ORDINARY MEETING OF COUNCIL TO BE HELD TUESDAY 28 OCTOBER 2014

CL02

DA 365/2009 - SECTION 96 MODIFICATION TO THE HOURS OF OPERATION OF AN EXISTING RURAL INDUSTRY (OLIVE PROCESSING)

ATTACHMENTS

365/2009 (2)

GRIFFITH CITY COUNCIL
17 MAY 2014
RECEIVED
12 May 2014

GRIFFITH CITY COUNCIL
17 MAY 2014
REGISTERED

Planningmatters
DEVELOPMENT SERVICE

ABN: 95 707 366 151

23 Noorilla Street
Griffith NSW 2680

Telephone: 02 6962 2696
Facsimile: 02 6962 2696
Email: info@planningmatters.net.au

Our Ref': 2010.15
Your Ref': DA 365/2009

Mr S Parisotto
Senior Development Assessment Planner
Griffith City Council
PO Box 485
GRIFFITH NSW 2680

GRIFFITH CITY COUNCIL
17 MAY 2014
REGISTERED

Dear Mr Parisotto,

DA 365/2009 – Application to modify the Notice of Determination

Following on from our recent discussions, please find attached an application to modify Council's Notice of Determination No. 365/2009 dated 5 February 2010. This application seeks consent to receive & process fruit on weekends and requests modification of the wording of condition O(1).

Condition O(1) currently restricts processing operations to 7:00am-7:00pm Monday to Friday, with no processing to presumably occur on Saturdays, Sundays or Public Holidays. The olive harvest generally only lasts for approximately two (2) months per annum and requires harvesting & processing to occur 7 days a week during this period. Given that fruit is ideally processed shortly after it is harvested, the current restriction of processing days means that the proponent has to stall or cease harvesting on weekends and try to increase harvesting/processing volumes on weekdays. Whilst this is extremely expensive because harvesting contractors & staff are essentially being paid not to harvest fruit on weekends, it is almost logistically impossible and results in a considerable amount of fruit being wasted or down-graded because it should have been harvested & processed earlier.

Considering that the growth of fruit to account for the loss of around 20 days per annum, this application seeks approval to process fruit at the site on weekends. Whilst the proponent would like to operate process fruit between the hours of 7:00am-7:00pm on both Saturdays & Sundays it is understood that Council has reservations because of the potential impact on surrounding residential receivers. In an act of good faith to ensure that processing on weekends does not impact on the property's neighbours, the proponent is willing to propose that processing only occur between 9:00am-4:00pm on Saturdays and 9:00am-1:00pm on Sundays during the olive season. Given that all processing operations occur within the confines of the building, the proponent is confident that weekend activities will not impact upon the surrounding locality.

Given that the proponent is anxious to undertake weekend processing during the 2014 season, your assistance in determining this application as quickly as possible is be greatly appreciated.

Should you have any queries regarding this application please don't hesitate to contact me on 0427 844 374 or by email: mruggeri@planningmatters.net.au

Regards,

Martin Ruggeri
Principal
Planningmatters Development Service

Griffith city council ...love the lifestyle...

DA 365/2009(1):SP:SP

NOTICE OF DETERMINATION OF A DEVELOPMENT APPLICATION

(Section 81(1)(a) Environmental Planning & Assessment Act, 1979)

Development Application No.:	365/2009(1)
Applicant(s):	Tree Tops Plantation "Bassano" Mid-Western Highway GOOLGOWI NSW 2652
Description of Development:	Change of Use from a Rural Industry involving Citrus Packaging to a Rural Industry involving Olive Processing
Property Description:	Lot 415 DP: 751709 Farm 666 Morley Road YOOGALI
Date of determination:	5 February 2010
Development application has been:	granted consent *(subject to conditions in Attachment 'A')*
Development consent operates from:	5 February 2010
Development consent lapses on:	5 February 2015
'General terms of approval' given by:	no other authorities

It is important that all conditions be carefully read and understood prior to the commencement of the development.

If you are dissatisfied with this decision, Section 97 of the Environmental Planning and Assessment Act 1979 provides you the right to appeal to the Land and Environment Court of New South Wales within twelve (12) months from the date of this notice.

For further information regarding this matter please contact Council's Principal Planner, Mr Steven Parisotto.

STEVEN PARISOTTO
PRINCIPAL PLANNER

Enc

Griffith City Council, PO Box 485, Griffith NSW 2680, 1 Benerembah Street, Griffith NSW 2680
• Ph: 02 6962 8100 • Fax: 02 6962 7161 Corporate • 02 6964 4369 Engineering • 02 6964 4368 Environmental
Email: admin@griffith.nsw.gov.au • Web: www.griffith.nsw.gov.au

Attachment 'A'

Part B - Administrative or General Conditions

This Part includes general background controls and minor administrative matters or procedures that ensure the development is clearly identified and specified.

(1) Approved Plans

The Development must be implemented substantially in accordance with Development Application No 365/2009 received by Council on 8 December 2009 and the below mentioned plans and/or documents, except where amended in red on the attached plans or modified by the conditions of this consent.

Drawing No. or Document	Date Received by Council	Prepared or Drawn By
Site Plan	8 December 2009	Mentor
Partial Floor Plan	8 December 2009	Mentor

(2) Scope of Consent

Prior to construction of the approved development, it is necessary to obtain a Construction Certificate for building and engineering works. These Certificates can be issued either by Council or an appropriately qualified 'Accredited Certifier'. A separate application, complete with detailed plans and specifications, shall be submitted to Council for these Construction Certificates.

(3) Lapsing of Consent

This Consent is valid for a period of five years from the date of consent. It will lapse if the approved use of any land or construction work has not commenced prior to that date. No further extensions will be granted.

(5) This approval is limited to the installation of plant and equipment associated with the handling, processing, packaging and transport of 3,000 tonnes olives per annum.

This approval does not give consent to the treatment of waste water onsite.

Any increase in the annual tonnage of olives processed or changes to the treatment of waste water will require a new application being made to Council. Dependent on the changes the new development may be classified as designated development as set down in Schedule 3 of the Environmental Planning and Assessment Act, 1979.

(6) To ensure that the development has minimal impact on the amenity of locality the boundaries of the site, specifically those along the Murray Road and Morley Road frontages, are to be landscaped. Landscaping shall include earth mound and tree planting. Plant species are to be indigenous to the locality and planted so as to provide a suitable visual buffer between the development and neighbouring properties.

Part C - Protection of the Environment

This part includes conditions that relate to control or management of impacts on the environment. It includes special requirements that may relate to protection and safety of residents or the wider community and special controls that do or may relate to interactions between the environment and the development.

(1) Waste Management Plan

A Waste Management Plan shall be prepared for the development, submitted to Council and approved **prior to commencement of work/operations on the site**. The plan shall address all waste collection, processing and disposal issues associated with waste generated by the development both during construction and during on-going operations.

(2) If any damage is occasioned to Council property, particularly concrete kerbing and guttering and footpaving during building construction, the cost of repairs will be recoverable. It is therefore requested that any damage which is obvious before construction be immediately notified to Council to avoid later conflict.

