

Development & Operational Overview



12 June 2015

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Overview of Existing and Proposed Facility Features

Current Site

- Central Victoria Livestock Exchange (CVLX) is currently located on approximately 12.3 hectares of land bound by Latrobe Street, Learmonth Street, Winter Street and Brazenor Street in Delacombe, approximately 5kms south west of the central business district of Ballarat
- The current facility is in excess of 50 years old. The characteristics of the existing facility:
 - Uncovered apart from limited working areas;
 - Predominantly concrete and cobblestone flooring;
 - o Requires weekly wash down of flooring to clean animal effluent;
 - Animal Effluent collected is discharged to the sewerage system;
 - Utilises over 35 ML of potable water annually in managing animal effluent and livestock consumption;
 - Due to the age of the facility it has inherent operational inefficiencies and animal welfare management issues;
 - Many sections of the facility does not comply with best practice; and
 - The facility is now completed surrounded by other urban uses.
- The current layout of the saleyard facility which has been developed in stages over a 50 year period means that the flow of livestock and operations through the facility is inefficient and disjointed.
- A large percentage of the sheep yard floor surface is a combination of concrete and cobblestone, which creates an environment that is less than best practice in respect of animal welfare, safety, operational efficiency, environmental management and maintenance.
- The required cleaning of the yard surfaces to manage animal effluent places a high dependence on potable water supply and as such discharges large volumes of high nutrient load effluent water as trade waste. Hence increasing substantially the demand on core infrastructure networks within the Ballarat Region.
- There is no roof covering the main sections of yards which results in any rainfall in the area being added to the trade waste system once it comes in contact with the concrete floor. Additionally, this is less than ideal from a livestock presentation, marketing and welfare perspective.
- The current site would be very difficult to redevelop in an efficient, cost effective manner and would necessitate the business closing for several months with operations disrupted for up to two years.

Proposed Site

- Relocating to the proposed location near the interchange of the Sunraysia Highway and Western Freeway will:
 - Reduce heavy vehicle traffic within Ballarat;
 - Improve transport efficiencies for vendors, buyers and livestock transports as a whole;

- o Facilitate substantial operational efficiency improvements;
- o Improve animal welfare outcomes and the marketability of livestock;
- Improve overall site workplace health and safety;
- Substantially reduce the volume of solid and liquid waste being treated in the Ballarat Trade Waste System;
- Significantly reduce the dependence on potable water making more available for core urban uses and requirements; and
- Facilitate superior presentation of animals to improve buyer competition increasing the returns to livestock producers within the region.
- Workplace health and safety benefits will include improved public access, greater separation of livestock and people, and improved amenities for all site attendees.
- The proposed new cattle facility will feature a 'soft floor' that is a recyclable which provides immediate quantifiable benefits in reducing animal stress, weight loss and dehydration.
- The proposed new sheep facility will feature a 'flow through' design which will substantially improve animal welfare outcomes, reduce time spent in the facility and improve the presentation of the livestock for sale.
- The sheep and cattle facilities will incorporate significant roof structures covering large sections of the facility which will result in a range of benefits to operators, patrons and livestock.
- The proposed 'soft floor' in the cattle facility will eliminate the need to wash down yard surfaces to remove manure substantially reducing the quantum of effluent being produced onsite. The By-product of this process is recyclable as landscaping material.
- The undercover component of the sheep facility will be swept, rather than washed, to collect any residual effluent that will be taken offsite for recycling through landscaping or to be used as fertiliser.
- The proposed new facility features dedicated public car parking and truck parking areas to facilitate safe site access and the separation of light and heavy vehicles moving around the site.
- Sheep/Lamb and Prime Cattle sales are held weekly. Store cattle sales are typically held monthly, except in February where 3-4 sales may be held during the month.

An analysis of the key differences in the facilities is summarised below;

Site Features	Existing Facility	Proposed Facility
Area (Ha)	12.3	44.5
Online Sale Capability	No	Yes
Prime Cattle	Weekly Monday	Weekly Monday
Store Cattle	3rd Friday each Month (except February)	3rd Friday each Month (except February)
Sheep and Lambs	Weekly Tuesday	Weekly Tuesday
Drive Through Truckwash	No	Yes
Water Type	Potable	Potable / Dam / Roof Capture
Paddock Holding Capability	No	Yes

Fresh Water Storage Capacity	0	7
(ML)		
Effluent Water Storage Capacity	2	47.8
(ML)		
Onsite Irrigation System	No	Yes
Onsite Canteen	No	Yes
Onsite Agent Offices	3	6
Weekly Washout Requirement	Yes	No
Onsite Effluent Management	Limited	Total System
Effluent Discharge from Site	Yes	No

* The areas highlighted in Green show the substantial positive differences between the two sites.

