

# **RIVERLANDS**

## **E S T A T E**

telling the story of historical context,  
environmental responsibility & sustainable  
development

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Adduco

# OUTLINE

- Background
- Challenges
- Values/Aspirations/Vision/Concept
- Enhancements & Design
- Implementation & Prioritisation

# BACKGROUND

- BOFFA MISKELL CONSULTATION GOALS

- Review planting along SH1
- Develop entrance statement & signage
- Talk to MDC about street enhancement
- Create place for food & relaxation
- Improve water quality & enhance amenity value of Ohine-anau-mate Canal & industrial drain

# CHALLENGES

- Tangible recognition of cultural significance
- Traffic management
- Lack of amenity
- Flash flooding, stop bank overtopping, waterway capacity with high tide back-up & sea level rise
- Improving water quality & flow
- Aesthetics – storm-water function versus ecological & ‘pleasantness’ functions !
- Funding

# MAIN DRAINAGE FEATURES & HISTORICAL LINKS

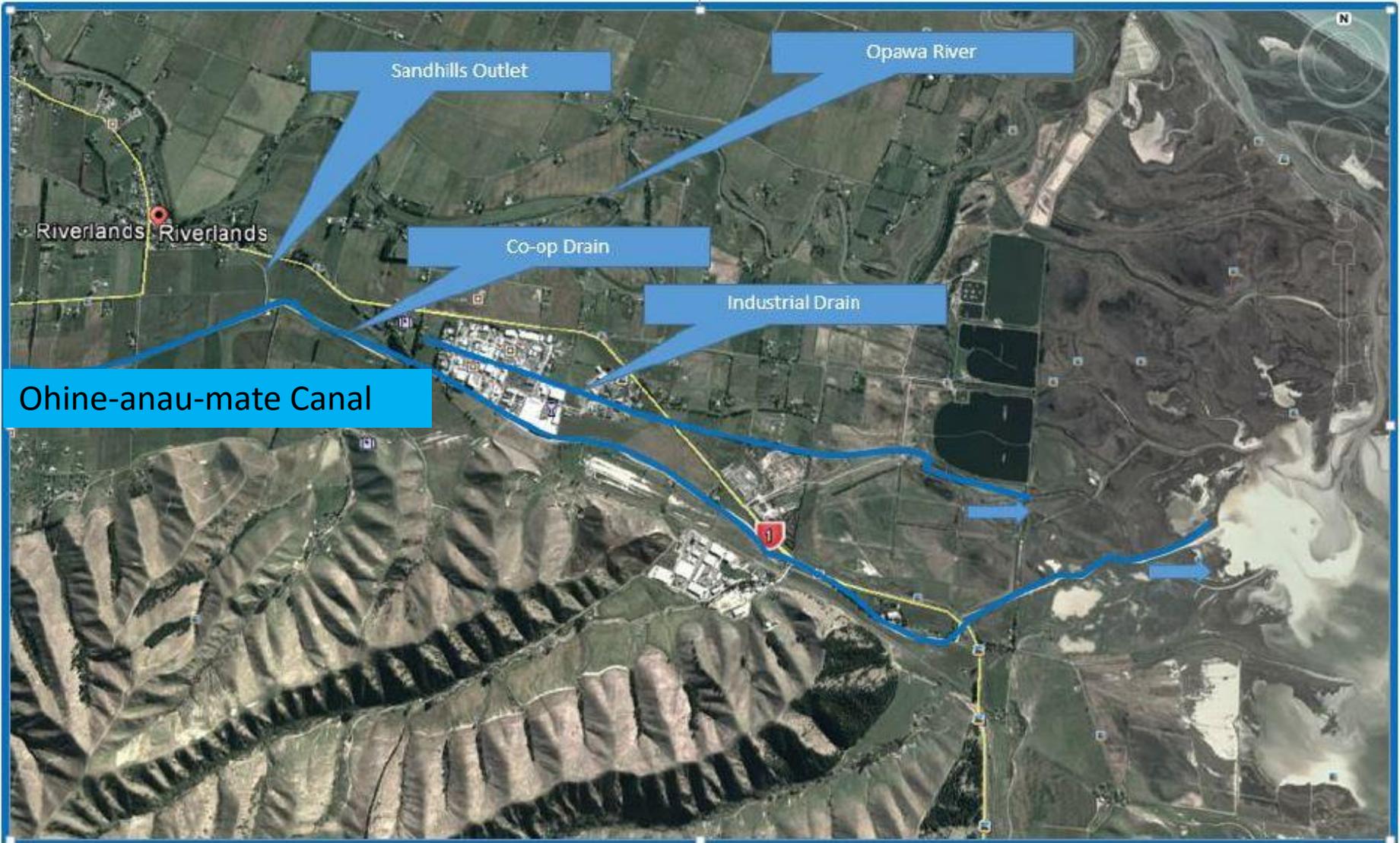


Figure 2: Drain Locations

# OVERALL AERIAL VIEW OF RIVERLANDS INDUSTRIAL ESTATE



# ASPIRATIONS/VISIONARY CONCEPT

- Enterprise, Creativity, Sustainable business & employment
- Involve partners & stakeholders
- Showcase entry that projects identity of estate and region
- Respect Rangitāne history, acknowledging archaeological significance & desire for improved health of Ohine-anau-mate Canal (historical fore-runner of aquaculture in NZ)
- Restore inanga (whitebait) fishery as cultural indicator
- Legible Design reflect history & natural patterns
- Safe, pleasant work & relaxing, informative recreation spaces