Reason: Prevent Damage

(3) Effective dust/noise/erosion control measures are to be maintained during construction to maintain public safety/amenity.

(4) The applicant is to be responsible for all amplification, extension and adequate provision for connection of services at their own expense. The work is to be in accordance with *Council's Engineering Guidelines – Subdivision and Development Standards December 2008* and relevant authorities specifications.

(5) This approval does not include the treatment of waste water generated by the processing of olives on site. The management and treatment of waste water generated by the development shall be carried out in accordance with the details set out in the Statement of Environmental Effects and shall meet the requirements, if any, of the Department of Environment, Climate Change and Water in respect to the transport of waste water and use of waste as a soil ameliorant.

Part F - Building Matters

This part relates to applications for buildings of all types.

(1) Noise and Sound Levels

The L_{10} sound level output from the equipment installed for the operation of the building shall not exceed 5 dBA above the ambient background levels at the boundary of the property. Certification of the level of sound output level is to be provided on completion of work by a Consultant approved by Council.

(2) Housing of Machinery

All machinery shall be installed and/or housed in such a manner so as to prevent the emission of noise and transmission of vibration outside the premises.

(3) Compliances, Certificates and Statements

Where indicated, the following Codes, Standards, Treatments and Certificates shall apply to, or are required for, the development.

Details – Code, Certificate or Statement	Applies	Required
Building Code of Australia	**Yes**	All building work must comply with and be carried out in accordance with the requirements of the Building Code of Australia.

Part J - Prior to Commencement of Work

There are a number of matters that need to be done before your project can physically commence. These are set out in the following conditions.

(1) The applicant is required to pay for all inspections carried out by Council's employees for all water, sewer, stormwater, drainage, roadworks and landscaping. The estimated amount must be **paid prior to the issue of the Construction Certificate for Civil Works**. Any adjustments to the total amount must be paid in full **prior to the lodgement of a Subdivision Certificate application**.

The estimated amount is specified below:

Payment shall be for two (2) inspections as per Council's current Revenue Policy.

Part L - Prior to Use or Occupation of the Development

Prior to commencement of use of the development or occupation of a building, Council must be contacted, an inspection carried out and permit to occupy issued. This is to confirm that all works have been completed and the development is suitable for use for its designed purpose.

(1) Inspections and Certificates - Final

On completion of these conditions, the applicant shall contact Council's Customer Service Officers to arrange an inspection to be carried out and the development finalised, and appropriate Compliance, Subdivision or Occupation Certificate issued.

(2) Final Fire Safety Certificate

The essential fire safety measures referred to in this Schedule, excluding any existing measures, are to be installed within the building.

A final fire safety certificate, in or to the effect of Form 15 (copy attached) is to be furnished by the owner of the building to the Principal Certifying Authority (PCA) **prior to the issue of a Final Occupation Certificate**, in respect of all essential fire safety measures specified in the above Schedule.

The certificate should state that each specified essential fire safety measure has been assessed by a properly qualified person (chosen by the owner), and was found to be capable of performing to a standard not less than that specified in the Schedule.

Advice
A person who carries out the assessment must inspect and verify the performance of each specified fire safety measure and must test the operation of each new item of equipment installed in accordance with the Schedule.

(3) A detailed landscaping plan shall be submitted to and approved by Council and the landscaping works shall be undertaken and completed **prior to the lodgement of an Occupation Certificate application.**

The landscaping beds are to incorporate a micro-irrigation system to shrubs and trees and shall be installed to the applicant's expense.

(4) **Prior to the lodgement of an occupation certificate**, line marking and directional lines must be implemented in accordance with AS2890.1:2004. Line marking and directional libes are to be maintained by the owner/or occupier of the site for the lifetime of the development.

(5) **Prior to the lodgement of an Occupation Certificate application** the existing access ways to the subject site off Murray Road are required to be sealed from the existing concrete driveways to the edge of the seal along Murray Road.

(6) The applicant must submit a master plan and works programme outlining the time frame for sealing all vehicular manoeuvring areas with bitumen or heavy duty concrete. The plan and programme must be submitted to and approved by Council prior to the **lodgement of an Occupation Certificate application.**

(7) The existing access points to the subject site and to the road carriageway of Murray Road are required to be upgraded. These road works are required to be constructed to accommodate the turning movements of heavy vehicles travelling to and from the development.

(8) **Prior to the lodgement of an Occupation Certificate application** a turning path diagram detailing the swept path of the largest vehicle entering and leaving the site onto Murray Road shall be submitted to Council for approval. The turning path diagrams used shall be in accordance with AS2890.

(9) Water Allocation Transfer

The applicant is to arrange for the transfer to Council of a water allocation of 1.0ML (0.4 per tenement for 2.8 additional tenements). Documentary evidence of the transfer must be submitted to Council **prior to the lodgement of an Occupation Certificate application.** Alternatively, the applicant may make a pro-rata payment (this fee is based on market value) plus an administration fee to Council.

The contribution is exclusive of the fees for the connection of water services to the individual allotments.

Payment is to be in the form of cash or bank cheque. Where bonding is accepted a bank guarantee is required.

Note: The subject Policy No. 750 – Volumetric Water Allocation is currently under review. The charges will be adjusted accordingly following the adoption of the new policy.

Part O - On-Going Requirements

This part includes conditions or requirements that will need to be satisfied at all times.

(1) Hours of Operation

The hours of operation are limited to the hours set out in the table below

	Time Period
Processing Operations	7:00 am to 7:00 pm Monday to Friday
Delivery Times	7.00am to 7.00pm

Any alteration to these hours will require a modification to this consent or a separate development application.

(2) The landscaping, including the irrigation system, shall be install according to the approved plan and maintained to the satisfaction of Council during lifetime of the approved development.

(3) Provision of 16 off-street parking spaces each of dimensions 2.6 metres x 5.5 metres, including 1 carparking space of dimensions 3.5 metres x 5.5 metres for disabled persons in accordance with Council's Parking Code to serve the proposed development. Parking bays are to be clearly identified by pavement markings. Spaces adjacent to walls or other obstructions which may affect door openings or vehicle manoeuvring are to be widened by an additional 300 mm on the side of the obstruction(s).

In respect of parking for disabled persons, approval does not guarantee compliance with the Disability Discrimination Act and the developer should investigate their liability under the Act. The applicant's attention is drawn to the Australian Standard AS 1428 Parts 1, 2, 3 and 4 in respect of acceptable standards of design and requirements.

(4) Vehicles making deliveries to the premises being limited to semi-trailers as specified in AS2890.

(5) All vehicular loading and unloading is to be carried out within the site to prevent interference with the use of the public road by vehicles and pedestrians.

(6) Entry and Exit of Vehicles

All vehicles are to enter and exit the site in a forward direction to ensure pedestrian and traffic safety.

(7) The premises and operation is to be conducted in such a manner so as not to interfere with the amenity of the adjoining lots by way of noise, vibration, smell, fumes, vapour, steam, soot, ash, dust, waste water, waste products, grit, oil or any other matter.

