# Biodiversity Development Assessment Report Wavier

## Liquid waste treatment facility at 14-16 Kiora Crescent Yennora

*By Ecological Consultants Australia Pty Ltd TA*

*Kingfisher Urban Ecology and Wetlands*

**November 2019**

*About this document*

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*Statement of Authorship*

*This study and report was undertaken by Ecological Consultants Australia at Studio 1/33 Avalon Parade, Avalon. The author of the report is Geraldene Dalby-Ball with qualifications BSc. majoring in Ecology and Botany with over 20 years' experience in this field.*

*Limitations Statement*

*Information presented in this report is based on an objective study undertaken in response to the brief provided by the client. Any opinions expressed in this report are the professional, objective opinions of the authors and are not intended* to advocate any particular proposal or pre-determined position.

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Signed: Geraldene Dalby-Ball – Director of Ecological Consultants Australia

# Executive Summary

This Biodiversity Development Assessment Report Wavier has been prepared for Benbow Environmental. It relates to the proposed modification of a Liquid waste treatment facility at 14-16 Kiora Crescent Yennora. The site is currently owned by the proponent (Enviro Waste Services Group Pty Ltd) and operates as a Liquid waste treatment facility.

Actions of the proposed development include an increase in processing capabilities of the liquid waste Facility onsite. There will be no major changes to the building design and form. Minimal construction works are required for the proposed development. The proposed modifications will not result in removal of existing vegetation or a change to landscaping of the site as the site is already developed. The site is not in close proximity to any critical habitats. Nor will development affect habitat suitability onsite. The flora and fauna impacts are considered negligible.

# Table of Contents

# 1 Admin

| | |
|---|---|
| Proponent Name | Enviro Waste Services Group Pty Ltd (Enviro Waste) |
| Project ID | N/A (Pre SSD application) |
| Name and qualification of author | **Geraldene Dalby-Ball**<br>Director at Kingfisher Urban Ecology and Wetlands<br><br>CAREER SUMMARY<br>• **Director and Ecologist**, Ecological Consultants Australia. 2014-*present*<br>• **Director and Ecologist**, Dragonfly Environmental. 1998-*present*<br>• **Manager** Natural Resources and Education, Pittwater Council 2002-2010<br>• **Wetland Ecologist** Sainty and Associates 1995-2002<br><br>QUALIFICATIONS AND MEMBERSHIPS<br>• **Bachelor of Science with 1st Class Honors**, Sydney University<br>• WorkCover WHS General Induction of Construction Industry NSW White Card.<br>• Senior First Aid Certificate.<br>• **Practicing member and vice president** Ecological Consultants Association of NSW<br><br>With over 20 years wetland and urban ecology experience, a great passion for what she does, and extensive technical and on-ground knowledge make Geraldene a valuable contribution to any project.<br><br>Geraldene has over 8 years local government experience as manager of environment and education for Pittwater Council. Geraldene presented papers on the topic at the NSW Coastal Conference, Sydney CMA and Hawkesbury Nepean forums. Geraldene is a Technical Advisor Sydney Olympic Park Wetland Education and Training (WET) panel.<br><br>Geraldene has up to date knowledge of environmental policies and frequently provides input to such works. Geraldene was a key contributor to the recent set of Guidelines commissioned by South East Queensland Healthy Waterways Water Sensitive Urban Design Guidelines. Geraldene's role included significant contributions and review of the Guideline for Maintaining WSUD Assets and the Guideline for Rectifying WSUD Assets. |

# Jack Hastings

## ECOLOGIST

### CAREER SUMMARY

- **Ecologist**, Kingfisher Urban Ecology and Wetlands. *2019-present*
- **Environmental Consultant,** BBN Consulting. *2018-2019*

### QUALIFICATIONS AND MEMBERSHIPS

- Bachelor of Environmental Science, Southern Cross University
- Certificate II Agriculture
- WHS General Induction of Construction Industry NSW White Card

Jack is a passionate ecologist who has worked with various stakeholders across both the public and private sectors to deliver sustainable environmental outcomes. He has worked on projects with major construction contractors and has been able to deliver tailored environmental solutions on time and within budget.

Jack is experienced at conducting and delivering a range of ecological assessments including; BDAR, CEMP, PoM, VMP, Flora & Fauna, certification certificates and species monitoring. He has completed a range of significant projects, working as the project ecologist on local developments through to state significant infrastructure.

