

RECOMMENDED EXEMPTION FROM HAVING TO CONDUCT AN ARCHAEOLOGICAL STUDY: THE PROPOSED UPGRADE OF THE FISHWATER FLATS WASTE WATER TREATMENT WORKS NELSON MANDELA BAY MUNICIPALITY, PORT ELIZABETH, EASTERN CAPE

**Jonathan Kaplan
Agency for Cultural Resource Management
5 Stuart Road
Rondebosch
7700
acrm@wcaccess.co.za**

December, 2011

1. Introduction & brief

The Nelson Mandela Bay Municipality has proposed the upgrading and modernization of the existing, but ageing Fishwater Flats Waste Water Treatment Works (WWTW) in Port Elizabeth in the Eastern Cape (Figures 1 & 2).

The 30-year old, Freshwater Flats WWTW is situated on the southern bank of the Swartkops River, directly to the north of the N2, and about 15 kms north east of Port Elizabeth within an area that is quite heavily industrialized and degraded.

The proposed development entails the upgrading of existing facilities and buildings, and the construction of new facilities and buildings (Figures 3 & 4).

It is important to note that the entire development will take place within the boundaries and footprint area of the existing works.

Coastal and Environmental Services (CES) in Grahamstown requested the Agency for Cultural Resource Management (ACRM) to conduct a baseline study of the proposed development in order to assess the possible impact on archaeological resources. ACRM advised CES that the probability of locating important archaeological heritage in the proposed footprint area was likely to be very low, given the already degraded nature of the affected site. Instead, ACRM offered to apply for exemption from having to conduct an Archaeological Impact Assessment (AIA) of the proposed project.

2. Archaeological background

According to Dr Johan Binneman (pers. comm. December, 2011) of the Albany Museum in Grahamstown, no archaeological remains are known to occur in the surrounding study area, but Rudner (1969) did record Later Stone Age (LSA) shell middens near the mouth of the Swartkops River/Estuary about 2 kms to the south east. Scatters of shellfish and some stone tools have also been documented at Bluewater Bay north of the river (Kaplan 1993).

It is worth mentioning that much more work has been done further to the north, in the Coega Industrial Development Zone (IDZ), where numerous archaeological studies have been undertaken as part of the IDZ EIA process (Binneman 1996, 2006, 2004, 1999; Binneman and Webley 1996; Binneman & Webley 1997, 1996; Kaplan 2007, 2008; Webley 2006, 2007; Webley & Guess 2007; van Schalkwyk pers. comm. 2007).

One of South Africa's most important Early Stone Age (ESA) finds and excavations was conducted a few kilometres west of Zone 13 at Coega, at Amanzi Springs (Deacon 1970). In a series of spring deposits a large number of stone tools were found in situ, to a depth of about 3-4 metres. Remarkably, wood and seed material preserved in the spring deposits, possibly dating to between 250 000 to 800 000 years old, were also recovered at the time.

3. Conclusion

It is the archaeologist's professional opinion, that the proposed upgrading of the existing Fishwater Flats Waste Water Treatment Works in Port Elizabeth is not considered to pose a serious threat to the archaeological heritage for the following reasons:

- The proposed upgrade will take place entirely within the footprint area of the existing works, which constitutes a severely transformed landscape (refer to Figure 3).
- The surrounding area is fairly heavily industrialized.

4. Recommendations

The following recommendations are made:

- The project is deemed to be viable.
- An AIA is not required, since the probability of locating any important archaeological remains is likely to be extremely low.
- In the unlikely event of any unmarked human burials being uncovered during the proposed activities, these must immediately be reported to the archaeologist (Jonathan Kaplan 082 321 0172), or the South Africa Heritage Resources Agency (Att: Ms Mariagrazia Galimberti 021 462 4502).

5. References

Binneman, J. 2006. Phase 1 Archaeological Heritage Impact Assessment on portion 221/1 of the farm Limehurst in Zone 13 of the Coega Industrial Development Zone (IDZ) for the construction of a peaking power plant. Report prepared for PBA International (SA). Albany Museum Grahamstown.

Binneman, J. 2004. Report on Phase 1 survey of visible archaeological features at Schelmshoek and Hougham Park. Report prepared for PPC. Albany Museum Grahamstown.

Binneman, J. 1999. Coega Industrial Development Zone: Cultural Sensitivity Phase 2 Report. Report prepared for Coega IDZ. Albany Museum Grahamstown.

