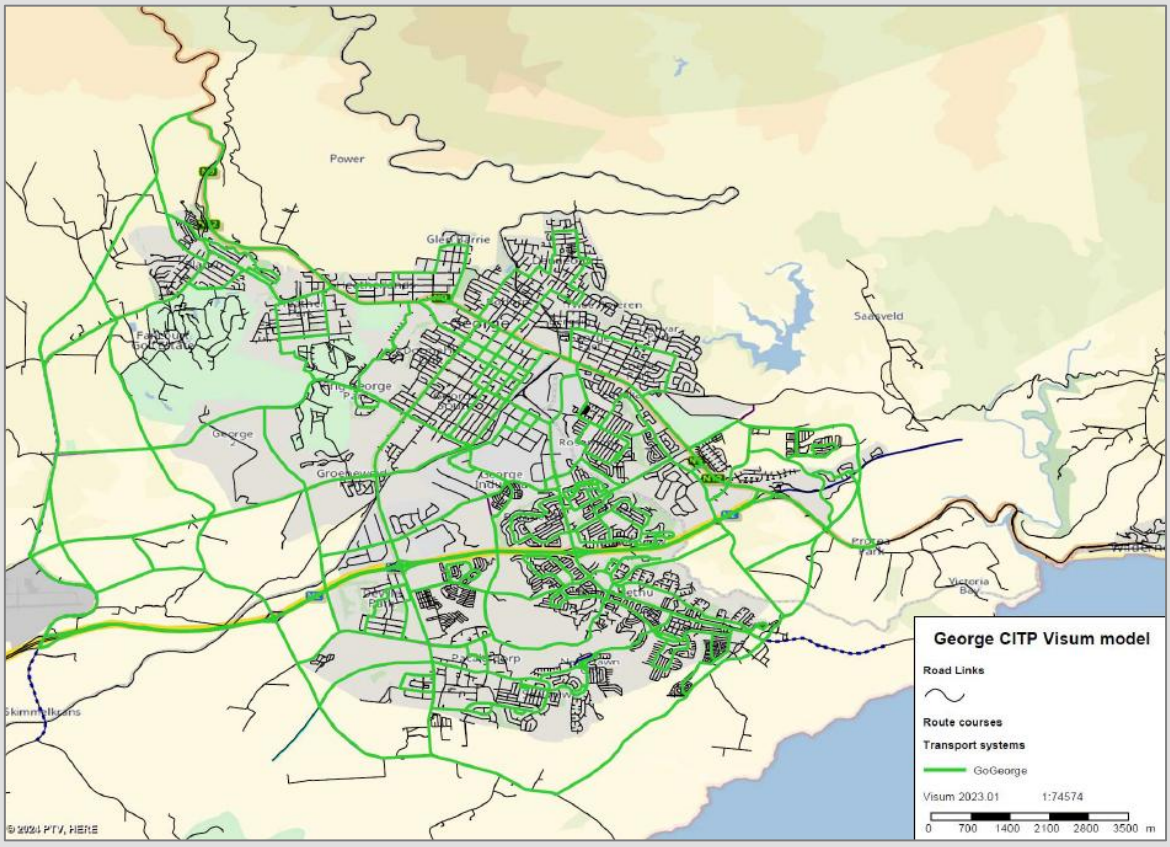


Figure 6: Current GO GEORGE lines with proposed subsidised lines combined to reflect network coverage

20 Parking	The parking must be provided in accordance with the George Integrated Zoning Scheme By-Law (2023) and will be discussed in further detail during the site development plan phase.
21 Conclusion & Recommen-dations	The transport impact assessment reviewed the expected transport-related impacts of the proposed **Phase 1** of the Garden Route City development. Based on the analysis outlined in this study, the following findings, conclusions and recommendations are relevant: • **Existing Conditions:** All study intersections are currently operating at acceptable Levels of Service under existing conditions • **Background Conditions:** Most of the study intersections are currently operating at acceptable Levels of Service under future background conditions; certain intersections are expected to experience increased delays; however, these impacts are primarily attributable to approved and latent developments in the broader area and not the proposed development. Upgrades were also provided in accordance with the Kraaibosch Roads Master Plan and Cost Apportionment (SMEC, 2025). • **Expected Development Trips:** The proposed development is expected to generate approximately 891 vehicle trips (369 in/ 522 out) during the a.m. peak hour and 1 301 vehicle trips (727 in/ 574 out) during the p.m. peak hour. • **Total Traffic Conditions:** Under total traffic conditions, including the proposed development, the road network is expected to continue operating at acceptable levels, subject to the implementation of the proposed mitigation measures (as discussed in the existing and background conditions) as well as the following upgrades: o Upgrading the Platinum Drive/Park Road intersection (Int. 9) with a fourth approach extending Park Road towards the bridge over the N2. The roundabout will still operate acceptably as a single-lane roundabout. o Further upgrades will include the bridge over the N2 with one lane per direction. o It is also required to dual Park Road between Blue Mountain Boulevard and Saint George's Road as part of Phase 1 of this development. • **Future Phases of Garden Route City:** The high-level capacity analysis indicates that, following Phase 1, approximately 1 120 a.m. and 700 p.m. peak-hour vehicle trips, across both directions combined, remain available over the N2 bridge. An indicative 1 220 additional residential units could be accommodated in subsequent phases,

	subject to the final land-use mix, mixed-use traffic demand and directional capacity limits. This is conditional on the dualling of the Park Road/Platinum Drive roundabout, with the development extent **to be confirmed through detailed TIAs for subsequent phases**. • **Site Access and Circulation:** The main access to Phase 1 of the development will be via the bridge over the N2 and will connect to the extension of Park Road and the Platinum Drive/Park Road intersection. The bridge will be widened to accommodate two lanes per direction. The gravel road that connects the quarry/mine operations to the service road next to the N2 will be used as a construction/emergency access. • **Public Transport and NMT:** There are sidewalks along all Platinum Drive and Park Road in the vicinity of the site. It is proposed that, with the extension of Park Road to the bridge, sidewalks be provided along the extension of Park Road. It is also recommended that the GoGeorge Bus routes be extended to form part of the Garden Route City development in the future • **Parking:** It is recommended that the parking be provided in accordance with the George Integrated Zoning Scheme By-Law (2023). The parking will be confirmed during the site development plan development. It is concluded that the additional traffic from the proposed development can be accommodated on the transport network with minor mitigation requirements. It is recommended that the proposed development be approved from a transportation point of view, provided that the required mitigation, as defined in this study, is in place.

Draft

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8. Transport Impact Assessment, Eden Meander, Innovative Transport Solutions (Pty) Ltd, July 2023
9. Transportation Impact Study, Garden Route East, Innovative Transport Solutions (Pty) Ltd, January 2010
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Draft

ANNEXURE A

Figures

Draft

GARDEN ROUTE CITY

PTN'S. 7,8 12 & REM. 23 KRAAIBOSCH No.195

USE	AREAS	No. OF ERVEN / UNITS	NOTATION
RESIDENTIAL 1 (400 - 600m²)	20,10	335	
RESIDENTIAL 1 (500 - 700m²)	26,66	380	
RESIDENTIAL 1 (700 - 900m²)	14,50	161	
MEDIUM DENSITY RESIDENTIAL 40u/ha	7,48	299 UNITS	
FUTURE DEVELOPMENT	72,62	5807 UNITS	
EDUCATION			
MIXED LAND USE			
OPEN SPACE			
PRIVATE STREETS			
PUBLIC ROADS			
ACCESS CONTROL POINT			
MIXED USE NODE			
MUNICIPAL			
SLOPES STEEPER THAN 1 : 5			

0 50 100 250 200 250 300 350 400 450 500m

PHASE 1

USE	QUANTITY	NOTATION
RESIDENTIAL 1 (700 - 900m²)	152	
RESIDENTIAL 1 (500 - 700m²)	129	
MEDIUM DENSITY RESIDENTIAL 40u/ha	299	
PRIVATE OPEN SPACE	2	
PRIVATE STREET	2	
ACCESS CONTROL POINT	1	
PUBLIC ROADS		
TOTAL	585	NOTATION

PHASE 2

USE	QUANTITY	
RESIDENTIAL 1 (500 - 700m²)	256	
RESIDENTIAL 1 (400 - 600m²)	335	
EDUCATION	1	
MUNICIPAL	1	
PRIVATE OPEN SPACE	5	
ACCESS CONTROL POINT	1	
PUBLIC ROADS		
TOTAL	599	