# SENSITIVE TO RANGITANE HISTORY

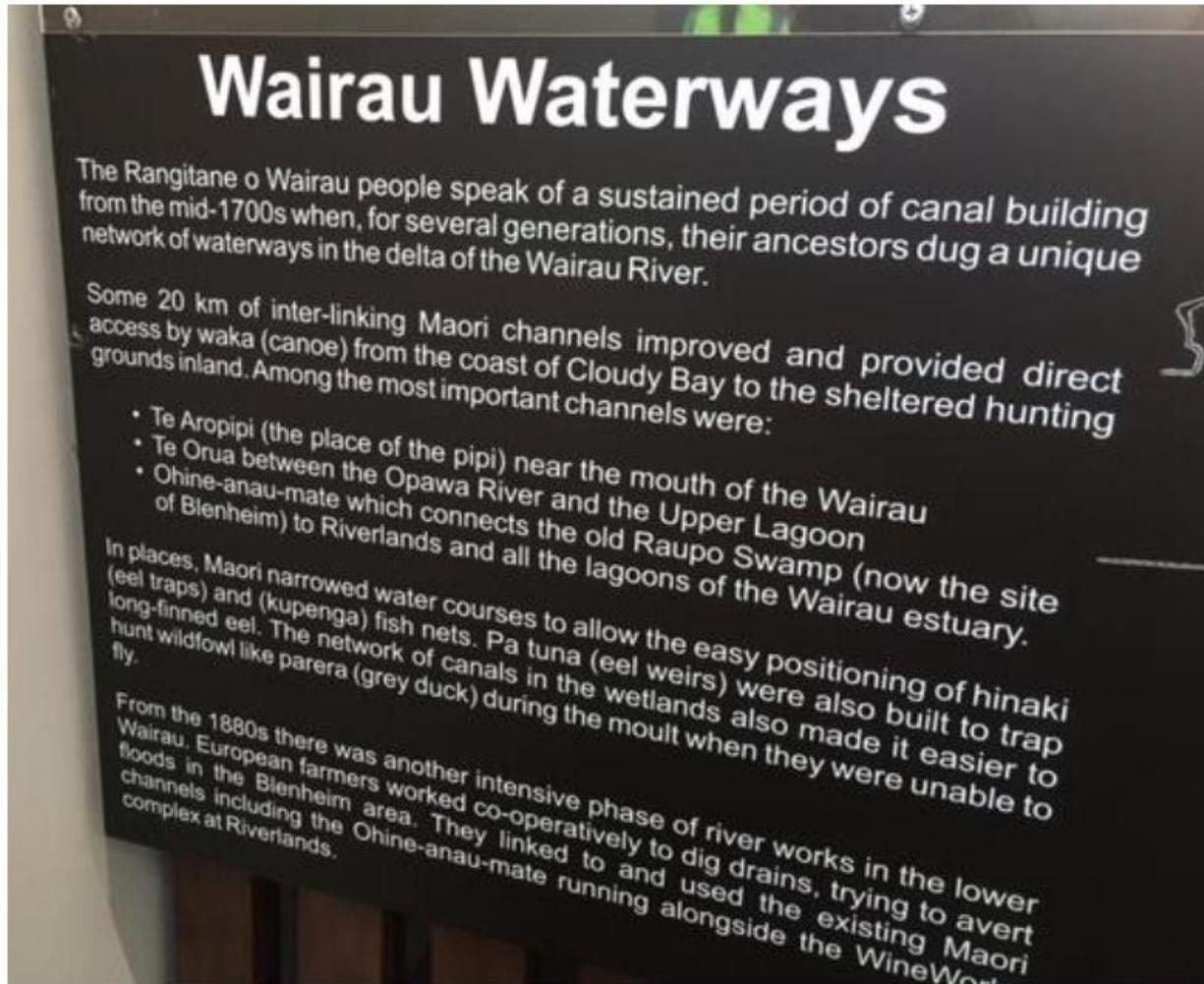


Figure 1: From information display in Wineworks reception

# CATCHMENT HILLS, EROSION & FLAMMABLE TREES – NOW!



**Gullies**  
Plant totara, matai  
lowland ribbonwood, broadleaf  
and lancewood.

**Pine Plantation**  
Thin and interplant with totara,  
matai, kowhai, kanuka and five-finger.

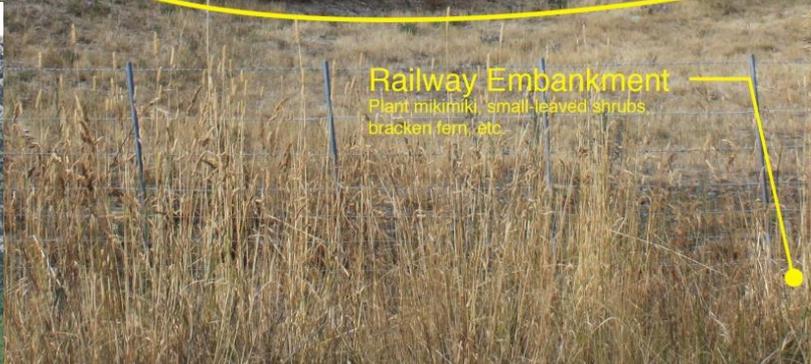
**Tunnel Gully Erosion**  
Plant tussock, rushes and sedges, NZ flax,  
toetoe, mikimiki, manuka, cabbage tree,  
ribbonwood and lacebark.

**Dry Shrublands**  
Plant mikimiki, NZ broom, matagouri,  
prostrate kowhai, porcupine shrub, korokio, etc.

**Kanuka Woodlands**  
(This is on lower slopes with deeper soils)  
Plant kanuka, kowhai, totara, lacebark and  
cabbage tree.

