# Proposed development of Erf 3927, Still Bay



# **Engineering Services Report**

**June 2019** 



# George Office Western Cape

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# Proposed development of Erf 3927, Still Bay

# **Engineering Services Report**

# **June 2019**



# PREPARED FOR:

Daily Double Trading 447 CC 5 Attie Hoffman Street Still Bay 6674

# PREPARED BY:

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# Proposed development of Erf 3927, Still Bay

# **Engineering Services Report**

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# 1 INTRODUCTION AND BACKGROUND

Element Consulting Engineers has been appointed by Daily Double Trading 447 CC for the rendering of professional multi-disciplinary engineering services for the proposed development of Erf 3927, Still Bay.

The project proposes the development of 12 group housing units.

A number of pre-application discussions have been held with various officials of the local municipality. These discussions focused on engineering services availability and municipal requirements i.t.o. the proposed development.

This report will detail and discuss the preliminary engineering services design of the proposed development in terms of firstly the bulk engineering services and secondly the internal engineering designs in parallel with the engineering standards and technical design criteria applicable to the project.

# 2 PROPOSED LAND USE

The proposed development of Erf 3927, Still Bay, encompasses of 12 group housing units. The Site Development Plan (SDP), as prepared by Nel & De Kock Town Planners is shown below.



Figure 1: Site Development Plan (SDP)

# 3 LOCALITY AND ACCESS

The proposed development is located on Erf 3927, Still Bay. The site is directly north of the Jongensfontein Road and west of the Still Bay Golf Course.

Proposed access to the development is from Bessie Street on the western boundary of the site.

Locality and access are indicated in the diagram below.



Figure 2: Locality and access

# 4 GEOTECNICAL INVESTIGATION

A formal geotechnical investigation has not been performed and will be performed during the detail design stage. A visual inspection of the site was conducted in order to assess conditions on site.

Holistically, the conclusion reached is that the in-situ materials found on site are adequate for the construction of engineering services and foundations for residential development.

## **General Soil Profile**

Inspection of the site indicated relatively consistent soil horizons throughout with a light brown silty sand of significant depth present. Darker brown silt is evident in the lower lying areas. The materials appear slightly moist and are fairly loose. No perched water table is evident and a low to moderate water retention rate is expected. Flat to undulating gradients are evident.

# **Slope Stability**

Gradients on the site is flat to undulating. No natural slope instability is present.

# **Ground water and stormwater**

No ground water and/or perched water are evident. A low to moderate water retention rate is expected. Lateral movement of stormwater will be moderate due to the flat to undulating gradient. Erosion of the silty sands may occur.

## **Engineering Services**

A TLB will suffice for trenching and excavations of all services and foundations in all materials. Although the possibility of rock is deemed to be small, rock may be present at deeper depths. This will be determined by a formal geotechnical investigation.

## Foundations for residential development

The visual investigation indicated that the in-situ materials are adequate to support residential development. Reinforced strip footings will be adequate for the development. Fill areas to be adequately compacted to a minimum specification to be determined from the formal geotechnical investigation and detail design.

#### **Construction materials**

A number of commercial operators are located in close proximity to the site for the provision of imported construction materials.

# 5 PRELIMINARY ENGINEERING SERVICES DESIGN

This chapter will discuss the preliminary engineering services design of the proposed development in terms of firstly the bulk engineering services and secondly the internal engineering designs in parallel with the engineering standards and technical design criteria applicable to the project.

## 5.1 Water

#### **Water Demand**

The Average Annual Daily Demand (AADD) for this proposed development in line with accepted design consumptions, assumptions, criteria and standards, is calculated at approximately 10.8 kl/day. Peak factors will be considered during the detail design stage of the project.

# **Bulk Availability**

Preliminary investigations and the necessary discussions with the local municipality indicated that bulk water is available for this development. Correspondence to this regard, confirming the allocation and availability of bulk water for this development has been obtained from the local municipality and is attached to the report as addendum.

