

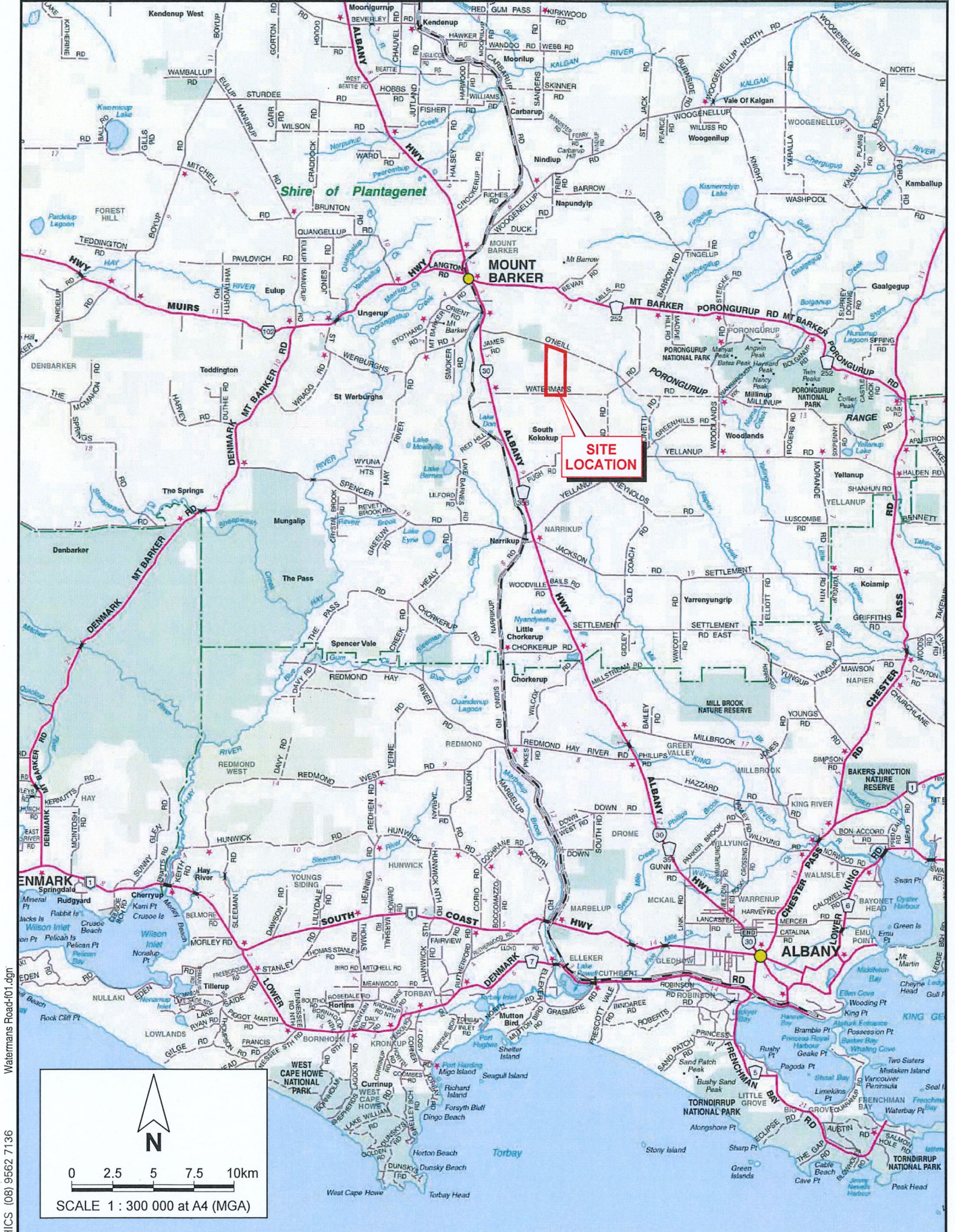
Council

LOT 5711 WATERMANS ROAD, MOUNT BARKER –
FREE-RANGE CHICKEN POULTRY FARM

Regional Location
3-D Poultry Production Structure
Proposed Operational Areas
Site Setting and Separation Distances
Summary of Submissions

Meeting Date: 14 December 2021

Number of Pages: 13



PINPOINT CARTOGRAPHICS (08) 9562 7136 Watermans Road-f01.dgn

Scale: As shown
 Drawn: K. McCormack
 Date: 6 August 2021
 Dwg: Watermans Road-f01

