

7.1.2 UPDATED REPORT - DEVELOPMENT APPLICATION FOR ANIMAL HUSBANDRY TYPE 2 INTENSIVE (POULTRY FARM) AT 136 TOP FORESTRY ROAD, RIDGEWOOD

File No: MCU12/0184
Author: Development Planner
Regional Strategy & Planning Department
Attachments: Att 1 - Revised Heavy Vehicle Estimation
Att 2 - Proposed Upgrades to Top Forestry Road
Att 3 - Odour Models

PURPOSE

In November 2013, council deferred consideration of a Development Application for Material Change of Use for Animal Husbandry Type 2 (Poultry Farm) and Environmentally Relevant Activity (ERA 4 – Poultry Farming) at 136 Top Forestry Road, Ridgewood requesting the applicant provide additional information on the proposal.

The purpose of this report is to summarise the additional information received and provide a further assessment.

EXECUTIVE SUMMARY

Since council's Ordinary Meeting of 14 November 2013 officers met with the applicant to discuss council's request for additional information and associated issues with the proposed poultry farm. Further written details were subsequently provided by the applicant on 2 December 2013, including advice that the maximum number of birds proposed is 235,554; further details of traffic movements; revised odour modeling, and confirmation that some additional upgrades to Top Forestry Road would be undertaken.

Review of the additional information provided by the applicant concludes that there are still a number of unanswered issues surrounding the proposed poultry farm including:

- The odour report fails to take into account a nearby receptor (house), and does not satisfactorily resolve odour issues for a number of houses currently owned by the applicant. The odour modelling also does not address the manure spreading but simply proposes some management measures for control of the expected odour.
- The traffic details identify that truck movements will be less than officers identified in the previous report to council, with these numbers unable to be fully verified by officers in time for the Ordinary meeting. Notwithstanding this the number of heavy vehicles submitted by the applicant remains significant and will adversely impact on the road safety of Top Forestry Road and for the amenity of residents living along the proposed travel route
- Loading of the live birds is proposed to commence at 2.30am but no details have been provided of the number of vehicles that will travel to and from the site at this time.
- Sealing of Top Forestry Road is now proposed within 50 metres of all houses and an Infrastructure Agreement is proposed with council for half the cost of the worst bend on Top Forestry Road. Council's traffic engineer considers the existing road sufficient to cater for the existing use and that the necessary road improvements ought to be undertaken by the poultry farm operator and not council. Further, the proposed improvements are not adequate to cater for the number of heavy vehicle movements likely to be generated and no Infrastructure Agreement has been provided by the applicant.

- No additional stormwater details have been provided to demonstrate that the water quality of nearby creeks will not be adversely impacted upon. Notwithstanding this it is considered that this specific matter could be addressed by suitable conditions.

It is concluded that the additional information provided by the applicant does not satisfactorily address officers concerns with the proposed poultry farm and therefore officers confirm their original recommendation for refusal.

OFFICER RECOMMENDATION

That Council Refuse Application No. MCU12/0184 for a Development Permit for Material Change of Use for Animal Husbandry Type 2 – Intensive (Poultry Farm) and Environmentally Relevant Activity (ERA 4 - Poultry Farming), situated at 136 Top Forestry Rd, Ridgewood for the following reasons:

- the proposed poultry farm does not comply with the Overall Outcomes of The Noosa Plan's Mary River Catchment Locality, Agricultural Uses and Transport, Roads and Drainage Codes**
- the proposed poultry farm does not achieve sufficient separation distance from surrounding residents so as to avoid adverse odour impacts on residents' amenity, with insufficient details provided on the emissions from manure stockpiles, manure spreading, and for one of the closest sensitive receiver locations**
- the proposal will have unacceptable impacts on the safety of Top Forestry Road and the proposed road improvements are not sufficient to provide the necessary safe environment**
- traffic generated by the development proposed will have significant adverse impacts on the amenity of residents, given Top Forestry Road is unsealed and bird collection is likely to be through the night and**
- The proposed sheds and earthworks necessary for shed construction is likely to adversely impact on the scenic amenity of the area, as the applicant has not demonstrated that they will integrate satisfactorily with the landform and landscape.**

FINANCE AND RESOURCING

If council were to approve this development, the applicant would be required to pay infrastructure charges for trunk infrastructure.

Council's Infrastructure Policy Branch has provided the following estimate of the infrastructure charges required by this development:

Allocation of adopted infrastructure charge to trunk infrastructure networks	Amount Payable
Transport	\$156,672
Public Parks & Land for Community Facilities	\$27,648
TOTAL (June 2013 index) =	\$184,320

PROPOSAL

The application seeks approval for a Material Change of Use for Animal Husbandry Type 2 – Intensive (Poultry Farm) and Environmentally Relevant Activity (ERA 4 - Poultry Farming), situated at 136 Top Forestry Rd, Ridgewood.

