

DEVELOPING SUITABLE AREAS FOR
INTENSIVE AGRICULTURAL INDUSTRIES
in the
GOLDEN PLAINS SHIRE

AREA IMPROVEMENT PROJECT
CONTRACT No. 20317

PREPARED BY:

THE REGIONAL DEVELOPMENT COMPANY



In conjunction with

EARTH TECH ENGINEERING
and
ED HARVEY PLANNING AND DEVELOPMENT

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Background

The Project

Golden Plains Shire Council received funding from the Victorian Department of Sustainability and Environment and to undertake an Area Improvement Program (AIP) pilot study to investigate the creation of specific areas for intensive animal industries within the Shire.

The Golden Plains Shire is an active supporter of the intensive animal industry as has been shown by the continued development over recent years of the broiler industry, the pig industry, and more recently, the meat rabbit growing industry.

The shire has the largest area of sustainable land for the development of the intensive animal industries in the region; the area is relatively flat, has a suitable climate and supports both cropping and grazing activities of a broad acre nature. Holding sizes are large with a low population density.

The broiler industry is well represented in the Municipality with ten established grower farms and at least three current planning permits for the establishment of further farms. Bartter, Steggle, the major processor in the area, also have their breeding complex in the Shire, located near Bannockburn.

Open range piggeries have also been developed in the Shire in the Shelford and Warrembeen areas, with grow outs in both these areas as well as in Meredith. A recent addition to the pig industry in the area is the artificial insemination complex established at Lethbridge.

The rabbit industry is also continuing to expand and there are successful farms in the Lethbridge, Gheringhap and Fyansford areas.

The planning policies of the Council are directed at encouraging further intensive animal industry development in recognition that they are essentially a rural shire.

The primary aim of this AIP study is to identify areas suitable for piggery and broiler industries within the Golden Plains Shire and ensure that such development can proceed with some certainty, whilst taking into account economic, environmental and socially sustainable outcomes.

In October 2003, The Regional Development Company in conjunction with Earthtech Engineering and Ed Harvey Planning and Design, were appointed to undertake the study.

The approach taken was in three stages:

- Stage One: Scoping and confirmation of the issues, including the establishment of a Stakeholder Advisory Group
- Stage Two: Solution Development
- Stage Three: Solution Implementation



The project has been managed by a project steering committee comprising of:

Alicia te Wierick	Development Manager, Golden Plains Shire
Cr Tony Francis	Golden Plains Shire
Mandy Elliott	Environmental Project Officer, Department of Sustainability and Environment
Julian Vandernord	Regional Planner, South West Region Department of Sustainability and Environment

Consultation Process

The project has been focused on achieving local solutions for local issues and has drawn heavily on a consultative approach.

The consultation process included:

- Thirty key stakeholder interviews at the commencement of the project
- The establishment of a Stakeholder Advisory Group (SAG) comprising:

Infrastructure Providers	Barwon Water Central Highlands Water Powercor VicRoads Golden Plains Shire
Environment Agencies	Corangamite Catchment Management Authority Environment Protection Authority Department of Sustainability and Environment
Intensive Animal Industries	Bartters Western Plains Pork VFF Chicken Meat Individual pig and poultry breeders
Community Representatives	

- Four workshops and discussion meetings with the stakeholder advisory group to confirm identified issues and scoping of project; give feedback on possible solutions; and review costs of development from an industry perspective (with a sub group of the SAG).
- Letters to all landholders in identified areas outlining the project and seeking feedback.
- Face to face meetings with over 25% of landholders in identified areas outlining the project and seeking feedback.
- Phone interviews and responses to landholders.
- Draft Solutions Paper to all identified stakeholders for feedback.
- Discussion meeting with Councillors and Senior Staff of Golden Plains Shire.
- Final presentation to Stakeholder Advisory Group.



The Final Report

This final report:

- Defines the industry requirements for development (poultry and pig industries).
- Summarises the key issues.
- Identifies the preferred areas for intensive animal industry development in the Golden Plains Shire (taking into account identified issues and industry requirements).
- Identifies solutions for establishing the preferred sites and attracting investment.
- Outlines the costs and benefits of the developments, and the proposed solutions.
- Details the implementation plan.
- Provides an outline of the implementation steps taken to date.
- Reviews the process taken for this pilot AIP project and documents the 'lessons learnt' for the benefit of future AIP projects.
- Provides recommendations to enable to the ongoing development of intensive agriculture industry investment within acceptable environmental, social and economic parameters

This final report draws heavily on previous background papers prepared by the consultants in conjunction with the Stakeholder Advisory Group.

These papers include:

Issues Paper	December 2003
Solution Development Framework and Options	March 2004
Infrastructure Discussion Paper	June 2004

Additionally written progress reports for each stage were provided to the Project Steering Committee and regular project management meetings and teleconferences held.



Industry Requirements

Poultry Industry Issues

- Current Australian consumption of chicken meat is 31kg/p.a. Growth is mainly in the QSR (Quick Service Retailing) sector; about 15%-20% p.a. The market for chicken meat is defined almost entirely within Australia, with no significant export. The industry is experiencing overall growth of about 4% p.a., therefore, in most instances, when a new farm is built (e.g. in Golden Plains Shire), it will most likely be the result of a relocation or a closure.
- Due to the difficulty in obtaining new site approval, farms tend to maximise the development potential of existing sites.
- Retention of processing capacity in the Geelong region: Bartter Steggles is the fourth largest private employer in the Geelong region.
- Location required for a new feed mill to service the network of broiler farms in the Geelong/Golden Plains region. Total investment is in the order of \$15-\$20M. Location requirements include:
 - Proximity to a rail line (will require a spur off the main line) and B-double capacity road network.
 - Site size between 2.5 to 4 hectares.
 - Acceptable separation distance from other uses.
 - Access to a port.
 - Treated water.
 - Three phase power.
 - Natural gas.
 - One hour maximum travel time between feed mill and broiler farms.
- Transportation costs are a key factor for broiler farm location. Processors will invoke price penalties if transport exceeds a given distance.
- Growers and processors tend to have a long term relationship with little movement of growers between processors. Broiler farms are generally owned by individual growers who supply the processors under contract.
- New grower-processor arrangements are developing that will more closely tie production and processing in terms of distance and quality assurance.
- The ideal conditions for broiler farm location include:
 - Class A separation distance.
 - Three phase power.
 - Treated (town) water with final treatment on-site.
 - Preferably natural gas (or LPG tank).
 - B-double capable road access.
 - Minimum 200,000 birds (Class A – 500,000 birds in a 10 shed facility).
 - Ability to orient tunnel sheds to achieve effective fan exhaust.



- Establishment conditions for a 4 shed, 200,000 bird broiler farm:
 - 120 hectare site.
 - Investment of \$2.7M to \$3M (\$500,000 per shed, plus infrastructure).
 - Current contract period is 10 years, but future contracts may be up to 20 years.
- An additional \$1M can be required if there are public objections during the planning assessment process (requiring additional investigations and the possible acquisition of land to increase buffer distances. For example, a developer (applicant) will normally prepare an environmental management plan as a part of the application. If there is an objector(s) the EPA becomes involved, requiring the preparation of a much more detailed and expensive environmental impact assessment.
- Water consumption per 40,000 birds (one shed) is considered to be 200,000 litres over a 12 hour period. For a 200,000 bird farm, a 0.5 ML dam or tank is required.

Pig Industry Issues

- Water is a limiting factor for the pig industry. In the Golden Plains area, the implication of water limitation is that pig industry investment opportunities are not being realised. For example, Western Plains Pork at Warrambeen started in 1997 with 450 sows and now operates at 1,000, with capacity for 1,600 sows. The total of 1,000 sows means that there are up to 8,000 pigs on site at any time, consuming 40,000 litres of water per day. Dependency on run-off and bore water limits the operation from achieving the desired capacity of 3,000 sows. The site is approximately 15km from Central Highlands Water and Barwon Water treated sources, with the potential for pipelines to run through areas considered suitable for the poultry and pig industries.
- A regional feed mill would be a bonus for Western Plains Pork with the potential for joint venture or some other commercial arrangement with Bartter Steggles.
- Issues arising from piggeries at remote locations:
 - 3-phase power is not always available. Power is required for a feed mill, feed delivery systems and water pumps.
 - Distance from, and availability of, labour.
 - Treated water supply. For 1,000 sows (including progeny) peak daily water usage is 170,000 litres during hot weather and 85,000 litres in winter.
 - On the evidence of interviews and subsequent meetings, a lack of infrastructure is limiting the growth of existing pig enterprises and may be dissuading new investors.



