

Exhibited

This planning application is open for
public comment until
19 October 2026

Reference no	PLN-26-0191
Site	507 NILE ROAD EVANDALE
Proposed Development	Land spreading of biosolids
Zone	21.0 Agriculture
Use class	Resource Development

Written representations may be made during this time to the General Manager;
mailed to PO Box 156, Longford, Tasmania 7301,
delivered to Council offices or
a pdf letter emailed to planning@nmc.tas.gov.au

(no special form required)



NORTHERN
MIDLANDS
COUNCIL

Exhibited

PLANNING APPLICATION

FOR BUILDINGS, WORKS AND CHANGE OF USE

(E.g. Residential houses, sheds, carports, retaining walls, visitor accommodation, commercial development, signage etc.)

Office Use Only:

The Proposal

Description of proposal:

Application of biosolids to agricultural land onto the properties Berega and situated at

Driveway construction material:

N/A.

The Land

Site address:

504 Nile Rd, Evandale, TASMANIA 7212

Title reference:

C/T: PID 7166425 and PID 6398793

Existing buildings on site:

Farm House and buildings

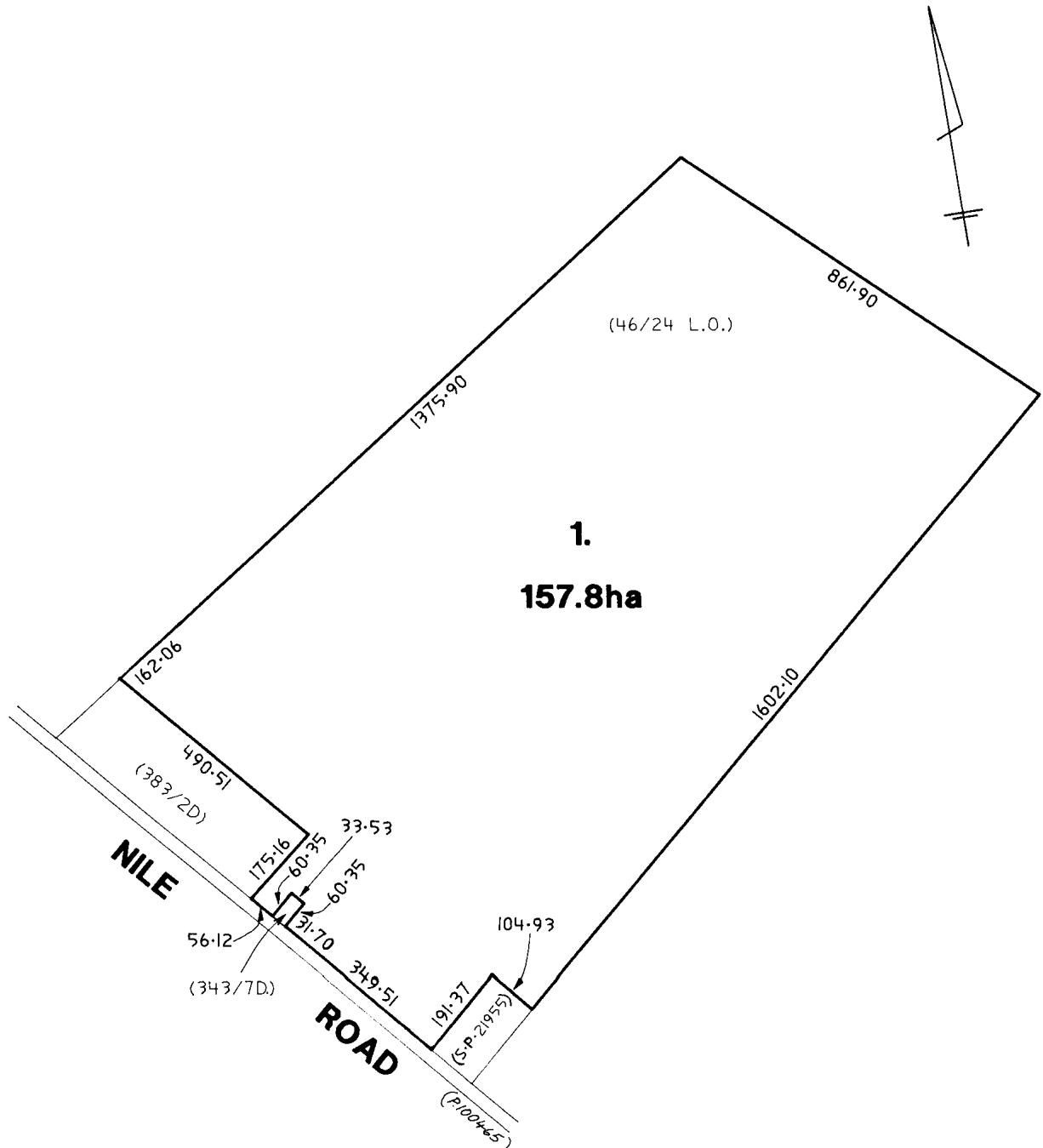
Existing use of site:

Agriculture

Applicant justification of any variation/discretion to the Tasmanian Planning Scheme – Northern Midlands

The application of biosolids is considered a normal agricultural activity, it returns valuable nutrients and humus to the land as a form of fertiliser. It is an example of conservation of natural resources including the recycling of the nutrient Phosphorus, a non-renewable natural resource.

Owner:	PLAN OF TITLE of land situated in the LAND DISTRICT OF CORNWALL PARISH OF LYMINGTON COMPILED FROM (46/24 L.O.) SCALE 1:9000 MEASUREMENTS IN METRES	Registered Number: D.49560
Title Reference: C.T. 4061/68		Approved
Grantee:		Recorder of Titles



OWNER FOLIO REFERENCE CT 2050-76 GRANTEE		PLAN OF TITLE LOCATION CORNWALL-LYMMINGTON FIRST SURVEY PLAN No. P.84 COMPILED BY LTO SCALE 1: 10000 LENGTHS IN METRES		Registered Number P.200172 APPROVED 01 MAY 1996 <i>[Signature]</i> Recorder of Titles	
MAPSHEET MUNICIPAL CODE No. 120	LAST UPI No 470021	LAST PLAN No.	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN		

BALANCE PLAN

A-143

Tasmanian Quality Meats Biosolids Management Program

Executive summary

Tasmanian Quality Meats (TQM) are engaged in an upgrade of their wastewater treatment system. This has included the construction of a new polishing and storage pond, the installation of aeration and plans to de-sludge lagoons as this becomes a necessity.

TQM plan to remove up to 6,000 m³ of wet sludge and to transport and have this spread onto farmland.

The application of biosolids has been shown to be beneficial for agricultural land as it provides humus, soils nutrients and trace elements. It is particularly valuable as a source of the nutrients Nitrogen and Phosphorus.

It is planned to de-sludge lagoons 2 and 3 in spring 2026.

Introduction

At the Cressy abattoir biosolids are the sludge remaining after the treatment of wastewater from the abattoir processes. This material has been aged with the majority being more than 5 years within the process lagoons.

Regulatory framework and approvals

Biosolids are a controlled waste as defined in the Environmental and Pollution Control Act (EMPCA). The beneficial reuse and application of biosolids to farmland is addressed by the Tasmanian Biosolids Reuse Guidelines (2020) (TBRG 2020)

Classification of biosolids

Biosolids are classified in accordance with their contaminant and stabilisation status. Classification is undertaken in accordance with the TBRG 2020.

Land selection

Suitable land for biosolids application is selected in accordance with the criteria set out in the TBRG 2020.

Application Rates, restrictions, and buffer areas

Maximum application rates will not exceed 50 wet tonnes/ha, but the actual rates will be determined through the Nitrogen Limiting Application Rate (NLAR).