Binneman, J. and Webley, L. 1997. Coega Industrial Development Zone: Cultural sensitivity. Report prepared for African Environmental Solutions

Deacon, H.J. 1970. The Acheulean occupation at Amanzi Springs, Uitenhage district, Cape Province. *Annals of the Cape Provincial Museums* 6:141-169.

Kaplan, J. 2008. Phase 1 Archaeological Impact Assessment the proposed Kgalagadi Manganese Smelter in the Coega Industrial Development Zone Port Elizabeth. Report prepared for Coastal Environmental Services. Agency for Cultural Resource Management.

Kaplan, J. 2007. Phase 1 Archaeological Impact Assessment the proposed Coega integrated liquified natural gas (LNG) to power project (CIP) Coega Industrial Development Zone Port Elizabeth. Report prepared for CSIR Stellenbosch. Agency for Cultural Resource Management

Kaplan, J. 1993. The state of archaeological information in the coastal zone from the Orange River to Ponta do Ouro. Report prepared for the Department of Environmental Affairs and Tourism. Agency for Cultural Resource Management.

Rudner, J. 1968. Strandloper pottery from South and South West Africa. *Annals of the South African Museum* 49(2). Cape Town

Webley, L. 2007. Phase 1 Heritage Impact Assessment of the proposed Afro-Asia Recycling Facility at the Coega Industrial Development Area, Port Elizabeth. Report prepared for SRK Consulting (Port Elizabeth). Albany Museum Grahamstown.

Webley, L. 2006. Phase 1 Heritage Impact Assessment of the proposed biomass plant in Zone 3, Coega Port Elizabeth. Report prepared for SRK Consulting. Albany Museum Grahamstown.

Webley, L. and Gess, R. 2007. Phase 1 Heritage Impact Assessment Straits Chemicals proposed Chlor-Alkali and Salt Plant Coega Eastern Cape Province. Report prepared for SRK Consulting. Albany Museum Grahamstown