PARDELUP FARM
 ENVIRONMENTAL MANAGEMENT PLAN
 375 (LOT 5711) WATERMANS ROAD, MOUNT BARKER

REGIONAL LOCATION

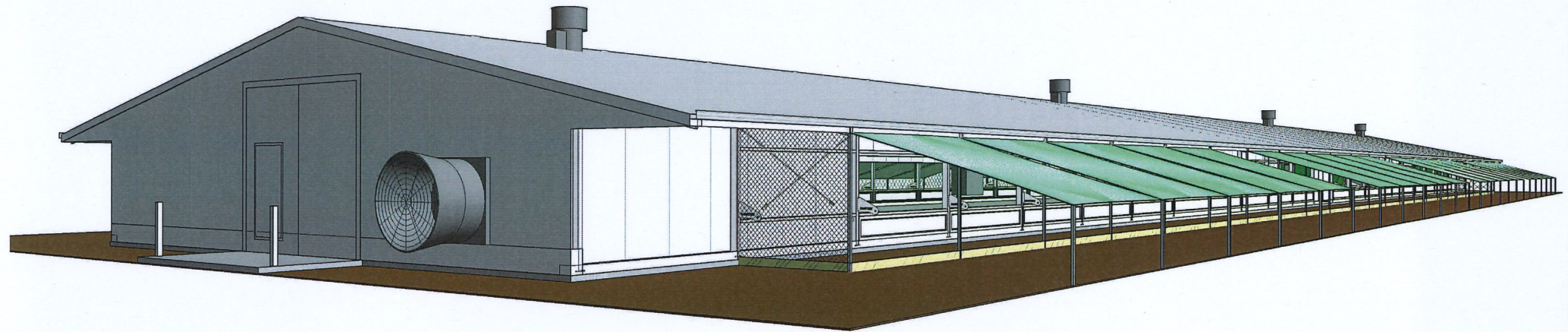
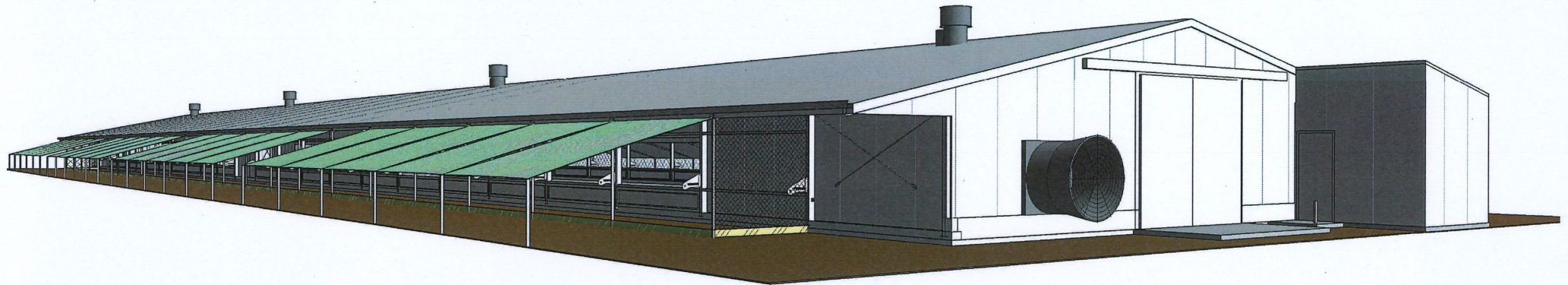
Figure 1



WATERMANS POULTRY FARM

PROPOSED NEW CONSTRUCTION - preliminary drawings

DRAWING LIST	
No.	Sheet Name
D 201	BROILER SHED LAYOUT
D 202	SHED ELEVATIONS
D 203	TYPICAL SHED SECTION
D 208	CURTAIN DETAILS



PROPOSED NEW CONSTRUCTION - preliminary drawings



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CLIENT APPROVAL: MT BARKER

CLIENT SIGNATURE:

CLIENT SIGNATURE INDICATES THEIR APPROVAL OF THE PLANS AND THE LAYOUT/EQUIPMENT DOCUMENTED.

REV	DESCRIPTION	DATE
J	PRELIM DRAWINGS FOR APPROVAL	15/07/2020
K	PRELIM DRAWINGS FOR REVIEW	31/08/2020
L	PRELIM DRAWINGS FOR REVIEW	07/09/2020