#### **Connection Point**

The site is serviced by a municipal 100mm AC bulk water line along Bessie Street on the western boundary of the site. The locality of this existing bulk water line in relation to the proposed development site is indicated in the diagram below.



Figure 3: Existing bulk water line layout servicing the site

# **Design Criteria and Standard of Engineering Services**

- Design consumption
  - Group housing units 10.8kl/day
- Peak factors as prescribed
- Minimum pressures for the network are calculated for a fire flow 30l/sec and peak demand at the point of lowest pressure under peak conditions.
- Maximum of 4 valves to isolate a pipe section.
- Maximum length of 600m of main pipe per isolated section.
- Air valves to be provided where applicable.
- Minimum cover to pipes to be 900mm.
- Pipe type and class to be uPVC class 6 to 12, depending on existing network pressure.
- Pipe diameters varying between 63mm and 90mm depending on pressure available and flow required.
- Erf connections to be HDPE Class 10.
- Erven to be serviced with a 20mm connection and Aqua-Loc box and meter.
- Fire hydrants to be provided in accordance to relevant guidelines and legislation.

#### 5.2 Sewer

# **Design flow**

The Average Dry Weather Flow ('ADWF'), in line with accepted design criteria and standards, can be calculated as 9.7kl/day. The design peak flow, inclusive of a specified peak factor of 3.5, can be calculated as 0.39l/sec. Allowance must also be made for extraneous inflow into the system which can be calculated conservatively at 15%. This will be finalized during the detail design stage.

# **Bulk sewerage treatment capacity (Still Bay WWTW)**

Correspondence with the local municipality indicates that the existing Still Bay wastewater treatment works (WWTW) has capacity to accommodate the flow of the proposed development. Correspondence has been obtained from the municipality confirming the above and is attached to the report as addendum.

# **Connection point**

The site is serviced with a bulk sewer network and a 160mm uPVC bulk sewer line is located on the western boundary along Bessie Street. Correspondence with the local municipality identified this line as the connection point for the development. A letter from the municipality to this regard is attached as addendum.

# Existing bulk sewer network layout plan

The diagram below indicates the existing bulk sewer network servicing the site.



Figure 4: Existing bulk sewer network servicing the site

# **Design Criteria and Standards of Engineering Services**

- The following design flows will be utilized:
  - Group housing units 9.7kl/day
- Specified peak factor of 3.5
- Allowance for 15% extraneous flow

- A conventional waterborne sewerage system will be provided.
- Minimum flow velocities designed for as 0.7m/s.
- Minimum cover to all pipes to be 800mm.
- Pipe diameters of generally 110mm for all service connections and minor lines and 160mm and above for main lines, as required per the detailed designs.
- Minimum design gradients to be as follows:

Dwelling Units	Grade
1 (House connection)	1:60
1-5	1:80
6-10	1:100
11-80	1:120
81-110	1:150
>110	1:180

- Erf connection depth to be minimum 1.0 m and at least be able to drain 80% of the erf.
- Precast concrete rings manholes with concrete floor and premanufactured concrete lid.
- Manhole covers and frames to be Polymer Concrete.
- Manholes to be central over main pipe on downstream side.
- Manhole spacing to be maximum 80m
- All concrete, mortar or screed used with manholes to be from dolomite aggregate and low alkali sulphate resistant cement to SABS 471.
- Pipelines to be uPVC class 34 and to be laid on Class C bedding.

## 5.3 Streets and access

## Access and sight distance

Proposed access to the development is from Bessie Street on the western boundary of the site. Access is indicated in the diagram below. Sight distances at the proposed access point are excellent and satisfactory for development purposes in both the vertical and horizontal alignments.



Figure 5: Proposed access point to the development on Bessie Street.

# **Traffic Impact Statement**

The traffic impact of the proposed development will be negligible from a traffic engineering perspective with less than 9 trips being generated in the morning peak hour.