The development involves the construction of 8 x 100m to 130m long x 16m wide sheds along the ridgeline of the site, and proposes to carry in the order of 235,554 birds at any one time. This is a reduction to the number of birds previously proposed of between 250,000 – 300,000 birds. The applicant indicates the process involves rearing day old chicks to chickens for a period of 6-9 weeks, before being removed from the site for chicken meat production (batch cycle).

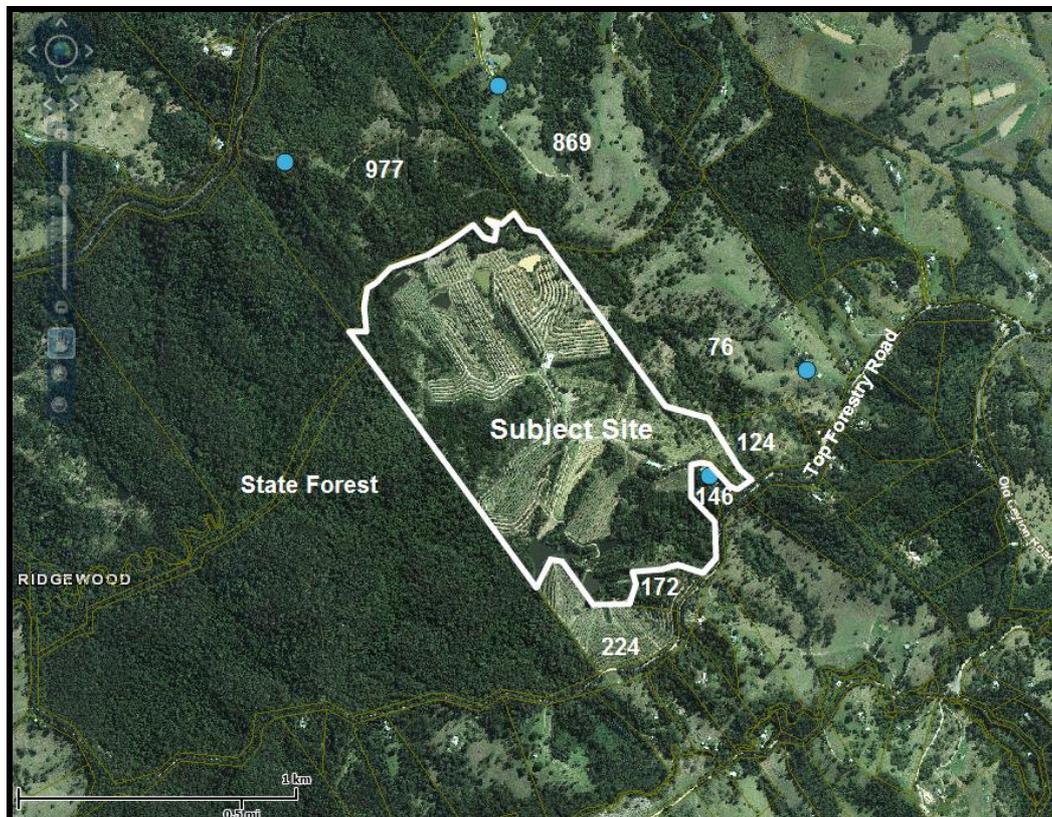
Feed for the birds, is brought onto the site throughout the batch cycle by 19m B-doubles with deliveries generally made between 8am to 4pm and focused mostly during the first half of the batch cycle (weeks 1 - 5). The grown chickens are then removed from the site during weeks 5 - 8 commencing at 2:30am when the birds are less active.

The applicant proposes that upon completion of the bird growing cycle, the sheds are cleaned out and prepared for the next batch cycle over a 1 - 2 week period. Spent litter from the sheds is proposed to be stockpiled within 2 bunded areas for a period of 4 to 5 weeks, before being spread onto the existing avocado orchard. The bunded areas have a total lineal distance of 300m x 20m wide and are located adjacent to the proposed sheds.

A Preliminary Operational Management Plan has been prepared by the applicant to address the operation of the proposed poultry farm and the existing avocado farm.

