



WAIKANA E NORTH

CONCEPT DESIGN

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REVISION:	ISSUE:	DATE:
A	100% CONCEPT DESIGN	12.02.2023
B	SUPPLEMENTARY PLANTING	19.05.2023
C	PLANTING UPDATE	02.06.2023

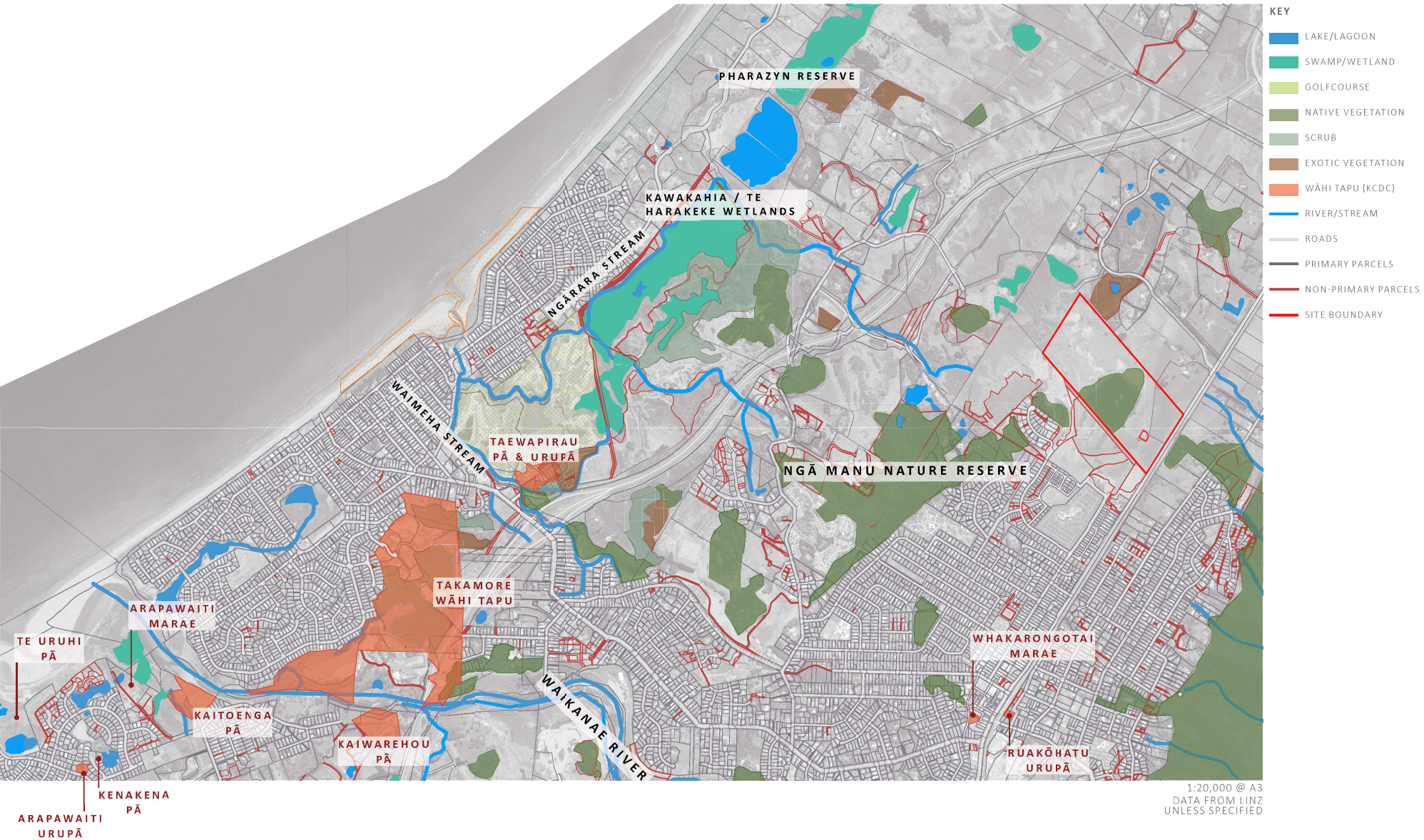
prepared by:
Wā | WRAIGHT + ASSOCIATES LIMITED