It is proposed that the necessity of a traffic impact assessment be waived.

# **Internal Standards and Design Criteria**

- Internal road width of between 5.2m.
- Asphalt surfacing 30mm or paving of 80mm.
- Pavement structural materials to be imported from commercial sources.
- All minimum radii at bellmouths to be 8m.
- Minimum road grade of 0.4% and camber of 2%.
- Road design life of 20 years.

# Layout plan

A concept layout plan is provided in the diagram below.

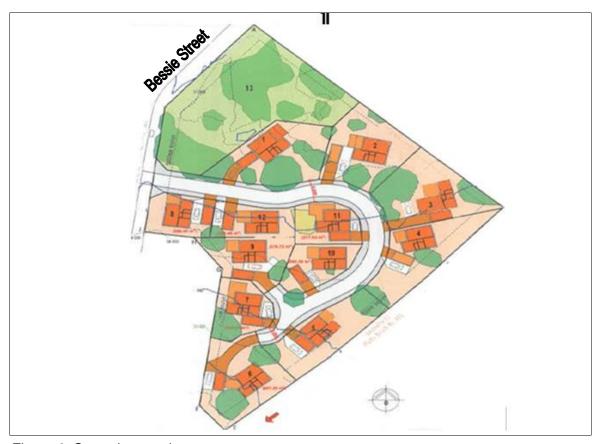


Figure 6: Street layout plan

# 5.4 Stormwater

# Design and site layout considerations

A formal stormwater reticulation system will be provided by a combination of surfaced streets, kerbs, inlet structures and stormwater pipes. The internal street will be designed to drain into Bessie Street. The site generally drains overland towards a northern and north-western direction.

All designs will be confirmed with the municipality during the detail design stage.

The diagram below indicates the drainage routes on the proposed development as discussed above:



Figure 7: Stormwater drainage on the internal street will be designed to drain into Bessie Street. The site generally drains overland towards a northern and north-western direction.

# **Internal Standards and Design Criteria**

The following standards and design criteria are envisaged:

- Minor system designed for 2-year return period and conveyed in a combination of maximum 200m aboveground in the road prism and underground piped system.
- Major system designed for 50-year return period. Difference between the 50 year and 2-year flood to be conveyed in the road prism with depths not exceeding 150mm and into designated public open spaces.
- Minimum gradients for pipelines to allow minimum flow speeds of 0.7m/s at full flow.
- Maximum pipeline flow velocities to be 3.5m/s.
- Stormwater pipes to be 100D as required by specific loadings or installation conditions.
- Bedding to be Class C.
- Minimum cover on pipes to be 800mm.
- Minimum pipe diameter to be 450mm.

## 5.5 Solid Waste

A formal solid waste collection area will be provided in the site development plan. A formal arrangement for the removal of solid waste will be entered into with the local municipality.

#### 5.6 Electrical

## **Electrical Demand**

The electrical demand for this proposed development in line with accepted design criteria and standards, is calculated at approximately 54kVA. Diversity factors will be considered during the detail design stage of the project.

# **Bulk Availability**

Preliminary investigations and the necessary discussions with the local municipality indicated that bulk electricity is available for this development. Correspondence to this regard, confirming the allocation and availability of bulk electricity for this development has been obtained from the local municipality and is attached to the report as addendum.

# **Connection Point**

The site can not be services by the infrastructure in Bessie Street. The local municipality indicated that capacity is available at the Strandloper mini substation located on the intersection of Suikerbos Crescent and Geelhout Street. A new bulk supply cable will be required to be laid from this point firstly along Geelhout Street, then in a proposed sleeve between erven 3566 & 3565 and lastly underneath Bessie Street, also in a sleeve.

The locality of the mini substation and proposed cable route is in relation to the proposed development site is indicated in the diagram below.