Background

The location of the subject site in relation to its surrounds is shown on the image below:



At its Ordinary Meeting on 14 November 2013 council deferred consideration to the next Council meeting and requested the applicant provide the following additional information:

1. *total vehicle trips including details of size of vehicles, purpose of trip, time of trip and number of trips per day*
2. *feasibility of requirements to provide to seal to 50m in front of affected properties on Top Forestry Road or to enter into an infrastructure agreement with council*
3. *composting and stockpiling methodology including data on management of emissions during these processes*
4. *water quality management particularly addressing potential impacts from use of shed waste and composting material for fertilising the orchard and any associated run off and*
5. *feasibility on reduction of size and number of sheds.*

A meeting was held with the applicant and their consultants on the 20 November, to discuss Council's request for further details and officer's concerns, including the following:

- Council's odour consultant's concerns with the odour modelling undertaken of the proposal.
- A revised table to be provided, similar to the table included in the officer's report to council, clearly detailing the likely maximum vehicle/trip numbers including vehicle types on a weekly and daily basis, including travel times.
- Evidence of maximum number of birds able to be transported on a single truck at the different growing stages.
- Review and provide further details of the likely upgrading requirements for Top Forestry Rd, similar to the details provided for the internal driveway to ensure Top Forestry Road achieves the necessary safe environment, including consideration on sealing and road widening to allow two trucks to pass one another.
- Confirmation of the maximum number of birds to be kept in the sheds with consideration given to reducing the number of chickens on site.

The applicant provided a formal response to the request for additional information on the 2 December 2013. An assessment of the additional information is provided below.

ASSESSMENT

1. Total vehicle trips including details of size of vehicles, purpose of trip, time of trip and number of trips per day.

The applicant has provided a revised table of the daily vehicle movements, including the type of vehicles, purpose of the trip and travel times, which is included as **Attachment 1**.

The revised table has been updated to reflect the proposed maximum number of birds as 235,554 and indicates that delivery of feed will be spread over additional days, concentrated in the first half of the 9 week batch cycle (weeks 1 – 5) and so avoid live bird pick up times towards the end of the batch cycle (weeks 5 -8). The applicant's revised table also indicates that feed deliveries will now be spread over 16 days, with up to 4 heavy vehicle trips for feed deliveries proposed in any one day. Live bird pick up will now be spread over 5 days for each batch cycle, with between 20-26 heavy vehicle trips using the road from 2:30am onwards.

The proposed trip numbers detailed in the applicant's revised table differs significantly from the information previously provided to council by the applicant for feed deliveries and information gained by officers from the industry and council's odour consultant. Notwithstanding this, Council's Traffic Engineer confirms that even with the revised traffic movements, the planned traffic demand will still require significant improvements to Top Forestry Road, so as to ensure the safety of Top Forestry Road. The proposed pick up times for live birds similarly still raises significant amenity concerns for residents, particularly for those residents living along the travel route through the residential streets of Cooroy.

2. Feasibility of requirements to provide to seal to 50m in front of affected properties on Top Forestry Road or to enter into an infrastructure agreement with council.

A plan has been prepared by Callaghan & Toth Engineers showing Top Forestry Road to be sealed within 50m of adjacent dwellings. The plan includes 5 sections of the road to be sealed, totaling 381m of the existing 1.3km travel route on Top Forestry Road. The applicant indicates they are willing to accept a condition for the sealing of these sections, subject to a subsequent Operational Works approval.

The applicant also concedes that the existing road bend located adjacent to 111 and 124 Top Forestry Road is of insufficient width to accommodate two trucks to pass. A concept plan has been provided including widening of the road formation, with stone pitched retaining walls on each side of the road. A copy of the proposed works is included as **Attachment 2**.

The applicant considers the current situation is inadequate for the existing traffic usage and seeks Council to enter into an infrastructure agreement to pay a contribution of 50% of the cost for improvements to Top Forestry Road at this bend. No details as to the cost of road improvements have been submitted or a signed Infrastructure Agreement.

Council's Traffic Engineer advises that the current width of the road is sufficient for its predominantly rural residential use and is being maintained by council twice a year, as a designated school bus route and therefore all necessary improvements should be undertaken by the applicant and not council. Council's Traffic Engineer also advises that the road improvements offered by the applicant are not considered suitable to cater for the number of heavy vehicles expected to be generated by the poultry farm. In order for the safety and amenity concerns to be properly addressed, Council's Traffic Engineer recommends Top Forestry Road be sealed for its entire length and the road widened to allow two trucks to pass one another.

Infrastructure agreements allow local governments and developers to negotiate and agree on specific arrangements for the infrastructure networks that support developments. The process for negotiating an infrastructure agreement must be undertaken prior to issuing a development approval, in order to ensure the works are secured. In regard to the infrastructure agreement proposed by the applicant, it is not appropriate for Council to enter into an agreement without any details as to the scope and cost of the works.

3. Composting and stockpiling methodology including data on management of emissions during these processes

The applicant's consultant performed further odour modeling of the sheds and litter stockpiles only, with no modeling undertaken for the manure spreading, instead proposing a number of management techniques to minimise the potential for odour nuisance. The further modeling results in a much larger odour footprint than that which was originally submitted with the application. The modeling results are included as **Attachment 3**.

During the review of the most recent modeling, it was identified that a sensitive receptor was not included. This missed receptor is located at 185 Top Forestry Road, and is 750m to the south of the subject site (see **Attachment 3**) and it appears the receptor maybe within the 2.5 odour limit modeled. Accordingly council's odour consultant advises that the actual concentration at this sensitive receptor is uncertain and should therefore be analysed further.