Common issues

Part of the rationale for the Golden Plains AIP study has been the expectation that farms under planning pressure in the Melbourne Region may see an opportunity to relocate to a more 'welcoming' environment in the Golden Plains Shire. As a result of industry discussions, this line of reasoning is still valid, but needs to be adjusted to accord with the following factors:

- The establishment cost for a new farm, coupled with the complexity of the planning approval process is forcing growers to remain and manage their existing locations (this applies to both broiler farms and piggeries).
- The introduction of the Green Wedge Zones around Melbourne may create greater stability for existing and new farms in these zones.
- The closer link between grower and processor mentioned before will mean a greater tendency for 'company' broiler farms to dominate the travel time catchment (approximately 1 hour) of a processing facility.
- It is likely that the development of many new farms will be on a long term leasehold basis, providing an income for existing farms, while allowing broad acre farming to continue between the broiler farm or piggery buildings.
- While the broiler and pig industries apply their own biosecurity separation distances between farms, there is also a case for aggregation within this framework. Aggregation provides for better management of diseases.

Other industry opportunities

- Generally small scale at this time – e.g. rabbit meat production to supply the existing rabbit abattoir at North Geelong. However, rabbit production could be a possible use for old poultry sheds.
- Construction or utilisation of water pipelines for intensive agriculture may also provide opportunities for broad acre farmers to develop new enterprises.



Identified Issues

Stage One of this project identified issues associated with attracting, locating and developing intensive agriculture (specifically poultry and pig production) in the Golden Plains Shire.

The process to identify the issues involved consultation with existing intensive agriculture enterprises in the Geelong/Golden Plains/Ballarat region as well as with key infrastructure providers and environmental management organizations.

The identified issues were presented in an Issues Summary Paper and used as the basis for discussion the Stakeholder Advisory Group.

The following table identifies and defines the issues.

Issue	Explanation
Planning controls	Large areas of land need to be secured to meet Code requirements (i.e. broiler farms and piggeries). Long term protection from fragmentation, and influence re proximate developments required by industry.
Environmental overall	Key environmental issues that need to be managed in relation to intensive farm operations include litter management, wastewater treatment, cooling and heating systems. CMA is the main advisor and referral authority with regard to surface and groundwater.
Catchment protection	Water quality issues need to be managed by compliance with Codes and planning overlays to meet nutrient level targets in the catchment.
EPA requirements	The EPA is the licensing and approval authority responsible for works approval, and expects Compliance with the relevant codes. Complaints most commonly arise when there is an association between intensive animal farms and hobby or 'lifestyle properties. Therefore, the EPA favours the use of appropriate overlays to ensure adequate separation distances are maintained.
Biosecurity	Paramount for the broiler industry, which requires separation distances between breeder farms and broiler farms, separation between avian species, separation from non-avian species. DPI is the biosecurity referral authority.
Infrastructure provision	Key limiting factor to current investment in Golden Plains Shire. Evidence exists of farms not able to meet approvals limits due to lack of water. Three phase power required by industry as best case, however capital investment for individual enterprises is not justifiable. Industry clusters may have localised impacts on road intersections with industry capital again required.



These issues are common to intensive industry developments however; this AIP Study has investigated these issues in the context of Golden Plains Shire.

This next section examines the identified issues from various perspectives: industry, environmental agencies, local landholders and infrastructure providers.

At the stage of identifying issues, possible ideas for investigation to develop solutions were noted. These are more fully explored in the Potential Solutions section of this report.

Planning Controls

Most poultry industry respondents regard planning as the key issue in relation to current and future operations. Application of the Broiler Code, in conjunction with planning controls, means that large areas of land need to be secured to successfully establish a broiler farm complex.

Main planning issues in current 'built-up' areas (e.g. Mornington Peninsula):

- Noise.
- Complaints from neighbours.
- Truck movements and time restrictions.
- Urban encroachment.
- 'Campaign' objection delays and enforcement proceedings.

Industry is looking for long-term protection from land fragmentation and some influence over the type of development that occurs in the vicinity of broiler farms. Existing Melbourne region broiler farm areas are under pressure, with future expansion opportunities unlikely. The creation of a stable environment for intensive agriculture investment is a key concern for the pig and broiler farm industries.

Creating areas with planning controls that encourage and protect these industries from land fragmentation and inappropriate land use will be an important locational determinant for new investment in intensive agriculture.

The concept of farm clusters is of interest to the intensive animal farming industry because a cluster offers the potential for shared staff, economies in operational costs and shared separation buffers. The counter view relates to concern for biosecurity. If large low-density areas can be identified, some producers prefer a single, remote location.

Planning priorities for discussion:

- Identify appropriate areas for intensive agribusiness that satisfy settlement density, infrastructure and biosecurity requirements.
- Identify 'no-go' areas where issues such as fauna and fauna values preclude development.
- Select an appropriate overlay control for intensive agribusiness that allows operators to comment on subdivision and development proposals within the overlay area. (A draft agriculture protection overlay is appended to this report.)
- Attract contract broiler farm investors prepared to meet Broiler Code guidelines.

The proposed new Farming Zone and the Rural Activity Zone, recently released for comment, has direct relevance to intensive animal farming.



Environment

The Catchment Management Authority has principal responsibility for administration of the Water Act and the Catchment and Land Protection Act. The CMA is the main advisor and referral authority on the impact of new development on surface water flows.

Ground water interactions are also important in the selection of locations for intensive agriculture, particularly recharge areas across the regional flow system.

It is noted that the CSIRO is currently conducting a groundwater modelling study that may assist the selection of appropriate areas. The model is expected to be available in 6 months.

Key environmental issues in relation to farm operations include:

- Litter management (poultry and pig production).
- Waste water treatment.
- Cooling and heating systems.

Catchment Protection

Golden Plains falls within the Corangamite CMA, who are currently producing a Regional Salinity Action Plan.

The water quality issues associated with intensive agribusiness include:

- Nitrates enrichment of waterways from overland flows.
- Salinity impacts in the water table.
- Native vegetation reductions as a result of building activity (especially grasslands).
- Dam construction and impacts on environmental flows.
- Flood plain management (for example; local alterations to surface flows resulting from building pad construction).

The CMA preference is that the western half of the Golden Plains Shire be considered for intensive agribusiness investment.

The CMA offer the view that existing controls such as the Broiler Code and planning scheme overlays offer sufficient environmental protection provided that are applied correctly.

From a CMA perspective, the key task is to identify locations and apply management procedures that will help achieve nutrient level targets in the catchment.

EPA Requirements

- The EPA expects compliance with the relevant codes (e.g. broiler farms and piggeries). The EPA is a licensing and approval authority and is responsible for works approval.
- Complaints most commonly arise when there is an association between intensive animal farms and hobby or 'lifestyle' properties. Therefore, the EPA favours the use of appropriate overlays to ensure adequate separation distances are maintained.



- Suggested that application of the Broiler Code for a Class A Farm (320,000 birds) currently requires a site of approximately 650 hectares to satisfy separation distance and other environmental criteria.
- In the Strathbogie area, EPA regards a cluster of four farms as one unit. When environmental risk assessment criteria is applied to this combined area (in particular, odour), the required buffer becomes too large for viable relocation.
- Litter from broiler farms is predominantly distributed as fertiliser to broad acre farms, with some questions as to whether this is a sustainable practice. There appears to be a need and an opportunity to attract a value adding industry to process waste for commercial fertiliser products.
- 'Nesting' or grouping of broiler farms may provide opportunity for localised waste treatment and use for pasture irrigation. This has been used effectively by Hazeldene's at Lockwood near Bendigo.
- Piggery odours are perceived as a problem – particularly at grow-out facilities. The current solution involves separation distance, rotation and management.
- Ecoshelter piggeries are considered to generate less odour due to dry litter base, regular clean-out and avoidance of anaerobic treatment lagoons.

Biosecurity

Biosecurity is paramount for the broiler industry, which means:

- Breeder farms separated from broiler farms (Bartter Steggles breeder farms are located at Burnside Road, Bannockburn and in Pakenham).
- New broiler farms located away from existing larger farms and other avian species.
- Tendency for companies to 'regionalise' to maintain a consistent standard within their respective areas.

The Department of Primary Industries (DPI) is a referral authority for intensive animal farming proposals. The DPI operates a biosecurity unit to provide policy advice to government and industry.

Basic compatibility guidelines:

- Pigs and poultry should have a separation distance of at least 1 km.
- Poultry industry is particularly sensitive to other avian species.
- Litter distribution, as fertiliser, should be sourced from local farms. Litter from other areas, if not treated, could introduce new pathogens to local flocks.

Agro-forestry may be a beneficial way of managing separation distance buffers.

Infrastructure

The main infrastructure required for the development of intensive animal industries is good quality water. Other infrastructure required varies between the industry types. These have been identified in the Industry Requirements section of this report.



The key requirements for chicken meat processing are:

- Good quality water.
- Three phase power.
- B-double access for feed trucks.
- Roads and bridges with appropriate load limits.

