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1 Background

6ty° engaged ES&D to conduct an environmental site assessment (preliminary site investigation – PSI) at 215 Wellington Street Launceston (the Site). The proposed development of the site is for a hospital development. The development will include a three-level building with multiple theatres, beds, and other facilities that are included in the development application.

This scope of the PSI is detailed below.

2 Scope of Works

Our scope of works included the following:

1. Complete a full site history search for the subject site identifying any past land use activities that have occurred on the site and off the site that are likely to have impacted the soil or groundwater on the site.
2. Prepare a Sampling Plan for the site and review the plan based on the findings of the site history search.
3. Prepare a Preliminary Site Investigation (PSI) or an Environmental Site Assessment (ESA) report in accordance with the NEPASC. Make recommendations for the suitability of the site for the proposed future use. This is based on an NEPM-based risk assessment.

3 Assessment Criteria

The assessment is required to be completed to address the *Tasmanian Planning Scheme - Contaminated Land Code*.

The following screening levels have been considered in the assessment: Health Screening Levels (HSLs), Health Investigation Levels (HILs), Ecological Investigation Levels (EILs), Ecological Screening Levels (ESLs) and Groundwater Investigation Levels (GILs) (if applicable) provided in the *National Environmental Protection (Assessment of Site Contamination) Measure 1999*, as amended April 11, 2013 (NEPASC). NEPASC commercial/industrial limits have been used.



3.1.1 Background Information Sources

- Land Information System Tasmania (LISTMap - www.thelist.tas.gov.au)
- DPIPWE Groundwater Information Portal (<http://wrt.tas.gov.au/groundwater-info>)
- Tasmanian Planning Scheme
- Google Earth Pro
- Mineral Resources Tasmania (MRT) Digital Geological Atlas (http://www.mrt.tas.gov.au/products/geoscience_maps/digital_geological_atlas_125_00_scale_series)
- *Nature Conservation Act 1999* (<https://www.legislation.tas.gov.au/view/html/inforce/current/act-2002-063>).

4 Site Details

4.1 Ownership and Location

The property is privately owned, and the details are included in Table 1 and Figure 1. The property is zoned *Commercial*.

Table 1: Site details

Street Address	Property ID	Title Reference
215 Wellington Street South Launceston TAS 7250	7616342	42371/1

4.2 Surrounding Land Use

The surrounding area has multiple uses and zonings, including commercial, local business and inner residential areas (see Figure 2).

The site currently has a hospital operating. Aerial Photos Tasmania shows that the presence of the current structure did not have any major changes from 1986 (see Figure 7 and Figure 8).



Figure 1: The Site



9237C Wellington St ESA

Map Legend

215 Wellington

1m Contours

Data Boundaries

0102030 m

Map CRS: GDA94 / MGA zone 55
Scale: 1:800 @ A4

PAF#: 9237C
Map type: ES&D
Landscape A4
Drawn Date:
17/04/2024
Drawn by: JW



Figure 2: Tasmanian planning scheme – Zoning.



Preliminary Site Investigation



5 Environment

5.1 Topography

A review of the LISTmap contours indicates that the site is slopes steeply from East to West, with an elevation of approximately 11-16 m AHD.

5.2 Surface Water

The nearest surface water body is the South Esk River, located approximately 1.2 km to the northwest.

5.3 Hydrology and Hydrogeology

The groundwater gradient is likely to be similar to the topography. Groundwater is not accessed for use as the site is within a TasWater serviced area for drinking water. The Department of Primary Industries, Parks, Water and Environment (DPIPWE) Groundwater Information Access Portal indicates there are no registered bores within 500m of the Site. Surface water is captured by general stormwater systems.

5.4 Geology

The Land Information Systems Tasmania (the LIST) indicates the Site is situated on poorly consolidated clay, silt, and clayey labile sand with rare gravel and lignite; some iron oxide-cemented layers and concretions; some leaf fossils. There are no concerns of PAF material on the Site.

5.5 Acid Sulphate Soils

According to the LIST, there are no acid sulphate soils on the site.

5.6 Site History

The following information has been reviewed alongside the above to determine the historical land use and assess the likelihood of potentially contaminating activities occurring on the site:

- Anecdotal information
- Worksafe dangerous goods storage
- Historical aerial photographs