The odour modeling considers the cumulative impacts of the shed and stockpiling area (assuming good management of both), but no modeling has been undertaken to assess the impacts associated with spreading of the manure. While modeling of the manure spreading was not considered feasible by the applicant, council's odour consultant describes other cases where spreading has been modeled to determine the impacts. The modeling of spreading could lead to a situation where the predicted odour impacts increase and the 2.5 odour limits are not met for a number of nearby houses.

Council's consultant comments that the proposed management measures to control the emissions from the litter stockpiles and spreading management may potentially reduce the risk of adverse off-site odour impacts. However, the management measures are likely to be onerous for ongoing poultry farm operations and difficult to enforce by council.

The applicant acknowledges that several properties owned by themselves are adversely impacted upon by the odour associated with the development. To address this issue, the applicant proposes the inclusion of the following condition:

The poultry farm can only operate as long as Lots 20 & 22 on SP 226606, Lot 1 on SP 100788 and Lot 204 on RP892484 are owned and occupied by the operator or an employee of the poultry farm. In the event that the lands are not owned and occupied by the operator an employee of the poultry farm, the farm can only operate when the odour limits are below 2.5 odour units.

Council's solicitor advises that this would be an inappropriate condition to address the potential odour nuisance for these lots and that it is likely to be shown to be unlawful and not enforceable.

4. Water quality management particularly addressing potential impacts from use of shed waste and composting material for fertilising the orchard and any associated run off.

The applicant has not provided any further quantitative information about the specific design of the catchments within the avocado orchard. Notwithstanding this, Council's water quality specialist advises the applicant has demonstrated that stormwater quality pollution reduction targets can be met for the development's sheds, roads and bunded areas provided they are sealed.

In regards to the spreading of litter over the existing orchard, the applicant indicates the orchard currently includes a vegetated buffer located along the watercourses and the spreading of the compost will only be undertaken within the orchard area, which would not lead to any further impacts than what could currently occur on the site. Council's environmental specialists advises that providing vegetation buffers are maintained to the creeks and water monitoring is undertaken, the proposal is unlikely to have any adverse impacts.

5. Feasibility on reduction of size and number of sheds.

The applicant originally proposed the construction of 8 poultry sheds 160m long, which Ingham's indicate is the industry standard for new farms. During the detailed design stage, the sheds have been reduced to average lengths of 105m. The applicant also indicates that they intend to adopt RSPCA stocking density ratios of 17.2 birds per square metre, therefore the maximum total number of birds possible at the site is 235,554.

The Queensland Farming Manager of Inghams has provided written confirmation that most new facilities have a capacity of 240,000 birds and that a capacity of less than 200,000 may not be viable. As a result, the applicant does not consider it feasible to reduce the number of sheds on the site.

Legal

Advice has been sought from council's solicitor regarding the applicant's proposed condition to address odour impacts on adjoining lots. Council's solicitor advises that this is likely to be shown to be an unlawful condition and not able to be enforced.

Risk

There are significant risks in approving the current application, based on the current information provided by the applicant as:

- The odour modelling has identified that the Queensland odour guidelines will not be met for a number of properties, with no detailed analysis undertaken for 1 receptor and no odour modelling undertaken for the proposed manure spreading.
- The applicant's proposed extent of road works are not considered suitable to cater for the number of heavy vehicles expected to be generated by the poultry farm and the applicant has provided no agreement to the extent of roadworks officers have identified as necessary.
- The applicant seeks that council enter into infrastructure agreement for 50% of the cost to upgrade the most critical bend on Top Forestry Road. No infrastructure agreement has been provided or any details of the likely scope and cost of the works.
- The proposed trip numbers detailed in the applicant's revised table differs significantly from the information previously provided to council by the applicant for feed deliveries and information gained by officers from the industry and council's odour consultant including:
 - Max Watterson & Associates 5/11/13 – maximum 3,960 and minimum of 3,210 birds per truck
 - MWA Environmental attachment 6/11/13 – calculates 5312 birds per truck
 - Hayes Traffic Engineering attachment example – calculates 5,633 birds per truck
 - MWA Environmental attachment 6/11/13 – maximum of 154 feed deliveries in one cycle
 - Max Watterson & Associates advice on site meeting with councillors – maximum of 12 trips in any one day
 - Max Watterson & Associates 2/12/13 average number of birds per truck 5,011 and maximum of 26 trips in any one day
 - Max Watterson & Associates 2/12/13 maximum of 52 feed deliveries in one cycle.

Officers have not been able to establish satisfactorily in the time permitted the accuracy or otherwise of the information now supplied by the applicant.