Key requirements for intensive piggery developments are:

- Water
- All weather roads to take 42 tonne truck movements
- Telecommunications

An effective telecommunication service is an important resource for agribusiness, for banking, security, orders, and mobile phones. This is particularly relevant for food processing operations.

Each of the main infrastructure requirements (water, power, gas and roads) are discussed in this section relative to the Golden Plains Shire. In developing this data, the infrastructure providers were also asked to consider "best fit" areas for the development of these intensive agricultural industries from their perspective.

Water

Water is provided to the Golden Plains Shire by both Barwon Water and Central Highlands Water.

In addition to reticulated water, a proportion can be expected from surface water (eg caught off sheds), natural rainfall and in some instances, bores.

The use of bore water was discussed with industry during the course of this study, however, generally the salinity is too high for the poultry industry. The water quality required for the poultry industry is less than 200 ppm salinity. Pigs are more tolerant up to 900 ppm (eg Western Plains use bore water) but at best, bore water is a supplement rather than a primary source. Individual treatment plants are used in some areas. Package plants cost \$50,000 to establish and \$5,000 per year to run. the expected limitation on the supply of bore water (particularly over time) in the Golden Plains area makes the widespread use of bores unlikely.

Local rainfall is unlikely to be sufficient to enable commercial quantities of water to be collected in dams on individual properties. Consultation with the Southern Rural Water Authority will be required for guidance in the construction and use of dams on farms.

A key to obtaining water within the study area may be the formation of a group scheme to construct a new pipeline or renovate/augment an existing line. Group schemes have the ability to attract public money because of multiple beneficiaries and employment potential.

Barwon Water

- Water supply within the Barwon Water supply district is principally geared to serving urban settlements. For example, Meredith has a bulk entitlement of 1 ML per day.



- The She Oaks – Moorabool treatment plant provides 60ML per day, with the capacity to off load to the Bannockburn district. Service supply to agribusiness may need to be by agreement, involving off-peak storage tanks supplied by the consumer. In this context, a She Oaks – Shelford link may be a possibility.
- The Meredith catchment (Moorabool River) has limited potential for harvesting water, particularly in the context of protecting environmental flows.
- The She-Oaks treatment plant, which supplies the area, sources water from both the Lal Lal Reservoir and from Stony Creek Reservoir east of Meredith.
- The Bannockburn waste treatment plant generates approximately 15 ML p.a. of Class C water for recycling, currently used by a farmer and on the local golf course.
- Potential for a pipeline (15 km) to be extended from the Barwon Water system to the Western Plains free-range piggery at Warrambeen.
- Barwon Water is preparing a Water Resource Development Plan to address:
 - Demand management.
 - Recycling.
 - Best use.
- Barwon Water has a water network model of the Bannockburn/Meredith water supply area. Possible pipeline from She Oaks via Green Tent Road to sites along the Shelford-Meredith Road.

Central Highlands Water

- Central Highlands Water (CHW) does not supply any significant agricultural enterprises at present – predominantly an urban water supply authority. CHW has two operational pipelines that pass through rural areas:
 - Ballarat to Rokewood, constructed in the 1950's. This 150mm pipeline is in need of up-grading and does not have spare capacity. There has been investor interest in the Rokewood area, which would require storage on-site to take advantage of off-peak flow, and investor contributions required to meet the cost of changes to infrastructure priorities.
 - Smythesdale to Linton pipeline. More recent infrastructure, with available capacity. Preferred option from CHW perspective. Other options include bringing water across from Meredith (Barwon Water pipeline). Barwon Water and CHW share the Lal Lal Reservoir supply.
- Use of recycled water – potential for the broiler industry? Ballarat has supply available.
- Potential for a pipeline (15 km) to be extended from the CHW system to the Western Plains free-range piggery at Warrambeen.



Power and Gas

High Voltage/backup power systems and group power schemes are often necessary to effectively utilise the existing grid. Hazeldene's at Bendigo is a good example of an HV/back-up power system, whereby an agreement is reached to 'kick-in' back-up power generated on-site when loading reaches critical point. Costs are offset by the ability to contribute power back into the grid.

Three-phase power extends to Shelford. Expenditure on three-phase power infrastructure by Powercor will be based on a business case. Most likely scenario from a power supply perspective is a group scheme where costs are shared between customers and perhaps with government (note dairy industry case as a model). Effective access to the three-phase power network is dependent on peak loads and the position within the system (i.e. the system may be less effective 'down the system').

Intensive animal industry customers normally have a Powercor substation on site and connect supply at 240/415 volts. Powercor can respond to new sites that require augmentation, however the customer funds the capital works, although it is possible for Powercor to contribute to the cost, based on the business case. Group schemes can also be considered.

Development of a new feed mill in the area could improve the viability of expanding the three-phase network.

Wind power may find a compatible association with intensive agriculture, given the low density of development and the separation distances involved between uses. The Victorian Government is currently investigating the impact of wind farms on the landscape. Investigation of a possible association between wind farms and intensive agriculture may be warranted.

A high-pressure natural gas pipeline runs east west through the region at Gheringhap, approximately 5 km south of Bannockburn. There has been considerable public interest in the installation of a decompression valve to enable nearby residential areas to be serviced. The business case for a decompression unit apparently hinges on a significant industrial user. A feed mill to service both the pig and poultry industries would benefit greatly from gas power.

Roads

VicRoads and Golden Plains Shire have responsibilities for rural main roads and local roads, respectively.

The poultry industry does not generate a large number of vehicle movements. Industry clusters could result in localised infrastructure impacts. The key issues for the broiler and pig industries are the potential off-site road construction contributions for intersection upgrades and entrances from main roads.

Roads suitable for further investigation:

- Rokewood-Skipton Main Road.
- Bannockburn-Shelford Main Road.

Both of these roads have connection to local access roads built to an appropriate standard or are capable of cost-effective up-grade. Preference is for local access roads with sealed shoulders and existing turning lanes.

There are a number of C Class Roads in the Golden Plains Shire suitable for B-double movement.



The main issue from Vic Roads perspective is to ensure that localised connections to the main road network are adequate. This will often involve local road improvement and intersection works that can add considerably to the development cost of a farm. This may be an argument for farm clusters where the 'external' infrastructure costs can be shared.



Investigation Areas

The selection of suitable investigation areas was based on discussions with key stakeholders and took into account the identified issues, and industry requirements.

It was necessary to identify investigation sites so the various stakeholders (including environmental agencies and infrastructure providers) could assess:

- Their ability to provide services to the sites
- The potential costs of infrastructure and services
- The land sustainability

The investigation sites were identified after several processes took place:

- Interviews with key stakeholders to identify possible areas with regard to their particular expertise (infrastructure and business operations)
- Discussions with environmental authorities to exclude sensitive areas (especially with regard to soils, water, vegetation, noise and odour)

As a result of the issues identification process and the key stakeholder discussions, two areas were identified for detailed investigation. These areas are between the towns of Shelford and Rokewood and Shelford and Meredith in the Golden Plains Shire. The investigation areas have been configured to provide a buffer of 3-4 km around each town. The intervening areas currently host a major piggery and some broiler farm investment. Permits have been issued for further farms in these areas and there is a willingness to expand existing businesses.

Investigation Area A: Shelford – Rokewood Corridor

Shelford is located 36 km north-west from Geelong via Bannockburn. Rokewood is a further 17km north-west, along the Rokewood Shelford Road, which is a local main road. This road forms the “spine” of the first area selected for detailed investigation.

This part of the Golden Plains Shire has attracted investment from the pig industry (Western Plains Pork) due to the availability of large areas of land, a relatively low development density and proximity to the Melbourne/Geelong Region. For example, the property ownership plan indicates that there are only 20 – 30 properties between the two towns on either side of the Rokewood-Shelford Road.

Rokewood is a town of approximately 200 persons, showing positive growth in terms of both dwellings and population. Rokewood makes a significant contribution to intensive agribusiness employment in the region and would support further agribusiness growth under well-planned conditions.

Further development of this area is likely to occur if infrastructure can be made available.

Investigation Area B: Shelford – Meredith Corridor

Meredith is approximately 23 km north of Shelford on the Shelford-Meredith road, which is a local road. The area has attracted two recent broiler farms applications due to the relatively low density of the area and the availability of a limited water supply. The site has potential for further large-scale users, as there are only approximately 20 land parcels or tenements in the 23 km distance between



the two towns. As with Area A, Area B could attract further investment if the infrastructure can be made available.

Shelford has a population of approximately 160, and like Rokewood, is experiencing positive population and development growth.