**Detention Pond**  
Plant tussock sedges and rushes,  
lake clubbrush, NZ flax, toetoe, mikimiki,  
cabbage tree, etc.

**Railway Embankment**  
Plant mikimiki, small-leaved shrubs,  
bracken fern, etc.

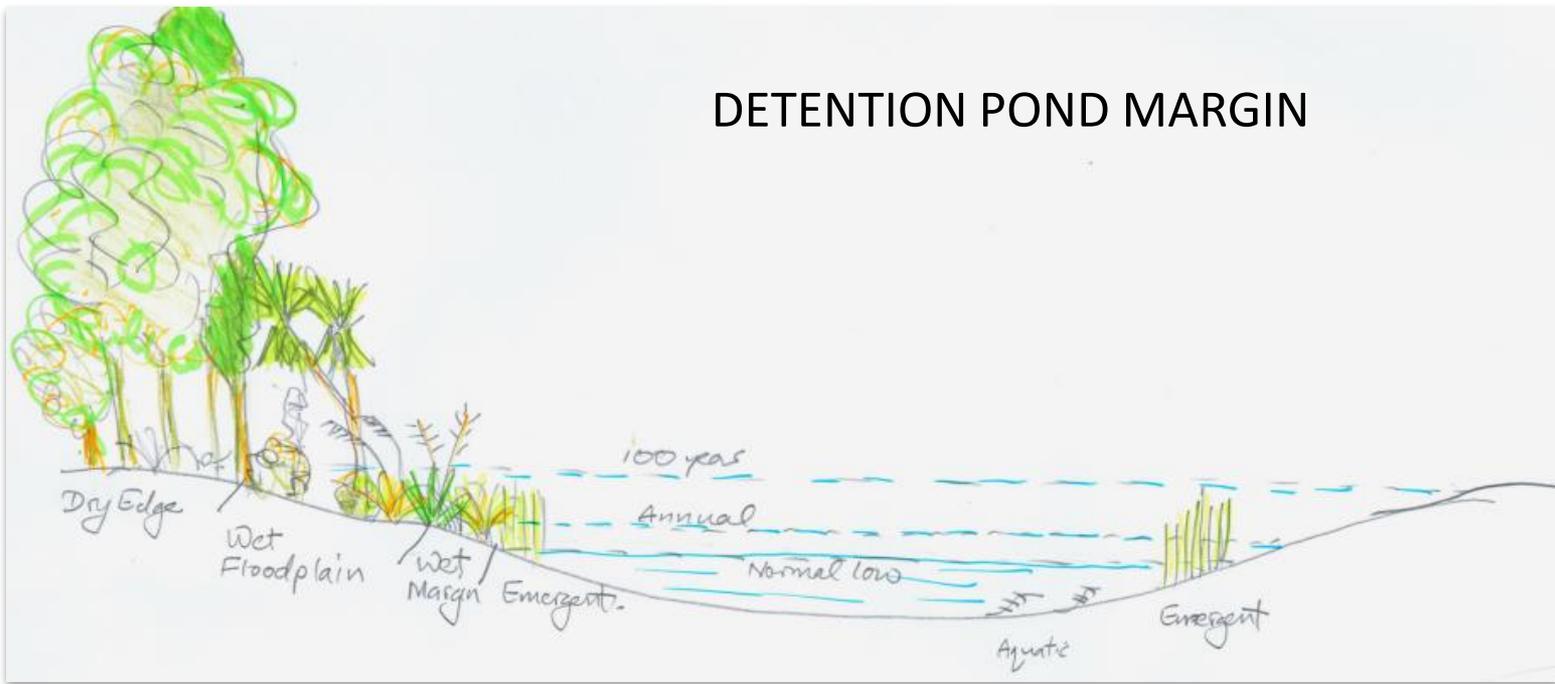


# Proposed Planting for Wither Hills & Detention Ponds

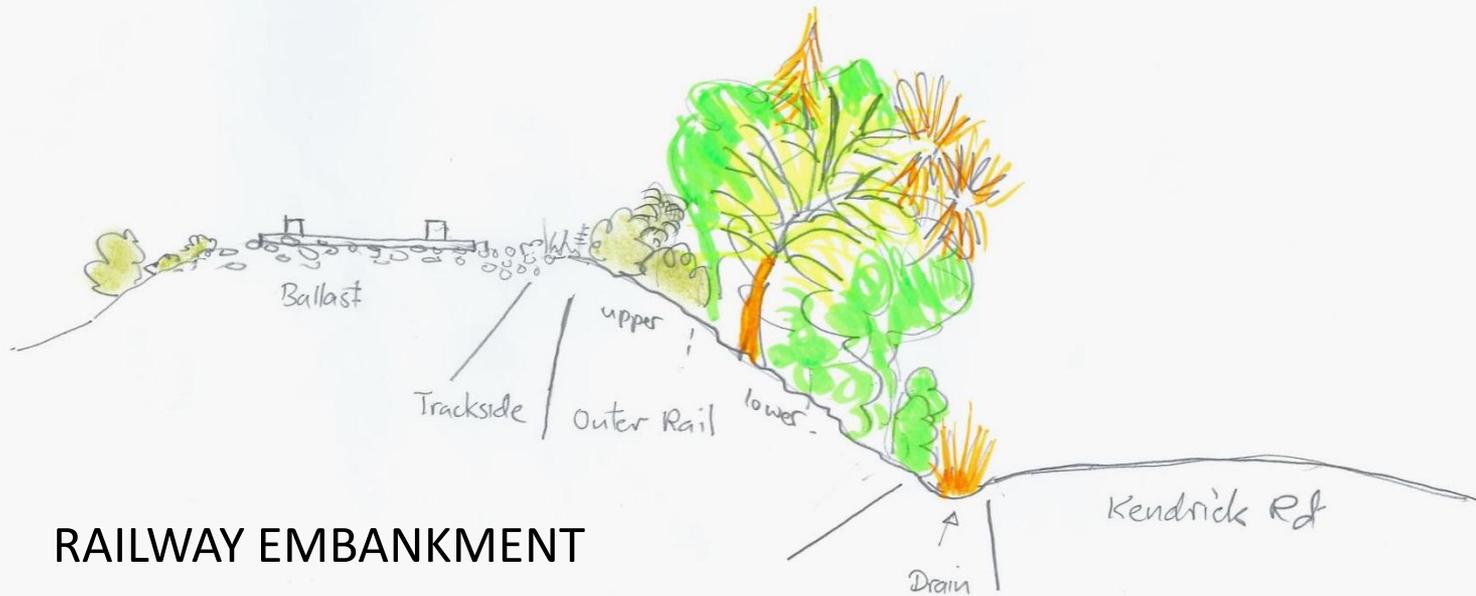
# POTENTIAL DETENTION PONDS TO MINIMISE FLOODING IN CANAL & TRAP SEDIMENT



# DETENTION POND MARGIN



# RAILWAY EMBANKMENT

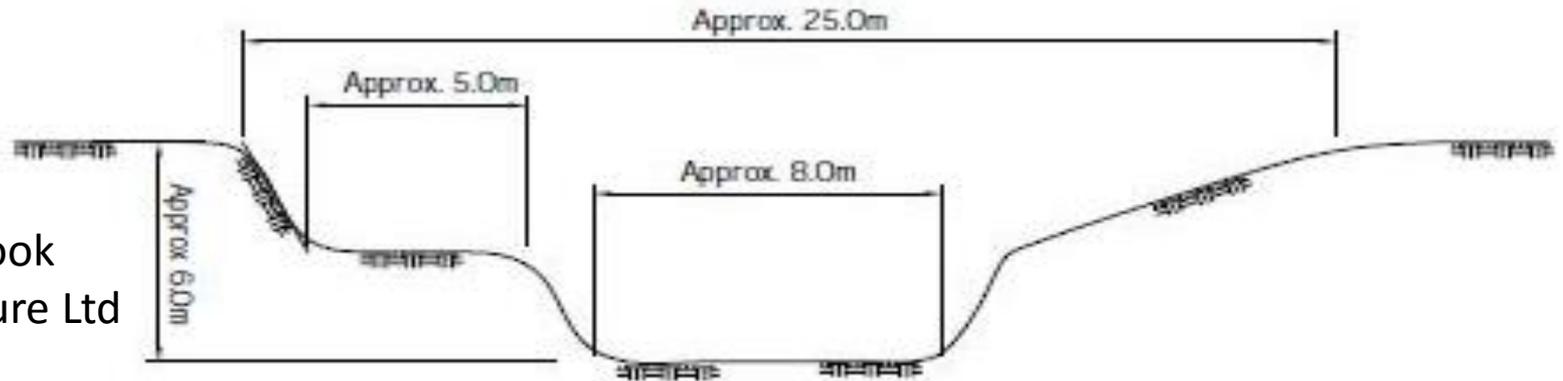


# OHINE-ANAU-MATE CANAL IN CURRENT STATE

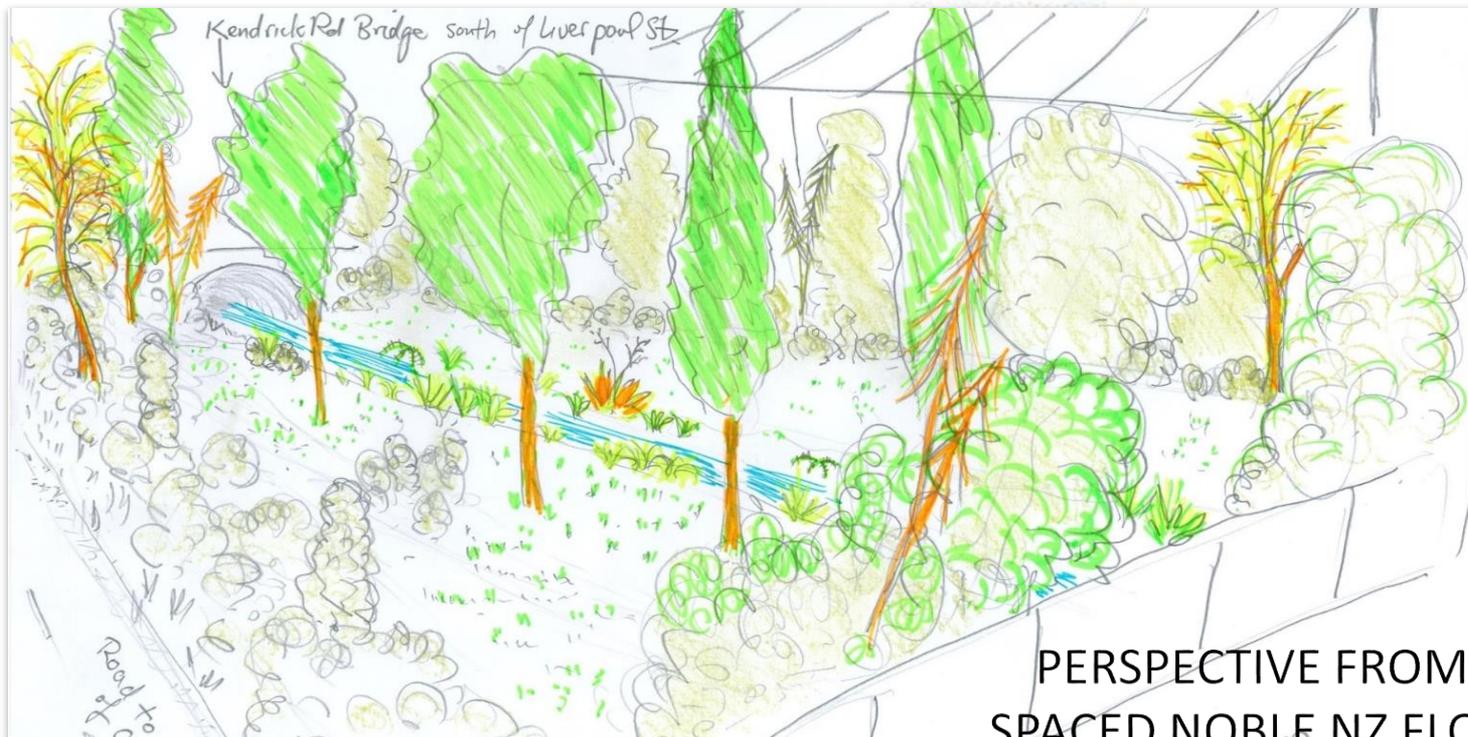


# OHINE-ANAU-MATE CANAL

indicative cross-section



Holbrook  
Architecture Ltd



PERSPECTIVE FROM BRIDGE WITH  
SPACED NOBLE NZ FLOODPLAIN TREES

AERIAL OF CANAL  
(SHEET 2) WITH TREE  
MIX

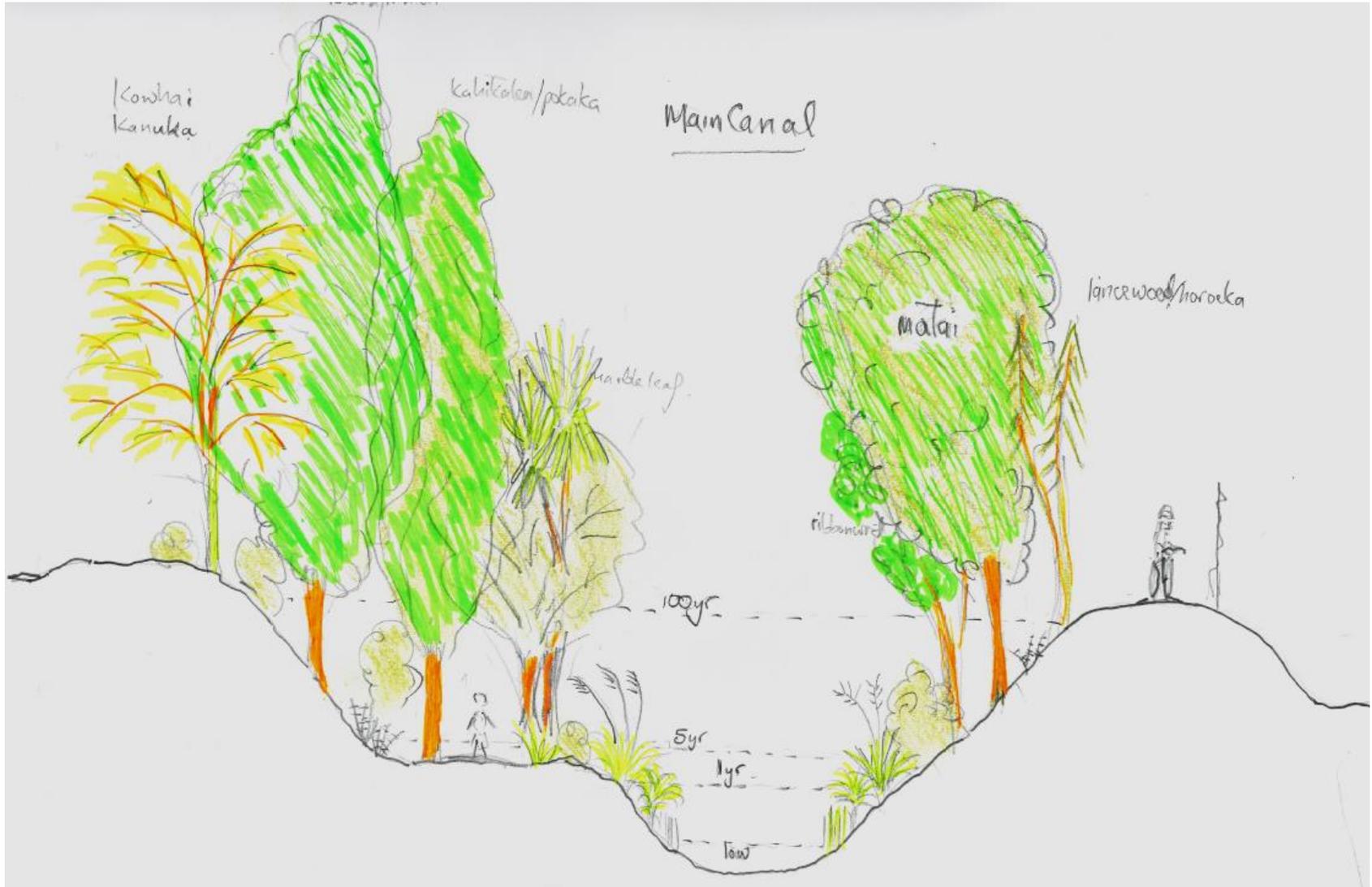
- KEY
- Shrub
  - Kahikatea
  - Kaikomako
  - Kowhai
  - Manatu
  - Matai
  - Pipika
  - Totara
  - Puka & Pushes
  - Lowland Tree Species
  - Low Shrubs & Groundcover
  - Cycleway

**RIVERLANDS INDUSTRIAL ESTATE**  
**Ohine-anau-mate Canal & Wineworks Car Park Planting**



# OHINE-ANAU-MATE CANAL

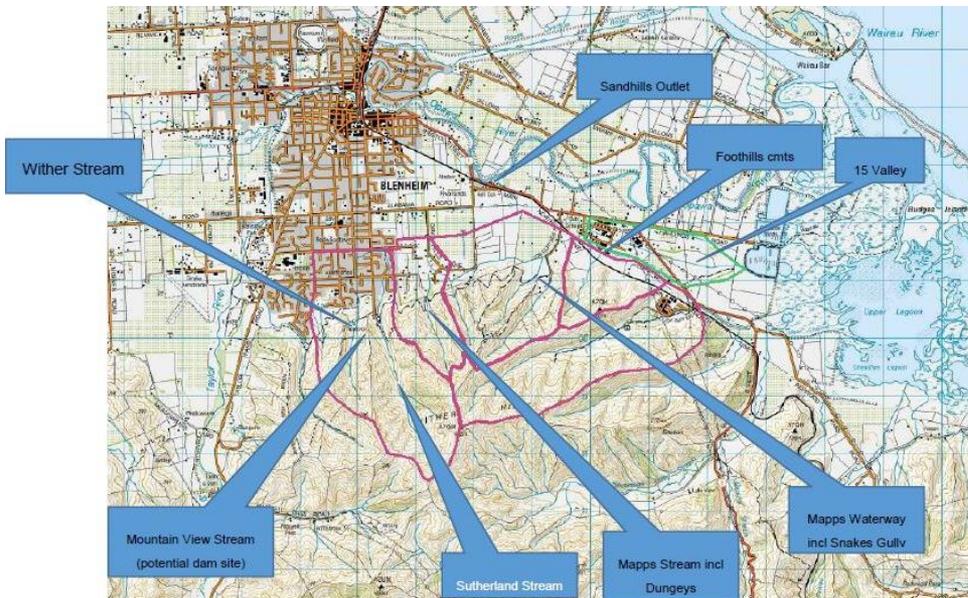
Later dense planting - with more biodiversity



# WETLANDS & RIPARIAN HABITATS



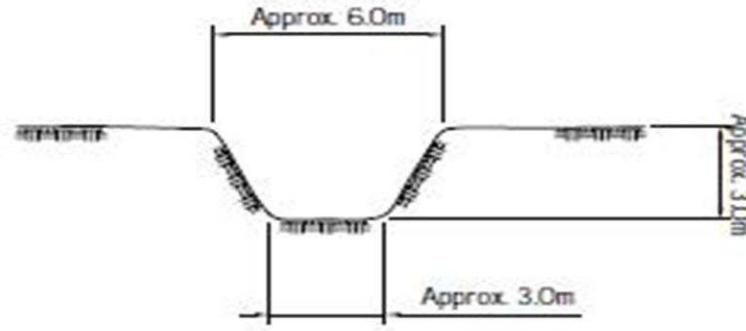
# POTENTIAL TO FLUSH CANAL THROUGH PERIODIC OVERFLOW FROM OPAWA RIVER VIA SANDHILLS OUTLET TO IMPROVE WATER QUALITY & FISH HABITAT



# INDUSTRIAL DRAIN . . . NOW!



# INDUSTRIAL DRAIN INDICATIVE CROSS-SECTION



INDUSTRIAL DRAIN  