Previous Council Resolution

Ordinary Meeting – 14 November 2013 (Council Resolution OM13/222)

ITEM 7.2.1 DEVELOPMENT APPLICATION FOR ANIMAL HUSBANDRY TYPE 2 INTENSIVE (POULTRY FARM) AT 136 TOP FORESTRY ROAD, RIDGEWOOD

That Council defer consideration of application No. MCU12/0184 for a Development Permit for Material Change of Use for Animal Husbandry Type 2 – Intensive (Poultry Farm) and Environmentally Relevant Activity (ERA 4 - Poultry Farming), situated at 136 Top Forestry Rd, Ridgewood to the next Council meeting and request the applicant to provide the following additional information:

- 1. total vehicle trips including details of size of vehicles, purpose of trip, time of trip and number of trips per day*
- 2. feasibility of requirements to provide to seal to 50m in front of affected properties on Top Forestry Road or to enter into an infrastructure agreement with council*
- 3. composting and stockpiling methodology including data on management of emissions during these processes*
- 4. water quality management particularly addressing potential impacts from use of shed waste and composting material for fertilising the orchard and any associated run off and*
- 5. feasibility on reduction of size and number of sheds.*

Critical Dates

There has been no formal extension of the decision making period. The applicant has the recourse to either wait for Council's decision, or seek to pursue a 'deemed refusal' of the application with the Planning and Environment Court.

CONSULTATION

Internal

Advice has been sought from the following specialists, with their comments included within the report:

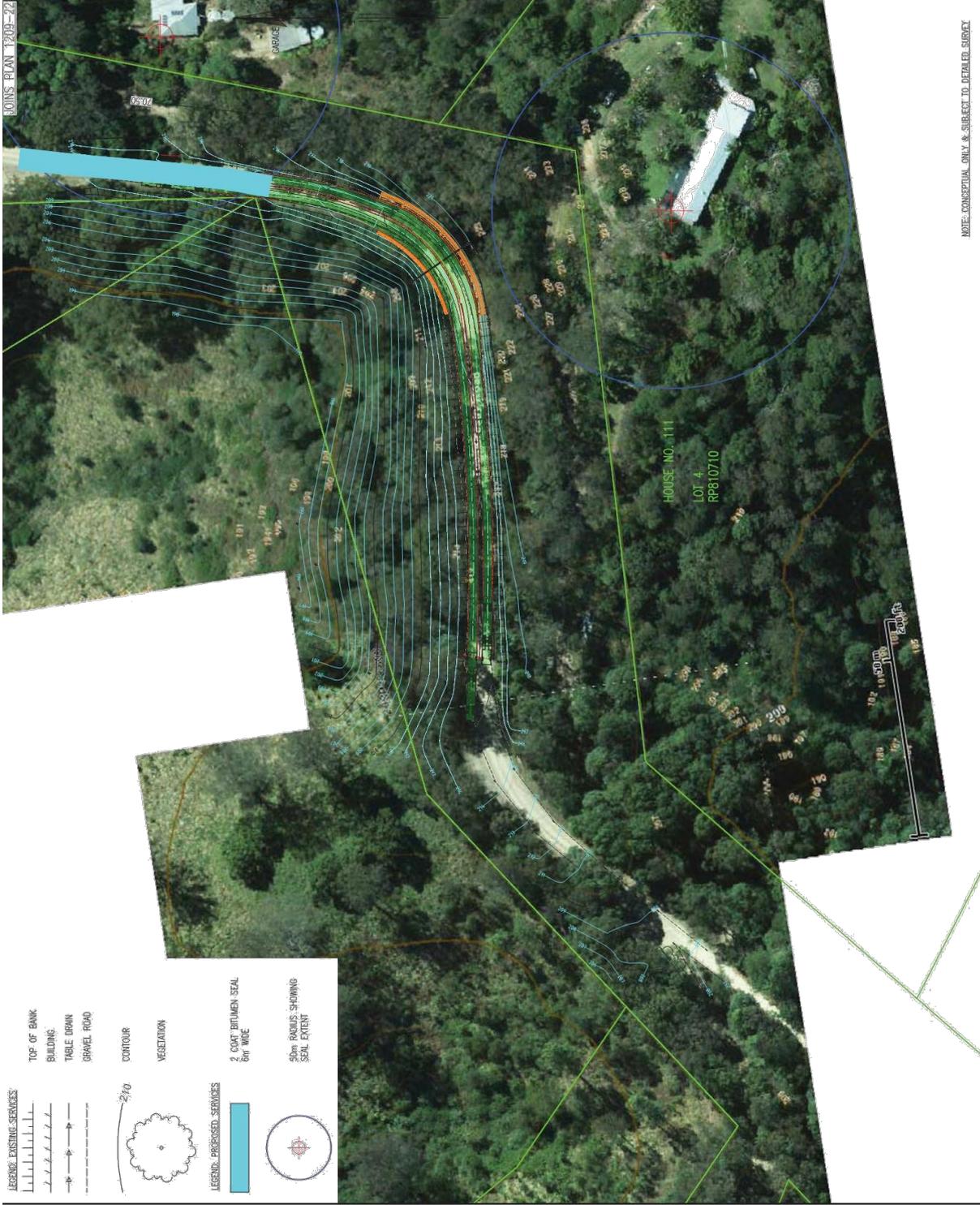
- Council's Solicitor;
- Traffic Engineering Specialist;
- Civil Engineering Specialist;
- Water Quality Specialist;
- Environmental Specialist; and
- External Environmental Consultant.