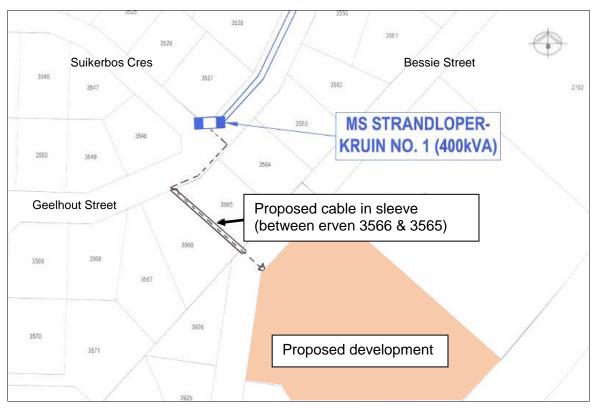


Figure 8: Proposed supply cable route from Strandloper mini substation to development.

# **Design Criteria and Standard of Engineering Services**

- Number of units 12
- Design demand
  - o Group housing units 4.5kVA (30A single phase)
- Diversity factor of 0.64
- Cables depth minimum of 1m
- Bulk supply cable to be aluminium
- Sleeves to be provided through adjacent erven and under road
- Concrete slabs over sleeves where dictated by detail design
- Bulk meter to be provided on erf boundary
- Houses to be provided with prepaid meters
- Capital contributions to be addressed in Service Level Agreement (SLA) with local municipality

# 6 CONCLUSIONS AND RECOMMENDATIONS

# 6.1 Conclusions

The following conclusions can be reached from the Preliminary Engineering Services Report on the proposed development of Erf 3927, Still Bay:

- 1. The proposed development envisages 12 group housing units.
- 2. Proposed access to the development is obtained from Bessie Street on the western boundary of the site.
- 3. The in-situ materials found on site are adequate for the construction of engineering services and foundations for residential development.

#### 4. Water:

- a. The site is serviced by a municipal 100mm AC bulk water line along Bessie Street on the western boundary of the site.
- b. The Average Annual Daily Demand (AADD) for this proposed development is calculated at approximately 10.8kl/day. Peak factors will be considered during detail design stage.
- c. Bulk water is available for the development and correspondence to this regard, confirming the allocation and availability of bulk water for this development has been obtained from the local municipality.

#### 5. Sewer:

- a. The Average Dry Weather Flow ('ADWF') created by the development is calculated at approximately 9.7kl/day and the design peak flow is calculated at 0.39l/sec.
- b. Correspondence with the local municipality indicates that the existing Still Bay wastewater treatment works (WWTW) has capacity to accommodate the flow of the proposed development. Correspondence has been obtained from the municipality confirming the above.
- c. The site is serviced with a bulk sewer network and a 160mm uPVC bulk sewer line is located on the western boundary along Bessie Street. Correspondence with the local municipality identified this line as the connection point for the development.

#### 6. Streets & access

- a. Proposed access to the development is obtained from Bessie Street on the western boundary of the site.
- b. Sight distances at the proposed access point are excellent and satisfactory for development purposes in both the vertical and horizontal alignments.
- 7. The traffic impact of the proposed development will be negligible from a traffic engineering perspective with less than 9 trips being generated in the morning

peak hour. It is proposed that the necessity of a traffic impact assessment be waived.

## 8. Stormwater:

- a. A formal stormwater reticulation system will be provided by a combination of surfaced streets, kerbs, inlet structures and stormwater pipes.
- b. The internal street will be designed to drain into Bessie Street.
- c. The site generally drains overland towards a northern and north-western direction.
- 9. A formal arrangement for the removal of solid waste will be entered into with the local municipality.