(8) Storage of Goods and Trade Waste

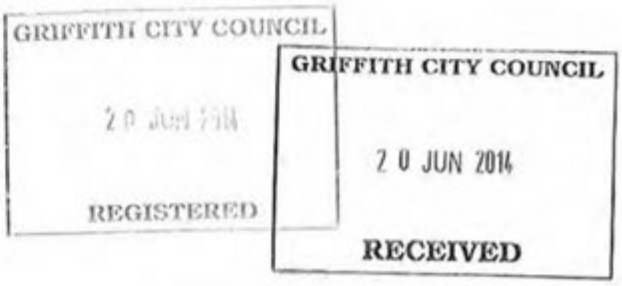
No goods, materials or trade waste are to be stored at any time outside the building/premises other than in the approved garbage facilities or storage facilities.

Other Local Government Act Approvals

In seeking development consent, the following other Local Government Act 1993 approvals have been granted under Section 68 with the attached conditions:

No other approvals sought.

ATTACHMENT C - Objection #1



19 June 2014

General Manager/Senior Development Assessment Planner
Griffith City Council
P o Box 485
Griffith NSW 2680

Dear Sir/Madam

Re: DA 365/2009 – Application to modify the Notice of Determination.

We wish to express our concerns with the above application.

We live at Farm 667, Murray Road – opposite to this site. The increase hours stated on this application to include weekends is a worry to us. We would like to know how the applicant intends to minimize the amount of noise, traffic and odours that will no doubt increase. They state that all processing operations occur within the confines of the buildings, we believe that their weekend activities will impact upon us, as we have felt them during the week.

Below we mention the main reasons for our concerns.

- Traffic – with more young families with young children moving into the area, the traffic is a very high concern. Families normally do activities such as walking and/or bike riding during weekends and with the increase of traffic of heavier vehicles the worry of safety is a very worrying one. We also should mention the wear and tear of the road.
- Noise – the increase of noise will definitely be extended to the weekend. Just as we experience during the week as soon as operations commences, we will now hear noise during the weekends.
- Odours – we have in the past had issues with odours, and though council dealt with the matter twice on our behalf in the past, the last time it took up to 5 weeks to rectify the matter. The previous time this occurred was during the last heat wave of 40 degree days and we were not able to use our evaporative air conditioner because the smell came into our house.

We have in the past had to deal with these issues that were mainly effecting us during the week (with the exception of the odour, which could last up to months, seven days a week), but now we may have to deal on weekends as well. Though we understand why they would like to increase their hours, we cannot feel that we will be affected on the two days a week that we can enjoy our time with our family.

We ask the Council to take into account the above issues when considering the application and ask the question how these issues will be dealt with.

Yours faithfully

Francesco and Teresa Reginato
P O Box 8131
Griffith East, NSW 2680
0412 626790

General Manager
Griffith City Council
PO Box 485
Griffith NSW 2680

19h June 2014

Re: Development Application No. 365/2009(2) – Section 96 Modification - Extension of Operating Hours at an existing Olive Processing Industry on Lot 415 DP 75170 Farm 666 Murray Road YOOGALI.

I received your letter dated the 6th of June in relation to the above Development application and am replying to strongly object to this application from Tree Tops Plantation.

My property (Lot 1 666 Murray Road) is directly across the road from Tree Tops Plantation. My front door is less than 200 meters from the building entrance of Tree Tops Plantation the activities conducted and the noise that resonates from their premises affects our solitude and privacy.

During past olive harvests we have been subjected to early morning arrivals of vehicles starting from 6.00am and also the arrival of trucks as late as 12.00am at night and also the incessant noise of the forklift during the night as well.

The application is for the receiving and processing of fruit on weekends if this is the case then their statement that all processing operations occur within the confines of the building is incorrect.

It does not state that the trucks arrive outside the door of the building to be loaded and unloaded which results in the constant noise of the forklift especially the reversing warning sound that they emit. This noise is rather consistent for hours at a time as they also go in and out of the building with the forklift for daily operations.

Vibrations of pumps and machinery can be felt through the house at times and can be rather overbearing to listen to, to the point when we have had to leave the house.

The hours proposed are 9.00am to 4.00pm on Saturdays and 9.00am to 1.00pm on Sundays this is not acceptable as their neighbors are entitled to serenity on the weekends. On Sundays especially people should be able to enjoy the peace and quiet with their families. They have more than enough time during the week to receive and process their olives .Knowing what operating hours they have, they therefore should by now be able to arrange their harvest and delivery based upon these hours.

Also what is the guarantee from council that Tree Tops will abide to any of the set hours as they now breach their current hours during the week. And I also note that the application states that it is only for the 2 month olive season this has not been clarified with start and finish dates this could mean 6 months or more. And is it only for the 2014 season? They have already been in operation this year since April this means the 2 month olive season should already been over.

We have previously raised our concerns with Councils compliance officer Allan Welch in relation to the activities at Tree Tops in the last couple of months.

I am also concerned that Tree Tops do not have adequate access for trucks to enter their site as quite frequently trucks cross to the incorrect side of the road to be able to swing into the entrance gate. This causes other road users to be at risk. Attached is a photo of a truck entering their gate. I would also ask if B Double trucks are permitted to use Murray Road and enter Tree Tops as there have been some in the past trying to negotiate into their gate.

Please can you inform me that you have received this letter and have lodged it as an official objection and keep me informed as to the outcome.

If this letter is to be presented to an Ordinary Meeting of Council I wish to have my name and contact details withheld.

I ask council to give serious consideration to my objection.

Yours faithfully

Name and address withheld.

Statement of Environmental Effects

Tree Tops Plantation does not consider the proposed development, under Change of Use regulations, to have any adverse effects to the environment on physical, biological, social or cultural aspects. Tree Tops Plantation considers the economic aspect for the district to be improved due to sustainable employment opportunities, for full time operational staff, transport and maintenance contractors, and the engagement of contractors and consultants assisting establishing any approved development,

Identification & Mitigation of Environmental Effects

Community Relations

- The site is currently developed and approved as a citrus packing facility. This proposed development is considered less disruptive to the surrounding community due to reduced number of heavy vehicles and a low boundary noise emission. Olive processing is not known to pose any long term health risks. There will be no variations from a visual impact perspective, due to the approved factory already on site.

Employee Numbers

- When the facility is running at full capacity it is expected that approximately 12 people will be employed within the operation, with a further 4 people during the harvesting operation.
- See Attachment (1) Estimated Labour Requirements 2013

Flora and Fauna

- The site will have no impact on any native or exotic flora or fauna.

Geological Issues & Soil Management

- There are no topography or geological characteristics, which will cause difficulties in managing harmful impacts to the environment.
- There are no known existing soil problems. Soil tests were not carried out and not considered in this development process.

Native Title Claims

The Applicants have not made enquiries in regard to Native Title Claims as there are no alterations to the site or the buildings.