Sale Procedures and Facility Features

Cattle Facility



This facility is designed to have multiple reuse areas to increase the total available selling capacity without uneconomically increasing costs to the users by over capitalising the facility given that more than half of all cattle sales conducted will have less than 2,000 head per sale.

There is significant reuse of the delivery area of what is essentially the sheep pavilion for also holding cattle for sale and post sale for delivery.

The dedicated holding and feeding areas allows livestock to be mechanically fed both pre and post sale a feed ration that is balanced nutritionally to improve animal performance and comfort.

Description - Cattle	Existing Facility	Proposed Facility
Covered Area (sqm)	300	~9,000
Receival Area (sqm)	1,725	2,119
Selling Area (sqm)	4,866	3,168
Dual Purpose Selling (sqm)	0	8,150
Delivery Area (sqm)	2,880	9,101
Feeding / Holding Area (sqm)	2,035	1,748
Total Area (sqm)	11,506	16,136

Water Access - Receival	Yes	Yes
Water Access - Selling	Yes	Yes
Water Access - Delivery	Yes	Yes
Water Access - Holding	Yes	Yes
Weighing System	Platform	Individual and Platform
Dual Purpose Areas	No	Yes

Prime Cattle Sale Process

Description - Prime Cattle	Existing Facility	Proposed Facility
Receival Commences	Sunday 1pm	Sunday 1pm
Receival Completes	Sunday 9pm	Sunday 9pm
Weighing Methodolodgy	Preweigh	Preweigh or Post Weigh
Drafting Commences	3am Monday	4pm Sunday
Drafting Completes	9am Monday	9pm Sunday
Receival Area Flooring	Concrete	Soft Floor
Receival Roofing	No	Yes
Curfew (water only)	min. 6 hrs	min. 6 hrs
Public Access Commences	7am Monday	7am Monday
Selling Area Flooring	Concrete	Soft Floor
Selling Area Roofing	No	Yes
Sale Commences	9am Monday	9am Monday
Delivery / Holding / Feeding Area Flooring	Concrete and Gravel	Compacted Gravel
Delivery / Holding / Feeding Area Roofing	Partial	Partial
Departure Transport Commences	11am Monday	10am Monday
Departure Transport 80% Complete	7pm Monday	4pm Monday

* The areas highlighted in Green show the substantial positive differences between the two sites.

Store Cattle Sale Process

Description - Store Cattle	Existing Facility	Proposed Facility
Receival Commences	Thursday 12pm	Thursday 12pm
Receival Completes	Thursday 9pm	Thursday 9pm
Weighing Methodolodgy	Preweigh	Preweigh or Post Weigh
Drafting Commences	5pm Thursday	5pm Thursday
Drafting Completes	6am Friday	10pm Thursday
Receival Area Flooring	Concrete	Soft Floor
Receival Roofing	No	Yes

Curfew (water only)	N/A	N/A
Public Access Commences	8am Friday	8am Friday
Selling Area Flooring	Concrete	Soft Floor
Selling Area Roofing	No	Yes
Sale Commences	10am Friday	10am Friday
Delivery / Holding / Feeding Area Flooring	Concrete and Gravel	Compacted Gravel
Delivery / Holding / Feeding Area Roofing	Partial	Partial
Departure Transport Commences	2pm Friday	12pm Friday
Departure Transport 80% Complete	8pm Friday	6pm Friday

* The areas highlighted in Green show the substantial positive differences between the two sites.

Cattle Sale Information

- The following information is based on an analysis of five (5) years of CVLX sales data (3 May 2010 – YTD May 2015):
 - Prime cattle sale yardings:
 - The average number of prime cattle presented for sale = 378;
 - The 85th percentile yarding of prime cattle presented for sale = 555; and
 - The maximum yarding of prime cattle presented for sale = 1,211.



Graph 1. Weekly Prime Cattle Sale Yardings (May 2010 to May 2015)

- Store cattle sale yardings:
 - The average number of store cattle presented for sale = 2,998;
 - The 85th percentile yarding of store cattle presented for sale = 3,771; and
 - The maximum yarding of store cattle presented for sale = 5,019.



Graph 2. Monthly Store Cattle Sale Yardings (May 2010 to May 2015)

The **current** CVLX facility has a total of 212 standard selling pens and 38 dedicated bull pens totalling 4,866m².

At 73% utilisation (this is the effective actual capacity as it is impossible to fill all sale pens to capacity due to the variance in sale lot sizes), the selling pens have a capacity to hold;

- 2,488 head of Prime Cattle (based on a 400kg animal); or
- 3,011 head of Store Cattle (based on a 325kg animal); or
- 3,685 head of Weaner Cattle (based on a 260kg animal).