## 10. Electrical:

- a. The electrical demand for this proposed development is calculated at approximately 54kVA.
- b. Discussions with the local municipality indicated that bulk electricity is available for this development. Correspondence to this regard, confirming the allocation and availability of bulk electricity for this development has been obtained from the local municipality.
- c. The site can not be services by the infrastructure in Bessie Street. The local municipality indicated that capacity is available at the Strandloper mini substation. A new bulk supply cable will be required to be laid from this point to the development.

With reference to all of the conclusions above, it can holistically be concluded that the proposed development can be designed and constructed to acceptable specifications and standards from an engineering design perspective.

# 6.2 Recommendations

With reference to the conclusions above, the following is recommended:

- 1. That all conceptual and preliminary design specifications and standards be accepted and approved.
- 2. That all detail designs be performed to the satisfaction of the local municipality, in line with the discussions contained in the report.

It is the holistic recommendation that the proposed development be approved from an engineering design perspective.

# 7 ADDENDA

- 7.1 Addendum 1 Letters to Still Bay Municipality requesting information
- 7.2 Addendum 2 Confirmation correspondence by Still Bay Municipality

Proposed development of Erf 3927, Still Ba

# **ADDENDUM 1**

LETTERS TO STILL BAY MUNICIPALITY REQUESTING INFORMATION



82 Victoro Sheef, George, 6539 P.O. Sex 5962, George, 6530 Set + 27 44 684 1138 Fax: + 27 44 684 1185 E-mail: into Secting Co.20 Website: Into Secting Co.20

Element Consulting Engineers (Phy Ltd. Reg. No. 2001/012266/67

Samuel and the state from 1 Dates | Marchael I Dates | 10 years | Vitament | Potential Contents | 10 years | 10 years |

Our Ref: Enquiries: Date: 1901191 Mr.H. Lourens 28 May 2019

Hourened Bedeng colds

The Municipal Manager Hessequa Municipality PO Box 29 Riversdal 6670

Att: Mr Harold Basson

Dear Sir,

#### PROPOSED DEVELOPMENT OF ERF 3927, STILBAAI: EXISTING SERVICES

We have been appointed as consulting engineers for the abovementioned proposed project. We are in process of compiling a services and preliminary design report as input into the town planning application. The proposed project consists of 12 group housing units as indicated on the attached drawing (locality and layout plan).

In terms of engineering services requirements, the water demand of the development will be approximately 10.8kl/day while sewer effluent will be approximately 9.7kl/day or 0.39l/s (inclusive of a peak factor of 3.5). Would you please provide us with a confirmation of availability of services for the proposed development. Would you also please provide us with the necessary existing services layouts for engineering planning purposes (inclusive of water, sewer and stormwater). Would you also please comment on the proposed access point from Bessie Street; we will provide a traffic impact statement as part of our report, although the impact of this proposed development will be negligible from a traffic engineering perspective.

Thank you for your consideration and time, it is appreciated.

Yours Sincerely

For Element Consulting Engineers

HANNES COURENS MEng Preng PrCPM

Technical Director & Branch Manager : Southern Cape

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Element Consulting Engineers (Pty) Ltd. Reg. No. 2001/012048/07

Participal Materialistics | Craje Sours | Distant | Bastantan | Decige | Manage | Maritimo | Falationne | Huderdoog | Spiritimo |

Our Ref. Enquiries: Date:

1901191 Mr H. Lourens 10 June 2019

hiorgrana@econd.co.za

The Municipal Manager Hessequa Municipality PO Box 29 Riversdal 6670

Att: Mr Sakkle Rust

Dear Sir.

#### PROPOSED DEVELOPMENT OF ERF 3927, STILBAAI: EXISTING SERVICES (ELECTRICAL)

We have been appointed as consulting engineers for the abovementioned proposed project. We are in process of compiling a services and preliminary design report as input into the town planning application. The proposed project consists of 12 group housing units as indicated on the attached drawing (locality and layout plan).

in terms of engineering services requirements, the electrical demand of the development will be approximately 4.5kVA (30A, single phase per unit with a diversity factor of 0.64). Thus a total demand of 4.5 x 12 = 54 kVA will be required. Would you please provide us with a confirmation of availability of services for the proposed development? Would you also please provide us with the necessary existing services layouts for engineering planning purposes.