INDICATIVE CROSS SECTION



Industrial Drain Enhancement



Mesh vine  
planting on  
fence

# WATER ISSUES

- Cleaning water through better wash-down practices into industrial drain – biotech filters and/or treatment wetlands
- Requires stronger oversight and contributions from MDC ?
- Salvaging/storing grey water from (green?) roofs, roads and industrial processes (e.g. bottle washing) for plant irrigation - recycling water

# FRONTAGE & ENTRANCE NOW!





# SPACES AND PLACES

- Creating a place that allows people to take ownership of the space
- People will seek to be in that space which will encourage others to enjoy what is on offer
- Places need to tell stories and provide a journey through the spaces.
- Creating a space that is safe

# URBAN FRIENDLY ENVIRONMENTS

- Having spaces for people to meet, stop and chat
- Places to relax and enjoy
- A real need for vertical interest such as trees and sculptural elements
- Spaces for people that vehicles can go through but managed in terms of speed and location
- Encourage interactions between different road users

# WHAT DOES IT LOOK LIKE?

- Providing road corridors that are broken up into rooms
- Delivering clear guidance in terms of signage and landscape treatments
- Creating quality spaces of interest
- There needs to be soft and hard engineering

# WHAT DOES IT TRY AND ACHIEVE?

- Creates spaces for workers in the area to take quality breaks
- Workers will want to be in these spaces
- Ownership of working in the area
- Greater safety
- More pleasant place