PHASE 3

USE	QUANTITY	NOTATION
MIXED LAND	1	
PRIVATE OPEN SPACE	2	
PUBLIC ROADS		
TOTAL	3	

PHASE 4

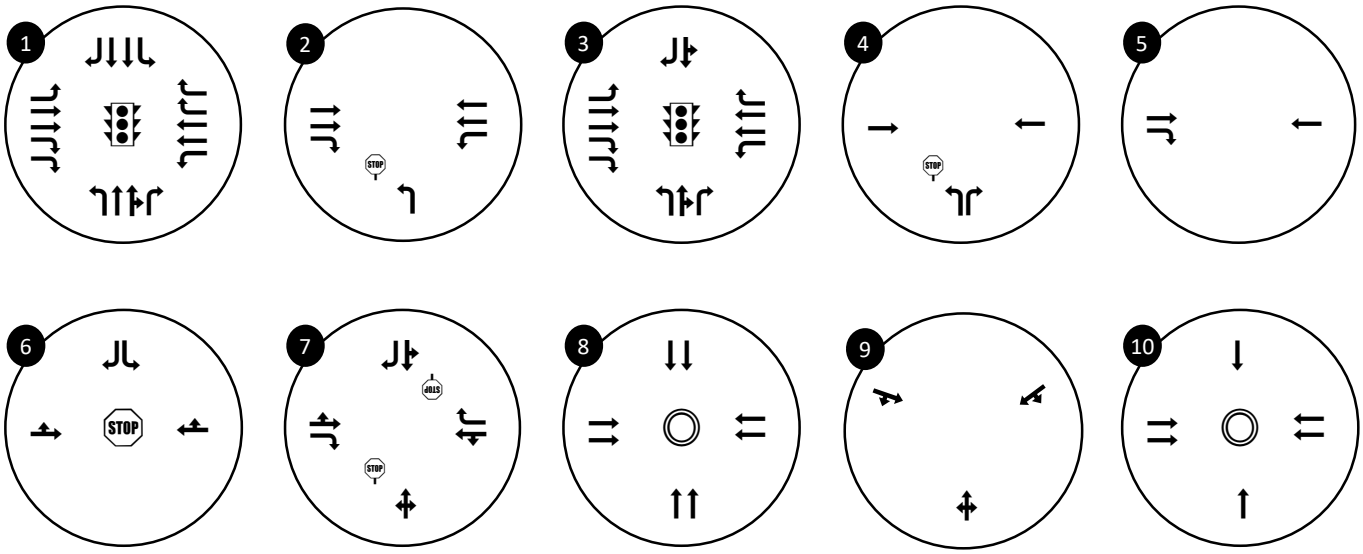
USE	QUANTITY	NOTATION
FUTURE DEVELOPMENT	5807	
PUBLIC ROADS		
TOTAL	5807	

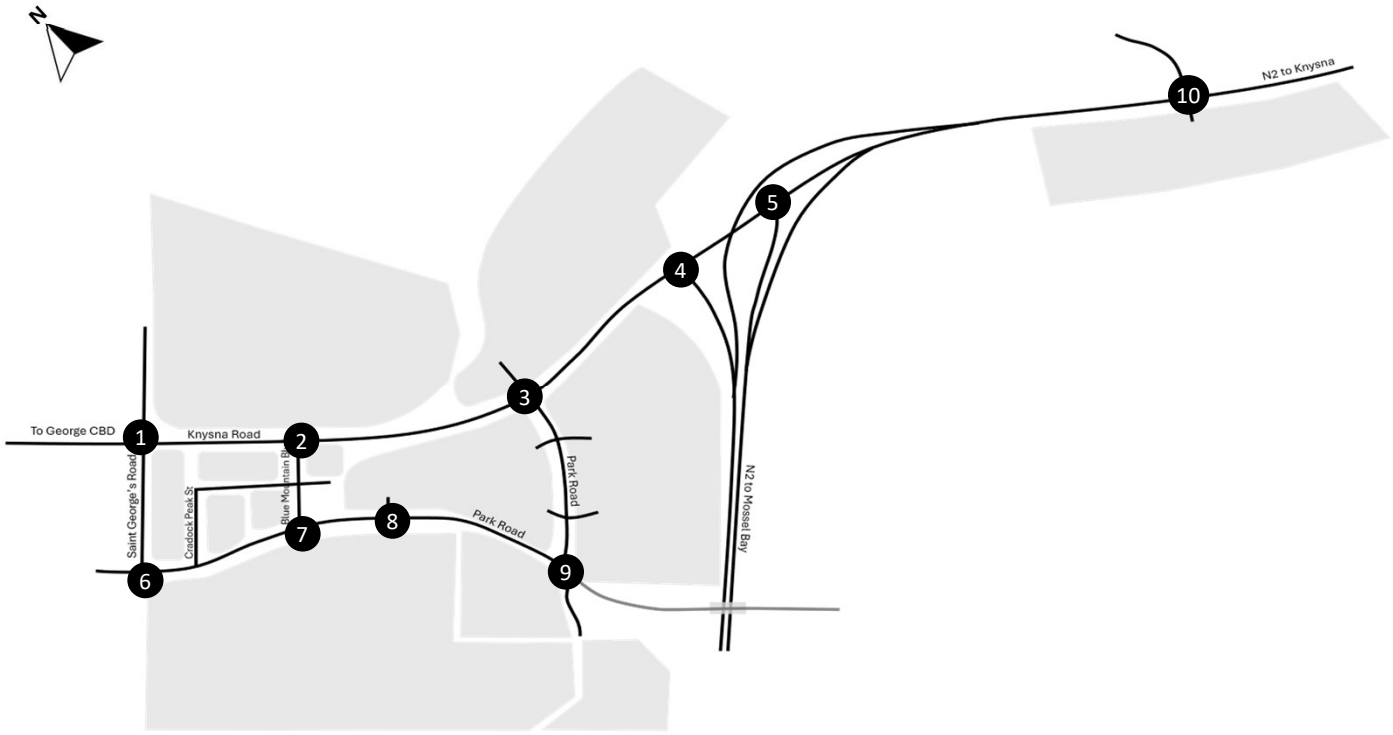
DATE	AMENDMENTS

Town Planning (PTY)Ltd
AETERNO

P.O. Box 1435
Faerie Glen 0043
Tel: (012) 348 5081

Date: 27 OCTOBER 2025
Scale: 1 : 5000 (A1)
Plan No:

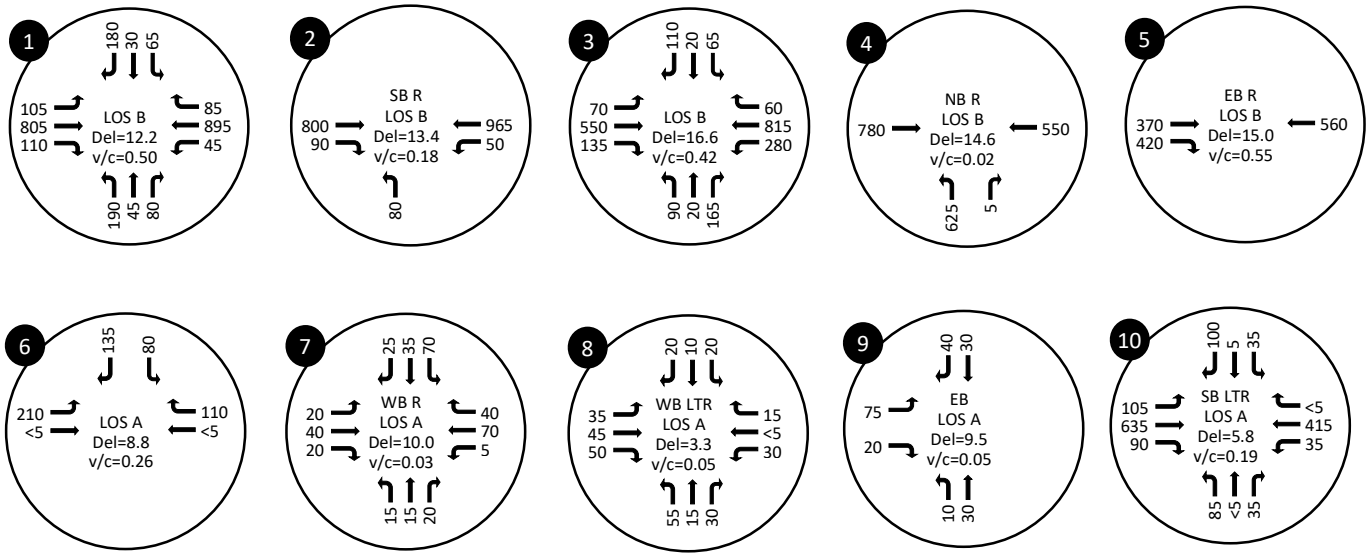




Turning lanes and turning movements
Stop Control
Traffic Signal Control
Roundabout (Yield Control)

Diagramatic / Not to Scale

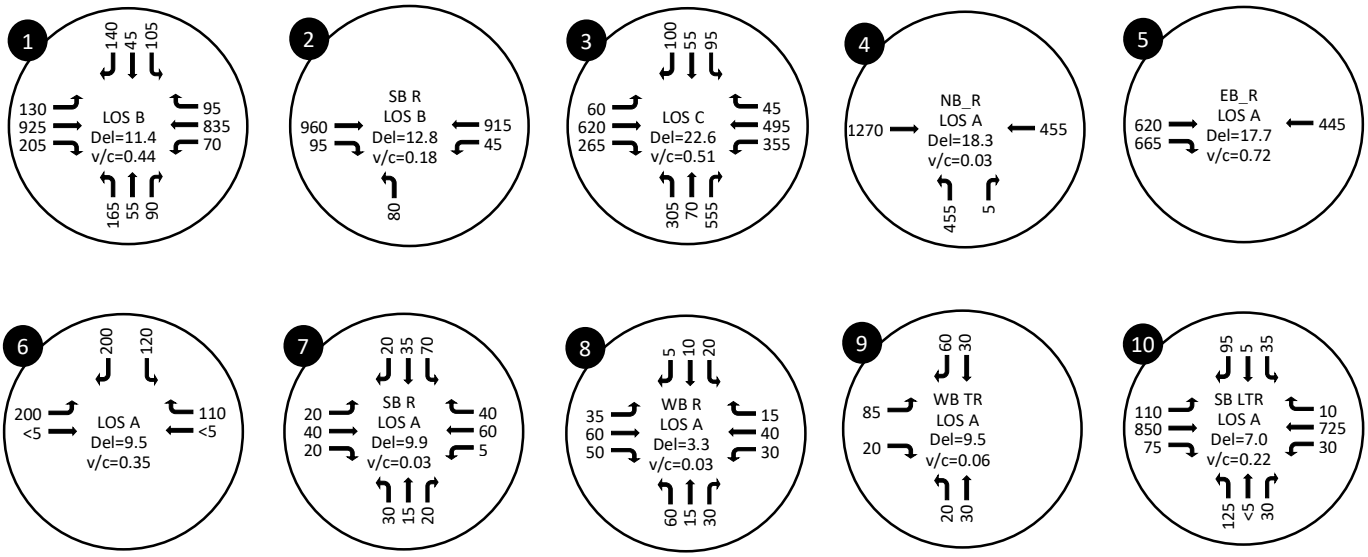
its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Existing Traffic Conditions** **Lane Configurations and Control**	**Figure:** **A2**

