## Need and desirability

#### 1. Need for a Batching Plant

The demand for a concrete batching plant in the Macassar vicinity and its location on Erf 4886 Macassar arises from the following:

- (i) The Khayelitsha Stellenbosch Helderberg Basin corridors focussing on Faure, Macassar and Paardevlei insofar current and future urban development, with the Macassar sand mines (construction/ concrete sand) and Erf 4886 Macassar being located within such development focus.
- (ii) Batching plants requiring close proximity to users given the following:
  - Need to minimise delivery turn-around time in order to reduce transport costs and vehicle use per trip, especially in mass-housing delivery projects.
  - Need to reduce impact of concrete mixer-trucks over long distances, especially through built-up areas
- (iii) While batching plants are usually located in industrial areas, either permanently (e.g. within an urban use) or on a temporary basis (e.g. to serve a dynamic growth axis), a lack of such industrial area in close proximity to the Macassar sand mines and the future core development area, the Macassar rural area (e.g. Erf 4886) is well suited for the location of such plants given their limited and temporary footprints and their operation resulting in minimal pollution given the recycling of all liquid and solid waste generated, as well as dust attenuation.

#### 2. Desirability

There is compelling evidence as to the desirability of the concrete batching plant proposed, as presented below.

#### 2.1 Economic Impact

The necessity of, and demand for construction concrete (ready-mix concrete) by the construction industry for housing and its support infrastructure and land uses currently underway (e.g. Croyden, Faure, Macassar) and envisaged for the greater Khayelitsha, Faure, Paardevlei node is a given reality. This current temporary land use departure application falls within the footprint of such node, having the following advantages:

- Transport cost-saving for both the delivery of sand to the plant from nearby Macassar Dune sand mines and the delivery of mixed concrete to the envisaged development, also reducing road user risk given reduction of heavy traffic passing through existing built-up areas
- Value-adding opportunities through local mineral (i.e. sand) beneficiation (mixed-concrete), job opportunities (especially in the construction value chain) and local transport sector stimulation

 Creating sustainable economic multipliers in the local economy given avoidance of higher import product (readymix concrete) cost impacts

#### 2.2 Capital Investment

While the establishment and production cost of the batching plant will contribute directly to urban infrastructure, the latent benefit of the resource investment (i.e. construction sand, mixed concrete) will be realized well beyond the life-cycle of the sand mines and the concrete batch plant through the benefits to be derived from the urban environment created.

# 2.3 Social Impact

The social impact on the nearby Sandvlei Smallholdings will be negligible given the distance from such holdings as well as the limited workforce to be employed at the batching plant, none of whom will reside on the site. Furthermore, noise and dust generation mitigation measures will be in place. Positive social benefit will be realized through the role of the batching plant in unlocking the latent benefit and synergy vested in the mineral resource (sand, aggregate) to create a socio-economic benefit through integrated urban development.

## 2.4 Compatibility with Surrounding Uses

Land use south of Macassar Road in the vicinity of the plant includes either existing sand mines, previously mined areas and utility services (Zandvleit Waste Water Treatment Works), all compatible with the proposed use. However, the impact on the Sandvlei Smallholdings to the north, especially those abutting Macassar Road and being some 300m distant will require mitigation measures for dust prevention/ suppression and noise abatement, as well as the covering of truck sand-loads to prevent windblown sand en-route to the plant. Subsequent to the departure period (5-years) the disturbed footprint will be reinstated to pre-batch plant condition.

#### 2.5 Impact on Safety, Health and Well-being of the Surrounding Community

Despite the relative distance to the Sandvlei Smallholdings north of Macassar Road, the following mitigation measures will be put in place:

- Management of all waste (cement water run-off, domestic and industrial waste disposal, hydrocarbon leakage/ spillage (fuel, oil)) and stormwater management to prevent any contamination of both surface and groundwater.
- Dust mitigation, including sprinklers at workstations and surface wetting in movement areas

- Traffic management through bell-mouth construction at the Macassar Road intersection, including safety signage, as well as truck driver education re safety and speed management.
- Hours of operation being restricted to 07h00 18h00 week-days

## 2.6 Impact on Biophysical Environment

"Overall, the impact of the proposed batching plant on Cape Flats Dune Strandveld and the CBA network is expected to be of low to medium significance. The site is located in degraded strandveld, with a large part heavily infested with invasive acacias and devoid of significant strandveld elements. No known Species of Conservation Concern occur on or in close proximity to the site. The site also forms part of a CBA corridor between the coastal strip and the Kuils River CBA to the north. The corridor is also severely degraded/eroded by sand mining activities, the presence of the Zandvliet WWTW and alien infestation". (Mark Berry Environmental Consultant, 2019).