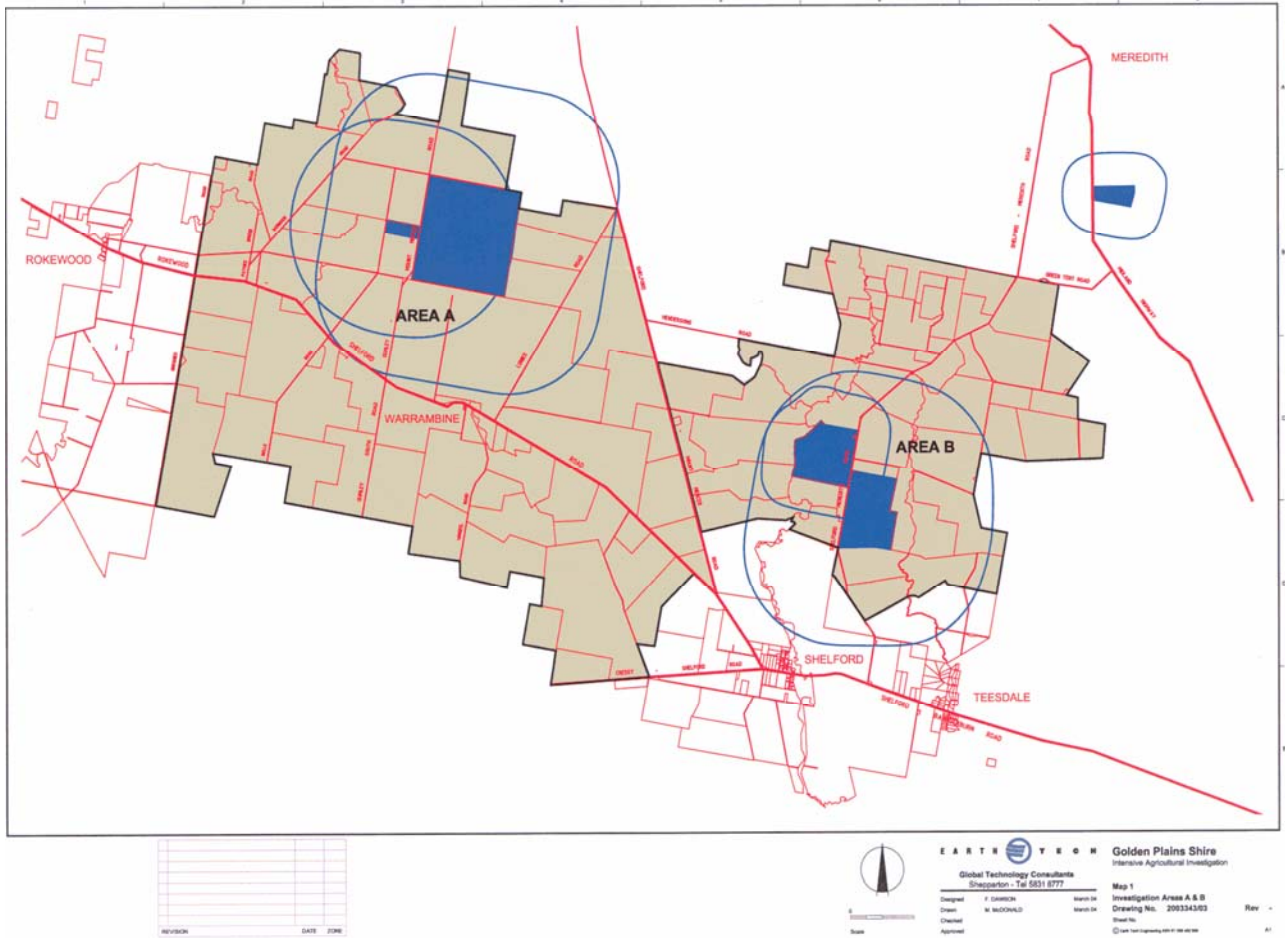
These two investigation areas are highlighted in Plan No. 1, which depicts:

- The location of towns and key roads.
- Property cadastre aggregated to common ownership (tenements).
- The location of existing intensive agriculture businesses, including separation distance "buffers".

Plan No. 2 depicts an aggregation of the planning overlays applying the two investigation areas.



Plan Number One





Landholder feedback

Following the selection of the Investigation Areas using environmental, infrastructure and economic criteria, the landholders within the affected area were consulted two ways.

- Face to face meetings were held at the homes/farms of about 25% of all landholders. The approach was random, with both direct approaches and preset interview times used.
- A letter was sent to all landholders in the identified investigation areas outlining the project and requesting feedback by letter, email, fax or phone call.

The letters generated written replies (fax, email and letter) and several phone calls. Respondents were contacted after receiving their information as a follow-up to certain questions raised, and to acknowledge receipt.

All landholders contacted by phone, face to face or in writing, were advised that this was an investigation only, and that if any changes to current land use or planning provisions for the areas were to occur, then full consultation through the normal public processes (advertisement, notification of exact changes in writing, feedback periods) would also occur. They were advised that the most likely changes could involve adjustments of the local Planning Scheme, and increased development applications.

The landholder issues that arose from these discussions/contacts are summarised below:

- There is a trend toward larger parcels of land to accommodate the separation distances required for intensive animal production. The relatively small number of large property tenements in the two investigation areas is evidence of this trend.
- Investors are frustrated by inadequate infrastructure for intensive agriculture, particularly water and three-phase power, roads and to a lesser extent, natural gas.
- Landowners in the investigation areas have a tolerance for intensive animal production and recognise the investment opportunities these industries present.
- "Traditional" farmers see the opportunity to continue grain growing in conjunction with intensive agriculture.
- On a specific issue, the landowners along the Shelford Meredith Road consider this local road will require upgrading if the intensity of investment activity increases.

The overwhelming response to the letter was positive and supportive of both the process and the development of the investigation areas for intensive agricultural industries.

Two responses were strongly opposing any intensive agricultural proposals in the area. The key points raised were:

- ethical objections to intensive agriculture from a respondent who would rather see Golden Plains Shire 'take a lead into the future and promote healthy safe and ethical farming practices'
- the potential for conflict between biodynamic land uses and production systems versus intensive poultry systems, and the need for sound buffer zones



- concerns re outbreaks of disease in concentrated areas of intensive industries
- odour emission control
- water availability and costs to the environment not being justified if additional water were to be sourced
- concerns re existing piggery development and the effect on the environment being “unknown” to date
- concerns re the consultation process

Industry feedback

Feedback has also been obtained from private industry with interests in the investigation areas. The comments and issues raised include:

- The urgent necessity for Western Plains Pork to obtain a 3-phase electricity supply to facilitate expansion of their existing facility.
- The desirability of establishing a feed mill near the investigation areas for the poultry and pig industries (this facility will also require 3-phase power and preferably, natural gas).
- The study should emphasise support for the growth of existing businesses in the investigation areas as well as new investment.
- Acknowledgement that the entities with the most interest in biosecurity are the businesses themselves. The determination of separation distances between uses is therefore as much an industry responsibility as it is a planning exercise.
- The most effective buffers are those acquired by the intensive agriculture business and then leased back to farmers for compatible farming activities. The opportunity for farmers to offer long-term leases to the broiler and pig industries may also provide greater flexibility for investors.
- Established businesses in the investigation areas have been keeping environmental records on soils and water table condition for some years. This information can be used to benefit the study.
- Potential for the storage and use of water from local streams during periods of peak flow.



Potential Solutions

A Solution Development Discussion Paper (March 2004) was discussed by the Stakeholder Advisory Group, and was circulated widely for comments during April 2004.

As a result, the following presents a summary of potential solutions for the development of intensive agriculture in the Golden Plains Shire.

Issue	Potential solutions summary
Planning controls	<ul style="list-style-type: none"> • Include investigation areas in the proposed new Farming Zone, with an emphasis on protecting intensive agribusiness from subdivision or excision. • Plan for new agribusiness development outside areas covered by environmental overlays (ES02, ES03, VP02) and determine management protocols for the SMO (Salinity Management Overlay) and the LSIO (Land Subject to Inundation Overlay) where applicable. • Encourage new investors to acquire sites large enough to encompass separation areas; i.e. to enable control over future subdivision. • Consider the introduction of a new VPP overlay – e.g. Agriculture Protection Overlay (APO) to apply over areas where there is significant intensive agriculture investment and rural employment. APO to operate in a similar manner to the Airport Environs Overlay (AEO), that is; applications for subdivision and development within the overlay area are referred to the agribusiness enterprise for comment as part of the planning assessment process.
Catchment protection	<ul style="list-style-type: none"> • Locate intensive agriculture away from natural drainage lines. • Identify native grassland areas to avoid or minimise damage resulting from building activity. • Where appropriate, elevate on pads, or bund animal housing areas to provide 100% flood protection. • Locate and design overflow dams to contain waste. Design 'wetland' treatment areas to 'strip' nutrients between overflow storage and the natural drainage system.