Thank you for your consideration and time, it is appreciated.

Yours Sincerely For Element Consulting Engineers

JAKO FOURIE, MEng PrEng Technical Director: Southern Cape





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Proposed developr	nent of Erf 3927, S	Still Bay	

# ADDENDUM 2

CONFIRMATION CORRESPONDENCE BY STILL BAY MUNICIPALITY

## Hannes Lourens

From: Shahida Kennedy <shahidak@hessegua.gov.za>

Sent: 19 June 2019 13:02
To: Lu-Anne Venter

Cc: Hannes Lourens; Lizet Cronje; Rhuschan Manho; Harold Basson; Justin Lesch; Saldde

Rust

Subject: RE: Proposed Development of Erf 3927, Stilbaai

Attachments: Sewer Network Analysis Map Pipe Diameter - Erf 3927 Sewer Pipe.bmp; Water

Network Analysis Map Pipe Diameter - Erf 3927 Water.bmp

Goele Dag Lu -Ann,

Sien kommentaar rakende die voorgestelde aansoek.

### Water en Riool :

- Daar is tans water en riooi netwerke en is die vorige kommentaar van toepasssing. Vind aangeheg die water en riooi uitlegkaarte. U word versoek om 'n water en riooi bestuursplan in te dien.
- Maak asseblief voorsiening vir 'n 2500 liter reën water tenk per eenheid.

#### Stilbaai Rioolwerke:

 Hessequa Munisipaliteit in tans in proses om die Stilbaai meesterplan op te stel en dus sal alle nuwe aansoeke onderhewig wees aan 'n kapitale bydrae wat op 'n later stadium bevestig sal word.

#### Paale en Stormwater:

- Dui asb aan hoe die stormwater op die perseel hanteer sal word en voorsien ons asb van n stormwaterbestuurplan sowel as die verkeers impak assesserings verslag. Na ontvangs van die verkeersverslag sal volledige kommentaar gelewer word op die voorgestelde ontwikkeling.
- Dui asb aan hoe die toegang beheer gaan word. Indien die ontwikkeling beveilig sal word deur enige hekke
  of "booms" sal die ontwikkeling as 'n privaat ontwikkeling beskou word en sal die instandhouding en
  opgradering van paaie sowel as straat ligte die verantwoordelikheid van die ontwikkelaar bly.

#### Vullis verwydering:

U word versoek om aan te dui hoe die vullis verwydering op die perseel hanteer sal word.

Kommentaar rakende elektries kan direk met Sakkie en Justin Lesch opgeneem word.

Met die indiening van die formele ontwikkelings aansoek sal die Tegniese afdeling finale kommentaar lewer.

Ek vertrou u vind bogenoemde in orde.

Yours Faithfully / Die Uwe / Othobekileyo



Shahida Kennedy Cend. Techni Eng. AMSAICE IMESA. Manager: Civil Planning and Project Management Directorate: Technical Services

Hessequa Local Municipality Van Den Berg Street , Riversdale , 6570

Office: +27 (0) 28 713 7942 | Celt 061 541 7061 Fax: 086 401 5188

Email: <u>shahidak@hessegus.gov.za</u> Webste: <u>http://www.hessegus.gov.za</u>

i

From: Lu-Anne Venter < lventer@eceng.co.za>

Sent: Friday, 07 June 2019 08:28

To: Shahida Kennedy <shahidak@hessequa.gov.za>

Cc: Hannes Lourens <hlourens@eceng.co.za>; Lizet Cronje Lizet@hessequa.gov.za>; Rhuschan Manho

<rhuschan@hessequa.gov.za>; Harold Basson <harold@hessequa.gov.za>

Subject: FW: Proposed Development of Erf 3927, Stilbaai

Gnele More Shahida

Met verwysing na Hannes se epos van Dinsdag:

Enige idee wanneer ons die onderstaande inligting kan verwag? Ons kliënt is dringend opsoek na die inligting sodat beplanning gedoen kan word.

