

SCHEDULE 1:

**UPDATED DEVELOPMENT CONCEPT
PLAN**

1.1 PERFORMANCE STANDARDS		
1. Use of Land for Wastewater produced from onsite poultry processing and manufacture activities	(a)	Any effluent disposal system (including disposal onto land by way of spray irrigation) associated with the disposal of non-human waste shall comply with the following: (i) All disposal/spraying shall be within the Irrigation Management Area shown on the DCP. (ii) No spraying shall occur from a public road or place. (iii) Any mud or materials deposited on the roadway from vehicles associated with the disposal of waste shall be removed immediately.
2. Building Envelope for the existing dwelling shown on this DCP and associated accessory buildings.	(a)	Maximum Height: 10m.
	(b)	Height relative to site boundary: No part of any building shall exceed a height of 3m plus the shortest horizontal distance between that part of the building and the nearest site boundary.
	(c)	Front yard: Any extension or addition to the existing dwelling shall be erected behind the front line of the dwelling.
	(d)	Rear and side yards: 10m.
3. Building Envelope for all buildings associated and accessory to a permitted activity listed in this DCP.	(a)	Maximum height: 20m.
	(b)	Yards adjoining any road or non-Industrial Zone: 20m.
	(c)	All other yards: 10m.
	(d)	Height relative to boundary: Height shall not exceed one quarter of the distance (d) to the closest boundary adjoining (h=d/4) for boundaries adjoining any non-Industrial Zone.
4. Access	(a)	Vehicular accesses shall be located in accordance with the DCP.
	(b)	Vehicular accesses shall be designed and constructed in accordance with the MPDC Development Manual 2010.
	(c)	When formed, Gate 2 shall be designed to a ‘Large Vehicle Entrance - Rural’ (MPDC DG307c: October 2011) standard in accordance with the requirements of the MPDC Development Manual 2010, inclusive of the minimum 7m access width through the gate amendment in Figure 8 of the Inghams ‘Traffic Impact Assessment Waitoa Plant Plan Change’ report, August 2013, prepared by Bloxam Burnett & Olliver Ltd, and be located at least 75m south of Gate 3 as shown on the DCP. The existing painted flush median on Waihekau Road shall also be extended 90m south of the access along with any local shoulder widening in accordance with the MPDC Development Manual 2010.
	(d)	All vehicle access via the Gate 4 entrance shall be carried out in accordance with a Management Plan approved by Council. The management plan shall detail the processes and protocols in place to ensure that no vehicles manoeuvre in the Waihekau Road traffic lanes and no conflict occurs between vehicles using the entranceway. The Management Plan must provide for the following: (i) That all vehicles greater than 5.2m in length shall enter the entranceway from a southern direction from Waihekau Road. (ii) That no more than two service vehicles shall be permitted to use the dispatch area at any one time. (iii) The vehicle movements shall be managed to prevent any more than one poultry truck and two service vehicles from needing to use the dispatch area and entranceway at any one time. (iv) That the area north of the entrance shall be maintained to a fully formed and sealed part of the entranceway. (v) That the existing “Poultry product truck” signage to the north and south of the site shall be maintained. (vi) That loose material shall not be tracked onto the carriageway of Waihekau Road that may cause a hazard/nuisance to road users. Any proposed variation to the Management Plan shall be approved in accordance with the above by Council prior to implementation of the amendment(s).
	(e)	That the manoeuvring area served by the wastewater access (Gate 3) shall be kept clear of all impediments and obstructions to vehicle manoeuvring.
	(f)	All heavy vehicles travelling south, west or northwest to and from the site shall travel via Waikau Road and SH27. Only heavy vehicles with destinations to the northeast shall be permitted to use the Seddon Road / SH26 intersection. Traffic routes and number of vehicles using the routes shall be recorded and be available upon request by Council.
5. Car Parking, Formation and Manoeuvring	(a)	435 parking spaces shall be provided on site where production is at or below 160,000 birds.
	(b)	All parking and loading spaces, and access and manoeuvring areas shall be formed and surfaced in accordance with the MPDC Development Manual 2010.
	(c)	All parking and loading spaces shall be maintained and line marked to the standards of the Matamata-Piako District Plan.
	(d)	All parking and loading spaces shall be provided on-site exclusive of land required for any screen planting area required by the DCP, access, or any manoeuvring area, including the manoeuvring areas required for vehicles accessing the dispatch area (Gate 4).
	(e)	Parking and loading spaces are to be either visible from the public road or clearly signposted at the road frontage.
	(f)	Parking and loading spaces shall be provided so that sufficient space is provided on-site so that no reverse manoeuvring onto or from a road is needed. The manoeuvring space provided shall take into account the type of vehicle anticipated.
6. Odour	(a)	The management of activities shall ensure that there is no odour nuisance at or beyond the boundary of the property. For the purpose of this rule an odour nuisance is defined as one that can be detected and determined to be a nuisance by three observers who are neutral to the issue, able to apply the frequency, intensity, duration and offensiveness to their observations and who are able to report these accurately; or an appropriately experienced Council or Regional Council Officer after having considered objectives, policies and guidelines of assessment as provided in the relevant sections of a Regional Air Plan or consideration of the provisions in Section 17 and Part XII of the RMA.
7.	(a)	The ‘existing screen and riparian planting’ shown on the Mitigation Strategy Plans L1 revision R3 dated 18 April 2013 and L2 revision R4 dated 23 May 2014 prepared by Mansergh Graham Landscape Architects Ltd shall be retained and maintained.