The **new** CVLX facility will have a total of 240 standard selling pens and 120 dual purpose pens designed for stock receival and selling, totalling 5,287m².

At 85% utilisation (the utilisation percentage will improve as the design of the pens and their sizing has been optimised at the new facility to more adequately fit the average sale lot configuration of the current sale format), the selling pens (including dual purpose pens) will have a single round selling capacity without using overflow selling areas of ;

- 2,913 head of Prime Cattle (based on a 400kg animal); or
- 3,535 head of Store Cattle (based on a 325kg animal); or
- 4,337 head of Weaner Cattle (based on a 260kg animal).
- Note: The notional capacity is affected by the animals' size and weight and the number of sale lots per pen. To this end, when calculating capacities, a notional utilisation factor based off historic sale data, is used to determine a realistic sale capacity.

It is for this reason that it is often more relevant to compare absolute square metre areas when comparing one facility with another.

The utilisation factor can also be significantly influenced by the physical dimensions of each selling pen. As the sale lot size can range from as little as 1.2 head on average per transaction lot to in

excess of 15 head per transaction lot depending upon the sale type, it is more efficient to have flexible penning configurations.

It is for this reason that the physical pen dimensions proposed in the new layout are quite different to those of the existing facility. Consideration has been given to optimising animal density whilst maximising selling area utilisation so as to improve animal welfare outcomes by ensuring that animals have the necessary space to rest and access to water.

Cattle Sale Types

- Prime Sales are held weekly, all year round. Prime Sales include domestic and export grade cattle. The average cattle yarded on a Monday for the past five (5) years is 378 head.
- Store Cattle Sales are generally held once a month. Additional Special Store Cattle Sales are held in certain months of the year, for example, February back to back Store Sales. The average number of store cattle yarded for the past five (5) years is 3,482 head.

Sheep Facility



This facility is designed to have a flow through design and includes the capacity to have a single round selling capacity in dedicated selling pens of approximately 40,000 sheep and lambs with a total theoretical facility capacity approaching 90,000 sheep and lambs.

The dedicated holding and feeding areas allows livestock to be mechanically fed both pre and post sale a feed ration that is balanced nutritionally to improve animal performance and comfort.

Description - Sheep	Existing Facility	Proposed Facility
Covered Area (sqm)	0	~27,000
Receival Area (sqm)	12,710	9,576
Selling Area (sqm)	11,825	12,844
Dual Purpose Selling (sqm)	0	16,142
Delivery Area (sqm)	5,612	8,005

Feeding / Holding Area (sqm)	1,117	3,443
Total Area sqm	31,264	33,868
Water Access - Receival	No	Yes
Water Access - Selling	No	Yes
Water Access - Delivery	Yes	Yes
Water Access - Holding	Yes	Yes
Dual Purpose Areas	Some	Yes

* The areas highlighted in Green show the substantial positive differences between the two sites.

Sheep & Lamb Sales

Description - Sheep	Existing Facility	Proposed Facility
Receival Commences	Monday 1pm	Monday 1pm
Receival 80% Complete	Monday 10pm	Monday 10pm
Weighing Methodolodgy	N/A	N/A
Drafting Commences	5pm Monday	5pm Monday
Drafting Completes	6am Tuesday	10pm Tuesday
Receival Area Flooring	Concrete	Concrete
Receival Roofing	No	No
Curfew (water only)	N/A	N/A
Public Access Commences	8am Tuesday	8am Tuesday
Selling Area Flooring	Concrete	Ashpheltic Concrete
Selling Area Roofing	No	Yes
Sale Commences	9am Tuesday	9am Tuesday
Delivery / Holding / Feeding Area Flooring	Concrete and Gravel	Compacted Gravel and Ashpheltic Concrete
Delivery / Holding / Feeding Area Roofing	No	Yes
Departure Transport Commences	11am Tuesday	10am Tuesday
Departure Transport 80% Complete	10pm Tuesday	9pm Tuesday

* The areas highlighted in Green show the substantial positive differences between the two sites.

Sheep Sale Information

- The following information is based on an analysis of five (5) years of CVLX sales data (3 May 2010 – YTD May 2015):
 - Average yarding of sheep presented for sale = 25,582 sheep;
 - The 85th percentile yarding of sheep presented for sale = 39,058 sheep; and
 - The maximum yarding of sheep presented for sale = 58,643 sheep.



Graph 3. Weekly Sheep and Lamb Sale Yardings (May 2010 to May 2015)

The **current** CVLX facility has 839 selling pens totalling 11,825m². At 85% utilisation *(this is the effective actual capacity as it is impossible to fill all sale pens to capacity due to the variance in sale lot sizes, and to comply with animal welfare codes of practice*), the selling pens have a capacity to hold 33,504 head of Sheep and Lamb (based on a 44kg animal).

