

BELGRADE PARADE

Council Agenda - Agenda Item 8.2
Attachment 2 - Plans to be Endorsed - 341-349 Hobart Road, Youngtown



PROPOSED SEWER
CONNECTION
TO TASWATER STANDARD

Lot 1
1.74ha

PROPOSED
STORMWATER
CONNECTION

DRAINAGE EASEMENT (LCC)

EASEMENT (LCC)

Top of bank

CREEK

CREEK

PIPELINE & SERVICES

Lot 2
2.04ha

(STORMWATER)
EXISTING DRAINAGE

EASEMENT 4.00

78

64

EXISTING DN150 SEWER

EXISTING DRAINAGE EASEMENT 2.00 WIDE

EXISTING DN150 SEWER

PROPOSED DN100
WATER CONNECTION
TO TASWATER REQUIREMENTS & STANDARD

EXISTING DN100 WATERMAIN

FH

EXISTING
WATER
CONN.

ROAD

HOBART

D.J.McCULLOCH Surveying

AUTHORISED LAND, ENGINEERING & MINING SURVEYORS

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SERVICES & EASEMENTS PLAN

341-349 Hobart Road, Youngtown
Sandhurst Trustees Limited Owner
Title Reference - F/R 153097-1
Development Application for Planning Permit
Launceston City Council

SCALE 1:1000 (A3)

Job No. 1330-1806


28/02/2018
Registered Land Surveyor Date

Plan Number
0618-03DA

Environmental Service & Design

ABN: 97 107 517 144



5 July 2018

Dallas McCulloch
D.J. McCulloch Surveying
PO Box 725
Riverside TAS 7250

Dear Dallas,

RE: Preliminary Site Investigation – 341-349 Hobart Road, Youngtown 7249

Environmental Service and Design (ES&D) has investigated the site at 341-349 Hobart Road, Youngtown 7249, in relation to any potentially contaminating activities formerly conducted thereon, including risk to potential receptors and other potential environmental issues which may arise due to development activities.

The assessment was guided by the principles and requirements contained within the National Environmental (Assessment of Site Contamination) Measure, 1999 (as amended) (NEPM) according to its status as a state policy.

The investigation comprised a Preliminary Site Investigation as defined in NEPM Schedule B2, Section 2.1:

“Preliminary site investigations (PSIs) usually include a desktop study to collect basic site information and identify the site characteristics (site location, land use, site layout, building construction, geological and hydrogeological setting, historical land uses and activities at the site), a site inspection and interviews with current and past owners, operators and occupiers of the site and nearby sites.

The preliminary investigation should be sufficient to:

- identify potential sources of contamination and determine potential contaminants of concern;
- identify areas of potential contamination;
- identify potential human and ecological receptors;



- identify feasible pathways by which contaminants and receptors may be linked;
- identify potentially affected media (soil, sediment, groundwater, surface water, indoor and ambient air)
- identify environmental issues which may arise because of development activities, or due to the change of use (increased disturbance due to increase in human activity).

With respect to contamination, if thorough preliminary investigation shows a history of non-contaminating activities and there is no other evidence or suspicion of contamination, further investigation is not required.”

It was concluded that the development does not present a significant risk to potential receptors identified in the Conceptual Site Model (CSM).

As per Section E2.4.3 of the Launceston Interim Planning Scheme 2015:

- the site history and site visit confirmed that potentially contaminating activities did not impact the development.

As per NEPM Schedule B2, Section 2.1, it was concluded that:

- No further investigation is required.

The details of the required investigation are documented in the following pages.

Yours sincerely,

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

Rod Cooper

Principal Consultant and SCPA Certified Practitioner





Preliminary Site Investigation

341-349 Hobart
Road Youngtown
7249

Project No: 6245
July 2018



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1 Introduction

Environmental Service and Design (ES&D) were commissioned by their client D.J. McCulloch Surveying to undertake a Preliminary Site Investigation (PSI) on the proposed development at 341-349 Hobart Road, Youngtown 7249 (OneSteel Metacentre). Property ID 2831027 and Title Reference 153097/1.

The aim of the PSI is to determine whether activities have occurred on or near the site which may result in contamination of the land and if so, whether the level of risk will increase with the proposed or future development.