Groete,

# Lu-Anne Venter

Technical Assistant

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82 Victoria Street, George, 4529 | PO Bax 9942, George, 4530



NO SOLI COLS CARTINAD / LEVEL 2 MARKE CONTRIBUTOR LITERARY CARRACTER CONTRIBUTOR

From: Hannes Lourens < hlourens@eceng.co.za>

Sent: Tuesday, 04 June 2019 08:56

To: Shahida Kennedy <shahidak@hessegua.gov.za>; Lu-Anne Venter lventer@eceng.co.za>

Cc: Hannes Geldenhuys <a href="mailto:segua.gov.za">s Rhuschan Manho</a> <a href="mailto:segua.gov.za">s Rhu

Subject: RE: Proposed Development of Erf 3927, Stilbaai

Shahida,

Goele more. Dankie vir die terugvoer. Ons benodig asb dringend duidelikheid rondom die volgende detail wat nie in jou e-pos aangespreek word nie:

Riool: Jy noem daar is 'n rioollyn beskikbaar. Bevestig asb die posisie met 'n uitlegplan, diameter van lyn, tipe lyn en spesifiek of daar kapasiteit in die lyn en in die WWTW is.

Water: Jy noem daar is 'n lyn beskikbaar. Bevestig asb die posisie met 'n uitlegplan, diameter van die lyn, tipe lyn en spesifiek of daar kapasiteit in die lyn en op die stelsel is.

Stormwater: Bevestig asb beskikbaarheid van dienste asook liggingsplan, diameter en tipe lyn.

Elektries: Jy noem daar is nie elektries beskikbaar nie. Kan jy asb met uitlegplan bevestig waar die 11kV netwerk loop en of daar kapasiteit in daardie netwerk is. Bevestig ook asb die tipe infrastruktuur.

Toegang: Kommentaar op die voorgestelde toegang.

Ek heg weer my oorspronklike brief aan. Ek moet dringend my verslag finaliseer aangesien die beplanner en kliënt daarvoor wag.

Dankie weereens vir jou moeite, ek hoor graag van jou.

Hartlike Groete / Warm Regards

2

# Hannes Lourens PrEng MEng PrCPM

Technical Director & Branch Manager – Southern Cape and Karoo © <u>Housen@econg.co.m</u> 1: +27.44 (841136 | 1: +27.44 (841165 | C: +27.62 7754264 | W: www.econg.co.zo (3) Victors Street, George, 4529 | PO Box 9942; George, 4530







ISO 9001:2008 CERTIFIED | LEVEL 2 B-BREE CONTENUTOR 125% PROCUREMENT RECOGNITION

From: Shahida Kennedy <shahidak@hessegua.gov.za>

Sent: 03 June 2019 12:39

To: Lu-Anne Venter < <u>Iventer@econg.co.za</u>>

Cc: Hannes Lourens <a href="https://linear.co.za">https://linear.co.za</a>; Hannes Geldenhuys <a href="https://linear.co.za">https://linear.co.za</a>; Collab Info <info@hessegua.gov.za</a>; Rhuschan Manho <a href="https://linear.co.za">https://linear.co.za</a>; Collab Info <info@hessegua.gov.za</a>;

Subject: RE: Proposed Development of Erf 3927, Stilbaal

Importance: High

Goele Dag Lu-Anne

Vind Tegniese kommentaar onderaan rakende bogenoemde ontwikkeling.

Siviele kommentaar: Daar is n riool lyn aan die erf se kant. Hessequa sal rioolaansluitings punt skep tot en met 1m in die erf waarby die eienaar kan opkoppel.