prepared for:
THAMES PACIFIC

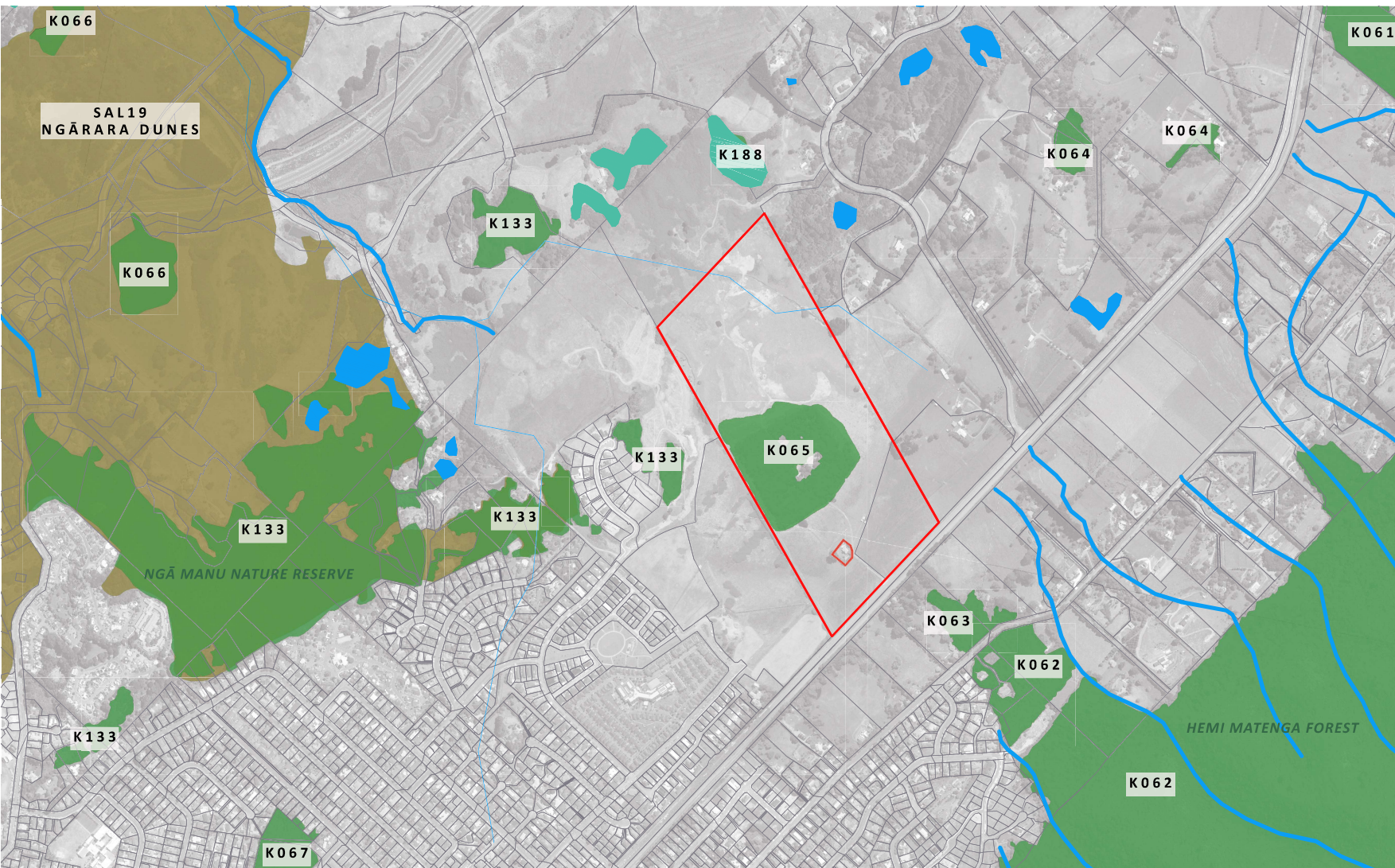
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WAIKANAE HOUSING

ECOLOGICAL, CULTURAL CONTEXT



ECOLOGICAL AREAS, SAL'S



K061: Kohekohe-tawa forest, titoki-mahoe treeland
Kohekohe forest at low altitude is uncommon within Tararua ED.

K062: Kohekohe-tawa-titoki forest
One of the 10 largest sites of lowland kohekohe forest in GW region. Kohekohe forest merges into lowland broadleaved tawa-titoki forest with rimu and rata emergents. Kohekohe forest mostly occurs on near-coastal south-facing slopes. Three tongues of privately-owned forest extend from Tararua ED into Foxton ED.

K063: Kohekohe-tawa-titoki forest
Very small fragment with considerable threat from pest plant species. Separated from the very large Hemi Matenga Forest by a road

K064: Kohekohe-tawa-titoki forest
A very small example of a forest type that is rare within Foxton ED and Wellington region.