WATERMANS POULTRY FARM

For: MT BARKER

375 (LOT 5711) WATERMANS ROAD,
MOUNT BARKER
WA

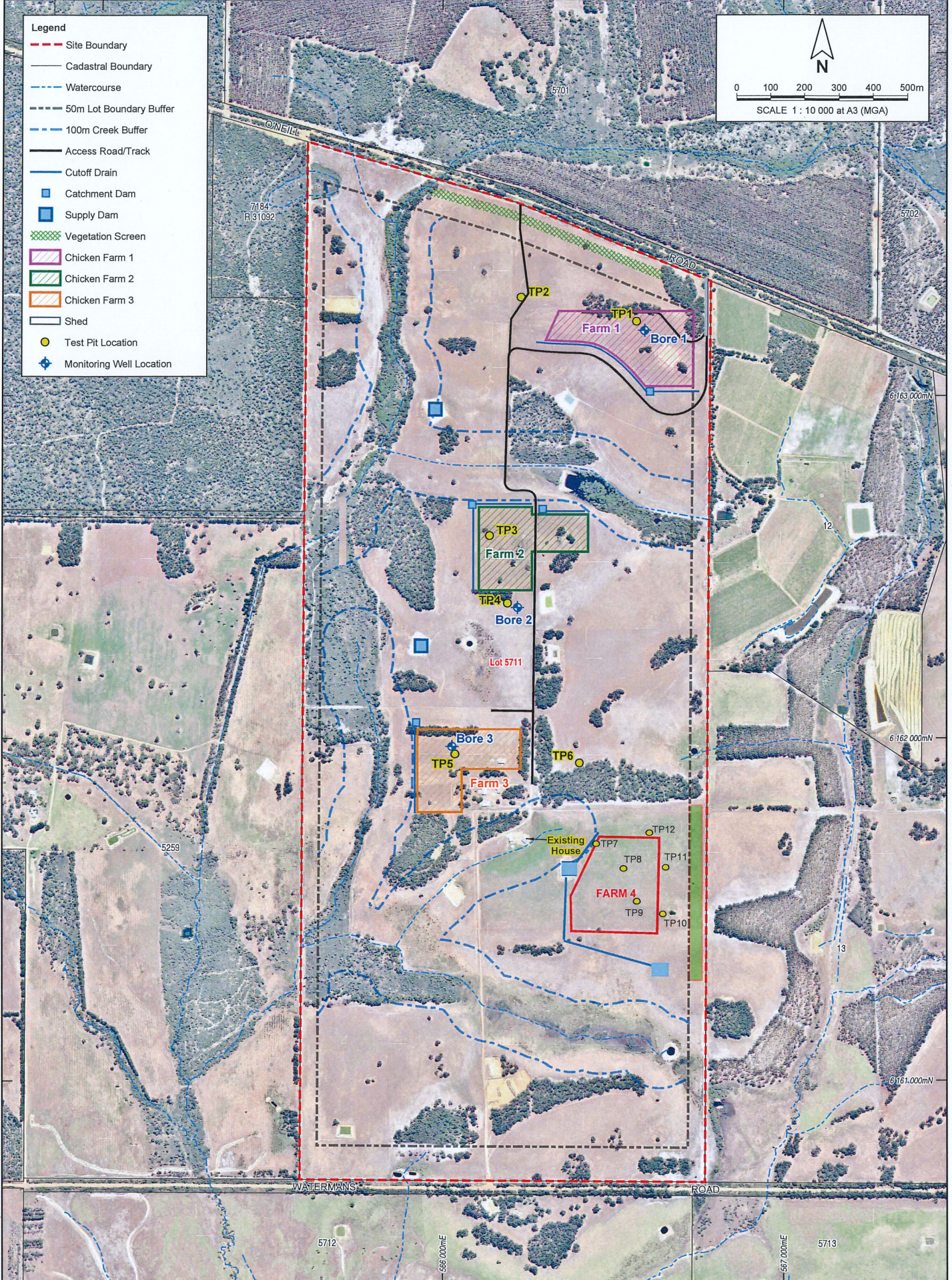
sheet title:

COVER SHEET

job no: MTBW-01
drawn by: AS

date: 07/09/2020

scale (A3):
drawing no: CS 01



- Legend**
- Site Boundary
 - Cadastral Boundary
 - Watercourse
 - 50m Lot Boundary Buffer
 - 100m Creek Buffer
 - Access Road/Track
 - Cutoff Drain
 - Catchment Dam
 - Supply Dam
 - ▨ Vegetation Screen
 - ▨ Chicken Farm 1
 - ▨ Chicken Farm 2
 - ▨ Chicken Farm 3
 - Shed
 - Test Pit Location
 - ◆ Monitoring Well Location

N

0 100 200 300 400 500m

SCALE 1 : 10 000 at A3 (MGA)

Scale: As shown
 Drawn: K. McCormack
 Date: 6 August 2021
 Dwg: Watermans Road-f02