Code E2 (Potentially Contaminated Land Code) of the Launceston Interim Planning Scheme 2015 stipulates that use or development of potentially contaminated land must not adversely impact on human health or the environment. **The following use and development are exempt for the code:**

E2.4.1 The following use and development is exempt from this Code.

E2.4.2 Development:

(a) to investigate potentially contaminated land; or

(b) in accordance with a notice issued in accordance with Part 5A of the Environmental Management and Pollution Control Act 1994.

E2.4.3 Any use or development where a site history prepared by a suitably qualified person has been provided to the planning authority that confirms potentially contaminating activities did not impact the site.

E2.4.4 Development that does not involve disturbance of more than 1m² of land.

E2.4.5 Any use or development that the Director, or a person approved by the Director for the purpose of this Code, having regard to the objective stated in all applicable standards in this Code, has issued a certificate stating that there is insufficient increase in risk from contamination to warrant any specific remediation and protection measures.

The Launceston Interim Planning Scheme 2015 specifies that environmental site assessments in relation to potentially contaminating activities must be prepared by a suitably qualified person. Council indicated that suitably qualified persons include Site Contamination Practitioners Australia (SCPA) certified practitioners. Consequently, Mr. Rod Cooper of Environmental Service and Design (SCPA certification no. 15020) was engaged to perform the assessment.

This report will comprise a summary of investigation pursuant to E2.4.3 above, to establish if potentially contaminating activities are likely to have impacted the site and quantification of the potential risk associated with the proposed development.

2 Scope of Works

The scope of the preliminary site investigation included:

- Desktop review of the site and surrounding land use history;
- Obtaining information from Work Safe Tasmania (WST) regarding potential storage of dangerous substances in the area surrounding the property;
- Determination of potential contaminants of concern;
- Field investigations and site visit;
- Consideration of the site's environmental setting;
- Identification of potential human and ecological receptors and consideration of risks to identified receptors;
- Development of a Conceptual Site Model (CSM); and,
- Preparation of the assessment report.

3 Basis for Assessment

As a State Policy for the purposes of State policies and Procedures Act 1993, the National Environmental Protection (Assessment of Site Contamination) Measure 1999 (NEPM) was the guideline used for the assessment.

The assessment included elements of a Preliminary Environmental Site Assessment as defined in NEPM Schedule B2. NEPM advises that if a thorough preliminary investigation shows a history of non-contaminating activities and there is no other evidence or suspicion of contamination, further investigation is not required (Schedule B2 and Section 2.1).

4 Information Sources

- Historic Dangerous Substances license information associated with Worksafe Tasmania, Department of Justice;
- (the LIST) Land Information System Tasmania (www.thelist.tas.gov.au), accessed 15/6/2018;
- (GIP) DPIPWE Groundwater Information Portal (<http://wrt.tas.gov.au/groundwater-info>);
- Launceston Interim Planning Scheme 2015 (www.iplan.tas.gov.au), accessed 02/05/2018;

- National Environment Protection (assessment of Site Contamination) Amendment Measure 2013 (no. 1).
- Google Earth Pro, accessed 15/06/2018
- Site visit and interviews with the owner.

5 Site Details

5.1 Ownership and Location

The property at 341-349 Hobart Road Youngtown (the site; Figure 1) is owned by Sandhurst Trustees Limited. The site is surrounded by residential dwellings to the east, west and south and a fire station is located immediately to the north. There is a commercial building to the south of the property and a caravan sales depot on the opposite side of Hobart Road.



Figure 1: Site Plan (Site in red shade)

5.2 Proposed Development

The proposed development involves subdividing the land into two plots; Lot 1, towards the back of the property (1.71 hectares) and Lot 2, which encompasses the existing workshop and office buildings (2.07 hectares).

No major site works are planned at this stage, and the site will continue to operate as a single business; however, some land was cleared for a lay-down area on Lot 1 (location of lay-down area shown on Figure 1). The hardstand will be reinforced with suitable materials and it will be landscaped to meet engineering standards. This PSI is relevant to this scope of work, which will result in no significant change to land use.

If Lot 1 is sold or redeveloped in the future, land clearing may be required in the southwest of Lot 1 to construct the cul-de-sac (Figure 2). An access strip for Lot 1 is proposed at the southern margin of the plot, as shown in Figure 2. The 8 m wide access strip would likely utilise existing industrial standard reinforced concrete where available. However, these potential developments are not encompassed by this PSI.