K065: Kānuka-mānuka scrub
A relatively large area of kānuka-mānuka scrub and sphagnum moss wetland. Habitat of this type is uncommon within Foxton ED.

K066: Dune wetland
Kahikatea, pukatea, toe toe, cabbage trees, mānuka. The second largest area of harakeke flaxland and raupo reedland in the Kāpiti District. An important representation of habitat formally common in the KCD.

K067: Kohekohe forest
Kohekohe-(titoki) canopy with occasional emergent rewarewa. Site is small and vulnerable to pest plant species encroaching from residential gardens.

K133: Wetland, swamp forest, kohekohe forest, tawa forest
One of largest and best examples of swamp forest within Foxton ED. Good example of sequences between wetland, swamp forest and dune-ridge dry forest. Contains maire tawake (Syzgium maire), the dwarf orchid Korthalsella salicornioides, and is likely to include the coastal kānuka (Kunzea amathicola).

K188: Mānuka-kānuka scrub
Regenerating early successional vegetation with low diversity due to grazing but acutely threatened land environment. Partly fenced recently; needs complete fencing to allow regeneration. Small area but has potential for restoration if fenced and pest plants and pest animal controlled.

1:10,000 @ A3
DATA FROM KCDC
OPERATIVE DISTRICT PLAN
2021. TEXT REDACTED

LANDSCAPE STRATEGY PLAN



DESIGN STATEMENT

Currently zoned to rural land with an eco-hamlet precinct overlay, the proposed subdivision at Waikanae North (layout by Cuttriss) is reflective of a the present urban expansion of the township. With Transmission Gully recently completed, the site takes advantage of an anticipated reduction in traffic volumes and speed on Old State Highway 1.

Entry thresholds

From Old State Highway 1, a stand of Nikau is proposed to ground the entry to the development. Signage integrated with the entry threshold will also be incorporated. The south western connection to Manu Park subdivision is proposed to feature tree planting adjacent the existing kanuka/mānuka bush, with nature-play elements incorporated.

Road network

Two connections to the existing road network are provided, one via Old State Highway 1, which will be managed by roundabout, and one to the south of the site, adjacent the neighbouring subdivision. Lots 85 and 41 are proposed to be retained by the developer to allow future connectivity to the north via Road 4 and Road 1 respectively.

The overarching road design incorporates pedestrian footpaths and swales with low level native planting and street trees to its edges to key into the site stormwater strategy (by Awa). All other street trees feature native underplanting. Lot clusters to the north-west portion of the site are serviced by narrow lanes which also allow for pedestrian pathways and grassed berms.

Hydrology

There are three existing watercourses on site and four identified wetlands. A fifth wetland borders the north-western boundary, with its buffer zone overlapping the site. The watercourse to the south-east of the site is proposed to be culverted. The remaining watercourses will be supplemented with riparian planting to their edges. Similarly, the designated wetlands will be supplemented with native planting.

Two constructed wetlands will manage the stormwater on-site. These will feature native planting to aid their visual and amenity appeal.

Dunelands

The existing site features two prominent dunes, with a third area to the northern corner which spreads out beyond the site boundary. Of the two most prominent dunes, earthworks are proposed to the eastern-most to

allow flat space to the sections adjacent. To this end, 1in3 batter slopes are proposed to the current base of the dune, with the top being retained. A walkway is allowed for between sections and native back-dune planting will follow. The western-most dune is proposed to be removed, with the material being used to raise the levels at the eastern end of the site.

Kānuka-mānuka bush (K065)

Ownership of this key ecological area is proposed to be transferred to KCDC. The developer will remove the existing unsafe structures to the central clearing, undertake removal of weed species, and install restoration/enrichment planting to the area's degraded edges. The bush will be a significant asset to the subdivision and wider community, with the tracks and clearings holding a high amenity potential.

Planting strategy

Planting selection to the proposed development is guided by the site's situation within the Kāpiti Coast Coastal Ecological Zone. As the site is also within close proximity to the Tararua Ecological District, species indicative of this ecological type are also considered appropriate to the south-eastern portion of the site.