Classification and Stability of Biosolids

Contaminant grading

The biosolids will be tested for their content of metals and organic compounds and will be classified against Table 7.1 (TBRG 2020) Contaminant Acceptance Concentration Thresholds for Biosolids as set out in TBRG 2020.

Stabilisation grading

Biosolids must not produce an odour and must meet an approved vector attraction reduction requirement set out in Table 8.1 TBRG 2020.

The biosolids in lagoons 2 and 3 at Cressy have been subjected to anaerobic and aerobic processes over an extended period extending over several years.

Land holder agreements

An agreement for the application of the biosolids is sought prior to the commencement of sampling and the application of the material. This will constitute a signed acceptance of this document.

Schedule for areas and application rates

A schedule showing application areas, application rates and setting out the responsibilities and obligations of the parties, the provider and the land-holder, is prepared.

Approvals Process

The farm plan with application rates and buffer areas

A biosolids Management Plan (This document) is prepared and is then submitted to the planning authority (Northern Midlands Council) for their approval.

Handling and Transport of Biosolids

K130 transport provisions

Only contractors that hold a current K130 permit may handle, transport and apply biosolids.

Cleaning and hygiene

All equipment used for transporting and the spreading of biosolids is fully cleaned prior to leaving a site following the application of biosolids.

Signage and public access

Public access onto land where biosolids have been spread is restricted for a period of 30 days following application. Signage on boundary fences and gates advising that biosolids have been applied will be erected for the duration of the activity and the withholding period.

Stock withholding

Access for grazing stock is restricted for a 30-day period following biosolids application. Pigs and poultry are entirely excluded.

Record Keeping

GIS recording of application areas

The contractor responsible for the application of biosolids will maintain a record of areas where the biosolids have been spread with these data being available for up-load to a GIS system if required.

Documentation

TQM will maintain a record of locations and dates where biosolids have been applied.

Physical Site Restrictions

Table 1 Buffer Zones

Buffer zones are set to avoid causing environmental nuisance and contamination of waterways, native vegetation and roadways as follows:

Characteristics	Buffer Distance metres	Reason
Slope	<15%	To prevent runoff
Attenuation distance to adjacent dwellings measured from the title boundary	100m	Tasmanian Planning Scheme Attenuation Code.
Open watercourses downslope	>100m	Buffer zones are used to reduce the likelihood of run-off, dust or odour affecting adjacent land or watercourses.
Open watercourses Flat	>50m	
Open watercourses Upslope	>10m	
Occupied dwellings	>100m	
Residential zone	>250m	
Public roads	>50m	
Adjoining properties	>50m	
Water bores	>50m	
Domestic water bores	>250m	
Property access roads	>5m	
Soil pH	>4.5	Not applicable to lime amended biosolids
	<7.5 (<7)	<7 applies to lime amended biosolids only
Undesirable drainage or extremely Permeable soils	Waterlogged, flood prone	To prevent run-off or groundwater contamination
Shallow groundwater	>1.5m to groundwater	Clay content specific. See TBRG (2020)
Rocky ground	Untillable land	Forestry and site rehabilitation are possible exceptions.

The property where the application of biosolids is proposed to take place

Figure 1 Barega Location Map



Biosolids Sampling Method

16 sub-samples of sludge were obtained from lagoons 2 and 3.

Using a random allocation method 4 composite samples were then obtained as colour coded in Figures 3 and 4. These composite samples were then sent to a NATA laboratory for analysis. The results are shown in Table 1.