CONCLUSION

It is concluded that the additional information provided by the applicant does not satisfactorily address officers concerns with the proposed poultry farm and therefore officers confirm their original recommendation for refusal. There still remains significant concerns regarding the odour report and there is no agreement by the applicant of the extent of road works to provide the necessary safe environment on Top Forestry Road.

Milligan Farms - Proposed Chicken Meat Farm - Maximum Vehicle Movements Per Batch Cycle (63 Days) for 8 Sheds

Day	Number of Vehicles	Approved time of day	Purpose of Trip	Type of Vehicle	Total annual trips generated	Total per Wk	Council's Est / Wk
WEEK 1							
1	3	Batching 08:00-09:00	Batching	Light truck	3		
2	2	Batching 09:00-10:00	Batching	Light truck	2		
3	2	Batching 10:00-11:00	Batching	Light truck	2		
4	2	Batching 11:00-12:00	Batching	Light truck	2		
5	2	Batching 12:00-13:00	Batching	Light truck	2		
6	2	Batching 13:00-14:00	Batching	Light truck	2		
7	2	Batching 14:00-15:00	Batching	Light truck	2		
8	2	Batching 15:00-16:00	Batching	Light truck	2		
9	2	Batching 16:00-17:00	Batching	Light truck	2		
10	2	Batching 17:00-18:00	Batching	Light truck	2		
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14	2	Batching 21:00-22:00	Batching	Light truck	2		
15	2	Batching 22:00-23:00	Batching	Light truck	2		
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148	2	Batching 11:00-12:00	Batching	Light truck	2		
149	2	Batching 12:00-13:00	Batching	Light truck	2		
150	2	Batching 13:00-14:00	Batching	Light truck	2		
151	2	Batching 14:00-15:00	Batching	Light truck	2		
152	2	Batching 15:00-16:00	Batching	Light truck	2		
153	2	Batching 16:00-17:00	Batching	Light truck	2		
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155	2	Batching 18:00-19:00	Batching	Light truck	2		
156	2	Batching 19:00-20:00	Batching	Light truck	2		
157	2	Batching 20:00-21:00	Batching	Light truck	2		
158	2	Batching 21:00-22:00	Batching	Light truck	2		
159	2	Batching 22:00-23:00	Batching	Light truck	2		
160	2	Batch					



NOTE: CONCEPTUAL ONLY & SUBJECT TO DETAILED SURVEY

<p>Callaghan & Toth Civil, Environmental & Hydraulic Engineers PO BOX 2205 WOODA HEADING 4067 VIC 3207 Phone: 5474088, Fax: 5474044 www.callaghanandtoth.com.au</p>	<p>designed: ST</p> <p>drawn: AM</p> <p>checked: ST</p>	<p>approved: MAX WATERSON & ASSOCIATES PHONE: 54 426 121</p>						
	<p>status: AS</p> <p>date: 05/12/13</p>	<p>project: PROPOSED TOP FORESTRY ROAD IMPROVEMENTS TO ACCESS LOT 21 ON SP226606</p>						
	<p>client: DAVID MILLIGAN</p>	<p>file: PROPOSED TOP FORESTRY ROAD IMPROVEMENTS LAYOUT PLAN 1</p>						
<p>lot 21 on SP226606 Parish of TUCEKUI County of MARCH SUNSHINE COAST COUNCIL Locality of RIDGEWOOD</p>								
<p>SCALE 0 5 10 20 40 60 Meters</p> <p>SCALE SHOWN IS ORIGINAL DRAWING SCALE OF THIS SCALE FROM THE DRAWING USE ONLY FOR DESIGN PURPOSES</p>								
<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>REV</th> <th>REVISION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>AK</td> <td>ADDED NOTE FOR CONSTRUCTION NOTE 11/1/13</td> <td></td> </tr> </tbody> </table>			REV	REVISION	DATE	AK	ADDED NOTE FOR CONSTRUCTION NOTE 11/1/13	
REV	REVISION	DATE						
AK	ADDED NOTE FOR CONSTRUCTION NOTE 11/1/13							
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<p>Sheet 2 of 7 sheets. drawing number 1209-21 A</p>								
<p>DATE: 7TH NOVEMBER 2013</p>								