Key

- Existing watercourse with 10m planted buffer
- Existing wetland with 10m planted buffer
- Existing ecological area (K065)
- Proposed medium density housing (Design by others)
- Stormwater attenuation area
- Enrichment planting to ecological areas
- Walkway
- Potential future walkway connection to adjacent site
- Nikau Grove
- Tī kōuka Grove
- Dune restoration planting
- Nature play/playground to be developed
- Car parking
- Shared path
- Swale
- Footpath
- Indicative driveway location

- Extent of works
- Property boundary
- Existing planting within ecological area
- Lot numbers







FENCING STRATEGY PLAN

DEVELOPMENT RULES:

- GENERAL LOTS
 - SIDE YARDS
 - UP TO 2M
 - FRONT YARDS & PUBLIC WALKWAYS
 - UP TO 1.8M IF 50% PERMEABLE
 - OR
 - UP TO 1.2M
- RURAL BOUNDARY
 - UP TO 2M. 50% PERMEABLE IF OVER 1.2M
- DUNE & BATTER SLOPES
 - UP TO 1.2M POST AND RAIL
- STREAMS
 - UP TO 1.8M IF 50% PHYSICALLY PERMEABLE + 3M SETBACK FROM STREAM CORRIDOR
- OR
 - UP TO 1.2M + 3M SETBACK FROM STREAM CORRIDOR
- STORMWATER (808 & 809)
 - UP TO 1.8M IF 50% PHYSICALLY PERMEABLE
- OR
 - UP TO 1.2M
- WETLANDS & 10M SETBACKS
 - UP TO 1.8M + PHYSICALLY PERMEABLE

FENCING OPTIONS:



TYPE 1 FENCE
1.2M POST & WIRE



TYPE 2 FENCE
1.2M POST & RAIL



TYPE 3 FENCE
CLOSED BOARD
≤ 2M



TYPE 4 FENCE
50% VISUALLY PERMEABLE
≤ 1.8M
≤ 2M FOR RURAL BOUNDARY



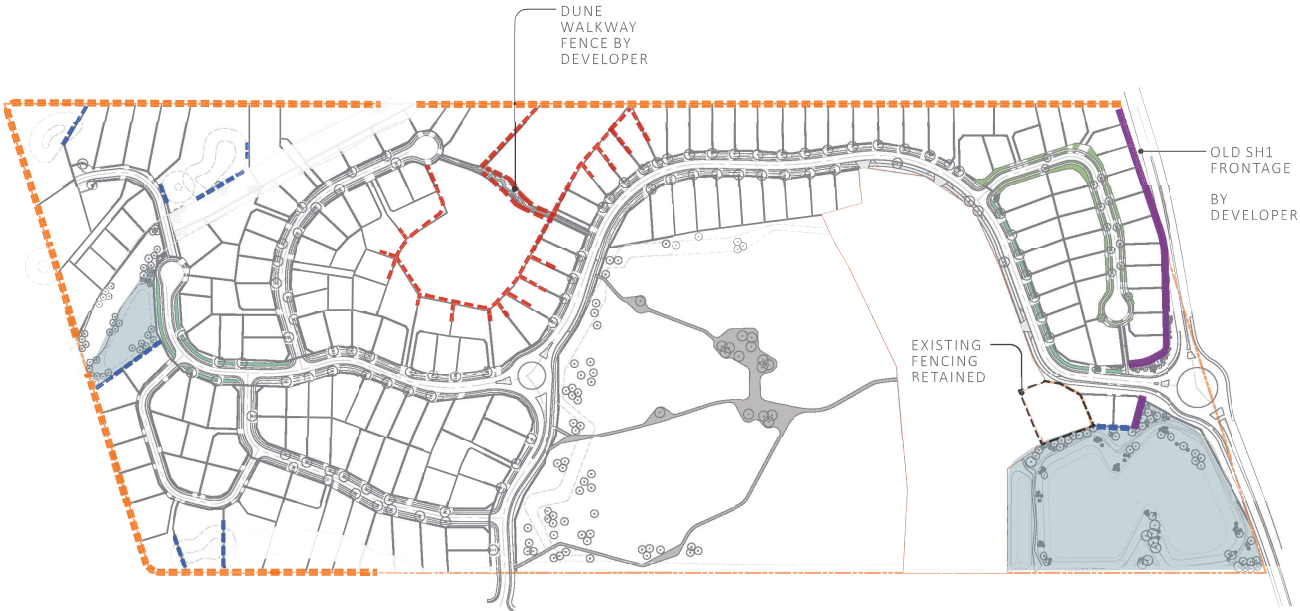
TYPE 5 FENCE
CLOSED BOARD
≤ 1.2M



TYPE 6 FENCE
50% PHYSICALLY PERMEABLE
≤ 1.8M



TYPE 7 FENCE
1.5M CLOSED WITH 300MM VISUALLY PERMEABLE TOP BY BOUNDARYLINE. BLACK STAIN



DUNE SECTIONS



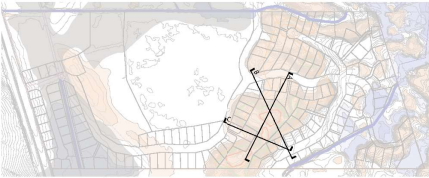
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SECTION B NTS



