DEVELOPMENT ASSESSMENT REPORT

Susco Piggery Expansion

CEFN Pty Ltd

Date: 14 April 2026

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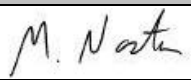
Document Control						
Revision	**Description**	**Date Issued**	**Prepared by**	**Signed**	**Reviewed by**	**Signed**
Rev 0	Final	14/04/2026	MRN		ZH	-

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1 INTRODUCTION

CEFN Pty Ltd (CEFN) own several piggeries across South Queensland. The CEFN head office is located in Clifton with most of their piggeries located near Clifton and Leyburn. An expansion of the nearby Kyles piggery to 13,800 standard pig units (SPU) was recently approved.

The proposed expansion of Susco will include the addition of a 2,600-sow breeder unit (farrowing to 10 weeks) to the existing breeder unit which has the same herd structure. Whilst most pigs leave the site at 10 weeks, some replacement gilts (female pigs) are retained to replace older sows. The total capacity of the proposed development will be approximately 24,500 SPU.

The existing effluent management system will be incorporated into the proposed effluent management system with irrigation of effluent across the identified effluent utilisation area (EUA).

The proposed development is a material change of use and requires a development permit (DP) from the Toowoomba Regional Council (TRC) including referral to the State Assessment and Referral Agency (SARA). It will also require a new Environmental Authority (EA) from the Department of Primary Industries (DPI) for environmental relevant activity (ERA) 3(3) – pig keeping.

The proposed piggery has been designed in accordance with the *National Environmental Guidelines for Indoor Piggeries 2025* (NEGIP). Extensive pre-lodgement advice has been sought from TRC and DPI. DPI advised that the NEGIP had been updated and now allowed for the use of the 'impermeable pond cover' assumption in the S-Factor assessment. As such, the distances between the proposed piggery and all dwellings, including those without approvals but outside the 1 km reverse amenity distance, are compliant. Various supporting assessments (e.g. traffic impact assessment) are in the process of being completed and will be submitted in response to information requests. Conditions, aligned with those incorporated into the Kyles development permit, are expected to ensure there are no ongoing impacts from the development.

Refer to Appendix A for a copy of the existing EA and Appendix B for the proposed design plans. Due to the age of the original town planning consent, it was not readily available.

2 SITE AND LOCALITY

2.1 SUBJECT SITE

The subject site is located approximately 24 km west, south-west of Clifton, 7 km north-east of Leyburn and is accessed from Toowoomba-Karara Road via Strathane Road (Figure 2). The property includes multiple land parcels with a total area of 695 ha (Table 1). The property is in the TRC area and is zoned as Rural. It includes the existing piggery sheds and effluent ponds, with the remainder of the property subject to cropping and grazing. The property also includes the existing 1,000 standard cattle unit (SCU) feedlot.

It is not expected that the land parcels on the northern side of Strathane Road will be subject to activities associated with the piggery. These land parcels have been included in the application to remove the associated dwellings as sensitive receptors.

Table 1 – Property Description

Land Parcel (Lot/Plan)	Area (ha)
3/M341013	64.8
4/SP170101	132.5
5/SP170101	67.2
45/ML1080	57.8
46/ML1080	128.4
21/ML606	132.5
112/M341013	65.3
10/RP892911	46.7
Total	**695.2**

2.2 CLIMATE

The climate of the region is sub-tropical characterised by summer-dominant rainfall (Figure 1). Long-term rainfall statistics show a mean annual rainfall of 697 mm with a January average maximum temperature of 29.9 ^{O}C and a July average minimum temperature of 5 ^{O}C. Rainfall and temperature data are presented for Pittsworth, with evaporation data presented for Warwick, sourced from the Bureau of Meteorology (BOM).

Figure 1 –Climate Data

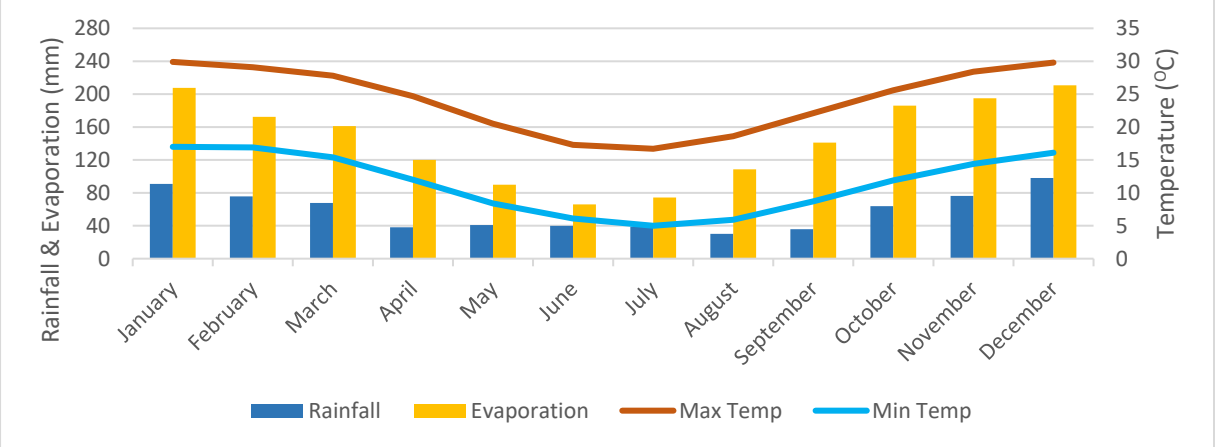

Figure 2 – Locality

2.3 RECEPTORS AND LAND USE

The nearest sensitive receptors surrounding the piggery site have been identified (Table 2, Figure 3). Table 2 provides the distance from each receptor to the nearest point of the piggery. The key receptors are R6 and R7 due to their separation distances and wind direction. R3 includes multiple dwellings with only the nearest one identified. However, this property is owned by Cefn. There are also various dwellings beyond R7. However, as they are further from the piggery in the same direction as R7, compliance with R7 ensures compliance with all receptors beyond it.

The building on Lots 2 & 3 RP162693 do not have any relevant building or planning approvals and are within the 1 km reverse amenity protection area under the TRC planning scheme. As such, they have no clear path to obtaining the necessary approvals and have not been considered receptors. They have been marked in Figure 3 with red crosses.

Generally, the region is dominated by cropping, intensive livestock (piggeries and feedlots), and grazing uses.

Table 2 – Sensitive Receptors

Receptor	Lot/Plan	Direction	Distance (m)
R1	23/SP206518	NNW	2,300
R2	47/N25528	NE	2,345
R3*	11/RP892911	ENE	1,740
R4	31/M341017	E	1,630
R5	111/M341017	SSW	1,200
R6	7/M341014	SW	990
R7	27/RP159844	W	1,360

*These receptors are owned by CEFN.

2.4 TOPOGRAPHY

Generally, site topography is gently undulating with a slope from the south to the north towards Thanes Creek. Elevation ranges from 459 m at the highest point, in the southern corner of Lot 5 SP170101, to 404 m at the downstream-most point of Thanes Creek in the north of the property (Figure 4).

Figure 3 – Sensitive Receptors and Land Use

Figure 4 – Topography

2.5 LAND AND SOIL

2.5.1 SOIL SYSTEMS

The property is mapped as part of the Soil Survey of the Eastern Darling Downs (DNRM, 2001). The piggery site and effluent utilisation areas are primarily on the Ellangowan soils, with the alluvial landscapes consisting of a mixture of Haslemere, Condamine and Gammie soils (Figure 5, Table 3).

Table 3 – Soil Mapping Units

Map code	Soil Name	Landform	Soil Description	Australian Soil Classification
Eg	Ellangowan	Hillslopes of undulating plains and rises.	Moderately deep to deep, texture contrast, with hard setting surface and bleached A2 over sodic, alkaline, mottled clay.	Yellow or grey sodosol
Hm	Haslemere	Relict alluvial plains.	Deep to very deep, hard-setting, texture contrast, with acid, dark, sandy clay loam over alkaline, dark brown to dark grey clay	Brown sodosol
Su	Springburn	Hillslopes of undulating plains and rises.	Moderately deep to deep, texture contrast, with crusting surface and thick bleached A2 over sodic, alkaline, mottled clay.	Yellow or grey sodosol
Cn	Condamine	Levees and terraces of the Condamine River.	Deep to very deep, sodic, alkaline, black, medium to coarse self-mulching, cracking clay.	Black vertosol
Ga	Gammie	Hillslopes of undulating to steep rises and low hills.	Very shallow to shallow grey to brown, neutral loam to clay loam with abundant stone.	Bleached leptic tenosol

2.5.2 AGRICULTURAL LAND CLASS

The piggery site and adjacent irrigation area is identified as agricultural land classification (ALC) Class C with suitability limited to grazed pastures. This is supported by the current use of land surrounding the piggery with improved pasture, either cut and removed or grazed. Alluvial soils in other parts of the property are identified as Class B soils. The piggery will not change the current use of Class A/B land.

2.5.3 ACID SULFATE SOILS

Acid sulfate soils (ASS) contain high levels of iron sulfide minerals, generally in anaerobic conditions. ASS are typically found in low lying coastal areas and, if disturbed, they can cause damage to both the built and natural environment. The site is not mapped as being likely to contain ASS.

2.5.4 CONTAMINATED LAND

Contaminated land is regulated under the *Environmental Protection Act 1994* (EP Act). Contaminant land sites are listed on the Environmental Management Register (EMR) and/or the Contaminated Land Register (CLR). The site is not listed on the EMR or CLR (Appendix C).

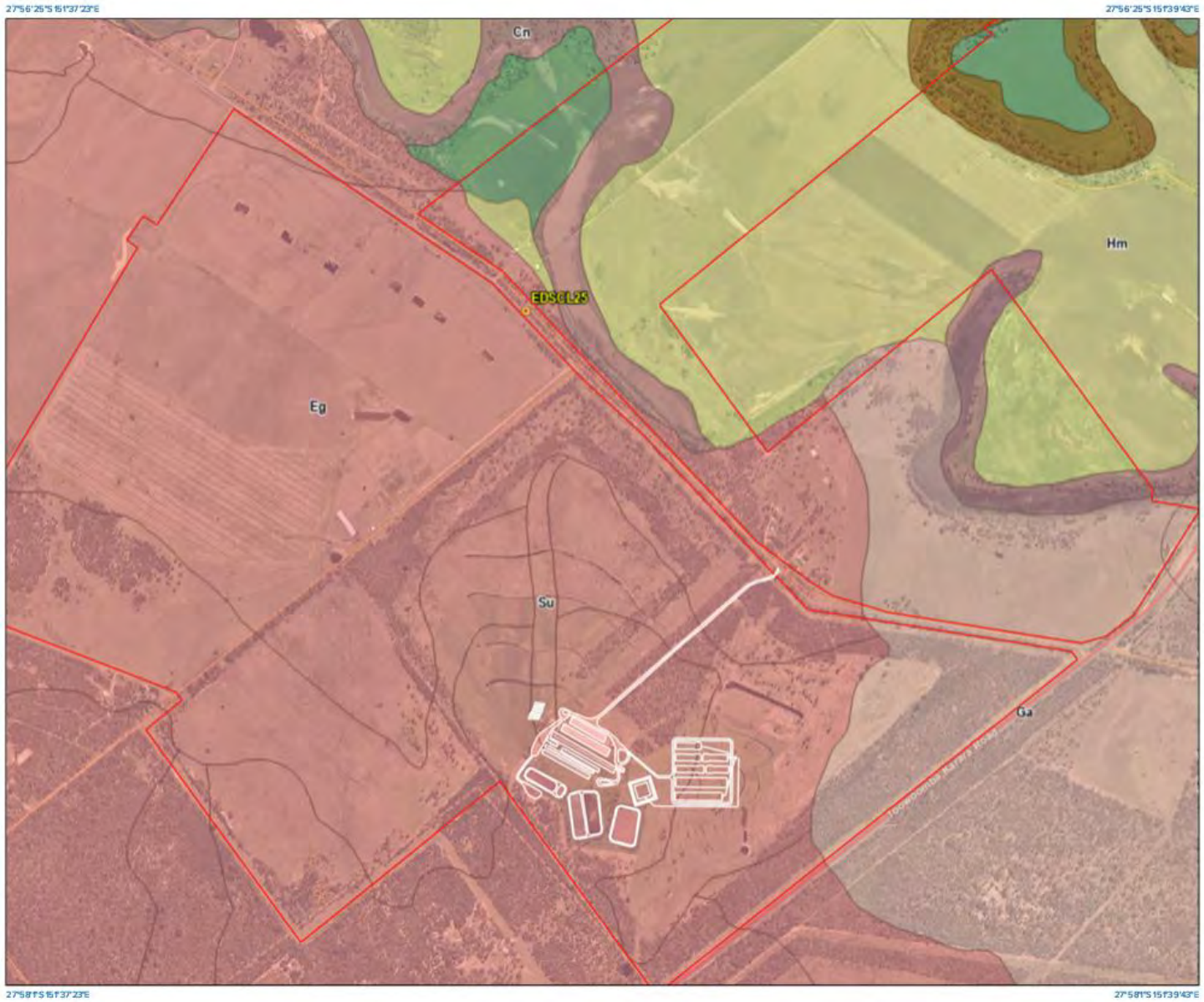

Figure 5 – Soils

2.6 SURFACE WATER

2.6.1 ENVIRONMENTAL PROTECTION ACT 1994

Surface water values are protected under the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019* (Water and Wetland Policy). Surface water is water which is not considered to be groundwater contained within an aquifer. Environmental impacts to surface water must be prevented or minimised.

2.6.2 VEGETATION ACT 1999

Under the *Vegetation Management Act 1999* (VMA), certain surface water features are identified as watercourses or drainage features. The stream order (SO) for these surface water features is identified on the map. Although identified as a surface water feature, the mapped watercourses and drainage lines are identified for the purposes of determining the associated clearing requirements. Regulated vegetation along these surface water features is considered a Matter of State Environmental Significance (Section 2.10.2).

Except for the SO 5 Thanes Creek, which forms part of the northern property boundary, there are no mapped drainage features across the property.

2.6.3 WATER ACT 2000

The watercourse identification map is used to delineate drainage features and watercourse mapped under the *Water Act 2000*. Water within drainage features (red) is defined as overland flow and water within watercourses (blue) is defined as surface water. Surface water features that are yet to be defined are described as unmapped (grey).

As there are no on-site drainage features, Thanes Creek is the only watercourse or drainage feature on or near the property (Figure 6). Some of the effluent structures are incorrectly mapped as water bodies. The property is in the Condamine River catchment and is subject to the *Water Plan (Condamine and Balonne) 2019*.

2.6.4 FISHERIES ACT 1994

Under the *Fisheries Act 1994*, permanent and ephemeral waterways, including drainage features, are subject to additional requirements where waterway barrier works are proposed. Structures such as dams and culverts are considered waterway barrier works.

Thanes Creek is mapped as a major impact waterway for fish barrier works. However, development is not proposed on or near this waterway.

Figure 6 – Surface Water Features

2.6.5 FLOODING

The piggery must be protected from inundation during a 1 % annual exceedance probability (AEP) flood event. This can either be through site selection or the construction. Land parcels to the north of Strathane Road are mapped as being subject to inundation during a 1 % AEP event (Figure 6). The piggery site and most of the EUA is not.

The Queensland Floodplain Assessment Overlay (QFAO) was developed to show the extent of floodplains and potential flood hazards across Queensland. The QFAO was developed as a low-resolution tool to identify potential flood areas. However, the accuracy of this layer is limited, and flood depth is not identified. Generally, the floodplain are and 1 % AEP mapping are aligned.

Figure 7 – Flood mapping – floodplain extent (yellow) and 1 % AEP mapping (blue). Source: FloodCheck Queensland

2.7 GROUNDWATER

A search of the Department of Regional Development, Manufacturing and Water (DRDMW) groundwater database was undertaken for all registered water bores surrounding the subject property (Figure 8). Refer to (Appendix D) for the bore report relevant to the below bore.

RN137252 is a sub-artesian bore located on Lot 26 RP159844, west of the existing piggery. Topographical contours (Figure 4) identify that it is at a similar topography to the existing piggery. The bore report indicates that the bore was drilled to a depth of 59.5 m (below ground level) intersecting the Marburg Subgroup aquifer at 41 m. The shallowest water bearing zone is overlain by several layers of clay. The clay or sandy clay layers extend from sub-soils to a depth of 26 m before sandier strata are intersected.

2.7.1 ENVIRONMENTAL PROTECTION ACT 1994

Environmental values (ecological, use, and cultural) of groundwater are protected under the Water and Wetland Policy. The level of protection is determined by the level of ecological (high or disturbed) value, the intended use of the groundwater (human consumption, stock, industrial uses) and any cultural or spiritual value placed on the water. Environmental impacts to groundwater must be prevented or minimised.

2.7.2 WATER ACT 2000

The use of groundwater is regulated under the *Water Act 2000* and a licence is required to use water for any purposes other than stock and domestic. Water supply is further discussed in Section 3.4.5.

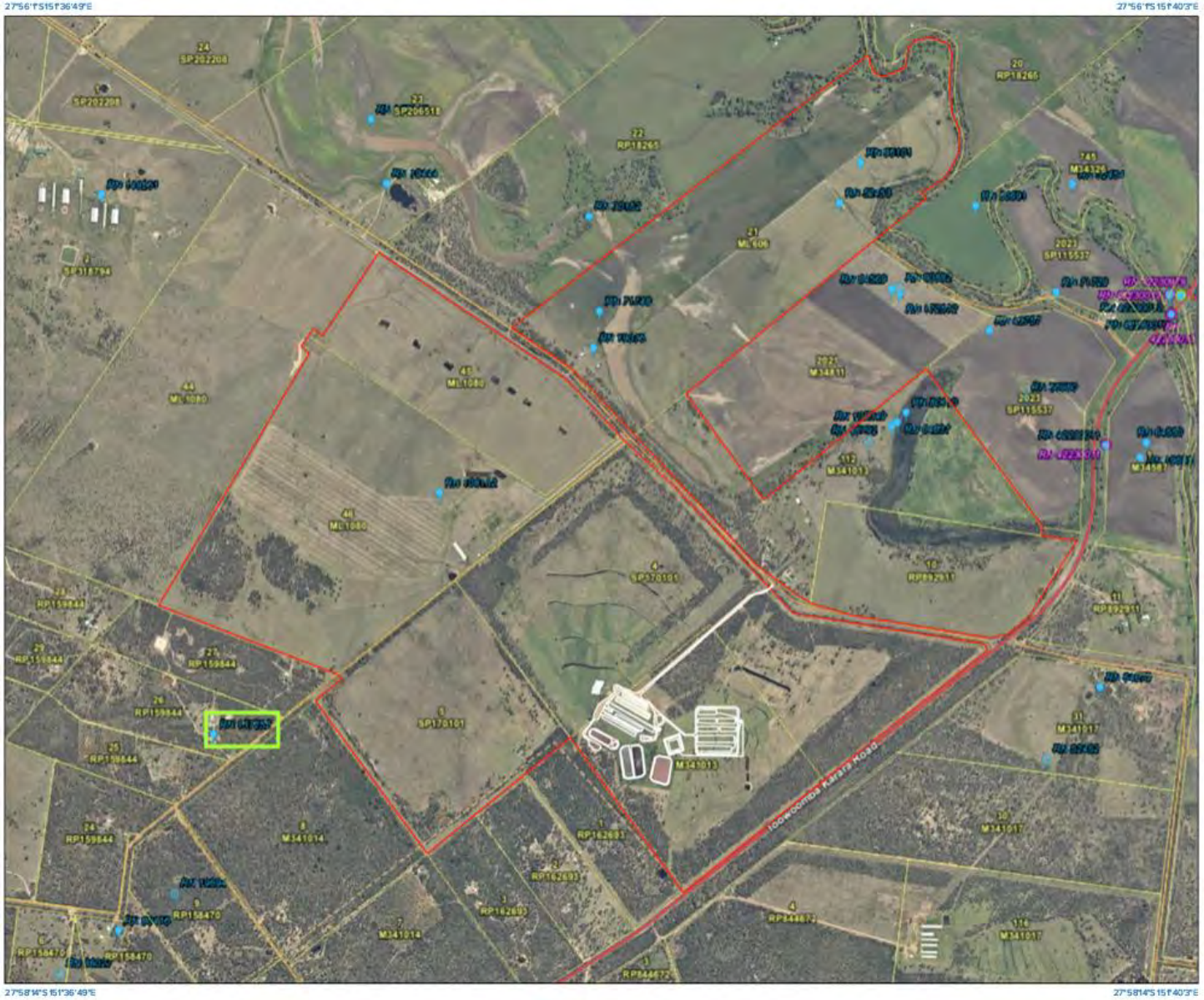

Figure 8 – Groundwater Bores

2.8 FLORA AND FAUNA

2.8.1 VEGETATION MANAGEMENT ACT 1999

The purpose of the VMA is to regulate the clearing of vegetation to conserve and protect the ecological and biodiversity values of land. Regulated vegetation is mapped under the following categories:

- Category A – Vegetation offsets and compliance notices;
- Category B – Remnant vegetation;
- Category C – High-value regrowth;
- Category R – reef-regrowth watercourse vegetation; or
- Category X – exempt.

Category A, B, C, and R vegetation is identified as containing of least concern, of concern or endangered regional ecosystems. Additionally, this vegetation may contain essential habitat for protected fauna. The clearing of this vegetation is subject to approval. Category R vegetation, Category B and C vegetation containing of concern or endangered regional ecosystems, and essential habitat are considered Matters of State Environmental Significance (MSES). Impacts to MSES may be subject to considerations under the *Environmental Offsets Act 2014*. Refer to Appendix E for a copy of the vegetation management report for the property.

The property contains areas of Category B vegetation which includes both of concern and least concern regional ecosystems (RE) (Figure 9 and Table 4). The vegetation surrounding the piggery and most of the EUA contains least concern RE. Some of the existing infrastructure is located within areas mapped as regulated vegetation. Following the approval of an application to correct the existing Property Map of Assessable Vegetation (PMAV) (Appendix F), a further clearing of approximately 0.5 ha of Category B vegetation is required for the future expansion of the composting pad.

Table 4 – Regional Ecosystems

Regional Ecosystem	VMA Class	Description	Structure
11.3.2	Of concern	*Eucalyptus populnea* woodland on alluvial plains	Sparse
11.3.25	Least concern	*Eucalyptus tereticornis* or *E. camaldulensis* woodland fringing drainage lines	Sparse
11.5.1	Least concern	*Eucalyptus crebra* and/or *E. populnea, Callitris glaucophylla*, *Angophora leiocarpa*, *Allocasuarina luehmannii* woodland on Cainozoic sand plains and/or remnant surfaces.	Sparse
11.9.9	Least concern	*Eucalyptus crebra* woodland on fine-grained sedimentary rocks	Sparse

2.8.2 NATURE CONSERVATION ACT 1992

Certain endangered, vulnerable, or near threatened plants and animals are protected under the *Nature Conservation Act 1992* (NC Act). The WildNet database provides important wildlife information subject to requirements under the NC Act. A search of the WildNet database was undertaken for an area within a 5 km radius of the development site (Appendix G). The search identified that 193 species have been recorded within 5 km of the site. There have been numerous sightings of the bull-oak jewel butterfly within 5 km of the subject site. The vegetation in the western corner of Lot 4 SP170101 (RE 11.5.1) may contain the bull-oak tree, which is the only tree that the butterfly inhabits (Lundie-Jenkins and Payne, 2000). Clearing of vegetation is not proposed and infrastructure is not proposed near the vegetation mapped as containing RE 11.5.1.

The protected plants flora survey trigger map, contained within the vegetation property report (Appendix E), identifies areas which are likely to contain protected plants listed under the NC Act. If clearing in these areas is proposed, a protected plants survey must be undertaken. The property does not contain protected plant trigger areas.

2.8.3 ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The Protected Matters Search Tool (PMST) was used to identify any Matters of National Environmental Significance (MNES) within 5 km of the proposed site (Appendix H). MNES are protected under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). The search identified five threatened ecological communities (Table 5), 46 threatened species and 9 migratory species. Regional ecosystems present on the site, which are relevant to one of the listed TECs, are bolded.

The small sliver of on-site vegetation in the north-west corner of the property is likely to contain the Poplar Box Grassy Woodland and/or Weeping Myall Woodlands TEC. This vegetation is not located near the piggery nor will clearing be required.

The vegetation surrounding the existing piggery contains the 11.9.9a RE which is identified as being part of the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland TEC. However, according to the Biogeographic sub-region mapping in Queensland Globe, the subject site is outside of the Nandewar Bioregion to which the TEC relates. The infrastructure proposed for the expansion is not near this vegetation and is in mostly cleared grazing land or effluent irrigation area.