As a result, Jack has valuable on-ground experience to complement his wide-ranging knowledge regarding state and federal legislation.

As an undergraduate student, he published a study that examined the cost of revegetation across the Richmond River Catchment in NSW. This study provided Jack with a deep understanding of urban and landscape ecology and the environmental factors associated with habitat restoration.

# 2 Site Details

**Street address -** 14-16 Kiora Crescent, Yennora NSW 2161.

**Lot/ DP**

- Lot 49 / DP18211 (14 Kiora Crescent)
- Lot 50 / DP18211 (16 Kiora Crescent)

**Local Government area -** Cumberland local government area

## 2.1 Description of existing development site

The site is currently owned by the proponent, Enviro Waste, and is already operating as a liquid waste treatment facility. The facility consists of a tank farm, filtration equipment, processing tanks, bunded areas, sump collection pits, odour control devices, unloading and loading areas, office and amenities.

## 2.2 Site map and landscape

The site is located approximately 6.9km south-west of Parramatta CBD (figure 1.0)

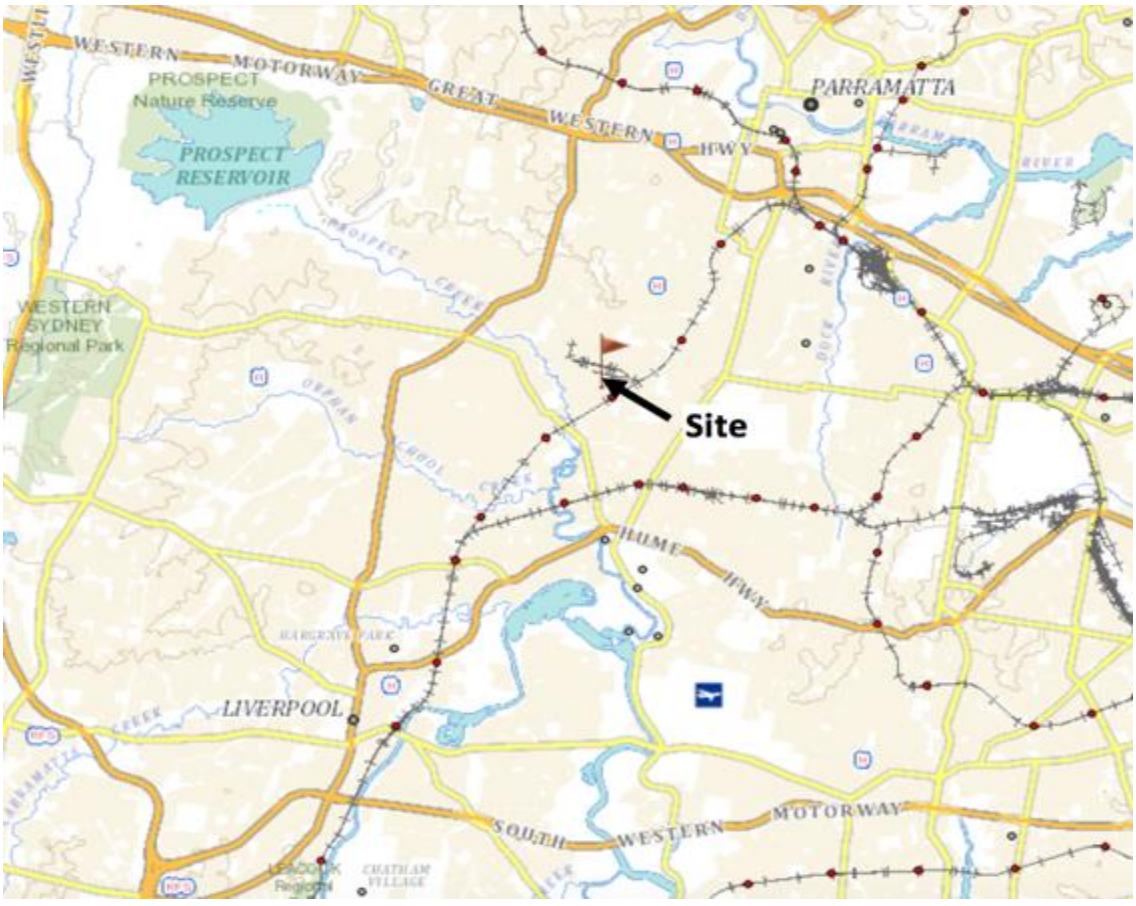


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**Figure 1.0. Location of the site, landscape perspective.**