SECTION C NTS

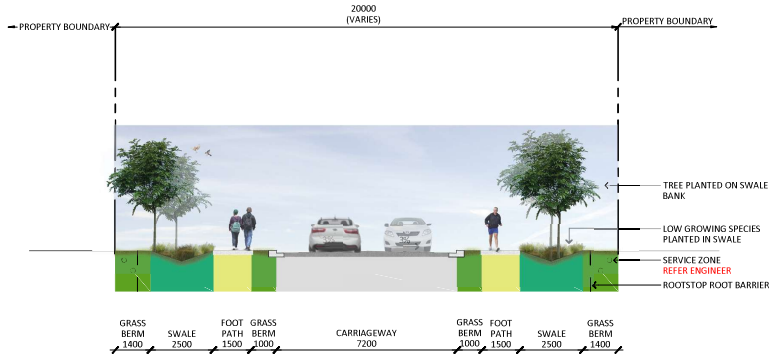
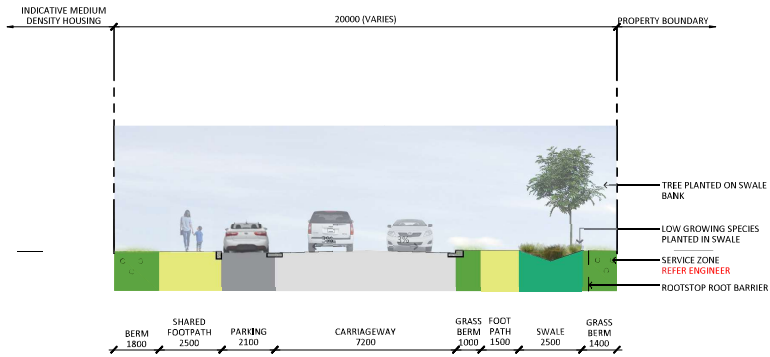


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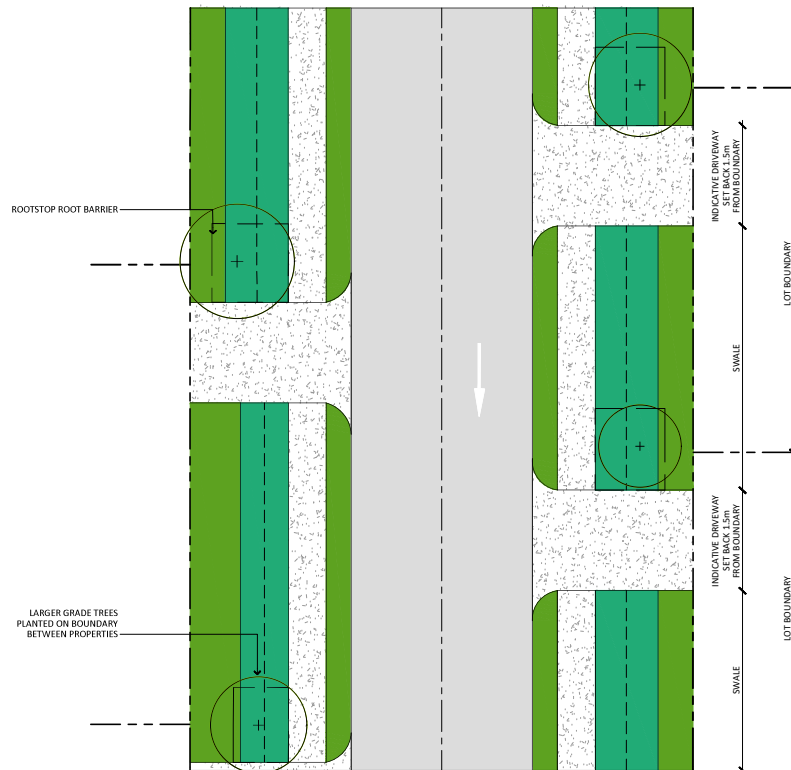
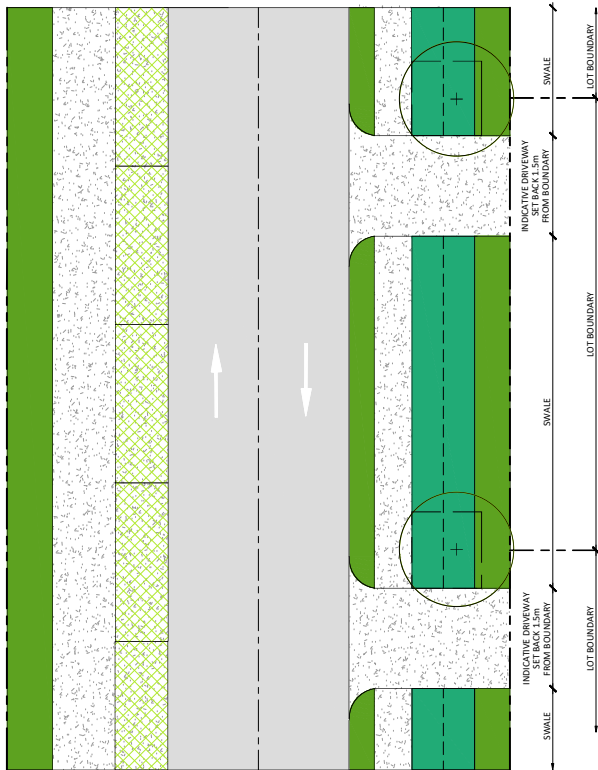
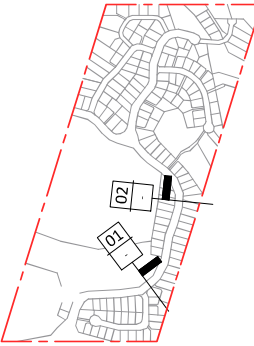