Table 5 – Threatened Ecological Communities

TEC	Status	Type of Presence	Relevant Regional Ecosystems	
Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Regions	Endangered	May occur	11.3.3 11.3.15 11.3.16	11.3.28 11.3.37
Natural grasslands on basalt and fine-textured	Critically Endangered	Likely to occur	11.3.21	11.3.24

TEC	Status	Type of Presence	Relevant Regional Ecosystems	
alluvial plains of northern New South Wales and southern Queensland				
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Likely to occur	**11.3.2** 11.3.17 11.4.7	11.4.12 12.3.10
Weeping Myall Woodlands	Endangered	Likely to occur	**11.3.2**	11.3.28
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Likely to occur	11.3.23 11.8.2a 11.8.8 **11.9.9a** 12.8.16 13.3.4	13.3.1 13.11.3 13.11.4 13.11.8 13.12.8 13.12.9

2.8.4 PLANNING ACT 2016

The TRC ecological significance overlay is mapped across the Category B vegetation adjacent to the existing piggery and the Category X vegetation adjacent to the property access road. While the northern-most shed of the proposed breeder unit is located adjacent to this vegetation, and within the associated buffer, it will not require the clearing of any of the vegetation mapped as part of the overlay. There will be no change to the existing piggery operations or footprint.

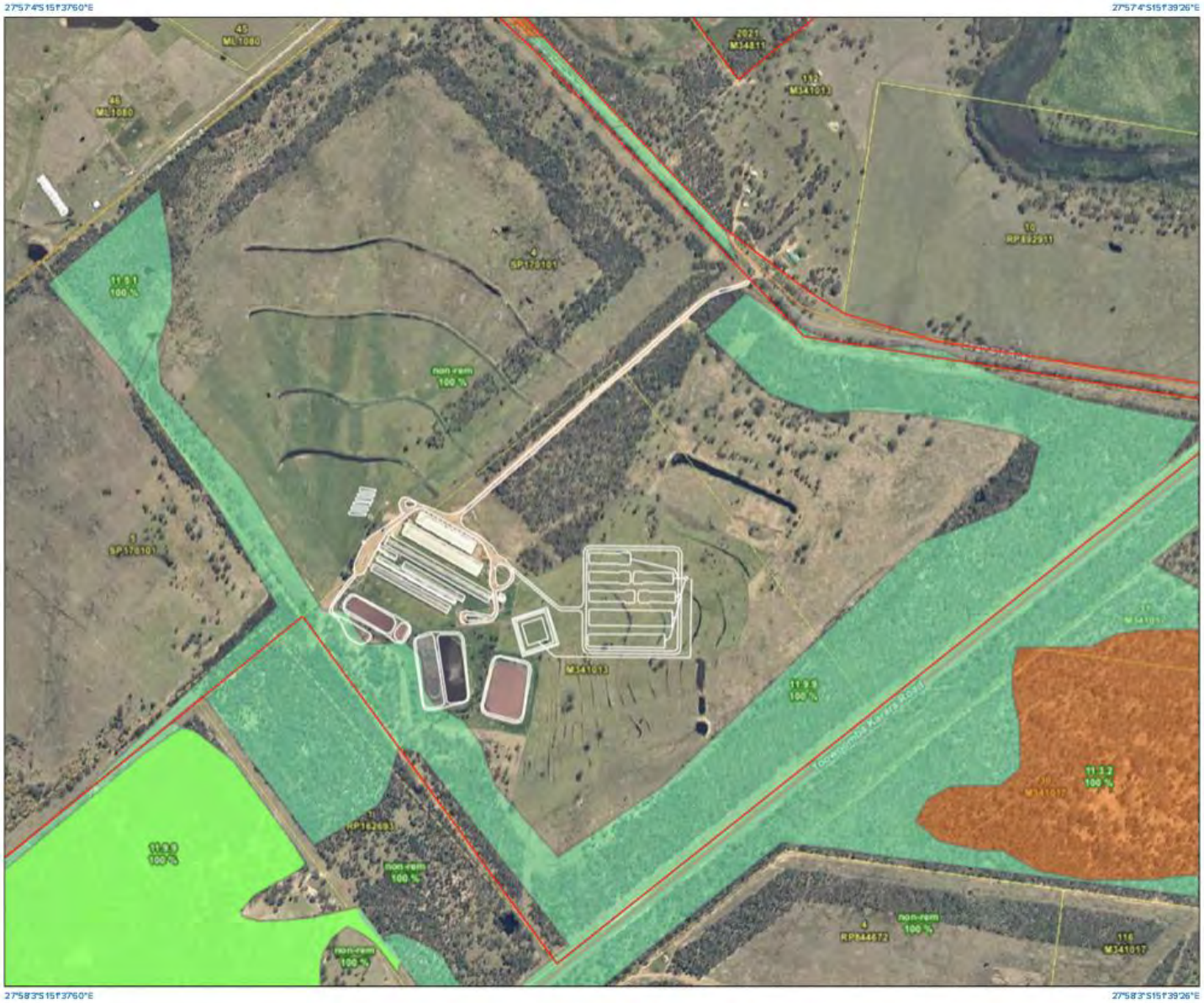

Figure 9 – Regulated Vegetation

2.9 WETLANDS

2.9.1 ENVIRONMENTAL PROTECTION ACT 1994

Wetlands regulated under the Water and Wetland Policy include Great Barrier Reef Wetland Protection Areas (wetland protection areas) and wetlands of general or high ecological significance (GES or HES). Wetland protection areas and HES wetlands are subject to additional requirements. Environmental impacts to wetlands must be prevented or minimised.

The Environmental Protection Regulation wetland map (Appendix I) for Lot 4 SP170101 shows that a low-lying area and part of Thanes Creek to the north of Strathane Road are mapped as GES wetlands. However, the piggery and associated EUA are not proposed on or near these areas.

2.9.2 ENVIRONMENTAL PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

Wetlands of international importance, listed under the Ramsar Convention, are a matter of National Environmental Significance (MNES) under the EPBC Act. The site is located more than 400 km from the nearest wetland of international importance (Appendix H).

2.10 STATE PLANNING POLICY – STATE INTERESTS

The State Planning Policy (SPP) outlines the guiding principles and State interests that underpin the delivery of local and regional plans, and development that will advance the social, economic, and environmental needs of Queensland. The SPP includes five State interests with those relevant to the property identified in the SPP mapping (Appendix J). The SPP overlays applicable to the site are discussed below.

2.10.1 ECONOMIC GROWTH

2.10.1.1 Agriculture

The SPP states that "Agricultural Land Classification (ALC) Class A and Class B land is protected for sustainable agricultural use". The SPP State interest guidance material for agriculture further states to, "Permit agricultural uses not dependent on ALC Class A and B land". However, it requires impacts to be minimised and rehabilitation of the land following the cessation of the activity.

The existing piggery complex, and proposed development site, are not mapped as Class A or B land. The land to the north of Strathane Road is. However, the proposed development will not change the use of this land.

The Toowoomba-Karara Road corridor is a stock route. However, no change is proposed to the boundary fence, which is an animal-proof, biosecurity fence.

2.10.2 ENVIRONMENT AND HERITAGE

2.10.2.1 Biodiversity

The of concern vegetation regulated under the VMA (Section 2.8.1) is identified as a Matter of State Environmental Significance (MSES). Thanes Creek is identified as MSES vegetation intersecting watercourses and there is also essential habitat to the south-west of the property. The proposed development site is not located in or near the above MSES.

2.10.3 SAFETY AND RESILIENCE TO HAZARDS

2.10.3.1 Bushfire Prone Area

All sparse to dense vegetation located on the property is mapped as a bushfire prone area with a medium potential bushfire intensity. The associated impact buffer extends into the piggery complex. Some of this vegetation has been previously cleared. Bushfire management is discussed in Section 3.5.

2.10.3.2 Flood Hazard Area

As per Section 2.6.5, part of Lot 45 ML1080 and most of the land parcels to the north of Strathane Road are mapped as flood hazard area. Works are not proposed in these areas.

2.10.4 INFRASTRUCTURE

2.10.4.1 State Controlled Road

The eastern property boundary forms the edge of the Toowoomba-Karara Road corridor, which is a state-controlled road. The site generally slopes away from the state-controlled road, with development proposed approximately 300 m from the road corridor.

2.11 CULTURAL HERITAGE

2.11.1 ABORIGINAL CULTURAL HERITAGE ACT 2003

A search of the Aboriginal Cultural Heritage Database and Register was undertaken on 4 June 2025 to determine if there is any Aboriginal cultural heritage identified on the subject property (Appendix K). The search did not identify any Aboriginal sites, designated landscape areas, registered study cultural heritage areas, cultural heritage management plans, cultural heritage bodies or cultural heritage parties for the area.

Under the Cultural Heritage Duty of Care Guidelines (Duty of Care Guidelines), the proposed development is a Category 4 development. As such, no further cultural heritage advice is required. Regardless, all work will be undertaken in accordance with the Duty of Care Guidelines.

2.11.2 QUEENSLAND HERITAGE ACT 1992

The Queensland Heritage Strategy manages and coordinates heritage issues, regulated under the *Queensland Heritage Act 1992*, that are central to community sustainability, ethos, and identity to protect the past, present, and future. A search of the Queensland Heritage Register (QHR) database was undertaken, and returned no heritage listed places on the property. Refer to Appendix L for the certificate of affect.

3 PROPOSED DEVELOPMENT

3.1 OVERVIEW

The existing Susco piggery is a breeder piggery with an approved capacity of 11,500 SPU. Pigs from this site are primarily sent, as weaners, to the Wyemo piggery, near Glenarbon. Some replacement gilts are retained in the piggery as future breeding sows. The effluent system for the existing piggery consists of a soon-to-be-constructed 21 ML Covered Anaerobic Pond (CAP), two Settling Ponds (approx. 18 ML each), a Secondary Pond and a large Wet-Weather Pond. Effluent is recycled and irrigated from the Secondary Pond. The CAP has been registered as a project as part of the Australian Carbon Credit Unit (ACCU) scheme. As the existing ponds have been in place for over 30 years, except for one of the Settling Ponds, their exact capacities are unknown. The eastern-most Settling Pond has been recently cleaned and surveyed, which provides an estimation for the other Settling Pond.

The proposed development will result in the expansion of the piggery to a total capacity of 24,500 SPU through the addition of a 2,600-sow breeder unit (farrowing to 10 weeks) with pigs housed across seven sheds. Pigs from the new sheds will have a similar structure to the existing piggery with most weaners sent to Wyemo and some retained as replacement breeding stock. The final herd structure may vary from the numbers provided but won't exceed the 24,500 SPU capacity.

For the purposes of the development application, the proposed capacity has been rounded up from the proposed pig herd from the DPI Piggery Assessment Spreadsheet (Appendix M). The total SPU in Table 6 is higher than the DPI Piggery Assessment Spreadsheet as the SPU conversion factors are not rounded to two decimal places in the spreadsheet. The total pig numbers are the same across the spreadsheet and the table.

The CAP has been suitably sized to treat effluent from the expanded capacity. The remaining ponds will be used to settle and remove sludge or for wet-weather storage. While the sizes of the ponds have been estimated, their expected capacity far exceeds the minimum requirements for wet-weather storage (16 ML). The current surface irrigation of effluent will not be utilised for regular effluent irrigation, with spray irrigation (lateral or travelling irrigator) being the primary irrigation method. The EUA will also be expanded for long-term sustainability. Effluent management is further discussed in Section 3.2.

Refer to Appendix B for a property plan and site plan.

Table 6 – Proposed Pig Herd

Site		Dry Sows	Lactating Sows	Suckers	Weaners	Young Gilts	Mature Gilts	Total
Existing Unit	Pigs	1,980	360	4,300	7,700	830	680	15,850
	SPU	3,168	900	430	4,543	1,228	1,224	11,493
Proposed Unit	Pigs	2,140	465	4,650	8,000	1,000	1,000	17,255
	SPU	3,424	1,163	465	4,720	1,480	1,800	13,052
Total	**Pigs**	**4,120**	**825**	**8,950**	**15,700**	**1,830**	**1,680**	**33,105**
	SPU	**6,592**	**2,063**	**895**	**9,263**	**2,708**	**3,024**	**24,545***

*Appendix M provides a more accurate calculation of total SPU

3.2 EFFLUENT SYSTEM

Effluent generated by pigs will be captured by a series of channels which sit below the slatted floors of the sheds. The new sheds will be a mixture of flushed and pull-plug sheds with the dry/gestating sow and mating sheds utilising a flushed system and the farrowing and weaner sheds utilising a pull-plug system. Recycled effluent will be used to flush the sheds or recharge the channels (pull-plug system).

Effluent will be directed out of the sheds via PVC pipe into a stirred concrete sump adjacent to the new unit. Effluent sumps are located at the end of the existing sheds. From these sumps, effluent will be pumped into the new 21 ML CAP. Effluent will then be transferred from the CAP to one of the two existing Settling Ponds.

As per the NEGIP, all ponds will maintain a freeboard of 0.6 m.

Table 7 – Summary of Effluent System

Pond System	Volume (ML)	
	Primary	Wet-Weather
Constructed	N/A	>20.0*
Required	20.5	16.0
Proposed	21.0	>20.0*

*This volume has been conservatively estimated based on the survey completed on one of the Settling Ponds. The actual volume is likely to far exceed the estimated volume.

3.2.1 COVERED ANAEROBIC POND

Planning is underway for a new covered anaerobic pond (CAP) for the existing piggery and a project has been registered with the Clean Energy Regulator as part of the Australian Carbon Credit Unit (ACCU) scheme. However, it has also been oversized to allow for flexibility into the future.

The CAP will be an earthen storage covered by a HDPE (or similar) pond cover. It will be agitated, through pumping or mechanical stirrers, to ensure that sludge does not settle prior to discharge into the Settling Ponds. Additional infrastructure will include gas plumbing and a flare for methane destruction. Biogas may also be utilised for heating or electricity within the piggery. An indicative process flow diagram is provided in Appendix B. The specific sizing and location of ancillary biogas infrastructure will be determined during detailed design. Data and designs from the recent Wyemo biogas project have been provided as they are indicative of the system proposed at Susco (Appendix B).

The proposed volume of 21 ML has been designed to meet the minimum required volume of 20.5 ML, which was calculated using the WatBal model (Appendix N).

Table 8 –Anaerobic Pond Summary

Anaerobic Pond Design	
Piggery Capacity (SPU)	24,500
Effluent Management	
Effluent Removal System	Flushed/Pull-plug
Effluent Removal Water Use Rating	Low-Medium flush
Recycled Water Use (%)	90
Fresh Water Use (L/day)	25,306
Recycled Water Use (L/day)	227,754
Solids Separation	N/A
Effluent Total Solids (kg TS/day)	8,622
Effluent Volatile Solids (kg VS/day)	7,045
Pond Design	
Pond design philosophy	Covered Anaerobic Pond
Maximum Suggested Baseline VS loading rate (kg VS/m^3/day)	0.333
De-sludging Interval (years)	0 (no sludge deposition)
Suggested Volume (ML)	20.5
Proposed Volume (ML)	**21.0**

3.2.2 SETTLING PONDS

The two existing Settling Ponds are currently used for primary treatment of effluent. With the addition of the CAP, they will become Settling Ponds, which can be used to settle sludge out of the effluent stream following treatment in the CAP and prior to recycling or irrigation from the Secondary Pond. One of the Settling Ponds has been recently emptied, cleaned, and surveyed. Going forward, this will allow for the alternating use of these ponds to ensure cleaning can be undertaken without interrupting the settling functionality. The second Settling Pond will be emptied, cleaned, and surveyed into the future.

3.2.3 SECONDARY POND

The existing Secondary Pond allows for the consolidation of effluent to ensure there is adequate effluent available for recycling or irrigation. Aside from small daily fluctuations, this pond is normally maintained near the top water level. If irrigation or recycling demand are not adequate to accommodate the normal inflows, effluent flows will be directed to the Wet-Weather Pond. Aside from a small inflow from the adjacent composting area following rainfall, the effluent inflows to the Secondary Pond will be completely controlled through pumping.

3.2.4 WET-WEATHER POND

With irrigation, the proposed piggery, incorporating the catchment area of the existing composting area, requires a Wet-Weather Pond capacity of approximately 16 ML. Due to the age of the existing piggery, the exact capacity of much of the existing pond system is unknown. However, in 2024, the eastern-most settling dam was emptied, cleaned, and surveyed. It has a capacity of approximately 18 ML. As such, this pond alone exceeds the required wet-weather storage capacity. Based on the surface area and estimated depth, it is expected that the

existing Wet-Weather Pond exceeds the capacity of the individual Settling Ponds. As such, it will exceed the minimum 16 ML wet-weather capacity. The progressive cleaning of existing ponds is expected to occur over the coming years. As each pond is cleaned, they will be surveyed to confirm the constructed volume.

The effluent system has been modelled using the WatBal model to identify the minimum required wet-weather capacity (Table 9, Appendix N).

Table 9 – Summary of WatBal Inputs

WatBal Input	Input	Comments
Analysis Setup	Primary and Storage with a 120-year analysis period.	WatBal only allows for a primary and storage pond to be modelled. The default analysis period from 1900 to present was used.
Pond Catchment	0 m^2	The composting area is self-contained and does not drain into the Secondary Pond.
Effluent Management	Flushed and Pull-plug	Dry sow and grower sheds are flushed while farrowing and weaning sheds are pull-plug.
Solids Management	8,600 kg TS/day 7,100 kg VS/day	The inputs for TS and VS are for effluent from sheds as there is no solids separating system. These numbers were generated using the DPI Piggery Assessment Spreadsheet.
Primary Pond	21 ML	The 21 ML covered anaerobic pond was used as the input.
Storage Pond	16 ML	This input was identified using an iterative approach to determine the minimum required volume.
Effluent Irrigation	45 ha with a 30 mm irrigation trigger and 10 mm of rain to cancel irrigation.	This was based on at least 45 ha of the 167.5 ha identified as EUA being available at all times for irrigation. The selected irrigation triggers are standard for piggeries where effluent irrigation can occur frequently and at low volumes.

3.2.5 EFFLUENT IRRIGATION

Currently, effluent is irrigated via a keyline system to the north and east of the piggery. Following the expansion, this system will not be used for regular effluent irrigation, with the installation of a more controlled irrigation system (travelling or lateral irrigator). This will allow a more even application of effluent across the available effluent utilisation area. However, the keyline structures will be retained for emergency irrigation to avoid ponds overtopping. The primary irrigation area will also be extended onto Lot 5 SP170101, with this paddock improved and remaining scattered trees removed. However, large clumps of trees along the boundary will be retained and avoided.

Due to the soil type and gentle slope, intensive cropping beyond cut and cart pasture is not likely to be possible. As such, the modelled irrigation system is based on irrigated pasture which, as required, will be cut and removed from the property. The available effluent irrigation area (218 ha) exceeds the required effluent utilisation area determined using the DPI Piggery Assessment Spreadsheet (Appendix M). It is likely that the primary irrigation area (167 ha) will provide adequate irrigation area for the near future. Long-term sustainability will be

dependent on actual effluent irrigation and pasture yields. As such, the secondary EUA may never be required.

3.3 COMPOSTING

Pig mortalities are currently composted in bays on a hardstand pad adjacent to the Secondary Pond. As it is existing, it is assumed that this pad has been constructed to achieve a maximum permeability of 1 x 10^{-9} m/s (0.1 mm/day). The composting pad is bunded to exclude upstream water and to contain any runoff. Runoff will be contained against the downslope bund and evaporated. As require, this area will be expanded with the bunding extended to ensure runoff is contained.

Composted material is currently removed from the property for use as an organic fertiliser. Any remaining bone fragments will be incorporated back into fresh compost for further decomposition. Dried sludge or sawdust will be utilised as a co-composting material. Small stockpiles of sawdust and mature compost are normally maintained on the hardstand pad.

3.4 OPERATIONAL DETAILS

3.4.1 LIFE OF OPERATION

It is intended that the life of the piggery is indefinite with sheds being refurbished or replaced as required into the future. Should the piggery be operated with the irrigation of effluent, there is adequate land available for the long-term management of Nitrogen and Phosphorous. If evaporation is utilised, there is minimal concern about long-term sustainability.

If the activity, or parts of it, were to cease in the future, those sites would be rehabilitated, and any infrastructure not required for an ongoing rural use decommissioned and demolished. Effluent will be allowed to evaporate prior to the decommissioning of the ponds.

3.4.2 EMPLOYMENT

The existing piggery has a total staff of 15. The proposed breeder unit will require 10 additional staff resulting in a total staff of 25.

3.4.3 STAFF AMENITIES

The existing staff amenities and office building will be retained for the existing unit. This amenities building will also be used for the new unit. Staff parking is provided in front of the amenities building. Treated wastewater from the amenities sewage treatment plant is irrigated on a nearby grassed paddock.

3.4.4 HOURS OF OPERATION

Due to animal welfare requirements, the piggery will be operational 24 hours a day, seven days a week. Generally, on-site piggery operations occur between 5 am and 5 pm, which will not change with the proposed expansion.

3.4.5 WATER SUPPLY

The DPI Piggery Assessment Spreadsheet estimates that approximately 58 ML/year of water will be required for the proposed development. However, current Cefn operations and known water efficiencies of new sheds indicate that water requirements will be no more than 50 ML/year. Water supply for the existing piggery is by various bores which are linked to two water allocations with a combined volumetric limit of 360 ML/year (Appendix O). Additional allocation has been secured sine the Kyles piggery expansion application was approved. This water is shared between both the Susco and Kyles piggeries and there is adequate water for both piggeries.

3.5 BUSHFIRE MANAGEMENT

CEFN own a fire-fighting truck which can be transported between all their properties during a bushfire event. Each piggery unit is surrounded by a ring road which is suitable for access via heavy vehicles and would be suitable for fire-fighting vehicles. Similarly, all internal roads are designed for heavy vehicle access and would be suitable for fire-fighting vehicles.

CEFN have developed an Emergency Management Procedure which details the necessary response in the event of a bushfire or structural fire (Appendix P). The recommendations from the Kyles Piggery Bushfire Management Report (BMR) (Appendix Q). Given the similar location, building types, vegetation, and proximity to nearby vegetation, the Kyles BMR will be applied to the Susco piggery.

3.6 TRAFFIC

3.6.1 TRAFFIC GENERATION

The existing piggery requires the transport of weaners (30 kg liveweight) from the site to the Wyemo piggery near Glenarbon. Additionally, a low number of cull animals are removed from the site and transported to the Swickers abattoir in Kingaroy. Generally, the piggery is self-replacing, with some weaners being retained and grown out as gilts (replacement sows). However, there may occasionally be a need to introduce new genetics into the facility, although this is rare. As such, these vehicles have not been considered part of normal operations.

The proposed expansion will increase the number of trucks taking cull sows and weaners out. Generally, the cull trucks are infrequent but have been rounded up. The information in Table 10 has been provided by CEFN based on their existing operations and not generic industry numbers. All trucks are semi-trailers and are likely to come from both north and south along Toowoomba-Karara Road.

Table 10 – Pig Movement Traffic

		Existing Unit	Proposed Unit	Total
Pig trucks (per week)				
Weaners Out (30 kg pigs)		2	2	4
Cull Sows Out		0.25	0.25	0.5
Feed (per week)				
Ration Required (tonnes)		125	130	255
Truck Capacity (tonnes)		25		
Trucks (number)		5.0	5.2	10.2
Total Trucks	Yearly	377	388	765
	Weekly	7.25	7.5	14.7
	Daily	1	1.1	2.1
Total Movements*	Daily	4	4	6

*Daily movements (two trips per truck) were rounded up to the nearest even number and are indicative of a 'maximum day' but conservative for a 'normal day'.

3.6.2 PARKING AND INTERNAL ROADS

The existing access will be utilised for piggery access. It has been constructed to an all-weather standard and will be maintained for the lifetime of the piggery. Parking for the loading of pigs is provided immediately adjacent to the load-out ramp on each of the units. This is likely to be at the end of the weaner shed for the proposed breeder unit.

Feed trucks will deliver feed directly to silos which will be located at the end of each shed or between two sheds. This allows feed trucks to enter the site, deliver feed and then leave whilst remaining separate to the sheds. This is to minimise any biosecurity risk from these trucks as they are likely to be used to deliver feed to other piggeries.

Due to the low number of trucks generated by the proposed development, it is unlikely that there will be more than one pig truck and one feed truck on the site at any one time. As such, additional parking areas are not necessary. In rare circumstances, trucks can park on the hardstand areas adjacent to the existing piggery sheds.

Staff parking will be provided adjacent to the staff amenities buildings at the existing piggery.

