# PROPOSED INFILL DEVELOPMENT: WORCESTER







# **PURPOSE:**

Urban infill is defined as new development that is sited on vacant or undeveloped land within an existing community, and that is enclosed by other types of development. The term "urban infill" itself implies that existing land is mostly built-out and what is being built is in effect "filling in" the gaps.

It is the purpose of this report to identify land for infill development and present a practical layout of single residential erven on such land for Council to subdivide, service and alienate in the prescribed manner of the MFMA.

#### **METHODOLOGY:**

Firstly, the Breede valley Municipal **Spatial Development Framework was used as the basis** for identifying land desirable for infill development and determining the manner of development.

Infill development adds residential capacity to towns without the unnecessary annexation or infringing on open space or other sensitive areas. Instead, it directs development to areas where it already exists. (This can be a cost-effective strategy for towns and developers.)

Land-parcels were thus identified which has access to basic services and existing urban infrastructure such as tarred roads, main water, sewerage and electricity supplies and which is located within predominant single residential neighbourhoods.

A survey of these land-parcels was done, prioritising for development:

- underutilized properties, identified by comparing the current use with surrounding properties and what could be supported by infrastructure and location
- · poorly maintained properties that might be redeveloped
- condition of public facilities, including street, sidewalk, and drainage problems that may need to be addressed in order to promote infill development in the area
- existing neighbourhood patterns of land use that may be factored into guidelines for compatibility of new infill development

**Development limitations for each infill parcel** were identified. (These may include: current zoning, soils, floodplain, wetlands, topography, and accessibility (roads and service infrastructure).

A **subdivision layout was done for each land-parcel**, keeping proposed erf sized within context of that of the surrounding neighbourhood, taking into cognisance the fact that these erven will need to be complimentary to the existing neighbourhoods and not facilitate barriers to development realisation in the form of *neighbourhood resistance to higher density* (necessary to recoup higher development costs).

This resistance can significantly delay a project, and therefore push up development costs, as the neighbours fight each successive development approval required for the project.

The input on the subdivision proposals was obtained from the internal electrical- and civil service departments in order to **attain the feasibility and costing** of the development proposals.

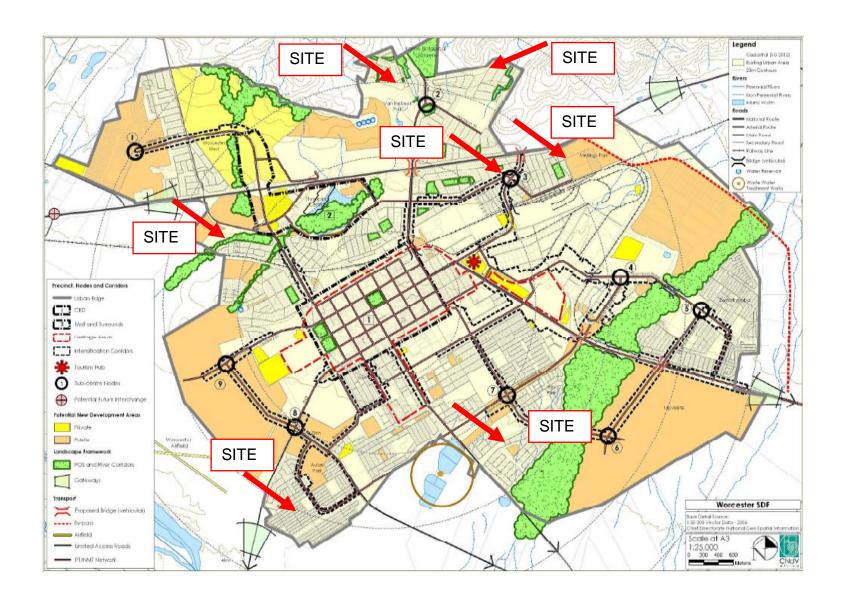
An **item will be brought to Council**, obtaining a formal sanction of the proposed infill projects, where after a timeframe for the acquisition of the relevant land use approvals will be drafted and LUPA processes will begin.

#### LAND IDENTIFICATION:

Five sites (A - D) were identified for immediate infill development.

Sites A to D were identified in the Spatial Development Framework (SDF) as either desirable for infill development, or located along an intensification corridor (which would also imply the prioritisation of the redevelopment of underutilised land).