Issue	Potential solutions summary
EPA requirements	<ul style="list-style-type: none"> • Consider a submission to the '<i>Taylor Report</i>' <i>A Study to Assess Options for the Continued Growth of the Victorian Broiler Industry</i>, in particular: <ul style="list-style-type: none"> ○ Criteria for 'triggering' an Environmental Risk Assessment (ERA). ○ Scope of an ERA, particularly in relation to the relevance of odour assessment/modelling in low density rural areas. ○ Clearer compliance relationship between the Broiler Code and EPA requirements.
Biosecurity	<ul style="list-style-type: none"> • Request peak industry body in the poultry and pig industries to advise preferred biosecurity separation distances between industries (e.g. pig breeder/grow out, poultry broiler/breeder, mushroom production, feed lot etc.). Victorian Farmers Federation, DPI and AQIS to advise. • Identify target areas for investments in Investigation Areas A and B based on biosecurity separation distances.
Infrastructure	<p><i>Water</i></p> <ul style="list-style-type: none"> • Consult with landowners in the Investigation Areas A and B to ascertain support for a water main extension. • Request Central Highlands Water to undertake engineering and cost feasibility for an up-graded/new water pipeline by extending the Ballarat-Rokewood line from Rokewood towards Shelford within the Central highlands District. • Include on-site storage as a pre-requisite for development to maximise the capacity and effectiveness of the proposed pipeline. • Request Barwon Water to apply their network model to: <ul style="list-style-type: none"> ○ Upgrade the water main from She Oaks (sourced from Lal Lal Reservoir near Ballarat and Stony Creek at Ballan) to the Area B corridor via Green Tent road (or similar route). ○ Assess cost of upgrade (noting that an existing trench has been cut through rock and presumably can be used for a new pipeline). • Include Area A and B pipelines in an infrastructure 'package' for State Government assistance, based on industry commitment and employment outcomes.



Issue	Potential solutions summary
Infrastructure (cont)	<ul style="list-style-type: none"> • Investigate water demand; suggest an anticipated 300ML p.a. capacity in each corridor to cater for poultry and pig investment. <p><i>Power and gas</i></p> <ul style="list-style-type: none"> • Request Powercor to conduct a feasibility assessment of the up-grade of 3-phase power in Investigation A and/or B for the purpose of attracting a processor to the area (e.g. feed mill). • Assess the viability of co-generation to reduce peak load demand. • Consult with the gas provider to determine the volume of gas required to justify a decompression unit (up to \$0.5M cost) and the distance the gas can be economically reticulated for a single industrial user. <p><i>Roads</i></p> <ul style="list-style-type: none"> • Request Vic Roads prepare a cost assessment for the upgrading of a key access intersection within Investigation Area A (e.g. Lonies Road/Shelford-Rokewood Road). • Assess the existing condition of the Shelford-Meredith Road as an access to the agribusiness investment sites. Obtain a cost estimate of a future up-grade and the traffic volume required to 'trigger' this work.

In terms of environmental solutions, a checking matrix was developed to ensure that all considerations of relevant legislation planning codes and preferred separation distances will be taken into account during the Implementation Stage.

Environmental Solutions Check Matrix

Use	Planning	Biosecurity	Environmental
Poultry (Broiler Farm)	Locate in an appropriate zone. (Farming Zone?) Consider introduction of Intensive Agriculture Overlay. Assess impact on surrounding land-uses.	Avoid proximity to streams and dams to minimise interaction with wild avian population.	Establish the requirement for an Environmental Risk Assessment (ERA) if the farm exceeds 320,000 birds.



Use	Planning	Biosecurity	Environmental
Poultry (Broiler Farm) (cont)	Planning Overlays. (Avoid or comply with Environmental Significance Overlay (ESO), Salinity Management Overlay (SMO), Vegetation Protection Overlay (VPO), Land Subject to Inundation Overlay (LSIO) and Rural Floodway Overlay (RFO).	Ensure quality and reliability of water supply is satisfactory for poultry farming. Consider onsite storage and treatment.	Identify potential impact on the natural drainage system and ground water reserves through consultation with the Catchment Management Authority (CMA) – linked to planning overlays assessment.
	Comply with Victorian Code for Broiler Farms, note particularly separation distances for different classes of farm. Incorporated in the Victorian Planning Provisions (VPP).	Minimum separation from pig industry farms 1 km.	Assess potential for greenhouse abatement through farm design, orientation and energy efficiency.
Pigs	Locate in and appropriate zone. (Farming Zone?) Consider introduction of Intensive Agriculture Overlay. Assess impact on surrounding land-uses	Ensure quality and reliability of water supply is satisfactory for pig farming. Consider onsite storage and treatment.	Identify potential impact on the natural drainage system and ground water reserves through consultation with the Catchment Management Authority (CMA) – linked to planning overlays assessment.
	Planning Overlays. Avoid or comply with Environmental Significance Overlay (ESO), Salinity Management Overlay (SMO), Vegetation Protection Overlay (VPO), Land Subject to Inundation Overlay (LSIO) and Rural Floodway Overlay (RFO).	Minimum desired separation between pig industry farms is 3 km. Minimum desirable separation from other intensive production uses such as poultry is 1 km.	



Costs

From the investigations into key industry requirements, issues regarding the development of intensive agriculture in the shire and the development of possible solutions, it was found that three key elements of infrastructure (water, 3-phase power and b-double road access) are pre-requisites for intensive agriculture investment in the investigation areas.

Accordingly, the cost of providing these services has been assessed. The cost assessments are preliminary and have been calculated purely for the purpose of a cost overview. Further detailed assessment will be required during the implementation phase.

Water

Access to a reliable water supply is essential for intensive agriculture. For biosecurity reasons, most farms will also treat their water on-site before delivery to the animals. On-site water storage (generally in tanks) is also required to allow for off-peak supply.

Investigation Area A (Shelford to Rokewood Corridor) can be supplied by Central Highlands Water from Ballarat via the pipeline to Rokewood.

As the basis for the evaluation, it has been conservatively estimated that Area A could attract three piggeries and six broiler farms (i.e. each farm to grow 320,000 birds in 7-8 sheds). There is also the potential for a feed mill and other forms of intensive agriculture such as a feedlot (subject to biosecurity and water demand).

The following criteria were used to determine the number of potential farms:

- the dimensions of the corridor (approximately 15 x 10 kms)
- existing farms
- number of property tenements
- distance from Rokewood to Shelford
- separation distances between farms

Central Highlands Water have costed a system that will deliver 1ML of water per day over a 12 hour period to a central point in Investigation Area A. The assumption is that private connections will be constructed from this line.

The best option is considered to be from the Enfield tank to the Gumley area via Dereel and Pinchgut Creek. An upgraded 200mm pipeline would be constructed from Enfield to a new 1ML or 2ML tank between Dereel and Corindhap (approximately 11 km), where a new 200mm pipeline would be constructed east from this tank (following intersecting roads) to a central supply point near Wurrook Road or the Gumley-Mt. Mercer Road (approximately 15km).

The total cost of the Option 1 up-grade is estimated to be \$4.0M. Private mains could be constructed from this point for approximately \$60.00 per metre.

Assuming, for example, that the new system was to be entirely privately funded, that 9 new farms were to establish over a 5 -10 year period and each farm was an average of 5km from the trunk line, and then the average cost per farm would be in the order of \$750,000.

If State Government contributed on a \$1 for \$1 basis to the trunk main, the average cost would drop to \$500,000. This would fall again to approximately \$300,000 per farm if the State paid for 100% of



the trunk system and individual farms paid for their private extensions. A cluster development close to the trunk main would reduce the estimated per farm cost.

The case for State infrastructure assistance will be strengthened if a company and/or group of investors were prepared to commit to establishing farms over a given time-frame (say 3-5 years).

Investigation Area B (Shelford to Meredith Corridor) represents a different situation, in that there is already a distribution system in place supplying approximately 80 properties from a 150/100mm main from Meredith to Shelford. However, due to commitment to township customers, there is no excess capacity in the existing system.

Augmenting the existing system by upgrading the water treatment plant, constructing a new clear water storage and providing a new 150mm pipeline through Investigation Area B is estimated to cost \$4.85M. Cost per farm for a new cluster of intensive agriculture businesses is therefore likely to be similar to Investigation Area A.

In both investigation areas, the opportunity exists for existing farms to take advantage of the improved water supply, which may serve to reduce the overall cost apportionment. New intensive agriculture investors may also seek to lease their sites on a long term basis from existing landowners. This could provide the opportunity for existing farming activities to continue around, the broiler farm or piggery footprint.

Considering a cluster of farms comprising for example, 3 piggeries and 6 broiler farms with appropriate separation distances in either Investigation Areas A or B, the likely cost to obtain water reticulated to the farm gate is \$300,000 to \$500,000 per farm. As mentioned earlier, within the farm, on-site storage and treatment facilities will need to be provided.