3.7 SITE SUITABILITY

3.7.1 ODOUR

A Level 1.5 S-Factor assessment has been completed to show compliance with the NEGIP (Table 11). As the distances between Susco and the nearby Ellangowan Feedlot and Kyles Piggery are more than half the distance required for Susco, they are considered to be separate odour sources. A cumulative (120 %) factor was applied to the proposed piggery to determine the need to consider cumulative impacts. R7 was within this 120 % distance and, as such, a cumulative S-Factor assessment was completed for the Ellangowan Feedlot (Table 12). As it is compliant with the 120 % distance from the Ellangowan Feedlot, it is also compliant with the cumulative assessment for the piggery.

Using 'The Air Pollution Model' (TAPM) and data from the Strathane weather station, S4 values have been generated for the site by Astute Environmental Consulting (Appendix R). As R6 and R7 are the most limiting receptors, further detail has been provided on their S-Factor assumptions.

Table 11 – S-Factor Assessment (Susco)

Receptor	Lot/Plan	Direction	Available (m)	Required (m)	Cumulative (120 %)
R1	23/SP206518	NNW	2,300	662	794
R2	47/N25528	NE	2,365	931	1,117
R3*	11/RP892911	ENE	1,740	741	889
R4	31/M341017	E	1,630	693	832
R5	111/M341017	SSW	1,200	336	403
R6	7/M341014	SW	920	671	805
R7	27/RP159844	W	1,360	1,342	1,610

Legend

Complies
Does not comply with cumulative (120 %) impact (Refer to Table 12)
Does not comply

R7 assumptions:

- $S2_S$ – Open Grassland – the landscape between the piggery and receptor has both dense vegetation and cleared grassland. As such, the more conservative 'open grassland' assumption was used.
- S3 – Flat – While there are slight undulations between the piggery and the receptor (Figure 10), the flat assumption was used.
- S4 – 1.0 as per Appendix R.

Figure 10 – Elevation profile between the piggery and R7 (Source: Google Earth)

R6 assumptions:

- $S2_S$ – Dense forest –The landscape between the piggery and the receptor is heavily vegetated.
- S3 – Gently sloping (1-2%) –The elevation in the first 500 m between the piggery and the receptor has a gradient of approximately 3 %. The landscape then plateaus resulting in an average slope of 1.5 % between the piggery and uphill receptor (Figure 11).
- S4 – 0.75 as per Appendix R.

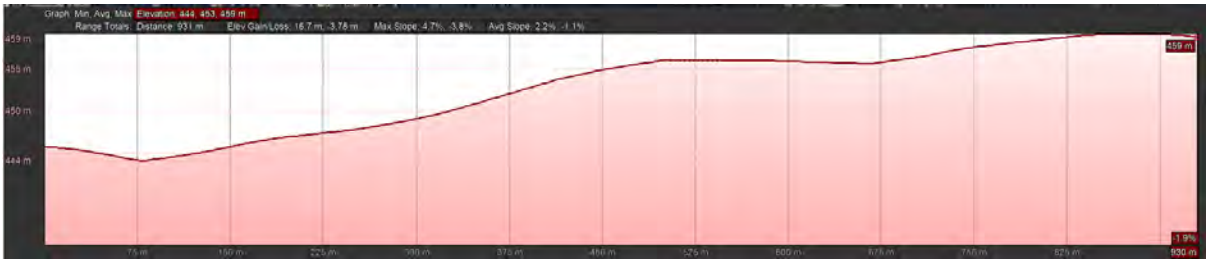

Figure 11 – Elevation profile between the piggery and R6 (Source: Google Earth)

Table 12 –S-Factor Calculation (Ellangowan)

Receptor	Lot/Plan	Direction	S1	S2	S3	S4	S5	Separation Distances		
								Required	Cumulative (120 %)	Available
R7	27/RP159844	WSW	52	0.3	1.0	1.0	1.0	745	894	975

- S1 – When full, the feedlot would have a stocking density of 15 m^2/SCU and average rainfall for the area is less than 750 mm/year.
- S2 – 0.3 - Single rural dwelling.
- S3 – R7 is uphill from the feedlot but, for a conservative assessment, the 'flat' terrain factor was used.
- S4 – To ensure a conservative assessment, the crops only vegetation factor was used.
- S5 – The meteorological data in Appendix R indicate the potential for high frequency wind towards the receptor. However, the S4 factor does not reflect the percentage of all winds as the percentage values do not add up to 100 %.

3.7.2 DUST

The proposed expansion is unlikely to substantially change dust emissions from the piggery. The only new dust sources are internal gravel roads. The separation to neighbours combined with surrounding vegetation is likely to ensure dust does not leave the property at concentrations that will cause nuisance. It is anticipated that both the approval from TRC and the EA from DPI will include dust deposition limits.

3.7.3 NOISE

An Environmental Noise Assessment was completed for the Kyles piggery expansion (Appendix S). Given the same buildings are proposed as part of the Susco piggery, it is expected that the piggery will have a similar increase in noise as Kyles. The Kyles Environmental Noise Assessment did not identify any potential exceedance at the nearest sensitive receptors. It is anticipated that the same conditions will be applied to the Susco piggery approval, and the piggery will comply with those conditions. There is also no history of noise complaints for the existing piggery. Operating hours, fan maintenance, and separation distances are likely to mitigate any potential noise impacts.

3.7.4 SURFACE WATER AND FLOODING

The existing and proposed piggery units are not located in a floodplain and will have a minimal impact on overland flow pathways across the property. There will be no impact to mapped drainage lines or waterways for fish barrier works.

Overland flow paths near the piggery are mapped within the TRC flood hazard overlay in the 'balanced/mixed' zone. However, these areas do not flood, they are simply drainage paths where runoff converges temporarily after rainfall. Further, they are not substantial to be mapped under any other legislation (e.g. *Water Act 2000* or *Fisheries Act 1994*). Due to the size of the property and landscape between the proposed unit and the property boundary (Strathane Road corridor), noticeable changes in stormwater characteristics are unlikely.

Simple earthworks will ensure that runoff is diverted around the sheds and not allowed to enter the buildings.

3.7.5 VEGETATION

The clearing of approximately 0.5 ha of Category B regulated vegetation containing least concern regional ecosystems will be required for the future expansion of the composting pad. The construction of the sheds and pond will also require the clearing of isolated trees within the current EUA. These trees will be inspected for fauna prior to clearing. A spotter/catcher will be engaged if fauna is identified and unable to leave the area without assistance.

The presence of bull-oak trees, which provide habitat for the endangered butterfly, are not expected to require clearing. Further, a 20 m buffer will be maintained between the EUA and vegetation.

3.7.6 GROUNDWATER

The significant depth to groundwater, combined with various layers of clay ensures that, regardless of design parameters, the potential for impacts to groundwater through leaching is negligible. This includes leaching from effluent ponds and irrigation of effluent.

3.7.7 SOILS

The soils on which the piggery is proposed are identified as ALC Class C land which is of minimal value for high-value agricultural uses (cropping). There is adequate clay material within the sub-soils to provide for the construction of effluent ponds. Geotechnical testing will be conducted on in-situ clay materials prior to construction to confirm their suitability or necessary treatments. Locating intensive livestock on these soil types is the most suitable use of low value agricultural land and avoids the fragmentation of Class A or B land.

The proposed irrigation area is unlikely to be of adequate quality for an intensive cropping regime. As such, it has been assumed that this land will be operated with a cut and cart pasture system. Based on the nutrient mass balance, this area will provide the long-term sustainability required for the lifetime of the piggery.

Soil monitoring will be undertaken annually to monitor soil nutrient levels in the effluent irrigation area. If excessive soil nutrients and adverse trends are identified, effluent irrigation on these areas will be reduced and alternate areas identified.

3.7.8 ACCESS

The existing access will continue to be used for the piggery following expansion. However, due to the low traffic volumes and vehicle type (semi-trailers) generated by the existing and proposed piggery, the need for upgrades is unlikely. If requested by TRC or SARA, a Traffic Impact Assessment will be prepared.

4 SITE-BASED MANAGEMENT PLAN

A Site-based Management Plan (SBMP) (Appendix P) has been prepared to guide the ongoing management of the piggery to ensure it meets the requirements of the DP, EA and environmental standards of APIQ✓ (Australian Pork Industry Quality Assurance Program) certification. The existing piggery is APIQ✓ certified and this certification will continue for the proposed piggery. The SBMP provided as part of this application may require amendments based on the conditions of the abovementioned approvals.

The SBMP includes details on:

- Effluent management – shed cleaning and effluent release, effluent transfer systems, ponds, and effluent irrigation;
- Solid organic waste management – composting and sludge;
- General waste;
- Environmental Monitoring – soil and event-based surface water;
- Emergency Incidents – effluent discharge and mass mortality event; and
- Rehabilitation.

5 PLANNING FRAMEWORK

5.1 PLANNING ACT 2016

The *Planning Act 2016* (PA) sets out the land use planning and development assessment process for Queensland. It facilitates Queensland's economic development through ecologically sustainable development. Planning applications are subject to assessment by both local government and state government agencies.

5.1.1 TOOWOOMBA REGIONAL COUNCIL

As the property is in the TRC local government area, the Toowoomba Region Planning Scheme (the planning scheme) sets the relevant assessment process and benchmarks under PA. The proposed development is defined as intensive animal industry and is subject to impact assessment against the entire planning scheme. The property is located in the 100 ha precinct of the Rural Zone.

5.1.1.1 Strategic Framework

The strategic framework sets the policy direction for the planning scheme and forms the basis for ensuring appropriate development occurs within the planning scheme area for the life of the planning scheme. One of the key aspects of the strategic intent of the planning scheme is the long history of agricultural production in the Toowoomba Region. The proposed development will further strengthen agricultural production in the region.

5.1.1.1.1 Settlement Pattern

Due to the nature of the proposed development, the settlement pattern theme has limited applicability to the proposed development. However, the additional jobs will further support nearby regional towns without requiring substantial housing growth. Additionally, the proposed development has been located so that it will not limit any growth in urban areas through land-use conflicts.

5.1.1.1.2 Natural Environment

<u>Element - Protect Ecosystems and Biodiversity Values</u>

The proposed expansion has ensured that the clearing of regulated vegetation is avoided. A PMAV application has been approved to correct the vegetation that is mapped across the existing piggery. Vegetation mapped within the ecological significance overlay has been avoided. Minimal clearing of isolated paddock trees will be required.

<u>Element – Waterways, Wetlands and Aquifers</u>

The proposed development will utilise groundwater for water supply and groundwater use will be within the water licence allocation. There are no on-site drainage features and Thanes Creek is over 1.5 km from the nearest part of the piggery complex or EUA. Additionally, the effluent management system has been appropriately sized to minimise impacts to waterways from potential spill events. Due to the on-site soil type, perennial pasture has been identified as

being most suitable for effluent utilisation areas and the available area exceeds the minimum required by the DPI Piggery Assessment Spreadsheet.

Element – Air Quality

In accordance with the NEGIP, the proposed development has been adequately separated from surrounding sensitive receptors. The separation from neighbours, combined with operating hours, will minimise noise impacts from the proposed piggery. Truck movements and pig vocalisation will be similar to the existing piggery with pig feeding and handling practices key to reducing vocalisation.

Element – Climate Change

There is a small existing on-site solar farm which supplements power supply from the grid. The proposed covered anaerobic pond will also allow for methane to be captured and destroyed using a flare. It may also be used to offset LNG use or electricity from the grid. Additionally, pork production across Australia has made significant steps towards reducing carbon emissions through optimised pig nutrition and feed efficiency. These concepts are also implemented by CEFN.

Element – Environmental Offsets

The proposed development will avoid the clearing of any regulated vegetation or vegetation mapped within the ecological significance overlay. As such, there will be no significant impact or requirements for offsets.

5.1.1.1.3 Community Identity and Diversity

Element - Rural Community Identity

The proposed expansion results in the growth of a key local industry with the CEFN having been present in the local community for over 80 years. In addition to other local intensive livestock operations, the CEFN operations diversify the rural activities in the area which are otherwise dominated by cropping and grazing uses.

Element – Cultural Diversity and Heritage

The property does not contain any matters of state heritage and the proposed development site has, generally, been subject to historic disturbance which minimises the potential for Aboriginal cultural heritage sites.

5.1.1.1.4 Natural Resources and Landscape

Element – Scenic Amenity

The property boundary is surrounded by thick, established vegetation which screens the existing and proposed piggery sites from neighbours and public roads. As discussed above, the incorporation of cut-and-cart pasture into the effluent utilisation area was in response to the lower quality soils and for the protection of the soil surface and surrounding waterways.

Element – Water Resources

The proposed piggery will utilise water supply from an existing entitlement. Additionally, the proposed development has been sited and designed to protect surface and groundwater values.

Element – Sustainable Production

The proposed development directly aligns with this element as it allows for increased agricultural production from a rural property with soils that would otherwise limit agricultural production. Additionally, the proposed development will strengthen local grain markets by increasing demand for commodities.

Element – Stock Route

The subject property is adjacent to the stock route within the Toowoomba-Karara Road corridor. Existing exclusion fencing and access points will be maintained to prevent access or injury to cattle utilising the stock route.

5.1.1.1.5 Access and Mobility

Element – Road Network

Due to the nature of the proposed development, low vehicle generation, existing use of Strathane Road for Susco and Strathane Piggeries as well as the Ellerby Feedlot, it will have a negligible impact on the local road network. Additionally, the substantial amount of land on the property will provide adequate parking and manoeuvring areas for the proposed development.

5.1.1.1.6 Infrastructure and Services

Element – Coordinated Infrastructure Planning and Delivery

The proposed development will not require any additional council infrastructure or services.

Element – Integrating Water Management and Infrastructure

The water supply for the piggery is from an existing groundwater entitlement and effluent generated by the proposed development will, where possible, be reused through irrigation. Due to the nature of the surrounding landscape and vegetation, any minor change in stormwater characteristics from the proposed sheds will be mitigated prior to being discharged from the property.

Element - Waste Water Management Infrastructure and Services

The reticulated sewerage network is not available to the property. Piggery effluent management has been designed in accordance with the NEGIP and existing staff amenities are serviced by a suitably designed wastewater system with irrigation of treated wastewater on surrounding grassland.

Element - Waste Management and Recycling

Standard waste management practices utilised across the pork industry are designed around the conversion or organic waste into a resource. Composted solid organic material will be transported off-site for reuse on farming land. Effluent will be reused in on-site irrigation areas.

5.1.1.1.7 Economic Development

Element – Economic Growth

The proposed development will provide economic growth for the surrounding rural communities through direct production and indirect impacts on other local farming operations and contractors/suppliers.

5.1.1.2 Relevant Codes

Compliance with the following zone and development codes has been addressed in Appendix T:

- Rural zone code;
- Rural uses code;
- Environmental standards code;
- Integrated water cycle management code;
- Landscaping code
- Transport, access and parking code; and
- Works and services code.

Compliance with the following overlay codes has been addressed in Appendix T:

- Environmental significance overlay code; and
- Bushfire hazard overlay code.

Further information and justification relating to these two overlays has been provided below.

Although their respective overlays are mapped on the property, the following overlay codes have not addressed in detail:

- Agricultural Land; and
- Flooding.

Further information and justification relating to these two overlay codes is provided below.

Ecological Significance

The retained vegetation across the property is mapped as an area of ecological significance. The property is also within the biodiversity corridors overlay. As the proposed development is within existing cleared land, it will not impact the extensive vegetation corridors that existing within the property. It will also not require the clearing of vegetation within the mapped areas of ecological significance.

Vegetation that may be cleared for the EUA, has already been subject to historic clearing or thinning. Where possible, land that requires minimal clearing will be subject to effluent irrigation as costs associated with clearing are likely to result in these areas being avoided until they are required for ongoing nutrient sustainability.

Figure 12 – TRC Ecological Significance Overlay

Bushfire Hazard

The proposed sheds are adjacent to an area of bushfire hazard and Cefn have a detailed emergency management procedure. Cefn own a fire-fighting vehicle, and a Bushfire Management Report was prepared for the Kyles piggery. Recommendations from this report have also been applied to the Susco Piggery. This includes the provision of 90kL of static water supply being retained on the property.

Figure 13 – TRC Bushfire Hazard Overlay

Flood Hazard

While the flood hazard overlay applies to the property, majority of the flood prone land is on the northern side of Strathane Road. The existing and proposed piggery sites are not located within a floodplain. While the 'balanced/mixed' overlay applies to local drainage areas on the property, any convergence of runoff in these areas is simply redirected with earthen drains or bunds. These short duration runoff flows will not impact the operation of the EUA as irrigation will not occur during or immediately following a rainfall event heavy enough to cause runoff.

Figure 14 – TRC Flood Hazard Overlay

Agricultural Land

While the agricultural land overlay applies to the property, it does not apply to the existing or proposed piggery sites (Figure 15). This part of the property has been included to remove receptors and its land use will not change. As such, there is no impact from the proposed development.

Figure 15 – TRC Agricultural Land Overlay

5.1.2 STATE ASSESSMENT AND REFERRAL AGENCY

The proposed development will trigger a referral to SARA under the following sections of the *Planning Regulation 2017*:

- Schedule 10, Part 5, Division 4, Table 2 – The proposed piggery is a concurrent ERA which has not been devolved to local government;
- Schedule 10, Part 9, Division 4, Subdivision 1, Table 1 – The proposed piggery has a capacity greater than 3,000 pigs which is a Schedule 20 activity;
- Schedule 10, Part 9, Division 4, Subdivision 2, Table 4 – The subject property is located within 25 m of a state transport corridor; and
- Schedule 10, Part 3, Division 4, Table 3 – The subject property greater than 5 ha in area and involves clearing of Category B vegetation.

The relevant State Codes have been addressed in Appendix U.

5.2 ENVIRONMENTAL PROTECTION ACT 1994

As the proposed development is an ERA, an EA is required. The proposed piggery is ERA 3 – Pig Keeping and the relevant threshold is 3 – keeping more than 8,000 SPU in a piggery. This threshold is a concurrent activity and the application for a development permit is taken to be an application for an EA. This document provides the information required for the concurrent EA application including an assessment of the environmental impact and details on waste management.

6 CONCLUSION

The proposed development is ideally located and designed in accordance with the NEGIP and the planning scheme. It is a rural development in a rural area and the surrounding environment, both built and natural, will be protected through the design and proposed management. As such, the proposed development should be approved.

7 REFERENCES

DNRM (2001) *Soil survey of the Estern Darling Downs - Clifton Shire Soils Map (1:100 000)*. Brisbane: State of Queensland, Department of Natural Resources and Mines. Available at: file:///C:/Users/matth/Downloads/edscla03255cliftonshiresoilsmap.pdf.

Lundie-Jenkins, G. and Payne, A. (2000) *Recovery plan for the bull oak jewel butterfly(Hypochysops piceatus) 1999–2003*. Brisbane.

APPENDIX A – EXISTING APPROVALS

Notice

Environmental Protection Act 1994

Decision about an application for an amalgamated project authority

This notice is issued by the administering authority[1]*, pursuant to section 198 of the* Environmental Protection Act 1994.

To: Cefn Pty Ltd
54 King Street
Clifton Qld 4361

Our reference: QGCT0329

Decision about an application for an amalgamated project authority

1. **Application details**

The application for an amalgamated project authority, made by Cefn Pty Ltd was received by the administering authority on 12 November 2013

The application reference number is: 2013-02.

Land description:
Lot 314 AG3486, 'Cefn Stud' 5862 Clifton-Gatton Road, Clifton Qld.
Lots 21 and 116 M341017, 5075 Toowoomba-Karara Road, Clifton Qld.
Lots 2, 3 and 4 M341013, Strathane Road, Clifton Qld.

2. **Decision**

The administering authority has decided to approve the application with conditions that the applicant has not agreed to in writing.

3. **Grounds for the decision**

The application was assessed against the criteria outlined in *section 113* of the Environmental Protection Act 1994. The applicant has demonstrated that they satisfy the eligibility criteria.

4. **Review and appeal rights**

You may apply to the administering authority for a review of this decision within 10 business days after receiving this notice. You may also appeal against this decision to the Planning and Environment Court. Information about your review and appeal rights is attached to this notice. This information is guidance only and you may have other legal rights and obligations.

[1] The Department of Environment and Heritage Protection is the administering authority under the *Environmental Protection Act 1994*.

Signature	Date
	11/12/13

Luke Boucher
Department of Agriculture, Fisheries and Forestry
Delegate of the administering authority
Environmental Protection Act 1994

Enquiries:
Department of Agriculture , Fisheries and Forestry
203 Tor St
Toowoomba Qld 4350
Phone: 132523
Fax: 0746881192
Email: livestockregulator@daff.qld.gov.au

Attachments

Amalgamated project authority (reference 2013-02)

Information sheet: Internal Review and Appeal to Planning and Environment Court (EM1866)

Permit[1]

Environmental Protection Act 1994

Amalgamated Project Authority

This amalgamated project authority is issued by the delegate of the administering authority under section 248 (b)(iii) of the Environmental Protection Act 1994.

Permit[1] number: 2013-02

The anniversary date of this amalgamated project authority is 27 August. The annual fee for this amalgamated project authority will be due on the anniversary date.

Amalgamated project authority holder(s)

Name and Suitable Operator Reference	Registered address
Cefn Pty Ltd Suitable operator ref. 702532	54 King Street **Clifton Qld 4361**

Environmentally relevant activities and location details

Environmentally relevant activities	Locations
ERA 3 – Pig keeping (2) – keeping more than 3500 but not more than 8000 standard pig units	Lot 314 AG3486 'Cefn Stud' 5862 Clifton-Gatton Road, Clifton Qld
ERA 3 – Pig keeping (2) – keeping more than 3500 but not more than 8000 standard pig units	Lots 21 and 116 M341017 5075 Toowoomba-Karara Road, Clifton Qld
ERA 3 – Pig keeping (3) – keeping more than 8000 standard pig units	Lots 2, 3 and 4 M341013 Strathane Road, Clifton Qld

Additional information for holders of amalgamated project authorities

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an amalgamated project authority is issued is a restatement of the ERA as defined by legislation at the time the approval is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an amalgamated project

[1] Permit includes licences, approvals, permits, authorisations, certificates, sanctions or equivalent/similar as required by legislation

authority as to the scale, intensity or manner of carrying out an ERA, then the conditions prevail to the extent of the inconsistency.

An amalgamated project authority authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the authority specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (the Act).

Contaminated land

It is a requirement of the Act that if an owner or occupier of land becomes aware that a notifiable activity (as defined in Schedule 3 and Schedule 4) is being carried out on the land, or that the land has been, or is being, contaminated by a hazardous contaminant, the owner or occupier must, within 22 business days after becoming so aware, give written notice to the chief executive.

	11/12/13
Signature	Date

Luke Boucher
Department of Agriculture, Fisheries and Forestry

Delegate of the administering authority
Environmental Protection Act 1994

Enquiries
Department of Agriculture, Fisheries and Forestry
203 Tor St
Toowoomba Qld 4350

Phone: 132523
Fax: 07 4688 1192
Email: livestockregulator@daff.qld.gov.au

Department of Agriculture, Fisheries and Forestry

Amalgamated project authority:

Conditions of the amalgamated project authority imposed by the delegate of the administering authority – section 248 (b)(iii) of the *Environmental Protection Act 1994.*

The schedules of conditions of environmental authorities P2-0191, P1-0024 and PI LI 516 imposed by the delegate of the administering authority under the *Environmental Protection Act 1994* are deleted and the following schedule is imposed:

Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this amalgamated project authority, the holder must also meet their obligations under the Act, and the regulations made under the Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of amalgamated project authority

The environmentally relevant activities conducted at the locations as described above must be conducted in accordance with the following site specific conditions of approval.

Agency interest: General	
Condition number	**Condition**
G1	Any breach of a condition of this amalgamated project authority must be reported to the **delegate of the administering authority** within 24 hours of becoming aware of the breach and record full details of the breach and any subsequent actions.
G2	This amalgamated project authority authorises **you** to conduct the activities listed above at the levels specified for each ERA.
G3	All reasonable and practicable **measures** must be taken to minimise the likelihood of environmental harm being caused.

G4	The **activities** must be undertaken in accordance with written procedures that: • identify potential risks to the environment from the **activities** during routine operations and emergencies • establish and maintain control measures that minimise the potential for environmental harm • ensure plant, equipment and measures are maintained in a proper and effective condition • ensure plant, equipment and measures are operated in a proper and effective manner • ensure that staff are trained and aware of their obligations under the *Environmental Protection Act 1994* • ensure that reviews of environmental performance are undertaken at least annually
G5	All information and records that are required by the conditions of this amalgamated project authority must be kept for a period of at least 5 years.
G6	Storage of chemicals and fuels in bulk or in containers of greater than 15 litres must be within a secondary containment system and releases from the containment system controlled in a manner that prevents environmental harm.
G7	If **you** become aware of any adverse impact on an **environmental value** likely to have been caused by the operation of the **activities, you** must notify the **delegate of the administering authority** in writing of the full details of the adverse impact within 24 hours of becoming aware of the impact.
Agency interest: Air	
Condition number	**Condition**
A1	Odours or airborne contaminants which are **noxious** or **offensive** or otherwise unreasonably disruptive to public amenity or safety must not cause nuisance to any nuisance **sensitive place** or **commercial place**.
Agency interest: Water	
Condition number	**Condition**
WT1	Other than as permitted within this authority, contaminants must not be released from the site to any **waters** or the bed and banks of any **waters**.
WT2	Contaminants must not be released to groundwater.
WT3	Contaminants must not be released to surface waters.

