

**PLANNING REPORT**  
for the  
**BULK SUPPLY OF ELECTRICITY**  
to  
**OUTENIQUA VIEWS ON ERF 19741, DANA BAY:**  
**REZONING TO GENERAL RESIDENTIAL ZONE III**

**CONTRACT NO. ME 1978**

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Revision 2

**CVW ELECTRICAL**

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## 1. Introduction:

Mossel Bay Erf 19741 has reference.

Erf 19741, Dana Bay is located along Flora Road, direction, Dana Bay. The property is located on the corner of Flora Road and Louis Fourie Road and extends Southwest towards Dana Bay. The property (application area) measures a total of 754 557.4 m<sup>2</sup>. The application area is currently zoned for 226 single residential units in terms of the Mossel Bay Municipality Zoning Scheme By-law (2021). Zoning status will be changed to General Residential Zone III (GRZIII). The estimate 761 erven will be calculated to NRS 034-1:2007, Urban multi-story/estate (LSM 8; High end).

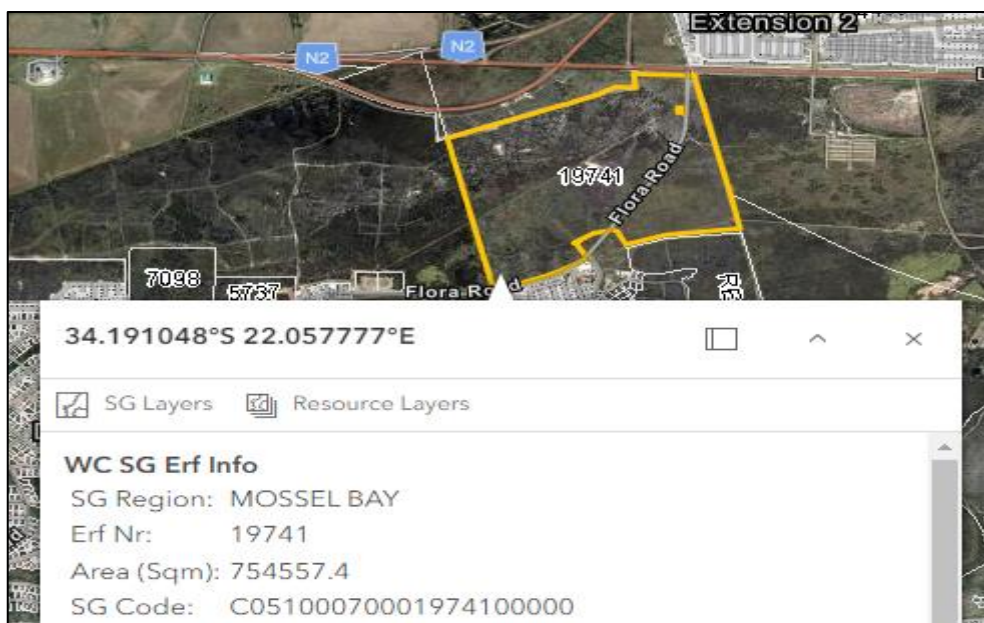


Figure 1: Project location.

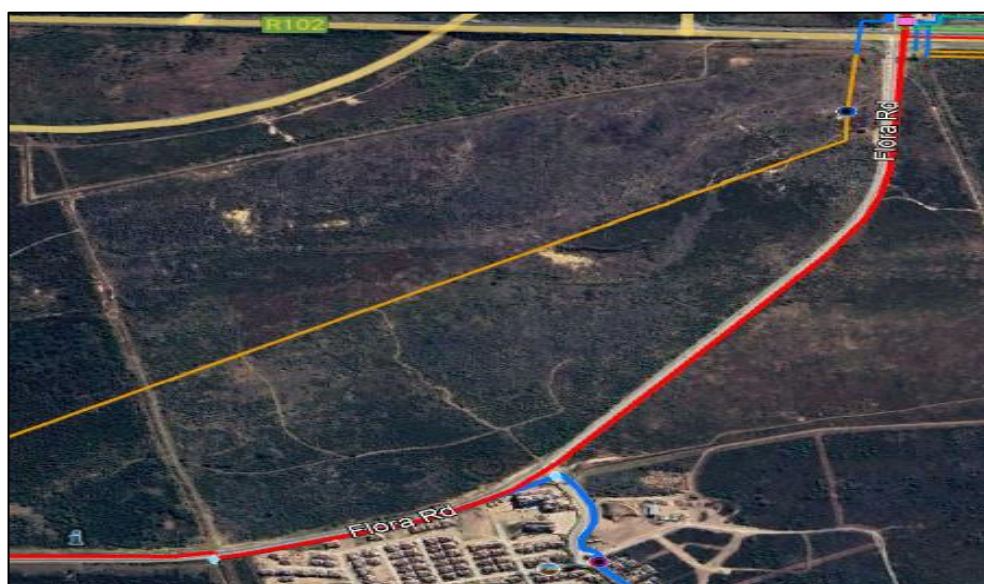


Figure 2: Existing MV network.