Figure 3: Hydrographic areas and Contours

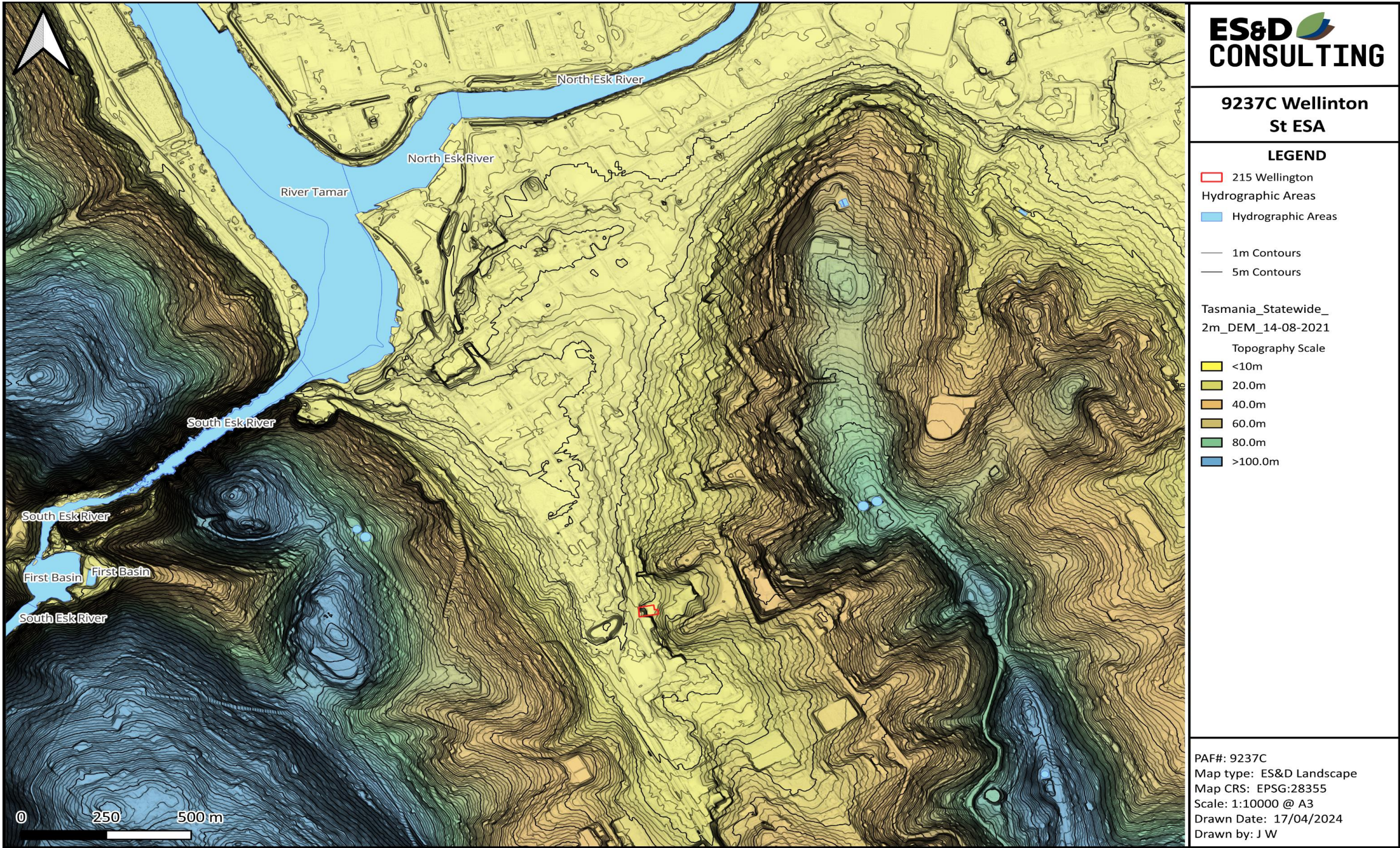




Figure 4: Contours





Figure 5: Surface water





Figure 6: Coastal Acid Sulphate Soil



9237C Wellington St ESA

Map Legend

215 Wellington

Coastal Acid Sulfate Soils

050100 m

Map CRS: GDA94 / MGA zone 55
Scale: 1:3000 @ A4

PAF#: 9237C
Map type: ES&D
Landscape A4
Drawn Date:
17/04/2024
Drawn by: JW



5.7 Anecdotal Information

The site Launceston Respiratory Clinic is available to assess, test, and diagnose people with mild-moderate respiratory symptoms such as chest colds, influenza, pneumonia, and COVID-19.

The site has a similar structure from 1986 (see Figure 7, Figure 8) The present state is unlikely to cause environmental risk.



Image 1: Street view of the Site

5.8 WST Site History and Dangerous Goods

WorkSafe Tasmania has confirmed that there are no records in their system pertaining to the storage of dangerous goods.



5.9 Historical Aerial Photography

A review of historical aerial photographs was undertaken to identify any potentially contaminating land uses in the area. Aerial images are below. Aerial photographs were sourced back to 1986. However, it is likely that the property has been in the current configuration for more than 35 years.



Figure 7: Aerial photo-1986



Figure 8: Aerial photo-2003

6 Potential Site Contamination

6.1 Onsite contamination

An inspection of the site indicated that the hardstand and concrete were in good condition with minor surface staining and, therefore, not considered a high risk to the environment or workers.

6.2 Offsite Sources

A desktop review has been conducted to determine whether there are any offsite sources of contamination that may cause harm to the environment and human health on the site. The desktop review includes inspecting the surrounding commercial/industrial Sites, EPA-regulated sites, listed underground petroleum systems and environmental factors such as topography and hydrology.