**Source: NSW Six maps**

The site is located approximately 1.4km north-east of Fairfield CBD (figure 1.1)

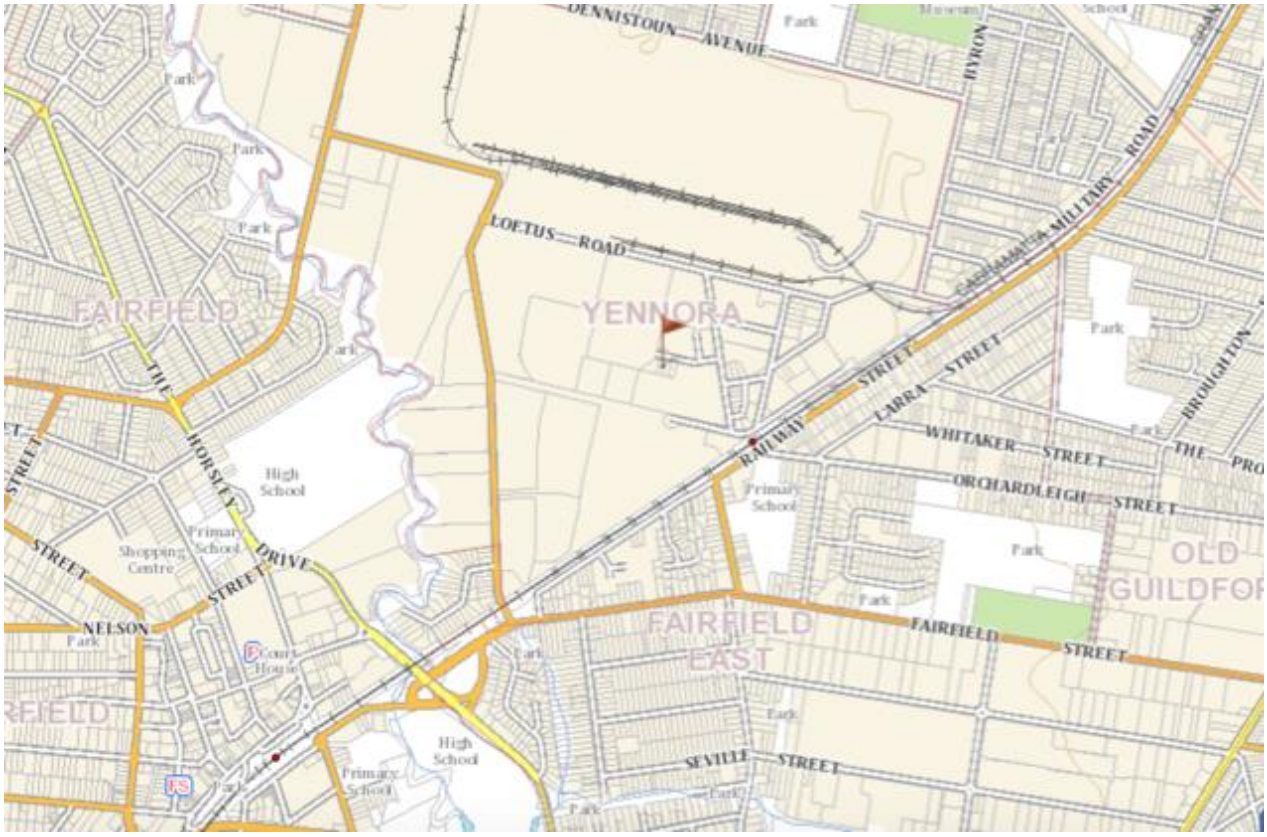


**Figure 1.1. Location of the site, local perspective.**

**Source: NSW Six maps**

The site does not impact any PCT or ecological community. The following figures 1.2 and 1.3 display the site and surrounding PCTs identified by NSW SEED mapping.


N

**Figure 1.2. A landscape perspective of vegetation cover and mapped PCTs. Site does not impact any PCT.**

**Source: NSW Six maps**


N

**Figure 1.3. A local perspective of the site, landscaped vegetation in the immediate surrounding area.**

**Source: NSW Six maps**

# 3 Proposed Development

## 3.1 Project Description

The proposed development involves increasing processing capabilities of the liquid waste recycling facility located at 14-16 Kiora Crescent, Yennora. The proposed development seeks approval to increase the processing quantities from 900 tonnes per annum to 100,000 tonnes per annum, and increase the maximum quantity to be stored at any one time from 110 tonnes to 200 tonnes. There will be no major changes to the building design and form. Minimal construction works are required for the proposed development. All construction activities will take place within the existing building footprint.