8. Noise	(a)	That the corrected noise level measured at the Noise Emission Control Boundary shall not exceed: <div><div>SUPERSEDED</div><ul style="list-style-type: none">Monday to Saturday (5 am to 9 pm) 50 dB LAeq,All other times including Sundays and Public Holidays 45 dB LAeq and 75 dB LAmax.</div>										
	(b)	That the corrected noise level measured at the notional boundary of any dwelling which exists at the date of the DCP (October 2014), except dwellings on the Lots detailed in (c) following, shall not exceed: <ul style="list-style-type: none">Monday to Saturday (5 am to 9 pm) 50 dB LAeq,All other times including Sundays and Public Holidays 40 dB LAeq and 75 dB LAmax.										
	(c)	The performance standard in (b) above does not apply to the following Lots: <ul style="list-style-type: none">Section 3 SO 432231Part Lot 4 DP 7322Lot 1 DPS 35427Lot 3 DP 7322Lot 2 DP 473506										
	(d)	That, all noise levels shall be measured and assessed in accordance with the requirements of New Zealand Standard NZS 6801:2008 “Acoustics – Measurement of Environmental Sound” and New Zealand Standard NZS 6802:2008 “Acoustics - Environmental Noise”										
	(e)	All construction noise shall comply with the relevant noise levels stated in New Zealand Standard NZS 6803:1999, section 7.2 ‘Recommended numerical limits for construction noise’ and shall be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 “Acoustics - Construction Noise”										
9. Vibration	(a)	Vibration shall not exceed the following average levels: <div><div>(i)</div><div>At or within the boundary of any site zoned residential, or within 20m of any dwelling in the rural or rural-residential zones:</div><table><tr><th>Time</th><th>Average Weighted Vibration Level (Wb or Wd)</th></tr><tr><td>Monday to Saturday 7.00 - 6.00pm (0700 - 1800)</td><td>45 mm/s2</td></tr><tr><td>At all other times</td><td>15 m/s2</td></tr></table><div>(ii)</div><div>At or within the boundary of any adjacent site zoned business or industrial:</div><table><tr><th>Time</th><th>Average Weighted Vibration Level (Wb or Wd)</th></tr><tr><td>At all times</td><td>60 m/s2</td></tr></table></div>	Time	Average Weighted Vibration Level (Wb or Wd)	Monday to Saturday 7.00 - 6.00pm (0700 - 1800)	45 mm/s2	At all other times	15 m/s2	Time	Average Weighted Vibration Level (Wb or Wd)	At all times	60 m/s2
Time	Average Weighted Vibration Level (Wb or Wd)											
Monday to Saturday 7.00 - 6.00pm (0700 - 1800)	45 mm/s2											
At all other times	15 m/s2											
Time	Average Weighted Vibration Level (Wb or Wd)											
At all times	60 m/s2											
	(b)	The weighted vibration levels Wb and Wd shall be measured according to BS6841:1987. The average vibration shall be measured over a time period not less than 60 seconds and not longer than 30 minutes. The vibration shall be measured at any point where it is likely to affect the comfort or amenity of persons occupying an adjacent site.										
10. Lighting and Glare	(a)	At no time between 7.00am and 10.00pm shall any outdoor lighting be used in a manner that causes an added illuminance in excess of 125 lux, measured horizontally or vertically at the boundary of any non-industrial zoned site adjoining.										
	(b)	At no time between the hours of 10.00pm and 7.00am shall any outdoor lighting be used in a manner that causes: <div><div>(i)</div><div>An added illuminance in excess of 10 lux measured horizontally or vertically at any window of an adjoining building within a non-industrial zone.</div><div>(ii)</div><div>An added illuminance in excess of 20 lux measured horizontally or vertically at any point along any non-industrial zone boundary.</div></div>										
	(c)	Where measurement of any added illuminance cannot be made because any person refuses to turn off outdoor lighting, measurements may be made in locations of a similar nature which are not affected by such outdoor lighting.										
	(d)	The outdoor lighting on any site adjoining any non-industrial zoned site shall be so selected, located, aimed, adjusted and screened as to ensure that glare resulting from the lighting does not cause a significant level of discomfort to any occupants of the non-industrial site.										
	(e)	No reflective material or unpainted surfaces should be used which could cause glare.										
		For the purposes of this rule the discomfort level is defined as one that can be detected and determined to be a nuisance by an appropriately experienced Council officer who is able to apply the frequency, intensity, duration and offensiveness to their observations and who is able to report these accurately.										
11. Signage	(a)	Signs attached to or forming part of the principal building, its walls or canopies: <div><div>(i)</div><div>A maximum of 3 signs.</div><div>(ii)</div><div>Each sign shall not exceed 6.0m² in area.</div></div>										
	(b)	Naming or directional signs displayed at each entrance to the site: each sign shall not exceed 3.0m².										
	(c)	Any painted or similar sign, or static illuminated sign which is not visible from beyond the site: no size maximum.										
	(d)	Safety signs to meet legislative requirements: no size maximum.										
	(e)	Temporary signs: no size maximum.										
	(f)	The size of letters on signs shall comply with the following minimum height standards in relation to speed limits: <div>50 km/hr 75mm</div> <div>100 km/hr 175mm</div>										
Note: Earthworks and Facilities for the storage and handling of hazardous substances and dangerous goods’ are covered under the Waikato Regional Plan and Hazardous Substances and New Organisms Act 1996 respectively.												