The above cost range is based on the assumption that government will contribute dollar for dollar to the trunk main up-grade. This is to be pursued further over time; part of the initial cost incurred by early developers could be rebated as new investors take advantage of the supply.

3-Phase Electricity

Powercor has assessed the augmentation of their existing system to provide 3-phase power to Investigation Areas A and B.

Power consumption was calculated on the following assumptions:

- Broiler farm 150 kVa / farm
- Piggery 20 kVa / farm
- Feed mill 300 kVa

Powercor estimate the total project cost to be \$3.45M (excluding GST), made up of \$2.35M of backbone upgrade costs to reach areas A and B and \$1.1M of costs to provide supply points within these areas.

The above system would be able to service approximately 18 broiler farms, 6 piggeries and a feed mill. There is scope for a progressive up-grade, depending on the location of the first cluster of farms. The above cost estimate may therefore be reduced if specific sites are targeted.



B-double Truck Access

The principal roads through the centre of each investigation area consist of a rural main road (Area A) and a local road (Area B). Broiler farms and piggeries require the services of b-double freight trucks, with the frequency of vehicle movements geared to the production breeding cycle. The number of vehicle movements is not dissimilar to normal farming operations, however, the size of the vehicles requires that intersections of main roads with local access roads need to be designed for safe turning movements. Each intersection requires a design specific to the local situation, however, it can be expected that an intersection treatment suitable for B-double movements can cost between \$100,000 and \$200,000.

It is expected that one intersection up-grade will be required in Area A, either at the intersection of the Rokewood Shelford Road with the Gumley-Mt. Mercer Road or Lonies Road.

In Area B, the Shelford Meredith Road may require up-grading as a local road. This is estimated to cost \$1.35M, but could be applied to a shorter distance, depending on the location of the farms. On this road, a preferred intersection is not evident at this stage, but the location of existing or proposed farms indicates that turning movements from the Shelford Meredith Road directly onto abutting properties may be required.

In terms of farm clusters, the above information clearly identifies a cost advantage of establishing a 'shared' intersection.

Cost Summary

There are many variables to consider in determining infrastructure costs for intensive agriculture. An accurate assessment cannot be completed until a specific development area has been located and the number of participants identified. However, as a result of the co-operation and assistance of service authorities and the Golden Plains Shire, an appreciation of the cost can be obtained.

A cluster of six broiler farms and 3 piggeries, developed over a 3-5 year period and located in accordance with their respective Code of Practice guidelines, could expect to incur infrastructure contributions for water, power and road access of between \$500,000 and \$750,000 per farm. This assumes a dollar for dollar government contribution the water supply trunk main. This cost could reduce with further government contributions for works (e.g. roads) and from rebates obtained from additional farms benefiting from the new infrastructure over time.

Both the pig and poultry industries have expressed support for a new feed mill to be established in the Golden Plains area to service the existing farms and future development. A feed mill established within or close to the investigation areas could make a substantial contribution to the cost of infrastructure, which would benefit individual farms. At this stage, there is insufficient information to assess the contribution from a feed mill.

As part of the industry consultation during this project, the poultry industry has offered the view that establishing a 'basic unit' broiler farm (200,000 birds in 4 sheds) will cost between \$2.7M and \$3.0M. The above infrastructure assessment implies that between 20-25% of this cost can be attributed to essential infrastructure.

The implementation phase will require confirmation that this expenditure is acceptable in terms of investment return.



Benefits

Intensive agriculture industries (in particular, pig, poultry and mushroom production), are seeking long term, sustainable locations for future investment. The environmental and amenity issues required to be addressed in establishing a new farm are onerous in terms of time and cost. This is causing existing farms to attempt to expand within their existing locations, when a new location would be preferable.

Golden Plains Shire, through their proactive and sensitive approach to developing and encouraging intensive agricultural industries, and through implementing the solutions identified in this study, can provide significant benefits to both industry and the shire.

Location

Golden Plains Shire is well located in relation to the Geelong/Melbourne Region. Barter Steggles is a major poultry processor, well established in Geelong and seeking to develop long term grower relationships in the region.

The investigation areas identified in this study contain existing pig and poultry enterprises that are seeking to expand. Permits have also been issued for new farms within these areas.

The attributes of the investigation areas include:

- Very low development density.
- Close to employment sources in Geelong, and in the nearby towns of Shelford, Rokewood and Meredith.
- No significant environmental constraints (e.g. native vegetation, flood prone land or inappropriate terrain). Existing streams within the investigation areas are protected by Environment Significance Overlays.
- Access to essential infrastructure.
- Sufficient area to establish protection areas around the adjoining towns.
- A high acceptance level from rural landowners.

As mentioned in the issues discussion, while broiler and pig industries apply their own biosecurity separation distances between farms, there is also a case for aggregation within this framework. Aggregation provides for better management of diseases. This is a significant factor in favour of the nominated Golden Plains areas.

For the nominated Golden Plains areas, the development of new farms is of interest to Barter Steggles (Geelong), particularly as many of their existing suppliers have old shedding that needs to be replaced.

Economic benefits

The benefits derived from creating a rural precinct for intensive agriculture include:

- Local employment on farms and in providing support services.
- Improved viability for small towns.
- The ability for Barter Steggles to expand processing capacity, with commensurate benefits for employment in Geelong.
- Establishing a threshold for a new feed mill to service the pig and poultry industries.



- Improved viability for existing rural landowners through long term leasehold arrangements.
- The opportunity to construct 'best practice' broiler farms and piggeries to replace older facilities.
- Reduction in the number of farms located close to urban development.

Employment

Employment developments within the Golden Plains Shire as a result of the development of extensive agriculture have been estimate on a per farm basis using figures provided by existing industry in the Golden Plains Shire.

The main generator of jobs in the broiler industry comes mainly from the skilled labour required for the processing plants. This is another reason for developing a closer association between grower and processor in terms of total employment benefit. Barter Steggles currently employ in the Geelong area associated with processing.

Poultry production: Based on an average 200,000 bird (4 shed operation) it has been estimated that 9 staff are required (see attachment 2 for calculations). In addition, the construction phase will require 2-3 fulltime employees, and maintenance throughout the period of operation involves tradesman (plumbers, electricians, mechanics etc).

At this stage, Barter itself would expect to expand by at least one farm per year (approximately 5%).

Pig production: Numbers provided by Western Plains Pork indicate that at their current levels of productions (1 500 sows, and 12 000 growing pigs) they employ 13 fulltime staff and 5 contractors.

Feed mill

During the course of this study, it has become apparent that Barter Steggles are searching for an appropriate location to site a feed mill within an hour of their Geelong production facility. The required infrastructure and preferred siting criteria have been stated earlier in this report.

It is anticipated that the expenditure will be about \$15-20 million to build a new plant spread over two stages and that it would employ 30 people plus six contractors.

Considerable goodwill has been developed through this pilot study and Stakeholder Advisory Group between both Barrters and Golden Plains Council, as well as other potential industry beneficiaries (customers) of the feed mill.

Possible Funding Sources

Following the determination of the costs of infrastructure provisions to the identified Investigation Areas, there is a case to develop applications for infrastructure assistance from the State Government, through the Regional Infrastructure Development Fund. Assistance may be also available through the Federal Government Regional Partnership Program, delivered by the Geelong Area Consultative Committee.

The **Regional Infrastructure Development Fund** provides support for capital works in regional communities to (amongst others):

- Support new industry development including physical works to facilitate economic development



- Link transport infrastructure, including roads, rail, ports or airports of regional significance

Projects are selected which enhance the development of rural and regional Victoria, and are assessed against criteria which address real needs and deliver real benefits.

The project application needs to clearly demonstrate that it:

- Enjoys local community and industry support
- Is Consistent with ecological sustainable development
- Builds on identified key regional strengths
- Adds value to existing products and services
- Attracts investment and complements other investments in the region
- Creates jobs and stimulates regional economic growth
- Provides an adequate social and economic return to the community
- Facilitates the integration of the region into global markets

It is clear from the above that the case for State Government assistance will require active participation of private industry, and investment commitment. It may be possible to develop a "Stage One" selection of sites based on expressions of commitment from existing or new intensive agriculture industries in the identified Investigation Areas.

The **Regional Partnership Program** is based on the federal government's approach of working in partnership with communities, government and private sector to foster the development of self reliant communities and regions (consistent with the policy framework "Stronger Regions, A Stronger Australia").