### 3.1.1 Proposed site use

The facility would receive an increased quantity of liquid wastes that it is already licenced to receive including:

- Residues from industrial waste treatment/disposal operations – landfill leachates (N205);
- Liquid waste material in glass, plastic or aluminium containers;
- Surface active agents (surfactants) containing principally organic constituents and which may contain metals and inorganic materials (M250);
- Waste oil/hydrocarbons mixtures/emulsions in water (J120);
- Sewage sludge & residues (K130); and
- Grease trap waste (K110).

The operation of the facility involves the following activities to be undertaken on site:

- Unloading and loading of liquid waste from tanker trucks;
- Filtration of solid debris;
- Separation of solids;
- Separation of oils and sludge; and
- Separation of oil and water;

The increased processes quantities would utilise the existing equipment onsite.

### 3.1.2 Proposed activities onsite

The purpose of the facility is to receive waste liquids and process the liquid so suitably cleaned water is removed for discharge to tradewaste and remaining sludges are sent on by a licenced waste contractor to be further processed, predominantly as grease trap waste.

The processes involved in the site operations are as follows:

- Waste liquids are collected from sites throughout the Sydney Metropolitan Area. Most of the liquids are collected from special purpose tanks which separate the solid residues from the liquids, minimising the solids collected. The waste liquids are collected via vacuum tankers. Some of the liquids are delivered or picked up by a small truck in IBCs (1000 L containers)
- The liquids are delivered to the recycling facility. The unloading area is located inside the factory building. The waste liquids are pumped from the tankers using pumps within the facility (not the tanker pump) through filters to remove any residue fine solids and then into one of the storage tanks.
- The waste liquid is pumped from the storage tanks, into the tank adjacent to the DAF (tank 1) and then into the DAF (Dissolved air flotation) which separates the solid and oil from the water.
- Waste water from the DAF is discharged to the Sydney Water sewer under a Trade Wastewater Agreement.
- Oil and sludge is transferred from the DAF to small storage tanks.
- This oil and sludge waste is removed from site by a licenced waste contractor to be processed as grease trap waste.