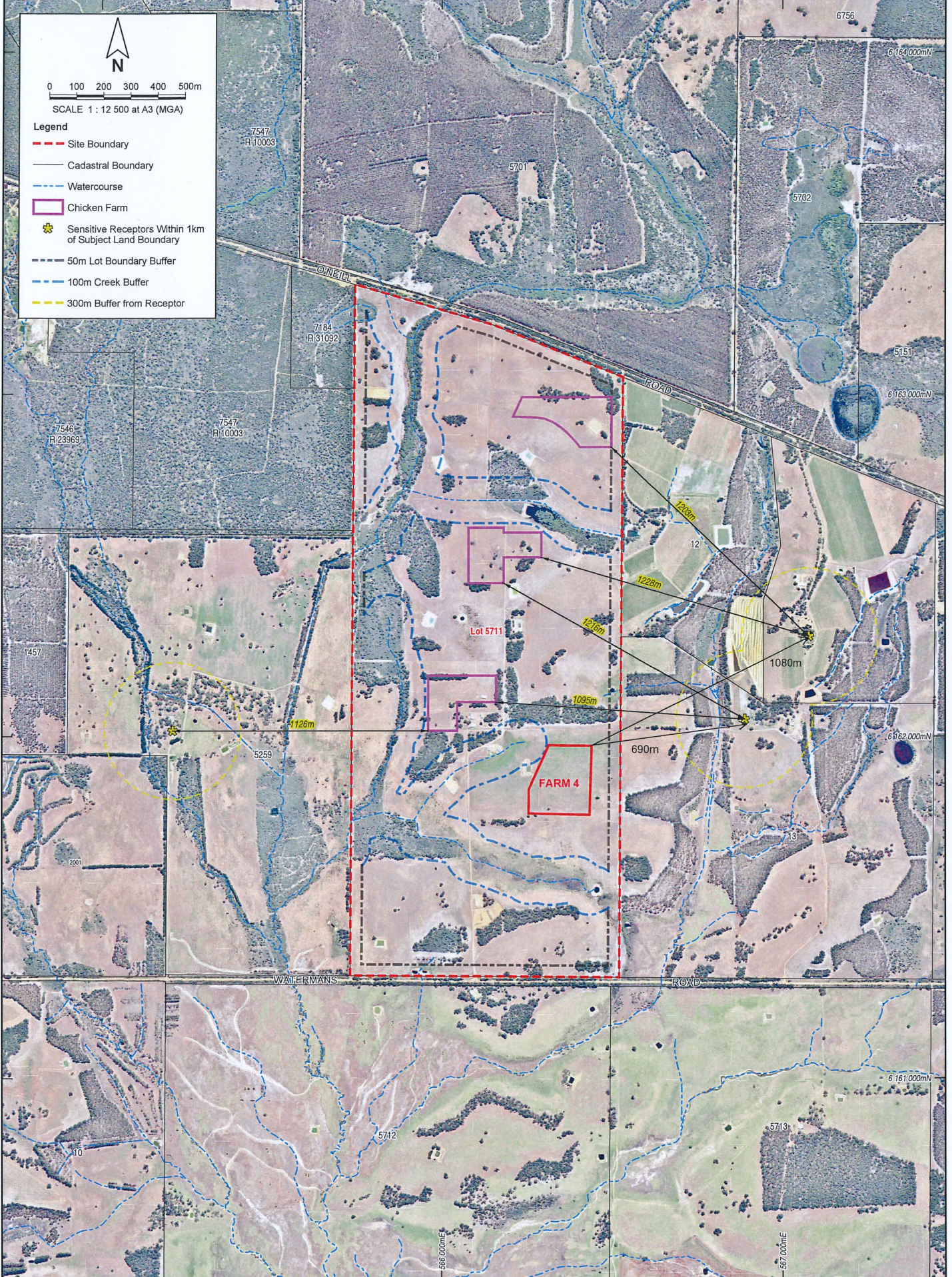
WATERMANS FARM
 ENVIRONMENTAL MANAGEMENT PLAN
 375 (LOT 5711) WATERMANS ROAD, MOUNT BARKER

Figure 2

PROPOSED OPERATIONAL AREAS



CONTOUR SOURCE: Dept. of Agriculture, 2000.
 CADASTRAL SOURCE: Landgate, January 2020.
 AERIAL PHOTOGRAPH SOURCE: Microsoft Virtual Earth.
 WATERCOURSE SOURCE: Landgate 1:50 000 Topographic Mapping.



Legend

- Site Boundary
- Cadastral Boundary
- Watercourse
- Chicken Farm
- * Sensitive Receptors Within 1km of Subject Land Boundary
- 50m Lot Boundary Buffer
- 100m Creek Buffer
- 300m Buffer from Receptor

N

0 100 200 300 400 500m

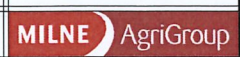
SCALE 1 : 12 500 at A3 (MGA)

Scale: As shown
Drawn: K. McCormack
Date: 6 August 2021
Dwg: Watermans Road-105

WATERMANS FARM
 ENVIRONMENTAL MANAGEMENT PLAN
 375 (LOT 5711) WATERMANS ROAD, MOUNT BARKER

Figure 4

SITE SETTING AND SEPARATION DISTANCES



CONTOUR SOURCE: Dept. of Agriculture, 2000.
 CADASTRAL SOURCE: Landgate, January 2020.
 AERIAL PHOTOGRAPH SOURCE: Microsoft Virtual Earth.
 WATERCOURSE SOURCE: Landgate 1:50 000 Topographic Mapping.