Noise Emissions

- The establishment of the facility will be conducted Monday – Friday, the hours 7.00 am to 7.00pm. There is no heavy construction works required.
- The building premises are manufacture from steel framing and fully lined, read insulated with food grade sandwich panel. All items of plant equipment under satisfactory maintenance with the exception of the colour sorter will emit noise of a small water pump or light duty motorised belt conveyor. The colour sorter utilises compressed air jets to deflect rejected product as it falls after passing colour sensitive sensors. The jets of air that deflect the olives fire intermittently at a sound pressure level 75-80dB. As the air blast is for a fraction of a second, the sound energy is quickly dissipated in the air, however this repeated action is likely audible at the site boundary should other activities not be occurring about the

site. Mechanical aids, and operating procedures will be developed along with continued community consultation to ensure that the operation of this equipment is not the annoyance of the community.

- All silencing equipment fitted to trucks, forklifts and motor vehicles will be kept in good condition, and those cartage contractors engaged will be required to have equipment in similar good condition..

Offensive Odours

- There will be no emissions producing offensive odours created by the correct operation of this facility.

Operational Requirements

- The site provides sufficient land area for present and future requirements.
- Services can be efficiently supplied to the site (e.g. power, water).
- See Attachment (2) Estimated Power Requirements

Pests and Diseases

There are no unusual pests or diseases that are known of, within the district.

Times of Operation

- The facility will be operational for twelve months of the year.
- The harvesting operation will commence in late February and continue until harvest is finished in late May. During Harvest operations, the facility will be operating 10- 12 hours per day. A Manager will be on site 24 hours per day to inspect the fresh fruit and move water. However, this is extremely minimal in terms of work and noise. Manned shifts will be running, for 12 hours, reducing to day shift only after harvest.
- Processing operations will be on a 5 day working week basis throughout the year nominally between the hours 7.00am to 7.00pm.

Topographic and Meteorological Assessment

- The rainfall patterns or prevailing wind directions will not to cause any management difficulties.
- The local climatic conditions (e.g. air movement, rainfall) in combination with the topography will not result in microclimatic conditions, and therefore there will be nil adverse effects on the Yoogali or Griffith community.

Vehicle Movements

- When the facility is running at full capacity of 3000 tonne p.a, there will be 16 employees during February to May, and 12 employees for the remainder of the year. Assuming one person per vehicle, this is a maximum of 16 passenger vehicles per day during peak operating times.
- At full capacity of 3000 tonne p.a, transport of olives into the facility is estimated to be 2 semi trailers per day from late February to mid March and again from mid April to mid June.

- At full capacity of 3000 tonne p.a, transport of packaged olives is estimated to be 5 trucks of 12 tonne capacity per week.

Water Management

- Storm water control and site drainage is unaffected by this proposed development.
- See Attachment (3) Material Inputs for 2010 Table Olive Harvest.

Wastewater Management

- Wastewater resulting directly from the storage of olives operation will be collected and transported to Bassano Grove and added to the main water storage dam on the site The Bassano Grove currently irrigates 600 ML per annum. The salty waste solution is to be diluted with the main storage water to such minimal PPM that that storage dam remains suitable for normal irrigation purposes. A monitoring program is to be established to ensure the soil salinity level remains stable, and that the salt levels are not increasing in the Bassano Grove storage dam...

See attachment (4) Floor Plan, Cross Section Plan & Harvest Procedures

See attachment (5) Management of Waste Water

Tree Tops Plantation

Stephen Wells

General Manager

Attachment (1) - Tree Tops Plantation Estimated Labour Requirements 2013

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Manager & Supervisor Day shift	2	2	2	2	2	2	2	2	2	2	2	2
Forklift Day Shift	1	1	1	1	1	1	1	1	1	1	1	1
Labour Day Shift	3	3	3	3	3	3	3	3	3	3	3	3
Sort, grade & pack	6	6	6	6	6	6	6	6	6	6	6	6
Supervisor Aft shift			1	1	1							
Forklift Aft shift			1	1	1							
Labour Aft Shift			2	2	2							

Note: The supervisor from afternoon shift obviously becomes labour or even forklift when afternoon shift is not required. Similarly Forklift & labour from afternoon shift become part of the sorting and grading requirement when needed or perhaps move to extra farm labour if needed.
As the business grows, the sorting, grading & packing operation may need to continue during harvest and extra temporary labour may be needed. The permanent labour will be retained so there are always skilled people to do the skilled jobs.

Attachment (2) - Tree Tops Plantation Estimated Power Requirements

1. Reception

- Compressor. The compressor is required for the Colour sorter. Requires a 3.7 to 4.5kW compressor. (3phase?)
- Flooded hopper and elevator 0.75kW. 240v
- Washer, elevator only, 0.38kW. Water sprays using pressurised factory supply of potable water.
- Second hopper with elevator 0.38kW 240v.
- Leaf blower is probably not required. Separate memo below.
- Destemmer. 0.75kW. (Note the Bando Pro forma #6934 23062009 quotes 6hp 4.5kW not stated whether 240v or 3 phase)
- Colour sorter electrical supply 1kW. See Esko Technical Characteristics below. (3 Phase)
- Flooded hopper to sorting table and grader. 0.75 kW not known whether 240v or 3 phase.
- Sorting Table 0.75kW 3 phase.
- Grader 0.38kW, 240v.

2. Process area
    - 70mm pump 3 phase, power rating may be as high as 3kW
    - 50mm pump 3 phase, suggest 1.5kW.
    - Pomona pump, 4In (100mm). 3 Phase, suggest 1.5kW.
    - An extra 50mm pump may be required (2kW)
    - In line heater for CO_2 delivery. Prevents freezing of regulator and delivery lines due to rapid expansion from cylinder. Possibly 1kW

3. Depitting & Slicing line.
    - Depitting and slicing machine. 3 phase. 0.75kW.
    - Water recycling equipment. 0.38-0.75kW. 0.38kW
    - Elevator from reception line?
    - Densimeter. 0.38kW.
    - Sorting table to remove broken pieces. Suggest 0.38kW.

4. Packaging Line
    - Receival hopper. (Dry) 3 phase, 0.75kW.
    - Weighing scale. Single phase. Minimal power rating.
    - Brine tank pump. 3 phase, 0.38kW.

5. Laboratory and Starter Culture area.
- Laboratory Hot plate. Single phase 2.4kW
- Laboratory refrigerator with freezer compartment. 240v 0.75kW
- Laboratory incubator. 240v 0.38kW
- Fume hood or exhaust fan. 240v 0.38kw.
- Scientific equipment. Microscope, pH meter, scales or balances, electric stirrer are all having minimal power requirements.
- Air conditioning. Suggest split system with Starter culture area.

Starter Culture area.

- Significant hot water requirements. 6 barrels x 200lt water at 35°C will be required each morning over a short period of about 2 hours. If hot water is available at 60°C

then perhaps 400 ltr will be needed to mix with cold water to produce 600lt at the required temperature. A dual system solar hot water with LPG gas back up such as DUX Sunpro 400lt open circuit (D4FL26W3AC). www.dux.com.au. LPG will be needed in the laboratory section for heating and microbiological work

- Air conditioning. As stated before, the culture area requires a constant temperature of 35°C. This temperature would be unpleasant in the preparation area. A split system providing normal temperatures in the preparation area and laboratory would be ideal. Suggest single phase possibly 4kW.