PROPOSED EARTHWORKS

WAIKANAE HOUSING



KEY PLAN:



DRAFT

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Issue: amendment: date:

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TYPICAL
ROAD SECTIONS

scale:

A5 SHOWN

date:

27.04.2023

drawing no.

L2.01

project name

WAIKANAE
NORTH

project phase: project no.
CONCEPT 2217
DESIGN

client:
BULLETIN TRUST

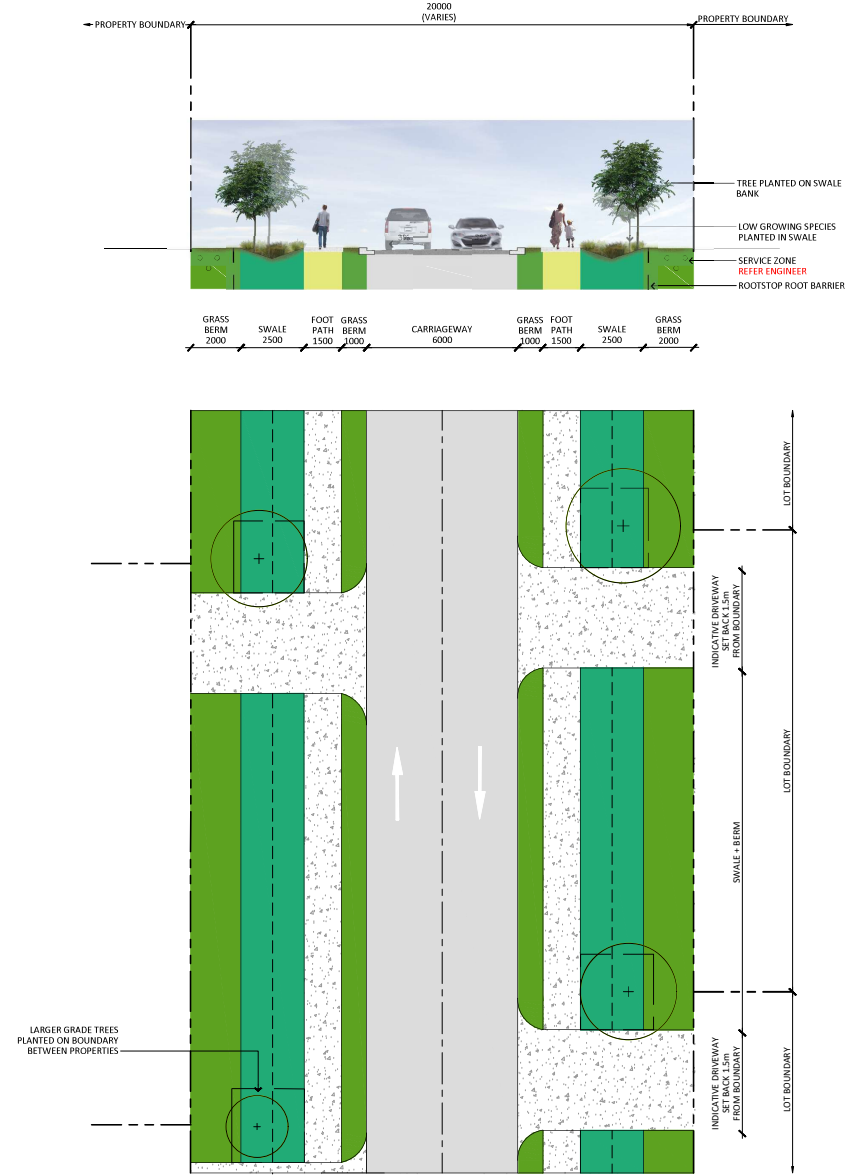
01 ROAD 01 - OUTSIDE MEDIUM DENSITY
scale 1:100 @ A1 | 1:200 @ A3