Through the Regional Partnership Program, the Commonwealth Government will partner projects that focus on:

- Strengthening growth and opportunities by investing in projects that strengthen and provide greater opportunities for economic and social participation in the community
- In improving access to services by investigating in projects that, in a cost effective and sustainable way, support communities to access services. In particular those communities in Regional Australia with a population of less than 5,000
- Supporting planning by investing in projects that assist communities to identify and explore opportunities and to develop strategies for action
- Assisting structural adjustment for communities by investing in projects that assist specifically identified communities and regions to adjust to major economic, social or environmental change



A successful application/project must demonstrate that it:

- Provides benefits for the community by:
 - Meeting a demonstrated need or community demand for the project's outcomes
 - Filling a market gap
 - Adding value to existing resources, products or business

- Creates or enhances opportunities in the community by:
 - Establishing new, diversifies or expanded business in responses to demonstrated markets
 - Creating new economic/employment opportunities, including job creation
 - Providing infrastructure that enhances economic/social opportunities
 - Enhancing interaction in the community that will lead to an improvement to the community as a whole
 - Delivering diversification of skills and/or demographics in location
 - Increasing the uptake of innovation, best practise or new technologies

Community support and industry partnerships are vital to the application and to the successful ownership of the project.

Both of these programs appear suitable for the development of funding applications for infrastructure development and more detailed Stage One site developments.



Implementation Plan

The following table summaries the key steps to be taken to develop the solutions and achieve the desired outcomes for Golden Plains Shire which is “to ensure community and industry certainty in planning for intensive agriculture industries in the Golden Plains Shire”

These steps have been derived from the potential solutions.

Action	Progress	Responsibility
1. Suitable Locations 1.1 Identify appropriate areas for the development of intensive agriculture industries in Golden Plains Shire	Investigation Areas A & B identified, and refined to meet all criteria	Consultants
2. Planning Controls 2.1 Include investigation areas in the proposed new farming zone, with an emphasis on protecting intensive agribusiness from subdivision or excision 2.2 Consider introduction of new VPP overlay – eg. Agricultural Protection Overlay (APO)	Response to “Taylor Report” outlining merits of new planning overlay for VPPs Draft APO appended to this report Approval required from DSE (see recommendations)	Consultants Golden Plains Shire DSE
3. Environment 3.1 Use Environmental Solutions Checklist for planning, biosecurity and environmental ‘first run’ assessments	To be used when liaising with developers about specific sites within the Investigation Areas and through development approval process	Golden Plains Shire



Action	Progress	Responsibility
<p>4. Infrastructure Developments</p> <p>4.1 Investigate sources of funds to provide necessary infrastructure projects designated to facilitate investment</p> <p>4.2 Develop draft applications form finalisation and lodgement by Golden Plains Shire</p>	<p>Several funding sources identified</p> <p>Underway</p>	<p>Consultants</p> <p>Consultants</p>
<p>5. Industry Investment</p> <p>5.1 Identify potential industry investors and owners who are willing to proceed with expansion or new intensive agricultural industry development in Identified Investigation Areas</p> <p>5.2 Call for expressions of interest to invest in intensive Ag. Industry within investigation Areas A & B</p> <p>5.3 Following receipt of expressions of interest, request Barwon Water and Central Highlands Water refine their initial water cost estimates to facilitate a "Stage One" development</p> <p>5.4 Similarly request Powercor to provide more detailed cost estimates for 3-phase power to EOI selected sites</p>	<p>Several potential investors identified</p> <p>See Recommendation One</p>	<p>Consultants</p> <p>Golden Plains Shire</p> <p>Golden Plains Shire</p> <p>Golden Plains Shire</p>



Action	Progress	Responsibility
<p>5.5 Refine funding applications based on above information to assist with Stage One infrastructure developments</p> <p>5.6 Investigate the potential for group scheme in conjunction with infrastructure providers</p> <p>5.7 Develop the identified expenditure and returns into specific benefit cost analysis on a per farm development basis (for attraction of industry)</p>		Golden Plains Shire
<p>6. Spin off Projects</p> <p>6.1 Continue discussions with Barrter and other local industries regarding locations and timing for a new feed mill (consider facilitating a joint venture approach)</p> <p>6.2 Investigate the potential for value adding industry to process intensive animal industry waste for commercial fertiliser products</p>		<p>Golden Plains Shire</p> <p>Golden Plains Shire</p>



Recommendations

1. That Council invite expressions of interest from landowners and industry to develop a best-practice farm cluster within the investigation area as a basis for proving the case for public and private infrastructure investment.
2. That Council request the Department of Sustainability and Environment to evaluate the use of an Agriculture Protection Overlay to provide long term protection for intensive agriculture investment.
3. That Council requests the EPA to define agreements on buffer distances for individual farms versus a cluster of farms. This project has the potential for the EPA to become a "partner" in a best practise solution.
4. That the Implementation Plan is reviewed regularly (for progress and refinement) and incorporated into both the Council's Planning Development Process and the Economic Development Process.



Attachments



Attachment One: Agriculture Protection Overlay (Draft)

Shown on the planning scheme map as APO with a number.

Purpose

To implement the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.

To protect areas within the overlay from subdivision and land uses that may jeopardize the operational viability, biosecurity or sustainability of agricultural enterprises.

To encourage the preparation of agricultural management plans by local landowners.

To ensure that land use and development in the APO area are compatible with the conduct of agribusiness in accordance with a local agricultural land management plan.

To limit the number of people residing in an APO area who are not involved with the business of agriculture.

Use of land

Any requirement in a schedule to this overlay must be met.

Construction of buildings

Any building proposed to be constructed in an area that may result in the alteration to or performance of an existing Code of Practice separation distance or buffer area associated with an existing agricultural enterprise must be referred to the adjoining owners of land under Section 55 of the Act. This requirement may be waived when, in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and landowners.

Subdivision

A permit is required to subdivide land.

An application to subdivide land must be referred to the adjoining owners of land under Section 55 of the Act where the performance of existing biosecurity guidelines, Code of Practice separation distance requirements and or statutory buffers distances are likely to be detrimentally affected. This requirement may be waived when, in the opinion of the responsible authority, the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and landowners.

Decision guidelines

Before deciding on an application, in addition to the decision guidelines in Clause 65, the responsible authority must consider, as appropriate:

- The State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement and local planning policies.



- Whether the proposal will result in an increase in the number of dwellings and people affected by or likely to affect existing agriculture.
- Whether the proposal is compatible with the present and future operation of existing agricultural enterprises in accordance with an appropriate local agricultural management plan.
- The views of owners and/or lessees of agricultural enterprises.

Notes: Refer to the State Planning Policy Framework and the Local Planning Policy Framework, including the Municipal Strategic Statement, for strategies and policies that may affect the use and development of land.

Check the requirements of the zone that applies to the land.

Other requirements may also apply. These can be found at Particular Provisions.

Schedule to the Agriculture Protection Overlay

Shown on the planning scheme map as **APO (designated number)**.

Requirements

An application to use land for the following uses must be referred to adjoining landowners and occupants under Section 55 of the Act unless in the opinion of the responsible authority the proposal satisfies requirements or conditions previously agreed in writing between the responsible authority and the landowners:

- Abattoir
- Accommodation
- Animal boarding
- Bed and breakfast
- Broiler farm
- Cattle feedlot
- Caretaker's house
- Dwelling (other than Bed and breakfast)
- Intensive animal husbandry
- Place of assembly



Attachment Two: Broiler Farm Employment Calculations

Based on the average 200,000 bird 4shed farm, and 5.8 batches per year

Broiler farm employees	2.50 full time employee (FTE)
Supply of litter 48 loads @ 3 hr trips per batch with 5.8 batches equals 22Weeks	0.50 FTE
Delivery day olds 2 days 6 days per year i.e. 12 days	0.05 FTE
Feed delivery 22 delivery per batch, @ 4hr per trip 5.8 batches per yr 13.5 person weeks	0.28 FTE
Clean out 2days x 2 persons x 5.8 batches	0.10 FTE
Washing down 2 days x 1 person x 5.8 batches	0.05 FTE
Production of feed Mill produces 8 tonnes of feed per man Hr 200,000 birds use 814 tonnes per batch therefore 814 x 5.8 =4721tonnes i.e. 590 man hours	0.32 FTE
Feed delivery 22 delivery per batch, = 13.4 wks therefore 22 x 5.8 x 4hr per trip	0.28 FTE
Bird pick-up 5500 birds per person per night therefore 36.4 days per person for 200,000 birds. i.e. 210 days per year	0.88 FTE
Service men 5 hr per week per farm i.e. 260 hours	0.15 FTE
Remove litter Equiv to 22 weeks	0.50 FTE
Inoculation 2days x 2 persons 5.8 times per year	0.50 FTE
Processing thru put 60 birds per man hr therefore 3333 man hrs to process 200,000 birds. i.e. 87 weeks	1.81 FTE
Transport birds to farm 40 loads/200,000 farm x5,8 batches and 3hr per trip	0.38 FTE
Distribution of product 25,000 boxes per farm per batch, 50 boxes per pallet 10 pallets per truck therefore 50 truck loads by average 4 hrs i.e. 200 hr x 5.8 = 1160 hrs	0.64 FTE
TOTAL	8.94 FTE

This figure of say 9 employees produced in the industry per 200,000 bird farm does not include such things as the use of tradesmen i.e. electrician, plumbers mechanics etc



Attachment Three: Funding Application Material (Draft)

*REGIONAL INFRASTRUCTURE DEVELOPMENT FUND
Application Form*

1. Project Name:

2. Organisation's Details:

Name of organisation:

Address: Postcode:

Name of project manager/contact person:

Position/Title:

Address: Postcode:

Telephone: Fax: Email:

Legal status of organisation:

Date of establishment: ACN No.