The **new** CVLX facility will have 816 selling pens and 32 dual purpose pens (*i.e. designed to hold and sell sheep*) totalling 12,845m². At 85% utilisation (*the utilisation percentage will improve as the pen sizes of the new facility have been designed to more adequately fit the average sale lot configuration of the current sale format*), the selling pens will have the capacity to hold 35,482 head of Sheep and Lamb (based on a 44kg animal).

Note: The notional capacity is affected by the animals' size and weight and the number of sale lots per pen. To this end, when calculating capacities, a notional utilisation factor based off historic sale data, is used to determine a realistic sale capacity.

It is for this reason that it is often more relevant to compare absolute square metre areas when comparing one facility with another. The utilisation factor can also be significantly influenced by the physical dimensions of each selling pen. As the sale lot size can vary depending upon the mix of adult sheep and lamb presented for sale.

The physical pen dimensions proposed in the new layout are quite different to those of the existing facility. Consideration has been given to optimising animal density whilst maximising selling area utilisation so as to improve animal welfare outcomes by ensuring that animals have sufficient space whilst held in pens.

Sheep Sale Types

- Sheep & Lamb Sales are held weekly, all year round. Sales include domestic and export grade livestock.
 - The average sheep yarded for sale for the past five (5) years is 25,582 head.
 - The maximum sheep yarded for a sale during this period was 58,643 head.
- Special Sheep Store Sales are generally held in November/December annually. The average number of stock yarded in these periods for the past five (5) years is 38,747 head.

CVLX Operational Overview of the New Site

Prime Cattle Sales

Sunday

• National Vendor Declaration forms that accompany the livestock into the site are entered into the software system.



Livestock in selling pens with 'soft' woodchip floor will often lay down and rest overnight as they are much more relaxed.



- Animals are received at the facility and drafted into their selling lots and arranged in selling pens according to the sale draw.
- Once the cattle are arranged in their pens, pre sale NLIS scanning will commence. Usually the individual scanning will commence at approximately 8pm-10pm depending on numbers received for the sale.

Livestock are scanned and recorded electronically in the computer management software.



- The scanning data collated will then be uploaded into the site software system. The pre sale scanning information consists of;
 - o Agent
 - o Vendor number
 - o Pen Number
 - o Lot number
 - o Number of head in the lot
 - o Sex type
 - Breed type
- Once all data is uploaded the sale will be balanced to ensure the number of animals electronically scanned and recorded matches the exact number of cattle received. This can differ as some livestock are sent to the facility without a functioning National Livestock Identification System (NLIS) device (tag with a passive radio frequency microchip) and will need to be identified with a functioning device prior to the sale commencing.

Animals move freely through the facility at night under lights



Monday

- Liveweight Scales are tested with certified weights and signed off by a senior staff member confirming their accuracy prior to the commencement of weighing. Scales will be tested again during the weighing process.
- In a 'preweigh' sale methodology weighing of livestock will commence at 3am.
- The viewing public will start arriving onsite around 7am.
- The sale starts at 9am.
- In a 'postweigh' sale methodology the weighing of sold cattle will commence as soon as the 1st selling agent has delivered the correct sale paperwork to site staff to then enter into the site computer management software system. This is coupled with the pre-sale scanning information collated the night before. To complete the process a weight is added to the lot once the lot moves over the scales.
- Once the animals are weighed they will be moved by site staff into buyer delivery pens.

Many livestock movements are conducted by site staff on horseback for safety and efficiency reasons.



- The sale will be balanced against cattle received and against what each individual buyer has purchased on the day.
- NLIS buyer transfers will be completed

- Sales reports will be emailed to the relative buyers on the day once the checks and balances are completed by site staff.
- Buyers and or Agents must inform site staff if they require animals to be fed. If animals are not trucked out on the day of the sale, they will be fed regardless at the cost of the buyer. This is a legal requirement.

Sheep and Lamb Sales

Monday

- Agents will be informed formed by management as to where their client's sheep and lambs will be received.
- Agents will commence drafting sheep and lambs into sale groups in preparation for sale as they are received.
- National Vendor Declaration forms that accompany the livestock to the site are entered into the sites computer management software system to undertake and property of origin verification.

Tuesday

- Management will inspect the site to ensure issues are address regarding animal welfare and all operational procedures are being followed.
- Agents continue drafting and penning sheep and lambs and prepare for the commencement of the sale.
- Sale commences at 9am.
- As the sheep and lambs are sold the delivery process will commence.



pens with unrestricted access to water.

Sheep are held in holding

- All sold lots will be counted out of the selling pen and balanced with the agent.
- Buyer lots will be balanced against each individual buyer that bought on the day.



Sheep are loaded using adjustable height ramps as most large trucks have 4 dedicated 'decks'. Each ramp has external operator access for added safety.

