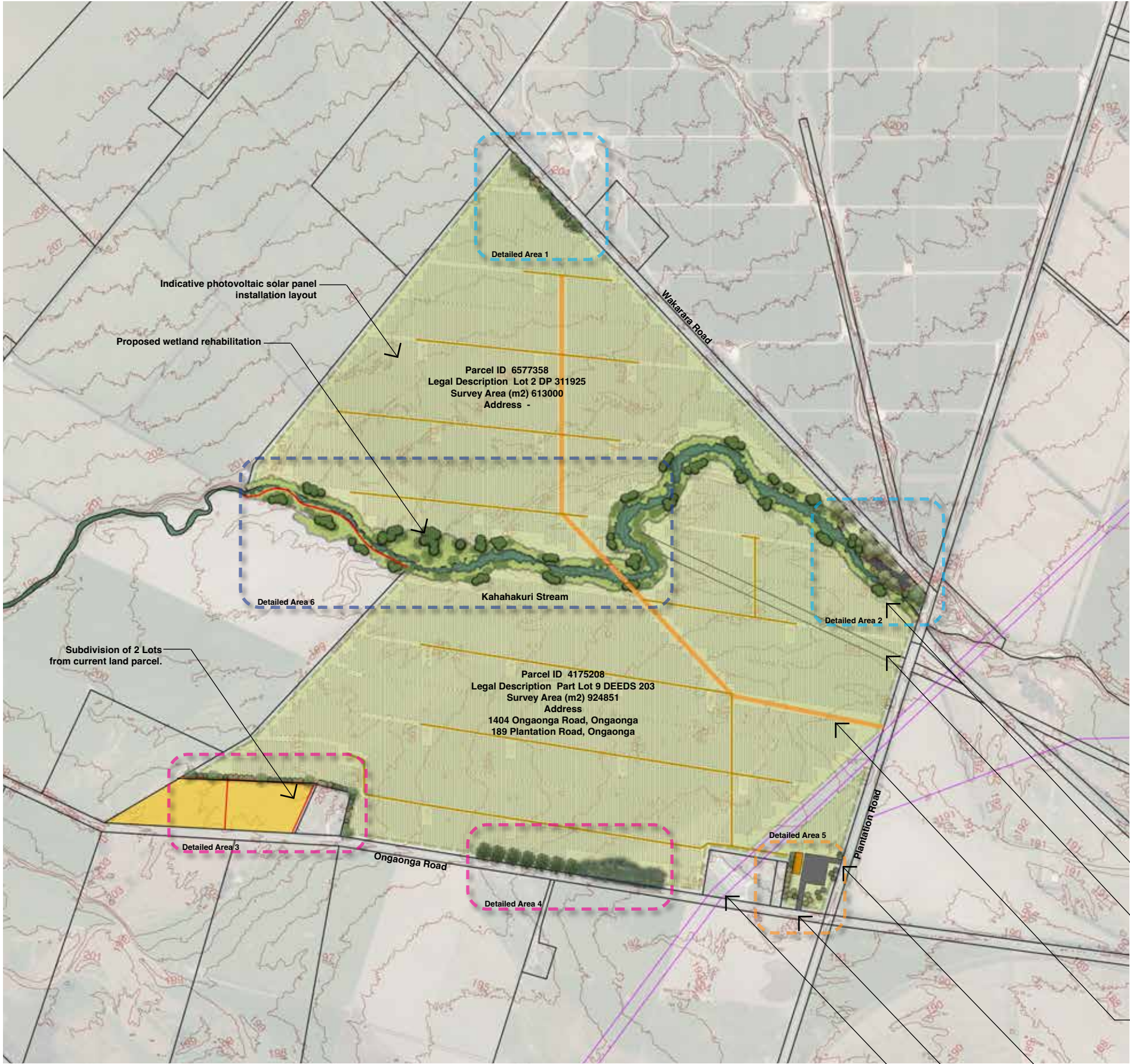


Detailed Concept

SKYSOLAR | Ongaonga Solar Farm

March 2022





Legend:

- Development area with 5m offset from boundary
- Indicative photovoltaic solar panel installation layout
***Final arrangement subject to Solar Consultant's design**
- Contour line and value
- Transpower 110kV Powerlines
- Existing Oak trees to be retained and protected
- Existing Oak trees to be retained and protected
- New Oak tree planting
- New tree and shrub planting
- Kahahakuri Stream planting