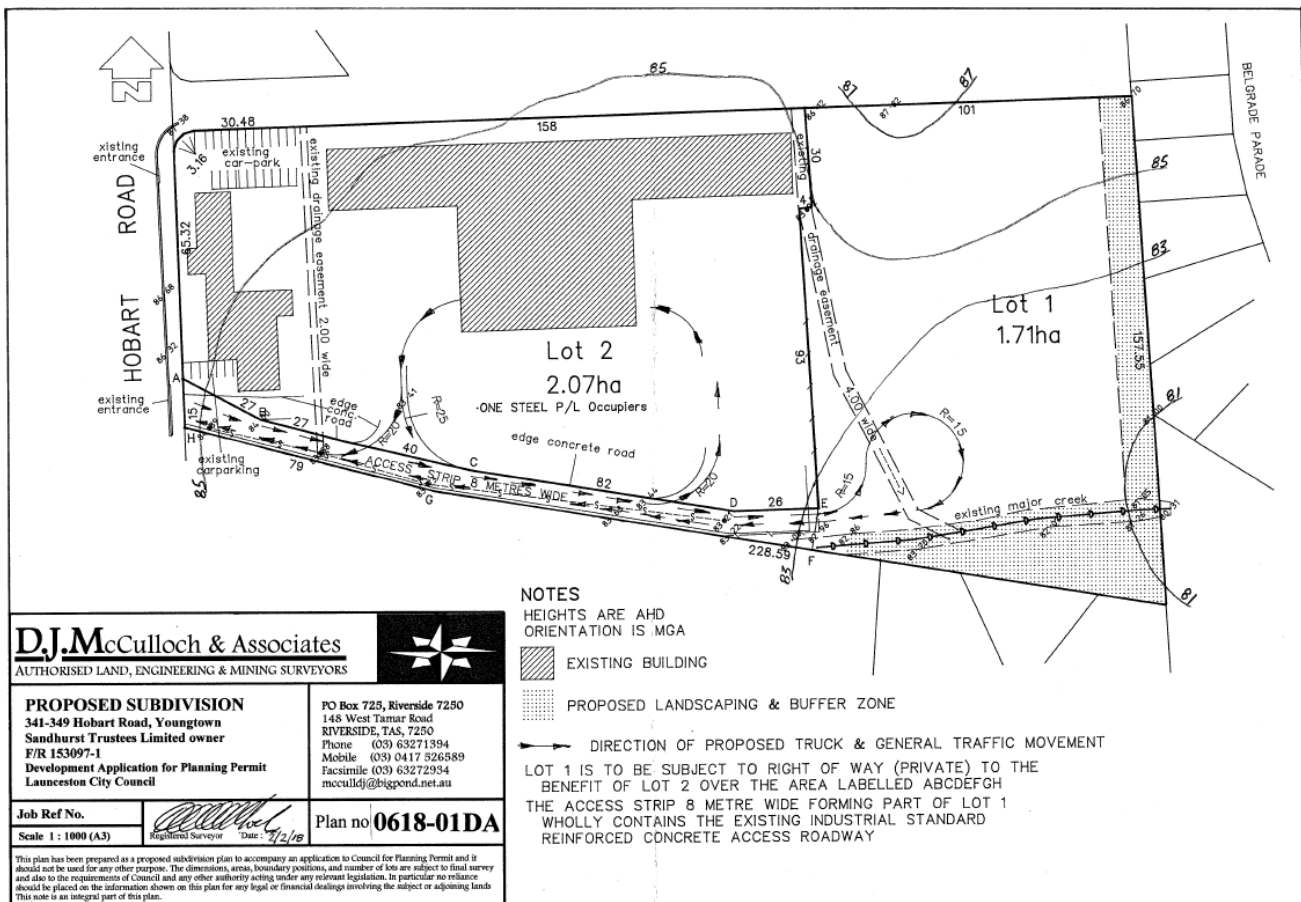


Figure 2: Proposed development (c/o D. J. McCulloch Surveying)

5.3 Zoning

The site is currently zoned “General Industrial” (Launceston Interim Planning Scheme 2015, Figure 2) and is surrounded by “General Residential” to the east and west, “Light Industrial” to the north and “Commercial” to the south. A section of “Open Space” zoning is located to the southeast and further to the northeast. The current zoning will not change as part of the proposed development.

