



OUR REF: QUB MAN

13th May 2019

Department of Planning Lands and Heritage
Gordon Stephenson House
2/140 William Street
Perth WA 6000

ATTENTION: Damien Martin

Dear Damien,

RobertsDay
planning·design·place

RE: IMPROVEMENT PLAN 47 - MANDOGALUP

We refer to our meetings on the 25th February and 13th May 2019 to discuss the future planning of Mandogalup, particularly the abovementioned and recently gazetted Improvement Plan. As requested we are pleased to submit the following background information to feed into the Improvement Plan process as part of the wider stakeholder engagement process.

As outlined in the declared Improvement Plan, Mandogalup has a long history of uncertainty primarily due to the operation of the Alcoa Residual Disposal Area's (RDA) and implied amenity impacts. In 2017 the EPA issued s16(e) advice defining four zones of consideration in relation to dust activity - Area A seen to have no impact and subsequently partially rezoned to Urban and Areas B, C and D subject of the now declared Improvement Plan 47.

Subsequent to the 2017 EPA advice, in January 2019 DWER released "Mapping dust plumes at Mandogalup using a LiDAR" to inform the Improvement Plan process:

"The study findings were that:

- *Major contributors to overall dust levels in the area include the Alcoa RDA, sand and other quarries, roads, truck movements, agricultural activities and industrial activity in the Kwinana industrial area;*
- *The levels of PM10 dust at the Central and Norkett sites over the study period seem to be somewhat comparable to other locations in Perth and semi-rural areas in the wider Perth metropolitan area; and*
- *Amenity impacts were unable to be assessed, except to note that TSP (larger particles) levels seem to decrease with distance from the RDA.*

*This analysis has not examined any specific meteorological conditions that give rise to dust plumes from industry operations. However, as a general statement, it can be said that during the study period, industrial and agricultural activity contributed to elevated dust levels in Mandogalup **but did not cause an exceedance of the NEPM standard for PM10.***

*TSP concentrations exceeded the EPR TSP limit of 1000 $\mu\text{g}/\text{m}^3$ averaged over 15 minutes at two locations on 17 December 2017. Directional and pictorial analysis indicates that it is **unlikely the RDA was a major source of the exceedance.** The applicable EPR standard for TSP of 90 $\mu\text{g}/\text{m}^3$ averaged over 24 hours was not exceeded."*

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A detailed review of the study has been undertaken by our project environmental consultants Strategen (refer Attached Report) who have summarised the key land use implications as follows:

- EPA designation of low likelihood of amenity impacts in Area is confirmed;
- Amenity impacts in Area B are confirmed as unlikely;
- Air quality in Areas C and D is compliant with the NEPM air quality goal for PM10;
- A low potential for amenity impacts was demonstrated in Areas C and Area D, with the majority of impacts attributed to local or unknown sources, but not to RDA and quarrying dust emissions; and
- Air quality in Area D is compliant with the NEPM air quality goal for PM10.

On that basis it is our view that the orderly and proper planning of the locality determined through the Improvement Plan process should be guided by:

- providing a clear and logical district level separation between Industrial and Urban zones; and
- ensuring the resulting Urban zone is able to sustain logical and coherent neighbourhoods consistent with the policy principles of Liveable Neighbourhoods.

DISTRICT PLANNING

Qube has previously made submissions to government in relation to district structure planning through submissions on the proposed 'Perth and Perth at 3.5 million' Framework Plan and the 'Westport-Preparing for Strategy'. These submissions carried the following rationale for the future land use of the area (refer Attachment 1):

- notwithstanding the lack of evidence of material dust impact, adopting a nominal buffer to RDA H for the term of its operation;
- using the future Hammond Road South alignment as a clear and unambiguous short term boundary line between the future Urban to the east and Industrial to the west;
- long term retention of the existing Mandogalup community; and
- adopting the green corridor between Beeliar Parklands in the north and the Spectacles in the South as the long term transition from Urban to Industrial zones.

With the benefit of the January 2019 EPA findings, this solution clearly balances the operational sensitivities of Alcoa RDA H with the logical definition of existing and approved communities within Mandogalup. It is also consistent with District Planning going back to the 2007 WAPC Jandakot Structure Plan.

NEIGHBOURHOOD DESIGN

Liveable Neighbourhoods, 2009 is the WAPC's key policy guiding *'the design and assessment of structure plans (regional, district and local) and subdivision for new urban (predominantly residential) areas.'* An overall Concept Plan for the precinct demonstrates how the proposed Urban uses would form a logical extension of the approved Urban development in the precinct and required alignment with the policy Elements of Liveable Neighbourhoods as follows (refer Attachment 2):

- **Element 1 - Community Design:** creation of two distinct Neighbourhoods, defined by a neighbourhood centre and offering a diversity of recreational, education and other daily needs within a convenient 5-10 minute walk and easy cycle distance.
- **Element 2 - Movement Network:** directly leverages off major regional road and passenger rail infrastructure. The larger critical mass of development can facilitate more regular bus services to nearby rail stations at Kwinana and Aubin Grove and together with the existing direct regional bike path connections, further supporting the Governments' MetroNet agenda. A secondary cycle network via neighbourhood connector streets and

paths within the transmission easement will also provide safe and convenient cycle access to the regional path, as well as within and between neighbourhoods.

- **Element 3 - Lot Layout:** The expansion of the Mandogalup residential neighbourhood would increase the potential number of houses to in excess of 3000 homes. With the increase in scale and the additional land, the precinct can be delivered as a true masterplanned community, where the range of housing is enhanced by the network of additional community facilities and amenities the precinct can attract.
- **Element 4 - Public Parkland:** The additional urban land enables the completion of a comprehensive network of open space corridors and recreational trails that provide a distinctive setting for the residential community. It also provides access to a greater variety of open spaces, a more comprehensive restoration of the Peel Main Drain into a living stream and tree retention opportunities across the precinct.
- **Element 5 - Urban Water Management:** was already established over the entire precinct as part of the District Water Management Plan undertaken consistent with planning in the Jandakot Structure Plan.
- **Element 6 - Utilities:** Can be extended in accordance with state and local government requirements.
- **Element 7 - Activity Centres and employment:** The contribution of additional population in Mandogalup can only help boost the existing Secondary Centres at Kwinana and Cockburn, but also the proposed District Centre to the south on Anketell Road, which currently has a relatively constrained catchment limited to the tight Kwinana Freeway corridor. The proposal would also significantly enhance the provision of neighbourhood retail facilities within Mandogalup, providing the opportunity for two Neighbourhood Centres', which could support a small supermarket, convenience retail and local services. The precinct is very well connected to major employment opportunities across the Kwinana Industrial Area.
- **Element 8 - Schools:** The additional Urban land creates the opportunity for a second primary school, again co-located with active playing fields and neighbourhood centre. The proposed second school is located on a neighbourhood connector and living stream, providing excellent bus, cycle and walking access.

In conclusion, Urban zoning of the subject precinct represents a logical approach to district land use and neighbourhood planning in accordance with established WAPC policy. We respectfully request that this information be noted and provided to the project team responsible for preparing the Improvement Plan and would welcome any opportunity to meet and provide further information. Please contact the undersigned if you have any questions on 9213 7300.

Yours sincerely,

ROBERTSDAY



DEON WHITE
PARTNER

"Mandogalup Dust Monitoring - Review of DWER Lidar Study Report - Strategen Environmental, 19th April 2019"

Attachment 1: District Plan

Attachment 2: Mandogalup Precinct Plan