6. Lighting and power.

- All areas of factory will need significant lighting.
- During harvest the facility will operate 12 hours per day. Overhead lights in factory areas, process area, the tank storage area.
  Laboratory, starter culture, amenities, ablutions and storage areas will have normal lighting.

- 3 Phase and 240v single-phase power outlets will be placed in the production area and packaging area.

James Smyth Consulting

Attachment (3) – Tree Tops Plantation Material Inputs for 2010 Table Olive Harvest

Crop anticipated for 2010 is 500 tonnes in total, 50 tonnes lye treated green Manzanillo, 450 tonnes black that includes Manzanillo and Kalamata varieties.

Initial green harvest to tanks. These olives will be transferred to 1000lt IBCs and the tanks reused for the black harvest.

Tanks individual capacity is 16700lt containing 11.2 tonnes of olives and an estimated 5,500 ltr of liquid.

50 tonnes of green fruit will fill 5 tanks.

Water required: Lye treatment 5500lt, "quick" rinse 5500lt, 1st rinse 5500lt, 2nd rinse 5500lt, Brine 5500 lt. Total 5 x 5500lt = 27500lt per tank x 5 tanks = **137,500lt.**

Bins: 50 tonnes each containing approximately 400kg of olives will need 125 bins. Each bin will require washing to remove mud from the grove and any residual lye after tipping, estimated 50lt of water per bin per trip. 125 x 50 = **6,250lt.**

Black olive harvest. Incoming bins from grove will require a wash underneath to remove mud and dust. Suggest 50lt of water per bin i.e. 900 x 50 = **45,000lt.**

Olives from grove require spray wash at reception. Estimate 100lt of water per tonne = 450tonnes x 100 = **45,000lt.**

Each black tank will require brine only i.e. 5500lt x 40 tanks = **220,000lt**

Green and black olive sorting and grading. Estimate water wash to remove residual lacto bacilli and general wash down etc at 400lt per tonne. 500 x 400 = **200,000lt.**

Ablutions etc. During harvest 1000lt per day (7 days per week) for 9 weeks 63 x 1000 = **63,000lt.**

Ablutions for remaining 43 weeks x 5 days at 150lt per day = **21500lt** (Ablutions could be almost entirely provided by rain water). Total water for ablutions = **84,500lt**

Starter culture. 45 tanks x 400lt of water = **18,000lt.**

Total water requirement = **755,000lt.**

Add 10% to allow for unforseen circumstances. 755,00 x 10% = **830,500lt**

NB.Peak water use is during green harvest i.e. 27,500lt per day.

Process Material Requirements

Sodium Hydroxide (pearl, solid) requirement.

5 tanks x 5500lt x 1.5% = 412kg

CO_2 Requirement for Green lye treated Olives: Harvesting a total of 5 tanks at a rate of 1 tank per day will require a total of 750kgs of liquefied CO_2 in packs of 8 cylinders. Each cylinder contains 31kg of CO_2. The CO_2 will be used to reduce the pH of the brine in each tank prior to the addition of starter culture. It is expected to use each batch of lye twice before discarding it.

Salt requirement.

1. Lye will contain 1% salt to reduce skin sloughing. 5 x 5500 x 1% = **275kg.**
2. Initial brine added to each tank green or black. 45 x 5500 x 8% = **19,800kg**. This salt will equilibrate to about 3.5% in the brine.

3. Equilibrium safe level is 6% salt overall. 2.5% more salt will need to be added over time. Each tank contains 11.2 tonnes of olives of which 20% is pit, which will not absorb salt. 11.2 x 80% = 8960kg x 2.5% = 224kg salt plus 5500 x 2.5% = 137.5kg. Total 361.5kg per tank additional x 45 = **16268kg**

4. **Total salt needed for 2010 harvest = 275 + 19,800 + 16,268 = 36,343 kg.**

Dextrose monohydrate requirement

Used to continue fermentation when natural sugar is exhausted and fermentation must continue to lower pH to a safe level. Used almost exclusively in lye treated green olives. Dextrose monohydrate is a vital ingredient in starter culture.

Green lye treated olives may require up to 25kg per tank i.e. 5 x 25kg = 125kg

Black olives will require an initial 5kg added with the starter culture to establish the fermentation, as the natural sugars will be dependent on osmotic pressure to be available in the brine. 42 x 5kg = 210kg.
Total dextrose monohydrate required to maintain fermentation = 335kg plus requirement in starter culture.

Starter Culture requirements.

Each tank will require two 200lt barrels of actively fermenting culture to ensure fermentation begins immediately and continues rapidly thus virtually eliminating the growth of spoilage organisms.
500 tonnes will therefore require 90 barrels of starter culture.
Using the recipe below the amounts required follow the recipe.

Starter Culture 200lt recipe

Ingredient	Chemical Formula if applicable	g/lt	200lt recipe g	Remarks
Yeast Extract Powder	N/A	4	800	Keep ingredient dry in a sealed container
Dextrose monohydrate	N/A	20	4000	
di Potassium Hydrogen Phosphate *anhydrous*	K2HPO4	2	400	
di Ammonium Phosphate (DAP)	(NH4)2HPO4	2	400	Food grade, not fertiliser grade
Sodium Citrate	C6H5Na3O7.2H2O	2	400	
Sodium Acetate *anhydrous*	C2H3NaO2	5	1000	
Magnesium Sulphate	MgSO4.7H2O	0.2	40	
Manganese Sulphate	MnSO4.H2O	0.04	8	
Salt, Coarse, Heat sterilised	NaCl	40g	8000	
Water, potable, sterile			To 200lt	

Lactic acid bacteria freeze dried culture.			5	

Starter culture ingredients total:

Item	Amount for 90 barrels
Yeast Extract	72kg
Dextrose monohydrate	360kg (plus 335kg from fermentation requirements) = 695kg
di Potassium hydrogen phosphate *anhydrous*	36kg
di Ammonium Phosphate (DAP	36kg
Sodium Citrate	36kg
Sodium Acetate *anhydrous*	90kg
Magnesium Sulphate	3.6kg
Manganese Sulphate	0.73
Lactic acid bacteria freeze dried culture.	0.45kg

Lactic Acid 85 – 88% Food grade

Required for pH adjustment and acidification of new brine when needed for packed product. Suggest 1 x 200lt drum.