Although Sites B and C are not identified for infill development in the SDF, the criteria which earmarked them for development is based on sound planning principles such as delineating the boundary of a residential neighbourhood with a sprawl of underutilised commonage (Site C) and the extension of a residential component in order to enclose and safeguard bulk service infrastructure in a manner not in conflict with surrounding land use patterns or the character of the existing built environment.



# **INFIL DEVELOPMENT PROPOSALS:**

Site A:

**Property description:** Erven 1, 6920 and 6921

**Development layout:** Linear erf layout along Dirkie Uys Street.

18 single residential erven (average size of 660m<sup>2</sup> per erf)

Access: All erven will have direct access from Dirkie Uys Street.

Service availability: Existing sewer- and water mains in Dirkie Uys Street

**Red flag issues:** EIA Regulations, 2014 Listed Activities

Government Notice No. R. 982 of 4 December 2014 -

Activity Number: 27

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –

- (i) the undertaking of linear activity; or
- (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

The abovementioned activities are hereinafter referred to as, "the listed activities".

Regulation 3.(2)

The investigation, assessment and communication of the potential impact of activities must follow the

procedure as prescribed in regulation 21, 22, 23 and 24 of the Environmental Impact Assessment

Regulations, 2014.

**Civil Engineering Comment:** Subject to Environmental Authorization, if required, the proposed development is in principle supported.

Total Service Cost – R1 428 981.34

Total Bulk Service Contributions - R965 684

Total Cost for Civil Services: R2 394 665,34 (incl Vat)

## **Electrical Engineering Comment:**

Service availability : Electrical services in close proximity

Electricity Red Flag Issues : No Capacity available: New Miniature substation to be installed

Additional Capacity required: 200-315 KVA

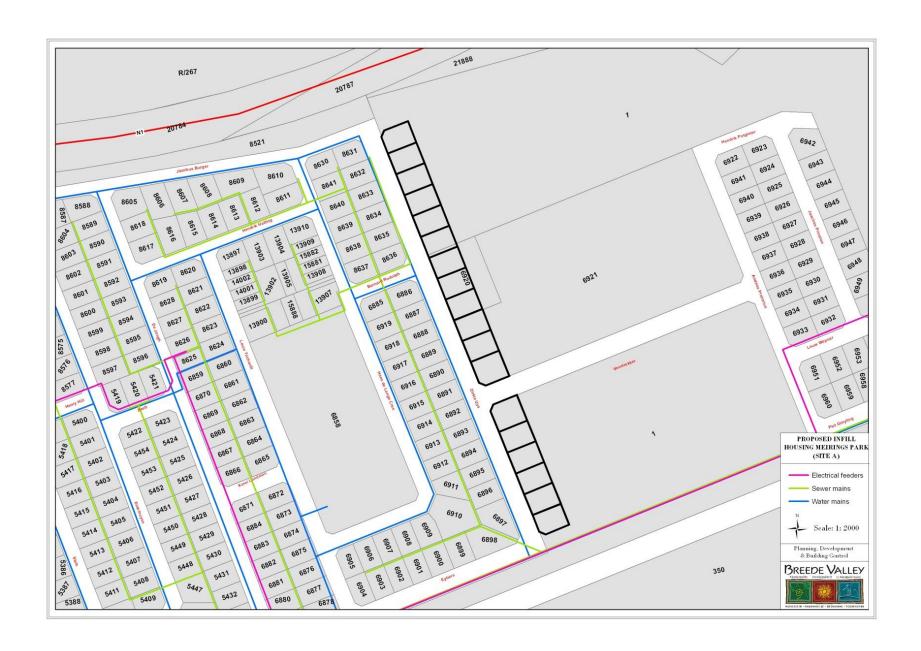
Estimated Cost :R 1 800 000 (within the 2016/2017 financial year )

# Conditions to Subdivision for site A

- 1. All cost for the new service required (includes network charges, and network upgrade to meet the required additional demand due to a lack of Capacity and infrastructure) will be for the applicants account. Please note: High cost implication.
- 2. Applicant responsible for all cost with regard to the total municipal infrastructure requirements.
- 3. Electrical bylaw "10. Right of admittance to inspect, test or do maintenance work" that clearly indicate our 24hour access to our metering.

- 4. Customer must be able to show to electricity department his valid certificate of compliance (coc) for the installation, before the commissioning of supply will commence.
- 5. Please note should any network extensions, maintenance or repairs on municipal infrastructure or equipment be required the municipality will not be responsible for any repairs or damages cause to the contributory value (fences, harden, pave, tar, concrete) added to the terrain.
- 6. The new regulations (Ref: 12/1/2/1 Circular 11/2012 Western Cape Government: Publish in GG 34586 NOTICE NUMBER 711, promote and set minimum requirements for energy efficiency for new buildings and extensions to existing buildings. Applicant to comply with energy efficiency requirements, as set by the municipality.