Notes:

- 8m offset from the Transpower 110kV lines
- Development opportunities under power lines to be confirmed
- Deer fence to all property boundaries (not shown for clarity)
- Total Site Area - 150ha
- Total Approximate Development Area - 144ha (approx)
- 5m Boundary Offset Area - 5.8ha (approx)

Educational signage and designated viewing area

Parcel ID 4227473
Legal Description Blk 302 Ruataniwha CGD
Survey Area (m2) 17527
Address Plantation Road

Proposed entrance from Plantation Road
Retain existing gravel road through site.
Retain existing culvert over Kahahakuri Stream.

Proposed temporary entry/exit from Plantation Road minimum 68m from intersection with Ongaonga Road. Entry/exit to be a temporary metal crossing until the main bulk of construction work is completed and will be concreted to 6m in width once the field office is nearing completion.

Proposed permanent entry/exit from Ongaonga Road
Transportable field office, car park and staging area.

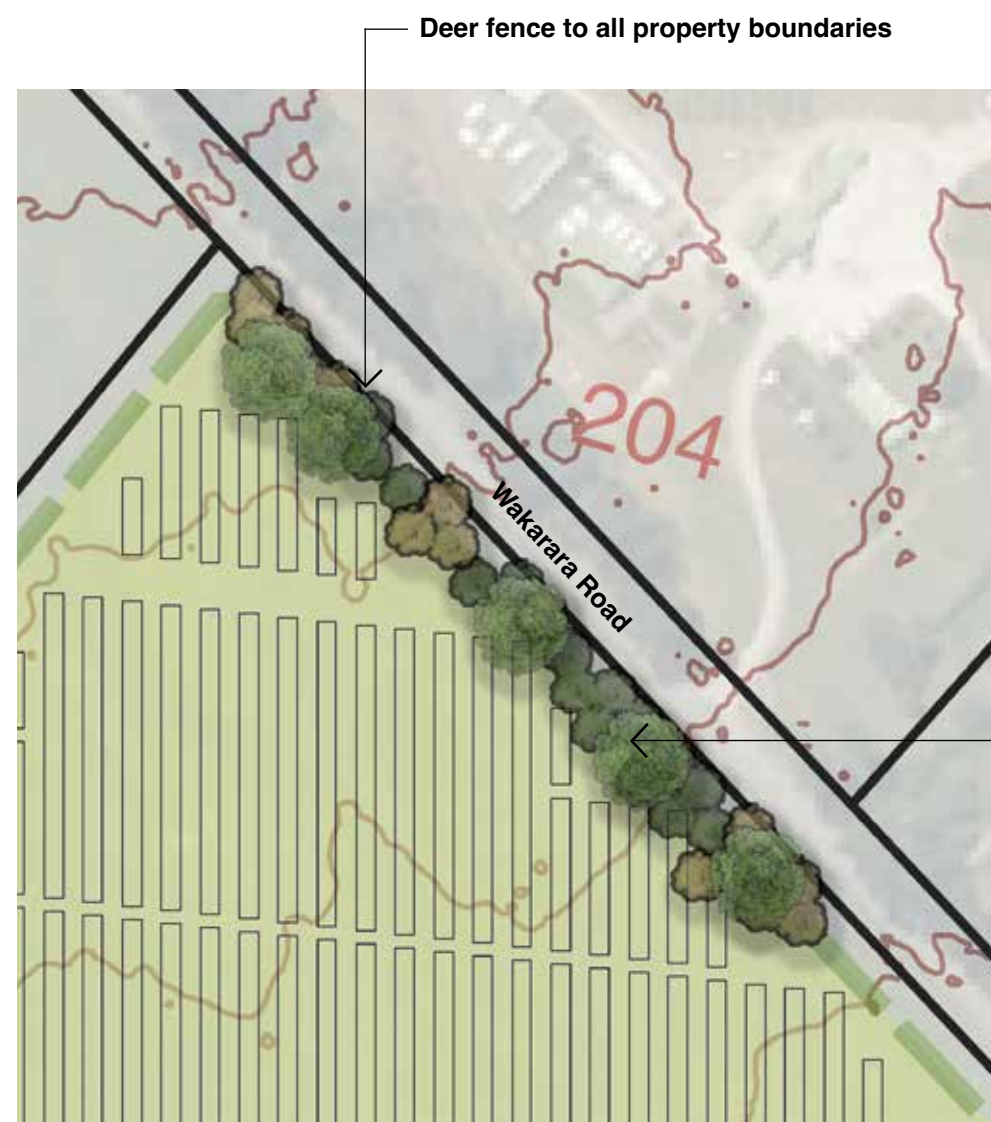
Existing Transpower substation



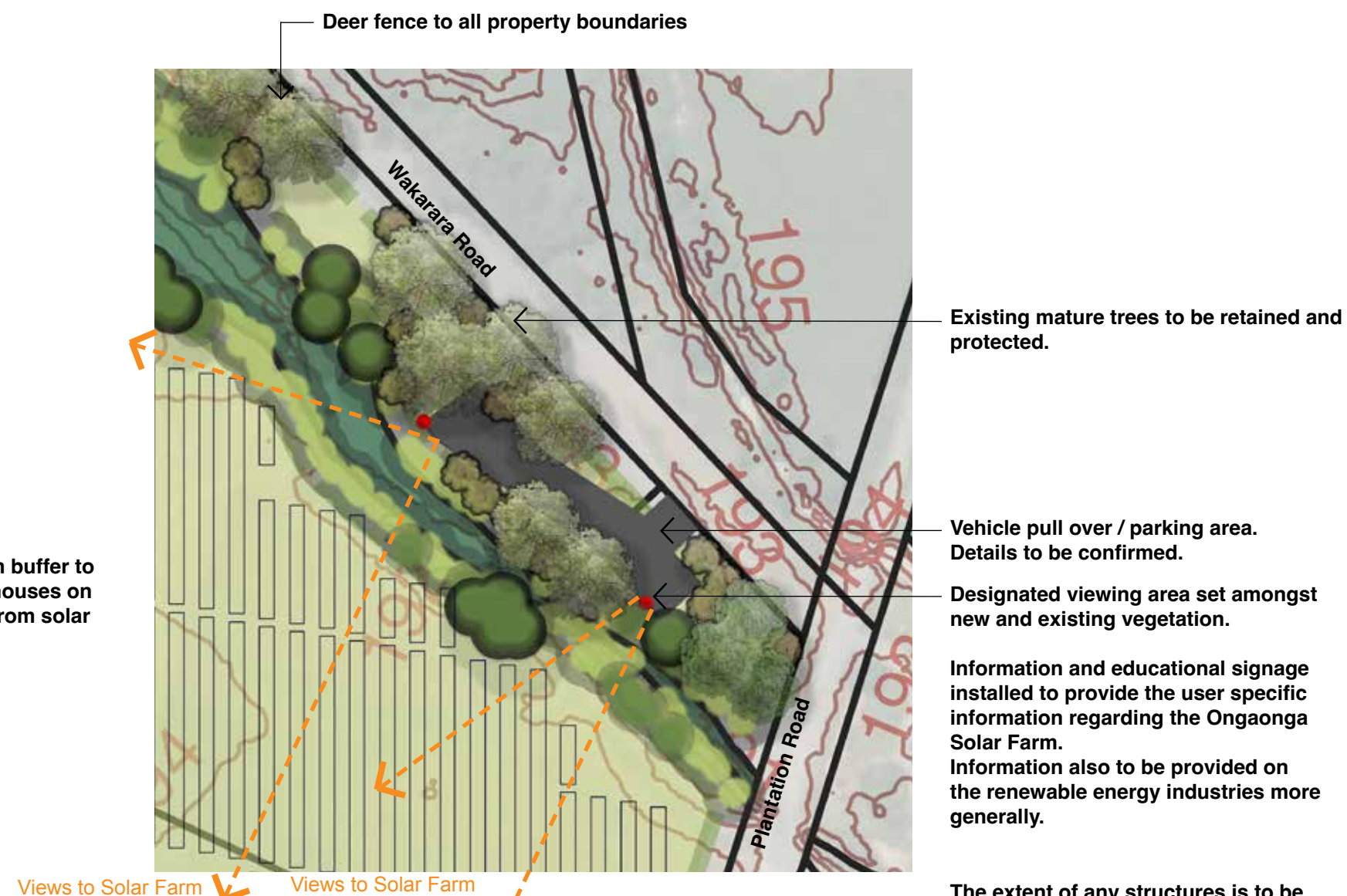
0 250 500 m

Scale 1:10,000

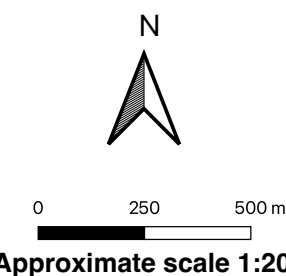
SKYSOLAR Ongaonga Solar Farm
Detailed Concept Site Plan