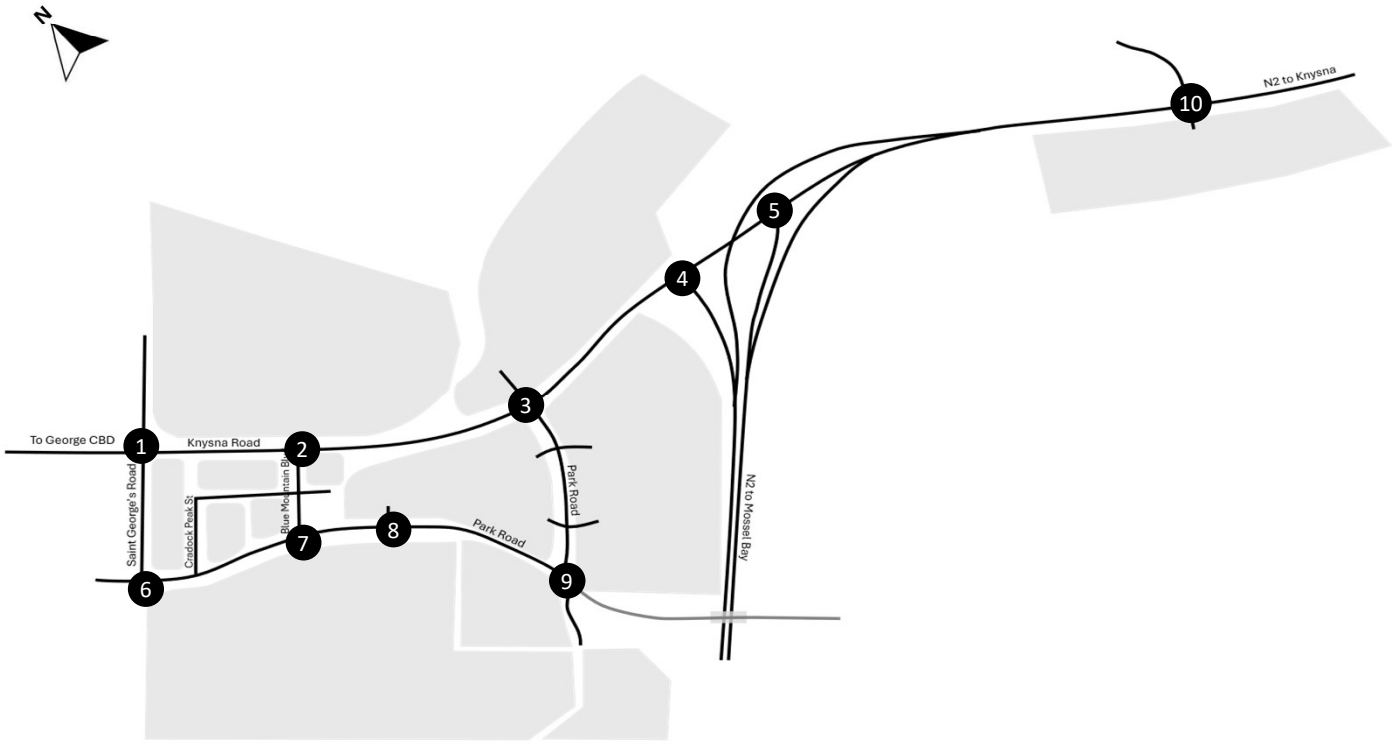


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Existing Traffic Conditions** **AM Peak Hour**	**Figure:** **A3**

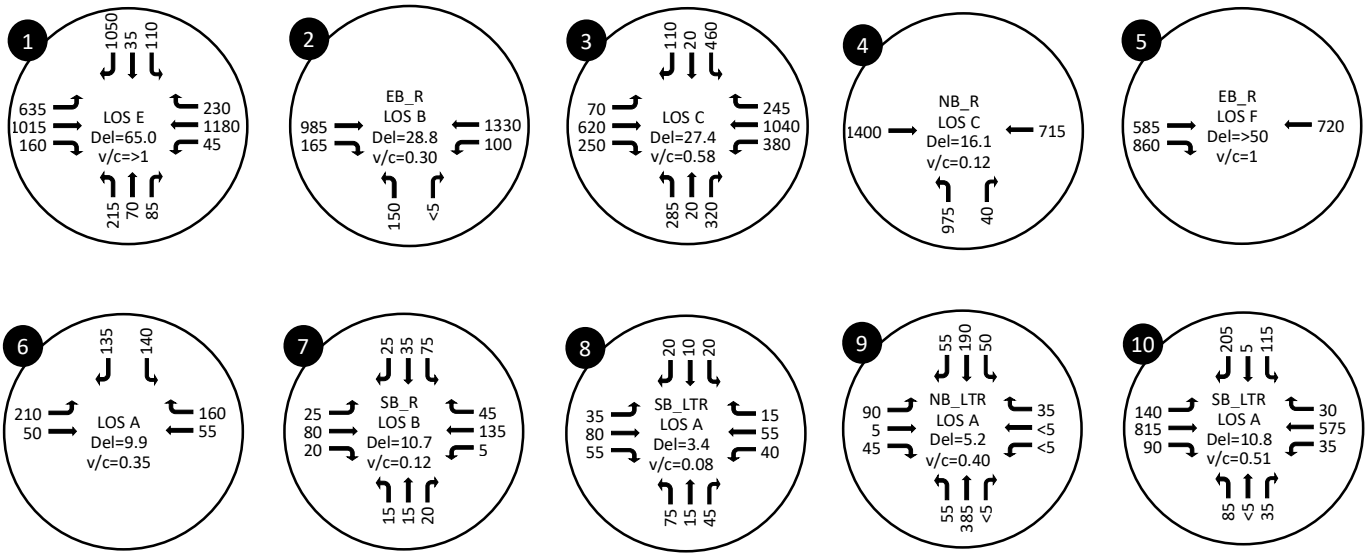


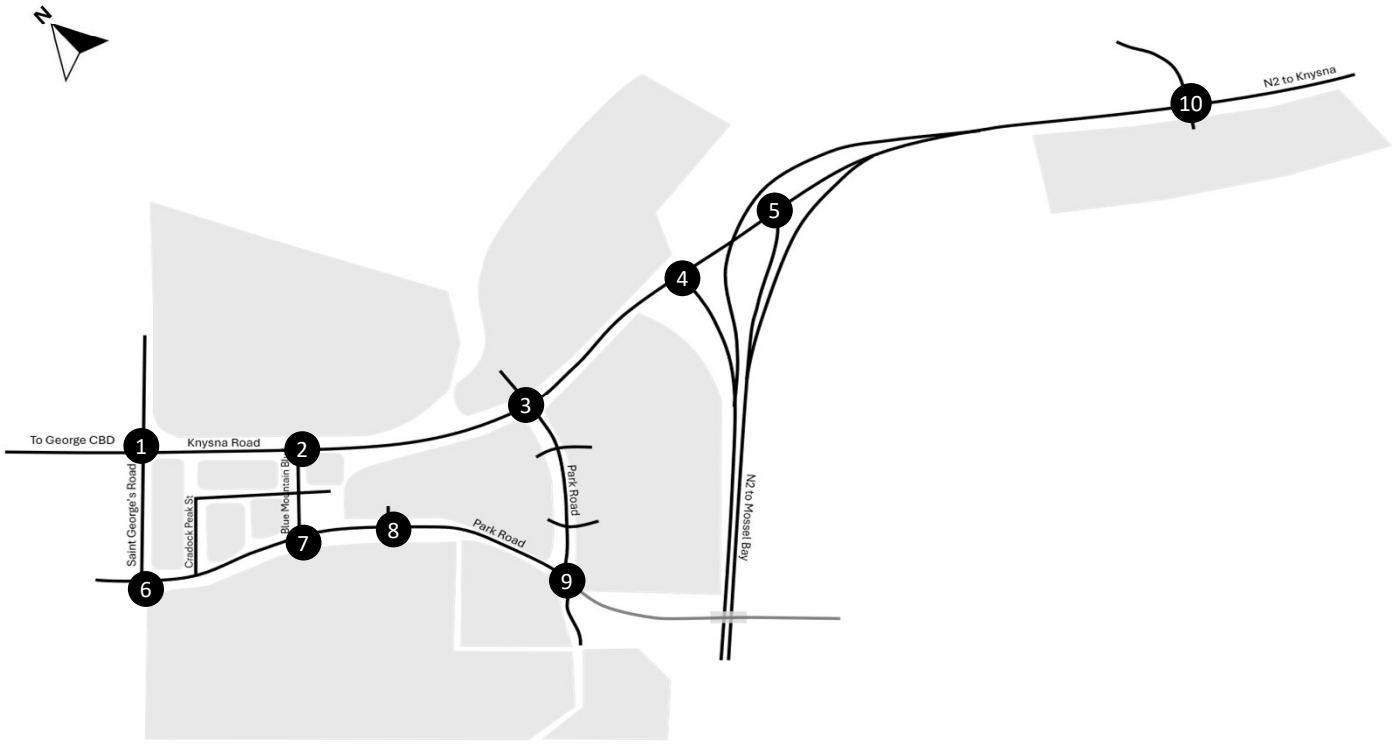


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Existing Traffic Conditions** **PM Peak Hour**	**Figure:** **A4**