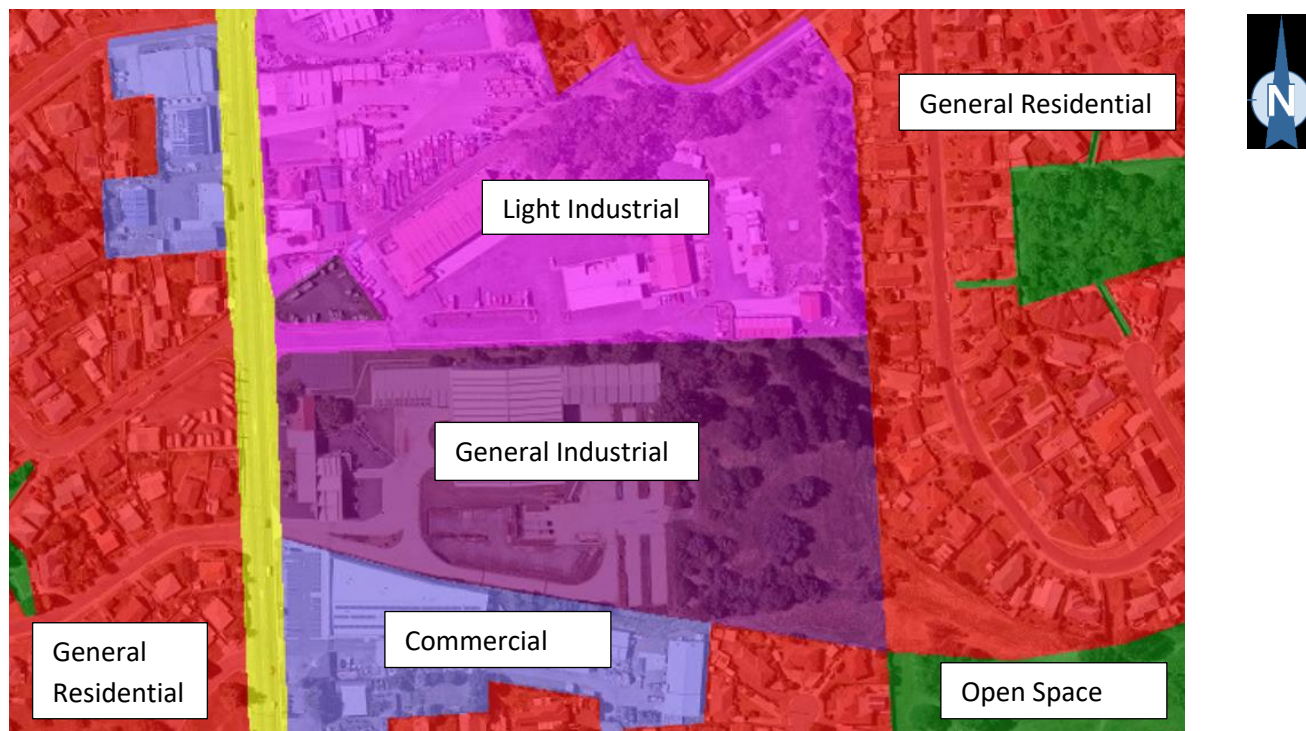


Figure 3: Zoning – General Industrial

6 Geology, Hydrology and Hydrogeology

6.1 Topography

A review of Google Earth indicates the site is relatively flat but slopes slightly towards the east-southeast, with elevations for most of the site ranging from 84-86 m. The elevation decreases to 82-85 m near a drainage line to the southeast of the site.

6.2 Surface Water

There is a minor stream located in the south of the site, which flows out of a water body located to the southwest (refer to Figure 3). The minor stream flows into Jinglers Creek, approximately 1.7 km to the northeast of the site. Jinglers Creek flows into the North Esk River approximately 3.3 km north-northeast of the site.

6.3 Regional Geology

The Land Information Systems Tasmania (the list) indicates that the site is underlain by Tertiary sediments, comprising “dominantly non-marine sequences of gravel, sand, silt, clay and regolith”.