Summary of Submissions
Lot 5711 Watermans Road, Mount Barker

	Name/Address	Submission	Comment
1.	DPIRD Locked Bag 4 Bentley DC 6983	<p>Thank you for the opportunity to comment on the proposed free-range chicken farm at Lot 5711 Watermans Road, Mount Barker.</p> <p>The Department of Primary Industries and Regional Development (DPIRD) supports the development of rural industries in general, however it is not able to support this application in its current form, as additional information is required.</p> <p>DPIRD assessed the application and have the following comments:</p> <ul style="list-style-type: none"> • The Shire of Plantagenet Planning Policy requires a distance to groundwater of only 1.5m while all other intensive animal industries in WA are required to maintain a 2m separation distance above the maximum winter groundwater level. The Environmental Code of Practice for Poultry Farms in Western Australia recommends a 3m separation above the maximum winter groundwater level for the development of new free to range sheds. • Conclusive winter groundwater results are required to verify the separation distance to the maximum winter groundwater level. DPIRD recommends a 3m separation distance as this aligns with the Environmental Code of Practice for Poultry Farms in Western Australia. Current results do indicate a possible 3m separation, however measurement was undertaken in May and not in July/August when the groundwater level is at its maximum. • DPIRD recommends that a monitoring program be required for this proposal. The monitoring should include soil testing, groundwater monitoring and surface water monitoring. <ul style="list-style-type: none"> • The proposal does not include a nutrient management plan that demonstrates a sustainable nutrient balance. The input of nutrients into the system is addressed, but there does not appear to be any estimate of nutrient off-take. How will the nutrients entering the system be utilised and the system balanced? • According to calculations on page 20 of the application document the following nutrients will be applied to each ranging area (0.5ha area): <ul style="list-style-type: none"> ○ 154kg of Total Nitrogen in ranging area per shed (308kg/ha) ○ 47kg of Total Phosphorus in ranging area (94kg/ha) <p>How will the soil be able to assimilate this high application of nutrients?</p> 	<p>Noted.</p> <p>Noted.</p> <p>1. A condition of development approval will require the applicant to demonstrate a 3m ground water separation.</p> <p>2. A condition of development approval will require the provision of a detailed monitoring plan including soil testing, groundwater monitoring, surface water monitoring and nutrient monitoring as part of a revised Environmental Management Plan (EMP).</p> <p>3. A condition of development approval will require the provision of a Nutrient Management Plan as part of a revised EMP.</p> <p>See comment 3.</p>

		<ul style="list-style-type: none"> The sheds have large eaves and shade cloth extensions to provide protection from rain and hot weather. This means that the range area will receive no rain and without water pasture will not be able to grow. These range areas will be scrapped after each cycle to remove up to 80% of the manure. This scraping will probably remove most plants in the range area. There is no indication in the application document regarding the management of pasture in the range areas. 	4. A condition of development approval will require details involving pasture management within free-ranging areas as part of a revised EMP.
2.	DWER PO Box 525 Albany	<p>The Department has identified that the above proposal has the potential for impact on water resource values and management. Key issues and recommendations are provided below and these matters should be addressed.</p> <p>It should be noted that the additional farm was not shown in previous correspondence provided to the Department of Water and Environmental Regulation (DWER) and therefore DWER has not had a previous opportunity to comment on the proposal for 'Farm 4'.</p> <p>Environmental Licensing</p> <p>Under Schedule 1 of the Environmental Protection (EP) Regulations 1987 the proposed activity, free range chicken farm, is not categorised as a Prescribed Premises and does not require statutory approval from the Department.</p> <p>Although chicken farms are not regulated under Part V Division 3 of the Environmental Protection (EP) Act 1986, land use and waste practices as part of proposed operations must conform to industry codes, local (Shire of Plantagenet Local Planning Scheme) and state government planning approval requirements. DWER expects that poultry farms are compliant with the Environmental Code of Practice for Poultry Farms in Western Australia (the Code) (WABGA, 2004).</p> <p>Rights in Water and Irrigation Act</p> <p>The proponent is advised:</p> <p>a) contact DWER's South Coast Water Licensing team on 9841 0101 regarding the requirements under the Rights in Water and Irrigation Act 1914 on matters related to:</p> <p>i) the taking of surface and groundwater to support the commercial activities</p> <p>ii) any proposed interference with the bed and banks of a watercourse.</p> <p>Wilson Inlet Management Area</p> <p>The subject land is located in the Wilson Inlet Management Area which is declared under the Waterways Conservation Act 1976. The proposed site is located within the catchment of the Hay River which is a major river system of the Wilson Inlet estuary. Wilson Inlet has significant environmental, social and economic values to the region. A number of non-perennial waterways are located on Lot 5711 which are the upper tributaries of the Sleeman River which flows into the Hay.</p> <p>The non-perennial waterway which runs east to west below proposed Farm 4 is mapped in DWER's hydrographic dataset along with the north to south running drain (to the south of the existing residence). A large dam is located downstream on this waterway near the western boundary of the property with the adjacent property. The east west waterway is broad and not well defined.</p>	<p>Noted.</p> <p>Noted</p> <p>Noted.</p> <p>Noted.</p> <p>5. The proposal conforms to most of the requirements included in the Code (WABGA, 2004) except for the 3m ground water separation requirement. See comment 1.</p> <p>6. Include an advice note on this matter in development approval</p> <p>Noted.</p> <p>Noted.</p>