There are several commercial/industrial sites around the business, however they are not potentially contaminating activities so are unlikely to impact the site. There are no EPA-regulated sites nearby, and the nearest active underground petroleum storage system (UPSS) is 200 m away, so it is unlikely to have impacted the Site. Dangerous Goods search has indicated that the adjacent property on the south (217 Wellington Street) has a file with unclear UPSS. This is highly unlikely to affect this site as the site is up gradient. The groundwater should flow towards the street and down to the South of the property. 217 Wellington Street will be investigated, and any contamination will be removed.



6.3 Potential Receptors

A final conceptual site model (CSM) was developed after considering the risks to potential human and environmental receptors, as outlined below.

Table 2: Conceptual Site Model

Contamination Source	COPC	Pathway	Receptor
UPSS unknown status at 217 – 229 Wellington Street	- Total Petroleum Hydrocarbons (TPH) - Total Recoverable Hydrocarbons (TRH)	Site is upgradient of UPSS – no pathway Low Risk	- Future occupants - Subsurface workers - Surrounding site users - Groundwater - Soil

7 Sampling

Sampling is not required due to a lack of evidence of potential contamination and/or potential contamination that is deemed low risk for the intended use. This is particularly relevant if there is no change of use.

8 Conclusions

A PSI was conducted, and the findings are the following:

- Encountering hydrocarbons impeding the site's intended use is unlikely.
- It is unlikely that surrounding activities have the potential to contaminate the site.
- The Site is suitable for future use with management measures.
- The NEPM Based Risk Assessment found that the risk is low and acceptable.



8.1 Tasmanian Planning Scheme Compliance

8.1.1 C14.5 Use Standards

C14.5.1 Suitability for intended use Objective:

That potentially contaminated land is suitable for a sensitive use or one of the specified uses.

P1

The land is suitable for the intended use, having regard to:

- (a) an environmental site assessment that demonstrates there is no evidence the land is contaminated.
- (b) an environmental site assessment that demonstrates that the level of contamination does not present a risk to human health or the environment; or
- (c) an environmental site assessment that includes a plan to manage contamination and associated risk to human health or the environment that includes:
 - (i) any specific remediation and protection measures required to be implemented before any use commences; and
 - (ii) a statement that the land will be suitable for the intended use.

8.1.2 C14.6 Development Standards for Building and Works

C14.6.1 Excavation works, excluding land subject to the Macquarie Point Development Corporation Act 2012 Objective:

That works involving excavation of potentially contaminated land, excluding on land subject to the Macquarie Point Development Corporation Act 2012, do not adversely impact on human health or the environment.

Performance Criteria (P1)

Excavation, excluding on land subject to the Macquarie Point Development Corporation Act 2012, must not have an adverse impact on human health or the environment, having regard to:



- (a) an environmental site assessment that demonstrates there is no evidence the land is contaminated.
- (b) an environmental site assessment that demonstrates that the level of contamination does not present a risk to human health or the environment; or
- (c) an environmental site assessment, including a plan to manage contamination and associated risk to human health and the environment, that includes:
 - (i) any specific remediation and protection measures required to be implemented before excavation commences; and
 - (ii) a statement that the excavation does not adversely impact on human health or the environment.

8.2 Assessment against Clause C14.5 (P1)

ES&D has completed an assessment of the land, and the assessment has found that the land use at the site and surrounds is unlikely to have caused the land to be contaminated beyond the intended use under the NEPM, and the risk during development to subsurface workers and future site users is low and acceptable. However, see management measures.

8.3 Assessment against Clause C14.6 (P1)

The assessment reveals that the development area is not likely to be contaminated with low risk to human health and the environment and therefore, the site is suitable for development and future land use. However, as a precaution construction workers should wear protective clothing when they are in contact with soil.



9 Recommendations

ES&D recommends that the Site is suitable for intended use as ongoing commercial/industrial and does not pose an unacceptable risk to public health in accordance with the *Contaminated Land Code* C14.5 and C14.6.

The development can proceed with the following management measures.

Management Measures:

- Encountering widespread petroleum-based hydrocarbon contamination at the site is unlikely, but during excavation, if odour or discolouration is detected, re-assess with a photoionisation (PID) meter. If vapour is detected this management measure will need to be reassessed. Standard excavation type PPE is required.
- If the excavation is planned for more than 150 cubic metres, test to check for acid-sulphate soil and plan the necessary actions as the site is very close to the Coastal acid Sulphate soil as indicated in the LISTMap.
- A pre-demolition asbestos plan should be made to avoid exposure if there is an underlying risk of asbestos on site.

The assessment has been completed in accordance with the *National Environmental Protection (Assessment of Site Contamination) Measure 1999* as amended.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'R Cooper'.



Rod Cooper BSc., CEnvP Site Contamination
Principal Consultant ES&D



10 References

- Australian Heritage Database, <http://www.environment.gov.au/cgi-bin/ahdb/search.pl>
- Department of Primary Industries, Parks, Water and Environment (DPIPWE) Groundwater Information Access Portal: <http://wrt.tas.gov.au/groundwater-info/>,
- Land Information System Tasmania (TheLIST), www.thelist.tas.gov.au
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