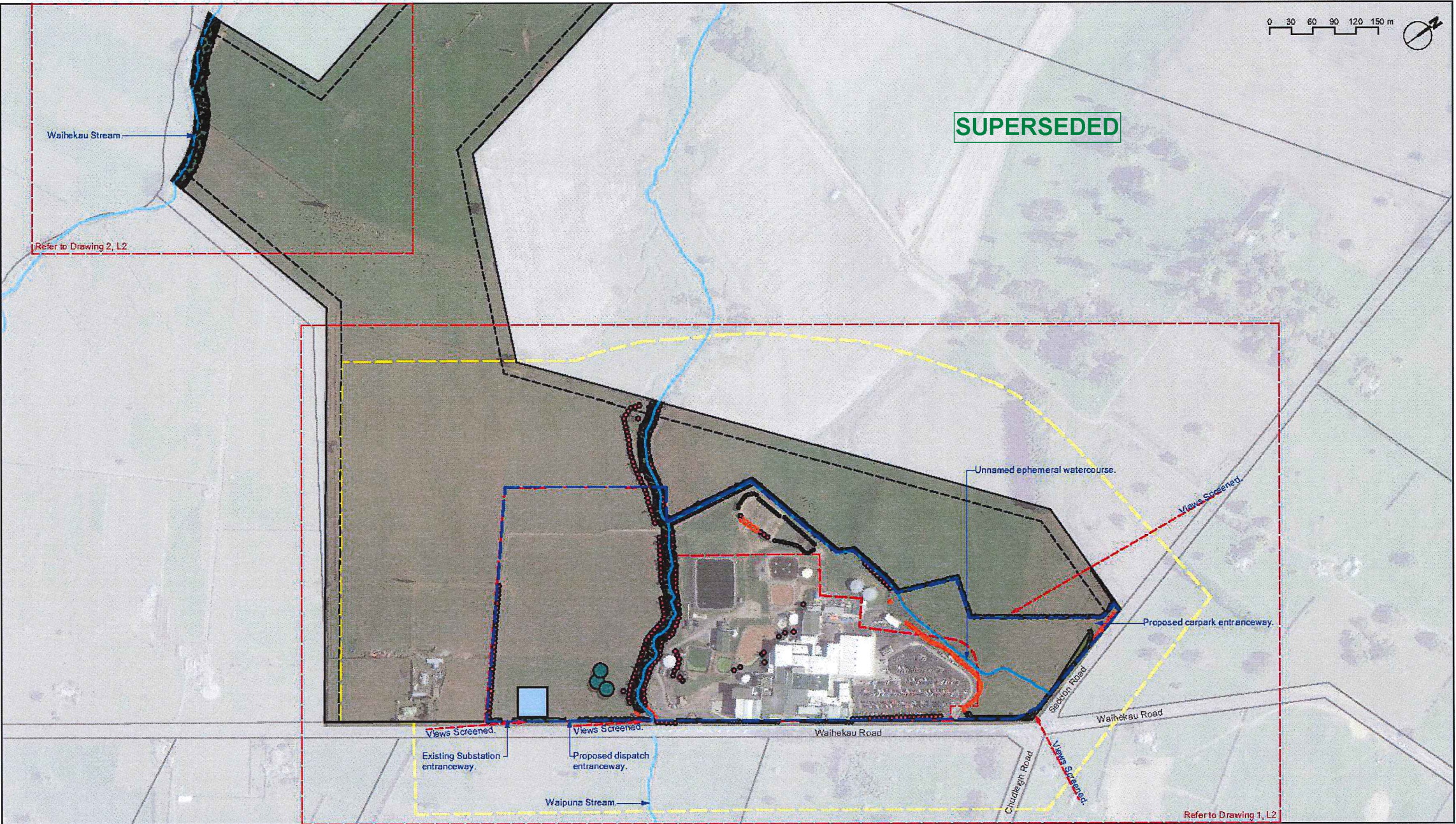
1.2 MATTERS OF CONTROL	
1. Controlled Activities provided for in the Development Concept Plan	<p>A. General:</p> <p>(a) Location relative to the DCP.</p> <p>(b) Extent to which activity complies with Development Controls and Performance Standards of the District Plan.</p> <p>B. Visual:</p> <p>(a) The visual effect of buildings, structures and accesses and manoeuvring areas and earthworks, landscaping or other activities will be assessed in terms of the likely effects on or of:</p> <p>(i) The surrounding environment and general landscape character;</p> <p>(ii) Design elements in relation to the locality;</p> <p>(iii) The mitigating effects of proposed landscaping.</p> <p>(b) In making an assessment of visual impact regard shall be had to:</p> <p>(i) The scale of the facility or building;</p> <p>(ii) Height, cross sectional area, colour and texture of structures and buildings;</p> <p>(iii) Distance to site boundaries and compatibility with surrounding properties;</p> <p>(iv) Proposed planting, fencing and landscaping;</p> <p>(v) Signage;</p> <p>(vi) The intensity of lighting when viewed from a distance;</p> <p>(vii) Effect of lighting on neighbouring amenity;</p> <p>(viii) The opportunity for co-siting of facilities.</p> <p>(c) Assessment of landscaping:</p> <p>(i) Whether existing landscape features are integrated into the new development;</p> <p>(ii) Whether the layout and design are of a high standard, and provide a visual environment that is interesting and in the scale of the propose development;</p> <p>(iii) The size of trees to be planted at the time of planting and at maturity;</p> <p>(iv) The timing of implementation of the landscape plan and the maintenance of approved planting;</p> <p>(v) Whether the type and location of planting promotes public safety;</p> <p>(vi) The extent to which the Inghams Plan Change Development Landscape and Visual Assessment, April 2013, and Mitigation Plans L1 Revision R3 dated 18 April 2013 and L2 Revision R4, L4 Revision R0 and L5 Revision R0 dated 23 May 2014, prepared by Mansergh Graham Landscape Architects Ltd is adopted and implemented. In particular and as appropriate regard shall be had to:</p> <ul style="list-style-type: none"> The establishment of evergreen specimen tree mitigation screen planting, capable of reaching a minimum height of 6m, along the western boundary of the proposed carpark expansion/industrial development and to fill in gaps in the existing screen planting along the northern, eastern and southern Building Plant Management Area boundaries; A dense swath of evergreen under-planting beneath the proposed screen planting along the carpark capable of reaching a height of 1m; and The establishment of 15m wide riparian planting along the Waipuna Stream margins and the 5m wide along the lower portion of the un-named ephemeral watercourse. <p>C. Traffic, Parking, Loading and Access:</p> <p>(a) Any application shall be assessed upon consideration of the following :</p> <p>(i) Gate 6 on the DCP off Seddon Road shall be constructed and made operable following an increase in production over 160,000 birds/day to separate all HCV traffic from the staff and visitor carpark access at Gate 5. The access on Seddon Road should be located a minimum 75m from the Seddon Road / Waiheka Road intersection and be designed to the 'Large Vehicle Entrance - Rural' (MPDC DG307c: October 2011) standard in accordance with the requirements of the MPDC Development Manual 2010, inclusive of the minimum 7m access width through the gate amendment in Figure 8 of Inghams 'Traffic Impact Assessment Waitoa Plant Plan Change' report, August 2013, prepared by Bloxam Burnett & Olliver Ltd.</p> <p>(ii) The main car park should be extended in stages as production increases to ultimately provide a minimum 564 car park spaces at the production threshold of 250,000 birds/day. Car parking spaces should be increased at a rate of 15 spaces per 10,000 birds/day in excess of the present baseline 160,000 birds/day.</p> <p>D. Stormwater and Effluent Effects:</p> <p>(a) The proposal shall be designed and maintained in a manner which prevents as far as practicable, pollution or contamination of land, water or Council's stormwater system. Techniques such as bunding, impermeable layers under bunds and interceptors may be required. The extent of measures required will be determined after having regard to the Building Code and the sensitivity of the receiving environment to discharges. The requirements of the Matamata-Piako District Council Development Manual 2010 shall not apply to existing or future on-site, self-serviced stormwater or wastewater infrastructure.</p>