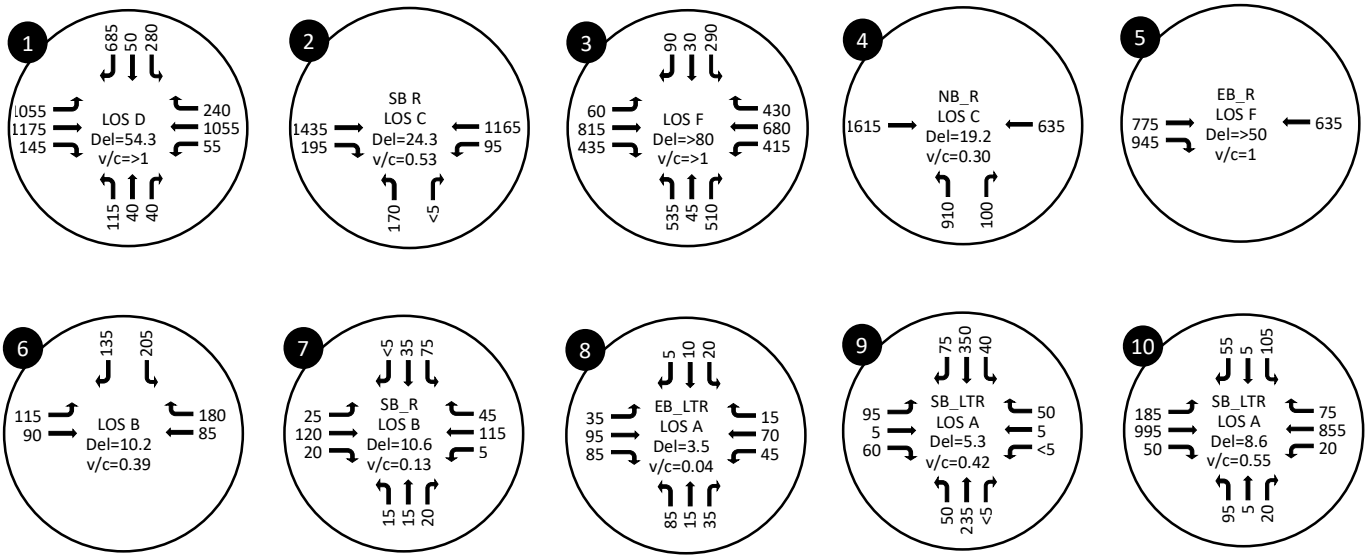


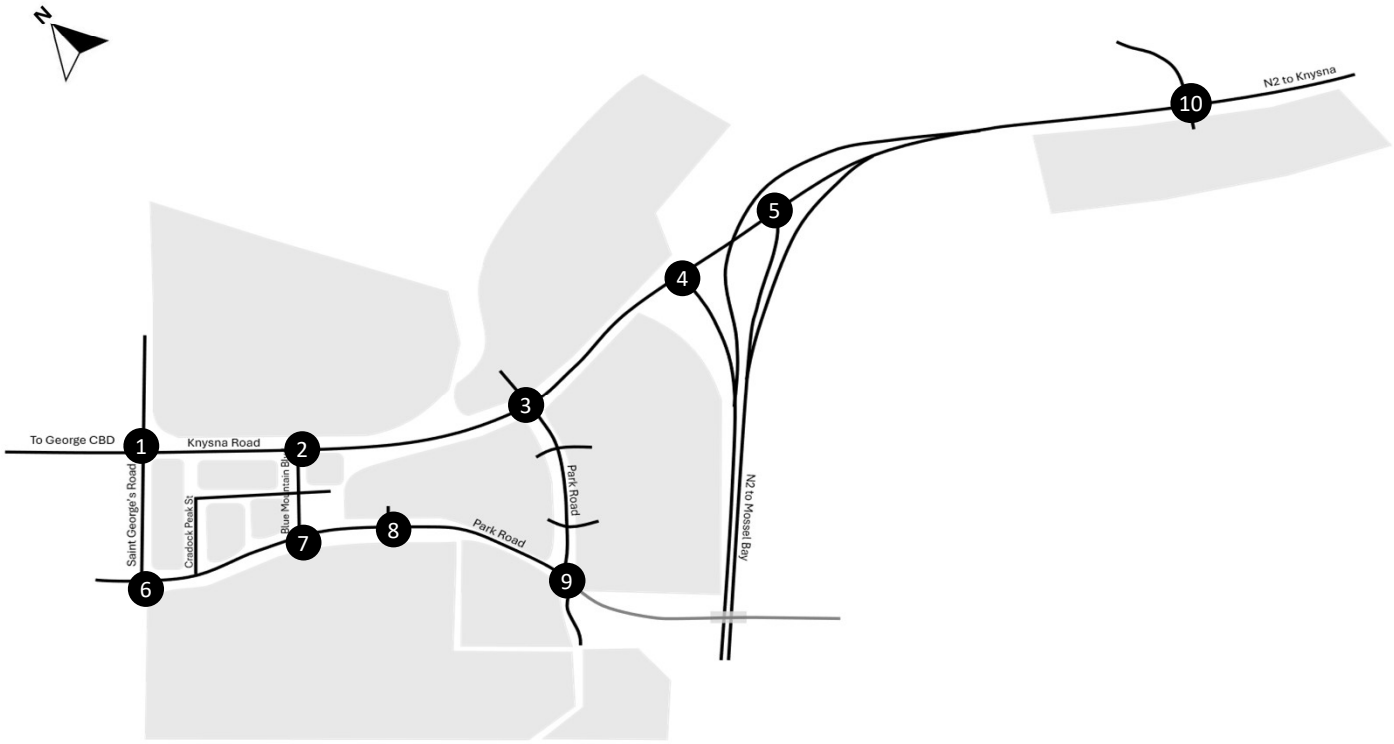


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Background Traffic Conditions** **AM Peak Hour**	**Figure:** **A5**

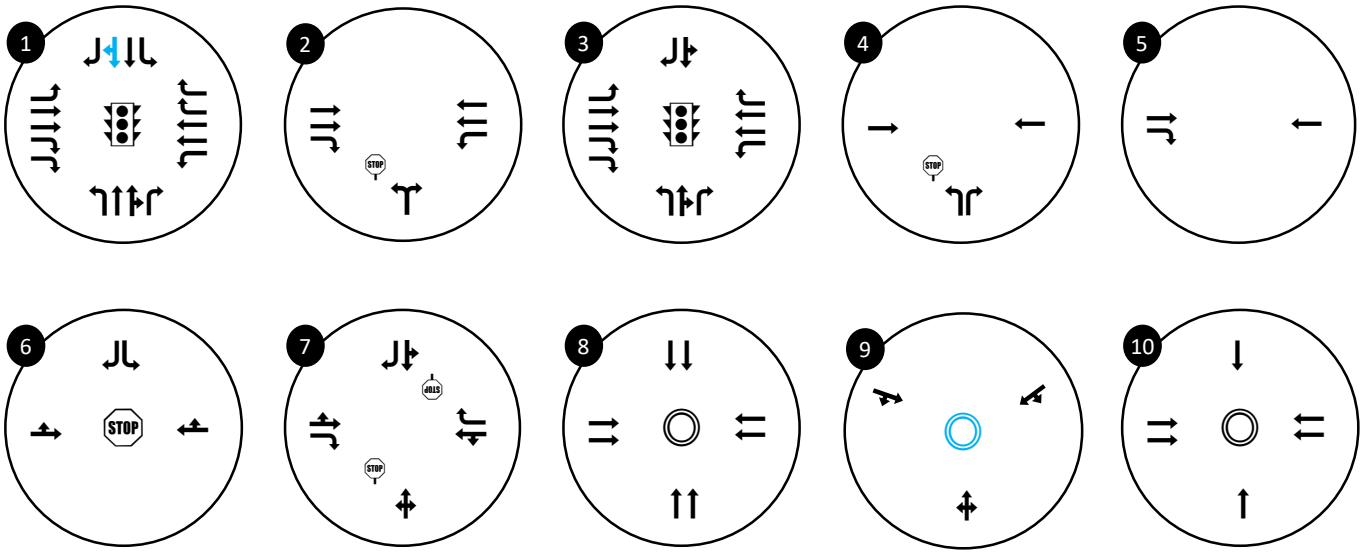


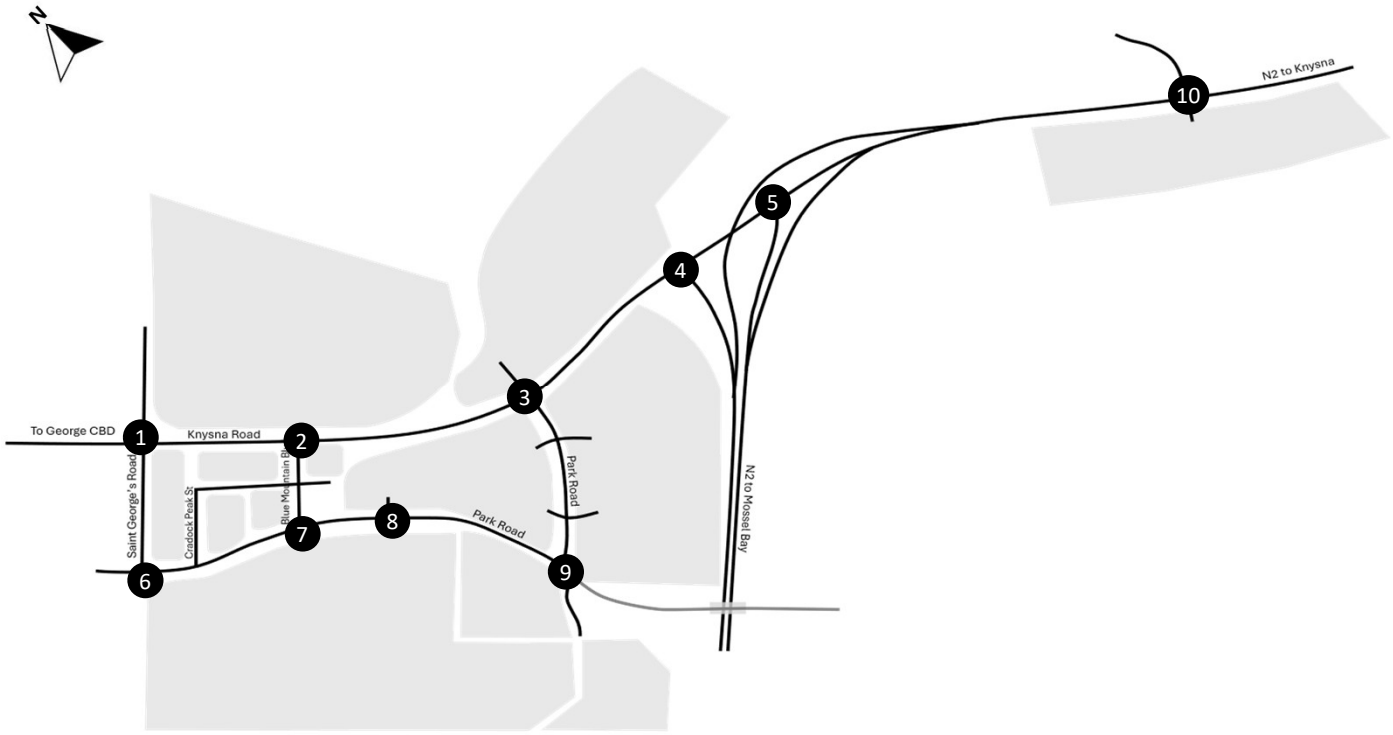


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Background Traffic Conditions** **AM Peak Hour**	**Figure:** **A6**