6.4 Regional Hydrogeology

Groundwater flow is likely to the south / southeast / east following the topography towards the minor stream in the south of the site (Figure 3). Reference to the Department of Primary Industries, Parks, Water and Environment (DPIPWE) Groundwater Information Access Portal indicates there are no registered bores within 500 m of the site. Groundwater is not extracted for drinking purposes in the area, as water is supplied to the area from TasWater infrastructure.

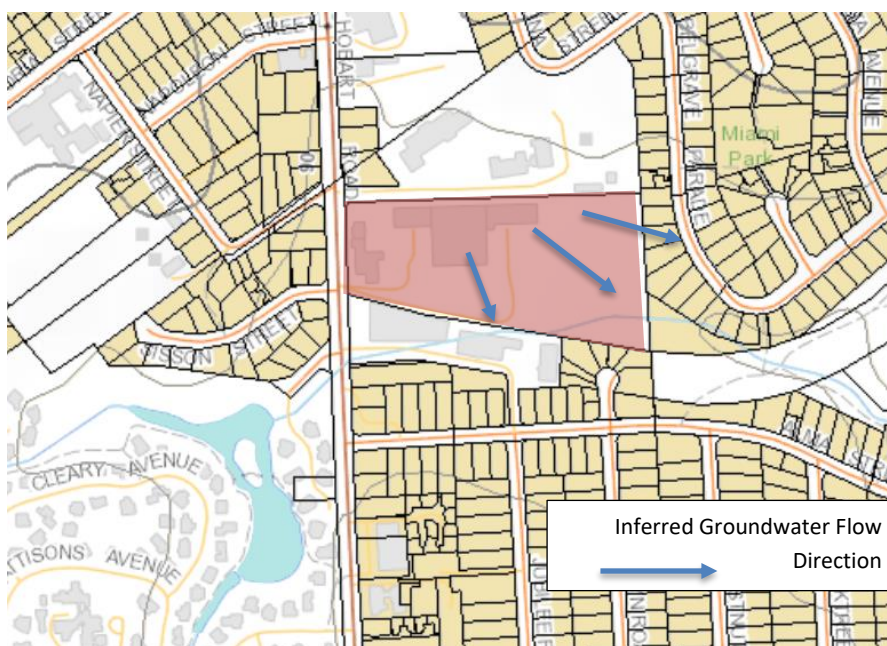


Figure 4: Inferred Groundwater Flow Direction (Site in red shade)

6.5 Acid Sulfate Soils

Review of the LIST (Land Information System Tasmania) indicates that the site was not mapped on the “Inland Acid Sulfate Soils” map. Based on this, no management for acid sulfate soils is required, however construction workers should be briefed on their potential.

7 Site History

7.1 Site and Surrounding Land uses

The site is currently occupied by the OneSteel Metacentre, a distribution centre for OneSteel. Steel products are stored and cut-to-measure on-site, but no smelting is conducted on premises. Steel products generally do not contain chromium or other contaminants of concern (Site Manager, 2018,

pers. Comm., 5 June). The Youngtown fire station borders the site to the north and there are residential properties to the east and west. There is a commercial property to the south of the property that is owned by City Mission. JR Autos are located on the opposite side of Hobart Road, to the west of the site.



Figure 5: Location of the site in relation to nearby potential contamination sources

7.2 WorkSafe Tasmania Dangerous Goods Licenses

A search of the Historic WorkSafe Tasmania Dangerous Goods Licenses information was conducted. In 1956, the site was occupied by William Adams Tractors Pty Ltd. Correspondence provided by Worksafe shows that they were licensed for the storage of 450 gallons of petrol and kerosene. They also stored non-flammable liquids, including minerals oils and mineral spirits.

Documentation from 2004 shows that there was an above ground, 600 litre capacity diesel tank on-site at this time (refer to photograph on Figure 6). The plans from 2004 (Figure 7) show that the above ground tank was located near the centre of the site, in an area that is now concreted. The plans also show that a new diesel tank was proposed for the area adjacent to the boundary between Lot 1 and Lot 2.