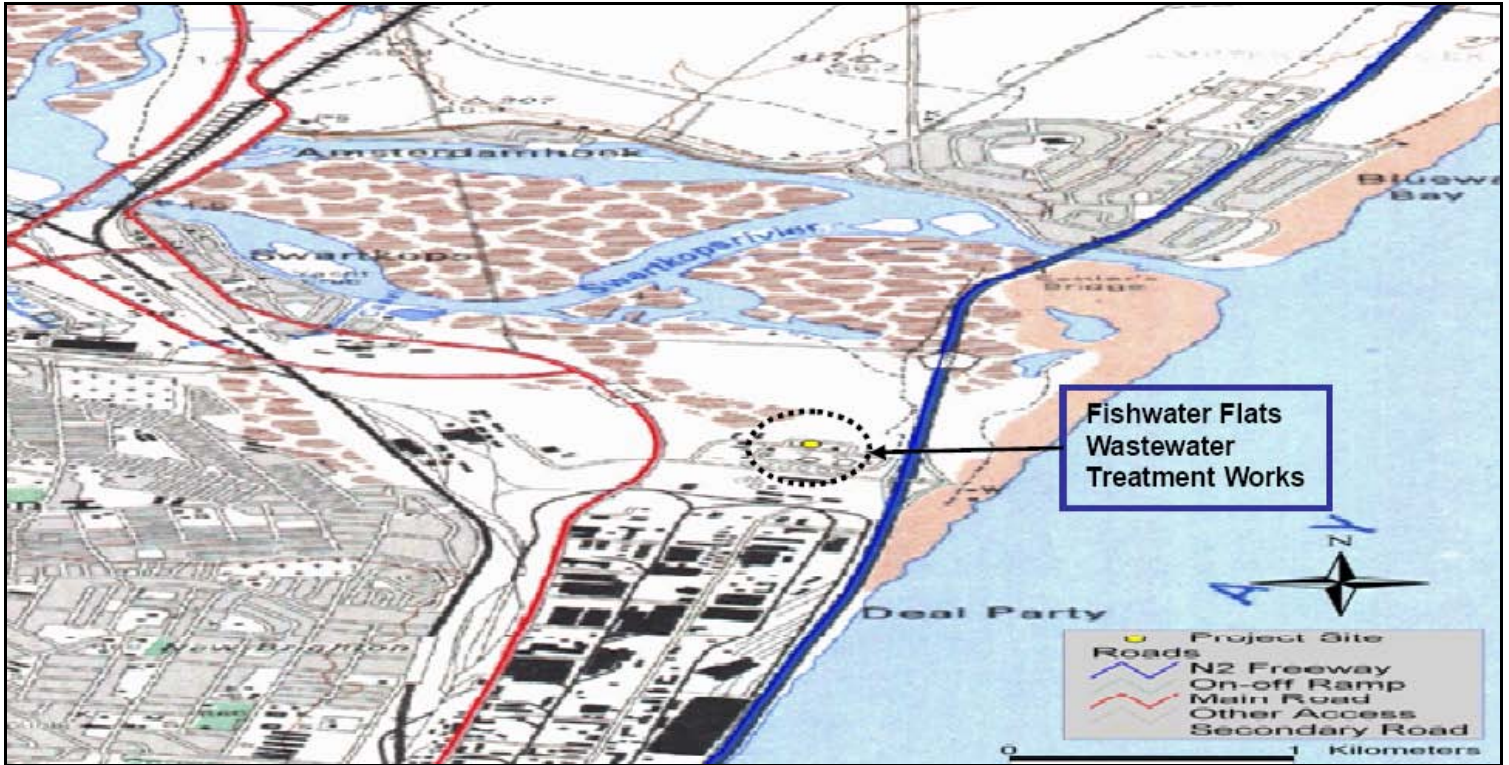


Figure 1. Locality Map indicating the existing Fishwater Flats Waste Water Treatment Works