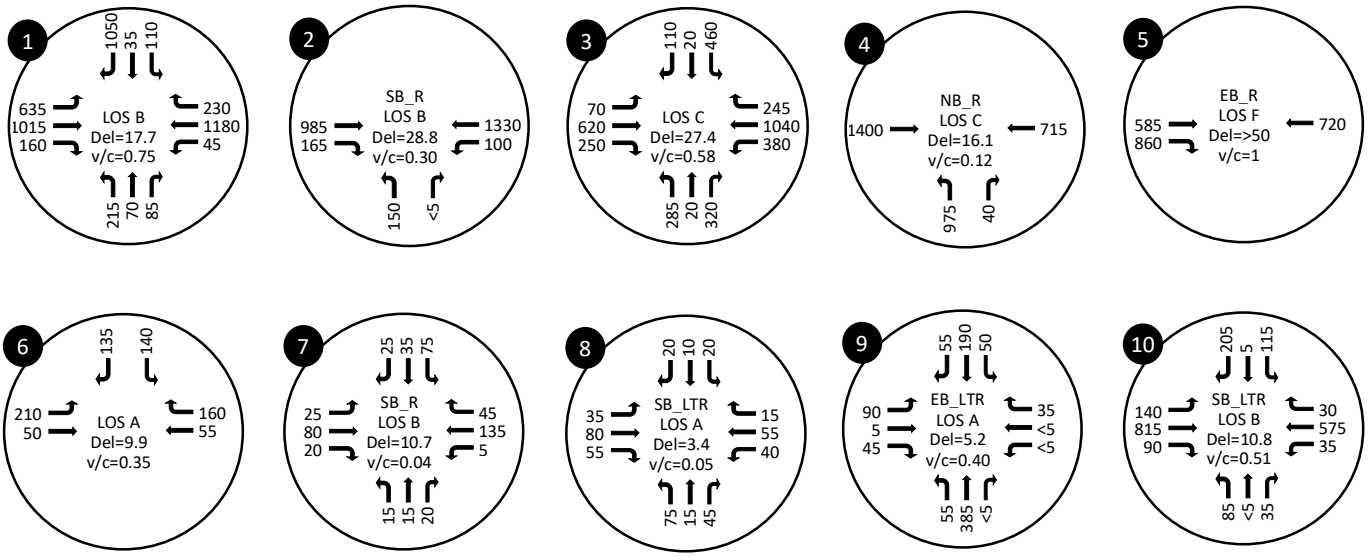


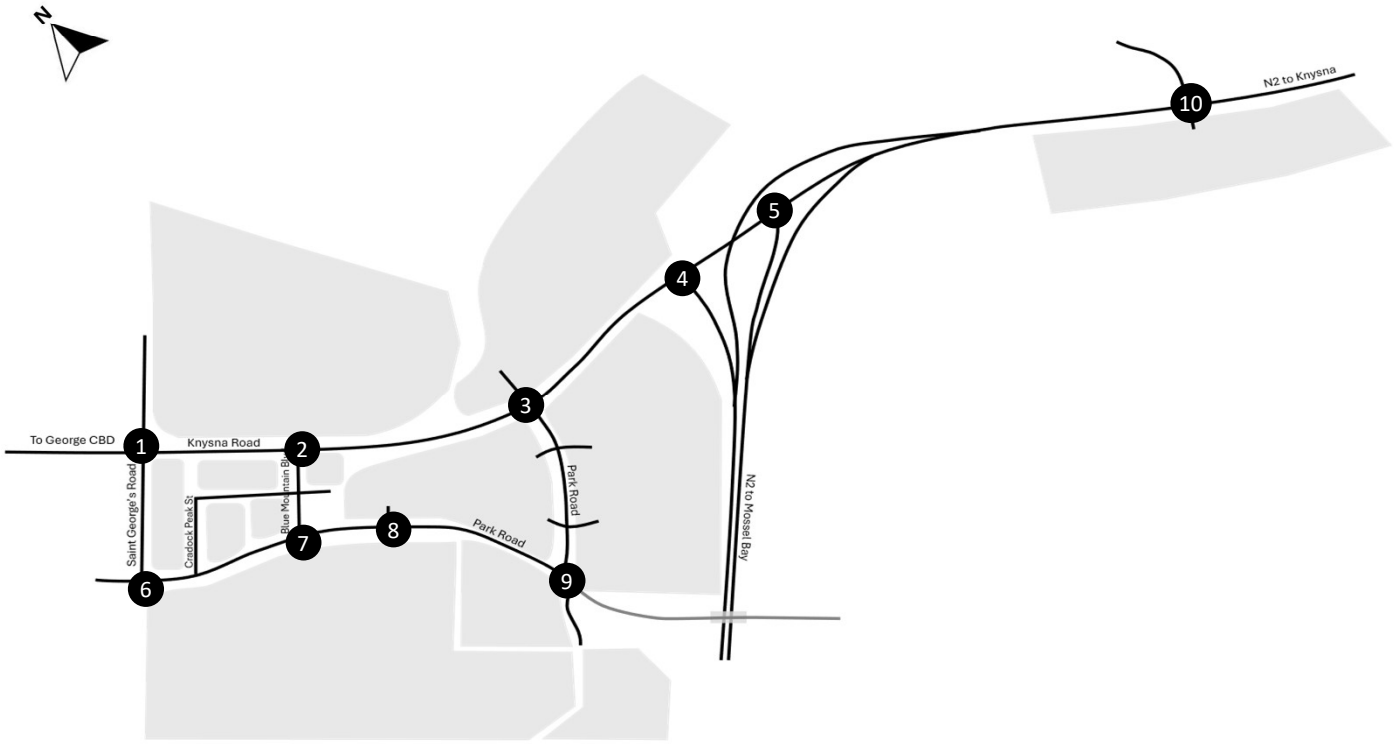


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Background Traffic Conditions** **Proposed Upgrades**	**Figure:** **A7**

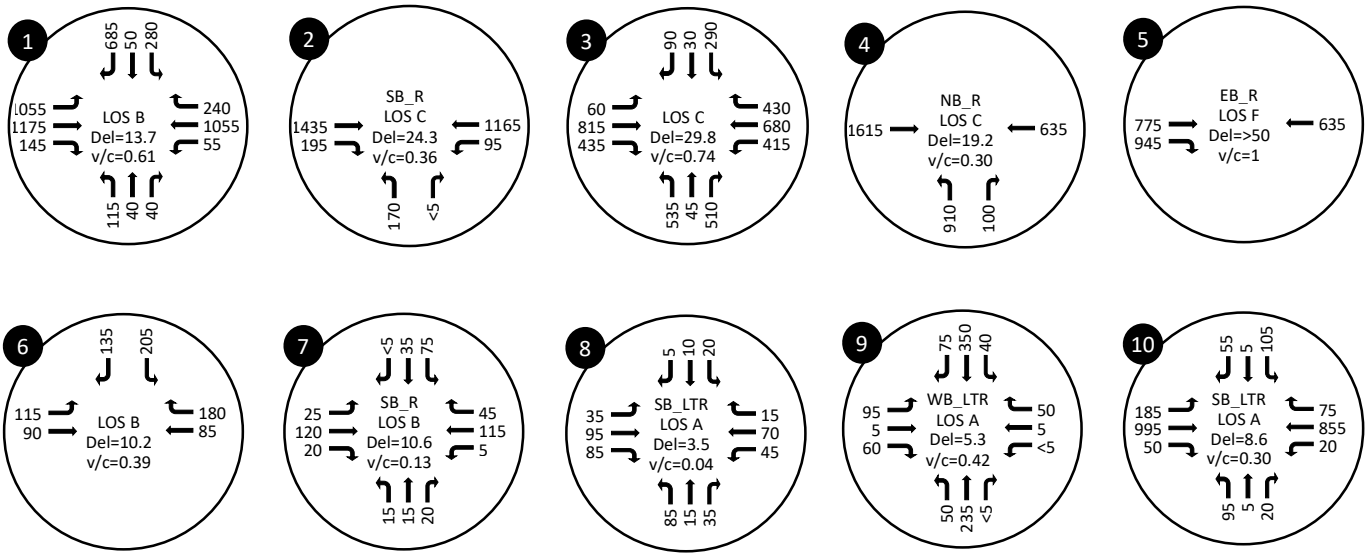


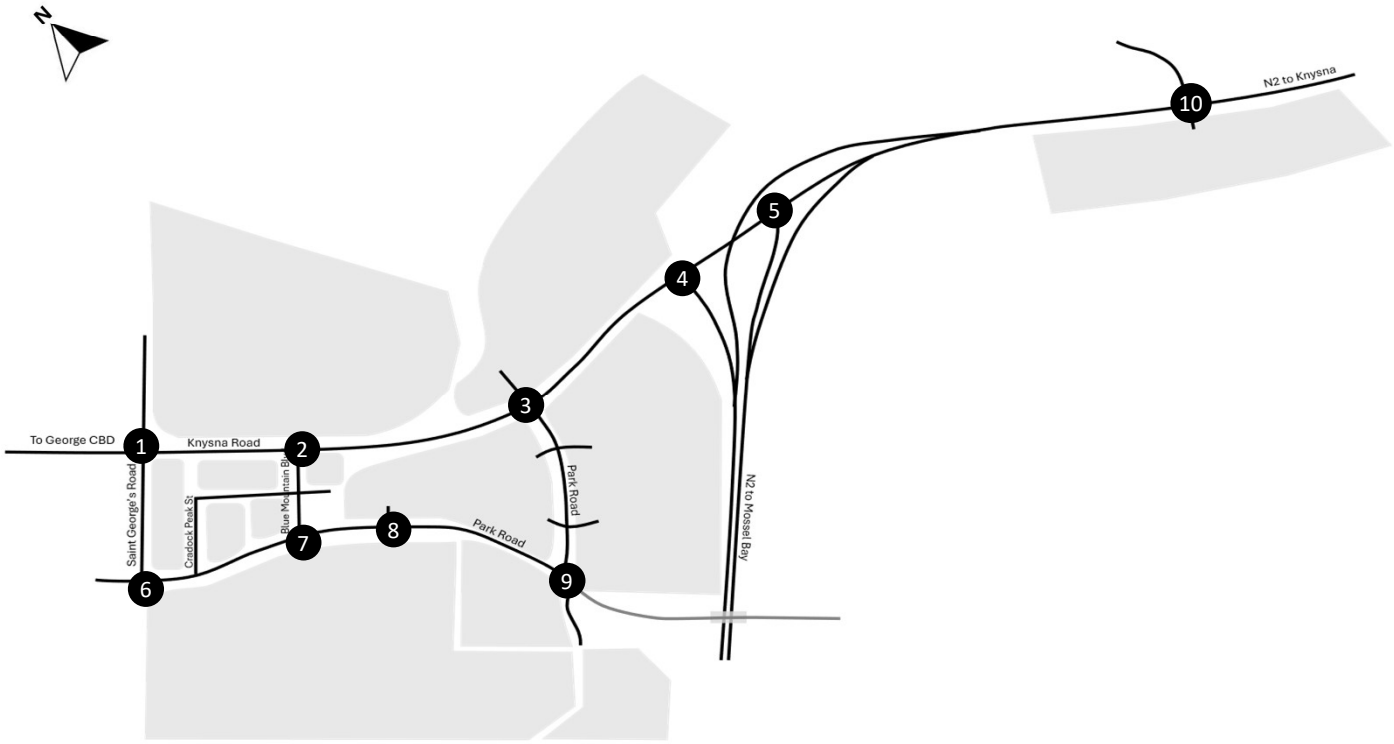


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Background Traffic Conditions** **AM Peak Hour with upgades**	**Figure:** **A8**