Existing above ground diesel storage 600 litres

Figure 6: Photograph of the above ground storage tank in 1986 (c/o WorkSafe Tasmania, issued 29/6/2018). Site visit evidence and interview on site suggest the tank may not have been moved from the original position. (Site Manager, 2018, pers. Comm., 5 June)

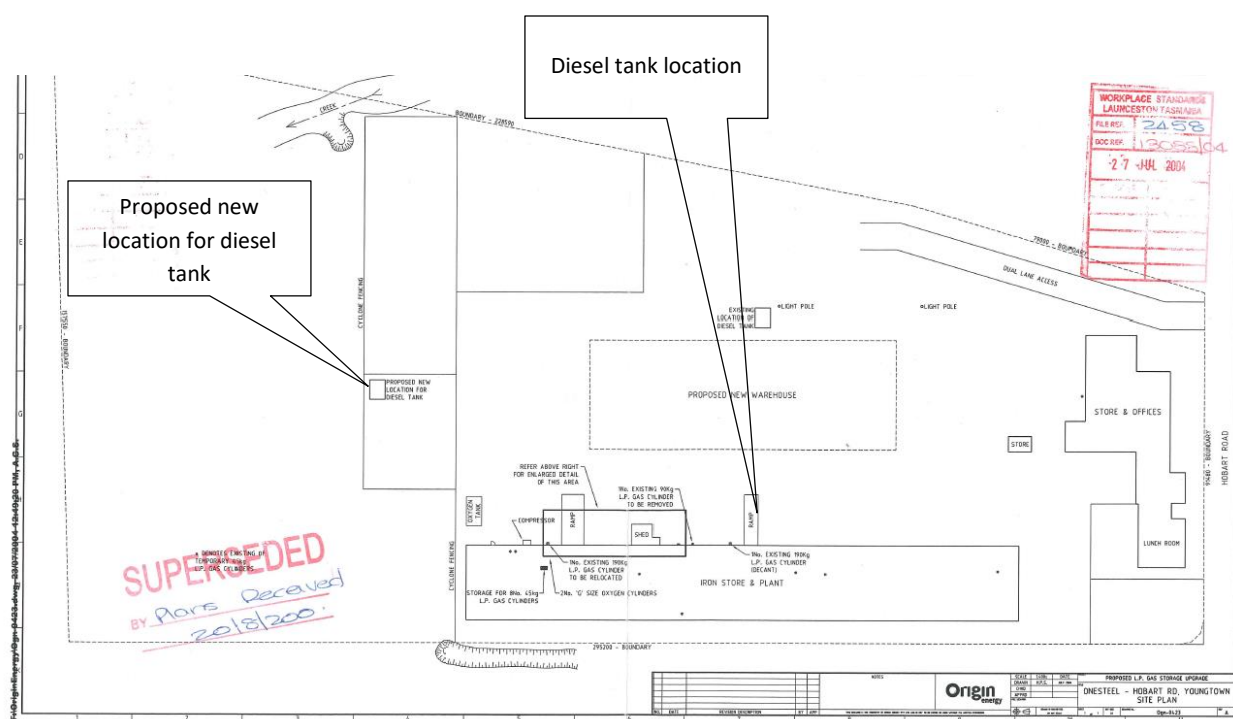


Figure 7: Plans from 2004 showing the location of the above ground 600 L diesel tank and the proposed new location for the tank (c/o WorkSafe Tasmania, issued 29/6/2018))

7.3 Historical Aerial photography

A review of historical aerial photographs available on the LIST and Google Earth was undertaken to identify any historical potentially contaminating land uses in the area. Photographs from 1974, 1978, 1983, 1986, 1997 (the LIST), 2004, 2011, 2015 and 2016 (Google Earth) are shown in Figures 5-13 below. Most site activities appear to have been conducted on the area that is proposed as Lot 2, closer to Hobart Road.



Figure 8: Aerial 1974



Figure 9: Aerial 1978



Figure 10: Aerial 1983



Figure 11: Aerial 1986



Figure 12: Aerial 1997



Figure 13: Aerial 2004



Figure 14: Aerial 2011



Figure 15: Aerial 2015



Figure 16: Aerial 2016

8 Site History Summary

Based on the review of the site, the site history is as follows:

Period	Site
1974 - Current	General Industrial

9 Potential Site Contamination

9.1 Onsite contamination

Historical imagery details the site has been occupied by an industrial site since at least 1974. Documentation from WorkSafe shows that the site was a tractor and earth-moving equipment sales depot. The existence of mineral oil stores on-site in 1956 (WorkSafe documents, refer to Section 7.2) indicates that parts and machinery were cleaned on-site.