James Smyth Consulting

Attached Floor Plan & Cross Section Plan

Proposed Layout of Machinery and Olive Storage Tanks in
Existing Factory Areas at 666 Murray Road, Yoogali

There are to be two harvest production streams: -

1 Green olives

2 Black olives, which includes the Kalamata variety.

Green olives will be harvested into Chep PB7 plastic field bins with a plastic bag liner containing a weak sodium hydroxide (Caustic Soda or as it is known in the olive industry, lye) solution. After harvesting the plastic bag liners are sealed and the PB7 bins are transported to the receival area and washed underneath to remove grove mud and dust. The bins are then weighed so that a reasonably accurate estimate of the fruit weight can be obtained and are transported to the process area, bypassing the receival area, where they are tipped to a fermentation tank. Each bin will contain approximately 400kg-drained weight of olives. Each fermentation tank of 16700litres will contain approximately 11.2 tonnes of olives or 28 PB7 bins containing an estimated 400kg of olives each. The bins will be stored in the processing area until there are sufficient to be tipped consecutively into a processing tank.
Black olives will be harvested dry into PB7 field bins without plastic liners and transported to the receival area where they will be washed underneath, weighed and tipped to the receival hopper. After washing the olives will pass through the receival line to the output of the colour sorter and be collected again into PB7 bins and transported to the process area and tipped immediately into fermentation tanks.

Note:

Black olives PB7 bins are expected to contain 500kg of fruit each. Each 16700-litre tank will contain about 22 bins.

Unlike green olives, which have to be, processed together black olive olives can be added to the fermentation tank over several days.

Waste Disposal

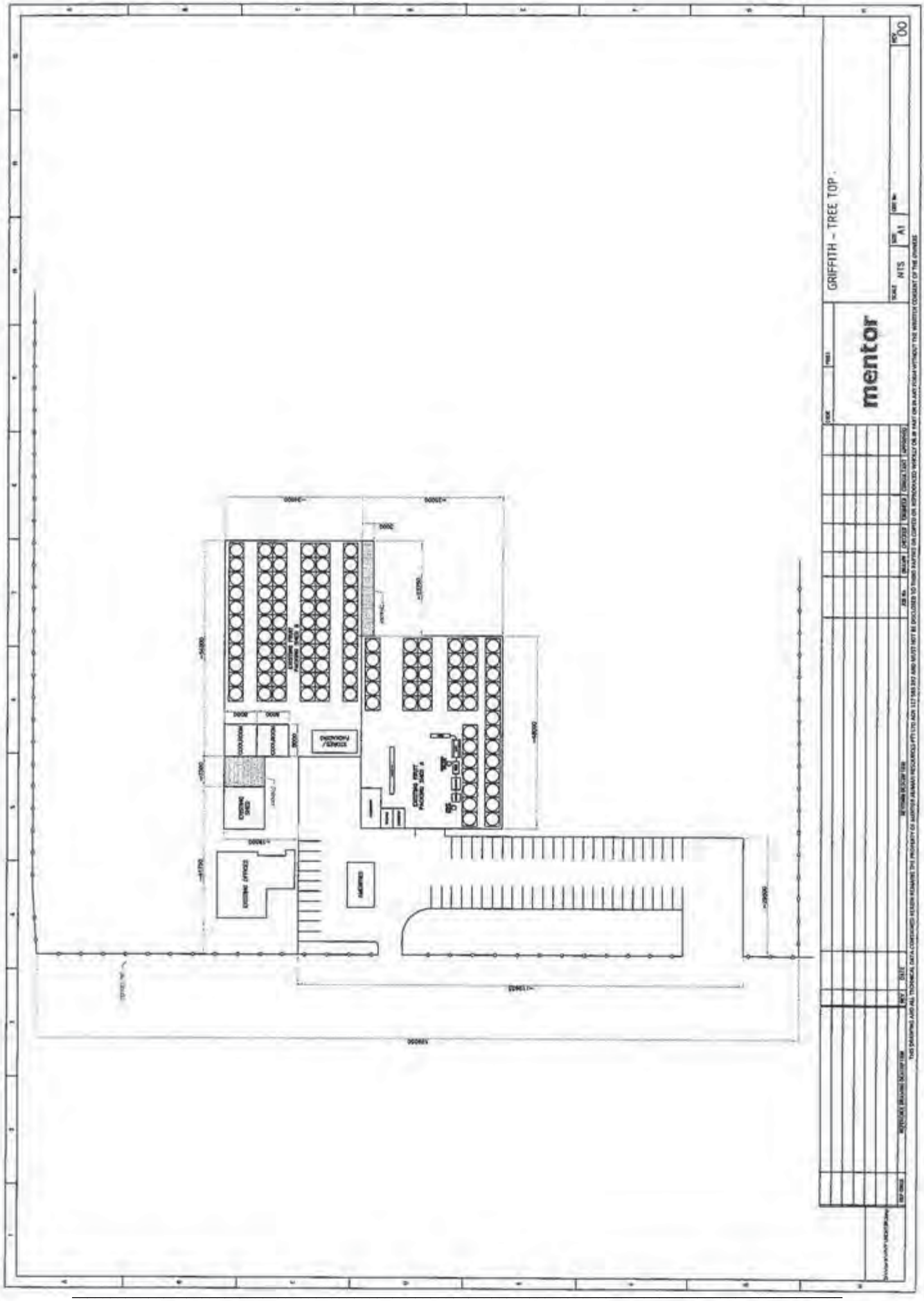
Each green lye treated green olive tank contains about 5500 litres of liquid. A number of liquid treatments occur during the processing. It is hoped to harvest and treat 1 tanks per 24-hour period. Waste disposal from each green olive tank is estimated as follows:

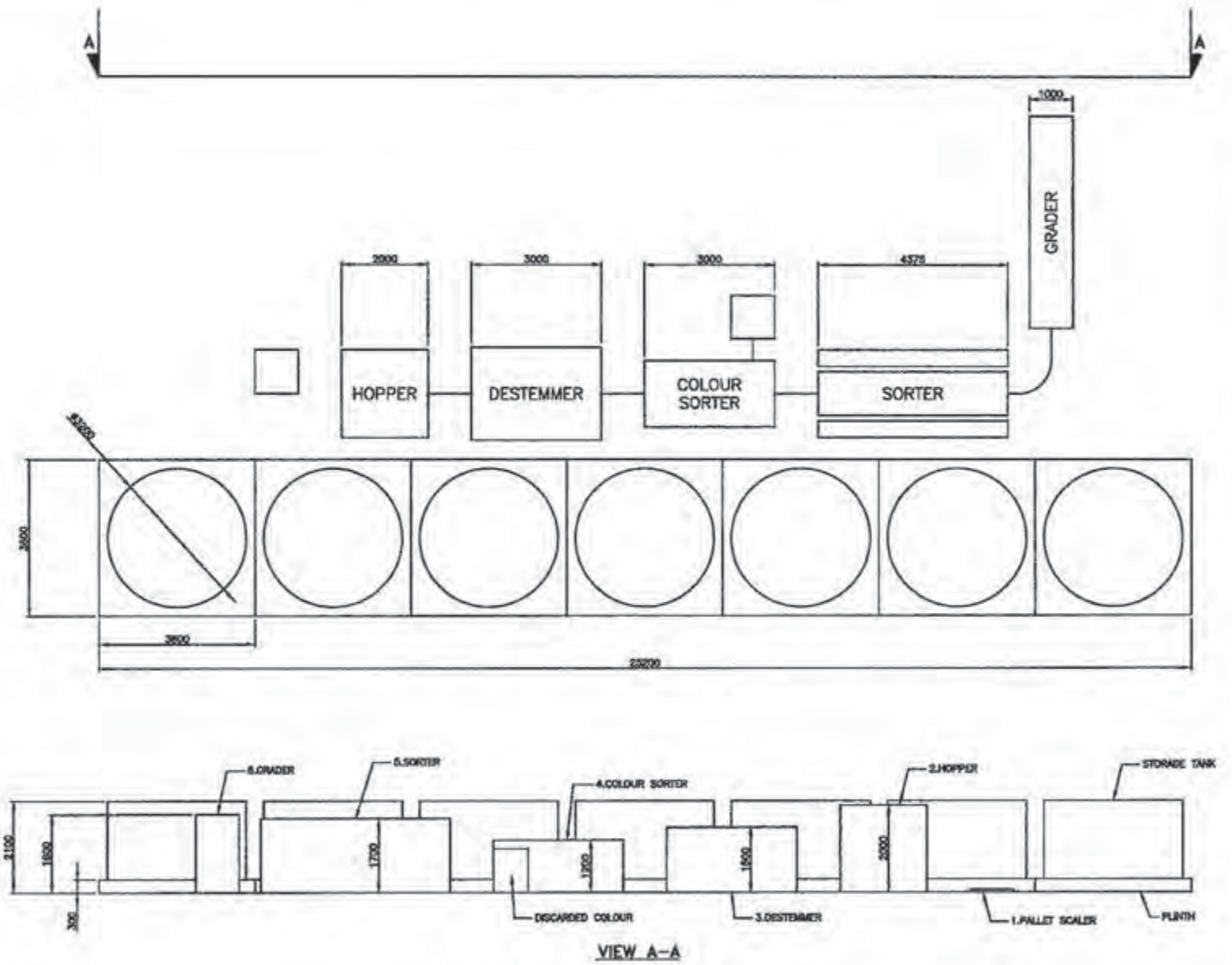
Spent lye 2750lt of 0.4% NaOH (Lye is reused once and discarded each second day).

Water rinses discarded. 3 x 5500 litres.

Total per tank = 19250lt

James Smyth Consulting


GRIFFITH – TREE TOP
mentor
A1
A1S



VIEW A–A

mentor

GRIFFITH - TREE TOP

SCALE 1:50 | SIZE A1 | REV 00

Attachment (5) – Tree Tops Plantation Management of Waste Water

Liquid waste totals for Lye treated Green Olives are 2750 litres of discarded lye per tank of 11200kg of olives (Lye is used twice) (pH approximately 12). There are 3 rinses of 5500 litres (pH 9-13). Total 19250 litres per tank of Olives. With 5 tanks of green olives a total of 96,250 litres of waste water is produced.

Allowing for another 96,250 litres wash down etc during the harvest (no lye is used for processing black olives) , a total of 192,500 litres is allowed for over the production period from February to end of May.

Total Waste water	192,500	Litre	
Inflow from supply channel to dam .	600,000,000	Litre	
Total salt	275,000,000	mg	
Salt Concentration	.50	mg/L	
Salinity of dam water	0.140	dS/m	=140 EC units

Table 1

Fresh water delivered into the dam over this period will be approximately 600Megalitres minimum, pumped into the existing 200ML dam and then out of the dam into the pressurised irrigation system. Waste water will be pumped into the dam over the Feb-Apr period, delivering it in a perforated poly pipe across the length of the dam (Approximately one hundred metres). This would disperse the waste water across a broad expanse and allow it to be reused during irrigation of the 400 ha olive grove.

Acidity (pH) of Waste Water.

With a ph of 12 the green olive waste water is highly alkaline. With the significant dilution effect of 600mg fresh water, this will not pose problems as there is enough carbon dioxide released by dam fauna to neutralise the sodium hydroxide. All aquatic organisms release carbon dioxide into water. Some of it bubbles to the surface, some of it dissolves with the water, but most of the carbon dioxide (CO_2) found in water is produced by organisms (bacteria mostly) that decompose dead plant material. Constant replenishment of the irrigation water during the irrigation season ensures water remains fresh, the quality of the incoming water is managed by Murrumbidgee Irrigation and the aquatic and bird life ensures there is sufficient nutrients and plant materials to produce CO_2, which neutralises the alkalinity of the lye.
(http://tellus.ssec.wisc.edu/outreach/teach/ideas/kotoski/Minifact_Sheets/Minifact6_Carbon_Dioxide.pdf)

Salinity of Waste Water

Salinity will not pose a problem given the dilution factor. In the best judgement of Tapas Biswas PhD, (Senior Irrigation Scientist Water Resources & Irrigated Crops SA Research & Development Institute) "you can use the blended water for growing any crop". A calculation reveals the average water salinity, after blending, should be around 140 EC units. According to water quality guidelines any crop with a 10% leaching fraction should be able to grow. (Figure 1)
With regards to other chemicals (many of which are sugars) , their insignificant amount will not cause any damage; however water quality tests are carried out as part of ongoing management and crop and irrigation system maintenance will ensure that this remains the case.

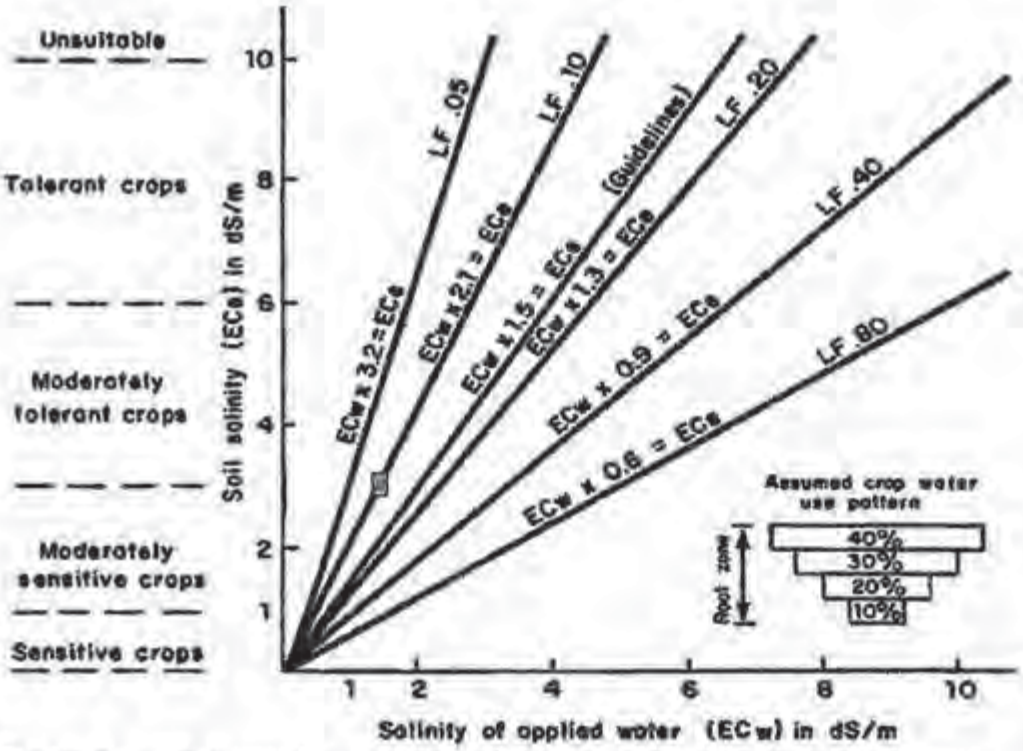


Figure 1. ▯ *Indicates how a salinity of 1.4 ds (140EC) relates to salt tolerance. Olive is considered as a moderately* salt tolerant *plant (Rugini and Fedeli, 1990)*
(http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6T3X-4GD4SHF-3&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1039826568&_rerunOrigin=google&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=41693f65f8f076ce33f215f37174396e)