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designed	AT	datum	4/15/2013
drawn	AM	scale	1:500
checked	AT	drawn (B.M.)	15/11/2013

approved by
MAX WATKINSON & ASSOCIATES
PHONE: 54 426 121

project
PROPOSED TOP FORESTRY ROAD IMPROVEMENTS TO ACCESS LOT 21 ON SP226606

client
DAVID MILLIGAN

file
PROPOSED TOP FORESTRY ROAD IMPROVEMENTS LAYOUT PLAN 2

LOT 21 on SP226606
Parish of TUCEKUI
County of MARCH
SUNSHINE COAST COUNCIL
Locality of RIDGEWOOD

SCALE
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SCALE SHOWN IS ORIGINAL DRAWING SCALE
OF THIS DRAWING FROM THE DRAWING
FILE: SP226606.DWG

REVISIONS	
NO.	DATE
1	15/11/13
ADDED FOR CONSTRUCTION NOTE 11/1/13	

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Sheet 3 of 7 sheets.
drawing number
1209-22
A

DATE: 7TH NOVEMBER 2013

LEGEND - EXISTING SERVICES

- TOP OF BANK
- BUILDING
- TABLE DRAIN
- GRAVEL ROAD
- CONTOUR
- VEGETATION

LEGEND - PROPOSED SERVICES

- 2 COAT BITUMEN SEAL 6M WIDE
- 50m RADIUS SHOWING SEAL EXTENT



LEGEND - EXISTING SERVICES

- TOP OF BANK
- BUILDING
- TABLE DRAIN
- GRAVEL ROAD
- CONTOUR
- VEGETATION

LEGEND - PROPOSED SERVICES

- 2 COAT BITUMEN SEAL 6M WIDE
- 50m RADIUS SHOWING SEAL EXTENT

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designed	BY	DATE	BY	DATE
drawn	BY	DATE	BY	DATE
checked	BY	DATE	BY	DATE

approved BY
MAX WATERSON & ASSOCIATES
PHONE: 54 426 121

project
PROPOSED TOP FORESTRY ROAD IMPROVEMENTS TO ACCESS LOT 21 ON SP226606

Client
DAVID MILLIGAN

file
PROPOSED TOP FORESTRY ROAD IMPROVEMENTS LAYOUT PLAN 3

LOT 21 on SP226606
Parish of TUCEKOI
County of MARCH
SUNSHINE COAST COUNCIL
Locality of RIDGEWOOD

SCALE

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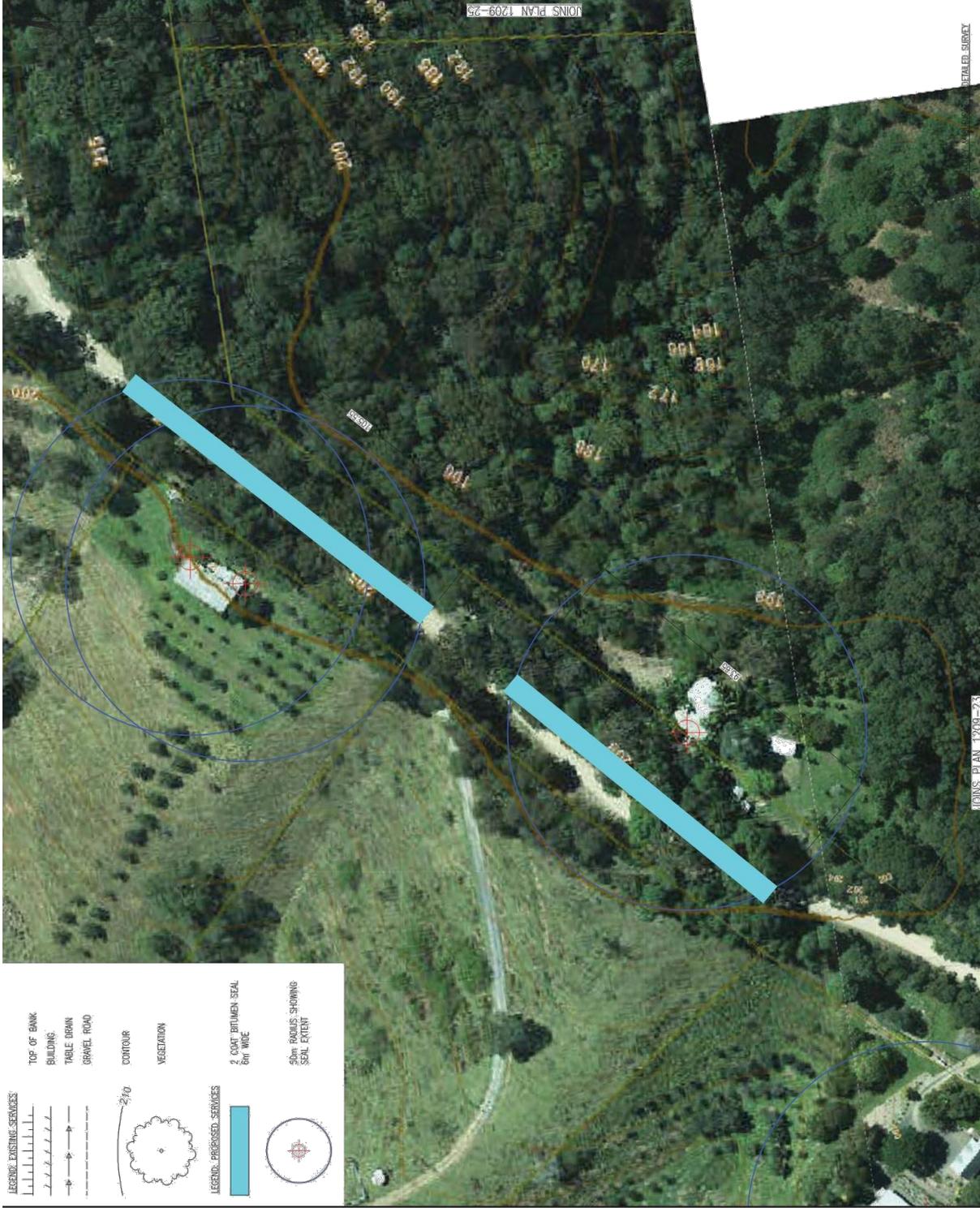
REVISIONS