The site visit outlined no potential contamination sources on the site. However, on-site personnel mentioned that a petroleum storage system was removed from the site around 30 years ago (location shown on Figure 17). This location corresponds with the location of the 600 L diesel tank that was on-site in 2004, as identified in WorkSafe records (Figure 7). It is worth noting that the diesel tank is contained in a bunded area and the risk of significant soil and/or groundwater contamination is low.

The Worksafe search also identified a proposed new location for the diesel tank, although there was no documentation of the construction of the proposed new diesel tank, and on-site personnel did not mention it during the site visit. It should be noted that no dangerous goods license was required for the development of the proposed new diesel tank, so the WorkSafe records would not necessarily include the relevant documentation. No other potential contamination sources were identified on-site. Although potential contaminants are bought on site, it is not in a form that can cause risk or impact the environment, work standards and OH&S practices are conducted at a high level on the site, reducing risk of impact.

The groundwater flow direction has not been investigated, but it is likely towards the south / southeast / east following the topography. If this is the case, groundwater near the southwest of Lot 1 could potentially contain hydrocarbons from the diesel tank that existed in 2004 or the proposed new diesel tank (if it was constructed). No significant excavation is proposed for the current development and it is unlikely to intercept groundwater, so the risk to workers and the environment is low and **above all** there is no increased risk to workers due to the development. However, dermal and eye protection should be worn whilst conducting earthworks at the site as normal OH&S practice would require. We also recommend maintenance of the capping layer in the laydown area.



Figure 17: Site Plan (Site in red shade)

9.2 Offsite Sources

9.2.1 Youngtown Fire Station

The Youngtown fire station is located adjacent to the site at 339 Hobart Road, Youngtown (Figure 1). The Tasmanian Fire Service used perchlorinated compounds (PFASs) in their fire-fighting foams. PFASs “are emerging as contaminants of global concern because they do not break down naturally (environmentally persistent), have the ability to bioaccumulate, and are potentially toxic” (EPA, 2018 - <http://epa.tas.gov.au/regulation/contaminated-sites/identification-and-assessment-of-contaminated-land/contaminated-land-issues/pfas-contamination>).

The Tasmanian Fire Service are currently investigating the presence of PFASs in soil at the Youngtown fire station and they are potentially present in groundwater beneath the site. However, groundwater is unlikely to be intercepted as a result of the proposed development and there is not an increased risk of soil contamination. Nevertheless, skin and eye protection

should be worn if earthworks are to be conducted on-site. The Tasmanian Fire Service have removed PFAS from use.

9.2.2 JR Autos

JR Autos are located across the road from the site on 340 Hobart Road, Youngtown. JR Autos is a caravan sale yard. The site owner informed us that they have never had a UPSS on site and that no significant mechanical works are conducted on-site. Therefore, this site does not pose a significant risk to groundwater and air quality at the site.

10 Site Visits

ES&D representatives visited the site on the 5th of June 2018 to investigate potential sources of contamination in the proposed development area. There was no visible evidence of contamination at 341-349 Hobart Road, Youngtown 7249 (Figure 18 to Figure 20). Nearby properties were also investigated for the potential of offsite sources contaminating the property.



Figure 18: Lay-down area on Lot 1 with the workshop of Lot 2 in the background – looking west towards Hobart Road



Figure 19: Laydown area with the minor stream in the background – looking towards the south



Figure 20: Unused portion at the rear of Lot 1 – looking towards the east

11 Potential Receptors

A preliminary Conceptual Site Model (CSM) (Table 1) was developed after consideration of risks to potential human receptors as outlined below.

Risks to human health from hydrocarbon contamination can arise via the inhalation route when people are exposed to vapours for extended periods, including from vapour intrusion into built spaces, and/or by direct contact with contaminated soil, surface water or groundwater (e.g., ingestion, dermal contact). Risk to human health from steel operations is possible if there is direct contact with contaminated soil, surface water or groundwater (e.g., ingestion, dermal contact, ocular or oral). These are not considered for this site as this site does not have steel in the form of dust or vapour.