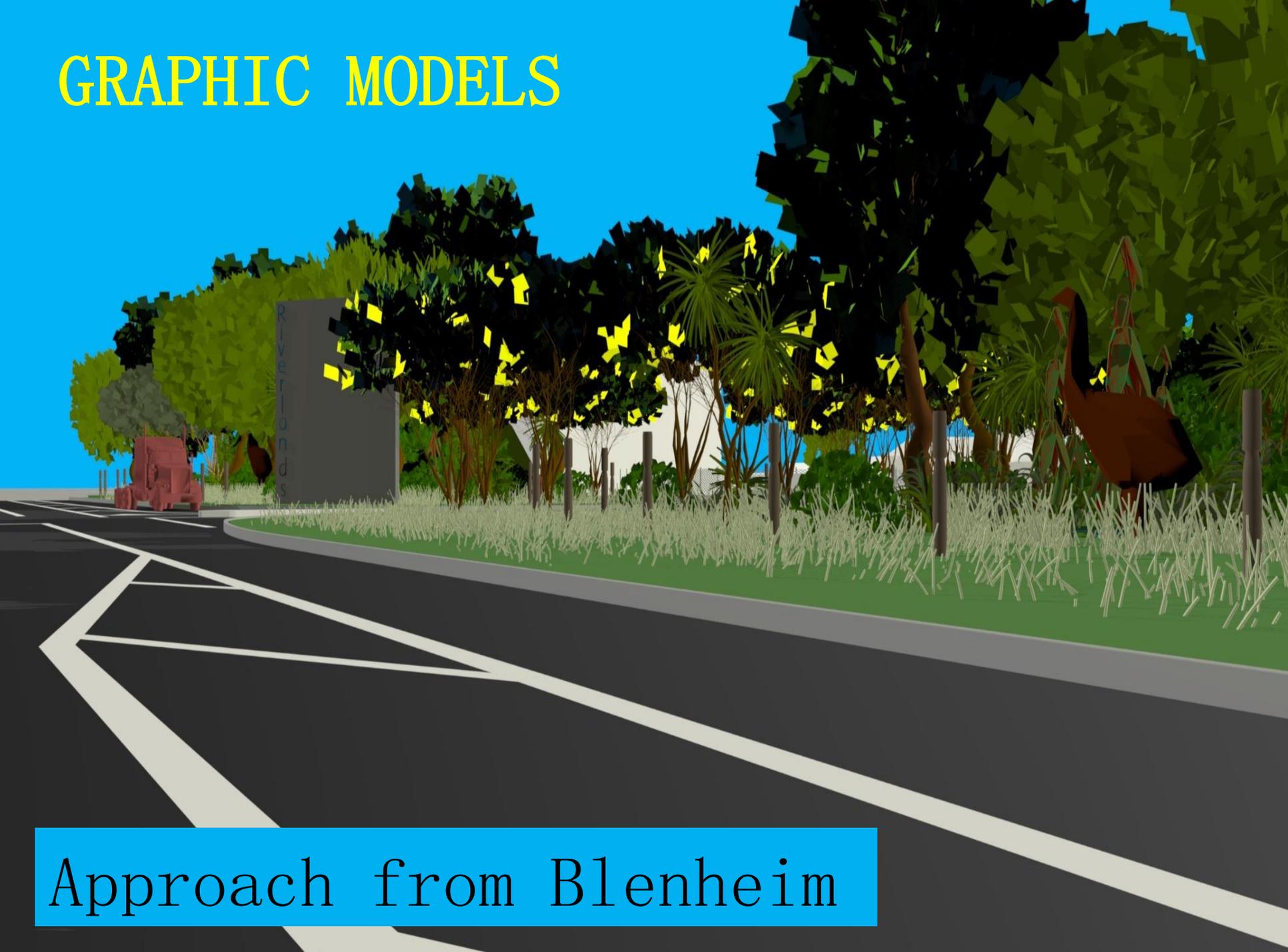
# SUMMARY

- Ownership and Pride
- Safety and Amenity
- Encouraging further development
- Enduring

# OVERALL STREET PLAN (SHEET 1)



# GRAPHIC MODELS



Approach from Blenheim



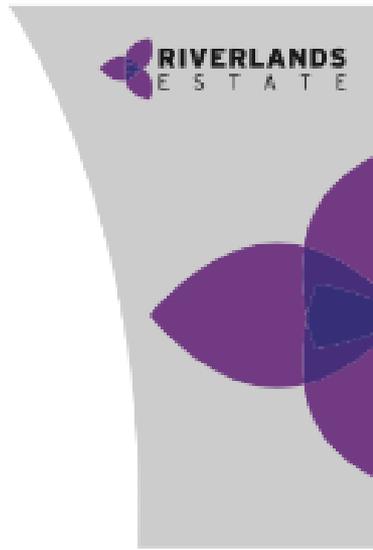
Pond, Wetland, Moa & Pou  
harking back to Natural & Cultural  
History (Place-making)



Entranceway – Noble NZ trees graded to Marlborough texture plants along frontage & kowhai-lined avenue