SUPERSEDED

1.3 MATTERS OF DISCRETION	
1. Restricted Discretionary Activities provided for in the Development Concept Plan	<p>A. Noise Effects:</p> <p>(a) The Council shall ensure that existing lawfully established activities on neighbouring properties in the locality are not adversely affected by unreasonable noise from the proposal. In determining appropriate noise levels, Council shall have regard to the noise environment of the locality in which it is proposed to site the facility, and the practicality of reducing noise from the utility components.</p> <p>(b) Council shall have regard to Section 5.2 of the District Plan (noise) and the "Guide to assessing road-traffic noise using NZS 6806 for state highway asset improvement projects" by the NZ Transport Agency (October 2011).</p> <p>B. Stormwater and Effluent Effects: Refer to the Stormwater and Effluent Effects matters of control for Controlled Activities within Section 1.2.D.</p> <p>C. Visual: Refer to the Visual matters of control for Controlled Activities within Section 1.2.B.</p> <p>D. Traffic, Parking, Loading and Access:</p> <p>(a) Any application shall be assessed upon consideration of the following :</p> <p>(i) Traffic volumes, traffic mix relative to the existing and future traffic patterns, access, parking and loading on-site.</p> <p>(ii) Hours of operation relative to the existing and future neighbourhood amenity.</p> <p>(iii) Construction traffic volumes, traffic mix, hours of operation.</p> <p>(iv) Design and location of access points onto roads.</p> <p>The requirements of the MPDC Development Manual 2010 shall be met in respect of the relevant matters outlined.</p> <p>E. Odour Effects:</p> <p>(a) Council shall consider the effect of the probability of offensive odours from the operation of facilities and in particular the operation of waste treatment and disposal facilities and solid waste management disposal sites.</p> <p>F. Solid Waste:</p> <p>(a) Any application shall undertake a solid waste audit to identify waste reduction and/or to conform with the Council's solid waste minimisation strategy.</p> <p>G. Risk Management:</p> <p>(a) Any application shall advise on the risk associated with, but not restricted to :</p> <p>(i) The use of hazardous substances in the facility and proof that the New Zealand Fire Service and the Waikato Regional Council have been advised.</p> <p>(ii) The technology used in the provision of the service, eg. high voltage, electricity, radio-active material, electro magnetic radiation.</p> <p>(iii) Risk of rupture, breakage, collapse, failure, movement etc of components of the facility as it relates to the design and maintenance of the facility and the effect of natural hazards on the facility.</p> <p>(iv) The measures inherent in the proposal which will avoid, remedy or mitigate the potential for that effect to occur.</p>
2. Discretionary Activities provided for in the Development Concept Plan	For Discretionary Activities Council shall as a minimum have regard to all the matters of control for Controlled Activities within Section 1.2 and the matters of discretion for Restricted Discretionary Activities within Section 1.3.1. The matters of control for Controlled Activities and matters of discretion for Restricted Discretionary Activities are only a guide to the matters Council will consider and shall not restrict Council's discretionary powers.

DEVELOPMENT CONCEPT PLAN

Poultry Processing and Manufacturing Site, Waiheka Road, Waitoa
OCTOBER 2014



MITIGATION STRATEGY OVERVIEW

To mitigate potential adverse landscape and visual effects of the proposed plan change development, the following strategies will be employed:

The implementation of evergreen screen planting, to fill in the gaps of the existing screen planting along the northern, eastern and southern site boundaries; and to provide more extensive screen planting along the north-western edge of the proposed development.

The implementation of proposed under-planting beneath the proposed and existing screen planting along the northern boundary of the subject site to reduce adverse effects of the associated traffic and headlight glare from the proposed carpark extension.

The implementation of proposed screen planting along the new dispatch entranceway to screen the majority of the proposed entranceway, associated traffic movement and also screen the majority of the proposed bore water treatment and storage facilities; when seen from within close proximity along Waiheke Road.

Riparian planting along the Waipuna Stream and the lower portion of the unnamed ephemeral watercourse will increase landscape values and provide additional screen planting for the southern extent of the existing and proposed industrial development.

Where possible, the existing screen planting surrounding the subject site will be retained to ensure that adverse landscape and visual amenity effects are reduced.

The proposed mitigation planting will emulate sheltering hedgerows, which are common elements in the surrounding rural landscape. Once implemented, the overall effect will be to enhance the amenity of the area and provide suitable screening of the proposed plan change development.

Key

- Original Development Concept Plan: Building and Plant Management Area
- Noise Emission Control Boundary
- Buffer
- Existing Substation
- Existing Screen and Riparian Planting to be Maintained
- Existing Screen Planting to be Removed
- Proposed Development Concept Plan: Building and Plant Management Area
- Proposed Screen Planting**
Suggested Species:
Pittosporum eugenoides tarata
Pittosporum tenuifolium kohuhu
- Proposed Riparian Planting**
Suggested Species:
Carex virgata Small swamp sedge
Coprosma robusta karamu
Conyline australis Cabbage tree
Cortaderia fulvida toetoe
Leptospermum scoparium manuka
Phormium tenax Flax
Pittosporum tenuifolium kohuhu
Plagianthus regius Ribbonwood
Pseudopanax arboreus Five finger
Pseudopanax crassifolius Lancewood
Sophora microphylla kowhai
- Proposed Underplanting**
Suggested Species:
Libertia grandiflora NZ Iris
Carex secta
- Proposed Specimen Tree Planting**
Suggested Species:
Alectryon excelsus titoki

Consultants:

The purpose of this plan is to show the general intent of the design and may not be complete in every detail. This plan shall be read in conjunction with all other project documents. Should the design differ from the plan and specifications or specifications to the design, the design shall prevail. The contractor shall confirm all dimensions and quantities on site before commencing work.