Future workers involved in the construction of the development were considered in the preliminary CSM, along with subsurface workers.

12 Conclusions and Recommendations

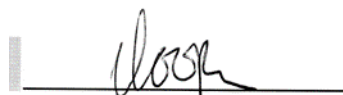
Environmental Service and Design (ES&D) were commissioned by their client, D.J. McCulloch Surveying, to conduct a Preliminary Site Investigation for the proposed subdivision at 341-349 Hobart Road, Youngtown 7249. Minor earthworks (i.e. shallow sculpting and deposition of hardstand materials) are proposed for the lay-down area on Lot 1, but no significant excavations are proposed, and groundwater interception is not expected.

ES&D investigated each potential contamination source based on the usage, inferred groundwater flow direction (both locally and regionally) and distance to the property. The results of the preliminary site investigation, based on the site history, site assessment and desktop assessment, including a search of Historic WorkSafe Dangerous Goods Records, indicate that there was an above ground diesel tank on-site. The tank was contained in a bunded area and the risk of significant soil and/or groundwater contamination is low. Nevertheless, we recommend the use of eye and skin protection when conducting earth works.

Mineral oils were used on Lot 2 in the 1950s; these pose a minor risk if it has migrated through groundwater. Additionally, there is a risk that PFASs may migrate to the site via groundwater. Again, we note that no significant excavations are proposed, and groundwater the interception is not expected. We recommend the use of eye and skin protection when conducting earth works.

Based on this, ES&D conclude there is there is low risk, but more significantly no increased risk to potential receptors.

A CSM was constructed and is shown in Table 1. A risk assessment was then conducted according to the principles and methodology contained within the NEPM and found no increased risk to human health receptors associated with the development, therefore requirements under section (E2.6.2) of the Launceston *Interim Planning Scheme 2015* are met.



Rod Cooper.

Certified Site Contamination Practitioner



Table 1: Final Conceptual Site Model

Contamination Source	COPC	Pathway	Receptor
Above-ground diesel tank – existing (2004) and proposed	<ul style="list-style-type: none"> ● Total Petroleum Hydrocarbons (TPH) ● Total Recoverable Hydrocarbons (TRH) ● BTEX ● PAH's ● Phenols 	Dermal contact/ingestion of potential contaminants of concern in surface soils – contamination unlikely due to concrete bunding	<ul style="list-style-type: none"> ● Subsurface workers – no earthworks planned for that area around the above ground tank– it is currently concreted – low risk ● Subsurface workers – down gradient of the tank– no excavations planned and gravel hardstand is being maintained – low risk – wear eye and skin protection
	<ul style="list-style-type: none"> ● Total Petroleum Hydrocarbons (TPH) ● Total Recoverable Hydrocarbons (TRH) ● BTEX ● PAH's ● Phenols 	Groundwater – unlikely due to concrete bunding	<ul style="list-style-type: none"> ● Subsurface workers – no significant excavations planned and groundwater is unlikely to be intercepted – low risk ● Minor stream on Lot 1 – no change in the hydrological flow paths as a result of this development – no increased risk
Petrol, kerosene, mineral oils and mineral spirits used by William Adams Tractors Pty Ltd	<ul style="list-style-type: none"> ● Phenols ● Total Petroleum Hydrocarbons (TPH) ● Total Recoverable Hydrocarbons (TRH) ● BTEX 	Most activities appear to have occurred on Lot 2. It could potentially be in groundwater	<ul style="list-style-type: none"> ● No significant excavations planned; therefore, groundwater won't be intercepted – low risk
Youngtown Fire Station	<ul style="list-style-type: none"> ● PFASs 	Groundwater	<ul style="list-style-type: none"> ● Minor stream ● Surrounding site users ● Subsurface workers – no significant excavations planned groundwater is unlikely to be intercepted – Low risk

References

Launceston City Council Interim Planning Scheme 2015

National Environmental Protection (Assessment of Site Contamination) Measure, *Guideline on the Investigation Levels for Soil and Groundwater*, Schedule B (1), (1999) as amended 2013

Land Information System Tasmania (the List): www.thelist.tas.gov.au

Department of Primary Industries, Parks, Water and Environment (DPIPWE) Groundwater Information Access Portal: <http://wrt.tas.gov.au/groundwater-info/>