## 3.2 Floor Plan

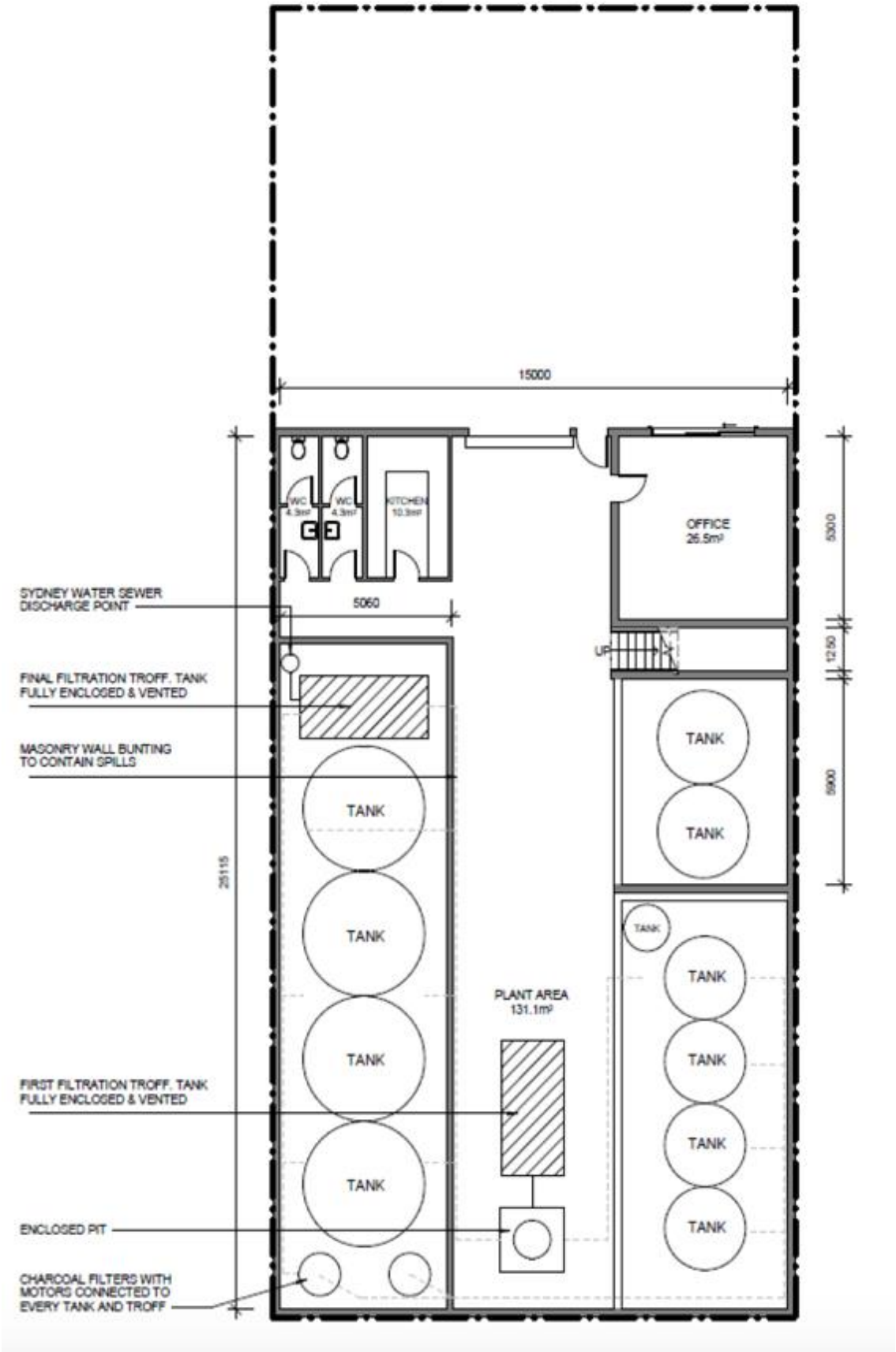


**Figure 2.0. Floor Plan for the proposed development at 14 Kiora Crescent, Yennora.**

## 3.3 Swept Paths for heavy vehicles