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LA MOTTE: INTEGRATED HOUSING PROJECT

The project comprises the development of two parcels of land on either side of the existing La Motte Forest Village. The third parcel of land comprises the formalisation of an existing residential and business area.

The affordable housing development is situated on the western side of the existing township and makes provision for 329 housing units, a school site, 2 church sites and 2 crèche sites.

The land on the eastern side of the existing township has been earmarked for GAP housing. Provision has been made for 106 residential erven.

The third development node comprises the formalisation of an existing area and comprises 16 residential erven, 3 business sites and 2 erven belonging to the local authority.

1. Location

The La Motte Forestry Village lies to the south of the R45 on the Robertsvlei Road. The town is approximately 2.5 km outside Franschhoek. The planning areas are located on either side of this township.

Both proposed development areas have variable slopes, but on average the slope is 1:15 from southwest to northeast.

2. Description of Services

2.1 Roads

2.1.1 Access Road.

The existing forestry town of La Motte has 299 residential erven. Access to the residential area is from the Robertsvlei Road (DR 01351) which intersects the R45 main road to Franschhoek, Stellenbosch and Paarl. The Robertsvlei road is a link road to Franschhoek. The road crosses the Franschhoek river with a single carriageway bridge.

A traffic impact study investigating the impact of the traffic generated by the proposed development on the various intersections and single carriageway bridge is being undertaken and will be submitted as a specialist report. Early indications are that no major upgrade of the single carriageway bridge will be required.

2.1.2 Streets

The internal streets will be 5.0m to 5.5m wide. The streets will have mountable kerbs on the one side and an edge kerb on the other side. The bitumen surface will consist of two chip and spray layers using 13.2mm and 6.7mm chips. A fog spray will be applied to the chip and spray surface. The vertical alignment of the roads will be designed to enable the natural flow of storm water from the development.

The insitu subgrade material under the roads has a G9 classification. An allowance will be made for an additional G7 subgrade layer in the road layers for the internal roads.

2.2 Storm Water Network

The proposed development areas abut the forests on the slope of the Franschoek Mountains. A cut-off drain will be constructed along the entire western boundary of the residential area to divert the storm water runoff away from the erven. The channels will discharge into the existing drainage lines which ultimately discharges into the Franschoek River..

The internal storm water network will consist of open channels, side inlet catch pits, manholes and concrete pipes with sizes varying from 375mm diameter to 450mm diameter. A storm water retention pond will be constructed to simultaneously act as a sand- and rubbish trap.

2.3 Water Network

The water demand per erf in an affordable housing scheme is estimated at 600 liters/erf/day. The proposed township will therefore have a total average daily potable water demand of 261 kiloliters.

2.3.1 Pipe Network

The proposed network will consist of mainly 75mm and 100mm diameter Class 12 HDPE pipes. Each individual erf will be fitted with a metered water connection.

2.3.2 Storage Capacity

The existing township is fed from a reservoir situated above the town. The accepted guideline is that a minimum capacity equal to 48 hours of water demand be supplied. A 0.50 megaliter reservoir will be required in order to provide the storage capacity required under this guideline.

A GLS report analysing the existing water network will be submitted as a specialist report

2.4 Sewer Network

A flush water sewer network will be installed in the new township. The network will consist of 160mm diameter uPVC Class 34 sewerage pipes. The network will gravitate via the existing sewer network to an existing pump station from where the sewerage is pumped to the Wemmershoek Sewerage Treatment Works. This sewerage works was recently upgraded to cater for the developments in the area.

The estimated sewerage discharge from the development is estimated at 210 kiloliters per day. A GLS report analysing the existing sewer pipe network will be submitted as a specialist report.

2.5 Solid Waste Disposal

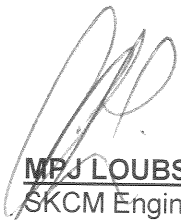
Stellenbosch Municipality collects waste on a weekly basis as part of their normal service delivery to La Motte. The solid waste generated from the proposed township is estimated at 450kg/day.

2.6 Electricity

The electrical service provider to the proposed township is Eskom. Preliminary indications are that there is bulk electricity available in the area, but that the existing switchgear will require upgrading. An application for funding and the installation of the electricity supply will be made to Eskom.

We trust that you will find the above in order. We are willing to supply additional information should it be required.

Yours faithfully



MPJ LOUBSER PrEng
SKCM Engineers

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