# ENTRANCE SIGN CONCEPTS





Entrance to Estate



Welcome to Blenheim ...  
Sign/Installation behind here

# NOBLE NZ TREES – TOTARA, MATAI, LANCEWOOD



# ARCHITECTURAL COMPOSITION TEXTURED SHRUBBERY



# STREETSCAPES AS THEY ARE





Sheffield Pocket Park



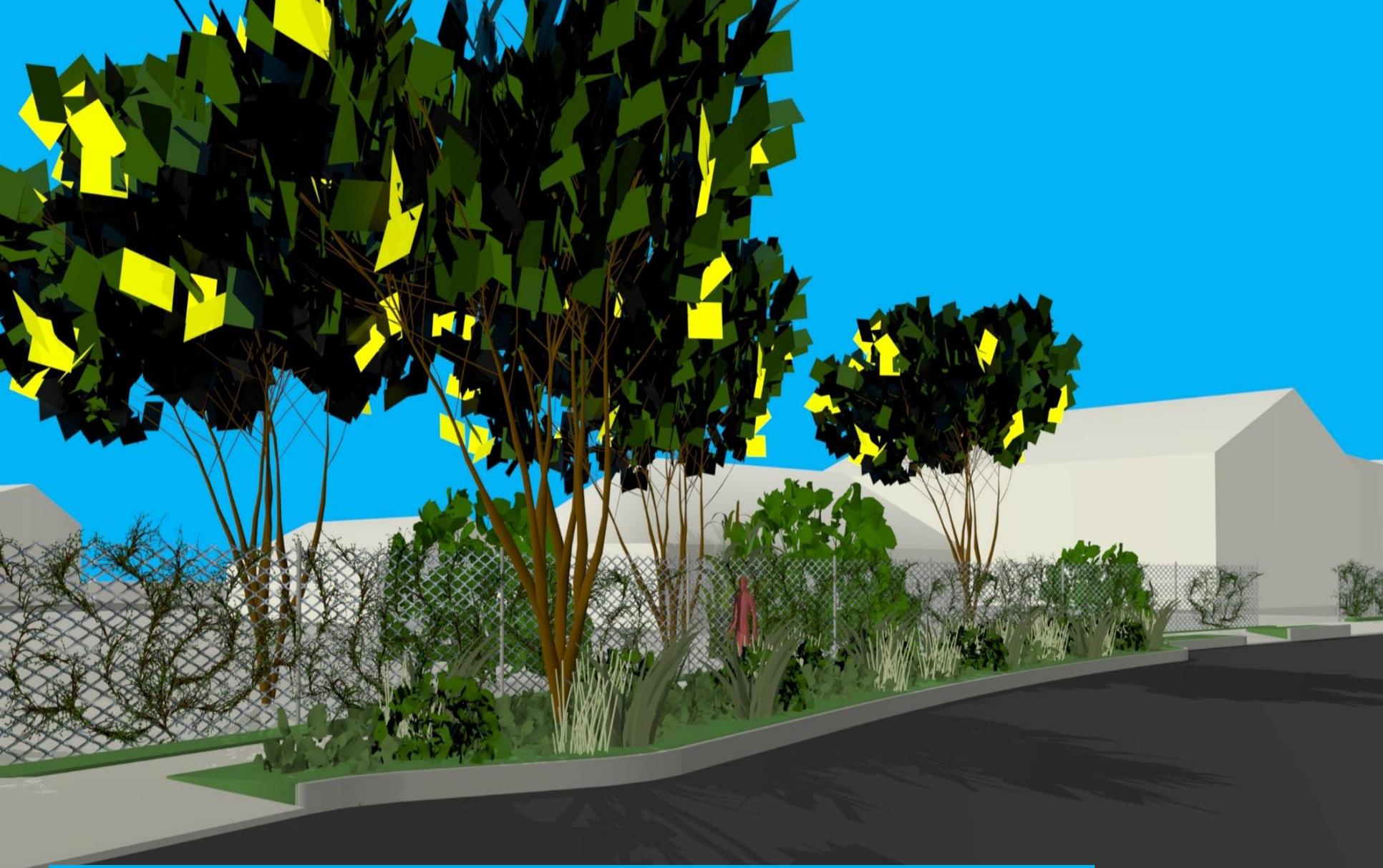
Sheffield Pocket Park



Sheffield/Liverpool Corner







# Liverpool Street Planting





Liverpool Street Pocket Park







# BEFORE

Pocket Park in Vernon St  
small trees below power lines



# AFTER



# BEFORE

Bristol Street pocket park



# AFTER



# INCORPORATE NZ NOBLE TREES

totara, matai, houhere, kowhai, kanuka



# COLOUR, FORM TEXTURE



# ICONIC MARLBOROUGH SPECIALTIES



# VINES & PERGOLAS NZ JASMINE, LEAFLESS LAWYER & SCRAMBLING POHUEHUE

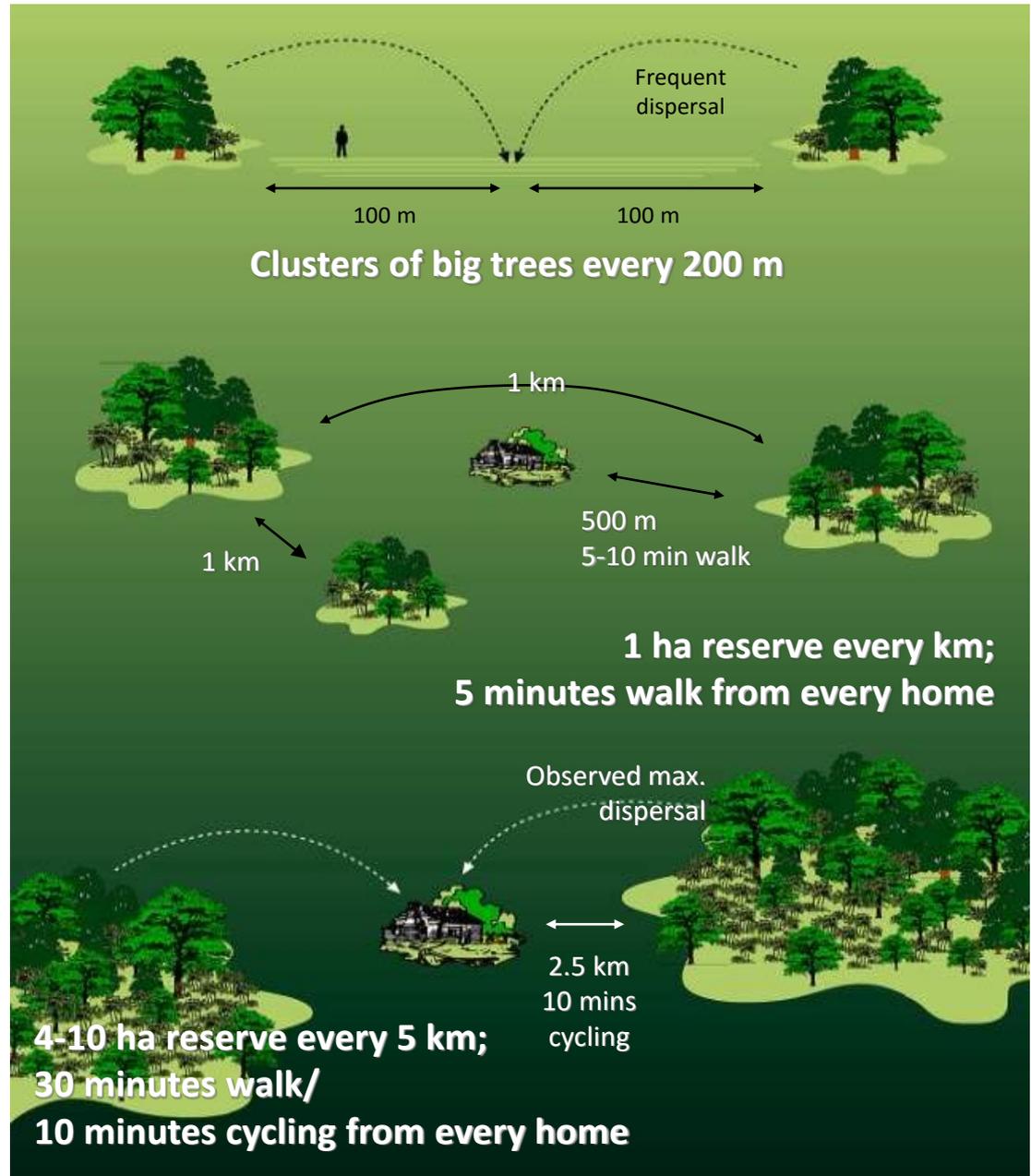


# SHELTERED COURTYARD



# Integrating People Nature & Landscape “Tui to Town”

Meurk & Hall (2006)  
optimum density for  
forest habitat patches:  
groves a few minutes  
walk from each  
residence; habitats  
within 10 minutes  
walk; sanctuaries  
within 45 minutes walk  
or 10 mins bike ride



# WHERE TO FROM HERE?

- The proposal needs buy in from stakeholders.

# We envisage that there are two stages running in parallel.

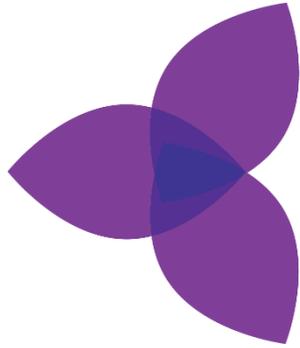
- The first being for work within the estate – e.g. the entrance, pocket parks, streets and industrial drain
- Initial cost estimates are up to \$1million

# The dialogue continues as Stage 2

- with MDC to facilitate proposed Wither Hills planting, creation of detention ponds, and planting of the Canal

# CONCLUSIONS

- We see this as an exciting & worthwhile project for Marlborough, Blenheim and Riverlands which will:
- Create a healthier and more attractive working environment by recognising the natural & cultural heritage of the estate.
- We welcome your feedback & support.



**RIVERLANDS**

E S T A T E

# PLANT PALETTE FOR HILL SLOPES WITH PINE

- *Discaria toumatou* matagouri/tumatakuru
- *Dodonaea viscosa* akeake
- *Griselinia littoralis* broadleaf/
- *Hoheria angustifolia* narrow-leaved  
lacebark/houhere
- *Hoheria populnea* houhere
- *Kunzea ericoides* kanuka
- *Muehlenbeckia astonii* shrub pohuehue
- *Muehlenbeckia complexa* scrambling pohuehue
- *Myoporum laetum* ngaio
- *Nothofagus fusca* red beech
- *Nothofagus solandri* black beech
- *Olearia lineata* narrow-leaved tree daisy
- *Olearia paniculata* golden akeake
- *Ozothamnus leptophyllus* tauhinu
- *Pittosporum eugenioides* lemonwood/tarata
- *Pittosporum tenuifolium* black mapau/kohuhu
- *Plagianthus regius* lowland ribbonwood/manatu
- *Podocarpus totara* totara
- *Sophora microphylla* kowhai

# PLANT PALETTE FOR SLIPS & SEEPAGES

- *Coprosma propinqua* mikimiki
- *Cordyline australis* cabbage tree/ti kouka
- *Cortaderia richardii* toetoe
- *Ficinia nodosa* knobby clubrush
- *Juncus australis* nz rush
- *Juncus gregiflorus* nz rush
- *Juncus sarophorus* nz rush
- *Leptospermum scoparium* manuka
- *Phormium tenax* nz flax/harakeke
- *Plagianthus regius* lowland ribbonwood/manatu
- *Pteridium esculentum* bracken fern