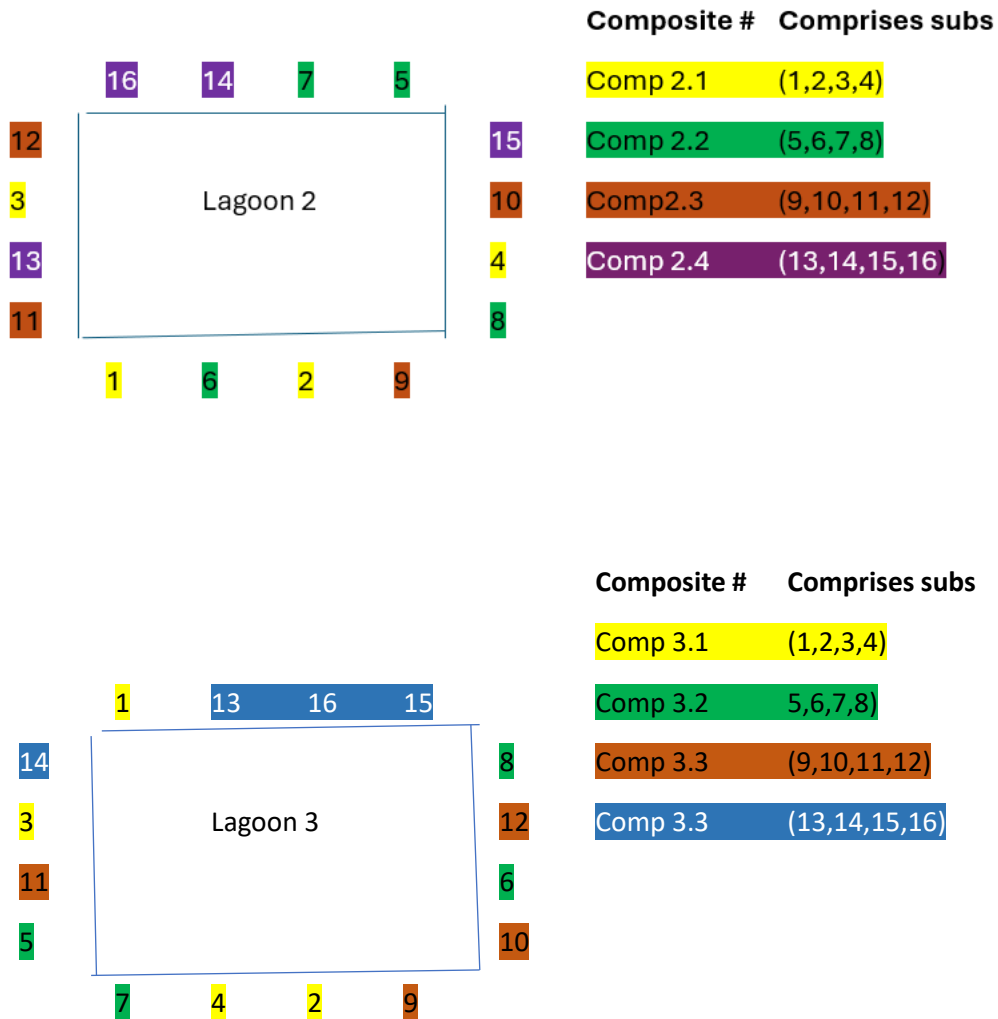


Figure 3 Nutrient and other concentrations are calculated as means (averages) for each colour-coded random numbered sampling locations.