WAIKANAE HOUSING
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02 ROAD 01A
scale 1:100 @ A1 | 1:200 @ A3

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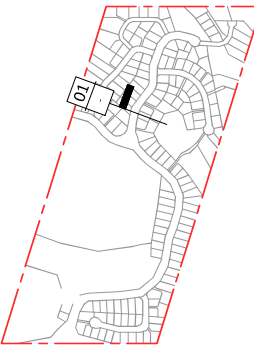
WAIKANAE HOUSING



01 ROAD 02
scale 1:100 @ A1 | 1:200 @ A3

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date:

27.04.2023

drawing no.

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project name
WAIKANAE
NORTH

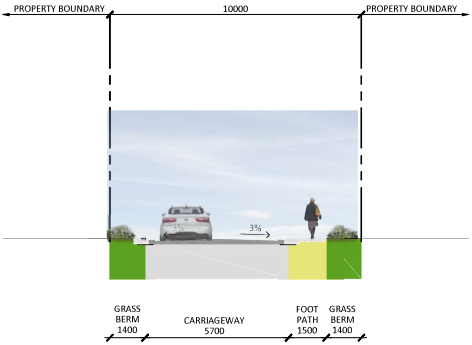
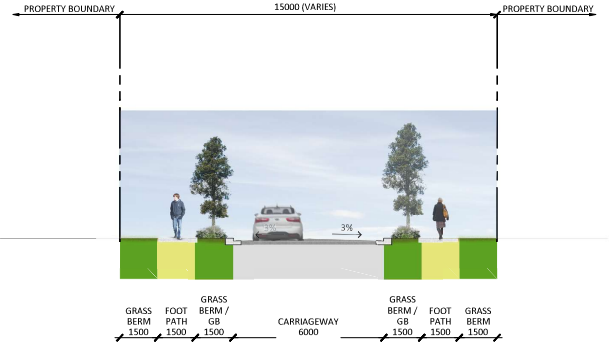
project phase:
CONCEPT
DESIGN

project no.
2217

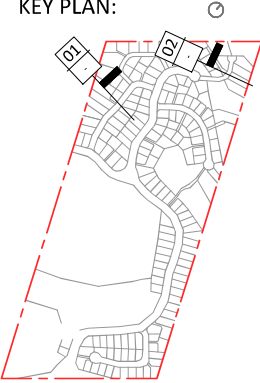
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WAIKANAE HOUSING



KEY PLAN:



DRAFT

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TYPICAL
ROAD SECTIONS

scale:

A5 SHOWN

date:

27.04.2023

drawing no.

L2.03

project name

WAIKANAE
NORTH

project phase:

CONCEPT

project no.

2217

DESIGN

client:

BULLETIN TRUST

01 ROAD 03 / 04 / 05

scale 1:100 @ A1 | 1:200 @ A3

WAIKANAE HOUSING

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02 ROAD 06 / 07

scale 1:100 @ A1 | 1:200 @ A3

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PLANTING STRATEGY: K065 RESTORATION