Agency interest: Noise	
Condition number	**Condition**
N1	Noise generated by the **activities** must not cause environmental nuisance at a nuisance **sensitive place** or **commercial place**.
Agency interest: Land	
Condition number	**Condition**
L1	Any release of contaminants generated by the **activities** to land must not cause environmental harm.
L2	Before surrendering this amalgamated project authority the site must be rehabilitated to achieve a safe, stable, non-polluting landform.
Agency interest: Waste	
Condition number	**Condition**
WS1	Waste must only be removed from the site by a transporter lawfully able to transport it to a place lawfully able to receive it.
WS2	Any release or utilisation of waste products generated by the **activities** must not cause environmental harm.

END OF PERMIT

Attachments

NIL

Definitions

Key terms and/or phrases used in this document are defined in this section and **bolded** throughout this document. Applicants should note that where a term is not defined, the definition in the *Environmental Protection Act 1994* (the Act), its regulations or environmental protection policies must be used. If a word remains undefined it has its ordinary meaning.

activities means the environmentally relevant activities, whether resource activities or prescribed activities, to which the amalgamated project authority relates.

administering authority means the Department of Environment and Heritage Protection or its successor or predecessors.

commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

delegate of the administering authority means an officer of the Department of Agriculture, Fisheries and Forestry (DAFF) or its successor as cited by the administering authority.

environmental nuisance (the Act) is unreasonable interference or likely interference with an **environmental value** caused by—

a) aerosols, fumes, light, noise, odour, particles or smoke; or
b) an unhealthy, **offensive** or unsightly condition because of contamination; or
c) another way prescribed by regulation.

environmental value (the Act) is—

d) a quality or physical characteristic of the environment that is conducive to ecological health or public amenity or safety; or
e) another quality of the environment identified and declared to be an **environmental value** under an environmental protection policy or regulation.

prescribed contaminants means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

measures has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

noxious means harmful or injurious to health or physical well-being.

offensive means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive.

sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

f) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
g) a motel, hotel or hostel; or
h) a kindergarten, school, university or other educational institution; or
i) a medical centre or hospital; or
j) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 1992* or a World Heritage Area; or
k) a public thoroughfare, park or gardens; or
l) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

you means the holder of the amalgamated project authority.

APPENDIX B – DESIGN PLANS

APPENDIX C – CONTAMINATED LAND SEARCH

APPENDIX D – BORE REPORTS

APPENDIX E – VEGETATION MANAGEMENT REPORT

APPENDIX F – PROPERTY MAP OF ASSESSABLE VEGETATION

APPENDIX G – WILDNET DATABASE SPECIES LIST

APPENDIX H – PROTECTED MATTERS SEARCH TOOL (MNES)

APPENDIX I – WETLANDS MAP

APPENDIX J – STATE PLANNING POLICY MAPPING

APPENDIX K – ABORIGINAL CULTURAL HERITAGE DATABASE AND REGISTER

APPENDIX L – QUEENSLAND HERITAGE CERTIFICATE OF AFFECT

APPENDIX M – DPI PIGGERY ASSESSMENT SPREADSHEET

APPENDIX N – WATBAL OUTPUT

APPENDIX O – WATER LICENCE

APPENDIX P – SITE-BASED MANAGEMENT PLAN

APPENDIX A – ENVIRONMENTAL AUTHORITY

APPENDIX J – EMERGENCY MANAGEMENT PROCEDURE

APPENDIX Q – KYLES BUSHFIRE MANAGEMENT PLAN

APPENDIX R – METEOROLOGICAL DATA

APPENDIX S – KYLES ENVIRONMENTAL NOISE ASSESSMENT

APPENDIX T – TOOWOOMBA REGION PLANNING SCHEME ASSESSMENT BENCHMARKS

Rural Uses Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Rural Uses Code is to guide the development of the following uses to facilitate the appropriate development of a range of rural activities and to protect the productive capacity and natural resource values of rural land:

a) Animal Keeping.
b) Aquaculture.
c) Intensive Animal Industries.
d) Intensive Horticulture.
e) Permanent Plantations.
f) Rural Industry.
g) Wholesale Nursery.
h) Winery.

2 OVERALL OUTCOMES

The overall outcomes sought for the Rural zone code are as follows:

a) development is located, designed and operated to avoid or appropriately minimise impacts on the amenity and character of the locality;
b) areas or values of environmental significance including biodiversity, waterways, wetlands, water quality and soil quality, are protected from the adverse impacts of development; and
c) development is provided with an appropriate standard of infrastructure that reflects the operational needs/capacity of the development and does not adversely impact on existing infrastructure or the carrying capacity of land in the locality.

3 ASSESSMENT BENCHMARKS

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
Assessable Development		
General		
PO1 Ecological values, habitat corridors and soil and water quality are protected, having regard to: (a) maximisation of vegetation retention and protection of vegetation from the impacts of development; (b) avoidance of potential for erosion and minimisation of earthworks; (c) retention and protection of natural drainage lines and hydrological regimes; and (d) avoidance of leeching by nutrients, pesticides or other contaminants, or potential for salinity.	No acceptable outcome is nominated.	The proposed development will not require the clearing of any regulate vegetation. Habitat corridors are provided within existing vegetation along property boundaries. The proposed development is not in or immediately adjacent to any drainage corridors.
PO2 Development is designed and managed so that it provides appropriate protection for community safety and health, and avoids unacceptable risk to life and property.	No acceptable outcome is nominated.	The proposed development will not present any public risk or risk to life/property. Existing stormwater control and setbacks will prevent any off-site risks.
PO3 Effective separation distances are provided to minimise potential conflicts with or impacts on other uses having regard to vibration, odour, dust, spray drift and noise emissions.	No acceptable outcome is nominated.	The proposed development complies with the separation distances required by the NEGIP. Extensive vegetation will mitigate issues relating to dust and spray drift.
PO4 Provision is made for effluent treatment and disposal which ensures impacts on the natural environment are avoided and odour is minimised.	No acceptable outcome is nominated.	The land identified for irrigation of effluent is adequate to minimise the potential for long-term accumulation of Nitrogen and Phosphorus.
PO5 An adequate water supply is available to the proposed use.	No acceptable outcome is nominated.	The proposed piggery will be supplied by an existing licensed bore with a 202 ML allocation.

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
Intensive Animal Industries and Aquaculture		
PO6 Natural topography and vegetation effectively screen the development from nearby residences, community uses and any road or other public view point.	No acceptable outcome is nominated.	Existing topography and vegetation will completely screen the proposed development from residences and public roads. No further planting or landscaping is proposed.
PO7 Intensive animal industries or aquaculture are not located within a declared catchment area or a declared groundwater area.	No acceptable outcome is nominated.	The property is not located within a town water supply catchment.
PO8 Sites used for intensive animal industries or aquaculture are large enough to contain all odour emissions within the boundaries of the site.	**AO8.1** Potential odour sources are located the distances specified in Table 9.4.2:2 from the boundary of the site.	An industry specific calculation of the required separation distances has been completed in lieu of arbitrary setbacks. The proposed development complies with the required separation distances to all sensitive land uses.
Animal Keeping being Kennels and Catteries		
PO9 Animal keeping (being kennels or catteries) is sited, constructed and managed such that: (a) animals are securely housed; and (b) the use does not cause a nuisance beyond the site boundaries.	**AO9.1** The site is fenced to a minimum height of 1.8m designed to prevent escape of animals by climbing, jumping or digging. **AO9.2** Buildings are constructed with impervious reinforced concrete floors, gravity drained to the effluent collection/treatment point. **AO9.3** Exterior walls of buildings are constructed of sound absorbent material being brick, concrete, masonry or other similar material. **AO9.4** Animals are kept in enclosures, inside buildings at all times between the hours of 6:00 pm and 7:00 am. **AO9.5** A person who is responsible for the supervision of the operation of the development is accommodated on the premises at all times.	N/A

Rural Zone Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the rural zone is to:

a) provide for a wide range of rural uses including cropping, intensive horticulture, intensive animal industries, animal husbandry, animal keeping and other primary production activities;
b) provide opportunities for non-rural uses that are compatible with agriculture, the environment, and the landscape character of the rural area where they do not compromise the long-term use of the land for rural purposes; and
c) protect or manage significant natural features, resources, and processes, including the capacity for primary production.

In addition, the zone code aims to:

a) protect the productive capacity of all rural land for rural use;
b) protect water quality and the ecological and hydrological processes of waterways and wetlands;
c) protect the landscape character and its associated visual and scenic amenity;
d) minimise the potential for conflict between rural uses and other uses;
e) provide for the establishment of appropriately scaled agri- and eco-tourism activities that are based on farm life or primary production in the locality, or on the scenic or environmental values of the locality;
f) provide for intensive animal industries including feedlots, piggeries and poultry farms; and
g) protect rural land from fragmentation that diminishes its productive capacity.

2 OVERALL OUTCOMES

The overall outcomes sought for the Rural zone code are as follows:

a) areas used or suitable for primary production are conserved and are not further fragmented;
b) the establishment of a wide range of rural pursuits is facilitated, including cropping, intensive horticulture, intensive animal industries, animal husbandry and animal keeping and other compatible primary production uses;
c) uses that require isolation from urban areas as a consequence of their impacts, such as noise or odour, may be appropriate where land use conflicts are minimised;
d) development incorporates sustainable land management and other sustainable practices that maximise energy efficiency, water conservation and encourages sustainable transport use;
e) development contributes to the amenity and landscape character of the area;
f) the establishment of non-rural activities that are directly associated with and subordinate to rural production, natural resources and landscape amenity is facilitated in a manner that

minimises land use conflicts and is compatible with the character and environmental values of the locality. Suitable activities may include small-scale outdoor recreation, tourism facilities, short-term accommodation, home based businesses, and produce sales;

g) rural industries are facilitated where:
    (i) associated with rural production in the immediate vicinity;
    (ii) avoiding or minimising adverse impacts on the amenity of the locality; and
    (iii) compatible with the infrastructure in the locality.
h) natural features such as creeks, gullies, waterways, wetlands and bushland are retained, managed, enhanced and provided with appropriate buffers from development;
i) adverse impacts of land use, both on-site and on adjoining areas, are avoided and any unavoidable impacts are minimised through location, design, operation and management;
j) existing intensive animal industries are protected from the intrusion of non-rural activities such as small-scale outdoor recreation and tourism facilities;
k) the viability of both existing and future rural uses and activities are protected from the intrusion of incompatible uses; and
l) development has access to development infrastructure including utility installations and essential services.

100 Hectare Precinct

The overall outcome of the 100 Hectare Precinct within the Rural Zone is that the productive, natural and landscape values of highly fragmented rural land are preserved by the prevention of further fragmentation by reconfiguring a lot creating inappropriate lot sizes that do not support these outcomes.

200 Hectare Precinct

The overall outcome of the 200 Hectare Precinct within the Rural Zone is that the productive, natural and landscape values of rural land which is relatively unfragmented are preserved by the prevention of fragmentation by reconfiguring a lot creating inappropriate lot sizes that do not support these outcomes.

Heinemann Road Transport Precinct

The overall outcome of the Heinemann Road Transport Precinct within the Rural Zone is that:

a) the precinct provides for the establishment of transport and associated logistics uses that capitalise on the strategic location of the precinct close to the regional road network system and Toowoomba; and
b) the scale, character and built form of development contributes to a high standard of amenity.

3 ASSESSMENT BENCHMARKS

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
Accepted Development and Assessable Development		
General		
PO1 Setbacks are provided to: (a) avoid potential nuisance to neighbours; (b) protect residential amenity; and (c) maintain the local landscape character.	**AO1.1** Non-residential buildings, animal enclosures, storage facilities and waste disposal areas are setback the following distances from any: (a) dwelling on adjoining land in the Rural Zone – 50 m; (b) land included in the low Density Residential, Low-medium Density Residential, Township, Emerging Community or the Rural Residential Zones – 100 m.	There are no dwellings or residential land within 50 m of the property boundary.
PO2 Development does not adversely impact on the character of the locality, having regard to the scale and visibility of buildings.	**AO2.1** Building height (other than for silos, windmills and similar farming infrastructure) does not exceed two (2) storeys or 10.5 m in height above natural ground level.	The proposed sheds are single storey buildings with a maximum height of approximately 5 m.
Roadside Stalls and Shops		
PO3 The display and sale of goods does not impact negatively upon the amenity, character or safety of rural areas and the safety and efficiency of roads.	**AO3.1** Any structure used for the sale of goods or produce is limited to 25m^2 gross floor area. **AO3.2** Access to the structure is via the primary property access point. **AO3.3** Produce or goods sold are grown, made or produced on or adjacent to the land on which the road side stall is erected.	N/A
Dwelling House		
PO4 Dwellings have safe, all weather road access.	**AO4.1** Formed road access is provided to the dwelling.	N/A
PO5 An adequate, safe and reliable supply of potable and general use water is provided.	**AO5.1** The dwelling is connected to a rainwater tank with a capacity of at least 45,000 litres.	

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
PO6 Wastewater generated on site is treated and disposed of in a sustainable manner.	**AO6.1** Wastewater is treated and disposed of in accordance with the *Queensland Plumbing and Wastewater Code (QPW)*.	
PO7 The location of any dwelling does not compromise the continued operation of an existing or approved intensive animal industry, extractive industry or other uses that are incompatible with residential development.	**AO7.1** The dwelling is located at least 1,000m from an existing or approved intensive animal industry operation. **AO7.2** The dwelling is separated from an extractive industry by at least: (a) 500 m from a hard rock extractive industry; (b) 200 m from a sand and gravel extractive industry; and (c) 100 m from a haul route. **AO7.3** The dwelling is setback from site boundaries by 50 m.	
Caretaker's Accommodation		
PO8 Development provides for the accommodation of a caretaker, and their family members, in a manner that: (a) does not compromise the productivity of use; (b) is safe and comfortable for the amenity residents; and (c) has regard to the landscape and private recreation needs of the residents.	**AO8.1** A caretaker's accommodation is: (a) separated from significant levels of emissions (adverse to human health or amenity) generated by the use/s of the site by at least 6m; (b) provided with a private landscape and recreation area which: i. is directly accessible from a habitable room; and ii. if at ground level, has a minimum area of $16m^2$ with minimum dimensions of 4m; and iii. if a balcony, a veranda or a deck, has a minimum area of $8m^2$ with minimum dimensions of 2.4 m. **AO8.2** No more than one (1) caretaker's accommodation is established per non-residential use.	N/A
Noise Amenity		
PO9 The use does not adversely impact on the amenity of the surrounding residential land uses and/or residential streetscape character.	**AO9.1** New building plant or air-conditioning equipment is located central to the building and screened from view of the street or nearby residential uses.	The proposed sheds and ventilation equipment are similar to the existing piggery. Surrounding vegetation and setbacks provide noise mitigation.

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
Outdoor Lighting		
PO10 Outdoor lighting maintains the amenity of the surrounding area and does not adversely impact the safety for vehicles or pedestrians on the adjoining street as a result of light emissions, either directly or by reflection.	**AO10.1** Outdoor lighting is restricted to low level security lighting only. **AO10.2** Outdoor lighting is designed, installed and maintained in accordance with the parameters and requirements of *AS4282 – Control of the Obtrusive Effects of Outdoor Lighting*.	Minimal lighting is required for the piggery. Regardless, vegetation and setbacks will ensure off-site light impacts do not occur.
Building Work (not associated with a Material Change of Use)		
PO11 Provision is made for on-site vehicle parking to meet the demand likely to be generated by the development and to avoid on-street parking where that would adversely impact on the safety or capacity of the road network or unduly impact on local amenity.	**AO11.1** Car parking is provided in accordance with the Transport, Access and Parking Code.	N/A – any building work would be associated with the MCU.
PO12 Landscaping makes a positive contribution to the site and the amenity of the surrounding area and existing landscaping is not diminished.	**AO12.1** No reduction of previously approved landscaping areas is to occur.	
PO13 Stormwater resulting from roofed areas is collected and discharged in a manner that does not adversely affect the stability of buildings or the use of adjacent land.	**AO13.1** Roof water is collected and discharged in accordance with SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure.	
PO14 Wastewater treatment and disposal is provided that is appropriate for the level of demand generated, protects public health and avoids environmental harm.	**AO14.1** Where within a wastewater area, the development is connected to the Council's reticulated wastewater system in accordance with SC6.3 PSP No.3 Engineering Standards – Water and Wastewater Infrastructure. OR **AO14.2** Wastewater systems and connections are designed and constructed in accordance with SC6.3 PSP No.3 Engineering Standards - Water and Wastewater Infrastructure.	

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
Assessable Development		
Cropping being Forestry		
PO1 Forestry is established, maintained and operated in a manner that protects the amenity of the locality.	**AO1.1** Use of equipment and machinery and haulage associated with forestry is restricted to: (a) Monday to Saturday – 7:00 am - 7:00 pm; and (b) Sunday and Public Holidays – 8:00 am – 7:00 pm.	N/A
PO2 Adverse consequences of road traffic from harvesting activities on the road network are avoided.	No acceptable outcome is nominated.	
PO3 Forestry is established, maintained and harvested in a manner that maintains the environmental integrity, catchment values and the ecological values of the site.	**AO3.1** Land is not left in a disturbed and exposed condition and is rehabilitated following harvesting.	
Uses		
PO4 The zone primarily accommodates rural activities and related ancillary uses or compatible uses consistent with the values and features of the zone including its rural production capacity, natural resources, and scenic landscape amenity.	**AO4.1** Uses which are consistent with the intent of the zone include: (a) rural activities; (b) dwelling house where associated with rural activities; (c) caretaker's accommodation; (d) emergency services; (e) home based business; (f) major electricity infrastructure; (g) nature-based tourism; (h) outstation; (i) rural works' accommodation; (j) substation; (k) transport depot (where in the Heinemann Road Transport Precinct); and (l) warehouse (where in the Heinemann Road Transport Precinct and for the overnight storage of trucks and other road transport vehicles and the temporary storage of goods awaiting reshipment).	The proposed development is a rural activity and consistent with the intent of the rural zone.

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
	AO4.2 Uses which are inconsistent with the intent of the zone include: (a) business activities; (b) accommodation activities (other than dwelling houses and short-term accommodation); (c) entertainment activities; (d) industry activities other than rural industry and extractive industry activities and industries requiring isolation from urban areas; and (e) recreation activities.	
PO5 Rural industries are established only where associated with rural production in the immediate vicinity.	No acceptable outcome is nominated.	N/A – not a rural industry activity
PO6 Tourism and recreation related uses are established only where they are small in scale and are directly associated with rural production, natural resources and landscape amenity in the immediate vicinity.	No acceptable outcome is nominated.	N/A – not a tourism or recreation use
Rural Character		
PO7 Buildings have a low-rise, rural character.	**AO7.1** Building height (other than for silos, windmills and similar farming infrastructure) does not exceed two (2) storeys or 10.5m in height above natural ground level.	The proposed sheds are single storey buildings with a maximum height of approximately 5 m.
PO8 Development does not unduly impact on the rural amenity and character of the locality, having regard to: (a) the scale, siting and design of buildings and structures; (b) visibility from roads and other public view points, screening vegetation and landscaping; and (c) the natural landform and avoidance of visual scarring; (d) noise, odour and other emissions.	No acceptable outcome is nominated.	Due to the existing, dense vegetation, the piggery is not visible from public roads.

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
PO9 Roads and other infrastructure are of a sufficient capacity to accommodate the demands generated by the development.	No acceptable outcome is nominated.	The internal roads already provide access to the existing piggery. Any new roads will be constructed to a similar standard and suitable for heavy vehicle access.
Rural Viability and Managing Conflicts		
PO10 Development does not restrict the ongoing operation or viability of nearby rural uses.	No acceptable outcome is nominated.	The proposed development has been adequately separated from nearby dwellings. Odour does not impact on off-site uses (grazing and cropping).
PO11 Development that may be sensitive to the spray drift, odour, noise, dust, smoke and ash potentially associated with agricultural activities is adequately separated or buffered to avoid significant conflict.	No acceptable outcome is nominated.	The proposed development has been adequately separated in accordance with the NEGIP. As noise emissions are unlikely to be substantially different to the existing piggery, it is not expected that there will be any change in impacts.
Site Layout		
PO12 The site layout responds sensitively to on-site and surrounding topography, drainage patterns, utility services, access, vegetation and adjoining land use, such that: (a) any hazards to people or property are avoided; (b) any earthworks are minimised; (c) the retention of natural drainage lines is maximised; (d) the retention of existing vegetation and biodiversity values is maximised; (e) damage or disruption to sewer, stormwater and water infrastructure is avoided; and (f) there is adequate buffering, screening or separation to adjoining development.	No acceptable outcome is nominated.	The site topography has been utilised to assist with managing stormwater and effluent flows to minimise major earthworks or pumping. Minimal clearing, restricted to non-regulated and isolated paddock trees will be required.

Performance Outcomes	Acceptable Outcomes	Compliance Assessment
Precincts		
PO13 Development in the 100 ha Precinct: (a) does not involve the creation of additional lots smaller than 100 ha; (b) maintains the productive capacity of the land; and (c) maintains the natural and scenic landscape values of the land.	No acceptable outcome is nominated.	No additional lots are proposed. The piggery will enhance the agricultural use of the property which is limited by low quality agricultural soils. The proposed piggery will not be visible from any public roads.
PO14 Development in the 200 ha Precinct: (a) does not involve the creation of additional lots smaller than 200 ha; (b) maintains the productive capacity of the land; and (c) maintains the natural and landscape values of the land.	No acceptable outcome is nominated.	N/A

Transport, Access and Parking Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Transport, Access and Parking Code is to ensure development makes appropriate provision for transport, access, parking, servicing and end of trip facilities to meet the needs of development and facilitate, as far as practicable, an environmentally sustainable transport network.

2 OVERALL OUTCOMES

The purpose of the code will be achieved through the following overall outcomes:

a) the function, safety and efficiency of the transport network is protected or improved;
b) transport network infrastructure is designed for, in order of priority, pedestrians, cyclists, public transport and private vehicles;
c) pedestrians (including people with a disability) and cyclists are provided with a high level of accessibility, safety and convenience within a development site and on-site facilities are integrated with external walking and cyclist networks and public transport nodes;
d) the use of public transport is facilitated wherever practicable;
e) access, parking, servicing and associated manoeuvring areas are designed to be safe, functional and to meet the reasonable demands generated by the development;
f) access, parking, servicing and associated manoeuvring areas do not detract from streetscape character and are designed to discourage crime and anti-social behaviour;
g) adverse impacts on the environment and sensitive receptors are avoided; and
h) road layout provides for safe and practical connectivity with adjoining land.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
For accepted and assessable development		
PO1 Vehicular access arrangements, including driveway crossovers: (a) are appropriate for: (i) the capacity of the parking area; (ii) the volume, frequency and type of vehicle useage; and (iii) the function and configuration of the access road; (b) minimise any potentially adverse impact on: (i) the safety and efficiency of the road and pedestrian/cycle paths; (ii) the safety and efficiency of the road and footpath users; (iii) the integrity of any infrastructure within the road reserve; and (iv) the safety of access to adjacent properties. (c) protect the amenity of premises in the vicinity by: (i) maintaining the predominant vehicular access pattern in the street, including consistent width, grade and location; (ii) preserving the residential amenity of the streetscape, including noise and visual impact, and consideration of existing landscaping by considering: (A) use of materials which integrate with the streetscape (e.g. existing crossovers and driveways, etc); (B) minimising the width and grade of the access; (C) minimising impacts on the appearance of the	**AO1.1** Vehicular access and driveway crossovers are not: (a) an additional site/property access; (b) to a State-controlled Road or a road with bluestone kerbing; (c) within 25 m of a signalised road intersection; (d) within 20m of an unsignalised road intersection in a Commercial or Industrial Area; (e) within 10m of an unsignalised road intersection in a Community, Residential, Rural or Other Area; (f) within 1m of any infrastructure, including street signage, power poles, street lights, manholes, stormwater gully pits, or other Council/public utility asset; (g) within the Tree Protection Zone, as defined by Australian Standard 4970-2009; (h) for a lot with a frontage of 10m or less; (i) greater than 4m in width when for a lot with a frontage / width of more than 10m but less than 20m; and (j) greater than 6m in width when for a lot with a frontage / width of greater than 20m. *Note: An additional site access is considered to be more than one site access.* **AO1.2** Except where in a Rural Zone, vehicular access and driveway crossovers: (a) do not require the modification, relocation, or removal of any existing infrastructure (e.g. street trees, fire hydrants, water meters, manholes or stormwater gully pits); (b) do not affect or are not adjacent to a traffic island, speed control device, car parking bay, bus stop, or other structure within the roadway; (c) do not require removal or modification of any existing kerbing, traffic island, speed control device, car parking bay, bus stop, or other structure	The existing access will continue to be utilised with an increase from 1 semi-trailer per day to 2 (on average) and a worst-case scenario of 3 per day. The development is not publicly accessible. A Traffic Impact Assessment will be prepared if requested by TRC.