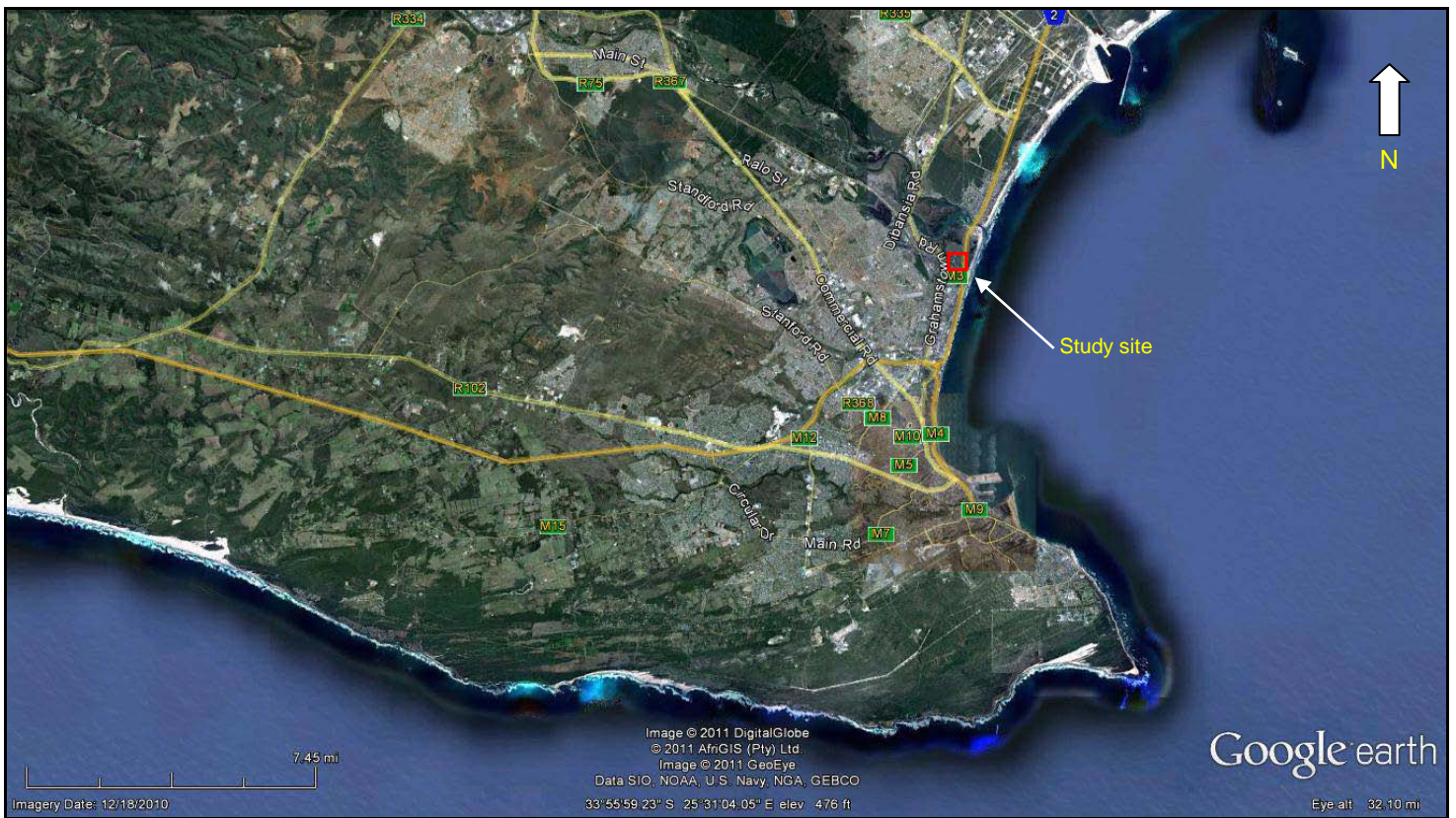


Figure 2. Google Earth satellite photograph illustrating the study site in a macro context

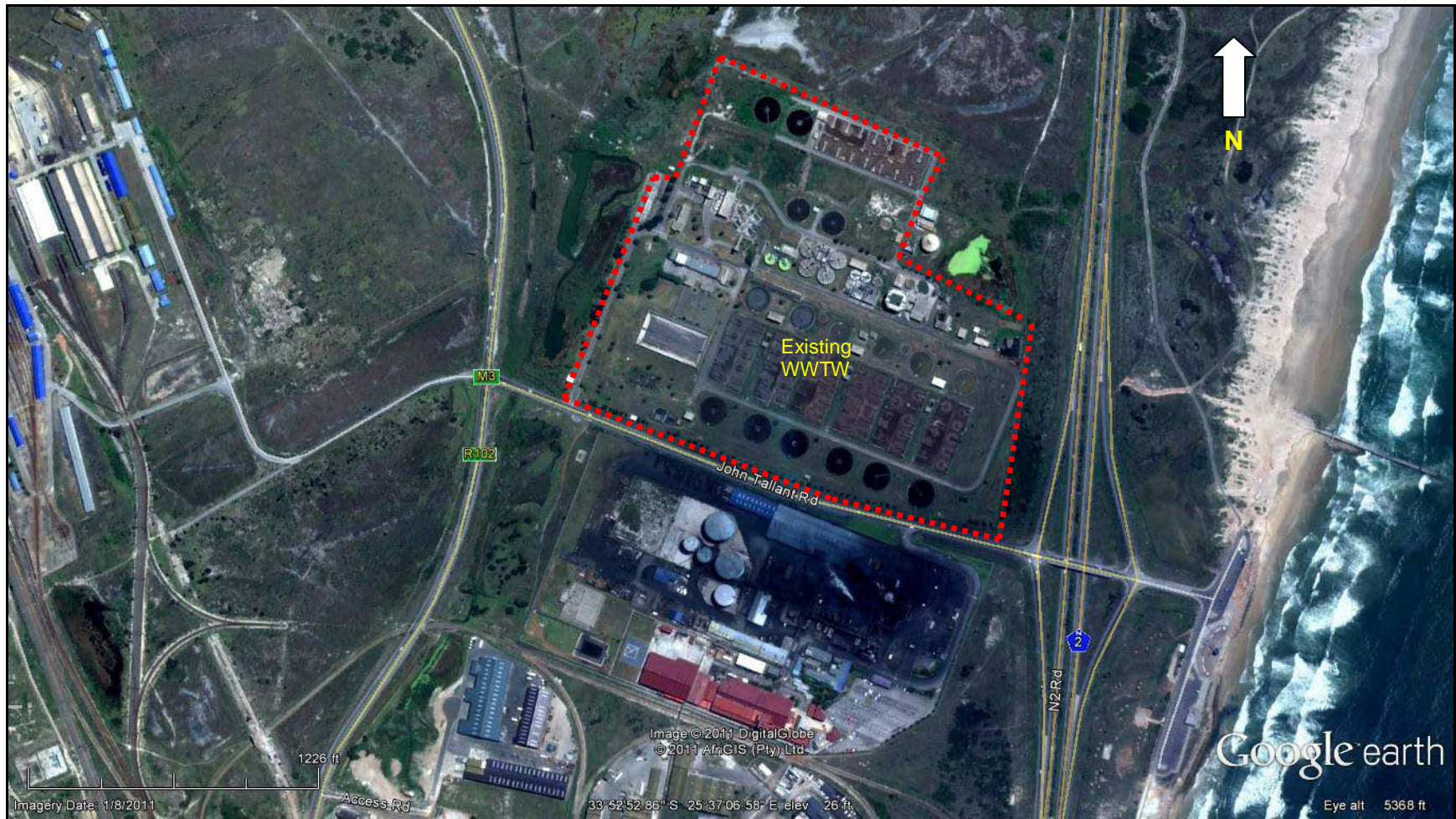


Figure 3. Google aerial photograph of the existing Fishwater Flats WWTW. Note that the proposed upgrade of the facility will take place entirely within the existing footprint area.