Water is aan die oorkant van die pad. Die aansluiting sal oor die pad gemaak moet word . Indien die eienaar nie selfdie aansluiting wil doen kan die werklike koste om die aansluiting te skep bereken word. Die munsipaliteit skep die aansluiting tot en met 1m binne die erf. Die kostes sal vir die eienaar se rekening wees.

Elektries: Daar is nie elektriese dienste naby die gebied nie. Volgens die voorstelling sal die Ontwikkellaar by die 11Kv netwerk moet aansluit, h/v Bessiestraat en Bosbokduin Laan.

Ek vertrou u vind bogenoemde in orde

Yours Faithfully / Die Uwe / Othobeklieyo



Shahida Kennedy Cand. Techni Eng. AMSAICE, IMESA Manager: Civil Planning and Project Management Directorate: Technical Services Hecsequa Local Municipality

Van Den Berg Street , Riversdale , 6670 Office: +27 (I) 28 713 7942 | Cell: 061 541 7081 Fax: 086 401 5188

Email: shahidak@hessegus.gov.za Webate: http://www.hessegus.gov.za

From: Lu-Anne Venter <iventer@eceng.co.za>

Sent: Monday, 03 June 2019 09:16

To: Shahida Kennedy <shahidak@hessequa.gov.za> Cc: Hannes Lourens <hlourens@eceng.co.za>

Subject: FW: Proposed Development of Erf 3927, Stilbaai

Goele More Shahida

3





#### Hannes Lourens

 From:
 Lu-Anne Venter

 Sent:
 21 June 2019 12:41

 To:
 Hannes Lourens

 Subject:
 FW: Stilbaai Erf 3927

Attachments: SKM\_4050190619131300.pdf

#### Lu-Anne Venter

**Technical Assistant** 

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NO SORE 2005 CERTIFIED / ESPAIS 2 R-VINES CONTRIBUTION SESSION/CONSIDERATIVE RECOGNITION.

From: Justin Lesch <justin@hessequa.gov.za>

Sent: Friday, 21 June 2019 12:27

To: Lu-Anne Venter <iventer@eceng.co.za> Cc: Jako Fourie <ifourie@eceng.co.za>

Subject: RE: Stilbaai Erf 3927

Beste Lu-Anne,

Onderstaande skrywe het betrekking.

Ek beantwoord sommer per epos weens die beperkte tyd vir 'n formele skrywe.

Die basiese beginsels vir bovermelde ontwikkeling is as volg:

- Toevoer aluminium kabel moet geneem word direk vanaf Miniatuur Substasie MS Strandloper Kruin Nr. 1. (Sien aangeheg beplande roete). Ingenieur moet toestemmning kry vanaf Erf Eienaar 3565 om oor dié erf te graaf. (Kabel moet in huls, 1m onder grondvlak geplaas word, asook "slabs" oor huls soos per elektriese regulasie).
- Ingenieur moet aan Munisipaliteit bevestig of hui 'n grootmaat aansluiting versoek (een meter op erf grens) of
  die ontwikkelingsvoorwaardes wat beoog word. Die spesifieke aspek moet duidelik van die begin af gestel word,
  want veroorsaak baie probleme en ongelukkigheid met elenaars wat woonagtig is in ontwikkelings.
- Transformator fooi is betaalbaar; 54kVA x R 1 700-00/kVA = R 91 800-00, BTW uitgesluit.
- Kapitale Bydrae is betaalbaar; 12 eenhede x (30A/45A) x R 14 779-13 (Koste per ERE) = R 118 233-04, BTW uitgesluit. (Kapitale bydrae is gebaseer op die huidige tariewe en is geldig tot einde Junie 2019, waarna dit verhoog sal word.)
- Ingenieur moet diensteverslag aan Munisipalteit rig vir goedkeuring.

Hoop bovermelde is voldoende.

By voorbaat dank.

Groete