Table 2 Results from Composited Biosolids Sampling

Parameter	Units	A1	A2	A3	A4	Mean	Contamination grade
Moisture content	%	74.2	78.3	76.01	72.7	75.3	
Contaminant grade							
Total As	mg/Kg	2.99	1.59	2.09	2.09	2.19	A <20 mg/kg
Total Cd	<20	0.2	0.2	0.2	0.2	0.2	A <1 mg/kg
Total Cr	mg/Kg	27	28	24	37		A <50 mg/kg
Total Cu	mg/Kg	45.11	26.5	31.09	33.06	33.94	A < 100 mg/kg
Total Pb	mg/Kg	14.9	8.7	10.5	12.5	11.65	A < 150 mg/kg
Total Hg	mg/Kg	1.2	3.0	0.3	1.7	1.33	B <15 mg/kg
Total Ni	mg/Kg	16	23	13	30	20.5	A <60mg/kg
Total Zn	mg/Kg	350	430	170	560	377.5	B <2500mg/kg
Nutrients							
Ammonia N	mg/Kg	312	7.6	334	11.8	166.9	
Nitrite/Nitrate	mg/Kg	39.2	0.32	27.8	2.61	17.48	
Total Kjeldahl N	mg/Kg	20059	8190	13559	9120	13182	
Total N	mg/Kg	2.2	0.12	2.8	0.51	1.42	
Total P	mg/Kg	39200	13900	33100	21600	26950	
Persistent Organic Contaminants (POPs)							
PFOS + PFHxS	µg/kg	1.6	<0.5	1.2	<0.5	1.2	
PFOA	mg/Kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Sum All PFAS	mg/Kg	2.4	<0.5	1.8	<0.5	1.19	
Stabilisation Criteria							
E. coli	MPN/g	>1100	>1100	>1100	>1100	>1100	
Salmonella/25g	MPN	detected	detected	detected	detected	detected	
Total solids	%	25.8	21.7	24.0	27.3	24.7	
pH	pH units	7.0	7.0	7.2	7.2	7.1	

The Cressy biosolids classify as a Class 2 Biosolid with Contaminant Grade B for Mercury 1.33mg/kg dry weight > Grade A 1mg/kg but less than Grade B maximum 15mg/kg dry weight and for Zinc at 377.5mg/kg dry weight but less than the grade B maximum of 2,500mg/kg dry weight. A;; other metals are well within Grade A requirements.

The presence of POP's in sampled biosolids is negligible and well below levels of concern.

Stabilisation is achieved through long-term anaerobic decomposition.

Land Identification for Biosolids Applications

Soils sampling and analysis

Soil sampling is undertaken through the collection of multiple samples obtained over 10-20ha plots with 30-40 sub-samples obtained in a zig-zag fashion over the land unit. These samples are then mixed and composite samples obtained and sent for analysis. Analytes include pH, soil moisture, suite of metals, nutrient concentrations, and exchangeable cations.

Soils Sampling Results

Table 3 Results from Soils Sampling Barega

All silty loam					
Analyte	Units	Desired level	N3	B5 South	B5 North
ECEC	µS/cm	<300	80	115	90
Total soluble salt	ppm	<990	264	379.5	297
pH Water	pH units	5.5-7.6	5.9	5.9	6
pH CaCl2	pH units		5.26	5.26	5.35
Available calcium	mg/kg	821	658	852	982
Available magnesium	mg/kg	173	116.4	192	184.8
Available sodium	ppm	<110	34.5	50.6	36.8
Available Nitrogen	ppm	22	15.4	13.4	9.4
Available Phosphorus	ppm	20	4.6	4.7	8.5
Available Potassium	ppm	173	116.4	113.1	120.9
Available Sulphur	ppm	7-10	5.8	7.4	6.7
Available copper	ppm	2	0.39	0.7	0.97
Available Zinc	ppm	3 - 5	1.59	3.06	5.75
Available iron	ppm	>30	338.9	313.3	283.7
Available Manganese	ppm	>20	10.34	11.45	10.74
Available Cobalt	ppm	0.5 - 0.7	0.73	1.01	0.69
Available Molybdenum	ppm	0.1 - 0.2	0.49	0.61	0.55
Available Boron	ppm	0.4 - 0.6	0.43	0.81	0.66
Total Organic matter	%	3 - 4	7.1	0.64	7.66
Total Organic carbon	%	1.5 - 2.0	3.55	7.28	3.83
Available Aluminium	ppm		1.84	1.11	0.76
Exchangeable Calcium	meq/110 of soil	5.91	2.99	3.86	4.52
Exchangeable Magnesium	meq/110 of soil	1.36	0.88	1.45	1.42
Exchangeable Sodium	meq/110 of soil	<0.45	0.14	0.2	0.15
Exchangeable Potassium	meq/110 of soil	0.45	0.18	0.26	0.29
Exchangeable Hydrogen	meq/110 of soil		4.98	6.96	5.63
Adj Exchangeable Hydrogen	meq/110 of soil	<1.36	1.43	3.2	1.8
Cation exchange capacity	meq/110 of soil		9.17	12.73	12.01

