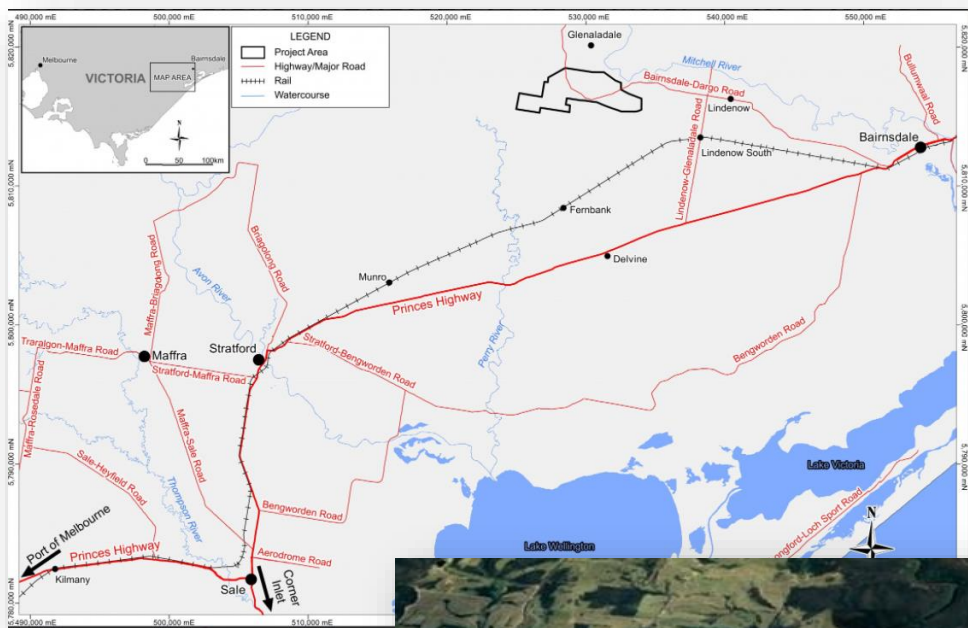


The proposed siting – doesn't make sense.....

It is proposed to develop a large, 170mtpa open cut mineral sands sited:

- In a catchment area of the Mitchell and Perry rivers
- Close to and elevated some 80mtrs above the Mitchell River valley – a significant, 20km long, fertile horticultural zone; **a 4000 hectare zone which is excluded from mining.**
- The horticultural zone is highly vulnerable to mine emissions and competing water use.



....unless it is a 'zero release' mine site. OFFICIAL

The EES scope could be incomplete and/or preliminary

- EES is provided by the Proponent
- The EES technical work is a separated part of (what should be) the complete technical and economic work needed to substantiate the project/business case – the feasibility study*
- Indications throughout the EES inquiry that feasibility work done by the Proponent to date is preliminary
- Links between the EES and the larger (expected) techno-economic body of study work are not available e.g. process flow sheets, mass balances, mine plans
- No ‘key issues analysis’; no project risk analysis (e.g. risk of early business failure and remedy)

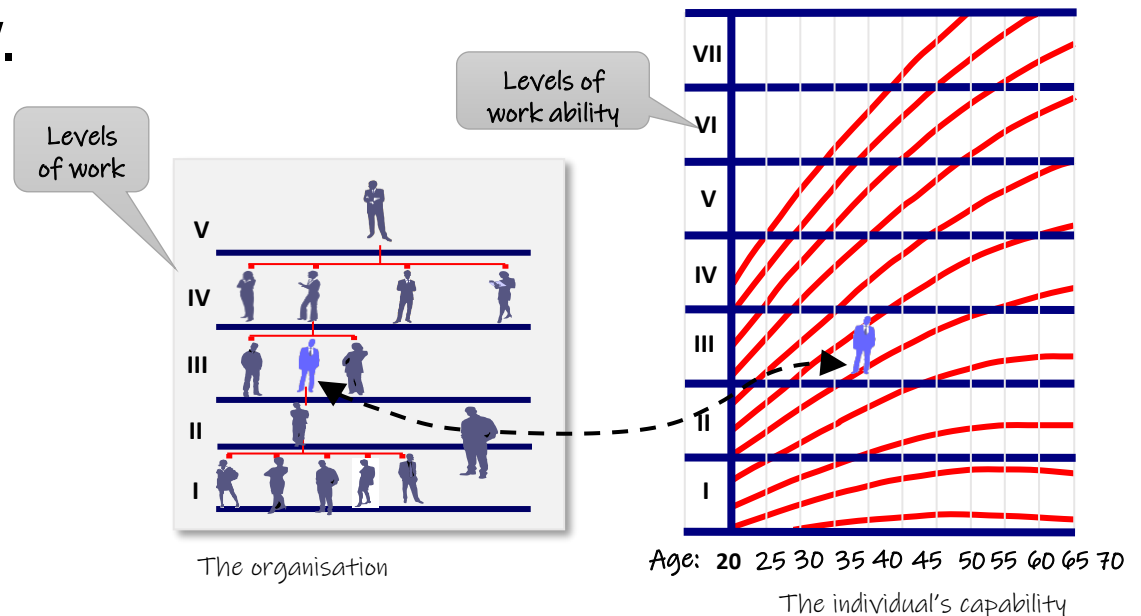
Review EES as part of the final feasibility study – with independent expert audit.

*Likely to be a series of studies leading up to a final feasibility study

Uncertainty and 'adaptive management'

- 'Adaptive management' as variously described in the proceedings (incl EGSC's Closing Submission) best characterises what might be expected as part of good managerial practice.
- Techno-economic evaluation of mining prospect is complex; commonly one or two steps more complex than the work of running the operating mine.
- Complex problems must not - and need not - be deferred, to be addressed post-approval

Use *Stratified Systems Theory*** to understand and manage work/problem complexity.



**Jaques E (1976) *A General Theory of Bureaucracy*