	<p>Waste, effluent and nutrient management Nutrients could enter the waterways on site via sheet flow (or percolation through leaching and hydraulic transmission in areas of shallow groundwater).</p> <p>The Environmental Code of Practice for Poultry Farms in Western Australia recommends that Nutrient Management Plans are developed to support free range poultry farm development applications and that the following aspects are determined for roaming/ranging areas:</p> <ul style="list-style-type: none"> • Stocking rates, pen rotations and associated nutrient loading from roaming areas. • Maximum seasonal groundwater level. • Soil properties and pasture growth nutrient requirements, where pasture nutrient needs are an essential factor for determining stocking rates. • Buffer distances, including proximity to waterbodies and waterways and buffer vegetation type and condition. • Nutrient concentration and colour of receiving waterbody. • Proposed on-going testing (e.g. groundwater levels and/or soil and pasture tissue testing). • Information as to how nutrients are removed from the system. <p>Spent litter management It is noted within Section 4.5 of the EMP that litter material will be used by secondary processors and/or farmers for use as soil amendment. DWER advises that the Unauthorised Discharge Regulations would apply if no treatment of the waste was to occur before applying to land. Where solid waste is proposed to be removed off-site for further processing, it is a requirement that this waste is taken to an approved facility licensed to accept this waste.</p> <p>Table 11 refers to “On-site Spent Litter Application and Nutrient Management”. This table needs to be updated to reflect that solid waste and spent litter is to be taken off-site for processing. This also applies in relation to “Dead Bird Management” in Table 11 as dead birds are to be disposed of off-site.</p> <p>Section 4.12 of the EMP draws reference to matters relating to accidents and emergency responses. This states that a plan is required for the disposal of dead birds should mass deaths occur, however, the plan is not provided.</p> <p>Nutrient Loading Although the proposal is for non-irrigated land use, WQPN 22 Irrigation of nutrient enriched wastewater (DoW 2008) see at: https://www.water.wa.gov.au/_data/assets/pdf_file/0013/4045/82324.pdf is used by DWER as a guideline to assess whether proposed stocking density and nutrient load exceeds the acceptable maximum nutrient needs for pasture. The guidelines use Total Nitrogen (TN) and Total Phosphorus (TP) and are based on soil type as well as nutrient concentration and colour of the receiving waterbody. WQPN 22 is based on nutrient load calculated as a rate of nutrients per kg / per ha / per year.</p>	<p>7. The EMP includes the use of interceptor drains, retention dams to manage surface water run-off at the farm 4 location.</p> <p>Noted.</p> <p>8. Include an advice note on this matter in development approval.</p> <p>9. A condition of development approval will require the solid waste to be taken to an approved licensed facility.</p> <p>10. A condition of development approval will require updated supporting information on spent litter and dead bird management as part of a revised EMP</p> <p>11. The details concerning the response to mass bird deaths is attended to in the EMP.</p> <p>Noted.</p>
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		<p>Sec 4.4.1 of the EMP provides annual nutrient loading rates based on the ranging area of each shed. Ranging areas (100 m x 25 m) for each shed (including both sides of the shed) equate to 0.5 ha. The annual nutrient load rate figures the EMP uses within nutrient budget calculation are 154 kg of TN and 47 kg TP. These figures should be doubled to obtain a per kg/ per ha / per year rate. Thus 154 kg TN becomes 308 kg (TN) and 47 kg TP 94 kg (TP) per ha / per year.</p> <p>While TN is close to the DWER guideline's recommended maximum limit, TP is almost double the recommended maximum limit. As the phosphorus buffering capacity (PBI) of the local soil types (sandy loams) is moderate (not high) this would indicate soils do not have capacity to retain excess phosphorus. For protecting water resources on the site, the EMP should address how excess phosphorus will be reduced to within the guideline's maximum recommended limits through reduced stocking rates and/or mitigative controls.</p> <p>Monitoring While within the EMP, quantifiable baseline soil data is provided which is critical for understanding the starting point for nutrient loss / export, DWER would expect more specific information is provided on annual monitoring and auditing of soil condition /quality in the free ranging areas. Ongoing rather than annual soil and/or plant tissue testing will be required to determine nutrient concentrations.</p> <p>DWER could potentially support the proponent's statement in Section 4.16.1 of the EMP that in the 'absence of a nationally accredited nutrient management system for free range poultry, it is proposed to assess the site and adopt a monitoring program similar to that used for outdoor piggeries - Australian Port Industry Quality Assurance Program (APIQ Australian Port Limited 2012) however this would need to be subject to further consultation with DWER and DPIRD.