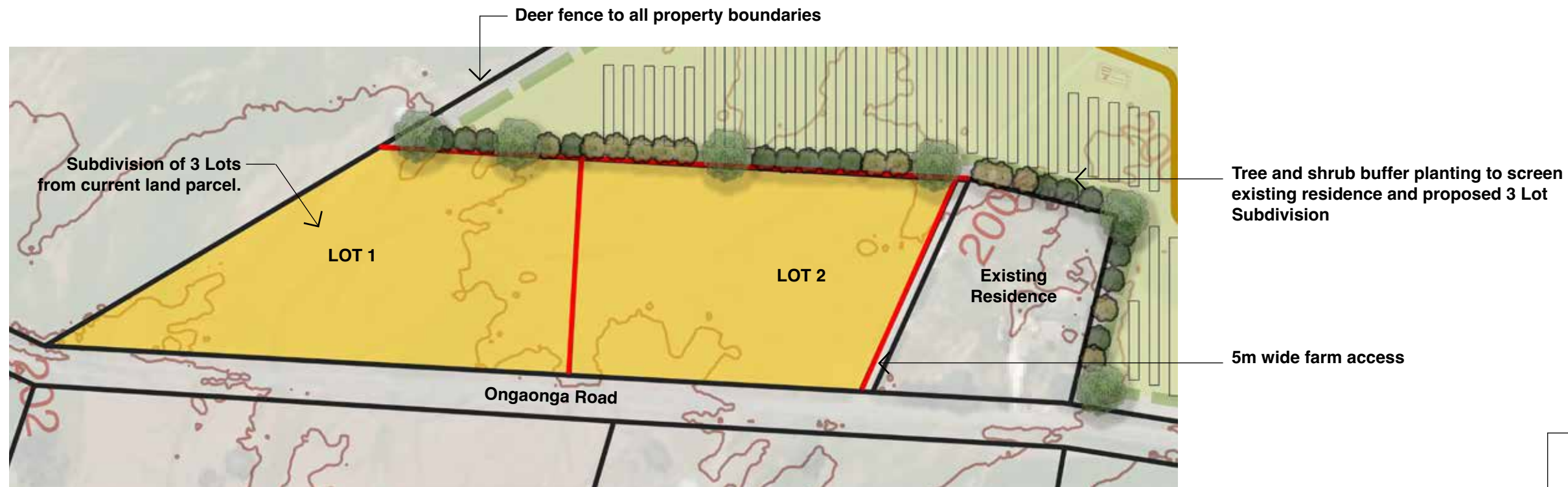


Detailed Area 1 - Wakarara Road



Detailed Area 2 - Educational signage and designated viewing area

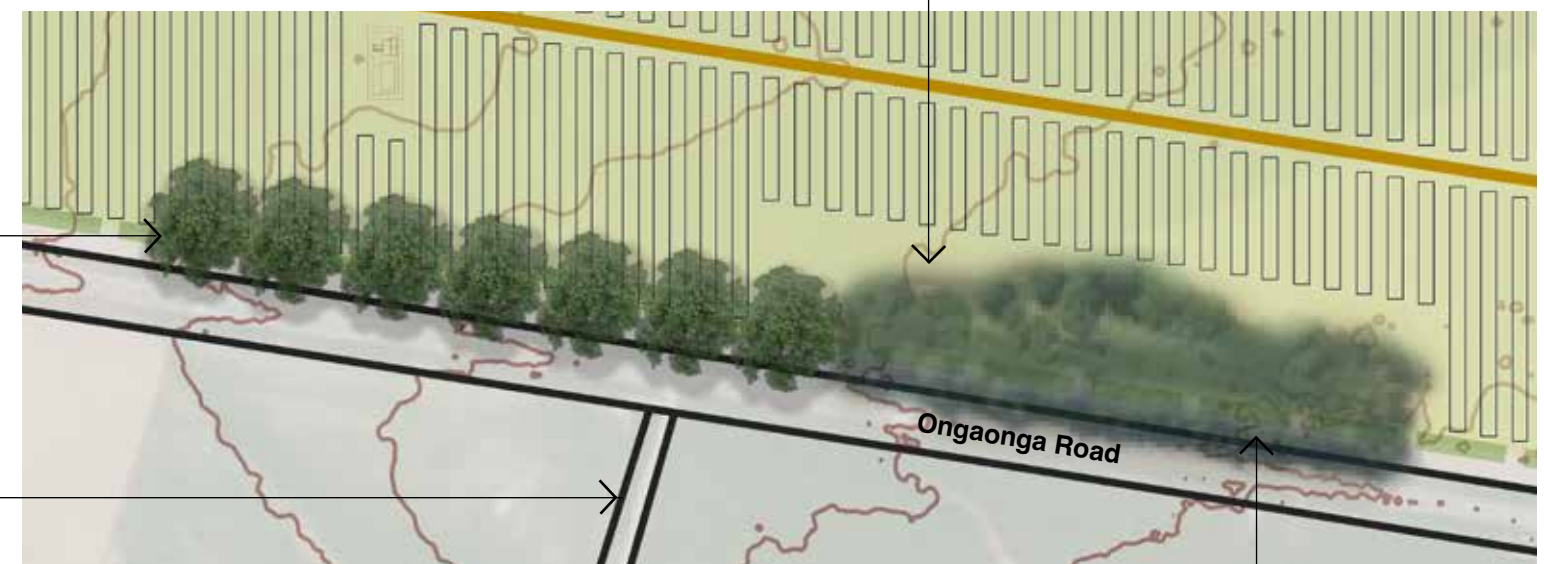




Detailed Area 3 - 3 Lot subdivision

- Existing Oak trees along Ongaonga Road to be retained and protected.
- Conifer species to be removed by arborist
- Additional understorey planting installed for effective screening / buffering of the site

- New Oak tree buffer to extend and complement the adjacent existing Oak tree grove.
- Additional understorey planting installed for effective screening / buffering of the site from existing residence on Southern side of Ongaonga Road
Extent of Solar Panel layout also to be confirmed
- Driveway to existing residence on Southern side of Ongaonga Road