- The relevant sales reports will be emailed to the respective buyers on the day of the sale.
- NLIS buyer transfers will be completed
- Buyers and or Agents must inform site staff if they require animals to be fed. If animals are not trucked out on the day of the sale, they will be fed regardless at the cost of the buyer. This is a legal requirement.

Store Cattle Sales

Thursday

- Receival of the Store cattle sale begins at approximately 12pm through to 9pm in most sales.
- There is no curfew required for Store cattle markets as they are sold on a \$ per head basis, however there is a possibility that some special store sales in the future will be conducted in the same manner as a Prime cattle methodology which are sold on a cents per kilogram basis.
- Agents begin receiving and drafting cattle into their selling pens late in the afternoon when approximately 40% of the expected yarding has arrived.
- National Vendor Declaration forms that accompany the livestock to the site are entered into sites computer management software system
- Once the cattle are arranged in their pens, pre sale NLIS scanning will commence. Usually the individual scanning will commence at approximately 8pm-10pm depending on numbers received for the sale.

 Once all data is uploaded the sale will be balanced to ensure the number of animals electronically scanned and recorded matches the exact number of cattle received. This can differ as some livestock are sent to the facility without a functioning National Livestock Identification System (NLIS) device (tag with a passive radio frequency microchip) and will need to be identified with a functioning device prior to the sale commencing.

Friday

- The viewing public will start arriving onsite around 7am.
- The sale starts at 9am.
- The sale will be balanced against cattle received and against what each individual buyer has purchased on the day.
- NLIS buyer transfers will be completed
- Sales reports will be emailed to the relative buyers on the day once the checks and balances are completed by site staff.
- Buyers and or Agents must inform site staff if they require animals to be fed. If animals are not trucked out on the day of the sale, they will be fed regardless at the cost of the buyer. This is a legal requirement.



Store Cattle sales tend to have larger volumes and greater livestock density's in this geographic region of Victoria

- The sale will be balanced against cattle received and against what each individual buyer has purchased on the day.
- Sales reports will be emailed to the relative buyers on the day once the checks and balances are completed by site staff.

- NLIS buyer transfers will be completed
- Buyers and or Agents must inform site staff if they require animals to be fed. If animals are not trucked out on the day of the sale, they will be fed regardless at the cost of the buyer. This is a legal requirement.

Weighing Process for Prime Cattle Sales – New Facility

CVLX Prime Cattle Sales will conduct its weighing procedure as a 'post sale' weighing methodology. All cattle will be sold on a cents per kilogram live weight basis.

Animals can be weighed and processed through either a 'bulk scale' or 'individual animal processing system' simultaneously. The methodology of this infrastructure design allows larger lots or pen lots can be directed to the bulk weigh bridge and smaller lots directed through the individual animal weigh unit almost halving overall weighing time.

A 'bulk' or 'platform' scale will weigh 1 sale lot every 60 seconds. The automated 'individual' system will weigh 1 animal every 15 to 20 seconds. Therefore sale lots with 1 or 2 head are faster to process on the individual scales than the bulk scales.

Automated individual weighing systems with remote controlled sorting gates removes all safety concerns around human / animal interaction in key risk areas.



- As stock enter the respective weighbridge their electronic NLIS device will be identified via a scanner transmitting the uniquely encoded tag numbers to the facility's computer management software system, and their respective sale lot information will be displayed on the computer terminal.
- The weight will then be automatically captured and the animals will be released off the weighbridge to the appropriate post weigh draft pen and the software will update the delivery displays to facilitate operators moving animals to their allocated delivery pens. This process is repeated for all selling lots.
- Cattle are then taken to their respective delivery pen via laneways to the south and east of the processing area. At this time the operational staff will reset the delivery pen displays for reallocation to the next selling pen.



LED displays provide information to operational staff about livestock details

• Gates leading into the processing area are pneumatically operated and controlled by operators via remote control units. This allows processing area staff to activate gates remotely and optimise operational efficiency and processing speed.

Traffic Movement

The site will incorporate a ring road that will facilitate vehicle movement into, on, around and out of the site. The roadway system will ensure all heavy vehicles move in a 'one way' clockwise direction around the facilities. The design will also facilitate safe movement and access to loading and unloading ramp infrastructure.

Site signage will direct livestock carriers to the correct area to unload or load stock. The facility will incorporate two (2) separate receiving areas for cattle and sheep;

- Cattle will be unloaded at the first area closest to the entry on the north side of the cattle facility; and
- Sheep will be unloaded closest to the 'drafting area' within the sheep facility. Livestock transport carriers will access this area by travelling around the facility via a Ring Road;

Light vehicles will enter the site and proceed directly to the light vehicle car park adjacent to the central amenities building.