</p> <p>Drainage controls DWER expects that wastewater containment infrastructure is constructed to meet industry standards. Wastewater containment infrastructure is generally expected to be lined to achieve a permeability of at least 1x10⁻⁹ m/s, which is the most commonly achieved by compacting 2 layers of 150mm of suitable clay. However, as stated in Section 4.4.2 of the EMP in the absence of an industry guideline for surface water management specific to chicken farms, the application of the first flush flow as a guideline for drainage calculation is acceptable.</p> <p>Terminal ponds receiving water from the chicken farm catchment areas must be located outside the waterway buffer area.</p> <p>Shed Design According to the EMP sheds will be located on level ground with floor level of each pair of sheds established to ensure maximum integration into the landscape and minimisation of earthworks. However, detailed information regarding the ultimate design of the sheds and final gradients are required to inform surface water management to reduce risk of run-off and erosion.</p>	<p>12. A condition of development approval will require the applicant to demonstrate how excess phosphorus will be reduced within free-ranging areas to within the guideline's maximum recommended limits as part of a revised EMP.</p> <p>Noted</p> <p>See condition 3.</p> <p>Noted.</p> <p>13. Proposal conforms to this requirement.</p> <p>14. Noted, the necessary surface water management measures will be installed once the poultry structures are constructed and prior to bird production.</p>
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	<p>All shed washdown water should be directed to evaporation ponds.</p> <p>The Code recommends that if there are more than one ranging shed on a property, an appropriate separation buffer is maintained between each roaming/ranging area. This is to enable the soil to assimilate nutrient runoff and prevent pockets of the property becoming significantly degraded. The buffer between sheds is in accordance with best practice and should be included in the EMP site plan.</p> <p>Separation from waterways A minimum 200 m buffer from waterways on the site is recommended in accordance with the Code's recommended best practice. The buffer should be measured 20 m outwards from the shed perimeter. The proponent should demonstrate that the separation requirement can be achieved 20 m outward from the shed perimeter.</p> <p>A minimum 3 m buffer from the highest known groundwater table is recommended in accordance with the Code's recommended best practice.</p> <p>Groundwater Historical aerial photography (including that used in Figure's 4 and 6 of the EMP) shows that the location of Farm 4 is considerably greener than surrounding areas of the lot. This provides a strong indication that soil moisture levels are higher in this site than the other three farm locations. Figure 4 of the EMP shows that less than 500 m to the east of the proposed farm location, water seepage to the surface occurs at 163 m AHD which is a similar surface elevation. The location of soaks within the properties to the east and west show that the groundwater table is at shallow depth at surface elevations ranging from 160 m to 187 m. Although Farm 4 is proposed to be located within the more elevated areas (above 170 m AHD) to maximise separation to groundwater, inferred groundwater levels range from 160 m AHD to 180 m AHD (source: EMP). Groundwater investigations need to be provided at the farm sheds with testing in winter conditions. Downgradient of the proposed farm site, groundwater level results obtained at the end of winter will inform the need for ongoing shallow groundwater monitoring. No groundwater (bore) information is provided within the EMP to show that a minimum 3m separation to groundwater in accordance with the Code, can be met at this site. The onsite investigation to determine depth to groundwater within the proposed development area using test pits to a depth of 3.5 m is not sufficient evidence of shallow groundwater. The test pits were undertaken in May when conditions are not indicative. End of spring conditions this year would provide greater confidence of achieving a minimum depth to groundwater of 3 m. It is recommended that the testing is undertaken as soon as practical.</p>	<p>15. A condition of development approval will require all poultry structure washdown water to be directed to evaporation ponds.</p> <p>16. A condition of development approval will require a minimum 20m separation between poultry structures and free-ranging areas as part of a revised EMP.</p> <p>17. Proposal conforms to the Health Local Law 2008 and Town Planning Scheme Policy No. 13.1 (Feedlots) for minor water course buffer distance requirements. See comment 1.</p> <p>Noted</p> <p>Noted.</p> <p>See comment 1.</p> <p>See comment 1.</p> <p>See comment 1.</p>
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Pasture management