Adjusted CAC	meq/110 of soil		5.62	9.09	8.18
Excg Sodium percentage	%	<5	1.53	1.57	1.25
Calcium:Magnesium ratio	Ca/Mg	2 - 5	3.39	2.66	3.19
Base saturation percentage	BSP		48.00	48	55

colour key

Very low
Low
Slightly low
Normal
High

Soil Nitrogen and Phosphorus levels are 'low' to 'very low'. All the soils will benefit from biosolids applications.

Biosolids Application Rates

It is necessary to determine a nitrogen mineralisation rate (MR) for the Cressy biosolids. This is based on the rate for anaerobically digested sludge as set out in TBRG (2020) at 20%. This rate is applied to the biosolids obtained from lagoons 2 and 3 at the Cressy abattoir.

Available Biosolids Nitrogen (ABN) and application rates are calculated in accordance with Appendix D: Application, Tasmanian Biosolids Reuse Guidelines (2020), and follow the example provided there

Application rates for biosolids for paddocks will be 50 wet tonnes/ha.

The calculated Nitrogen Limiting Application Rate NLAR, would allow for rates well in excess of 50 tonnes, however the 50 wet tonne rate will be adhered to and will ensure compliance as a Level 2 Activity.

Table 4 Typical Biosolids Application Rates for selected paddocks are shown.

Pasture requirement kg N/ha	75	75	75
Paddock example	N3	B5 South	B5 North
Inorganic N = NH ₄ +NO ₂ +NO ₃	15.4	13.4	13.4
Requirement less in soil	59.6	61.6	61.6
N available kg/wet tonne	0.7	0.7	0.7
NLAR t/ha	85.5	88.4	94.1

Discussion

As part of a plant-wide improvement program for the water supply, conservation of water and an upgrade of the wastewater treatment system, Tasmanian Quality Meats now seeks to commence a lagoons de-sludging program.

Over the last 24 months TQM have constructed a new polishing lagoon and have installed aeration in lagoon 3 to improve the treatment process. Specifically, the oxidation of nitrogen species.

The build-up of sludge in lagoons 2 and 3 is impeding the treatment process. It is therefore planned to remove approximately 6,000m³ of wet sludge from the two lagoons and to make this available for land application.

It is desirable that application of the sludge proceeds as soon as possible as it will lead to an improvement in the wastewater treatment process while if it occurs ahead of the on-coming growing season as this will provide the greatest benefit to the recipient farmers.

3/ Environmental Effects

Transport to the application sites will be by semi-trailer road tanker. The route followed will be from Tasmanian Quality Meats via the B53 to Powranna. Then turning North on the Midland Highway, then right at Leighlands Road (B41) to Nile Road, then turning south on the C416 to Barega.