Drawn By: LB
Checked: MG
Revision No: R3
Amendments:
R1: (17-04-13)
Amendments to riparian planting and screen planting. Removal of proposed carpark and building extensions/additions.
R2: (18-04-13)
Amendments to layout.
R3: (18-04-13)
Amendments to extent of DCP.

Project:

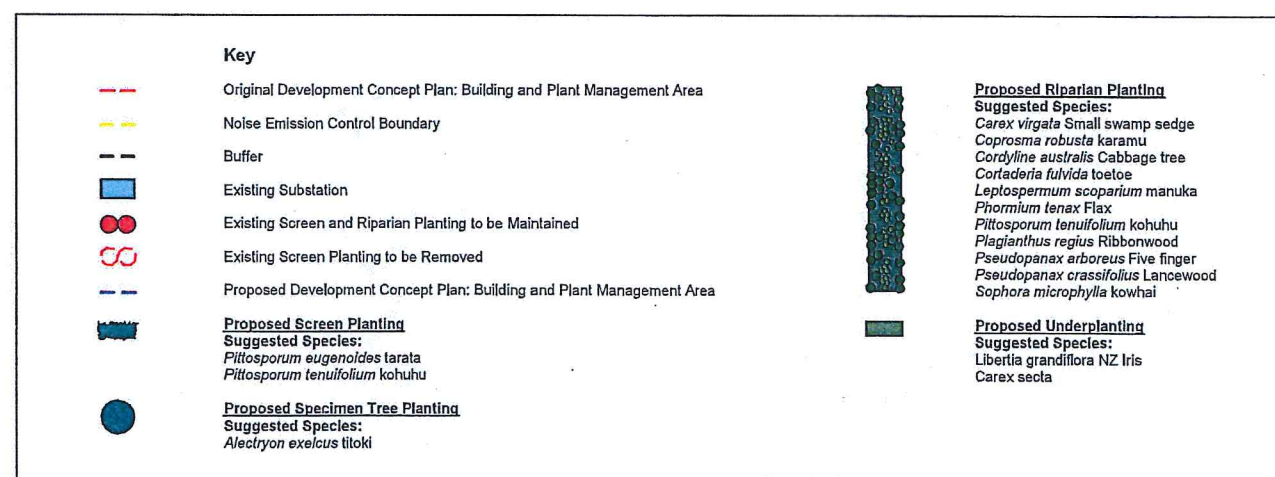
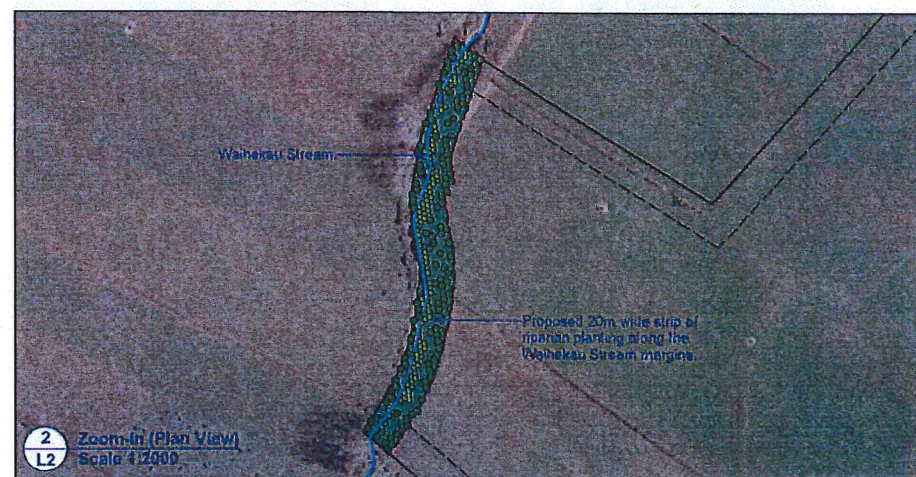
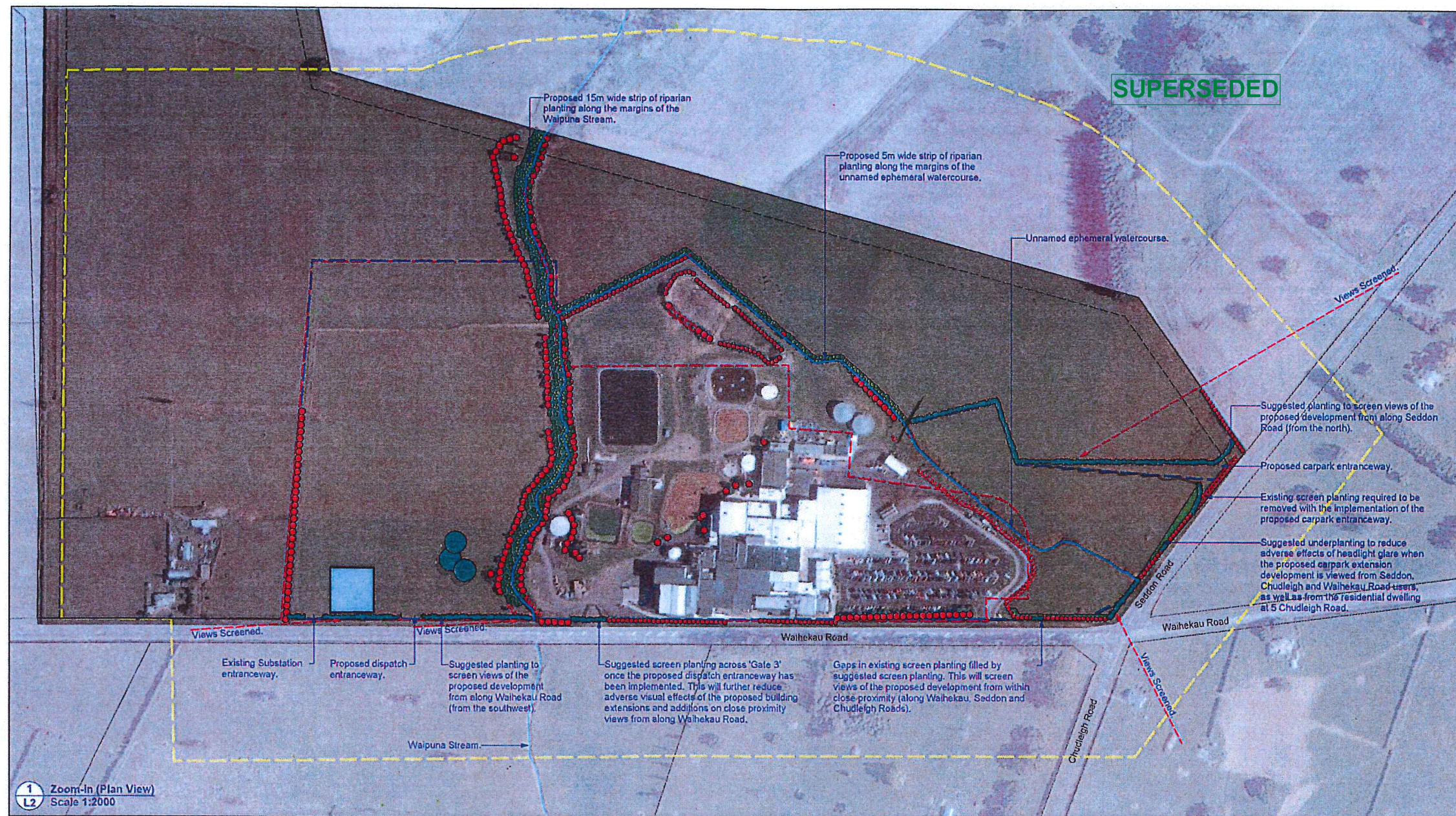
INGHAMS POULTRY SITE
MITIGATION PLAN