Performance outcomes	Acceptable outcomes	Compliance Assessment
streetscape by retaining existing vegetation, including approved landscaping; and (D) locating the access to minimise the impact of vehicle noise on neighbouring/adjoining properties.	within the road reserve; do not require any change to existing footpath/verge profiles, including table drains (where relevant); (e) do not have access restricted by an access restriction strip or link reserve; (f) do not access an unformed or unkerbed road; (g) are constructed from reinforced concrete; (h) are perpendicular to the road edge; and (i) are provided in accordance with the Australian Standard AS 2890.1 – Off Street Car Parking and Australian Standard AS 2890.2 (where relevant) and the relevant standard drawing in SC6.2 PSP No. 2 Engineering Standards – Roads and Drainage Infrastructure. **AO1.3** Where in a Rural Zone, vehicular access and driveway crossovers: (a) do not require the modification, relocation, or removal of any existing infrastructure (e.g. street trees, fire hydrants, water meters, manholes or stormwater gully pits); (b) do not affect or are not adjacent to a traffic island, speed control device, car parking bay, bus stop, or other structure within the roadway; (c) do not require removal or modification of any existing kerbing, traffic island, speed control device, car parking bay, loading bay, bus stop, or other structure within the road reserve; (d) do not require any change to existing footpath/verge profiles, including table drains (where relevant); (e) do not have access restricted by an access restriction strip or link reserve; (f) are sealed where accessing a sealed formed road; (g) are perpendicular to the road edge; and (h) are provided in accordance with the relevant standard drawing in SC6.2 PSP No. 2 Engineering Standards – Roads and Drainage Infrastructure.	
Car Parking Provision		
PO2 Provision is made for on-site vehicle parking to meet the demand likely to be generated by the development and to avoid on-street parking where that would adversely	**AO2.1** Where in the Principal Centre Zone or Mixed Use Zone Car parking is provided at the rate of: (a) Non-Residential Use one (1) parking space per 50m^2 of GFA; and	There is adequate open area adjacent to the site office and loading/unloading areas for heavy and light vehicle parking. Due to

Performance outcomes	Acceptable outcomes	Compliance Assessment
impact on the safety or capacity of the road network or unduly impact on local amenity. Note: Where the development does not meet the acceptable outcomes, or where no acceptable outcome is specified, a parking demand analysis report prepared by a suitably qualified person may assist in demonstrating compliance with the performance outcome.	(b) Residential Use - one (1) parking space per dwelling. **AO2.2** Where not in the Principal Centre Zone or Mixed Use Zone Car parking is provided at the rates set out in Table 9.4.6:3 to this Code. Note: Where a parking rate for a use is unspecified in Table 9.4.6:3 – no acceptable outcome is provided. Note: If the number of car parking spaces calculated in accordance with AO2.1 and AO2.2 is not a whole number, the number of parking spaces to be provided is rounded-up to next highest whole number. Note: Where application is made for establishment of two or more uses on the same premises, the parking demand is calculated by totalling the requirements for each use.	the rural nature of the activity, this is considered to be appropriate for the vehicle types and volumes.
For assessable development		
Transport Network		
PO1 The development is located on roads that are appropriate for the nature of traffic generated, having regard to the safety and efficiency of the transport network, and the functions and characteristics identified in the transport network hierarchy contained in *SC 6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	No acceptable outcome is nominated.	The existing access will continue to be utilised with an increase from 1 semi-trailer per day to 2 (on average) and a worst-case scenario of 3 per day. The development is not publicly accessible. A Traffic Impact Assessment will be prepared if requested by TRC.
PO2 Development does not compromise the orderly provision or upgrading of the transport network.	No acceptable outcome is nominated.	The proposed development will not prevent any upgrade works on local roads.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO3 Onsite transport network infrastructure (including roads, parking, access and public transport, pedestrian and cyclist facilities) appropriately integrates with surrounding networks and facilitates the orderly development of adjoining land.	No acceptable outcome is nominated.	The on-site road network has been appropriately designed for the rural use. Queuing of traffic on public roads will not occur.
PO4 Development is designed to encourage travel by public transport, walking and cycling. This may include integrated access between adjoining sites and/or the provision of mid-block connections which are safe, functional and legible for potential users.	No acceptable outcome is nominated.	N/A – the rural nature of the use does not require consideration of public transport, walking and/or cycling.
PO5 Car parking areas, pathways and other elements of transport network infrastructure are designed to enhance public safety by discouraging crime and anti-social behaviour, having regard to: (a) provision of opportunities for casual surveillance; (b) provision of lighting; (c) the use of fencing to define public and private spaces, whilst allowing for appropriate sightlines; (d) minimising potential concealment points and assault locations; (e) minimising opportunities for graffiti and other vandalism; and (f) restricting unlawful access to buildings and between buildings.	**AO5.1** Car parking areas, pathways and other elements of transport network infrastructure are designed in accordance with *Crime Prevention Through Environmental Design (CPTED) Guidelines*.	The property does not allow for public access.
PO6 Directional signage is provided within a development site to assist legibility and way-finding, including for pedestrians and cyclists.	No acceptable outcome is nominated.	Given the rural and private nature of the use, minimal directional signage is required.

Performance outcomes	Acceptable outcomes	Compliance Assessment
Access		
PO7 Vehicle access arrangements and queuing areas are appropriate for: (a) the capacity of the parking area; (b) the volume, frequency and type of vehicle usage; and (c) the function and characteristics of the access road and adjoining road network.	**AO7.1** Access driveways and queuing areas are located and designed in accordance with the provisions of Australian Standard *AS 2890.1 Part 1: Off Street Carparking*.	The proposed access and internal roads are designed to prevent queuing of traffic on public roads.
PO8 Access arrangements minimise any adverse impact on: (a) the integrity of any infrastructure within the road reserve; (b) the safety and convenience of pedestrians and cyclists; (c) the safety and convenience of access to adjacent properties; (d) the amenity of premises in the vicinity; and (e) street trees in the road reserve.	No acceptable outcome is nominated.	The existing access will continue to be utilised with no changes proposed.
PO9 Where the nature of the proposed development creates a demand due to the frequency and volume of vehicle movements for the set-down and pick–up of passengers, provision is made for set-down and pick-up facilities by bus, taxis or private vehicle.	No acceptable outcome is nominated.	N/A – set down and pick up of passengers is not required.
PO10 Where set-down and pick-up facilities for bus, taxis or private vehicles are provided as part of development they are: (a) safe for pedestrians, cyclists and vehicles; (b) conveniently connected to the main component of the development by pedestrian pathway; and (c) designed to provide for pedestrian priority and clear	**AO10.1** Bus pick-up/set-down areas: (a) allow a bus, based on the Long Rigid Bus (12m) in Austroads/Standards Australia HB72 – Design Vehicles and Turning Path Templates, to turn and manoeuvre in and out of the area in an easy and safe manner; (b) afford maximum safety for passengers boarding or alighting buses; (c) avoid standing or queuing buses from obstructing access to car parking spaces or circulation within the Site; and	

Performance outcomes	Acceptable outcomes	Compliance Assessment
sightlines.	(d) avoid on-street queuing or boarding/alighting of buses that would reduce traffic flow or safety on the road network. One clear traffic lane in each direction should be maintained. **AO10.2** Car and taxi pick-up/set-down areas: (a) allow a car to manoeuvre in and out of the area in an easy and safe manner; (b) afford maximum safety for passengers boarding or alighting cars; (c) avoid standing or queuing cars from obstructing access to car parking spaces or circulation within the site; and (d) avoid on-street queuing or boarding/alighting of cars that would reduce traffic flow or safety on the road network. One clear traffic lane in each direction should be maintained.	
Pedestrian and Cycle Facilities		
PO11 Provision is made for the safe and convenient movement of pedestrians on site and external to the site, having regard to desire lines, legibility, weather protection and the needs of people with disabilities.	**AO11.1** Pedestrian pathways and crossings are provided in accordance with SC6.2 PSP No.2 – Engineering Standards – Roads and Drainage Infrastructure. **AO11.2** Access for cyclists and pedestrians is clearly distinguished from vehicle access. **AO11.3** Pedestrian paths of a minimum width of 1.5m are provided through each car parking row and connect to the main entrance(s) to the building(s).	Due to the rural nature of the development, consideration for pedestrian or cycling facilities is not required. Open carparking arrangements are adequate and line marking or formed pedestrian throughways are not necessary. Signage will be provided to show the appropriate parking location for staff and visitors.
PO12 Provision is made for safe and convenient cycle movement to the site and within the site having regard to desire lines, users' needs and legibility.	**AO12.1** Shared paths and on-road cycle lane facilities are provided in accordance with *SC6.2 PSP No.2 – Engineering Standards Roads and Drainage Infrastructure*.	
PO13 Car parking areas are designed to be: (a) clearly defined, marked and signed; (b) convenient, safe and accessible; and (c) safe for vehicles, pedestrians and cyclists and	**AO13.1** The entry to the car park is clearly signposted. **AO13.2** Parking spaces are freely available for use by the development's occupants and visitors during the business hours of the use.	

Performance outcomes	Acceptable outcomes	Compliance Assessment
minimise vehicle/pedestrian conflicts by providing clear access lines for pedestrians movement within car park areas.	**AO13.3** Visitor or customer parking spaces are located in the most accessible position to the main entrance of the building and signed as such. **AO13.4** Unless otherwise specified in another code relevant to the development, 60% of the parking spaces for non-residential development are clearly visible from the street. **AO13.5** Public Safety: (a) The car park is located where it can be monitored by passers-by or the occupiers of the development. (b) Where the car park is open to the public at night, lighting is provided throughout the car park and along pedestrian access paths in compliance with Australian Standard AS 1158.3.1 – Road Lighting – Pedestrian Area (Category P) Lighting – Performance and Installation Design Requirements. (c) Except in the case of residential development: (i) where the car park is not required at night, entry to the car park is physically restricted; and (ii) where the car park is enclosed, the walls are finished in a light coloured material that reflects light. (d) Landscaping throughout the car park is provided in a manner, as indicated in the Landscaping Code that allows surveillance and minimises the risk of crime.	
PO14 Car parking areas are designed to provide spaces which meet the needs of people with disabilities.	**AO14.1** Parking spaces for people with disabilities are provided at the rates specified in Appendix C of Australian Standard AS2890.1 Part 1: Off Street Carparking. **AO14.2** Car parking spaces for people with disabilities are located as near as possible to the entrance or entrances of the facility or use they serve.	Due to the rural nature of the development, disabled parking is not required.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	AO14.3 Parking spaces for people with disabilities are designed in accordance with the provisions of Australian Standard AS2890.1 Part 1: Off Street Carparking. **AO14.4** Pathways and ramps between parking areas and the entrances to buildings are designed in accordance with the provisions of Australian Standard AS1428.1: Design for Access and Mobility. **AO14.5** Parking spaces for people with disabilities are identified by a sign incorporating the International Symbol specified in Australian Standard AS1428.1: Design for Access and Mobility. **AO14.6** The sign is readily visible from a vehicle at the entrance to the carpark, or guide signs are provided to indicate the direction of the disabled parking spaces.	
PO15 Car parking areas for non-residential development on a site in, or adjoining, a residential zone, are designed to minimise any adverse impact on the amenity of premises in the vicinity.	For non-residential development on a site in, or adjoining, a residential zone: **AO15.1** Car parking and driveway areas are setback a minimum distance of 3m from a side boundary that is common with a residential use in a residential zone. **AO15.2** Landscape planting is used between the car park and driveway areas and the side boundary to soften the visual impacts of car park areas and to provide shade. **AO15.3** An acoustic fence of 1.8m height is provided along the property boundary that is common with a residential use in a residential zone.	N/A – the subject site is not adjoining a residential zone.
PO16 Car parking and associated access arrangements are located and designed to avoid dominating the road frontage of the site or otherwise detracting from streetscape character.	**AO16.1** Car parking is provided either at the rear of the development or beneath buildings.	Due to the size of the property and existing vegetation, parking areas will not be visible from the road.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO17 Above ground or multi-level car parking areas are designed, articulated and finished to make a positive contribution to the local streetscape character.	**AO17.1** Above ground or multi-level parking areas are designed, articulated and finished to a quality equal to or better than adjoining buildings.	N/A – not proposed.
PO18 Landscaping is provided to soften the visual impact of car parking areas and to provide shading and protection from glare.	**AO18.1** Aesthetics, glare, heat absorption and re-radiation. (a) Landscaping is provided throughout the car park in the manner and at the rate indicated in the Landscaping Code; and (b) Unless otherwise specified in a zone, precinct or use code, where the car park adjoins a street frontage, or a boundary with a Residential or other sensitive land use, a landscaped strip of minimum 3 m width is provided along the frontage/boundary.	The existing vegetation will be adequate to provide shade surrounding the parking areas and buildings for staff to utilise.
PO19 Any parking, access and any other vehicle access/manoeuvring areas incorporate design measures to avoid dust nuisance to surrounding properties.	**AO19.1** Car parking, access and any other vehicle access/manoeuvring areas vehicle manoeuvring areas are imperviously sealed.	Due to the rural nature of the development, setbacks from property boundaries and existing vegetation, unsealed areas are considered to be adequate. Dust controls will be implemented as required.
PO20 Noise impacts from vehicle movement areas on any adjoining residential or other sensitive land use are mitigated.	**AO20.1** A solid, good quality brick, timber or masonry fence of a minimum 1.8 m height is constructed between any vehicle movement areas and a boundary to an adjoining residential or other sensitive land use.	N/A – no adjoining sensitive land uses.
PO21 Any part of the parking area designated as a vehicle cleaning or repair area is designed and constructed to avoid adverse impact on water quality or Council's wastewater or stormwater infrastructure.	**AO21.1** The development is capable of meeting the requirements of Council's Trade Waste Policy and the Trade Waste Environmental Management Plan.	Due to the rural nature of the development, combined with setbacks to property boundaries, adverse impacts on stormwater discharged from the property are not anticipated.

Performance outcomes	Acceptable outcomes	Compliance Assessment
Servicing		
PO22 Provision is made for the on-site loading, unloading, manoeuvring and access by service vehicles that: (a) is adequate to meet the demands generated by the development; (b) is able to accommodate the design service vehicle requirements; and (c) does not unduly impede vehicular, cyclist and pedestrian safety and convenience within the site.	**AO22.1** The service bays provided and access to them, can accommodate, at any one time, the types and numbers of service vehicles detailed in Table 9.4.6:3. **AO22.2** Service bays provided wholly or partly within a building are physically separated from the rest of the buildings floor space in manner that makes it impractical to use them as storage or work areas. **AO22.3** The design and provision of access driveways, manoeuvring areas and loading and unloading facilities for service vehicles complies with Australian Standard AS 2890.2 – 1989 – Off Street Parking – Commercial Vehicle Facilities. **AO22.4** Vehicles being loaded or unloaded with goods stand completely on-site and do not impede access to more than 6 parking spaces or 50 % of the on-site parking spaces (whichever is the lesser) while doing so. **AO22.5** Service vehicles can enter and leave the site in a forward gear.	The proposed access and loading/unloading arrangements are adequate considering the size of the property and nature of the development. All vehicles can enter and exit in forward gear.
PO23 Refuse collection vehicles are able to access on-site refuse collection facilities.	**AO23.1** Where an on-site refuse area is provided, access and manoeuvring areas are designed and provided to enable access by refuse collection vehicle based on the Design Service Vehicle in Austroads/Standards Australia HB72 – Design Vehicles and Turning Path Templates.	As heavy vehicle access is required for the piggery, there is adequate access for refuse collection vehicles (if required).
PO24 Servicing arrangements minimise any adverse impact the amenity of premises in the vicinity.	No acceptable outcome is nominated.	Due to the rural nature of the development, combined with setbacks to property boundaries, adverse impacts are not expected because of service vehicles.
PO25 Servicing arrangements are located and designed to avoid dominating the road frontage of the site or otherwise detracting from streetscape character.	**AO25.1** Areas used for servicing are not located at the front of developments, or are otherwise screened to minimise visual intrusion in the streetscape.	

Works and Services Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Works and Services Code is to ensure development is provided with a level of infrastructure which supports the achievement of ecological sustainability and maintains or enhances community health, safety and amenity.

2 OVERALL OUTCOMES

The purpose of the code will be achieved through the following overall outcomes:

a) premises are provided with an appropriate level of services to meet the demands of development;
b) the integrity of existing infrastructure is maintained;
c) access, parking, streets and pedestrian and cycle paths are provided to standards that ensure safe, convenient and efficient operation of movement networks;
d) risk to life and property is avoided;
e) development facilitates the efficient provision of infrastructure and use of resources;
f) whole of life cycle costs for infrastructure are minimised; and
g) the provision of infrastructure, services and utilities needed to service development does not detract from environmental values or from the desired character and amenity of the locality.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
For assessable development		
Utilities		
PO1 A water supply is provided that is adequate for the current and future needs of the intended use.	**AO1.1** Where within a water supply area, the development is connected to Council's reticulated water supply system in accordance with SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure. OR **AO1.2** Where not in a water supply area, the development is provided with an on site water supply in accordance with *SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure*. **AO1.3** Water supply systems and connections are designed and constructed in accordance with *SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure*.	Water supply for the proposed development is from groundwater bore with a 360 ML allocation which exceeds the water required by the development and the nearby Kyles piggery.
PO2 Wastewater treatment and disposal is provided that is appropriate for the level of demand generated, protects public health and avoids environmental harm.	**AO2.1** Where within a wastewater area, the development is connected to the Council's reticulated wastewater system in accordance with *SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure*. OR **AO2.2** Where not within a wastewater area, on-site waste water treatment and disposal is provided which complies with *SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure*.	The proposed effluent treatment and irrigation system has been designed to industry standards. Treated wastewater from staff amenities is irrigated on surrounding grass land which is either be mown or lightly grazed. Changes to staff amenities are not proposed.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	AO2.3 Waste water systems and connections are designed and constructed in accordance with *SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure*.	
PO3 The development is equipped with an adequate energy supply approved by and installed in accordance with the standards of the relevant energy regulatory authority.	**AO3.1** Premises are connected to an electricity supply approved by the relevant energy regulatory authority.	The proposed development is supplied from mains electricity which is supplemented by on-site solar panels.
PO4 Premises are connected to a telecommunications service approved by the relevant telecommunication regulatory authority.	**AO4.1** The development is connected to telecommunications infrastructure in accordance with the standards of the relevant regulatory authority.	Given the rural nature of the development, coverage by the mobile network and on-site Wi-Fi is adequate for the proposed development.
PO5 Provision is made for future telecommunications services (e.g. fibre optic cable).	**AO5.1** Conduits are provided in accordance with *SC6.2 PSP No.2 Engineering Standards – Roads and Drainage Infrastructure*.	
PO6 Development near utility services does not: (a) adversely affect the function of the service; or (b) place an additional load on the service; and (c) protects the infrastructure form physical damage; and (d) allows ongoing necessary access for maintenance purposes.	**AO6.1** Setbacks and loadings comply with *the Queensland Development Code QDC MP1.4*.	The development is not located near any utility services.
PO7 Infrastructure is integrated with and efficiently extends existing networks.	No acceptable outcome is nominated.	N/A – no new utilities infrastructure is proposed.
PO8 Water meter/s are installed and located for easy access by the relevant authority.	**AO8.1** Water meter/s are installed in accordance with *SC6.3 PSP No. 3 Engineering Standards – Water and Wastewater Infrastructure*.	N/A – water is supplied by a bore.

Performance outcomes	Acceptable outcomes	Compliance Assessment
Movement Networks		
PO9 Premises are provided with the following works along the full extent of the road frontage and to a standard that is appropriate to the function of the road and the character of the locality: (a) appropriate roadway treatment; (b) appropriate pavement edging (including kerb and channel); (c) safe vehicular access; (d) safe footpaths and bikeways; (e) street scaping or street tree planting; (f) stormwater drainage; and (g) street lighting systems.	**AO9.1** Design and construction of external road works are undertaken in accordance with *SC6.2 PSP No. 2 Engineering Standards – Roads and Drainage Infrastructure*. **AO9.2** Footpaths and bikeways are provided in accordance with the *Austroads Guide to Road Design – Part 6A: Pedestrian and Cyclist Paths (Austroads 2009m)*.	Due to the rural nature of the property and development, changes to the road frontage are not proposed. Existing vegetation provides adequate street trees.
PO10 Provision is made in the road reserve for street scaping, pedestrians and cyclists in a manner consistent with: (a) the current and projected level of usage; (b) the desired streetscape character; and (c) activities which are anticipated to occur within the verge.	**AO10.1** Street scaping works, footpaths and cycle paths are provided in accordance with *PSP No. 2 Engineering Standards – Roads and Drainage Infrastructure*. **AO10.2** Footpaths and bikeways are provided in accordance with the *Austroads Guide to Road Design – Part 6A: Pedestrian and Cyclist Paths (Austroads 2009m)*.	
PO11 Parking areas are constructed in a manner that is sufficiently durable for the intended function, maintains all-weather access and ensures the safe passage of vehicles, pedestrians and cyclists.	**AO11.1** Parking area design and construction is undertaken in accordance with the Transport, Access and Parking Code.	Adequate hardstand open space is provided for staff, visitor and heavy vehicle parking.
PO12 Movement networks can be easily and efficiently maintained.	**AO12.1** Infrastructure is provided in accordance with *SC6.2 PSP No. 2 Engineering Standards – Roads and Drainage Infrastructure*.	N/A – new movement networks are not proposed.