Is the applicant registered or required to be registered for GST purposes? YES NO

If yes, provide ABN No.:

If no, provide detail of exemption from registration for GST:

Can the organisation enter into a legally binding agreement? YES NO

★ If no ABN is provided, the Department may be required to withhold up to 48.5% of the Grant Monies pursuant to the PAYG requirements and remit that amount to the Australian Taxation Office

★ Non-government Applicants: Please attach copies of Articles, Memorandum, Constitution, Certificate of Incorporation/Association/Registration etc.

3. Council/s endorsing application

(Budget Sector Government Agencies do not need Council Endorsement)

Details of Council/s endorsing application:
Name of council/s:



Council/s contact:

★ *Please attach written confirmation from each Council's Chief Executive Officer indicating support for this project. Application must have Council's endorsement to be considered eligible.*

4. Project details:

Project name:

Project description (in 200 words or less):

Project Objective:
(dot points)

Total Project Cost: \$

RIDF Amount sought: \$

Project address/location:

Town:

Postcode:

Map reference (please tick one) Melway VicRoads Page and Grid Reference:

Who owns the land where the project is to be located?:

If the facility is leased, what are the terms of the lease?

Has a previous application been submitted or will an application

be submitted to any other Government agency for this project? YES

NO

If yes, please give details for each application.

Year: Funding Agency: Funding Program:

Name:

Funding Status:

Preliminary discussions Successful Unsuccessful

Not yet processed



5. Assessment criteria:

Submissions need to demonstrate the applicant's ability to meet a **significant** number of criteria in the following categories:

- a) Socio Economic;
- b) State and Regional priority;
- c) Project feasibility and delivery;
- d) Victorian Industry Participation Policy Statement
- e) Financial

Provide a concise and clear statement (**in 200 words or less**) in response to each **dot point** as outlined below in the sections entitled 'Socio-economic', 'State and Regional priority', 'Project feasibility and delivery', 'VIPP' and 'Financial'. In addition, please fill in the appropriate tables in the section entitled 'Financial' relating to:

- details of all confirmed and anticipated sources of finance for this project; and
- breakdown of projected expenditure required to complete the project

(a) Socio-economic

Demonstrate how the proposed project enjoys local community and industry support.
e.g. outcomes of community consultation process if appropriate.
(written confirmation of support required)

Show how the proposed project is consistent with ecologically sustainable development

Indicate how the proposed project builds on identified key regional strengths



Indicate how the proposed project adds value and benefit to existing products and services

Show how the proposed project attracts investment and complements other investments in your region

Demonstrate how the proposed project creates ongoing jobs and stimulates regional economic growth

Please quantify direct and indirect benefits arising from the completed project.

Demonstrate how the proposed project provides social and/or economic return to the community.

Show how the proposed project facilitates the integration of your region into global markets

(b) State and Regional priority

Show how the proposed project is consistent with objectives and key outputs of local or regional economic development strategies.

(Your council or regional development organisation may be able to provide information or assistance.)



State how the proposed project is consistent with the Victorian Government's stated policy commitments to regional Victoria.

(c) Project feasibility and delivery

Outline who will be managing the project during its implementation (construction phase) and indicate relevant project management experience.

Demonstrate that all the following issues have been satisfactorily identified and resolved (or resolution strategies in place):

- legal;
- land tenure;
- planning; and
- environmental issues.

e.g. is the project or part of the project subject to any planning, environmental or heritage approval, permit, licence or assessment requirement?

***Outline the project timeframe with key project milestones.
In dot points and attach relevant spreadsheet(s)***

Identify project risks and how these are to be managed.

e.g. potential slippage in timelines; project cost overruns, changes to financial contribution etc



(d) Victorian Industry Participation Policy

Recipients of grants greater than **\$1 million** are required to complete a Victorian Industry Participation Policy (VIPP) Statement. This statement includes three reporting requirements: the level of local content; the number of new jobs created; and possible skills and technology transfer generated by the project. Please state how your project meets these requirements.

(Information on the VIPP is available by calling 13 22 15 or at www.dsr.d.vic.gov.au)

Level of Local Content

Please specify the level of local content (Victoria/Australia/NZ) value added, expressed as a percentage of the overall contract price.

The number of new jobs

Skills and Technology transfer generated by the project

Identify the opportunities for increasing the skills of Victorians and Australians and the potential to undertake innovation, research and the development of technology.

(e) Financial

Your application must include : -

- a) an outline of the project's financial viability (feasibility study)



b) itemised project budget (attach quotes)

c) project cash flow.

Please attach business plan with management structure, cost benefit analysis, economic impact studies, etc (where available).

Provide details of all confirmed and anticipated sources of finance for this project.

It should be noted that those projects able to leverage/maximise funding support from a range of sources, including Commonwealth and local government, community, private sector and regional organisations will be considered favourably.

(Please note 'in kind' contributions are generally not accepted as part of the funding contribution to your project.)

Source	Confirmed	Anticipated	Total \$
Applicant			
Local Government			
Industry and community contribution			
Commonwealth Government (please specify)			
State Government (not including Regional Infrastructure Development Fund) (please specify)			
Other (please specify)			
Total			
Amount Requested from Regional Infrastructure Development Fund (exclusive of GST)			
Total Cost of Project			

- ★ Non-government applicants - Please attach Annual reports, audited financial statements (profit and loss statements, notes to accounts) of your organisation for the past three years.
- ★ Please provide copies of documentation confirming availability of other funding.
- ★ The project costs should be net of any embedded tax savings, that is, savings to be achieved by the removal or reduction of State and Federal taxes (eg wholesale sales tax) in conjunction with the introduction of the GST.





Statutory Declaration by applicant

All applications, other than those from Budget Sector Government Agencies, will be required to complete the following Statutory Declaration.

I, _____ of _____

in the State of Victoria do solemnly and sincerely declare that all information supplied in this application form, is to the best of my knowledge, accurate and complete and that the Department of Innovation, Industry and Regional Development will be notified of any changes to the information supplied and any other information or circumstances arising that may affect this application.

AND I make this solemn declaration conscientiously believing the same to be true and by virtue of the provision of an Act of Parliament of Victoria rendering persons making a False Declaration punishable for wilful and corrupt perjury.

DECLARED at _____)
in the State of Victoria)
this _____ day of _____)
200 _____)

Before me:

**Person before whom a statutory declaration may
be sworn –**

Refer section 107A Evidence Act (Victoria) 1958



Checklist

Before sending your application, please make sure you have (if applicable):

- attached copies of the Articles/Memorandum/Constitution, Certificate of Incorporation/Association/Registration etc
- attached a copy of your letter of endorsement from your local council/s
- attached your supporting statement covering each of the dot points outlined in the sections on:
 - Socio economic (including written confirmation of local community and industry support);
 - State and Regional priority;
 - Project feasibility and delivery (including relevant documentation/reports on social and/or economic returns)
 - Financial (including written confirmation of other funding sources) and copies of documentation confirming availability of other funding, annual reports, audited financial statements (profit and loss statements, notes to accounts) for the past three years.
- completed the tables detailing confirmed and anticipated sources of finance and detailed breakdown of projected expenditure
- attach copies of project concept design
- please attach copies of quantity surveyor estimates and or quotes
- factored in embedded tax savings in the calculation of project costs
- completed 'Statutory Declaration by Applicant'

Where do I send my application?

Send four copies of your application to:

*Project Manager
Regional Infrastructure Development Fund
Department of Innovation, Industry and Regional Development
Level 12, 55 Collins Street
MELBOURNE VIC 3000*

Submissions will be accepted throughout the year, to be evaluated on a case-by-case basis, subject to the availability of funding. Faxed or emailed applications will not be accepted.



For further information, contact:

*Project Manager,
Regional Infrastructure Development Fund
Department of Innovation, Industry and Regional Development
Phone: (03) 9651 9138
Toll-Free: 1800 817 059 (regional Victoria only)
Fax: (03) 9651 9360
Email: RIDF@rdv.vic.gov.au
Internet: www.business.vic.gov.au/RIDF*