Client:

Plan Name:
Overview
Mitigation
Strategy
A3 Scale: 1:6000
A1 Scale: 1:3000
Date: 18-04-2013
Project No: 2013-013
Issue: CONCEPT

Plan Number:

L1



DEVELOPMENT CONCEPT PLAN
Poultry Processing and Manufacturing Site, Waihekau Road, Waitoa
October 2014

Consultants:

The purpose of this plan is to show the general intent of the design and may not be complete in every detail. This plan shall be read in conjunction with all other contract documents. Should quantities differ between the plan and specifications or clarification is required, contact the designated project manager before proceeding. The contractor shall confirm all dimensions and quantities on site before commencing work.

Drawn By: LB
Checked: MG
Revision No: R2
Amendments:
R1: (17-04-13)
Amendments to riparian planting and screen planting. Removal of proposed carpark and building extensions/additions.
R2: (18-04-13)
Amendments to plan scales.

Project:

**INGHAMS POULTRY SITE
MITIGATION PLAN**

Client:



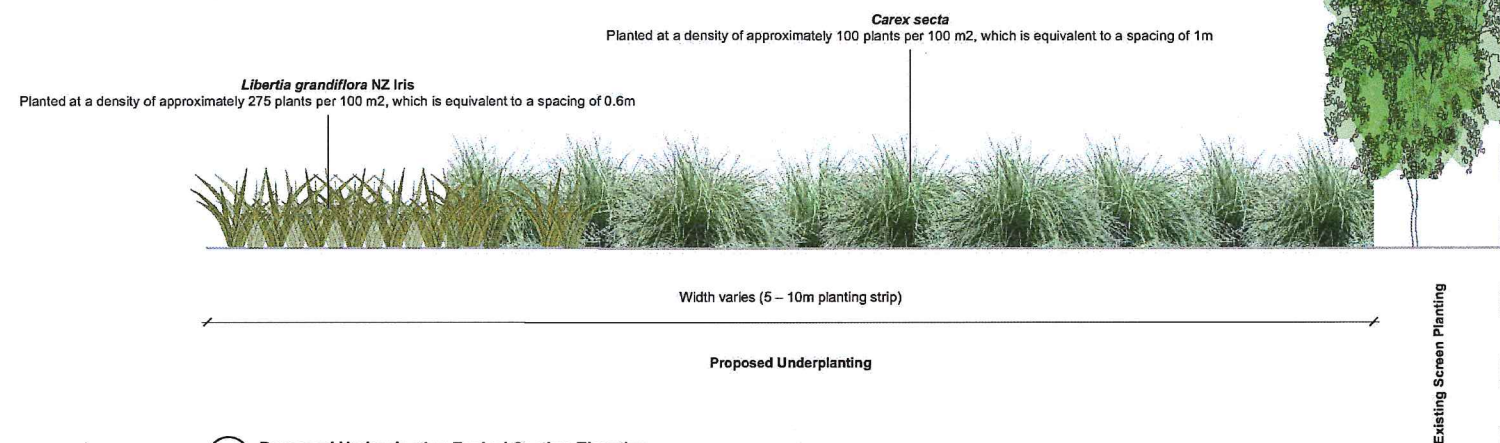
Plan Name:
Mitigation Strategy

A3 Scale: 1:4000
A1 Scale: 1:2000
Date: 18-04-2013
Project No: 2013-013
Issue: CONCEPT

Plan Number:
L2

SUPERSEDED

The proposed underplanting should be planted in very large naturalistic swathes (quincunx layout) in groups of odd numbers.



A Proposed Underplanting Typical Section-Elevation

Site Preparation Notes

- Verify the location of all services (including pipes and electrical cables) prior to excavation.
- The Contractor is responsible for the continuous protection and maintenance of any existing services affected by the works.
- Remove all unwanted vegetation and organic material from site. (To include trees, stumps and root systems). Grasses and weeds, including root systems, should be removed from all planted areas prior to planting. Grasses and weeds should be sprayed with Roundup (or similar approved herbicide) at manufacturer's recommended rates two weeks prior to planting. Complete die off shall have occurred before planting commences. Care must be taken to ensure no weed spray enters any adjacent water courses.