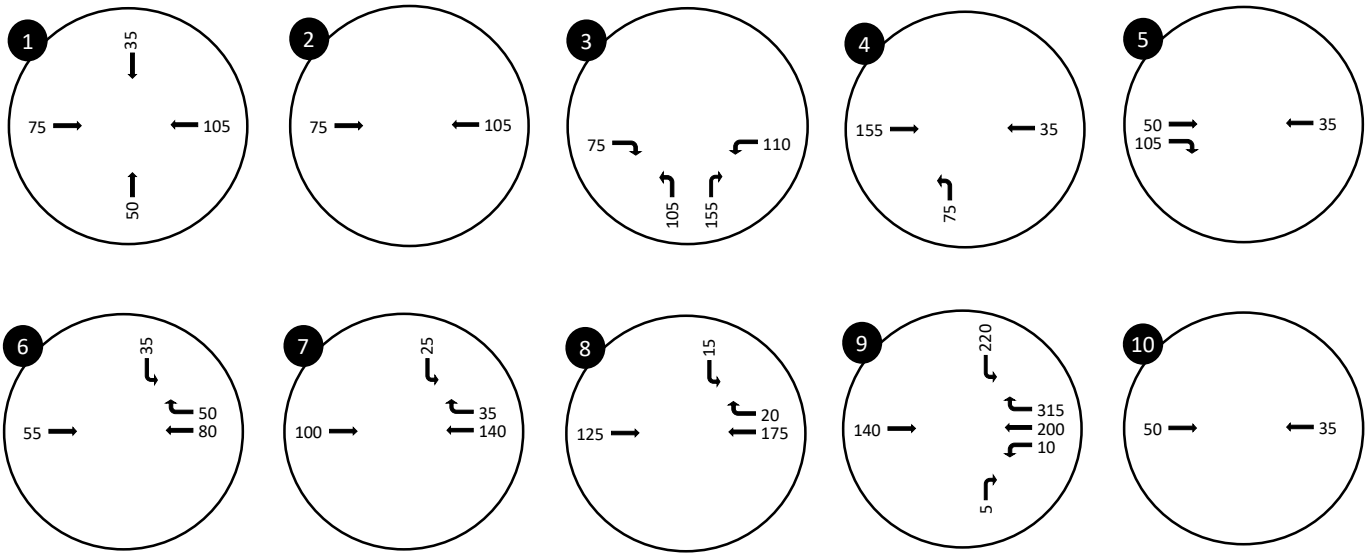


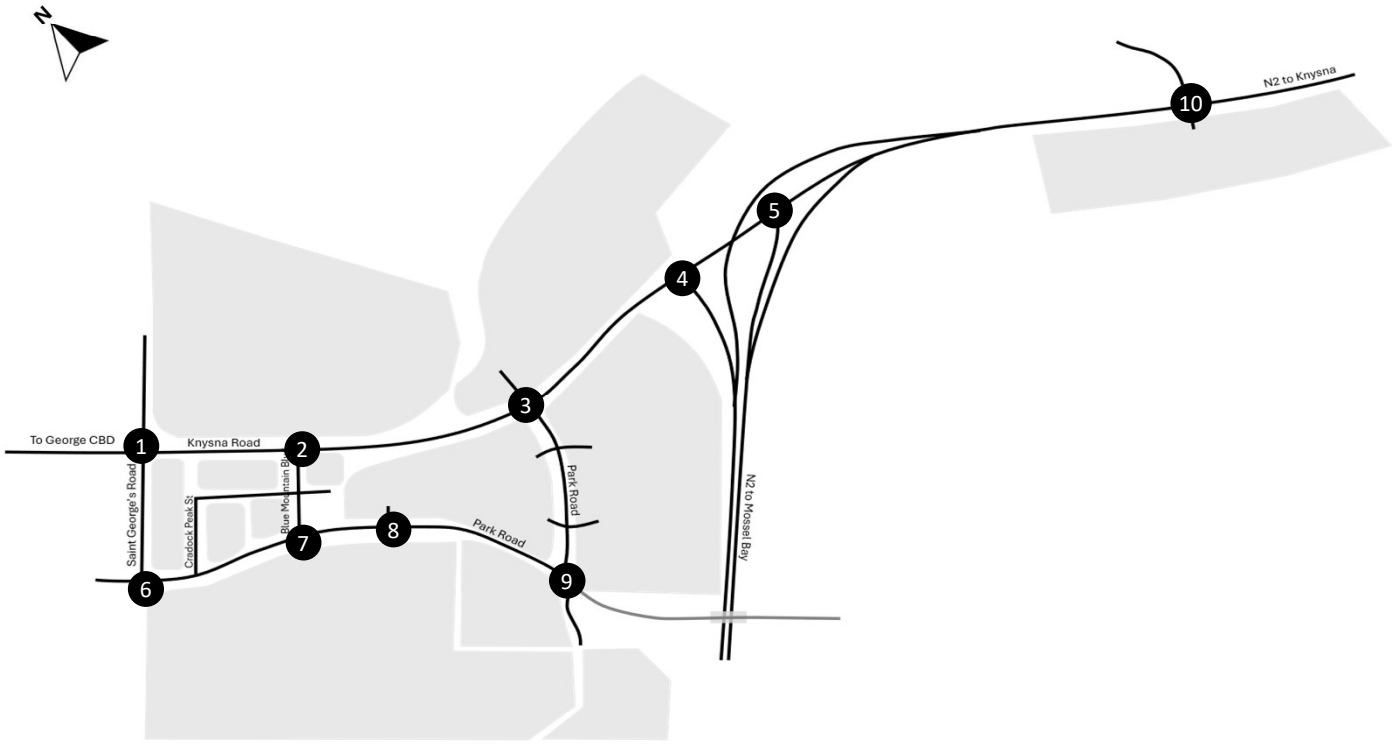


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Background Traffic Conditions** **PM Peak Hour with upgades**	**Figure:** **A9**

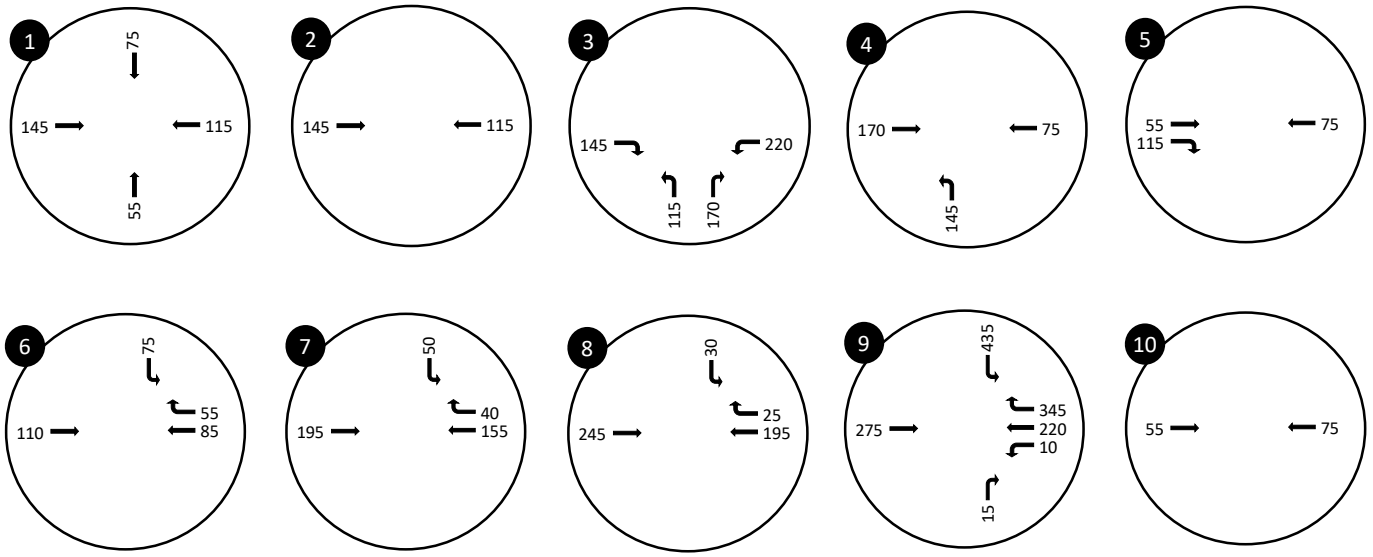


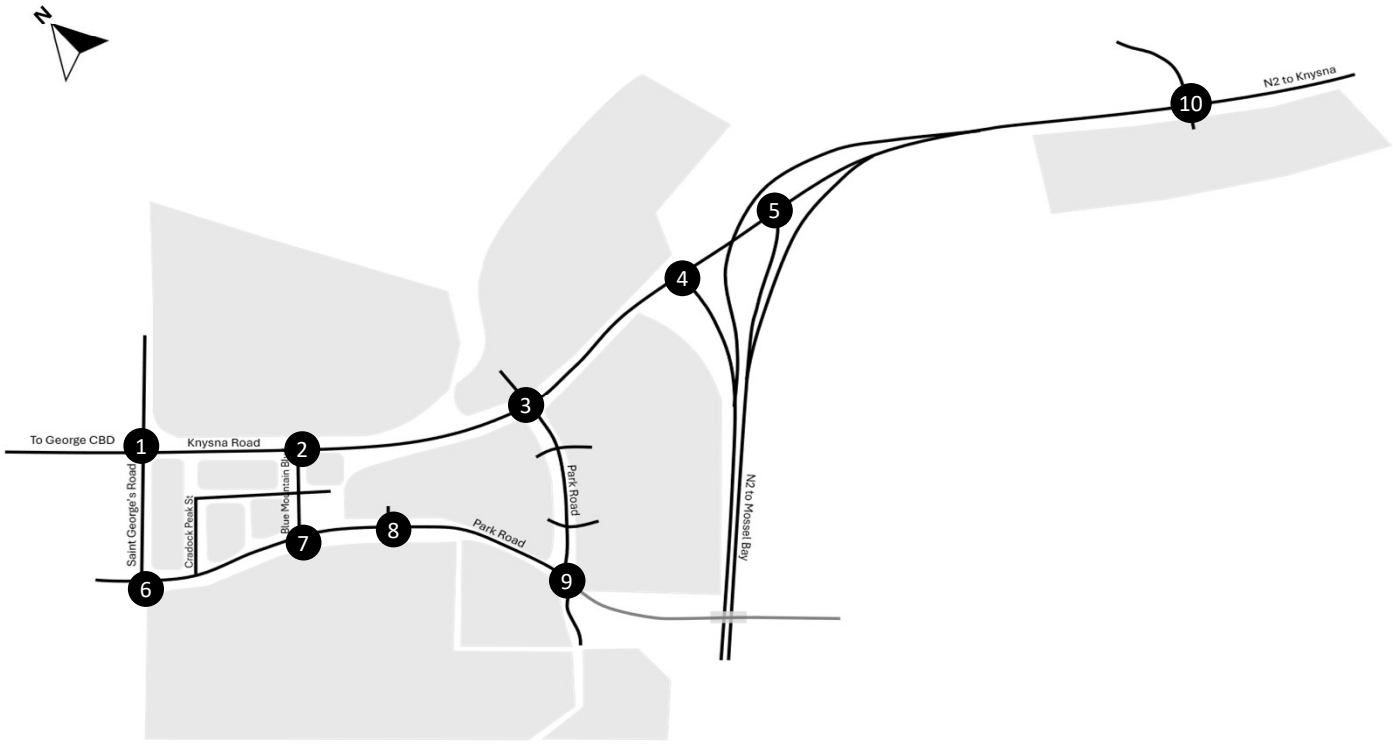


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Expected Development Trips** **AM Peak Hour**	**Figure:** **A10**