accessing the site

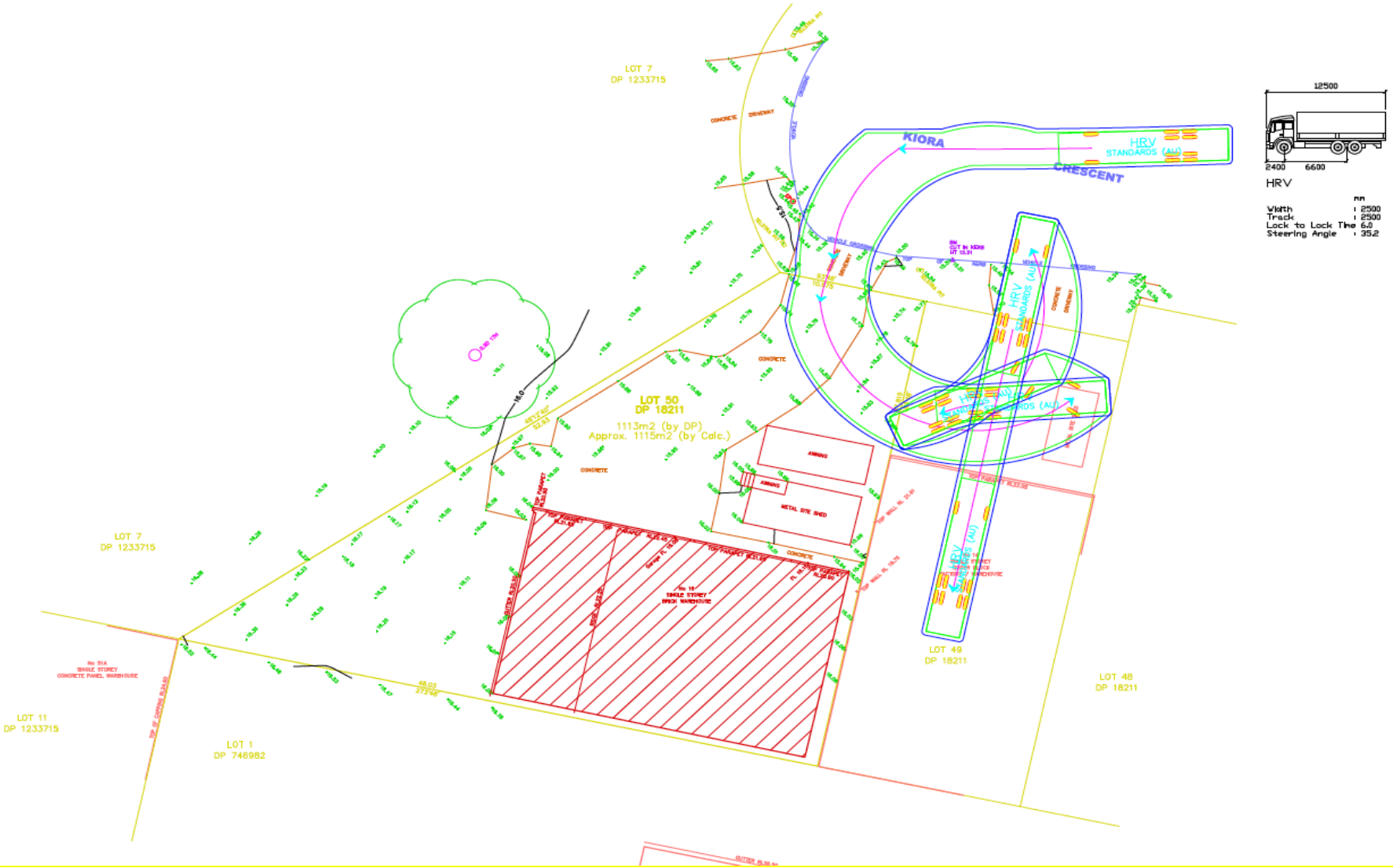


**Figure 2.1. Swept paths for heavy vehicles accessing the site at 14- 16 Kiora Crescent, Yennora.** NSW Surveys PTY LTD, 8/11/19.