Performance outcomes	Acceptable outcomes	Compliance Assessment
Vehicular Access		
PO13 Vehicular access arrangements: 1. are appropriate for: (a) the capacity of the parking area; (b) the volume, frequency and type of vehicle usage; and (c) the function and configuration of the access road; 2. minimise any potentially adverse impact on: (a) the safety and efficiency of the road; (b) the integrity of any infrastructure within the road reserve; and (c) the safety of access to adjacent properties; and 3. protect the amenity of premises in the vicinity.	**AO13.1** Other than for a House, Dual Occupancy, Bed and Breakfast Establishment or Home-based Business, vehicular access to a Council-controlled road is provided in accordance with Australian Standard *AS 2890.1 – Off Street Car Parking (and Australian Standard AS 2890.2* where relevant). **AO13.2** Where the vehicular access is for a House, Dual Occupancy, Bed and Breakfast Establishment or Home-based Business, the driveway crossover: (a) is not: i. a second property access; ii. located on a bend in the road of more than 45%; or iii. to a State-controlled Road or a road with bluestone kerbing; (b) is not within: i. 25 m of a signalised road intersection; ii. 20 m of an unsignalised road intersection in an industrial or Centre's zone or 10m otherwise; iii. 2m of any adjoining property access, including shared property accesses, at the property line; iv. 1m of any street signage, power poles, street lights, manholes, stormwater gully pits, or other Council asset; or v. the outer canopy of any street tree; (c) does not: i. require the modification, relocation, or removal of any existing infrastructure (e.g. street trees, fire hydrants, water meters, manholes or stormwater gully pits); ii. front a traffic island, speed control device, car parking bay, bus stop, or other structure within the roadway; iii. require removal or modification of any existing bluestone kerbing;	Vehicular access is appropriate given the vehicle types and rural nature and size of the property.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	iv. require any change to existing footpath/verge profiles; v. have access restricted by an access restriction strip or link reserve; or vi. access an unformed or unkerbed road; (d) is constructed of gravel (but only in a non-urban zone), reinforced concrete, bitumen or pavers; and (e) is provided in accordance with the relevant diagram in SC6.2 PSP No. 2 Engineering Standards – Roads and Drainage Infrastructure.	
Earthworks and Retaining Walls		
PO14 Earthworks result in stable landforms and structures.	**AO14.1** Earthworks and the construction of retaining walls and batters are undertaken in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	Earthworks are proposed for levelling of the shed pads and for the new covered anaerobic pond. Due to the setbacks to property boundaries and rural nature of the property, there is a low risk of off-site imacts. All earthworks will be appropriately designed and constructed. Any further detail will be provided during operational works applications (if required). Retaining walls are not proposed.
PO15 Earthworks do not result in the contamination of land or water and avoid risk to people and property.	**AO15.1** Earthworks are undertaken in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	
PO16 Earthworks are undertaken in a manner that: (a) maintains natural landforms; (b) minimises height of retaining walls and batter faces; (c) does not unduly impact on the amenity or privacy for occupants of the site or on adjoining land; and (d) does not unduly impact on the amenity of the streetscape.	**AO16.1** Earthworks and the construction of retaining walls and batters are undertaken in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	
PO17 Earthworks do not create or worsen any flooding or drainage problems on the site or on neighbouring properties.	**AO17.1** Earthworks and the construction of retaining walls and batters are undertaken in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	Earthworks are not proposed in or adjacent to major drainage lines or flood areas.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO18 Earthworks do not prevent access or create difficult access to the property.	**AO18.1** Earthworks and the construction of retaining walls and batters ensure driveways can provided in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	No earthworks are proposed in or adjacent to the property access.
PO19 Earthworks do not cause a significant impact on the amenity of the locality or along routes taken to transport material as a result of truck volumes, dust or noise.	**AO19.1** Earthworks are undertaken in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	All cut/fill will be balanced on-site. Some gravel may be imported to the property from local suppliers.
PO20 The transportation of material minimises adverse impact on the road system.	**AO20.1** Material is transported in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	
Waste Management		
PO21 Where relevant, the development is capable of providing for the storage, collection, treatment and disposal of trade waste such that: (a) off-site releases of contaminants do not occur; (b) the health and safety of people and the environment are protected; and (c) the performance of the wastewater system is not put at risk.	No acceptable outcome is nominated.	A commercial bin will be provided adjacent to the office and amenities building which will be serviced by a contractor. Due to the setbacks and vegetation, these areas will not be visible from public roads. Additionally, heavy vehicle access is required for the piggery and will be adequate for service vehicles. Alternatively, general waste will be transported by staff to the nearest waste transfer facility.
PO22 Appropriate refuse container storage areas are provided which are: (a) in a building or enclosing structure or screened from public view; (b) of adequate size to accommodate the expected amount of refuse to be generated by the use; (c) in a position that is conveniently accessible for collection; and	**AO22.1** Refuse container storage areas are provided which: (a) are in a building, outbuilding or other enclosed structure, or otherwise screened from public view, by a minimum 1.5 m high solid fence or wall or dense vegetation; (b) are provided with an imperviously sealed pad, on which to stand the bin(s), that is drained to an approved waste disposal system; (c) are within normal hose length of a hose cock;	

Performance outcomes	Acceptable outcomes	Compliance Assessment
(d) able to be kept in a clean state at all times.	(d) are large enough to accommodate at least one (1) standard sized container per dwelling and, in commercial and industrial premises, one (1) or more industrial bins of a size appropriate to the nature and scale of use; and (e) are situated not closer than 6m to a road or 2m to any site boundary. **AO22.2** On sites greater than 2,000m^2 in area, provision is made for refuse collection vehicles to access the collection area and to enter and leave the site in a forward direction without having to make more than a 3-point turn. **AO22.3** For multiple dwelling and retirement facility, container storage areas are located not more than 50m from any dwelling.	
PO23 Where the use is non-residential and generates recyclable waste, provision is made for conveniently located recycling bins on the premises, including in the refuse container storage area.	No acceptable outcome is nominated.	Limited recyclable waste is produced by the piggery.
Construction Management		
PO24 Work is undertaken in a manner which minimises adverse impacts on vegetation that is to be retained.	**AO24.1** Works include, at a minimum: (a) installation of protective fencing around retained vegetation during construction; (b) erection of advisory signage; (c) no disturbance, due to earthworks or storage of plant, materials and equipment, of ground level and soils below the canopy of any retained vegetation; and (d) removal from the site of all declared noxious weeds and environmental weeds.	Clearing of a small number of non-regulated paddock trees will be required for the proposed development. All substantial vegetation has been avoided. There is adequate open space for parking of plant and machinery away from retained vegetation. Weeds will be managed as per current practices.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO25 Work is undertaken in a manner which does not cause unacceptable impacts on surrounding areas as a result of dust, odour, noise or lighting.	**AO25.1** Construction is undertaken in accordance with the Environmental Standards Code.	Due to the property size, setbacks and existing vegetation, construction work will have limited impacts from dust or lighting. Construction hours will be limited to similar to piggery operational hours (5 am to 5 pm).
PO26 While undertaking development works, the site and adjoining road are maintained in a tidy, safe and hygienic manner.	**AO26.1** Construction is undertaken in accordance with the Environmental Standards Code.	Due to the size of the property, there will be no impact to adjoining roads and vegetation will screen any construction areas.
PO27 Traffic, parking and delivery of construction materials generated during construction are managed to minimise impact on the amenity of the surrounding area and to manage the safety of pedestrians, cyclists and motorists.	**AO27.1** Construction is undertaken in accordance with the Environmental Standards Code.	Due to the property size, there is adequate open space for the storage of plant, equipment, and materials during construction.
PO28 Council and state infrastructure is not damaged by construction activities.	**AO28.1** Construction, alterations and any repairs to infrastructure is undertaken in accordance with the *SC6.2 PSP No.2 Engineering Standards – Roads and Drainage Infrastructure, Queensland Development Code QDC MP1.4, and, where applicable, in consultation with the relevant service authority.* **AO28.2** Construction, alterations and any repairs to State-controlled roads and rail corridors are undertaken in accordance with the *Transport Infrastructure Act 1994*.	Due to the size of the property, and construction location, there will be no impact on council or state infrastructure.

Environmental Standards Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Environmental Standards Code is to appropriately manage the environmental impacts of development in relation to outdoor lighting, odour, noise, dust, waste management and general air emissions.

2 OVERALL OUTCOMES

The purpose of the code will be achieved through the following overall outcomes:

a) potential environmental impacts are identified and measures put in place to ensure that those impacts are appropriately managed; and
b) potential environmental impacts are mitigated to maintain the health and amenity of accommodation activities and other sensitive land uses.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
For assessable development		
Outdoor Lighting		
PO1 Development does not unacceptably reduce the amenity and environmental quality of environs, especially of any nearby residential premises or public spaces as a result of light spill.	**AO1.1** No outdoor lighting is proposed as part of the development. OR **AO1.2** Technical parameters, design, installation, operation and maintenance of outdoor lighting comply with the requirements of Australian Standard 'AS4282-1997 control of the obtrusive effects of outdoor lighting'. **AO1.3** For sporting fields and sporting courts the technical parameters, design, installation, operation and maintenance comply with the requirements of Australian Standard AS4282-1997 – Control of the obtrusive Effects of Outdoor Lighting and a compliance statement by a lighting designer has been provided in accordance with the Australian Standard (Section 4). **AO1.4** Where light spillage outside of the property boundary is likely to result in levels above those mentioned in AO1.3 the applicant has provided a lighting proposal and impact assessment (environmental and amenity) as part of the application which has demonstrated that the lighting will not create nuisance issues for surrounding sensitive receptors. **AO1.5** For private sporting courts the lighting system: (a) is baffled or shielded to ensure that a light source is not directly visible from a Habitable Room window of an adjoining Dwelling; and (b) the luminaire does not exceed a height of 8m above the court surface.	The setbacks and vegetation surrounding the proposed development will prevent any light spill over the property boundaries.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO2 Outdoor lighting (excluding street lighting, normal residential lighting and low level security lighting) situated in excess of 4 m above ground level does not jeopardise the safety or well-being of any pedestrian, cyclist or motorist. Light emissions do not reduce the ability of transport system users to see essential details of the route ahead, including signalling systems and signage.	**AO2.1** Outdoor lighting situated in excess of 4m above ground level is provided in accordance with Australian Standard AS1158.1.1:2005 – Road Lighting – Vehicular Traffic (Category V) Lighting – Performance and Installation Design Requirements.	
PO3 Outdoor Lighting does not cause unreasonable disturbance or cause detrimental impacts to any significant natural environment.	**AO3.1** The vertical illumination emanating from the outdoor lighting does not exceed one (1) lux on land within the Environmental Significance Overlay.	
PO4 Proposed sensitive land uses adjoining existing lawful non-residential uses with significant lighting for community purposes, security or safety reasons are designed to proactively address possible obtrusive light nuisance.	**AO4.1** Proposed sensitive land uses adjoining existing lawful non-residential uses with significant lighting for community purposes, security or safety reasons are designed in a manner to mitigate any light nuisance impacts from the existing lawful use by establishing: (a) shielding or louvers on windows facing the light source; (b) orientating buildings and bedrooms so that external lighting does not impact on residents during night time hours; and (c) utilising earth embankments, landscaping or other physical measures to shield existing light sources.	
Odour		
PO5 Development does not unreasonably affect the amenity and environmental quality of environs, especially of any nearby residential premises or public spaces due to odour impacts.	**AO5.1** The development does not involve activities that create odorous air emissions. OR **AO5.2** The development does not result in air emissions that exceed any of the acceptable levels specified within the Environmental Protection (Air) Policy 2008.	The proposed development complies with the separation distances required by the S-Factor methodology outlined in the NEGIP. Non-approved dwelling within 1 km of the existing approval do not have

<table>
<tr><th>Performance outcomes</th><th>Acceptable outcomes</th><th>Compliance Assessment</th></tr>
<tr><td></td><td>AO5.3
The development will not result in the release of noxious or offensive odours beyond the boundary of the site that cause environmental nuisance at any odour sensitive place, i.e. sufficient buffering is available within the development site itself to dissipate odour issues.
Note: An Odour Assessment Report provided with the application may be necessary to demonstrate compliance with AO5.3.</td><td>a reasonable path to obtaining the necessary approvals as per AO6.1 below.</td></tr>
<tr><td>PO6
Lot reconfigurations for residential or other environmentally sensitive land uses do not encroach upon existing or approved uses that may detrimentally impact upon the amenity of those proposed uses in terms of odour nuisance.</td><td>AO6.1
Lots for residential or other environmentally sensitive land uses are not located within the distances from specific uses outlined in Table 9.4.2:2 at the end of this code.
AO6.2
Where lots for residential or other environmentally sensitive land uses are located within the distances from specific existing uses outlined in Table 9.4.2:2, an Odour Assessment Report has been provided to demonstrate that the development will achieve the following thresholds therefore minimising odour nuisance.
<table>
<tr><th>Existing Use/Activity</th><th>Odour Level at Sensitive Receiving Environment.</th></tr>
<tr><td rowspan="2">All Activities</td><td>2OU/m³ 3 minute average, 99.5th percentile.</td></tr>
<tr><td>4OU/m³ 3 minute average, 99.9th percentile.</td></tr>
</table></td><td rowspan="2">N/A</td></tr>
<tr><td>PO7
Putrescibles waste generated as a result of the development does not cause odour nuisance issues for adjoining land uses.</td><td>AO7.1
The development ensures that all putrescibles waste will be stored in a manner that prevents odour nuisance and fly breeding and will be disposed of at intervals not exceeding seven (7) days.</td></tr>
</table>

Performance outcomes	Acceptable outcomes	Compliance Assessment
Noise		
PO8 The generation of noise from the premises does not cause Environmental Harm or Nuisance to adjoining properties or other noise sensitive land uses. Development: (a) is located in an appropriate zone; (b) proposes best practice design and construction materials (in relation to noise attenuation); and (c) proposes operational practices that will minimise noise nuisance for adjoining sensitive land uses.	**AO8.1** The development will achieve the following noise levels (when measured at the nearest sensitive receiver): (a) Background (L90) + 5dB(A) for variable noise between the hours of 7:00 am to 10:00 pm (measured at the facade of the sensitive land use); (b) Background (L90) + 3dB(A) for variable noise between the hours of 10:00 pm and 7:00 am (measured within bedrooms assuming open windows); (c) Background (L90) for continuous noise sources (measured at the facade of the sensitive land use between 7:00 am and 10:00 pm and within bedrooms assuming open windows from 10:00 pm – 7:00 am); and (d) maximum limit LAmax 45dB(A) inside dwellings; and The development will achieve the Acoustic Quality Objectives listed within the Environmental Protection (Noise) Policy 2008. HOWEVER **AO8.2** Where a development is unable to meet noise levels specified in $AO_{8.1}$ an acoustic assessment has been undertaken by a suitably qualified and skilled person which demonstrates that the development will not result in environmental nuisance at any existing or likely future residential premises (within a 10 year planning horizon).	Due to the available setbacks, operating hours and lack of complaints about existing operations, it is anticipated that noise levels will not exceed those outlined in the *Environmental Protection (Noise) Policy 2019*. It is anticipated that reasonable noise restrictions will be conditioned as part of the development permit and EA. A noise assessment was completed for the nearby Kyles piggery which showed that separation for odour ensures compliance with the relevant noise criteria.

<table>
<tr><th>Performance outcomes</th><th>Acceptable outcomes</th><th>Compliance Assessment</th></tr>
<tr><td>PO9
Development (other than licensed premises operating under a Liquor Licensing Approval) proposing the use of amplified sound equipment is designed, constructed and operated in a manner that is sensitive to the impacts of high and low frequency noise on adjoining sensitive land uses.</td><td>AO9.1
Where development (other than licensed premises operating under a Liquor Licensing Approval) proposes the use of amplified sound equipment, existing background octave band centre frequencies have been assessed and the development proposes the following maximum sound pressure criterion:
<table><tr><th></th><th colspan="8">Frequency - Hz - "A" Weighted</th></tr><tr><th>Background Level SPL dB(A)</th><th>31</th><th>63</th><th>125</th><th>250</th><th>500</th><th>1K</th><th>2K</th><th>4K</th></tr><tr><td></td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td><td>L_{90} + 5dB(A)</td></tr></table></td><td></td></tr>
<tr><td>PO10
Proposed sensitive land uses in close proximity to existing lawful land uses involving significant noise emissions such as entertainment venues, child care centres, industrial zones or other commercial premises are designed and constructed in a manner that achieves acoustic amenity for the users of the development.</td><td>AO10.1
The development is designed to achieve the internal noise criterion (Acoustic Quality Objectives) for the particular use as specified within the Environmental Protection (Noise) Policy 2008.
AO10.2
Where the proposed sensitive land use is not listed in the Environmental Protection (Noise) Policy 2008, the development is designed and constructed to meet the internal sound level design criterion contained in Australian Standard AS2107:2000 Acoustics – Recommended design sound levels and reverberation times for building interiors.
AO10.3
Where the sensitive land use is within or adjoining entertainment venues utilising amplified music the applicant has undertaken an acoustic assessment of existing background octave levels and designed the sensitive land use component to mitigate the impacts of low frequency noise (particularly between 31.5Hz and 125Hz).</td><td></td></tr>
</table>

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO11 Proposed sensitive land uses adjoining Council controlled arterial roads (other than designated 'Transport Noise Corridors') are designed and constructed in a manner that provides acoustic amenity for users/residents of the development.	Where development involves a sensitive land use adjoining a Council controlled arterial road (other than designated 'Transport Noise Corridors': **AO11.1** The development is designed and constructed in a manner that achieves the internal noise Acoustic Quality Objectives listed within the Environmental Protection (Noise) Policy 2008. **AO11.2** The siting of buildings and selection of construction materials complies with the specifications of Australian Standard AS3671-1989 Acoustics – Road traffic noise intrusion – Building siting and construction.	N/A – sensitive land uses are not proposed.
PO12 Proposed sensitive land uses adjoining 'Transport Noise Corridors' as designated by State or Local Government are designed and constructed in a manner that provides acoustic amenity for users/residents of the development.	**AO12.1** Proposed sensitive land uses adjoining 'Transport Noise Corridors' as designated by State or Local Government comply with the Queensland Development Code Mandatory Part (MP) 4.4 'Buildings in a Transport Noise Corridor' for all habitable rooms adjoining the corridor.	
PO13 Air conditioning units, refrigeration units and any other form of mechanical ventilation or extraction systems do not adversely impact on the acoustic amenity of surrounding sensitive land uses.	**AO13.1** Plant of this nature is not elevated, is acoustically shielded (if necessary) and will not be audible at adjoining sensitive receivers. **AO13.2** Roof-top mounted plant and equipment is located away from surrounding sensitive land uses and is acoustically shielded to achieve a nil increase in background noise levels (L_{90}) at the nearest sensitive receiver.	Setbacks provided by the size of the property are anticipated to provide suitable mitigation of noise from ventilation systems.
PO14 The construction phase of the development does not cause adverse acoustic impacts on surrounding sensitive receivers.	**AO14.1** Building work (including excavation and filling) is only conducted between the hours of 6:30 am and 6:30 pm Monday to Saturday (excluding public holidays). **AO14.2** Where building work is proposed outside of the acceptable timeframe of 6:30 am to 6:30 pm (Monday – Saturday) the applicant has supplied a 'construction management plan' which adequately addresses noise mitigation measures.	Available setbacks and restrictions on constructions hours are likely to be adequate to prevent any significant impacts to neighbours.
PO15	**AO15.1**	

Performance outcomes	Acceptable outcomes	Compliance Assessment
Private sporting courts do not create acoustic amenity issues for surrounding sensitive receivers.	Private sporting courts are not used between 10:00 pm and 7:00 am. **AO15.2** Mechanical equipment such as ball throwing machines which create audible noise at the nearest sensitive receiver is not used between 7:00 pm and 7:00 am.	
PO16 Vibration from the development does not affect the amenity of surrounding sensitive land uses or cause environmental harm or nuisance.	**AO16.1** The development does not result in vibration impacts outside of the development site. **AO16.2** Where vibration may impact on surrounding sensitive land uses, the proponent has provided a vibration impact assessment or alternatively included vibration within an environmental impact report for the site which demonstrates that the level of vibration will not cause adverse amenity impacts or cause environmental harm or nuisance at any sensitive land use surrounding the development.	
Dust		
PO17 The construction phase of the development prevents or mitigates (to an acceptable level) the release of dust particles which have potential to cause environmental nuisance to adjoining sensitive receivers (including sensitive receivers along haulage routes during excavation and filling operations).	**AO17.1** Off-site release of dust particles will be strictly managed to ensure that dust emissions do not travel beyond the property boundary and environmental nuisance does not occur. **AO17.2** Areas of exposed fill, excavation and unsealed accesses on the site are watered regularly (particularly during periods of high or constant wind) to reduce dust generation. **AO17.3** Areas of fill and excavation are graded, compacted and planted and/or mulched immediately after the dumping operation is complete. **AO17.4** Stockpiles of aggregate, sand or other materials brought onto the site are sprayed with water (or treated with an alternative method) to minimise dust nuisance. The frequency of water spraying is increased during hot, dry periods or where wind conditions are such that a dust nuisance is likely to occur. Stockpiles are located away from adjoining sensitive land uses.	Setbacks and extensive vegetation are likely to prevent dust impacts during the construction phase. Watering of exposed surfaces will occur during extended dry and/or windy periods where dust is observed.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	Note: Where excavation and filling exceeds 1,000 cubic metres the development has submitted a 'construction management plan' which adequately addresses dust mitigation measures. Measures must include strategies such as progressive rehabilitation and complaints processes.	
PO18 Haulage activities associated with excavation and filling are managed to prevent environmental nuisance issues.	**AO18.1** Haulage routes are selected on the basis of using the most suitable road surface to prevent dust generation and minimising the number of dwellings or other sensitive land uses affected by potential dust nuisance.	N/A – all cut/fill will be balanced on-site.
PO19 Water used for dust suppression activities does not itself create environmental harm.	**AO19.1** Water approved as a method for controlling dust emissions must not be used in a manner that enables contaminated water to enter any stormwater system or natural drainage corridor outside of the site boundaries.	Due to the available setbacks, any water used for dust suppression will not go beyond the property boundary.
PO20 The ongoing operation of the development site does not create dust nuisance for adjoining landholders.	**AO20.1** Areas within the site that are frequently used for vehicular purposes are imperviously sealed. **AO20.2** Industry-specific activities undertaken on site that create dust are performed in an enclosed shed or other structure with suitable dust extraction and filtration systems. **AO20.3** Grain facilities are equipped with semi enclosed grain receival hoppers fitted with dust extraction and filtration systems. All conveyor belts and bulk grain processing equipment are enclosed to prevent dust emission. Bunker storage without dust extraction is only permitted whereby the release of dust will not impact on surrounding sensitive receivers. **AO20.4** All development likely to generate any significant amount of dust must have an adequate water supply available at all times in order to undertake proactive dust reduction measures e.g. watering of access roads. **AO20.5**	Setbacks and extensive vegetation are likely to prevent dust impacts from ongoing operations. Unsealed internal roads will be watered, ad required, to minimise dust emissions. Due to the 'wet' nature of the sheds, dust will not be expelled from the sheds.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	Development that is likely to create ongoing significant dust issues has submitted a 'site based management plan' which adequately addresses dust mitigation measures.	
PO21 Proposed sensitive land uses are adequately separated from existing lawful land uses likely to generate dust emissions such as landfill sites, quarries, cropping land, motor sport facilities and other similar dust generating activities.	**PO21.1** Sensitive land uses achieve the separation distances from the nominated uses specified in Table 9.4.2:2.	N/A – sensitive land uses are not proposed.
PO22 Development does not result in dustfall quantities that are likely to impact on the health of surrounding sensitive receivers.	**AO22.1** Dustfall averaged over an annual period of time does not exceed 133mg/m^2/day when measured at the nearest sensitive receiver.	It is anticipated that dust limits will be conditioned in the EA in accordance with the *Environmental Protection (Air) Policy 2019* (EPP Air). Watering of roads, setback and existing vegetation will ensure dust impacts do not exceed those prescribed in the EPP Air.
General Emissions		
PO23 Air emissions resulting from development do not cause environmental harm (including environmental nuisance).	**AO23.1** The development does not result in air emissions that exceed any of the acceptable levels specified within the *Environmental Protection (Air) Policy 2008*. **AO23.2** Where a type of air emission is not listed within the *Environmental Protection (Air) Policy 2008* the proponent can demonstrate that the level of emission is in compliance with Australian ambient air quality standards; or If Australian standards do not exist, an ambient air quality standard from another country or organisation may be used with appropriate justification. **AO23.3** Where a development is proposing to generate and release air emissions in excess of current air quality emission standards the proponent will provide an 'air quality impact assessment' which adequately addresses the impact of the	Other than dust and odour, no other air emissions are anticipated.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	release and provides justification as to why the industry cannot mitigate the levels further.	
PO24 Child Care Centres are well located to avoid any harmful impacts from air pollution.	**AO24.1** Maximum concentrations of air pollutants do not exceed those recommended by the National Health and Medical Research Council.	N/A
PO25 Proposed sensitive land uses are adequately separated from existing lawful land uses that produce air emissions.	**AO25.1** Sensitive land uses in relation to air emissions are not located within the separation distances specified in Table 9.4.2:2.	N/A
PO26 Electromagnetic radiation levels from telecommunications and other facilities do not pose health risks to the community.	**AO26.1** Emission levels from equipment and infrastructure comply with the relevant industry standards as demonstrated through an approved written statement or certification provided by the carrier to council i.e. Electromagnetic Energy report.	N/A
PO27 Air emission vents or stacks are sited appropriately to ensure that surrounding land uses are not exposed to concentrated levels of air contaminants.	**AO27.1** Carpark exhaust stacks are located away from adjoining sensitive receivers. **AO27.2** Emissions are discharged vertically and have an exit velocity of at least 10 m/second. **AO27.3** Spray booth exhaust stacks are at least 8m in height or 4m higher than the adjoining ridgeline of a neighbouring building (if the building is within 40m of the emission point), whichever is the greater. **AO27.4** Tank venting for hydrocarbon fuel storage and LP Gas is located in accordance with AS1940-2004 The Storage and handling of flammable and combustible liquids (for hydrocarbons) and AS1596:2008 The Storage and Handling of LP Gas.	Setbacks from property boundaries will ensure ventilation systems to not expel concentrated contaminants into adjoining properties. No other exhaust systems are proposed.
Waste Management		
PO28 The development (excluding high rise buildings in excess of three (3) stories) is designed to ensure that waste storage and	**AO28.1** For commercial premises and industry activities (other than those premises utilising Council's wheelie bin waste collection program): (a) general waste and recycling containers are located within the curtilage of	Skip bins are already in place for the collection of general waste by a contractor. Due to the size of the property, existing vegetation, and vehicles accessing the

Performance outcomes	Acceptable outcomes	Compliance Assessment
collection can be undertaken in a manner that complies with Council's *Technical Guidelines for New Developments Waste Storage and Collection Requirements.*[1]	the property in an area that enables the waste collection truck to pick up the containers while entering and leaving the premises in a forward gear; (b) a container storage area is dedicated that is large enough to cater for the expected volume of general waste and recycling; (c) storage areas are screened either behind a building or using screening materials or landscaping to a minimum height of 1.5m; (d) where bulk bins (or alternative combined waste and recycling containers exceeding 2 cubic metres) are proposed the bin storage area is roofed and bunded, contains an impervious surface, is in close proximity to a hose cock and is graded and drained to either a wastewater system connection (requiring a trade waste approval) where sewer is available or in sewered areas, storage areas are drained to an area of significant landscaping, waste water treatment device or water quality improvement system e.g. Bioretention; (e) where bulk bins (or alternative combined waste and recycling containers exceeding 2 cubic metres) are proposed the bin storage area is designed to enable bins to be washed out within the storage area and drained to a sewer system (requiring trade waste approval) within sewered areas or area of significant landscaping, water treatment device or water quality improvement system e.g. Bioretention in non-sewered areas; and (f) bin storage areas do not pose amenity issues for surrounding sensitive receivers, including odour during storage periods or noise issues resulting from collection programs. **AO28.2** For a Multiple Dwelling of three (3) – six (6) units the development satisfies one of the following criteria: (a) a minimum road frontage is available within the immediate road reserve adjoining the development in order to place the required number of waste and recycling containers out for collection (2 x 240L wheelie bins per tenement) when calculated at 1m/bin e.g. a development requiring eight (8) bins must have at least 8m of useable road reserve (in terms of bin	property, there are multiple appropriate areas for the placement of these bins. No aspect of the development will be visible from public roads.