Detailed Area 4 - New and existing Oak trees

Deer fence to all property boundaries



0 250 500 m

Approximate scale 1:2500

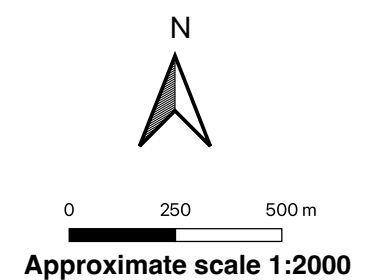


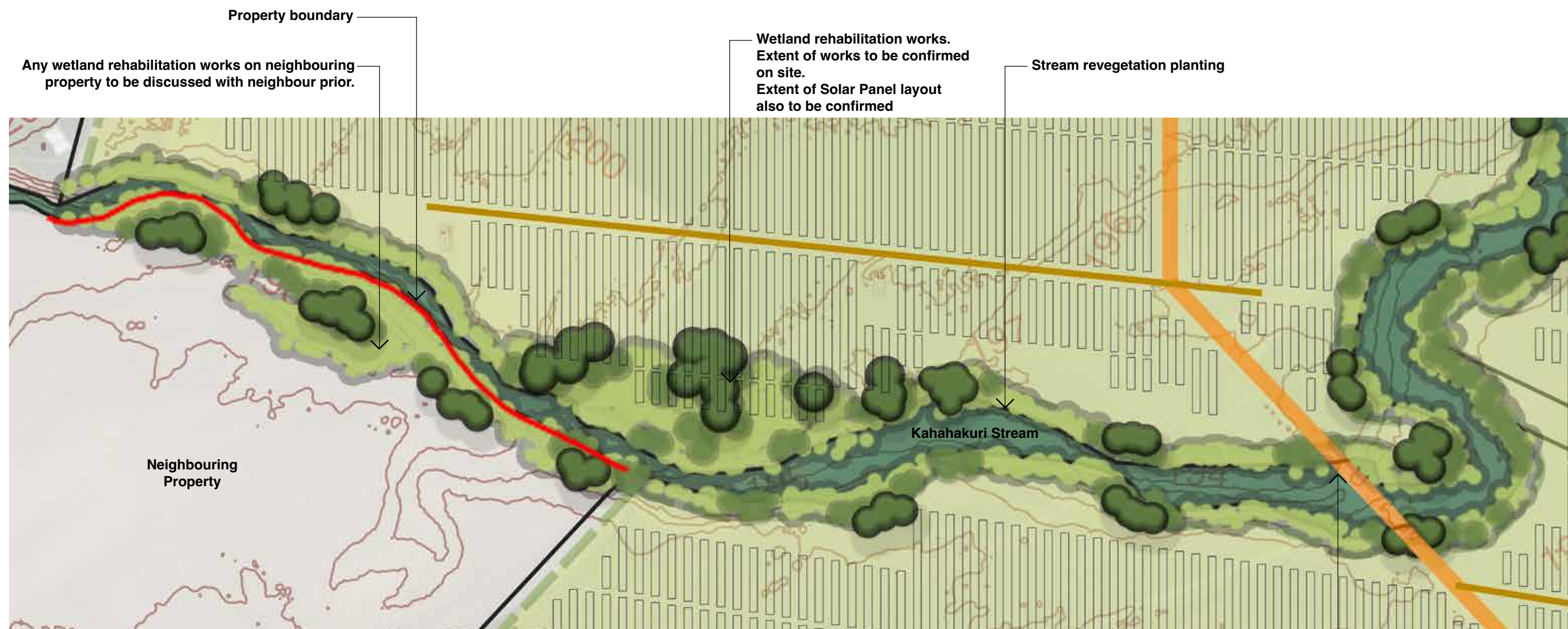
- Deer fence to all property boundaries
- Proposed temporary entry/exit from Plantation Road minimum 68m from intersection with Ongaonga Road. Entry/exit to be a temporary metal crossing until the main bulk of construction work is completed and will be concreted to 6m in width once the field office is nearing completion.
- Indicative transportable field office, car park and staging areas.
- Buffer planting to screen transportable field office from road
- Proposed permanent entry/exit from Ongaonga Road Transportable field office, car park and staging area.

Detailed Area 5 - Transportable field office, car park and staging areas.



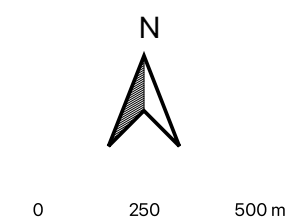
Example images showing the size and scale of the proposed transportable field office.





Detailed Area 6 - Kahahakuri Stream Revegetation and Wetland Rehabilitation

Existing gravel road through site leads to culvert over Kahahakuri Stream. Culvert to be retained.



Approximate scale 1:2000

TrinaTracker Solar Panels
Reflective Ground Surfaces



TrinaTracker
DUOMAX Twin Bifacial Modules

Examples in the landscape



Grazing Option



Grazing benefits

Baby Doll breed of sheep to graze under infrastructure
Reduced mowing maintenance
Productive secondary use of land.



Considerations