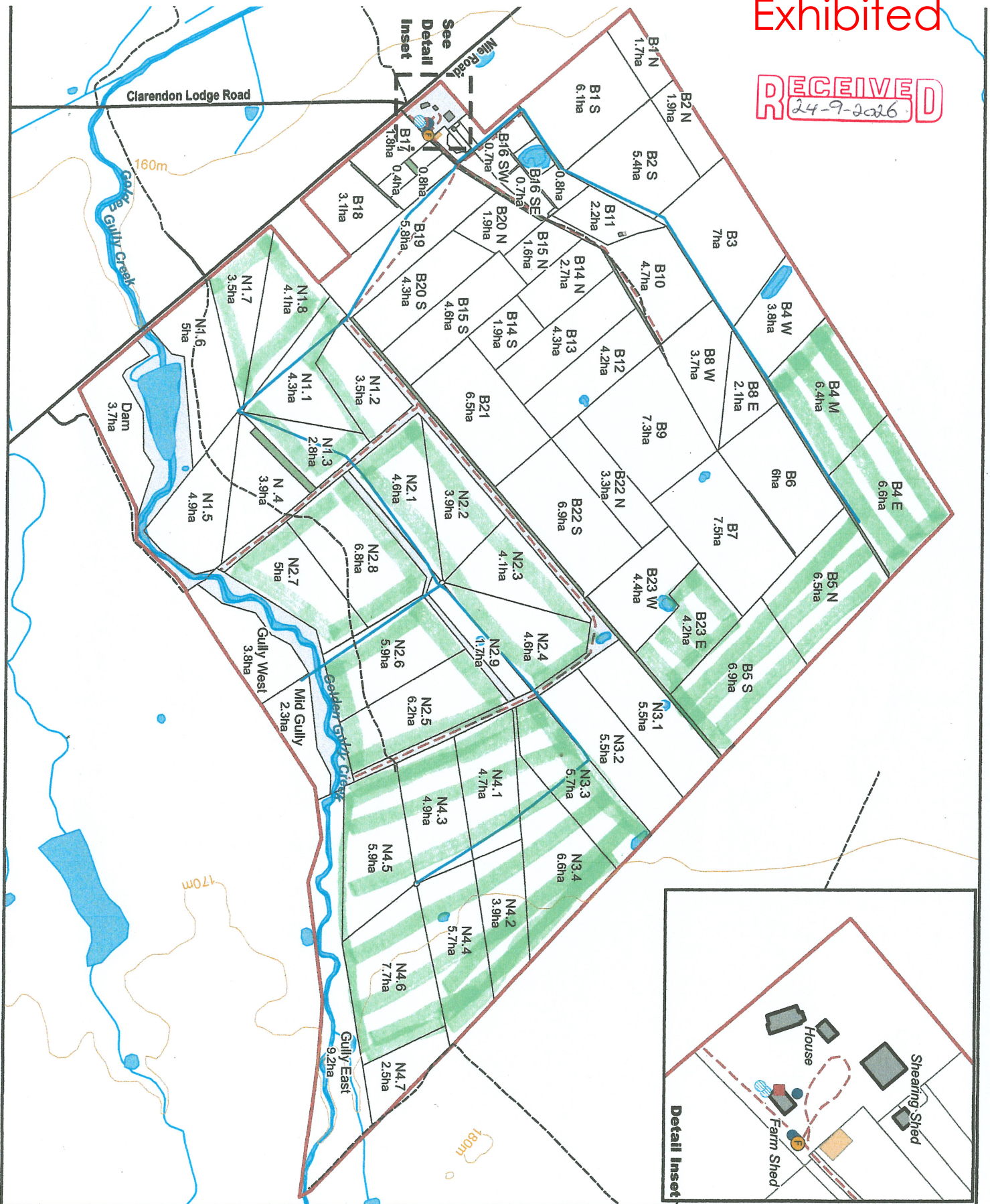
All transport and application equipment will be maintained in a clean condition and will not provide a nuisance to other road users.

The application process is estimated to take between 2-5 weeks depending on external conditions.

Buffer zones for water courses, boundaries and residential properties will be maintained

Exhibited

RECEIVED
24-9-2026



Barega Property Map

- Legend**
- Property Boundary
 - Building
 - Stock Yard
 - Farm Tip Site (B11)
 - Farm Dam/Watering Hole
 - Shelterbelt
 - Other
 - Waterline
 - Golden Gully Creek
 - Internal Roads
 - Chemical Shed
 - Fuel Point
 - Silo
 - Water Tank

Property Area: 327ha
Number Paddocks: 73
Paddock Area: 304.3ha