[1] Amended 27 April 2018

Performance outcomes	Acceptable outcomes	Compliance Assessment
	collection, excluding a 1m clearance around power poles and any area below a street trees canopy where bins cannot be collected); OR (b) the complex includes a communal bin storage area, whereby the body corporate will implement internal procedures requiring residents to progressively fill bins and only place full bins out for collection; and (c) each tenement has an approved bin storage area that will not create amenity issues for surrounding sensitive land uses; and (d) bin storage areas are screened behind buildings for amenity purposes; and (e) storage areas are not within dwellings (including garages) and it is not necessary to take the bins through dwellings (including garages) for collection purposes; and (f) a hose cock is located in close proximity to the storage location to enable bins to be cleaned; and (g) where a rear storage area is not possible bins are stored in a minimum 1.5m high screened area in the front of the dwelling(s); OR (h) screened communal storage areas (to a minimum height of 1.5m) are proposed which contain an impervious floor, hose cock and grading/drainage towards a grassed area or other porous surface. **AO28.3** For a Multiple Dwelling above six (6) units the development satisfies one of the following criteria: (a) The development incorporates 'internal collection' of either bulk bins or wheelie bins (in accordance with the waste management guideline that accompanies the environmental standard); OR (b) Communal bin storage areas contain a roof, bunding and bin 'washing' provisions in the form of either a sewer connection (requiring trade waste approval) or where no sewer is available a connection to a waste water treatment device, drain to an area of significant landscaping or drain to a water quality improvement device e.g. Bioretention system is acceptable; OR	

Performance outcomes	Acceptable outcomes	Compliance Assessment
	(c) Where 'internal collection' is proposed the internal design complies with the waste management guideline that accompanies this environmental standard and a certification from a registered RPEQ has been provided to demonstrate that manoeuvrability is acceptable for an appropriately sized refuse vehicle. **AO28.4** Commercial premises utilising Council's wheelie bin waste collection service to dispose of commercial waste: (a) utilise a maximum of four (4) wheelie bins i.e. less than 1 cubic metre; (b) store bins within the curtilage of the property in a designated area in close proximity to a hose cock, whereby any adjoining sensitive land uses will not experience amenity issues i.e. odour; (c) store bins on an impervious surface; (d) place bins on the road reserve for a maximum period of 24 hours during collection programs; and (e) store bins in an area that is screened from public view either in a building, behind a building or within a purpose-built screened storage area within a 1.5m minimum height.	
PO29 Development for a Community Residence, Residential Care Facility or Retirement Facility utilising communal bin storage areas ensure that residents have reasonable access to waste containers, where the development is for aged care purposes.	**AO29.1** For development involving a Community Residence, Residential Care Facility or Retirement Facility, bin storage areas are located within reasonable proximity to all units, in accordance with Council's Environmental Guideline.	N/A
PO30 High rise (in excess of three (3) storeys) residential developments and joint commercial and residential developments are designed to enable best practice waste management principles to be applied.	**AO30.1** The applicant has provided a waste management plan that as a minimum has addressed the following issues: (a) likely waste quantity and waste type to be generated on site on a weekly basis; (b) likely recycling quantities to be generated on a weekly basis; (c) waste container and recycling container (type and volume) requirements for the residential component (based on 240L of general waste and 240L of	N/A

Performance outcomes	Acceptable outcomes	Compliance Assessment
	recycling per unit) and the commercial component (if applicable); (d) waste storage area locations; (e) dual waste chutes for general waste and recycling; (f) bin room specifications and hygiene practices for waste handling areas, chutes, waste containers and other applicable equipment; (g) collection arrangements and manoeuvring diagrams (including overhead clearances); (h) waste minimisation practices; (i) use of compactors; (j) an impact assessment of waste management practices on any surrounding sensitive land uses; (k) air extraction fans, refrigeration or associated devices for refuse storage areas to prevent odour, particularly where putrescibles are stored; and (l) clinical and related waste storage and collection issues (if applicable).	
PO31 Demolition and building activities actively involve waste minimisation and waste avoidance principles including the promotion of recycling and re-use.	**AO31.1** The development will be carried out in accordance with the waste management hierarchy outlined in the Technical Guideline for New Developments Waste Storage and Collection Requirements and the applicant has nominated the quantity and type of materials that will be disposed of to landfill.	Waste from construction activities will be appropriately disposed of. The minimisation and reuse of organic waste aligns with the waste management hierarchy.
PO32 Development that involves the generation of 'clinical and related waste' as per the definition of the *Technical Guideline for New Developments Waste Storage and Collection Requirements* is designed to adequately cater for legislative storage and collection requirements.	Where involving development that involves the generation of 'clinical and related waste' as per the definition of the *Technical Guideline for New Developments Waste Storage and Collection Requirements:* **AO32.1** The storage of 'clinical and related waste' is in accordance with the *Technical Guideline for New Developments Waste Storage and Collection Requirements* with storage locations being demonstrated on submitted site/floor plans. **AO32.2** The development has proposed a method of disposing of 'clinical and related waste' and has demonstrated that an applicable waste collection vehicle is able to manoeuvre on site, while entering and leaving the premises in a forward gear.	N/A

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO33 Residential development involving 'internal collection' of either bulk bins or wheelie bins is designed to a standard that enables heavy vehicle access and manoeuvring whilst providing safety to residents and the protection of infrastructure.	**AO33.1** The development is designed and certified by a RPEQ and complies with the requirements outlined in Council's *Technical Guidelines for Waste Storage and Collection Requirements for New Developments*, including: (a) appropriate manoeuvring is adequate with vehicles being able to enter and exit the property in a forward gear; (b) overhead clearance is adequate for the applicable refuse vehicle; (c) road surface is appropriate for a HRV; (d) side clearance is appropriate for wheelie bin collection; (e) collection areas are appropriate for either bulk bins or wheelie bins; (f) minimum road width of 5.5m; and (g) internal road networks enable the refuse vehicle to traverse the site without resident safety being jeopardised.	N/A
PO34 Development involving refuse storage and collection external to Council's waste contract utilise waste containers and hygiene practices that prevent odour issues and remove harbourage opportunities for vermin and mosquitoes.	**AO34.1** The applicant will utilise the following control measures: (a) putrescibles waste will be removed from the property at intervals not exceeding seven (7) days (putrescibles will be refrigerated where possible and appropriate); (b) tight fitting lid assemblies will be utilised on all waste containers to prevent the pooling of rainwater, thus minimising mosquito breeding opportunities; and (c) bins will be secured to ensure that vermin and pest animals do not have access to a potential food source; and (d) bins will be cleaned on an 'as needed' basis if odour is identified as an issue.	On-site bins will have lids and property size will be adequate to prevent any off-site odour impacts from waste storage. Piggery effluent ponds are considered as part of the S-Factor assessment.

Integrated Water Cycle Management Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Integrated Water Cycle Management Code is to ensure water and related infrastructure are sustainably managed on a total water cycle basis to maintain the wellbeing of the community and the environment.

2 OVERALL OUTCOMES

The purpose of the code will be achieved through the following overall outcomes:

a) disturbance to natural land forms, wetlands, water courses and riparian zones is avoided, in order to protect aquatic ecosystems and natural hydrological functions;
b) the quality of surface and groundwater is protected, consistent with established values and objectives;
c) development facilitates an efficient use of water resources;
d) whole of life cycle costs for water and stormwater infrastructure are minimised; and
e) adverse impacts as a result of flooding and the effects of drainage are avoided.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
For assessable development		
Stormwater Management		
PO1 Development does not adversely impact on the quality of receiving waters by avoiding or minimising pollutants entering and being transported with stormwater.	**AO1.1** Stormwater quality treatment measures are implemented in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*. **AO1.2** Pollutant load reductions are achieved in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	Due to the setbacks from property boundaries, and extensive vegetation between the piggery sheds and the nearest point of discharge, changes in stormwater characteristics are not anticipated.
PO2 Adverse impacts of construction activities on stormwater quality are avoided or minimised using best practice environmental management for erosion and sediment control.	**AO2.1** Sediment and erosion control measures are implemented in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	Erosion and control measures, suitable for the proposed development and property type, will be implemented during construction.
PO3 Stormwater management incorporates water sensitive urban design techniques and avoids adverse impacts from water quantity, flow rates and duration and frequency in receiving waters, having regard to: (a) channel, bed and bank stability; (b) aquatic and riparian ecosystems; and (c) hydrological functions.	**AO3.1** Stormwater flow control measures are implemented in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	N/A – sensitive urban water design is not relevant to the proposed development.
Waste Water Management		
PO4 Development does not discharge wastewater to a waterway or external to the site unless demonstrated to be best practice environmental management for that site and has appropriate regard for: (a) cumulative effects;	**AO4.1** Wastewater management measures are implemented in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	No discharge of wastewater to waterways or external locations is proposed. Effluent will be treated and irrigated in accordance with industry standards.

Performance outcomes	Acceptable outcomes	Compliance Assessment
(b) the applicable water quality objectives for the receiving waters; (c) adverse impact on ecosystem health of receiving waters; and (d) in waters mapped as being of high ecological value, the adverse impacts of such releases and their offset.		
Artificial Waterways and Water Bodies		
PO5 The waterway or water body is designed to integrate multiple functions, including: (a) aesthetics, landscaping, and recreation; (b) flood management; (c) stormwater management; (d) water conservation and reuse; (e) community health; and (f) pest management.	**AO5.1** Artificial waterways or water bodies are designed in accordance with SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure.	N/A – artificial waterways or water bodies are not proposed.
PO6 The waterway is located and designed to be responsive to natural drainage features.	**AO6.1** Artificial waterways or water bodies are designed in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	
PO7 The waterway or body is designed to minimise whole of life cycle costs.	**AO7.1** Artificial waterways or water bodies are designed in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	
Flooding and Drainage		
PO8 Flooding and drainage characteristics upstream or downstream of the site are not worsened.	**AO8.1** Development is undertaken in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	The site is not subject to inundation during a flood event. Due to the relatively small development footprint, changes in stormwater velocity or volume are not anticipated.
PO9 The drainage network has sufficient capacity to safely convey stormwater run-off from the site.	**AO9.1** Development is undertaken in accordance with SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure.	

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO10 Stormwater resulting from roofed areas is collected and discharged in a manner that does not adversely affect the stability of buildings or the use of adjacent land.	**AO10.1** Roof water is collected and discharged in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	Due to biosecurity restrictions, water captured from use is not suitable for use as 'clean' water in the piggery. The use of recycled effluent for recharge and flushing will reduce effluent generation and is considered the most suitable water for those purposes.
Water Cycle Management		
PO11 The design and management of the development integrates water cycle elements so that: (a) water is used efficiently and potable water demand is reduced; (b) wastewater production is minimised; (c) stormwater peak discharges and runoff volumes are not worsened; (d) natural drainage lines and hydrological regimes are maintained as far as possible; (e) large, uninterrupted impervious surfaces are minimised; (f) reuse of stormwater and grey-water is encouraged where public health and safety will not be compromised; and (g) water is used efficiently.	**AO11.1** Integrated water management practices and infrastructure are implemented in accordance with *SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure*.	Water use efficiency in the pork industry is constantly improving. The use of recycled effluent for flushing and recharge substantially reduces water usage. Except during an infrequent spill event, impacts to adjacent natural drainage pathways are not anticipated.

Landscaping Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Landscaping Code is to facilitate landscaping which is an integral component of urban design, contributing to the creation or enhancement of quality places and spaces.

2 OVERALL OUTCOMES

The purpose of the code will be achieved through the following overall outcomes:

a) landscaping assists in the creation of aesthetically pleasing, safe, comfortable and functional environments for people to work, live and visit;
b) landscaping is suitable for its intended function and is responsive to site and environmental conditions;
c) existing significant vegetation and ecological values are retained and protected, to the extent practicable;
d) landscaping is integrated with the overall design of a development, and contributes to a coherent streetscape and the desired local character; and
e) landscaping is established in a manner that ensures the viability of species utilised and cost effective maintenance.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
For assessable development		
PO1 Landscape design is developed by a suitably qualified landscape professional and demonstrates an integrated approach to planning/development issues and documents both hard and soft works proposed for the development.	**AO1.1** Landscape documentation is prepared by the landscape professional identified in Table 9.4.4:2.	Existing vegetation will be retained, which ensures that the visual landscape along both the road corridor and to neighbours will not change. No further landscaping design or considerations are required. As the purpose of the landscaping code only applies to urban design, it is not considered relevant to the proposed development.
PO2 Landscape construction is undertaken by a suitably qualified landscape professional.	**AO2.1** Landscape construction is carried out by a member of the Queensland Association of Landscape Industries.	
PO3 Landscape design reflects the local context and incorporates cohesive and desirable aspects of the prevailing landscape character. (Desirable aspects are those considered necessary to maintain and enhance the character, setting and/or ambience, and ecological values of the location.)	**AO3.1** Where a street or locality has an identifiable character derived from existing vegetation, similar or identical plant species are used. **AO3.2** Existing desirable landscape elements and treatments are incorporated into landscaping to integrate the development into the existing character of the area. **AO3.3** Existing site trees are integrated into the development. **AO3.4** Species selection is reflective of cool temperate species.	
PO4 Where the development involves the creation of a new road street tree planting is undertaken having consideration of: (a) the hierarchy and function of the street; (b) selection of appropriate species; (c) avoidance of conflict between the street tree and utilities and services within the road reserve; (d) soil conditions;	Where the development involves the creation of a new road: **AO4.1** Street planting is carried out in accordance with the requirements of SC6.2 PSP No. 2 Engineering Services Infrastructure Roads and Drainage. **AO4.2** Species and materials are used that minimise the use of potable water. **AO4.3** Street tree planting is in accordance with PSP No.8 – Street Trees.	

Performance outcomes	Acceptable outcomes	Compliance Assessment
(e) existing street trees; (f) solar access; and (g) driveway access.		
PO5 Fencing design and acoustic barriers: (a) are compatible with the existing streetscape and proposed development type; and (b) provide visual interest and address the street.	**AO5.1** Front fences longer than 15m and greater than 1,400mm in height are visually fragmented with recesses at least 1.2m deep and 1.2m wide at 15m intervals, planted with at least one tree and groundcovers. **AO5.2** All planting and recesses along a fence are located within the property boundary and planting recesses are accessible from within the site. **AO5.3** Where acoustic fencing is required by the planning scheme it is designed by an acoustic engineer and incorporates a minimum 3m vegetated buffer on either side of the fence with vegetation having a mature height equal to or above the height of the acoustic fencing.	The property is surrounded by standard rural fencing and/or exclusion fencing.
PO6 Location, design and provision of planting in carparks and internal roadways achieve a high degree of shade, amenity and safety.	**AO6.1** Landscaping visually fragments and shades carparking areas with regular tree planting in individual planting bays evenly distributed throughout the car parking area at the rate of one planting bay per eight (8) carparking spaces. **AO6.2** Individual planting bays have a minimum dimension of 1,500 x 1,500mm with permeable surface treatments and are flush with the finished surface levels of the car park. **AO6.3** No raised kerbing is provided around planting bays. Wheelstops or bollards are used to delineate planting bays where necessary and finished carpark surface levels fall toward planting areas. **AO6.4** Planting bays incorporate ground covers less than 1,000mm height that allow unobstructed surveillance.	N/A – planting in carparks is not required.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO7 Location and habit of tree planting must not interfere with the function and accessibility of any adjacent utility services.	**AO7.1** Species mature height and siting must not interfere with or compromise overhead and underground utility assets including stormwater inlet pits. **AO7.2** Tree planting must be a minimum of 2m from any mains water easements and offset 4m from any sewer main or inspection chamber.	Tree planting is not proposed.
PO8 Maintenance access points must be considered and accommodated for in the site planning and design process.	**AO8.1** Access by appropriate maintenance or utility vehicles must be demonstrated with ground surface treatments that are stable and usable in all weather. **AO8.2** Functional maintenance vehicle circulation and access gates to be provided.	N/A – landscaping maintenance is not required as retained native vegetation does not require maintenance except for the clearing of firebreaks.
PO9 On-site stormwater harvesting is to be maximised for irrigating landscaping in development with reuse measures and amelioration of stormwater impacts provided.	**AO9.1** Landscape design takes advantage of the flow of water along overland flow paths. **AO9.2** Landscaping is used to help maximise opportunities for on-site stormwater infiltration by: (a) minimising impervious surfaces and incorporating semi-permeable paving products; (b) falling hard surfaces towards pervious surfaces such as turf or mulched areas; (c) maximise opportunities for turf and planting areas; (d) align planting areas parallel to contours to slow the flow of surface water; and (e) ensure planting palette comprises canopy tree species. **AO9.3** Provision for drainage is incorporated through treatments such as subsurface drains, swales, ponds and infiltration cells. **AO9.4** Sediment and erosion control measures are provided.	N/A - no additional landscaping is proposed nor will irrigation be required for existing vegetation.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	AO9.5 Planter boxes on podiums and building forecourts are plumbed to stormwater.	
PO10 Landscape design is integrated with any existing urban design theme within the surrounding area and coordinates paving, planting, street furniture, lighting, signage and other elements to reflect that theme and assist in the creation of a sense of place.	No acceptable outcome is nominated.	N/A – the proposed development and property are rural. No further landscaping is proposed.
PO11 Design of pedestrian paths and places reinforces the desired character of the area and/or place and includes features to enhance their use that are of universal design to ensure non-discriminatory access and use.	**AO11.1** Design complies with *AS1428 parts 1, 2, 3, and 4 – Design for Access and Mobility*.	N/A – given the rural nature of the development, pedestrian paths are not proposed.
PO12 Risks to personal safety and the potential for crime, vandalism and fear are reduced through landscape design that has been informed by Crime Prevention Through Environmental Design (CPTED) principles in relation to: (a) Surveillance. (b) Access control. (c) Territorial reinforcement. (d) Space management.	Landscape design incorporates the following design measures: **AO12.1** The attractiveness of crime targets is minimised by providing opportunities for effective surveillance through: clear sight lines from private to public space, reducing concealment or entrapment opportunities, public facilities (toilets, shelters etc) located to promote use, dual access points, avoiding blind corners, and lighting where appropriate. **AO12.2** Barriers are used to attract, channel or restrict the movement of people by: clear spatial definition and legibility, optimising opportunity for public interaction, visually permeable screens and fencing, appropriate use of mechanical measures that correspond to actual risk. **AO12.3** Reinforcing definition of territory and ownership of private, semi-public and public spaces through: clear design cues for use and activities, transitions and boundaries between public and private, design that encourages public interaction and ownership, legible universal signage.	N/A – the proposed development will not change the potential for crime in the area. No further landscaping is proposed.

Bushfire Hazard Overlay Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Bushfire Hazard Overlay Code is to protect the safety of people and property in bushfire risk areas.

2 OVERALL OUTCOMES

The purpose of the code will be achieved through the following overall outcomes:

1. development does not increase the exposure of people and property to an unacceptable bushfire hazard risk;
2. development located in a bushfire risk area is designed to mitigate the bushfire risk through siting, design and management measures;
3. development provides access and evacuation routes for both private and emergency service vehicles which are appropriate to the nature of the development and the level of bushfire risk;
4. development for essential community infrastructure is able to function effectively during and immediately after a bushfire event;
5. public health and safety and the environment are not put at risk by development involving the manufacture and/or storage of hazardous goods in a bushfire hazard area;
6. the reconfiguration of land appropriately responds to bushfire hazard having regard to the appropriate siting of future development and access for evacuation; and
7. development provides access to an adequate water supply for fire fighting purposes.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
Assessable and Accepted Development		
PO1 Development is provided with an adequate water supply for fire fighting purposes that is safely located and freely accessible.	**AO1.1** Development within a water supply area involving the creation of a new lot/s or involving proposed and existing buildings with a combined gross floor area greater than 50 m^2, is connected to Council's reticulated water supply system It will be readily available at all time for fire fighting vehicles and a water supply outlet located within the road reserve is within 40 m^2 of the following: (a) All of the land; or (b) A building envelope designated on each lot; or (c) The centre of each lot, excluding access handles (where no building envelope is designated); and (d) All existing and proposed buildings And Fire hydrants are designed and installed in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines, Unless otherwise specified by the relevant water entity **AO1.2** Development outside a water supply area involving proposed or existing buildings with a combined gross floor area greater than 50 m^2, are provided with a dedicated on-site water storage system that permanently holds a minimum of 10,000 litres (e.g. dam, swimming pool or water tank) for fire fighting purposes. **AO1.3** A water tank is provided within 10 m of each building (other than a class 10 building) which: (a) Is either below ground level or of non-flammable construction; (b) Has a take-off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (i) 10,000 litres for residential buildings; (ii) For industrial, commercial; and other buildings, a volume specified in AS2304-2011	The piggery is supplied by groundwater with a consistent in-flow. At the commencement of each operational day, there is a minimum of 180,000 L available on-site with a minimum of 90,000 L maintained at all times. CEFN own a fire fighting vehicle with an on-board supply of 3,000 L. All storages have appropriate connections for use by Queensland Fire and Emergency Services and the CEFN fire-fighting truck.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	(c) Includes shielding of tanks and pumps in accordance with AS2304-2011 (d) Includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank (e) Is provided with rural fire brigade tank fittings if serviced by a rural fire brigade (i.e. 50mm ball valve and male camlock coupling and, if underground, an access hole of 200 mm (minimum) to accommodate suction lines); and (f) Is clearly identified by directional signage at the street frontage	
PO2 Development provides for the safety of people and property by avoiding areas of High or Medium bushfire risk.	**AO2.1** Development is not located on land that is subject to High or Medium bushfire risk. OR **AO2.2** Where development is located in a High or Medium bushfire risk area (except for single dwellings on existing lots), it complies with a Bushfire Management Plan for the premises.	A bushfire management plan is incorporated into the Emergency Management Procedure. A bushfire risk assessment was completed for the Kyles piggery and the recommendations from this assessment will be incorporated into the Susco piggery. However, the distance from the proposed infrastructure to the nearest vegetation is greater than the Kyles development.
Assessable Development		
For all development		
PO1 Community infrastructure is only located in a bushfire medium and high risk area where the function and role of the infrastructure necessitates its location in the area and there are no suitable alternative sites in a low bushfire hazard area.	No acceptable outcome is nominated.	N/A – community infrastructure is not proposed.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO2 Community infrastructure is able to function effectively during and immediately after bushfire events.	**AO2.1** The community infrastructure is located on land that is not subject to High or Medium bushfire risk; or Note for AO2.1: A site-specific bushfire hazard assessment is necessary to demonstrate that although the proposed development site is within bushfire hazard area, the bushfire hazard is low on that site. **AO2.2** The community infrastructure will not involve any new building work other than a minor extension (<20 m^2 Gross Floor Area) to an existing building; or **AO2.3** The community infrastructure development is located within a bushfire hazard area (as identified in the Bushfire Hazard Overlay Maps) but is designed to function effectively during and immediately after bushfire events. Note for AO2.3: The development application must include and comply with a comprehensive Bushfire Management Plan.	
Water Supply		
PO3 Development is provided with an adequate water supply for fire fighting purposes that is safely located and freely accessible.	**AO3.1** Development within a water supply area involving the creation of a new lot/s or involving proposed and existing buildings with a combined gross floor area greater than 50 m^2, is connected to Council's reticulated water supply system It will be readily available at all time for fire fighting vehicles and a water supply outlet located within the road reserve is within 40 m^2 of the following: (e) All of the land; or (f) A building envelope designated on each lot; or (g) The centre of each lot, excluding access handles (where no building envelope is designated); and (h) All existing and proposed buildings And Fire hydrants are designed and installed in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines, Unless otherwise specified by the relevant water entity	The piggery is supplied by groundwater with a consistent in-flow. At the commencement of each operational day, there is a minimum of 180,000 L available on-site with a minimum of 90,000 L maintained at all times. CEFN own a fire fighting vehicle with an on-board supply of 3,000 L. All storages have appropriate connections for use by Queensland Fire and Emergency Services and the CEFN fire-fighting truck.