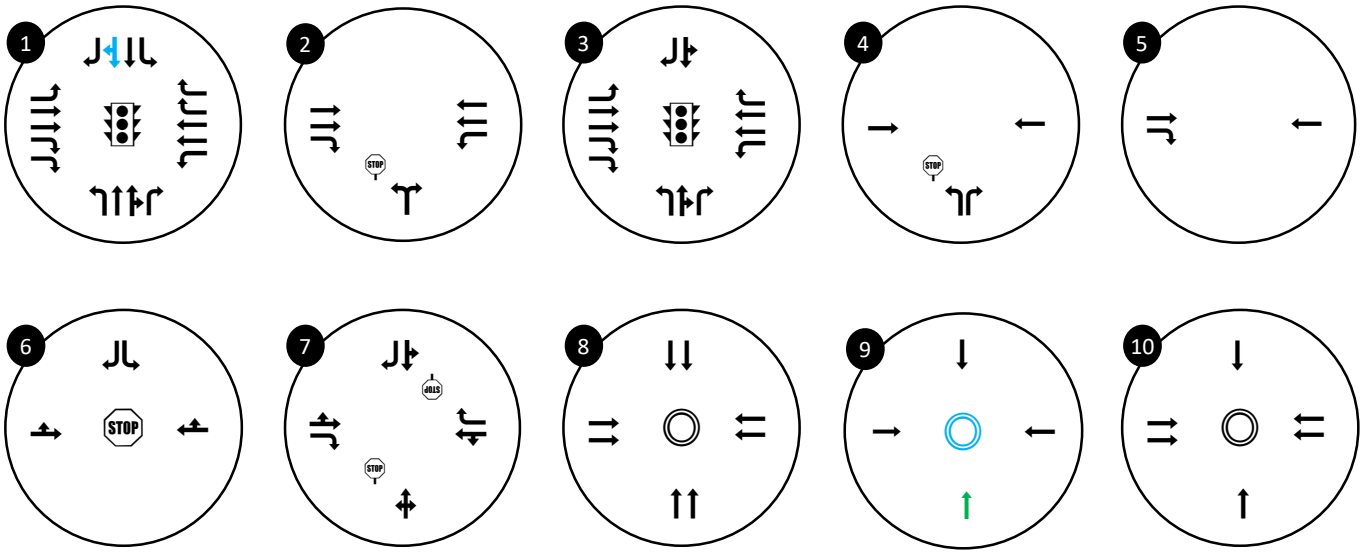


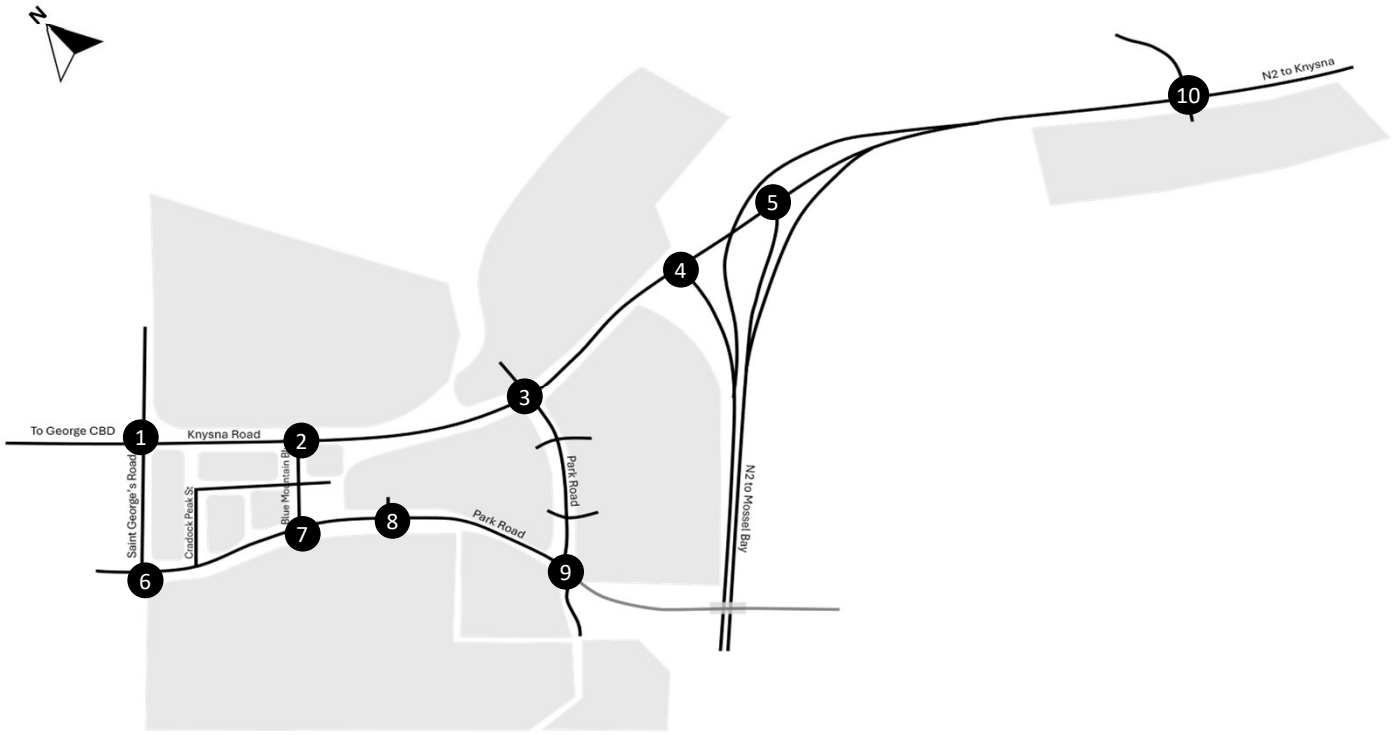


Turning lanes and turning movements
Stop Control
Traffic Signal Control
Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Expected Development Trips** **PM Peak Hour**	**Figure:** **A11**

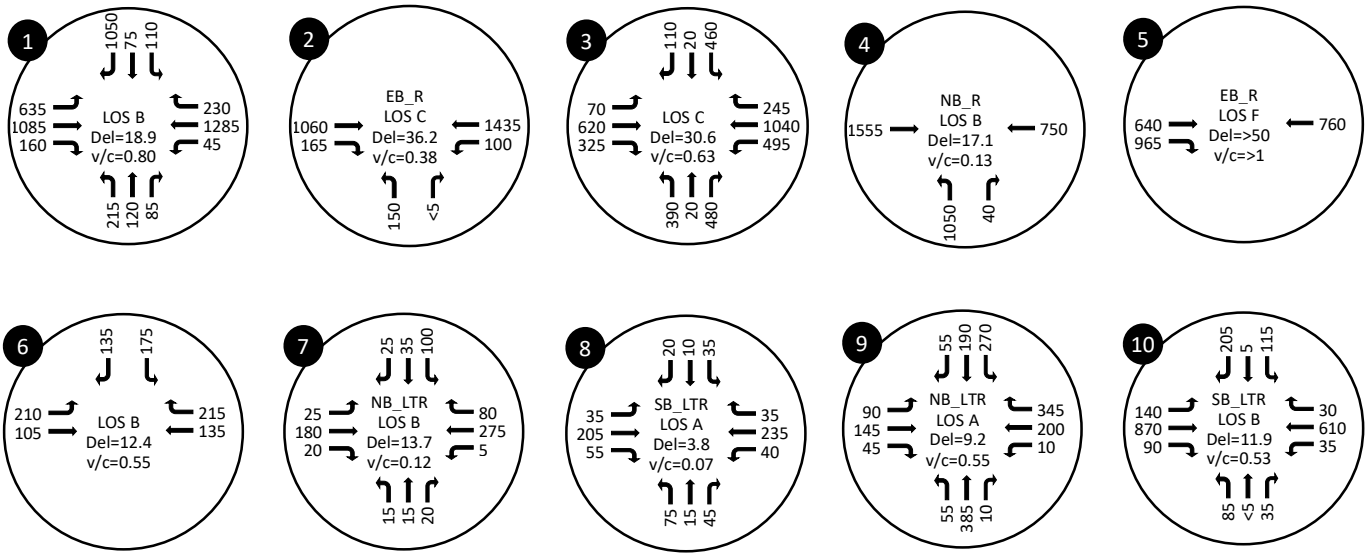


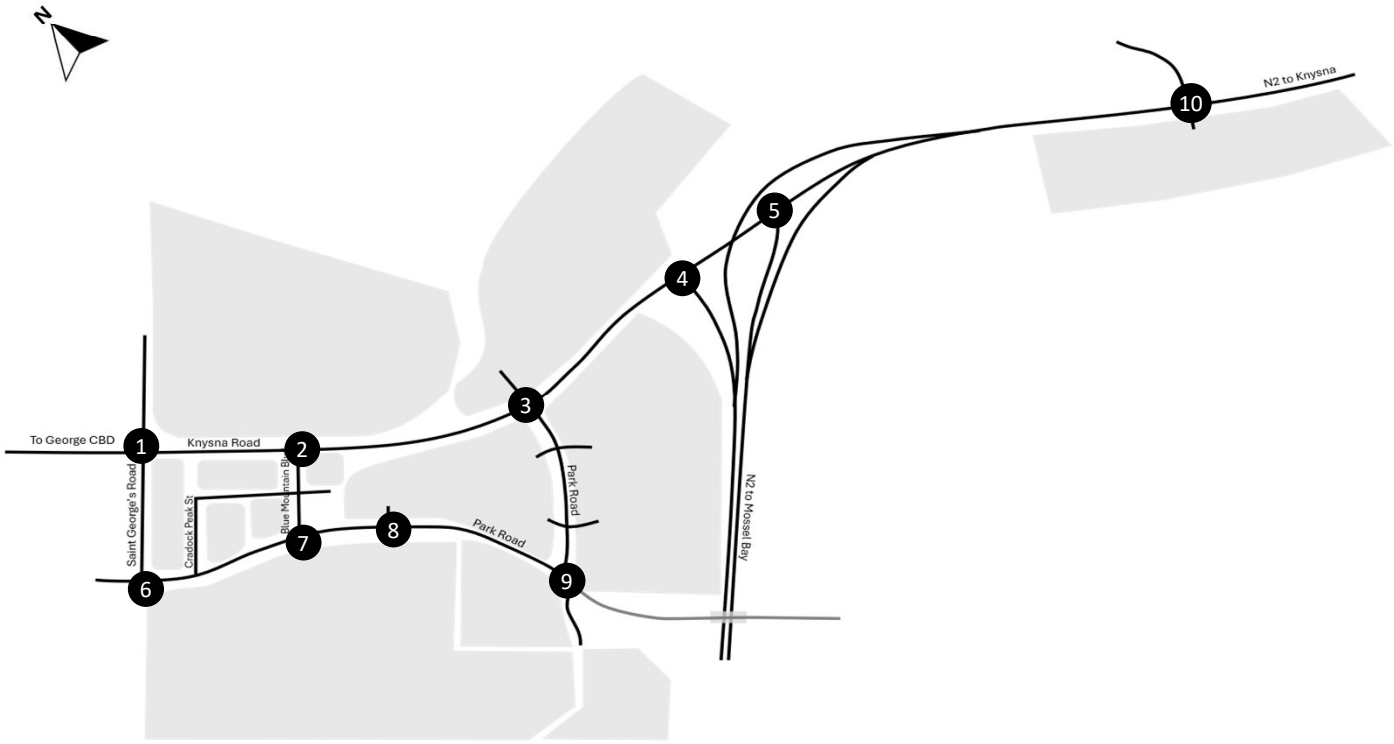


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)
- Background Upgrades
- Total Upgrades