MĀNUKA
Leptospermum scoparium



KĀNUKA
Kunzea ericoides



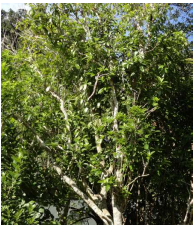
KOHŪHŪ
Pittosporum tenuifolium



MĀPOU
Myrsine australis



KAIKOMAKO
Pennantia corymbosa



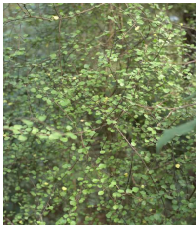
MĀHOE
Melicytus ramiflorus



HOROEKA
Pseudopanax crassifolius



WHAUWAHUPAKU
Pseudopanax arboreus



POATANIWhA
Melicope simplex

UNDERSTOREY



WHARANGI
Melicope ternata



SHINING SPLEENWORT
Asplenium oblongifolium



RENGARENGA
Arthropodium cirratum



HANGEHANGE
Geniostoma ligustrifolium



WHARAWHARA
Astelia banksii



KAWAKAWA
Piper excelsum



KOROMIKO
Veronica stricta



THIN-LEAVED COPROSMA
Coprosma areolata

LARGE TREES



TŌTARA
Podocarpus totara



MĀTAI
Prumnopitys taxifolia



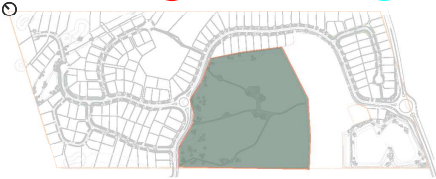
REWAREWA
Knightia excelsa



TITOKI
Alectryon excelsus



KOHEKOHE
Dysoxylum spectabile

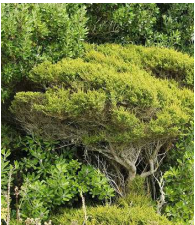


GRADIATED ENRICHMENT PLANTING LINKING TO EXISTING ECOLOGICAL AREA

PLANTING STRATEGY: BACKDUNE RESTORATION



NGAIO
Myoporum laetum



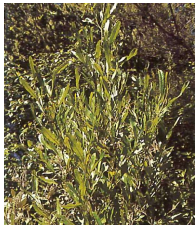
COASTAL TREE DAISY
Olearia solandri



TI KOUKA
Cordyline australis



AKIRAHŌ
Olearia paniculata



AKEAKE
Dodonaea viscosa



RAWIRITOA
Kunzea amathicola



TAUPATA
Coprosma repens



WHARARIKI
Phormium cookianum



TOETOE
Austroderia toetoe



SAND SEDGE
Carex pumila



WAIŪATUA
Euphorbia glauca



SAND TUSsock
Poa billardierei



TAUHINU
Ozothamnus leptophyllus



PŌHUEHUE
Muehlenbeckia complexa



SAND COPROSMA
C. ACEROSA



MATAGOURI
Discaria toumatou



WĪWĪ
Ficinia nodosa



THICK-LEAVED MĀHOE
Melicytus crassifolius



SAND DAPHNE
Pimelea villosa



PLANTING STRATEGY: WETLAND RESTORATION



OIOI
Apodasmia similis



WIWI
Ficinia nodosa



HARAKEKE
Phormium tenax



PŪREI
Carex secta



TOETOE UPOKOTANGATA
Cyperus ustulatus



BAUMEA
Machaerina rubiginosa



TĪ KOUKA
Cordyline australis



PUKIO
Carex virgata



PLANTING STRATEGY: RIPARIAN MARGINS



OIOI
Apodasmia similis



WIWI
Ficinia nodosa



RAUTAHĪ
Carex geminata



PŪREI
Carex virgata



UPOKO-TANGATA
Cyperus ustulatus



SHARP SPIKE SEDGE
Eleocharis acuta



HARAKEKE
Phormium tenax



KOWHAI
Sophora microphylla



TĪ KOUKA
Cordyline australis



PĀTE
Schefflera digitate



MĀNUKA
Leptospermum scoparium



KĀNUKA
Kunzea ericoides



KAWAKAWA
Piper excelsum



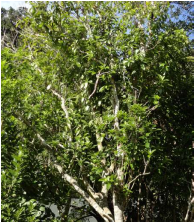
KOHEKOHE
Dysoxylum spectabile



WHAUWAHUPAKU
Pseudopanax arboreus



MĀPOU
Myrsine australis



MAHOE
Melicytus ramiflorus



PLANTING STRATEGY: STORMWATER ATTENUATION

DEEP WATER



RAUPŌ
T. ORIENTALIS

SHALLOW MARGINS



OIOI
Apodasmia similis



WĪWĪ
Ficinia nodosa



PŪREI
Carex secta



TOETOE UPOKOTANGATA
Cyperus ustulatus



BAUMEA
Machaerina rubiginosa



PUKIO
Carex virgata

SURROUNDING PLANTING



TĪ KŌUKA
Cordyline australis



HARAKEKE
Phormium tenax



KARAMŪ
Coprosma robusta



MĀNUKA
Leptospermum scoparium



AKIRAHŌ
Olearia paniculata



KOHŪHŪ
Pittosporum tenuifolium



TARATA
Pittosporum eugenoides



MANATU
Plagianthus regius



MINGIMINGI
Coprosma propinqua



MAKOMAKO
Aristotelia serrata



MAIRE TAWAKE
Syzygium maire



KAHIKATEA
Dacrycarpus dacrydiodes



NĪKAU
Rhopalostylis sapida