REV	REVISION	DATE
AS	ADDED NOT FOR CONSTRUCTION NOTE	11/17/13

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COMPUTER DIRECTORY
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NOT FOR CONSTRUCTION

Sheet 4 of 7 sheets
drawing number
1209-23
A
DATE: 7TH NOVEMBER 2013



LEGEND - EXISTING SERVICES

- TOP OF BANK
- BUILDING
- TABLE DRAIN
- GRAVEL ROAD
- CONTOUR
- VEGETATION

LEGEND - PROPOSED SERVICES

- 2 COAT BITUMEN SEAL 6m WIDE
- 50m RADIUS SHOWING SEAL EXTENT

<p>Callaghan & Toth Civil, Environmental & Hydraulic Engineers PO BOX 2005 1005A HEARNS AVE RIVERVIEW VIC 3177 Phone: 54740881 Fax: 54740944 www.callaghanandtoth.com.au</p>	
<p>designed: MT drawn: MT checked: MT</p>	<p>datum: AD63 DTM: 1984 DTM: 1984</p>
<p>approved by: MAX WATKINSON & ASSOCIATES PHONE: 54 426 121</p>	
<p>project: PROPOSED TOP FORESTRY ROAD IMPROVEMENTS TO ACCESS LOT 21 ON SP226606</p>	
<p>client: DAVID MILLIGAN</p>	
<p>file: PROPOSED TOP FORESTRY ROAD IMPROVEMENTS LAYOUT PLAN 4</p>	
<p>lot 21 on SP226606 Parish of TUCEKUI County of MARCH SUNSHINE COAST COUNCIL Locality of RIDGEWOOD</p>	
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LEGEND - EXISTING SERVICES

- TOP OF BANK
- BUILDING
- TABLE DRAIN
- GRAVEL ROAD
- CONTOUR
- VEGETATION

LEGEND - PROPOSED SERVICES

- 2 COAT BITUMEN SEAL 6m WIDE
- 50m RADIUS SHOWING SEAL EXTENT

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designed: **MT**
drawn: **MM**
checked: **MT**

approved:
MAX WATERSON & ASSOCIATES
PHONE: 54 426 121

project:
PROPOSED TOP FORESTRY ROAD IMPROVEMENTS TO ACCESS LOT 21 ON SP226606

Client:
DAVID MILLIGAN

file:
PROPOSED TOP FORESTRY ROAD IMPROVEMENTS LAYOUT PLAN 5

LOT 21 on SP226606
Parish of TUCEK01
County of MARCH
SUNSHINE COAST COUNCIL
Locality of RIDGEWOOD

SCALE
0 5 10 20 40 60 Meters

SCALE SHOWN IS ORIGINAL DRAWING SCALE
OF THIS SCALE FROM THE DRAWING
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SEE PLAN FOR DESIGN PROPOS

REVISIONS

Rev	Revision	DATE	BY
AS	ADDED NOT FOR CONSTRUCTION NOTE	11/17/13	

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Sheet 6 of 7 sheets.
drawing number
1209-25
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date: 7TH NOVEMBER 2013

NOTE: CONCEPTUAL ONLY & SUBJECT TO DETAILED SURVEY

