

RE: Minnippi Community Links Development Application No.DRS/USE/HO4-900398

I object to any approval being granted to the above mentioned development application on the grounds of the environmental damage the bulldozing of 835 trees and accompanying groundcover, and disturbance that cut and fill earthworks of Acid Sulfate Soils/Potential Acid Sulfate Soils (ASS/PASS) for a residential development and golf course will do to Bulimba and Seven Hill Creeks, and surrounding environmentally sensitive habitat.

- The low-lying area of the site, below 5m AHD, with some areas along the edges of the drains and billabongs as low as 1.0-1.5m AHD, form the flood plain of Bulimba Creek, and constitutes more than 50% of the total site, or around 63 ha.
- Reprofilling with cuts of up to 1.0m deep are proposed in many areas of the acid sulfate floodplains and placement of up to 1.5m of fill in other low lying areas of conservation grade wetlands; and proposed construction and/or deepening of water features in the central and eastern areas will result deeper local excavations of up to about 2.5 metres in depth. Four additional artificial water features are to be excavated. Saline water is to be transferred into the largest lake.
- There has been no acid sulfate soil testing beyond development. No concern has been demonstrated for adjoining ecologically sensitive habitat, Seven Hills Creek or Bulimba Creek if groundwater levels are lowered. Ground water levels have been modelled pre-development. What will the groundwater profile be post-development, and will on-going testing on adjacent ecologically sensitive habitat be carried out?
- EC and TDS levels in the soils indicate generally low soil salinity across the site. If groundwater levels are lowered, will salt water from tidal Bulimba Creek be drawn into Seven Hills Creek & through the alluvial soils in the flood plains of Bulimba Creek and Seven Hills Creek, and through the surrounding ecologically important habitats?
- What will be the effects of lowered water table under environmentally sensitive adjoining areas – oxygen penetration into potentially acid sulfate soils, influx of salt water, and changing water regime for remaining habitat vegetation?
- What will be the effect on Seven Hills Creek, Bulimba Creek and remaining ecologically sensitive plant communities, which are currently heavily influenced by storm water runoff, when storm water is diverted to the lakes for irrigating the golf course? Will the remaining trees end up like the River Red gums on the Murray River, which are literally dying for a drink of fresh water?
- Surface soils are generally poor quality and may limit the choice of plant species used in revegetation. Acid tolerant, and salt tolerant species may be required. Will these plants meet the requirements of the squirrel glider population? Soil tests have shown that in some instances, surface soil pH is as low as 3.5. Groundwater pH at the site ranges from 4.0 to 5.5. Generation of any additional acid by disturbing potential acid sulfate soils will result in a further drop of groundwater pH.
- Drawdown effects associated with the proposed water features were modeled for the “worst case scenario” of lowest estimated stored water depth at 0.75-1.0m, simulating water levels in time of drought. Depression of the water table of the order of -0.4m under the main two water features grading to -0.25m under the landfill area and closer to Bulimba Creek can occur. A drawdown of 0.4m would result in oxidation of the upper 0.1-0.15m of the underlying “high level” PASS layer present over much of the central area of the site. This would result in oxidation of up to a further 75,000 cubic metres of PASS material which could generate up to 75kg of sulfuric acid per cubic metre, or over 5 Mega-litres. Any depression in the water table is therefore not desirable.
- Most tests for acid sulfate soils/potential acid sulfate soils ASS/PASS exceed the QASSIT “Action Criteria” for large-scale disturbances. PASS levels were generally high, up to 25 times the QASSIT “Action Criteria”.
- Low to moderate levels of ASS/PASS will require treatment at 10-15 kg of lime per cubic metre, and high levels of ASS/PASS will require treatment at 35-200 kg of lime per cubic metre. 3,000tonnes of lime will be required in an attempt to mitigate acidity. Ongoing treatment will be required for 20 years.

Leave the Acid Sulfate Soil/Potential Acid Sulfate Soil undisturbed in the flood plain; don't bulldoze 835 trees for houses and a golf course. Instead, protect the existing environmentally sensitive habitat and carefully rehabilitate the area that the BCC has allowed to degrade over the past 37 years.

NAME.....SIGNATURE.....

ADDRESS.....