Site B:

Property description: Erf 550

**Development layout:** Linear erf layout along Carinus Street.

3 single residential erven (average sizes of between 1350m² and 1665m²)

Access: All erven will have direct access from Carinus Street.

Service availability: Existing sewer- and water mains in Carinus Street

**Red flag issues:** Steep slope across proposed erven.

Relocation of existing telecommunication services which run over portions 1 and 2.

EIA Regulations, 2014 Listed Activities

Government Notice No. R. 982 of 4 December 2014 -

Activity Number: 27

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –

(iii) the undertaking of linear activity; or

(iv) maintenance purposes undertaken in accordance with a maintenance management plan.

The abovementioned activities are hereinafter referred to as, "the listed activities".

Regulation 3.(2)

The investigation, assessment and communication of the potential impact of activities must follow the procedure as prescribed in regulation 21, 22, 23 and 24 of the Environmental Impact Assessment Regulations, 2014.

**Civil Engineering Comment:** Subject to Environmental Authorization, if required, the proposed development is in principle supported.

Total Service Cost - R1 008 180.89

Total Bulk Service Contributions - R290 346

Total Cost for Civil Services: R1 298 526.89 (incl Vat)

## **Electrical Engineering Comment:**

Service availability : Electrical services in close proximity

Electricity Red Flag Issues : None - No Additional Capacity required

Estimated Cost : R 250 000 ( witin the 2016/2017 financial year )

#### Conditions to Subdivision for site B

- 1. All cost for the new service required (includes network charges and network upgrade to meet the required additional demand due to a lack of Capacity and infrastructure and Street lighting) will be for the applicants account. Please note: High cost implication.
- 2. Applicant responsible for all cost with regard to the total municipal infrastructure requirements.
- 3. Electrical bylaw "10. Right of admittance to inspect, test or do maintenance work" that clearly indicate our 24hour access to our metering.
- 4. Customer must be able to show to electricity department his valid certificate of compliance (coc) for the installation, before the commissioning of supply will commence.

- 5. Please note should any network extensions, maintenance or repairs on municipal infrastructure or equipment be required the municipality will not be responsible for any repairs or damages cause to the contributory value (fences, harden, pave, tar, concrete) added to the terrain.
- 6. The new regulations (Ref: 12/1/2/1 Circular 11/2012 Western Cape Government: Publish in GG 34586 NOTICE NUMBER 711, promote and set minimum requirements for energy efficiency for new buildings and extensions to existing buildings. Applicant to comply with energy efficiency requirements, as set by the municipality.





Site C:

**Property description:** Erven 13674 and 13963

**Development layout:** Linear erf layout along Maitland Street.

29 single residential erven (average size of 400m² per erf)

Access: All erven will have direct access from Maitland Street.

Service availability: Existing sewer- and water mains in Maitland Street

Red flag issues: Investigate safety of storm water runoff ditch, north of proposed erven. No electrical capacity available (new

Miniature substation to be installed - additional capacity required is 200-315 KVA

Locality of Development in the direct vicinity of watercourse.

EIA Regulations, 2014 Listed Activities

Government Notice No. R. 982 of 4 December 2014 -

Activity Number: 12

The development of - (xii) infrastructure or structures with a physical footprint of 100 square metres or more;

Where such development occurs-

- (a) within a watercourse;
- (b) in front of a development setback; or
- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; -

excluding -

(dd) where such development occurs within an urban area; or

(ee) where such development occurs within existing roads or road reserves.

Activity Number: 27

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –

- (v) the undertaking of linear activity; or
- (vi) maintenance purposes undertaken in accordance with a maintenance management plan.

The abovementioned activities are hereinafter referred to as, "the listed activities".

Regulation 3.(2)

The investigation, assessment and communication of the potential impact of activities must follow the procedure as prescribed in regulation 21, 22, 23 and 24 of the Environmental Impact Assessment Regulations, 2014.

**Civil Engineering Comment:** 

Subject to Environmental Authorization, if required, the proposed development is in principle supported.