# POND EDGE PALETTE

•	<i>Apodasmia similis</i>	oioi		low edge
•	<i>Blechnum novae-zelandiae</i>		kiokio	low edge
•	<i>Bolboschoenus caldwellii</i>		lake clubrush/pungwha	emergent
•	<i>Carex geminata</i>		cutty grass/purei	upper edge
•	<i>Carex maorica</i>		riparian pureri	low edge
•	<i>Carex secta</i>		tussock sedge/pukio	low edge
•	<i>Carex virgata</i>		tussock sedge/pukio	upper edge
•	<i>Coprosma propinqua</i>		mikimiki	upper
•	<i>Coprosma robusta</i>	karamu		top
•	<i>Cordyline australis</i>	cabbage tree/ti kouka	upper	
•	<i>Cortaderia richardii</i>		toetoe	upper edge
•	<i>Cotula coronopifolia</i>		bachelor's button	upper edge
•	<i>Cyperus ustulatus</i>	umbrella sedge		upper edge
•	<i>Dacrycarpus dacrydioides</i>		kahikatea	top
•	<i>Dicksonia squarrosa</i>		wheki	top
•	<i>Elaeocarpus hookerianus</i>		pokaka	top
•	<i>Eleocharis acuta</i>	spike sedge		emergent
•	<i>Eleocharis sphacelata</i>			emergent
•	<i>Juncus gregiflorus</i>	rush		low edge
•	<i>Juncus sarophorus</i>	rush		low edge
•	<i>Laurelia novae-zelandiae</i>		pukatea	top
•	<i>Leptinella dioica</i>	hairless cotula		upper edge
•	<i>Leptospermum scoparium</i>		manuka	upper edge
•	<i>Lobelia angulata</i>	nz lobelia		upper edge
•	<i>Myrsine divaricata</i>	weeping mapau		upper edge
•	<i>Phormium tenax</i>	NZ flax/harakeke		upper edge
•	<i>Polygonum salicifolium</i>		NZ knotweed	low edge
•	<i>Rorippa palustris</i>	NZ watercress		low edge
•	<i>Schoenoplectus tabernaemontani</i>		lake clubrush	emergent
•	<i>Urtica linearifolia</i>	swamp nettle		upper edge

# CO-OP CANAL PALETTE

## FIRST STAGE SCARP CREST & OUTER SLOPES

- *Coprosma crassifolia*
- *Coprosma linariifolia*
- *Coprosma lucida*
- *Coprosma rigida*
- *Coprosma rubra*
- *Coprosma virescens*
- *Dodonaea viscosa*
- *Muehlenbeckia astonii*
- *Olearia fragrantissima*
- *Olearia lineata*
- *Olearia paniculata*
- *Olearia solandri*
- *Ozothamnus leptophyllus*
- *Pittosporum eugenioides*
- *Pittosporum tenuifolium*
- *Podocarpus totara*
- *Pseudopanax arboreus*
- *Pseudopanax crassifolius*
- *Sophora microphylla*

## FLOOD PLAIN

- *Cordyline australis*
- *Dacrycarpus dacrydioides*
- *Dichondra repens*
- *Elaeocarpus hookerianus*
- *Hoheria angustifolia*
- *Laurelia novae-zelandiae*
- *Plagianthus regius*
- *Prumnopitys taxifolia*

## UPPER BANK CREST

- *Carex geminata*
- *Carex secta*
- *Carex virgata*
- *Coprosma propinqua*
- *Cortaderia richardii*
- *Cyperus ustulatus*
- *Hebe salicifolia*
- *Juncus gregiflorus*
- *Juncus sarophorus*
- *Myrsine divaricata*
- *Phormium tenax*
- *Plagianthus divaricatus*
- *Urtica linearifolia*

## LOWER BANK & EDGE

- *Blechnum novae-zelandiae*
- *Carex maorica*
- *Eleocharis acuta*
- *Isolepis distigmata*
- *Isolepis prolifer*
- *Polygonum salicifolium*
- *Cotula coronopifolia*
- *Rorippa palustris*
- *Schoenoplectus tabernaemontani*

# SECOND STAGE – ADDITIONAL TO 1<sup>ST</sup> STAGE

## UPPER SCARP

- *Brachyglottis repanda*
- *Carmichaelia stevensonii*
- *Coprosma propinqua*
- *Cordyline australis*
- *Corynocarpus laevigatus*
- *Dianella nigra*
- *Dodonaea viscosa*
- *Griselinia littoralis*
- *Helichrysum lanceolatum*
- *Muehlenbeckia astonii*
- *Myoporum laetum*
- *Kunzea ericoides*
- *Olearia fragrantissima*
- *Olearia lineata*
- *Olearia paniculata*
- *Olearia solandri*
- *Podocarpus totara*
- *Pseudopanax arboreus*

## LOWER SCARP

- *Aristotelia serrata*
- *Asplenium hookerianum*
- *Asplenium terrestre*
- *Carpodetus serratus*
- *Coprosma linariifolia*
- *Coprosma lucida*
- *Cordyline australis*
- *Dianella nigra*
- *Elaeocarpus dentatus*
- *Griselinia littoralis*
- *Hedycarya arborea*
- *Hoheria angustifolia*
- *Hypolepis ambigua*
- *Lophomyrtus obcordata*
- *Macropiper excelsum*
- *Melicytus flexuosus*
- *Melicytus lanceolatus*
- *Microlaena stipoides*
- *Microsorium pustulatus*
- *Myrsine australis*

# FLOODPLAIN

- *Alectryon excelsus*
- *Asplenium gracillimum*
- *Asplenium oblongifolium*
- *Astelia fragrans*
- *Carex lambertiana*
- *Carex solandri* sedge
- *Carpodetus serratus*
- *Clematis paniculata*
- *Coprosma areolata*
- *Coprosma grandifolia*
- *Coprosma linariifolia*
- *Coprosma rhamnoides*
- *Coprosma rigida*
- *Coprosma robusta*
- *Coprosma rotundifolia*
- *Coprosma rubra*
- *Coprosma virescens*
- *Sophora microphylla*
- *Streblus heterophyllus*
- *Cordyline australis*
- *Cyathea dealbata*
- *Dicksonia squarrosa*
- *Griselinia littoralis*
- *Histiopteris incisa*
- *Lastreopsis hispida*
- *Leptospermum scoparium* manuka
- *Lophomyrtus bullata*
- *Lophomyrtus obcordata*
- *Melicytus micranthus*
- *Melicytus ramiflorus*
- *Myrsine australis*
- *Pittosporum tenuifolium*
- *Pseudopanax crassifolius*
- *Pteris macilenta*

# PLANT PALETTE FOR INDUSTRIAL DRAIN – TERRACE TOP

• <i>Aristotelia serrata</i>	wineberry/makomako	• <i>Dacrycarpus dacrydioides</i>	kahikatea
• <i>Alectryon excelsus</i>	titoki	• <i>Dicksonia squarrosa</i>	wheki
• <i>Asplenium spp</i>	nz spleenworts	• <i>Elaeocarpus dentatus</i>	hinau
• <i>Astelia fragrans</i>	bush flax	• <i>Griselinia littoralis</i>	broadleaf/papaumu
• <i>Brachyglottis repanda</i>	rangiora	• <i>Hedycarya arborea</i>	pigeonwood
• <i>Carpodetus serratus</i>	marble leaf/putaputaweta	• <i>Helichrysum lanceolatum</i>	niniaio
• <i>Clematis forsteri</i>	nz clematis	• <i>Hoheria angustifolia</i>	narrow-leaved lacebark/houhere
• <i>Clematis paniculata</i>	white clematis	• <i>Hoheria populnea</i>	houhere
• <i>Coprosma areolata</i>	veined coprosma	• <i>Hypolepis ambigua</i>	pigfern
• <i>Coprosma grandifolia</i>	large-leaved karamu	• <i>Lophomyrtus bullata</i>	ramarama
• <i>Coprosma linaiiifolia</i>	narrow-leaved coprosma	• <i>Lophomyrtus obcordata</i>	rohutu
• <i>Coprosma lucida</i>	shining karamu	• <i>Macropiper excelsum</i>	kawakawa
• <i>Coprosma rhamnoides</i>	variable leaved coprosma	• <i>Melicope simplex</i>	poataniwha
• <i>Coprosma robusta</i>	karamu	• <i>Melicytus lanceolatus</i>	narrow-leaved mahoe/mahoe wao
• <i>Coprosma rotundifolia</i>	round-leaved coprosma	• <i>Melicytus micranthus</i>	small-leaved mahoe
• <i>Coprosma rubra</i>	a broadleaved mikimiki	• <i>Melicytus ramiflorus</i>	mahoe
• <i>Cordyline australis</i>	cabbage tree/ti kouka	• <i>Microlaena stipoides</i>	nz rice grass
• <i>Cyathea dealbata</i>	silver fern	• <i>Pittosporum tenuifolium</i>	black mapau/kohuhu
• <i>Microsorium pustulatus</i>	hounds tongue fern	• <i>Plagianthus regius</i>	lowland ribbonwood/manatu
• <i>Myrsine australis</i>	red mapau	• <i>Polystichum richardii</i>	shield fern
• <i>Pennantia corymbosa</i>	kaikoimako	• <i>Pseudopanax arboreus</i>	fivefinger/whauwhaupaku
• <i>Pittosporum eugeniioides</i>	lemonwood/tarata	• <i>Pseudopanax crassifolius</i>	lancewood/horoeka
		• <i>Pteris macilenta</i>	brake fern
		• <i>Sophora microphylla</i>	kowhai
		• <i>Streblus heterophyllus</i>	milk tree/turepo