There is no mention within the EMP of how nutrients, particularly nitrogen, will be exported from the site through cropping. Although the EMP states nutrients will be largely utilised by vegetation growing in the ranging area it is questioned how this will occur without cropping or active pasture. Active pasture is integral to reducing nutrient leaching risk and is recommended for free range shed farms within the Code. Although having a soil type with moderate Phosphorus Buffering Index (PBI) capacity can mitigate phosphorus to some extent this is not as effective in retaining nitrogen (which is best exported through cropping or pasture). As there will be no rotation of ranging areas, maintenance of active pasture outside the perimeter of the sheltered areas is critical to managing erosion and nutrient loss from free range areas. Given areas will be rested for 3.5 weeks per cycle, opportunity exists for free range areas to be graded and pasture sown.

Revegetation and Fencing

Appropriately vegetated buffers allow particulate matter to be deposited and nutrients to be assimilated. No additional plantings aside from screening along the east boundary are proposed as part of the EMP. To reduce the risk of nutrients entering the waterway to the south, a vegetation buffer should be planted along the waterway to the south of the development. This should utilise local native species. The revegetated area should be fenced to restrict stock access. The recommended area for waterway revegetation is shown in the attached map.



Noted

Noted

See comment 4.

18. A condition of development approval will require the installation of stock proof fencing of riparian vegetation along Sleeman Creek.

19. A condition of development approval will require a vegetation buffer to be planted along the waterway to the south of farm 4.

		Stock proof fencing of riparian vegetation along Sleeman Creek should occur as areas outside the farms within the property will continue to have stock and contribute additional nutrient load from the site.	See comment 18.
2.	Stacey Bush Bush Farms 616 Watermans Road Narrikup	<p>Since the beginning of the poultry farm development the increase of traffic on Watermans road has been substantial. The trucking movements which have included the infrastructure freight, concrete trucks, waste removal, feed delivery, gas delivery and poultry transport have created hazardous situations. These include degradation of the gravel road including corrugations, road surface breaking up to expose the sand base, deep potholes and trucks unable to take the entrance into the property without utilising the right-hand side of Watermans road heading east. As the driveway is situated on a steep hill, traffic heading West have very little notice of vehicles turning into or vehicles leaving the property.</p> <p>I have come over the hill heading towards Albany highway to find a truck with a bulldozer on a low loader trailer trying to turn into the driveway of the property and bogged. This truck was taking up the width of the road. There was no signage or warning for vehicles coming over the hill heading West and the pilot vehicle was parked behind the truck at the bottom of the hill.</p> <p>On another occasion we came over the hill heading towards Albany highway to a truck turning into the Poultry farm driveway and utilising our side of the road to make the turn. These situations are dangerous. There is no warning and no signage. The poultry farm entrance on Watermans road does not allow for such large trucks safely turning into and out of the property on a blind crest.</p>	<p>20. Noted, the increase vehicle traffic is mainly due to the construction of poultry farm infrastructure. Construction of production units 1 and 2 were completed and is currently and are producing birds. Production unit 3 is presently under construction. The approval of production unit 4 means the increase in vehicle traffic will continue for another 6 to 9-month period. Problems arising from the construction period of any works, e.g. noise, dust and construction vehicles are not considered a material planning consideration.</p> <p>21. The crossover at the subject land provides a sight distance of approximately 190m to the east. In addition, the Council has installed the necessary 'Crest' warning sign at this location on Watermans Road. This warning sign provides advise of conditions which may require caution and may call for a reduction in speed in the interest of the safety of road users.</p> <p>22. A condition of development approval will require the posting of signs identifying truck movements on Watermans and O'Neill Roads in accordance with AS1742.3-2009. See comment 22.</p>

		<p>I have noted that the document states all trucking movements pertaining to the removal of waste products, transport of poultry and transport of feed will be undertaken on O'Neil Rd. We were led to believe that these trucking movements were to be undertaken on O'Neil road from the commencement of the poultry operation. These trucking movements have been undertaken on Watermans Rd throughout and up to at least October 2021. I have noted that the document states the waste products trucking movements will be 33 movements per year. The waste products truck would head east past our farm during winter of 2021 up to five times a day. The damage caused to Watermans Rd by these trucking movements have been documented in my emails to the works department.</p> <p>Should the poultry farm need to utilise Watermans Rd in the future for these trucking movements I feel that they should work with the Shire to upgrade grade Watermans Rd and the driveway entrance to ensure local traffic is not impacted by the degradation and safety issues these trucking movements cause.</p> <p>I would hope a tree buffer will be planted along the western frontage of all four Poultry farms to minimise the visual impact. The sheds and the night lighting are visible from Albany highway and along Watermans road when heading east.</p> <p>I am also concerned about an increase in flies, particularly stable flies and would like to know how this will be monitored.</p>	<p>23. A condition of development approval will require the payment of a once off financial contribution towards the maintenance and upgrade of Watermans Road.</p> <p>24. A condition of development approval will require the crossover at Watermans Road to be upgraded to accommodate Tandem Drive Network 4.1 vehicles. Noted.</p> <p>25. Fly breeding can be a risk where piles of moist litter are stored incorrectly. In this instance, waste will be removed from the site as soon as possible after each batch of chickens is removed. It is unlikely additional fly impacts will be experienced considering farm 4 will be more than 2.5km from at the house at Lot 5714 Watermans Road.</p>
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