Management of leasing arrangements
Irrigation and seasonality

Examples in the landscape



“Sheep are commonly are being used for grazing for vegetation control at solar facilities in the United States and Europe as sheep do not climb on or harm the modules. Raising the PV modules in height is not necessary to accommodate grazing as vegetation is accessible beneath the modules at standard heights. Cattle grazing is generally not compatible with PV facilities due to the risk of damage to modules. Sheep grazing to control vegetation growth can benefit local shepherds, solar operators, and the land due to a reduction in mowing, herbicide, and other vegetation management needs”.

<https://www.energy.gov/eere/solar/farmers-guide-going-solar>



Opportunities

Native planting / Pollinator Habitat Species Apiculture (bee keeping) around the site.

Overall Site Works



Kahahakuri Stream revegetation



Wetland rehabilitation



Fencing
Deer fence with barbed top wire and electric fencing on inside



Interpretive information signage and designated viewing area
Potential viewing site near the corner of Wakarara and Plantation Roads



Specimen Tree Planting



Oak tree species

Tree Buffer Planting



Arikaho



Ti Kouka



Matai



Kowhai



Pigeonwood

Shrub Buffer Planting



Kanuka



Karaka



Lancewood



Ngaio



Titoki



Puka



Mahoe

Kahahakuri Stream Revegetation Planting



Knotted club-rush



Baumea rubiginosa



Carex Secta



Toe Toe



Flax