Patrons will be able to park in a designated car park, whereas at the current site they park in on-street parking in whatever space is available. Overflow car parking areas are identified on the concept plan.

Yard Fees, Charges and Sale Invoicing

CVLX levy's agents and sellers usage fees and charges.

Invoices are raised and issued to licenced agent operating companies following the completion of each sale.

Invoices raised by CVLX contain two line items:

- 1. A yard fee which is currently calculated from a rate per animal sold; and
- 2. An agent operating charge which is also currently determined on a rate per animal sold.

Agents process their own 'account sales' with livestock vendors which provide and account of the sale amount realised at auction, less the yard fee and other applicable charges including the auction commission fee. This fee does not form part of the CVLX fee system and is outside of the sites control.

These arrangements will essentially remain unchanged at the new facility, however the fee structure for sellers, and agents will revolve around a combination of animals sold and their sale value. Systems used to process and manage sale invoicing and charging will improve through integration of new automated technology and software.

Animal welfare

Several infrastructure and operational factors illustrate the distinct difference between the way animals will be handled and kept at the proposed facility.

<u>Roof:</u> Livestock for sale are held in covered yards delivering superior welfare outcomes in response to providing access to shade and shelter as well as substantially improving working conditions at the site.



<u>Cattle Flooring</u>: Cattle will have access to soft floor (wood chip) surfacing throughout the facility, which will reduce animal stress, sore feet and lameness that occur when cattle are stood on concrete for an extended period of time. Soft flooring encourages cattle to lie down and rest comfortably.



Cattle pen on soft floor and covered facilities

<u>Cattle Movement:</u> horses may be used to move cattle around the facility during and after sales. The use of horses significantly reduces animal stress by removing direct human contact with cattle.

<u>Non-Bruise Railings:</u> All railings throughout the facility will be manufactured from non-bruise materials to reduce animal injury and bruising from contact with yard panels.

<u>Pen Configuration</u>: Pens have been designed to provide operators flexibility in configuring sale pen sizing. This allows pens to be reconfigured to cater for any sale lot size, and ensure stock can be temporarily held in pens at rate that does not exceed acceptable animal welfare stock density standards.

<u>Drinking Water:</u> Cattle held in receival, selling and delivery pens have access to fresh drinking water. Providing access to water reduces dehydration and stress on stock, and conversely improves stock condition, meat quality and carcase attributes. Sheep have access to water in holding, delivery and other designated facility areas.

<u>Gates:</u> Gates located throughout the cattle processing areas are pneumatically (air) operated, which allows the operator to activate gate positions via a remote control. This reduces the animal being stirred up by people handling and moving them on foot. Using this innovative practice in conjunction with the use of horses significantly lessens stress, improves temperament, and allows animal to remain calm during movement around the facility.

<u>Feeding</u>: Designated feeding facilities will be available for cattle and sheep (if required) to ensure they can be fed if they have exceeded industry "time off feed" standards or livestock owners elect to have them fed.

<u>Resting Paddocks</u>: Multiple resting paddocks will be available for livestock to rest and freshen up before or after sales or transport.

Social and Amenity Aspects

Store cattle and sheep sales attract the largest number of patrons and viewing people. People attend either to watch their livestock being sold, purchase livestock, talk to other livestock producers, neighbours, friends and/or associates.

An on-site canteen will operate during sales and will have a capacity to seat 80 people. The canteen is typically a popular place for social interaction between patrons. The proposed facility will incorporate interactive systems to display sale information, and may encourage some people to stay and talk longer.



The hours of operation are yet to be finalised, however they will tie in with the operating hours of the on sale days, and reduced hours during the day prior and post a sale.

Soft floor

A soft floor can have a huge influence on the condition, presentation and future productivity and value of livestock moving through a saleyard environment.

There is no doubt that having a comfortable flooring ensures cattle are more comfortable, less stressed, with less weight-loss percentages, and helps to prevent lameness caused by harder flooring materials such as concrete. From an animal welfare perspective a soft floor it is far superior to any other surface.

Additionally, facilities with 'soft' floors tend to attract greater buyer interest and as such higher prices.

Ensuring that livestock can enter and leave yards in the best condition possible is why soft flooring has become an increasingly popular trend in cattle markets across Australia over the past decade.

Reported benefits include better liveweight yields, with total weight loss being reduced by up to 2% which often means that the sellers fee's are fully covered by this efficiency gain compared to the existing site.

Maintenance

• A tractor and power harrow attachment will turn over the soft floor to promote aeration and drying. Weekly maintenance reduces the likelihood of flooring becoming wet and producing odour.



