

FRESHWATER IMPACT ASSESSMENT

PROPOSED DEVELOPMENT FRAMEWORK FOR STIKLAND SOUTH HOSPITAL SITE, ERF 6300



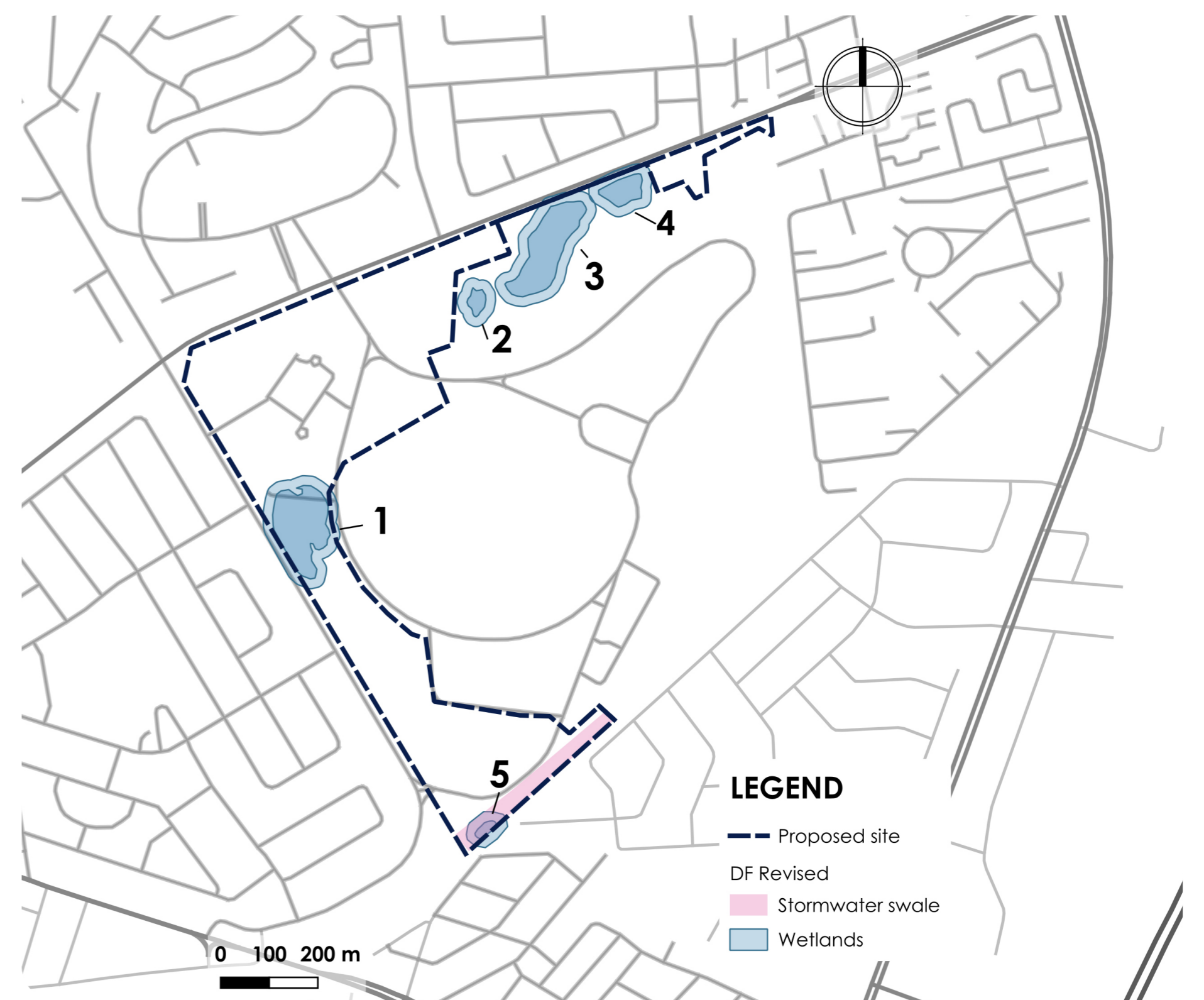
A Freshwater Impact Assessment was compiled by EnviroSwift Western Cape. The freshwater specialist identified five wetlands on site.



A risk assessment matrix was used to determine the level of risk associated with the proposed development. It was determined that the wetlands are all **relatively similar in terms of their Ecological Importance and Significance (low/marginal)**.



The wetlands differ in terms of their **Present Ecological State (PES)** with wetlands 2 & 3 being the least impacted, and having a PES of Category C, wetland 1 having a PES of Category D and wetlands 4 & 5 being the most impacted with a PES of Category E (see figure adjacent).



IMPACTS AND RECOMMENDATIONS

Negative Impacts

Partial infilling of Wetland 5 will result in loss of habitat. However, this loss will not be of high significance due to its present ecological state. Construction and operation activities will cause alteration of natural flow regime, increased erosion and sedimentation, and water quality impairment.

Positive Impacts

Retention of wetlands 1, 2, 3 & 4, with wetland 1 being retained as an open space in the development area, as well as the improvement of the ecological state of the retained wetlands.

MITIGATION MEASURES

- Planting of suitable wetland plants and establishment of a 20m wide buffer surrounding each wetland.
- Prohibit human and pet access to the retained wetlands and the dumping of any form of waste into these areas.
- Ensure no wetlands are mowed in the future to encourage biota gains.
- Additional mitigation measures can be found in the Environmental Management Programme.