Performance outcomes	Acceptable outcomes	Compliance Assessment
	AO3.2 Development outside a water supply area involving proposed or existing buildings with a combined gross floor area greater than 50 m^2, are provided with a dedicated on-site water storage system that permanently holds a minimum of 10,000 litres (e.g. dam, swimming pool or water tank) for fire fighting purposes. **AO3.3** A water tank is provided within 10 m of each building (other than a class 10 building) which: (g) Is either below ground level or of non-flammable construction; (h) Has a take-off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (iii) 10,000 litres for residential buildings; (iv) For industrial, commercial; and other buildings, a volume specified in AS2304-2011 (i) Includes shielding of tanks and pumps in accordance with AS2304-2011 (j) Includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank (k) Is provided with rural fire brigade tank fittings if serviced by a rural fire brigade (i.e. 50mm ball valve and male camlock coupling and, if underground, an access hole of 200 mm (minimum) to accommodate suction lines); and (l) Is clearly identified by directional signage at the street frontage	
Hazardous Materials		
PO4 Public safety and the environment are not adversely affected by the detrimental impacts of bushfire on the manufacture or storage of hazardous materials in bulk.	**AO4.1** Development complies with a Bushfire Management Plan for the premises. Note: 'Hazardous materials in bulk' is defined in Section 9, Glossary of the SPP Guideline. Where the assessment manager has not previously approved a Bushfire Management Plan (see Note 1.7 above), the development proponent will be expected to prepare such a plan to the satisfaction of the assessment manager. See Appendix 8 for more information on bushfire management plans.	Hazardous materials will be either stored in the office or located in open areas separated from vegetation in accordance with Australian Standards.

Performance outcomes	Acceptable outcomes	Compliance Assessment
Reconfiguring a lot and Material Change of Use		
PO5 Lot design and the siting of buildings provide safe sites for habitable and non-habitable buildings.	**AO5.1** All development enables buildings and structures to achieve setbacks from hazardous vegetation that are: (a) sited within the area of lowest hazard within the lot; and (b) provide for adequate setbacks from hazardous vegetation; and (c) 1.5 times the predominant mature canopy tree height or 10m, whichever is the greater; and (d) 10m from any retained vegetation strips or small areas of vegetation; and (e) sited so that elements of the development least susceptible to fire are sited closest to the bushfire hazard.	N/A – lot reconfiguration is not proposed.
PO6 For development that will result in multiple buildings or lots, roads and access are designed to mitigate against bushfire hazard by ensuring adequate access for: (a) fire fighting and other emergency vehicles; and (b) the evacuation of people in the event of an emergency.	**AO6.1** The road design is capable of providing access for fire fighting and other emergency vehicles, in accordance with the standards identified in SC6.2 PSP No. 2 – Engineering Standards – Roads and Drainage Infrastructure. **AO6.2** The lot layout ensures that all roads are through roads. **AO6.3** The lot layout does not include long narrow lots, long access ways or rear lots. **AO6.4** The road has a maximum gradient of 1 in 8 (12.5%).	The internal access roads will be designed for semi-trailers and will be suitable for fire-fighting vehicles.
PO7 For development that will result in multiple buildings or lots, fire breaks are provided that: (a) adequately and effectively separate the development site from surrounding vegetation to mitigate against bushfire hazard; (b) have sufficient width to enable continuous access for fire fighting and other emergency vehicles, residents and equipment; and	**AO7.1** The development incorporates a fire break provided by a perimeter road that: (a) separates the boundary of the lots and the adjacent bushland; (b) has a minimum cleared width of 20 m; (c) has a formed road width of 6 m; and (d) is constructed to an all weather standard. **AO7.2** The development includes fire breaks which are located as close as possible to the boundaries of the lot(s) and the adjoining bushfire hazard and the fire breaks have:	Fire breaks are in place along the property boundary and will be maintained between buildings and adjacent vegetation. A ring road around all buildings will provide part of the firebreak.

Performance outcomes	Acceptable outcomes	Compliance Assessment
(c) are in secure tenure and are maintained.	(a) a minimum cleared width of 6 m; (b) a minimum formed width of 4 m; (c) a maximum gradient of 1 in 8 (12.5 %); (d) are constructed and maintained to prevent erosion, provide adequate drainage and provide continuous access for fire fighting vehicles; (e) (e) provide passing bays and turning areas for fire-fighting appliances; and (f) (f) are either located on public land, or within an access easement that is granted in favour of the Toowoomba Regional Council and the Queensland Fire and Rescue Service. **AO7.3** Vehicular access is provided along and at each end of the fire break to existing fire maintenance trails or roads. **AO7.4** The development includes sufficient cleared breaks of 6m minimum width in retained bushland within the development (e.g. creek corridors and retained vegetation) to allow burning of sections and access for bushfire response.	

Environmental Significance Overlay Code

Toowoomba Regional Council

1 PURPOSE

The purpose of the Environmental Significance Overlay Code is to avoid or minimise the impacts of development on:

1. the biodiversity values of ecosystems, ecological processes, areas of ecological significance and biodiversity corridors; and
2. the ecological, hydrological and water quality values of natural waterways and wetlands.

2 OVERALL OUTCOMES

The purpose of the Environmental Significance Overlay Code is to avoid or minimise the impacts of development on:

3. the biodiversity values of ecosystems, ecological processes, areas of ecological significance and biodiversity corridors; and
4. the ecological, hydrological and water quality values of natural waterways and wetlands.

3 ASSESSMENT BENCHMARKS

Performance outcomes	Acceptable outcomes	Compliance Assessment
Areas of Ecological Significance		
PO1 Vegetation disturbance or other impacts on areas of ecological significance shown on the Environmental Significance Overlay maps, is avoided or where disturbance cannot be avoided the loss or reduction of ecological values is minimised.	**AO1.1** Impacts are avoided by locating development wholly outside mapped areas of ecological significance and areas of ecological significance buffer identified on the Environmental Significance Overlay maps. OR Where impacts on areas of ecological significance shown on the Environmental Significance Overlay Maps cannot be avoided, they are minimised by: (a) minimising the total footprint within which activities, buildings, structures, driveways and other works or activities are contained; (b) avoiding further fragmentation of areas of ecological significance and strengthening linkages where possible; (c) utilising areas of lesser importance in terms of biodiversity values so that areas of higher value are conserved to the greatest extent practicable; and (d) maintaining areas of ecological significance in patches of greatest possible size and with the smallest possible edge to area ratio.	The proposed sheds and CAP will not require the clearing of vegetation mapped within the ecological significance overlay nor Category B regulated vegetation. Clearing of isolated paddock trees, not within mapped vegetation will be required but has been minimised. Some edge clearing of vegetation within the ecological significance overlay may be required to develop additional effluent utilisation areas. However, it is planned to avoid the clearing of these trees until these areas are required for soil nutrient management. A PMAV has been approved to adjust some areas of Category B vegetation which are across the existing piggery.
PO2 Development optimises biodiversity outcomes by prioritising the location of environmental offsets within identified biodiversity corridors	**AO2.1** Biodiversity offsets designed to counterbalance development impacts on areas of ecological significance are delivered consistent with the *Queensland Government Environmental Offsets Policy 2008* and other applicable biodiversity/environmental offset policies.	Due to the minimised clearing footprint, offsets are not proposed.

Performance outcomes	Acceptable outcomes	Compliance Assessment
PO3 Landscaping complements biodiversity values by incorporating the following elements into the landscaping design: (a) native plants of local origin; or (b) known food and habitat trees and shrubs for endemic native fauna species in the local area; or (c) replication of adjacent healthy remnant habitats, including understorey vegetation; and (d) no declared noxious plants, weeds or invasive plants likely to displace native flora species or degrade fauna habitat.	No acceptable outcome is nominated.	N/A – additional landscaping is not proposed.
PO4 Movement of fauna is facilitated within and through the site, particularly along identified biodiversity corridors by: (a) ensuring that development and associated activities do not create barriers to the movement of fauna along and within biodiversity corridors; (b) directing fauna to locations where wildlife infrastructure has been created, to enable wildlife to safely negotiate a development area; and (c) separating fauna from potential hazards.	No acceptable outcome is nominated.	The retained native vegetation provides substantial habitat within the property and fauna corridors around the property boundary.
PO5 Identified biodiversity corridors on the Environmental Significance Overlay maps and their role to potentially connect areas of ecological significance (through rehabilitation or enhancement) are not compromised by development.	No acceptable outcome is nominated.	The property is located within a biodiversity corridor but the small clearing footprint will not prevent fauna movements as there is a substantial amount of vegetation which will be retained on-site.

Performance outcomes	Acceptable outcomes	Compliance Assessment
Waterways and Wetlands		
PO6 Development is not carried out within a mapped waterway or wetland identified on the Environmental Significance Overlay maps.	**AO6.1** Development is located outside the mapped boundary of a waterway or wetland identified on the Environmental Significance Overlay maps.	Development is not proposed in or adjacent to waterways. Existing native tree buffers will be maintained between the proposed irrigation area and the adjacent waterway. The use of perennial pasture also provides increased runoff retention and filtration.
PO7 Development provides a buffer which protects the ecological, hydrological and water quality values of the wetland or the waterway.	**AO7.1** Development provides a buffer area which is vegetated with native plants endemic to the area. **AO7.2** Buildings, structures and works are not carried out within the buffer area identified on the Environmental Significance Overlay maps.	
PO8 Development retains the existing hydrological regime or re-establishes the previous naturally occurring regime.	**AO8.1** Existing flows of surface and ground water are not altered through construction of channelled flows or the redirection or interruption of flows.	

APPENDIX U – STATE DEVELOPMENT ASSESSMENT PROVISIONS

State code 1: Development in a state-controlled road environment

State Development Assessment Provisions guideline - State Code 1: Development in a state-controlled road environment. This guideline provides direction on how to address State Code 1.

Table 1.1 Development in general

Performance outcomes	Acceptable outcomes	Response
Buildings, structures, infrastructure, services and utilities		
PO1 The location of the development does not create a safety hazard for users of the **state-controlled road.**	**AO1.1** Development is not located in a **state-controlled road**. AND **AO1.2** Development can be maintained without requiring access to a **state-controlled road**.	Complies. The development is located on private land with access from a local road.
PO2 The design and construction of the development does not adversely impact the **structural integrity** or physical condition of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	The proposed development is over 300 m from the state-controlled road and existing contours and drainage paths ensure runoff is not directly discharged to the state controlled road corridor. Existing vegetation ensures the development is not visible from the state-controlled road.
PO3 The location of the development does not obstruct **road transport infrastructure** or adversely impact the operating performance of the **state-controlled road**.	No acceptable outcome is prescribed.	
PO4 The location, placement, design and operation of advertising devices, visible from the **state-controlled road**, do not create a	No acceptable outcome is prescribed.	

Performance outcomes	Acceptable outcomes	Response
safety hazard for users of the **state-controlled road**.		
PO5 The design and construction of buildings and **structures** does not create a safety hazard by distracting users of the **state-controlled road**.	**AO5.1** Facades of buildings and **structures** fronting the **state-controlled road** are made of non-reflective materials. AND **AO5.2** Facades of buildings and **structures** do not direct or reflect point light sources into the face of oncoming traffic on the **state-controlled road**. AND **AO5.3** External lighting of buildings and **structures** is not directed into the face of oncoming traffic on the **state-controlled road**. AND **AO5.4** External lighting of buildings and **structures** does not involve flashing or laser lights.	
PO6 Road, pedestrian and bikeway bridges over a **state-controlled road** are designed and constructed to prevent projectiles from being thrown onto the **state-controlled road**.	**AO6.1** Road, pedestrian and bikeway bridges over the **state-controlled road** include throw protection screens in accordance with section 4.11 of the Design Criteria for Bridges and Other Structures Manual, Department of Transport and Main Roads, 2020.	N/A – bridges are not proposed.
Landscaping		
PO7 The location of landscaping does not create a safety hazard for users of the **state-controlled road**.	**AO7.1** Landscaping is not located in a **state-controlled road**.	N/A – landscaping not proposed. Existing native vegetation adjacent to the state-controlled road corridor will be retained.

Performance outcomes	Acceptable outcomes	Response
	AND **AO7.2** Landscaping can be maintained without requiring access to a **state-controlled road**. AND **AO7.3** Landscaping does not block or obscure the sight lines for vehicular access to a **state-controlled road**.	
Stormwater and overland flow		
PO8 Stormwater run-off or overland flow from the development site does not create or exacerbate a safety hazard for users of the **state-controlled road**.	No acceptable outcome is prescribed.	The proposed development is over 300 m from the state-controlled road and existing contours and drainage paths ensure runoff is not directly discharged to the state controlled road corridor.
PO9 Stormwater run-off or overland flow from the development site does not result in a material worsening of the operating performance of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	
PO10 Stormwater run-off or overland flow from the development site does not adversely impact the **structural integrity** or physical condition of the **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	
PO11 Development ensures that stormwater is lawfully discharged.	**AO11.1** Development does not create any new points of discharge to a **state-controlled road.** AND **AO11.2** Development does not concentrate flows to a **state-controlled road**. AND	

Performance outcomes	Acceptable outcomes	Response
	AO11.3 Stormwater run-off is discharged to a **lawful point of discharge**. AND **AO11.4** Development does not worsen the condition of an existing **lawful point of discharge** to the **state-controlled road**.	
Flooding		
PO12 Development does not result in a material worsening of flooding impacts within a **state-controlled road**.	**AO12.1** For all flood events up to 1% **annual exceedance probability**, development results in negligible impacts (within +/- 10mm) to existing flood levels within a **state-controlled road**. AND **AO12.2** For all flood events up to 1% **annual exceedance probability**, development results in negligible impacts (up to a 10% increase) to existing peak velocities within a **state-controlled road**. AND **AO12.3** For all flood events up to 1% **annual exceedance probability**, development results in negligible impacts (up to a 10% increase) to existing time of submergence of a **state-controlled road**.	The development site is not prone to flooding. Flood prone land parcels have only been included to remove receptors for the odour assessment.

Performance outcomes	Acceptable outcomes	Response
Drainage Infrastructure		
PO13 Drainage infrastructure does not create a safety hazard for users in the **state-controlled road**.	**AO13.1** Drainage infrastructure is wholly contained within the development site, except at the **lawful point of discharge**. AND **AO13.2** Drainage infrastructure can be maintained without requiring access to a **state-controlled road**.	Any drainage infrastructure around the sheds will discharge, via an existing legal point of discharge, across Strathane Road and into the floodplain.
PO14 Drainage infrastructure associated with, or within, a **state-controlled road** is constructed, and designed to ensure the **structural integrity** and physical condition of existing drainage infrastructure and the surrounding drainage network.	No acceptable outcome is prescribed.	N/A no drainage infrastructure proposed in or near the state-controlled road corridor.

State code 6: Protection of state transport networks

Table 6.2 Development in general

Performance outcomes	Acceptable outcomes	Response
Network impacts		
PO1 Development does not compromise the safety of users of the **state-controlled road** network.	No acceptable outcome is prescribed.	The proposed development will increase heavy vehicles accessing the property by one or two vehicles per day. The nearby 5,000 SCU feedlot and 60,000 SPU piggery already utilize Strathane Road for access. A Traffic Impact Assessment will be prepared if requested by SARA or TRC.
PO2 Development does not adversely impact the structural integrity or physical condition of a **state-controlled road** or **road transport infrastructure**.	No acceptable outcome is prescribed.	
PO3 Development ensures **no net worsening** of the operating performance the **state-controlled road** network.	No acceptable outcome is prescribed.	
PO4 Traffic movements are not directed onto a **state-controlled road** where they can be accommodated on the **local road** network.	No acceptable outcome is prescribed.	The property is accessed via Strathane Road, which is a local road.
PO5 Development involving haulage exceeding 10,000 tonnes per year does not damage the pavement of a **state-controlled road**.	No acceptable outcome is prescribed.	The proposed development will increase heavy vehicles accessing the property by one or two vehicles per day. The nearby 5,000 SCU feedlot and 60,000 SPU piggery already utilize Strathane Road for access. A Traffic Impact Assessment will be prepared if requested by SARA or TRC.
PO6 Development does not require a new **railway** level crossing.	No acceptable outcome is prescribed.	The property and local road access is not on or near an existing or proposed railway line.
PO7 Development does not adversely impact the operating performance of an existing **railway crossing**.	No acceptable outcome is prescribed.	
PO8 Development does not adversely impact on the safety of an existing **railway crossing**.	No acceptable outcome is prescribed.	
PO9 Development is designed and constructed to allow for on-site circulation to ensure vehicles do not queue in a **railway crossing**.	No acceptable outcome is prescribed.	
PO10 Development does not create a safety hazard within the **railway corridor**.	No acceptable outcome is prescribed.	

Performance outcomes	Acceptable outcomes	Response
PO11 Development does not adversely impact the operating performance of the **railway corridor**.	No acceptable outcome is prescribed.	
PO12 Development does not interfere with or obstruct the **railway transport infrastructure** or **other rail infrastructure**.	No acceptable outcome is prescribed.	
PO13 Development does not adversely impact the structural integrity or physical condition of a **railway corridor** or **rail transport infrastructure**.	No acceptable outcome is prescribed.	
Stormwater and overland flow		
PO14 Stormwater run-off or overland flow from the development site does not create or exacerbate a safety hazard for users of a **state transport corridor** or **state transport infrastructure**.	No acceptable outcome is prescribed.	The proposed development is over 300 m from the state-controlled road and existing contours and drainage paths ensure runoff is not directly discharged to the state controlled road corridor.
PO15 Stormwater run-off or overland flow from the development site does not result in a material worsening of operating performance of a **state transport corridor** or **state transport infrastructure**.	No acceptable outcome is prescribed.	
PO16 Stormwater run-off or overland flow from the development site does not interfere with the structural integrity or physical condition of the **state transport corridor** or **state transport infrastructure**.	No acceptable outcome is prescribed.	
PO17 Development associated with a **state-controlled road** or **road transport infrastructure** ensures that stormwater is lawfully discharged.	**AO17.1** Development does not create any new points of discharge to a **state transport corridor** or **state transport infrastructure**. AND **AO17.2** Development does not concentrate flows to a **state transport corridor**. AND	

Performance outcomes	Acceptable outcomes	Response
	AO17.3 Stormwater run-off is discharged to a **lawful point of discharge**. AND **AO17.4** Development does not worsen the condition of an existing **lawful point of discharge** to a **state transport corridor** or **state transport infrastructure**.	
Flooding		
PO18 Development does not result in a material worsening of flooding impacts within a **state transport corridor** or **state transport infrastructure**	*For a **state-controlled road** or **road transport infrastructure**, all of the following apply:* **AO18.1** For all flood events up to 1% **annual exceedance probability**, development ensures there are negligible impacts (within +/- 10mm) to existing flood levels within a **state transport corridor**. AND **AO18.2** For all flood events up to 1% **annual exceedance probability**, development ensures there are negligible impacts (up to a 10% increase) to existing peak velocities within a **state transport corridor**. AND **AO18.3** For all flood events up to 1% annual exceedance probability, development ensures there are negligible impacts (up to a 10% increase) to existing time of submergence of a **state transport corridor**. *No acceptable outcome is prescribed for a **railway corridor** or **rail transport infrastructure**.*	The development site is not prone to flooding. Flood prone land parcels have only been included to remove receptors for the odour assessment.

Performance outcomes	Acceptable outcomes	Response
Drainage infrastructure		
PO19 Drainage infrastructure does not create a safety hazard in a **state transport corridor**.	*For a **state-controlled road** environment, both of the following apply:* **AO19.1** Drainage infrastructure associated with, or in a **state-controlled road** is wholly contained within the development site, except at the **lawful point of discharge**. AND **AO19.2** Drainage infrastructure can be maintained without requiring access to a **state transport corridor**. *For a **railway** environment both of the following apply:* **AO19.3** Drainage infrastructure associated with a **railway corridor** or **rail transport infrastructure** is wholly contained within the development site. AND **AO19.4** Drainage infrastructure can be maintained without requiring access to a **state transport corridor**.	Any drainage infrastructure around the sheds will discharge, via an existing legal point of discharge, across Strathane Road and into the floodplain.
PO20 Drainage infrastructure associated with, or in a **state-controlled road** or **road transport infrastructure** is constructed and designed to ensure the structural integrity and physical condition of existing drainage infrastructure and the surrounding drainage network is maintained.	No acceptable outcome is prescribed.	N/A no drainage infrastructure proposed in or near the state-controlled road corridor.
Planned upgrades		
PO21 Development does not impede delivery of **planned upgrades** of **state transport infrastructure**.	No acceptable outcome is prescribed.	The development is located entirely on private land and not near the state-controlled road corridor.

State code 22: Environmentally relevant activities

Guideline – SDAP State code 22: Environmentally Relevant Activities provides direction on how to address this code.

Table 22.1: All development

Performance outcomes	Acceptable outcomes	Response
All ERAs		
PO1 Development is suitably located and designed to avoid or mitigate **environmental harm** to the acoustic **environment**.	**AO1.1** Development meets the acoustic quality objectives for sensitive receptors identified in the Environmental Protection (Noise) Policy 2019.	Generally, operating hours are between 5 am and 5 pm which minimises potential impacts on sleep. Internal truck movements will generally align with these hours. It is anticipated that model noise conditions will be included in the EA.
PO2 Development is suitably located and designed to avoid or mitigate **environmental harm** to the air **environment**.	**AO2.1** Development meets the air quality objectives of the Environmental Protection (Air) Policy 2019.	The proposed piggery has been adequately separated in accordance with the NEGIP. Existing topography and vegetation will minimise any dust impacts from on-site vehicle movements.
PO3 Development (other than **intensive animal industry** for **poultry farming**), is suitably located and designed to avoid or mitigate **environmental harm** on adjacent **sensitive land uses** caused by odour.	No acceptable outcome is prescribed.	The proposed development has been adequately separated in accordance with the NEGIP.
PO4 Development is suitably located and designed to avoid or mitigate **environmental harm** to the receiving waters **environment**.	**AO4.1** Development meets the management intent, water quality guidelines and objectives of the Environmental Protection (Water and Wetland Biodiversity) Policy 2019.	The proposed effluent management system has been designed in accordance with the NEGIP.
PO5 Development is designed to include elements which: 1. prevent or minimise the production of **hazardous contaminants** and **waste** as by-products; or 2. contain and treat **hazardous contaminants** on-site rather than releasing them into the **environment**; and 3. provide secondary containment to prevent the accidental release of **hazardous contaminants** to the **environment** from spillage or leaks.	No acceptable outcome is prescribed.	Effluent is managed in accordance with the NEGIP. Chemicals and fuels will be suitably stored in containers within sheds or bunded fuel storages.

Performance outcomes	Acceptable outcomes	Response
PO6 Environmentally hazardous materials located on-site are stored to avoid or minimise their release into the **environment** due to inundation during flood events.	No acceptable outcome is prescribed.	
All development – matters of state environmental significance		
PO7 Development is designed and sited to: 1. avoid impacts on **matters of state environmental significance**; or 2. minimise and mitigate impacts on **matters of state environmental significance** after demonstrating avoidance is not reasonably possible; and 3. provide an **offset** if, after demonstrating all reasonable avoidance, minimisation and mitigation measures are undertaken, the development results in an acceptable **significant residual impact** on a **matter of state environmental significance**. Statutory note: For Brisbane core port land, an offset may only be applied to development on land identified as E1 Conservation/Buffer, E2 Open Space or Buffer/Investigation in the Brisbane Port LUP precinct plan.	No acceptable outcome is prescribed.	The proposed development has been sited to avoid MSES.
Intensive animal industry – poultry farming (ERA 4(2))		
PO8 Poultry farming development (where farming more than 200,000 birds) is suitably located and designed to avoid or mitigate **environmental harm** on adjacent **sensitive land uses**, caused by odour.	**AO8.1** For poultry farming involving 300,000 birds or less, development meets the separation distances as determined using the S-factor methodology to: 1. a **sensitive land use** in a rural zone; and 2. boundary of a non-rural zone. OR **AO8.2** Development meets the separation distances as determined by odour modelling using the following criteria: 1. 2.5 **odour units**, 99.5 percent, 1 hour average for a **sensitive land use** in a rural zone; or 2. 1.0 **odour units**, 99.5 percent, 1 hour average for the boundary of a non-rural zone.	N/A