## 2. Project Layout

An application is in progress to densify the existing 226 single residential units to a total of 761 units which will be a mixture of sectional title and single residential stands. The development will be a gated community with access control, closed to the public. The development will be constructed over a six-phase period.

LANDUSE SCHEDULE						
Layer	Zone	Zone Category Code	Zone Category	Quantity	Calculated Area	
1607	ZONE	Phase A Landuse	F	Flats	56	4,491.09
1607	ZONE	Phase A Landuse	S	Single Res	38	11,348.38
1607	ZONE	Phase A Landuse	T1	Town House - Single	18	2,893.60
1607	ZONE	Phase A Landuse	T2	Town House - Double	4	921.96
				<b>114</b>	<b>19,655.01 m<sup>2</sup></b>	
1607	ZONE	Phase B Landuse	F	Flats	60	8,023.32
1607	ZONE	Phase B Landuse	S	Single Res	21	8,330.29
1607	ZONE	Phase B Landuse	T1	Town House - Single	26	4,347.73
1607	ZONE	Phase B Landuse	T2	Town House - Double	1	253.73
				<b>108</b>	<b>16,955.07 m<sup>2</sup></b>	
1607	ZONE	Phase C Landuse	S	Single Res	18	5,576.75
1607	ZONE	Phase C Landuse	T1	Town House - Single	106	17,415.73
1607	ZONE	Phase C Landuse	T2	Town House - Double	35	7,595.61
				<b>159</b>	<b>30,588.09 m<sup>2</sup></b>	
1607	ZONE	Phase D Landuse	S	Single Res	13	4,083.96
1607	ZONE	Phase D Landuse	T1	Town House - Single	59	9,801.09
1607	ZONE	Phase D Landuse	T2	Town House - Double	36	7,630.85
				<b>108</b>	<b>21,315.90 m<sup>2</sup></b>	
1607	ZONE	Phase E Landuse	F	Flats	40	3,525.95
1607	ZONE	Phase E Landuse	T1	Town House - Single	79	12,594.12
1607	ZONE	Phase E Landuse	T2	Town House - Double	1	244.90
				<b>120</b>	<b>16,364.97 m<sup>2</sup></b>	
1607	ZONE	Phase F Landuse	F	Flats	132	12,042.00
1607	ZONE	Phase F Landuse	T1	Town House - Single	20	3,218.83
				<b>152</b>	<b>15,260.83 m<sup>2</sup></b>	
				<b>761</b>	<b>120,139.87 m<sup>2</sup></b>	