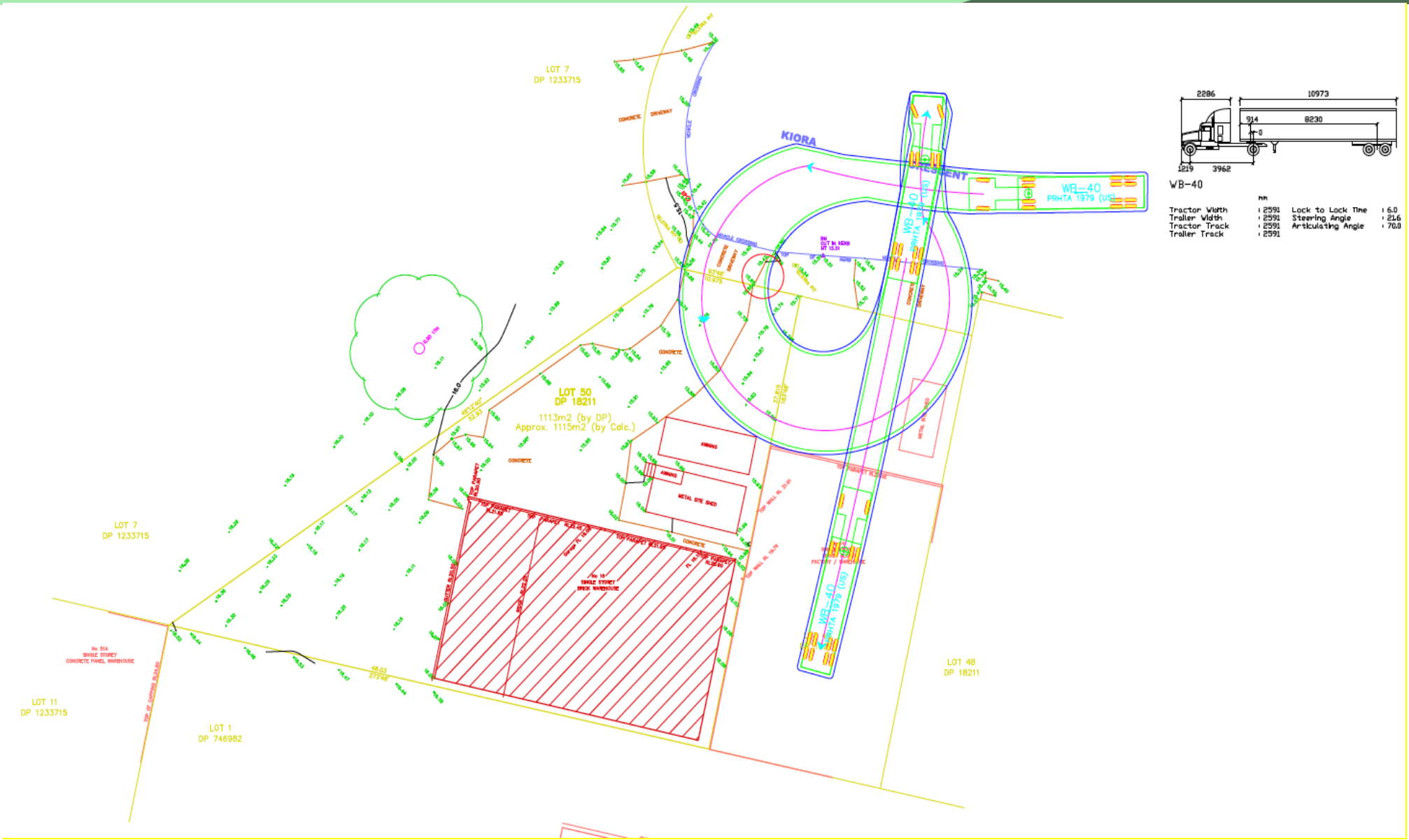


**Figure 2.2. Swept paths for heavy vehicles accessing the site at 14- 16 Kiora Crescent, Yennora.** Source : NSW Surveys PTY LTD, 8/11/19.

# 4 Impacts on biodiversity values

## 4.1 Vegetation abundance 1.4(b) BC Regulation

The proposed development will not result in removal of existing vegetation or a change to landscaping of the site as the site is already developed. The site is not in close proximity to any critical habitats. The flora and fauna impacts are considered negligible. The site is not assigned a PCT and is located >600m away from the closest identified PCT.

## 4.2 Vegetation integrity 1.5(2)(a) BC Act

Vegetation integrity onsite is poor as the site is already developed. Furthermore, no vegetation will be modified or removed as a result of this development. The site is currently contains no habitat features and development will not impact vegetation.

## 4.3 Habitat suitability 1.5(2)(b) BC Act

It is unlikely that threatened species would use the site as suitable habitat because of its current use and industrial setting. Additionally, there are no suitable habitat features for threatened flora or fauna onsite. Bionet species sighting accessed via the NSW SEED mapping portal has also confirmed that no threatened species or communities are present on site.

Assessment of habitat features as prescribed under clause 6.1(1)(a) of the BC Regulation

**1. karst, caves, crevices, cliffs and other geological features of significance**

No features present onsite.

**2. rocks**

No features present onsite.

**3. human-made structures**

There will be no major changes to the building design and form. Minimal construction works are required for the proposed development. It is expected not to be used by threatened species (i.e. mircobats) as it is not critical habitat for the species.

**4. non-native vegetation (prescribed under clause 6.1(1)(a) of the BC Regulation).**

Non-native vegetation will not be modified during this development. All activities will be confined to the existing building footprint.

## 4.4 Threatened species abundance 1.4(a) BC Regulation

The development will not modify any vegetation or features outside of the existing building footprint. No critical habitat features for threatened flora or fauna will be modified. The existing building will not be demolished, only modified. Therefore, no human-made habitat features will be lost. No waterways will be modified by this development.

**Vehicle Impacts**

A traffic and parking assessment will be undertaken for the proposed development. It is expected that vehicle strikes on threatened species of animals or on animals that are part of a threatened ecological community would not increase. This conclusion has been drawn as there is a lack of significant habitat features in the immediate vicinity and absence of recordings of threatened species surrounding the site.

## 4.5 Threatened species movement 1.4(d) BC Regulation

**Habitat connectivity**

The proposed modifications will not result in removal of existing vegetation or a change to landscaping of the site as the site is already developed. There are no connectivity features currently onsite, thus the development will not impact landscape connectivity. The building is being modified and minimal construction activities are taking place.

## 4.6 Flight path integrity 1.4(e) BC Regulation

The development will not impact flight paths of protected fauna. The development will not exceed the height of the existing building and all construction activities will take place within the existing building footprint. There is a lack of habitat features in the immediate surrounds that protected fauna would access.

## 4.7 Water sustainability 1.4(f) BC Regulation

The development will not impact any waterbodies. There are no waterbodies or aquatic features onsite. Site runoff or other associated impacts arising from construction activities will be contained and managed onsite.