# PLANT PALETTE FOR INDUSTRIAL DRAIN

## PLANT PALETTE FOR INDUSTRIAL DRAIN LOWER BANK & EDGE

### UPPER BANK

- *Carex geminata* cutty grass
- *Carex virgata* pukio
- *Coprosma propinqua* mikimiki
- *Hebe salicifolia* koromiko
- *Histiopteris incisa* sun fern
- *Lastreopsis hispida* hairy fern
- *Myrsine divaricata* weeping mapau
- *Plagianthus divaricatus* marsh ribbonwood

- *Blechnum novae-zelandiae* kiokio
- *Isolepis distigmata* turf sedge
- *Isolepis prolifer* turf sedge
- *Juncus australis* rush
- *Juncus gregiflorus* nz rush
- *Juncus pallidus* nz large rush
- *Juncus sarophorus* nz rush
- *Apodasmia similis* oioi
- *Polygonum salicifolium* nz knotweed
- *Rorippa palustris* nz water cress

# PLANT PALETTE FOR SH1 FRONTAGE & ENTRANCEWAY

- Combination of:
  - street trees
  - street shrub bed/woodland
  - Pond
  - Lawn

# STREET GROUND COVER & SHRUB PALETTE

• Anemanthele lessoniana		wind grass	• Macropiper excelsum	kawakawa
• Arthropodium cirratum		rengarenga	• Melicope simplex	poataniwha
• Carmichaelia australis		common broom	• Melicytus alpinus	porcupine shrub
• Carmichaelia carmichaeliae		Marlborough tree broom	• Melicytus crassifolius	porcupine shrub
• Carmichaelia stevensonii		Marlborough tree broom	• Melicytus flexuosus	flexible porcupine shrub
• Clematis forsteri	clematis		• Muehlenbeckia astonii	shrub pohuehue
• Coprosma acerosa	sand coprosma		• Myrsine divaricate	weeping mapou
• Coprosma crassifolia		thick-leaved mikimiki	• Olearia fragrantissima	sweet daisy tree
• Coprosma linariifolia		narrow-leaved coprosma	• Olearia lineata	narrow-leaved daisy tree
• Coprosma lucida	shining karamu		• Olearia solandri	coastal shrub daisy
• Coprosma propinqua		mikimiki	• Ozothamnus leptophyllus	tauhinu
• Coprosma rhamnoides		variable-leaved coprosma	• Pachystegia insignis	Marlborough rock daisy
• Coprosma rigida	red-stemmed mikimiki		• Plagianthus divaricatus	marsh ribbonwood
• Coprosma rubra	a small-leaved coprosma		• Pomaderris phyllicifolia	tauhinu
• Coprosma virescens		pink-stemmed mikimiki	• Pseudopanax ferox	fierce lancewood
• Corokia cotoneaster		korokio	• Sophora prostrata	prostrate kowhai
• Dianella nigra		ink-berry/turutu	• Teucrium parvifolium	NZ verbena shrub
• Helichrysum lanceolatum		ninao		
• Libertia grandiflora		nz iris/mikoikoi		
• Libertia ixioides		nz iris/mikoikoi		
• Lophomyrtus bullata		ramarama		
• Lophomyrtus obcordata		rohutu		

# MESH FENCE VINES

- *Clematis forsteri* clematis
- *Clematis paniculata* large-flowered clematis/puawhananga
- *Muehlenbeckia complexa* scrambling pohuehue
- *Parsonsia capsularis* NZ jasmine
- *Parsonsia heterophylla* NZ jasmine
- *Rubus schmidelioides* bush lawyer
- *Rubus squarrosus* leafless lawyer

# PLANT PALETTE FOR POCKET PARKS

- Combination of:
  - Street trees
  - Street shrub beds
  - Herbaceous borders
  - Pervious paving
  - Lawn
  - Rock garden

# HERBACEOUS BORDER PALETTE

- *Arthropodium cirratum* rengarenga
- *Asplenium gracillimum* graceful spleenwort
- *Asplenium oblongifolium* shining spleenwort
- *Asplenium terrestre* ground spleenwort
- *Astelia fragrans* bush flax
- *Dianella nigra* ink berry/turutu
- *Dichelachne crinita* plume grass
- *Dichondra repens* kidney herb
- *Hypolepis ambigua* pigfern
- *Ficinia nodosa* knobby clubrush
- *Leptinella dioica* hairless cotula
- *Leptinella perpusilla* nz cotula
- *Libertia grandiflora* nz iris/mikoikoi
- *Libertia ixioides* nz iris/mikoikoi
- *Linum monogynum* coastal linen flax
- *Lobelia anceps* shore lobelia
- *Lobelia angulata* lobelia
- *Microsorium pustulatus* hounds tongue fern
- *Paesia scaberula* fern
- *Phormium cooklanum* cliff flax/wharariki
- *Polystichum richardii* shield fern
- *Tetragonia implexicoma* nz spinach



# PERVIOUS PAVEMENT (CRUSHED MUSSEL SHELL) PALETTE

- *Carex breviculmis* short-stemmed sedge
- *Carex resectans* turf sedge
- *Cotula australis* cotula
- *Dichelachne crinita* plume grass
- *Dichondra repens* kidney herb
- *Geranium retrorsum* nz geranium
- *Geranium sessiliflorum* nz geranium
- *Geranium solandri* nz geranium
- *Gnaphalium* spp nz cudweed
- *Lachnagrostis* spp tumbleweed grass
- *Leptinella dioica* hairless cotula
- *Leptinella perpusilla* nz cotula
- *Lobelia angulata* common lobelia
- *Muehlenbeckia axillaris* mat pohuehue
- *Poa imbecilla* fine meadow grass
- *Rytidosperma* spp danthonia
- *Zoysia minima* nz twitch

# LAWN PALETTE

- *Carex resectans* turf sedge
- *Cotula australis* cotula
- *Dichondra repens* kidney herb
- *Geranium retrorsum* nz geranium
- *Geranium sessiliflorum* nz geranium
- *Geranium solandri* nz geranium
- *Gnaphalium spp* nz cudweed
- *Leptinella dioica* hairless cotula
- *Leptinella perpusilla* nz cotula
- *Lobelia angulata* nz lobelia
- *Muehlenbeckia axillaris* mat pohuehue
- *Poa imbecilla* fine meadow grass
- *Zoysia minima* nz twitch

# CORRIDORS - WOODS, HEDGES, WALLS, STREAMS, STREETS LINKING PATCHES, JOINING THE DOTS - CRITICAL VISUAL SYMBOLISM



# THE MATRIX DICHONDRA REPENS IN ROADSIDE LAWN

**biodiversity in surprising places**



# ELLERSLIE INTERNATIONAL FLOWER SHOW – 2012 (A POCKET PARK)





**TOTARA**



**MATAI**



**POKAKA**



**KAHIKATEA**



# ESTATE ENTRANCE



# CULTURAL LANDSCAPES