Table 1: Land use Schedule

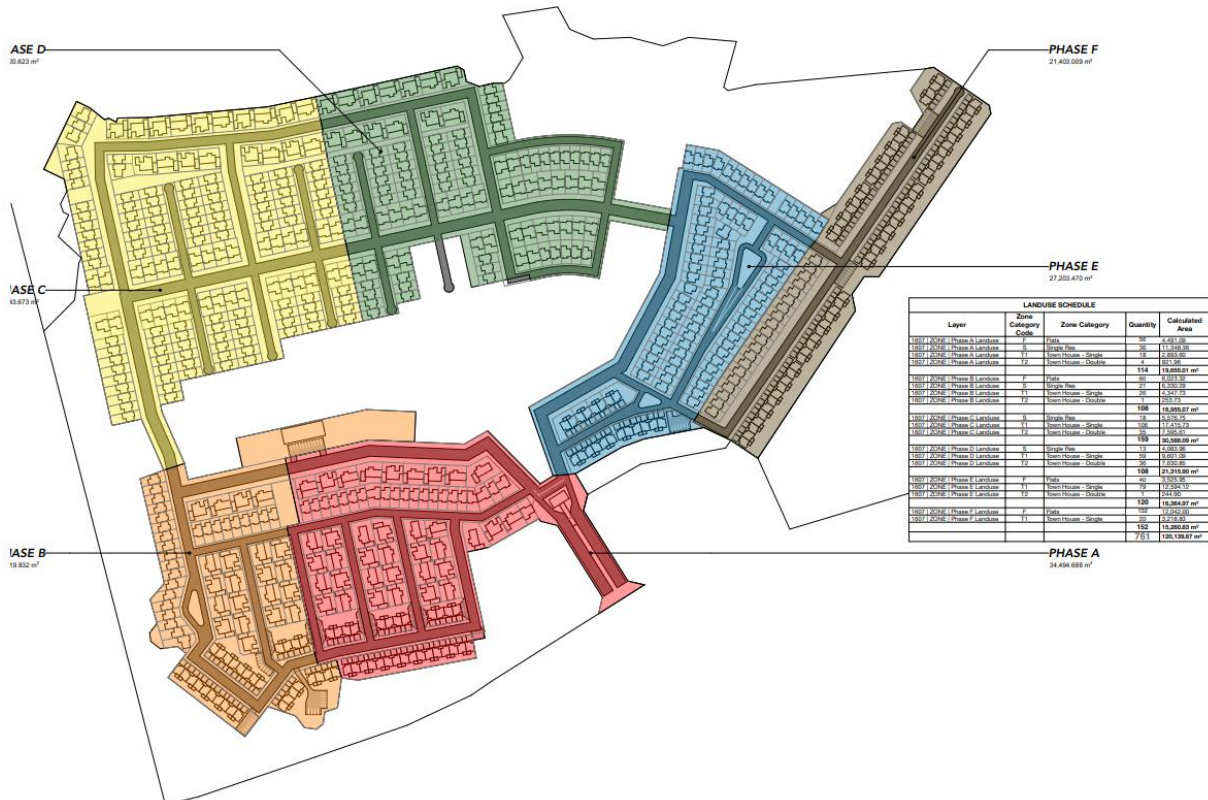


Figure 3: Phasing plan.

### 3. Planning

The following planning will make provision for the external and internal electrical requirements for the development.

#### 3.1. Electrical Supply: External

- 3.1.1. Electricity will be supplied by the supply authority, Mossel Bay Municipality. The Mossel Bay Municipality will only provide a Medium Voltage Bulk Supply Point, they will not take over any internal Medium or Low Voltage electrical reticulation services. The total estimated maximum demand for the entire development will amount to 3.483 MVA (ADMD).
- 3.1.2. The existing 185 mm<sup>2</sup>, 11 kV underground system passing the development along Flora Road can supply the additional load of ± 3.483 MVA ADMD. A 5-Way Ring main unit (RMU) will be positioned on the opposite side of the development entrance. The 5 Way RMU will be fitted with two incomers, one bulk metering unit, and two feeders.
- 3.1.3. The existing overhead powerline crossing the development is property of Mossel Bay Municipality. This line will be decommissioned and relocated. The new relocation route of the power line will be confirmed and approved by Mossel Bay Municipality.
- 3.1.4. The bulk connection to the Mossel Bay Municipal Grid will be designed and constructed to ADMD requirements. The notified maximum demand (NMD) for the development will be increased gradually in phases as the electrical demand of the development increases.

### 3.2. Electrical Supply: Internal

- 3.2.1. The development falls into the category Urban Multi-Story/Estate provision for a 60 Amp single-phase electricity supply to the Distribution Board of each apartment, a 16/25 mm<sup>2</sup> Cu 2-core service cable will be required.
- 3.2.2. The distribution on the property will be 11000V at high voltage level and 420/242V at low voltage level. Underground cable systems will be installed, which will have no visual impact on the environment. High Voltage cables will be installed at a minimum depth of 1000 mm and Low Voltage cables at a minimum depth of 600 mm from finished ground level. All cables will be directly buried and steel wire armoured.
- 3.2.3. Energy efficient Street lighting, 26 W LEDs on 5,4 m Poles will be provided. The design will ensure adequate illumination suite for the road users and pedestrians.
- 3.2.4. In order to minimize electricity load shedding and blackouts, thereby improving the quality of supply, developers and homeowners shall install energy efficient lighting (residential and streetlights) arrangements, Rooftop Photovoltaic system (25 % of actual supply), geysers that incorporate solar/heat pump/gas water heating and LPG gas cooking.
- 3.2.5. All electrical services will be installed in accordance with SANS 10142-1&2 respectively, NRS 034 and Mossel Bay Municipal standard specifications.

### 3.3. NERSA-467-58 Guidelines on electricity resale

- 3.3.1. **Reseller:** The Electricity Pricing Policy refers to a reseller as a 'non licensed trader of electricity'.

The tariff rates and tariff structure according to which electricity is resold must be identical to the approved tariff rates and tariff structure that would have been applicable had the customer been supplied with electricity by Mossel Bay Municipality. This is in line with Electricity Pricing Policy [Position 43(a)], which states that: Non-licensed traders of electricity shall provide the electricity at terms, tariffs, and services not less favorable than that provided by the licensed distributor in the area. This tariff could be renegotiated should license distributor impose higher bulk tariff charges or the reseller could apply with NERSA to be licensed reseller.

## 4. Recommendation(s)

The following recommendations are made:

1. The new route for the existing overhead powerline crossing the development must be confirmed and approved by Mossel Bay Municipality.
2. The new bulk supply point must be applied for and approved by Mossel Bay Municipality.
3. Electricity will be supplied by the supply authority, Mossel Bay Municipality. The electrical department will confirm enough spare capacity is available on the Eskom Contracted Notified Maximum Demand at Okert Bothma Substation (66/11 kV - 3 x 10 MVA Transformers).

Please contact me if you have any queries.

Yours faithfully CVW ELECTRICAL

A handwritten signature in black ink, appearing to read 'Jaco van Rooyen'.

Jaco van Rooyen Pr Techni Eng.  
Makukhane Consulting Engineers

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