- Spent soft floor material (woodchips or similar) from the cattle pavilion will be removed in stages, section by section. 100% of the soft floor material (1,600 cubic meters) may ultimately be replaced annually.
- Soft floor material is removed and replaced on a staged basis. Areas of high use are generally
 replaced more frequently, however replacement frequency is determined at the discretion of onsite management. Management may also form a decision following consultation with agents and
 other operators. Material moisture content and odour are key decision variables.

- In practice, the useful life of material may vary from roughly 6 months to 12 months depending upon the amount of livestock usage in particular pen areas and other sections of the facility.
- The flooring material removed is treated as solid waste, and is stored temporarily in a
 designated solids stockpile area. On-site management co-ordinate removal with a licensed
 waste facility or composting facility to ensure prompt removal. Waste material is not expected to
 be stockpiled for more than four (4) weeks. In the unlikely event that it is not collected by
 licensed outlets it will be disposed of through landfill outlets.

Waste Water

The current site requires wash down of all concrete areas within the cattle yard and all areas of the sheep yard.

The new cattle yard facility has soft floors and only requires wash down of the processing (weighing) areas. Therefore water demand and usage is significantly less.

Wash-down in the new sheep facility will significantly reduce as the design will allow the majority of the facility to be swept and cleaned. The equipment used may be either a Skid Steer Loader with Pick-Up Broom, or a ride on Industrial Sweeper unit similar to the images below.



Waste water on the new site will be captured from the truck wash use, water trough washing, sheep yard and cattle weigh area wash down, and from first flush ponds used to collect runoff from external yards. The onsite truckwash incorporates a solid separation system to remove as much of the solid effluent material as possible.

Domestic effluent generated from the central facilities building and public amenities will be managed using an on-site effluent management system.



Recycled wastewater will be reused (irrigated) across the irrigation areas.

Paddock and Pasture Management (at CTLX) Construction Post Commencement of Operations





Solid Waste

As part of normal operations the CVLX will generate a range of solid wastes. These will include:

- Solids removed from the waste water treatment system (manure and organic matter from the grit arrestor generated from the truck wash);
- General waste and refuse; and
- Stock mortalities.

Less frequently the CVLX will generate two other solid wastes, including:

- Spent soft floor material (sawdust or similar) from the cattle pavilion when replaced; assumed an annual occurrence; and
- Solids emptied from the facultative treatment ponds. Based on truck wash infrastructure designs (solid waste sumps and traps) it is assumed this could be required every five years.

There is no intent to utilise solid organic wastes on-site. All organic solids wastes will be removed offsite to a licensed waste facility or composting facility. Recovered solids from the truck wash effluent treatment system (settling pit), solids removed from the facultative ponds, sheep yard material and soft floor material will be temporarily stockpiled next to the facultative ponds, within a controlled drainage area, with runoff draining into the facultative ponds. The stockpiling area is not covered to allow the solids to dry. The material will be transported off site when it is dry enough to do so.

The duration of stockpiling prior to removal off-site will be monitored and determined by site conditions and the operational objective of minimising the potential for offensive odours from this source. Stockpiled material would be turned periodically to promote drying and aeration. Operational experience from other sites provides the following indicative stockpiling activities:

- Truck wash solids removed on average once per week and remain on the stockpile area for up to 3 to 4 weeks;
- Solids removed from the facultative ponds infrequent event (as noted above) with solids remaining on the stockpile area for up to 3 to 4 weeks;
- Sheep yard solids removed weekly and remain in the stockpile area for up to 3 to 4 weeks; and
- Soft floor material replacement rotated and confined only to areas where the material has deteriorated beyond its useful life. Removal occurs on rotation over a 12 month period with material remaining on the stockpile area for up to 3 to 4 weeks.

These timings are indicative only and would be confirmed through the EIP. Anecdotal data from other sites indicates that these sources do not generate significant odour when managed as described. The primary operational objectives would be to manage these solids to minimise odour generation.

Solids would be removed to appropriately approved and licensed facilities which would be detailed in the EIP. Quantities will be monitored by recording the amount of material taken off-site (truck numbers and weight estimate).

Truck Wash Operations

179 customers made use of the truck wash down facility in F2014. Truck wash operations recorded 180,000 minutes of use.

The graphs below illustrate truck wash usage trends and correlation to livestock sales activity.



Transport operators determine when trucks need to be washed down. This generally occurs after livestock have been delivered to facility for sale.

Transport operators are mindful of requirements that discourage or prohibit trucks spilling effluent on roadways. This therefore affects the regularity with which truck drivers choose to wash down their trucks before and after transporting livestock.

The proposed wash down area at the new facility will comprise of four (4) wash bays, which are designed to accommodate a prime mover and b-double trailer configuration, however two small rigid (non-articulated) trucks will have the ability to utilise one wash bay simultaneously.

The width of each wash bay provides acceptable separation between trucks being cleaned, and the gradient of each bay optimises the time operators take to wash out crates.