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Total Traffic Conditions** **Proposed Upgrades**	**Figure:** **A12**

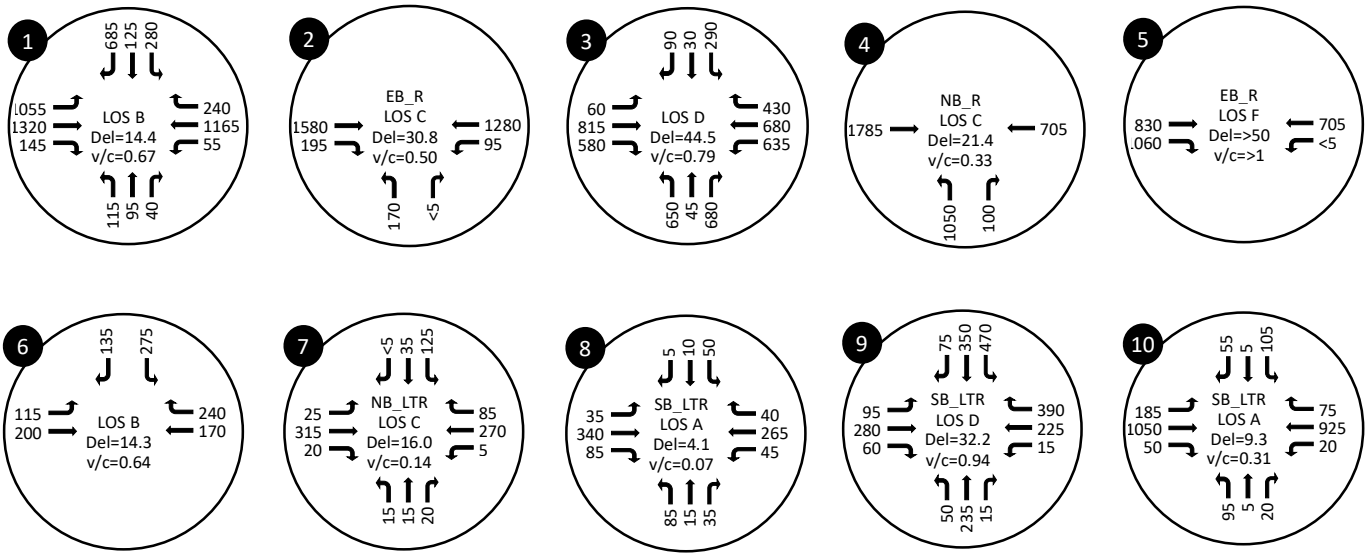


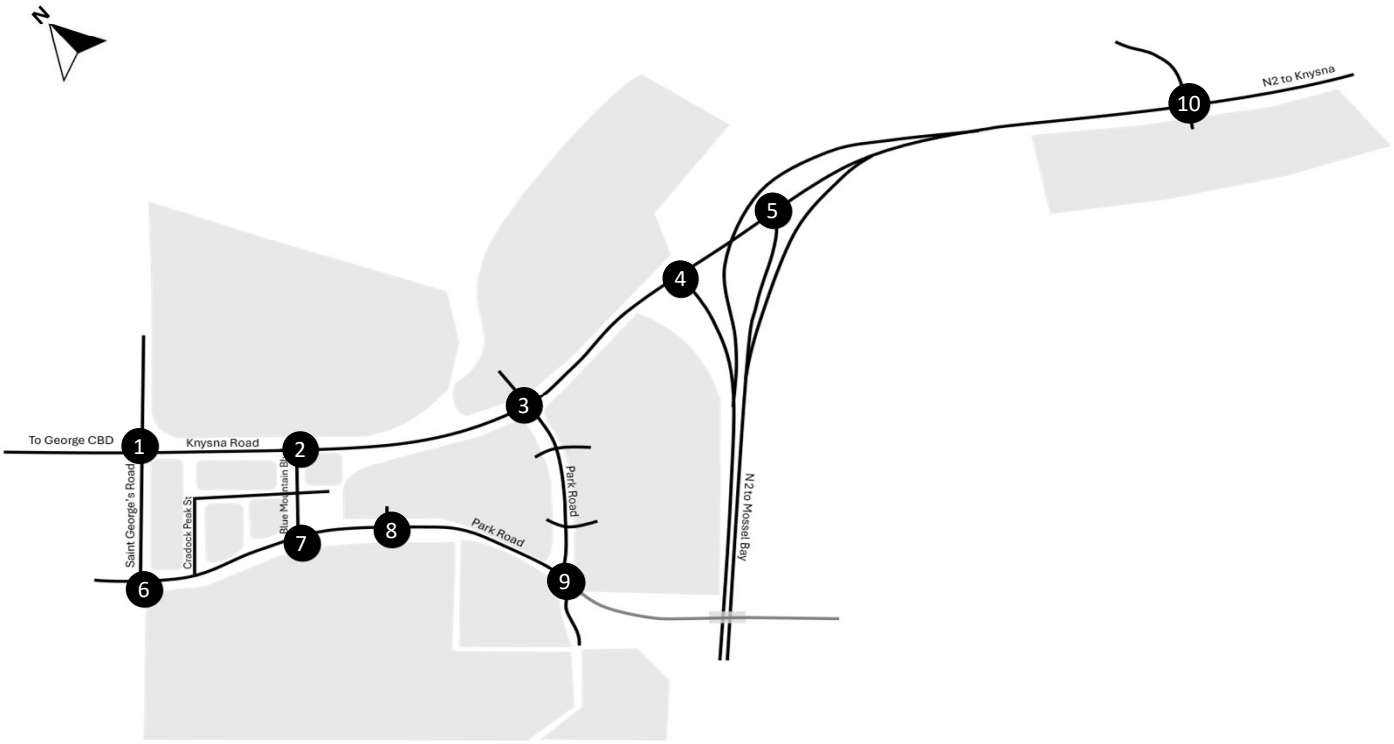


- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Total Traffic Conditions** **AM Peak Hour**	**Figure:** **A13**





- Turning lanes and turning movements
- Stop Control
- Traffic Signal Control
- Roundabout (Yield Control)

Diagramatic / Not to Scale

its INNOVATIVE TRANSPORT SOLUTIONS	**Garden Route City, George**	**Total Traffic Conditions** **PM Peak Hour**	**Figure:** **A14**

ANNEXURE B

Tables

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Table B1: Trip Generation

Phase	Land Use	Extent	Units	Source	Weekday AM Peak			Adjustment Factors		Weekday PM Peak			Adjustment Factors	
					Base Rate	In	Out	Adjusted Rate	MU	Base Rate	In	Out	Adjusted Rate	MU
1	Residential	299	units	COTO 220	0.65	25%	75%	0.59	10%	0.65	70%	30%	0.59	10%
1	Residential	281	units	COTO 210	1.00	25%	75%	0.90	10%	1.00	70%	30%	0.90	10%
1	Creche	1 129	100 sqm GLA	ITE 565	13.11	53%	47%	11.14	15%	13.29	47%	53%	12.63	5%
1	Sport Complex	2 635	100 sqm GLA	ITE 492	1.52	50%	50%	1.52	0%	3.80	57%	43%	3.80	0%
1	Medical Centre	3 011	100 sqm GLA	COTO 720	8.00	55%	45%	7.20	10%	8.00	45%	55%	8.00	0%
1	Convenience Shopping	3 011	100 sqm GLA	COTO 820	2.54	65%	35%	2.28	10%	14.37	50%	50%	12.93	10%

Table B2: Driveway Trips

Total Driveway Trips							
Precinct	Land Use	Weekday AM Peak			Weekday PM Peak		
		In	Out	Total	In	Out	Total
1	Residential	49	146	194	136	58	194
1	Residential	70	211	281	197	84	281
1	Creche	78	70	148	71	80	150
1	Sport Complex	20	20	40	57	43	100
1	Medical Centre	132	108	241	108	132	241
1	Convenience Shopping	50	27	76	216	216	433
	Total	**399**	**581**	**981**	**785**	**614**	**1399**

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Table B3: Mixed Use Trips

Mixed Use Trips							
Precinct	Land Use	Weekday AM Peak			Weekday PM Peak		
		In	Out	Total	In	Out	Total
1	Residential	5	15	19	14	6	19
1	Residential	7	21	28	20	8	28
1	Creche	12	10	22	4	4	8
1	Sport Complex	0	0	0	0	0	0
1	Medical Centre	13	11	24	0	0	0
1	Convenience Shopping	5	3	8	22	22	43
	Total	**42**	**60**	**101**	**58**	**40**	**98**

Table B4: Total Nett Trips

Nett-New Trips							
Precinct	Land Use	Weekday AM Peak			Weekday PM Peak		
		In	Out	Total	In	Out	Total
1	Residential	44	131	175	122	52	175
1	Residential	63	190	253	177	76	253
1	Creche	67	59	126	67	76	143
1	Sport Complex	20	20	40	57	43	100
1	Medical Centre	119	98	217	108	132	241
1	Convenience Shopping	45	24	69	195	195	389
	Total	**358**	**522**	**879**	**727**	**574**	**1301**

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