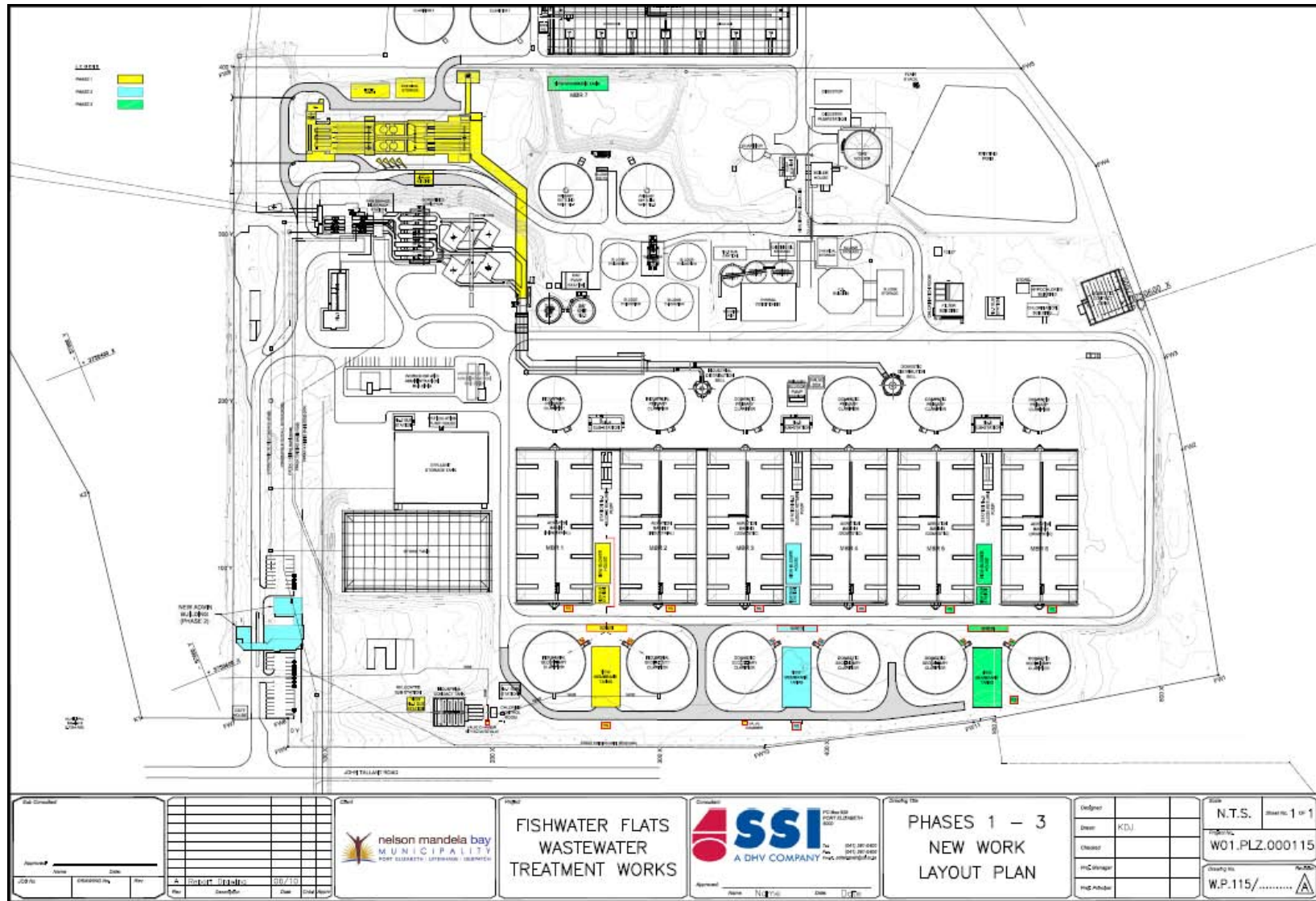


Figure 4. Layout plan of the proposed upgrade of the Freshwater Flats Waste Water Treatment Works