Thankyou to Tapas Biswas PhD Senior Irrigation Scientist Water Resources & Irrigated Crops SA Research & Development Institute Wine Innovation Building, Cnr Hartley Grove and Paratoo Road, Waite Precinct, Urrbrae SA 5064 [GPO Box 397, Adelaide 5001] Australia Phone: 08 83039730 Fax: 83039473 Mob: 0409444379 Email: tapas.biswas@sa.gov.au and

John Blackwell Charles International Centre of Water for Food Security (IC Water) Locked Bag 588, Building 24 Sturt University jblackwell@csu.edu.au Wagga Wagga NSW 2678 AUSTRALIA Ph: (02) 6933 4937 For their input to this statement. Web information retrieved 8th October 2009.

Kim Russell

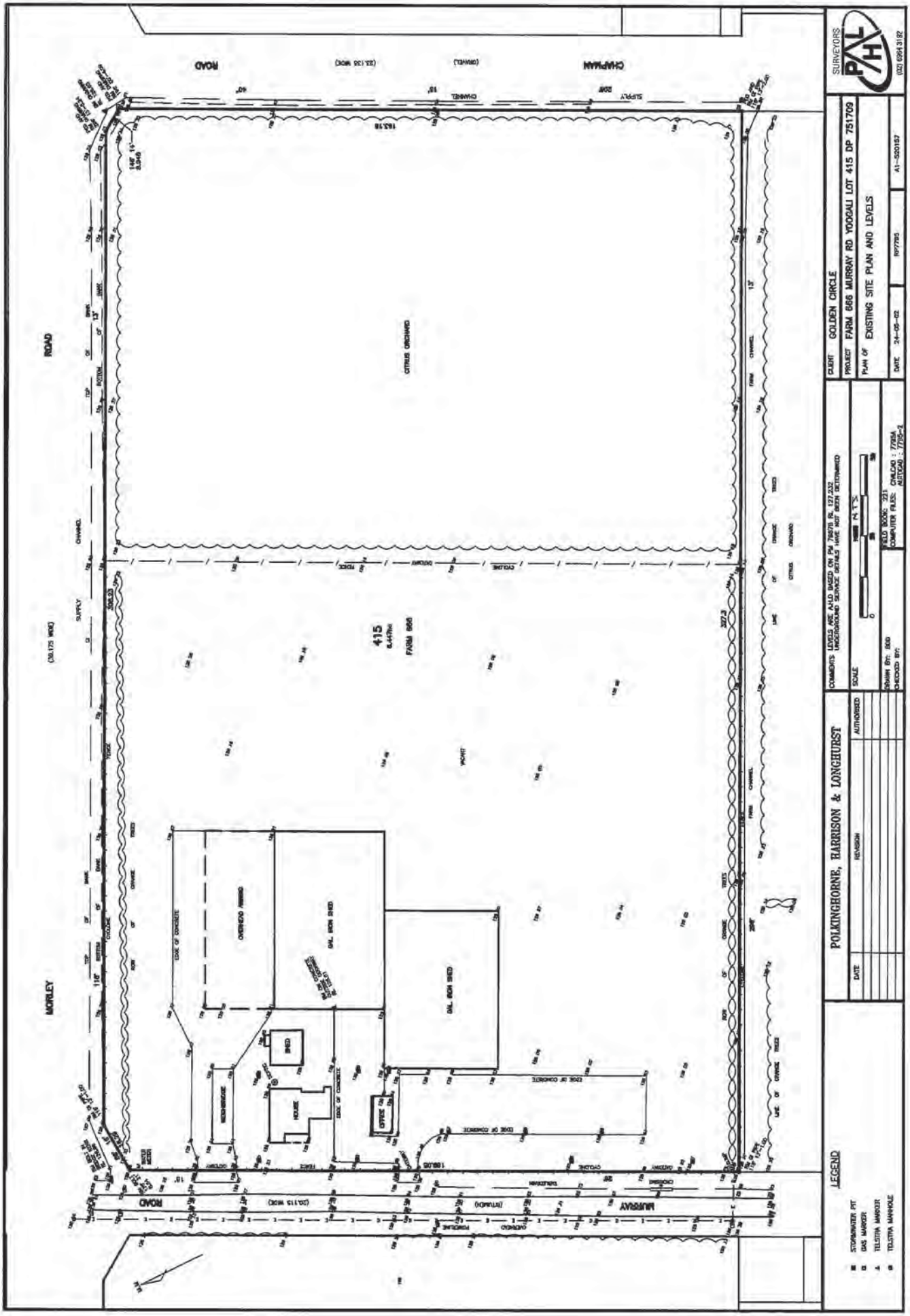
Director

Tree Tops Plantation, also

Director

Zero Waste Australia
www.zerowasteaustralia.org

Attachment (6) - Tree Tops Plantation Site Plan



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GN TN MN
Grid - Magnetic 10.5°

Important Notice!

This map is not a precise survey document. Accurate locations can only be determined by a survey on the ground.

This information has been prepared for Council's internal purposes and for no other purpose. No statement is made about the accuracy or suitability of the information for use for any purpose (whether the purpose has been notified to Council or not). While every care is taken to ensure the accuracy of this data, neither the Griffith City Council nor the Department of Lands makes any representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and disclaims all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages (including indirect or consequential damage) and costs which you might incur as a result of the data being inaccurate or incomplete in any way and for any reason.

GDA

the Griffith Local Government Area. Magnetic North is correct for 2001 moving easterly by 0.04° in about five years.

Important

This map was produced on the GEOCENTRIC DATUM OF AUSTRALIA 1994 (GDA94), which has superseded the Australian Geographic Datum of 1984 (AGD66/84). Heights are referenced to the Australia Height Datum (AHD) heights.
For most practical purposes GDA94 coordinates and satellite derived (GPS) coordinates based on the World Geodetic Datum 1984 (WGS84) are the same.

Contour Interval:	
Projection:	MGA94 Zone 55
Cost:	
Date:	Wednesday, 24 September 2014
Drawn By:	EnvironmentalServices
Map Zoom:	1324 m

ATTACHMENT E
DA 365/2009 (2)
Location of Rural Industry and proximity of Adjoining Dwelllings

Map Scale: 1:6,969 at A4
Map Zoom: 1324 m