Planting Implementation

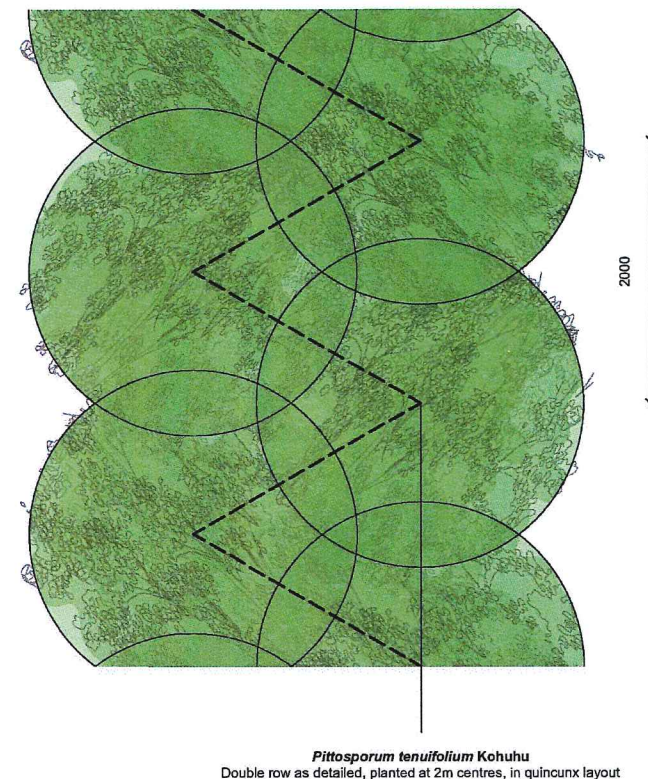
- Planting should be carried out between late April and early September. All plants should be sourced from a local seed source where possible.
- All plants should be of best nursery stock, healthy specimens with well developed root systems, free of pest and disease, well branched and symmetrical, and of typical normal habit for that particular species. Root bound specimens should be rejected.
- The Contractor should ensure that protection is given to all plants and their root systems during transportation and storage, and that plants do not become dehydrated. Bare rooted specimens should be planted on the day of delivery.
- Plant holes should be square and twice the diameter of the root ball. Plants should be planted to the same depth as they are growing in their planter bags. Roots should be spread radially and the hole, backfilled with soil and firmed in.
- Fertilise all plants at time of planting with Agriform, or similar, at the recommended manufacturer's rates.
- All plants should be well watered in immediately following planting. Planting should not be carried out during heavy rain or on excessively hot/cold and/or windy days.

Plant Size

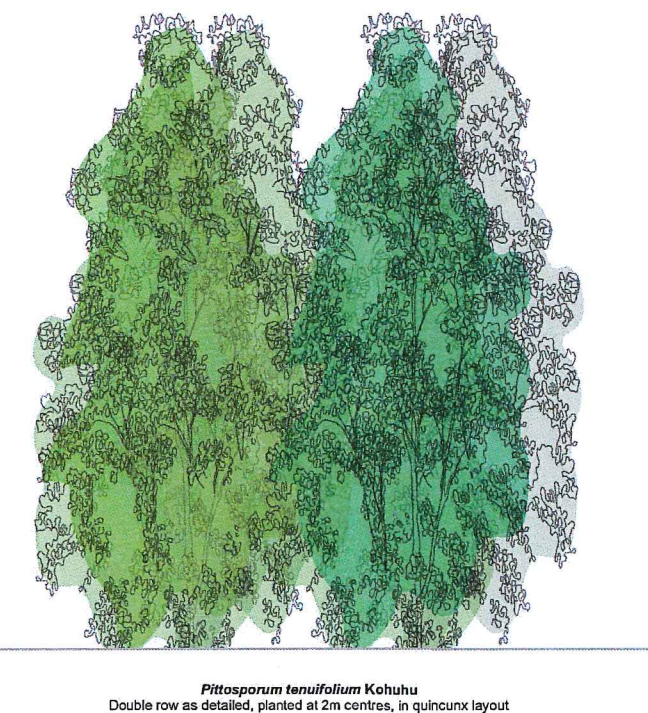
A PB2/3 sized bag or its pot equivalent (1.2 litres – 1.5 litres) is recommended as being a robust yet cost-effective plant grade to use in this environment. When selecting plants the vegetation should be 500 – 600mm high for the best chance of survival.

Maintenance

Weed management and plant releasing will be required, particularly over the key growing months from October to January. As the planting matures the time and costs of plant releasing will decrease as the space between plants decreases, reducing light and space for weeds to occupy.



B Proposed Screen Planting Plan View



B Proposed Screen Planting Elevation



Consultants:

The purpose of this plan is to show the general intent of the design and may not be complete in every detail. This plan shall be used in conjunction with all other contract documents. Should quantities differ between the plan and specifications or clarification is required, contact the designated project manager before proceeding. The contractor shall confirm all dimensions and quantities on site before commencing work.

Drawn By: AR

Checked: MG

Revision No: R0

Amendments:

Project:

**INGHAM'S POULTRY SITE
MITIGATION PLAN**

Client:



Plan Name:

**Typical
Mitigation Planting
Cross Sections**

A3 Scale: 1:50

A1 Scale: 1:25

Date: 23-05-2014

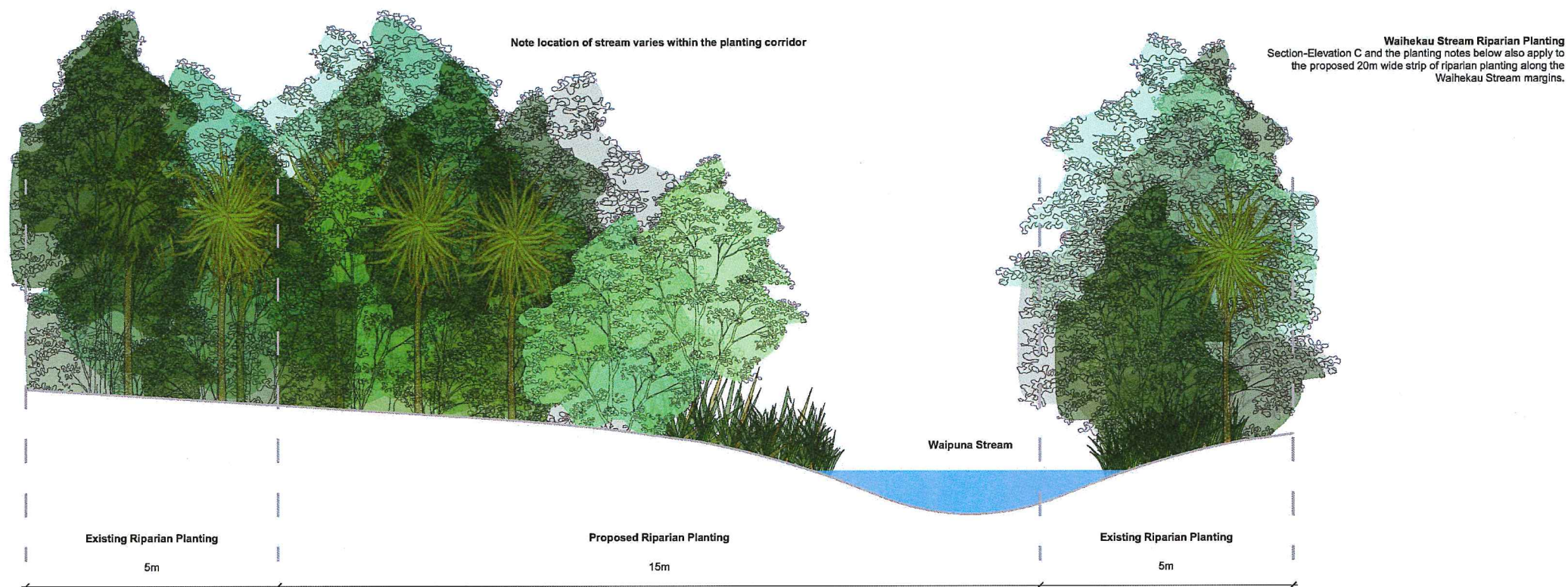
Project No: 2013-013

Issue: CONCEPT

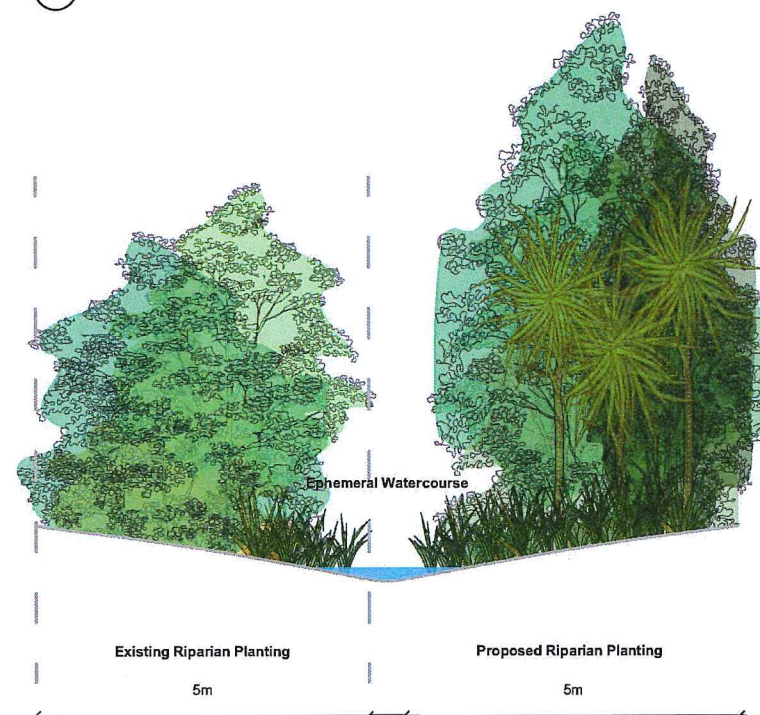
Plan Number:

L4

SUPERSEDED



C Riparian Planting Typical Section-Elevation (15m width)



Riparian Planting Implementation

Planting should be carried out between late April and early September. All plants should be sourced from a local seed source where possible. Ensure existing riparian planting is retained and not damaged during implementation of the enhancement planting.

Weed Control

Weed species (if present) should be removed from the site before planting. Care must be taken to ensure no weed spray enters the stream.

Plant Size

A PB2/3 sized bag or its pot equivalent (1.2 litres – 1.5 litres) is recommended as being a robust yet cost-effective plant grade to use in this environment. When selecting plants the vegetation should be 500 – 600mm high for the best chance of survival.

Plant Spacings

The following plants should be planted in naturalistic swathes (quincunx layout) in groups of odd numbers (3,5,7) rather than placing individuals more randomly.

Canopy trees should be planted at least 3.0m from another canopy specimen, which is a density of approximately 10 plants per 100 m².

- *Plagianthus regius* Ribbonwood

Understorey plants should be planted at a density of approximately 45 plants per 100 m², which is equivalent to a spacing of 1.5m.

It is important to ensure spacings do not exceed this, as rapid canopy closure is required to ensure the ongoing suppression of weeds.

- *Cordyline australis* Cabbage Tree
- *Coprosma robusta* Karamu
- *Cortaderia fulvida* Toetoe
- *Phormium tenax* Flax
- *Ptilosporum tenuifolium* Kohuhu
- *Pseudopanax arboreus* Five-finger
- *Pseudopanax crassifolius* Lancewood

Sedges should be planted in large groups at a density of approximately 100 plants per 100 m², which is equivalent to a spacing of 1m.

- *Carex virgata* Small Swamp Sedge

Low-growing and/or light-demanding species - such as Kowhai - will, ultimately, be competitively overtopped if closely surrounded by taller growing species. These species will also need to be established on margins and in open areas underplanted with grasses and sedges

- *Sophora microphylla* Kowhai

Maintenance

Weed management and plant releasing will be required within the planting zone, particularly over the key growing months from October to January. As the planting matures the time and costs of plant releasing will decrease as the canopy forms, reducing light and space for weeds to occupy.

D Riparian Planting Typical Section-Elevation (5m width)



Consultants:

The purpose of this plan is to show the general intent of the design and may not be complete in every detail. This plan shall be read in conjunction with all other contract documents. Should quantities differ between the plan and specifications or clarification is required, contact the designated project manager before proceeding. The contractor shall confirm all dimensions and quantities on site before commencing work.

Drawn By: AR

Checked: MG

Revision No: R0

Amendments:

Project:

INGHAM'S POULTRY SITE
MITIGATION PLAN

Client:



Plan Name:

Typical
Mitigation Planting
Cross Sections

A3 Scale: 1:100

A1 Scale: 1:50

Date: 23-05-2014

Project No: 2013-013

Issue: CONCEPT

Plan Number:

L5