Total Service Cost - R1 745 893.58

Total Bulk Service Contributions - R969 465

Total Cost for Civil Services: R2 715 358.58 (incl Vat)

## **Electrical Engineering Comment:**

Service availability : Electrical services in close proximity

Electricity Red Flag Issues : No Capacity available: New Miniature substation to be installed

Additional Capacity required: 200-315 KVA

Estimated Cost : R 1 800 000 ( witin the 2016/2017 financial year )

Conditions to Subdivision for site C

- 1. All cost for the new service required (includes network charges and network upgrade to meet the required additional demand due to a lack of Capacity and infrastructure) will be for the applicants account. Please note: High cost implication.
- 2. Applicant responsible for all cost with regard to the total municipal infrastructure requirements.
- 3. Electrical bylaw "10. Right of admittance to inspect, test or do maintenance work" that clearly indicate our 24hour access to our metering.
- 4. Customer must be able to show to electricity department his valid certificate of compliance (coc) for the installation, before the commissioning of supply will commence.
- 5. Please note should any network extensions, maintenance or repairs on municipal infrastructure or equipment be required of the municipality will not be responsible for any repairs or damages cause to the contributory value (fences, harden, pave, tar, concrete) added to the terrain.
- 6. The new regulations (Ref: 12/1/2/1 Circular 11/2012 Western Cape Government: Publish in GG 34586 NOTICE NUMBER 711, promote and set minimum requirements for energy efficiency for new buildings and extensions to existing buildings. Applicant to comply with energy efficiency requirements, as set by the municipality.





Site D:

Property description: Erf 9992

**Development layout:** Cluster layout centred around an internal open space.

37 single residential erven (average size of 400m² per erf) and one Institutional erf (2608 m²)

**Access:** Erven will have access from a crescent, feeding the cluster layout from Hoosain Street.

Service availability: Existing sewer main north of Erf 9992 and water mains in Hoosain Street

**Red flag issues:** Closure of Public Open Space.

EIA Regulations, 2014 Listed Activities

Government Notice No. R. 982 of 4 December 2014 -

Activity Number: 27

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for –

(vii) the undertaking of linear activity; or

(viii) maintenance purposes undertaken in accordance with a maintenance management plan.

The abovementioned activities are hereinafter referred to as, "the listed activities".

Regulation 3.(2)

The investigation, assessment and communication of the potential impact of activities must follow the procedure as prescribed in regulation 21, 22, 23 and 24 of the Environmental Impact Assessment Regulations, 2014.

**Civil Engineering Comment:** Subject to Environmental Authorization, if required, the proposed development is in principle supported.

Total Service Cost - R3 094 416

Total Bulk Service Contributions - R1 236 903

Total Cost for Civil Services: R4 331 319 (incl Vat)

### **Electrical Engineering Comment:**

Service availability : Electrical services in close proximity

Electricity Red Flag Issues : No Capacity available: New Miniature substation to be installed

Additional Capacity required: 315 KVA

Estimated Cost : R 2 900 000 ( witin the 2016/2017 financial year )

Conditions to Subdivision for site D

- 1. All cost for the new service required (includes network charges and network upgrade to meet the required additional demand due to a lack of Capacity and infrastructure) will be for the applicants account. Please note: High cost implication.
- 2. Applicant responsible for all cost with regard to the total municipal infrastructure requirements.
- 3. Electrical bylaw "10. Right of admittance to inspect, test or do maintenance work" that clearly indicate our 24hour access to our metering.

- 4. Customer must be able to show to electricity department his valid certificate of compliance (coc) for the installation, before the commissioning of supply will commence.
- 5. Please note should any network extensions, maintenance or repairs on municipal infrastructure or equipment be required the municipality will not be responsible for any repairs or damages cause to the contributory value (fences, harden, pave, tar, concrete) added to the terrain.
- 6. The new regulations (Ref: 12/1/2/1 Circular 11/2012 Western Cape Government: Publish in GG 34586 NOTICE NUMBER 711, promote and set minimum requirements for energy efficiency for new buildings and extensions to existing buildings. Applicant to comply with energy efficiency requirements, as set by the municipality.





# CONCLUSION:

Infill development promises to contribute to the solution of the myriad problems associated with sprawling land use patterns. It can support increased transportation choices, a more efficient use of land and infrastructure, more varied and affordable housing types, savings for local government budgets, reduced pollution, improved economic health and improved quality of community life.

A successful infill development program will however require more than a narrow focus on producing houses to fill individual lots.

Instead, a cooperative partnership with the broader focus of completing the existing community fabric is required. A variety of strategies have been successfully employed by local communities to make infill development happen.

The package of strategies should both encourage developers and raise the desirability of infill development in the eyes of existing and potential residents.