Deceased Stock

Deceased livestock occasionally arrive onsite, or at times livestock are required to be euthanised and are removed as required. This can occur with as little as one hour's lead time, however if removal of a deceased animal is requested in the afternoon of a sale, collection may occur the next morning.

There is a point at which animals will not be taken if decomposition has taken hold. In this rare case, carcases must either be buried in a designated area at least one metre beneath the soil surface, or as per current arrangements, where carcases are disposed of at a licensed land fill location.

The proposed yard design incorporates isolation pens to confine injured animals, or animals that may need to be euthanised. Designated isolation areas will be located in an area which is away from public view and where operations staff can monitor livestock.

Agents notify operational staff of any deceased or injured animals that have arrived or unloaded from trucks.

Deceased animals will be immediately removed and these will be placed into an isolation area and monitored accordingly. This ensures that no dead animals or carcasses remain unnoticed and untreated for an extended period of time.

Bio Security Management

Stringent administration of livestock identification, trading documentation and transfer of sale information is an integral part of Regional Infrastructure's bio-security management strategy.

Infrastructure maintenance is an important preventative measure. Yard surfaces are regularly cleaned or in the case of soft floored areas, harrowed or removed once material has reached the end of its effective life. Water troughs are regularly cleaned to ensure stock have access to fresh drinking water.

An emergency stock standstill plan is in place in the event of a disease outbreak. The Australian Veterinary Emergency Plan, otherwise known as the "Ausvetplan for Saleyard and Transport Enterprise Manual" is also used as an operational protocol in response to a bio-security alert.

Maintenance and Workshop Building

A maintenance building will be located on the northern side of the cattle facility.

The area will be secured by perimeter fencing, and access into the enclosed workshop area will be secured by two lockable industrial roller doors and a personal side access door.

The enclosed area of the maintenance shed will contain small plant and equipment, and small tools required for on-site maintenance and operations.

Small quantities of fuel, oil, and pasture chemical will be stored in a caged area inside the enclosed section of the shed.

Machinery such as a tipper truck, tractor, feeding unit, and tele-loader will be stored in the open areas of the shed.

Overnight Facility Activity

Sundays - for the weekly sale – the curfew is 9pm, however contractors work throughout the early evening drafting the animals.

Weighing starts depending on the numbers, somewhere between 10pm and 3am, however this must be finished by 6am approximately. 400 head of cattle are able to be weighed per hour. Cattle make noise when prompted by activity or are stressed, but will make minimal noise when left alone and undisturbed. Cattle stored on a 'soft' floor under a roof will often lay down and rest minimising site noise.

On Monday afternoon sheep arrive concurrently with the departure of cattle from the site and may continue into the night. No curfew exists for the sheep sales, as there is no empty weight requirement, however the majority of sheep are on site by 10pm with the remainder predominantly arriving after 5.30am the following morning. Agents are usually on site for the sheep sales drafting from the afternoon on the Monday through to late in the evening.

Staff arrive from 3am on Tuesday morning to draft and pen the stock. Sheep arriving on Tuesday morning tend to be small trailer lots from local farmers.

There are limited staff onsite from 10pm onwards on any evening and the number of vehicle movements after this time until approximately 6am in the morning is minimal.

Definition of Terms

- Curfew This is a process of restricting animals access to feed, but full access to water, to create a standardised weight reference point for all animals so that they can be sold on a cents per kilogram (c/kg) basis. Commonly this process is between 6 and 12 hours depending on whether the certified weighing process occurs before or after the sale. Traditionally it has been common for a 6 hour curfew to apply to animals that are weighed before the sale.
- Delivery Process of moving stock from selling pens into larger holding pens allocated to Buyer Groups
- Drafting Process of manually sorting stock into sale lots of similar phenotypical characteristics
- NLIS Device A device, normally an ear tag that contains a passive low frequency Half Duplex transponder (134.2kHz) that contains a globally unique number that is communicated when activated by a scanner. The National Livestock Identification System is an industry wide program that underpins Australia's export market access and biosecurity management systems (often called a radio frequency identification device)
- Lot A selection of one or more animals that are physically similar and normally from the same Vendor that form part of a sale transaction
- Pen A selling pen will contain 1 or more Sale Lots
- Prime Cattle Classification of stock referring to animal's that are generally finished / fattened and are fit for slaughter
- Scanning The process of recording the encoded number in the NLIS Device. Livestock in Australia must have an NLIS Device applied which must be recorded electronically and uploaded to the NLIS Database.
- Store Cattle Unfinished stock usually being purchased by other farmers or feedlots for further growing / fattening or breeding
- Store Sheep Sheep that are sold and purchased for restocking purposes
- Vendor Refers to the owner of the stock prior to sale