

**my home**

# my home

## compact sustainable living



This section samples a 'typical' Sunfield home.

My home:

- Is warm, bright and well insulated
- Is connected to the community
- Meets my needs

- 1 solar panels
- 2 passive surveillance to the lane
- 3 outdoor terrace
- 4 a front yard that opens onto a quiet, shared pedestrian lane
- 5 a courtyard space which can also store bikes, prams or scooters and is connected to both the living space and lane
- 6 shared pedestrian lane
- 7 lock up storage space
- 8 warm, bright and well insulated home
- 9 private backyard
- 10 adjoining service lane or shared open space





my home





**section two –**

# **contextual analysis**





# the global context

Auckland as a city is facing significant population growth with compounding pressure on already stretched infrastructure resulting in major challenges across the board, specifically relating to transport and water quality. Auckland is also a city that is rapidly evolving in terms of its cultural, social, and physical identity – its relationship to both the cultural and biophysical landscape.

It is the responsibility of a project of this scale to engage with these challenges and seek to offer solutions for more equitable and sustainable communities that address the social and environmental realities of today in order to achieve a better tomorrow.

Beyond the local context and the site itself there are a number of critical issues to be addressed which have significantly influenced the direction of the design process and resulting concept masterplan. The challenges facing the future of Aotearoa New Zealand and indeed the planet as a whole are manifold and widely documented.

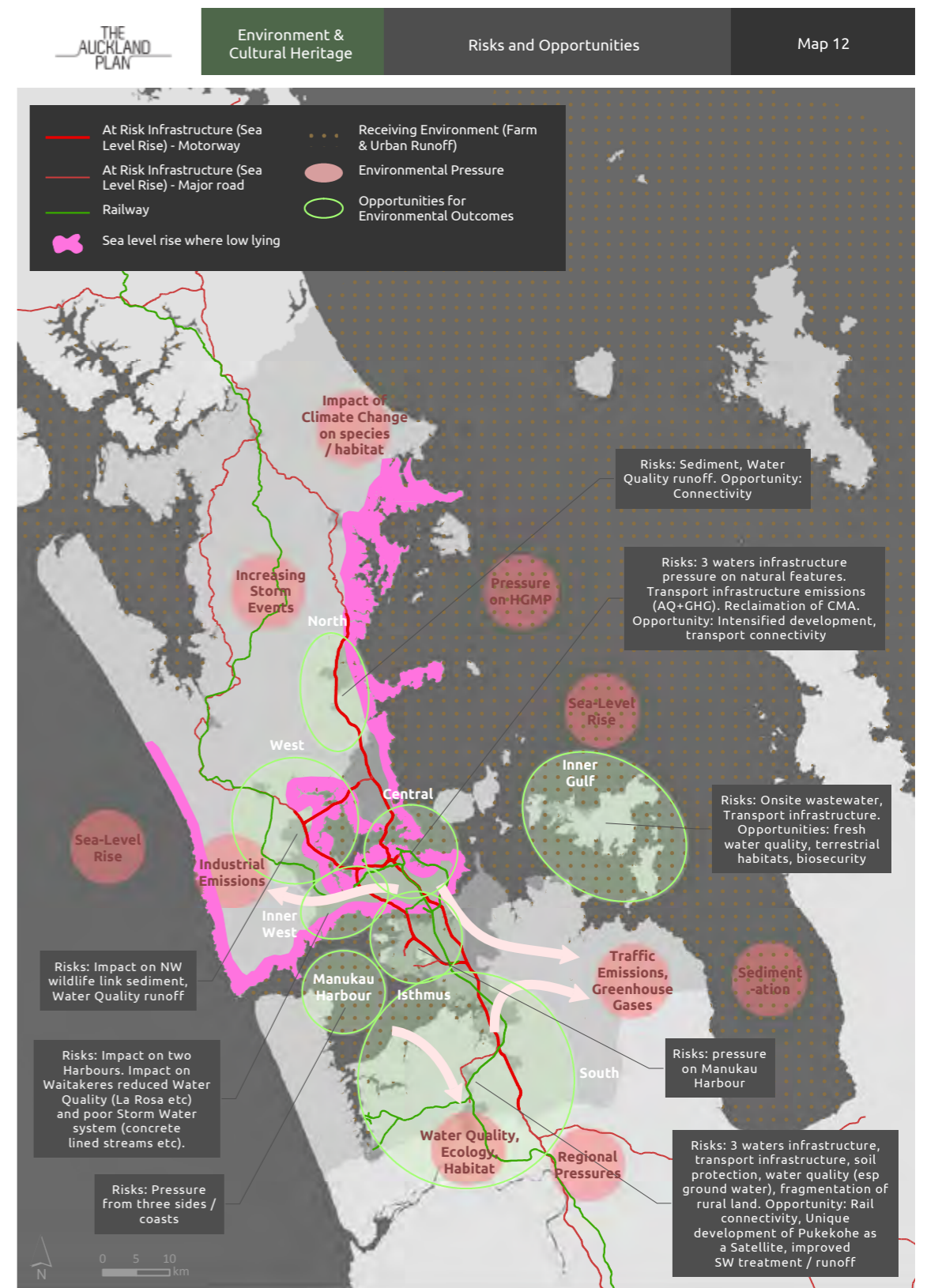
New Zealand is in the midst of a:

- Climate Emergency
- Biodiversity crisis
- Housing supply crisis
- Housing affordability crisis

In 2015 the UN established 17 Sustainable Development Goals (SDGs). They bring together the three dimensions of sustainable development: economic, social, environmental and apply to all countries. New Zealand will contribute to achievement of the goals through a combination of domestic action and international leadership. Working towards achieving the SDGs underpins much of government policy as New Zealand moves towards carbon neutrality and better, more sustainable outcomes for energy, infrastructure, environment, cities, communities, and people.

The design team have embraced an opportunity to explore a new approach to development that moves away from a reliance on private motor vehicles toward a future – thinking people centric collection of liveable neighbourhoods. This approach has unlocked a number of opportunities that will lead to healthier and more sustainable outcomes for now and the future.

Sunfield responds to these SDGs and employs measures to contribute to achieving their stated goals as well as responding to the specific Auckland context and offering solutions for transport and sustainable growth. These include consideration around questions of local identity, changing demographics, provision of diverse housing options, and addressing the environmental imperatives relating to resilience, sustainability, low carbon, and biodiversity loss, among others.





# mana whenua values

Engagement with mana whenua, and integration of mana whenua values and aspirations into the concept masterplan will be fundamental next steps in the design process.

The initial process of engagement is underway and we identified 6 of Tamaki Makaurau's 19 iwi who have expressed an interest in the Sunfield development.

It is worth reiterating that the concept masterplan captured in this document is only the beginning of a design process. Through engagement with mana whenua a framework would be established to guide the development of the design and embed the values of mana whenua into the built outcomes.

A possible framework for working alongside mana whenua could be structured around, and build upon, the Auckland Design Manual Te Aranaga Principles:

- Mana
- Whakapapa
- Taiao
- Mauri Tū
- Mahi Toi
- Tohu
- Ahi Kā

These principles seek to foster and guide both culturally appropriate design processes and design responses that enhance appreciation of the natural landscape and built environment and which place mana whenua as the heart of both.

The 6 iwi will also have design responses specific to their iwi which would further enhance Sunfield.





# site context

## regional location



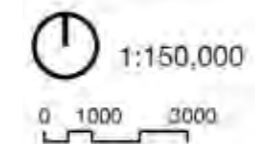
Sunfield is located on the edge of Auckland's Southern growth corridor only 30km south of Auckland CBD, or 12km south of Manukau City Centre by road or rail, and only 20km from Auckland Airport.

Sunfield adjoins the rapidly expanding growth areas of Takanini and Papakura not far from SH1 and the southern train line. The major growth area of Drury sits further to the south. Ardmore Airport is a privately operated airport which adjoins the site to the east.

### Site Context

#### Legend

- Project Boundary
- SH1
- AUP Future Urban Areas
- Trainline
- Rural / Urban Boundary
- Mill Road: Road of National Significance





# site context

## regional centres and connections



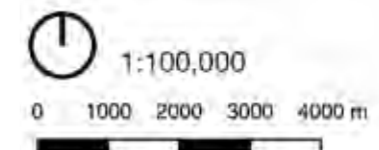
Sunfield sits in close proximity to the main arteries of State Highway 1 (SH1) and the southern rail line.

Nearby Manukau City Centre and Auckland Airport are significant employment destinations as are the light industrial and commercial centres of East Tāmaki, Onehunga, and Māngere.

The adjacent centres of Takanini and Papakura provide for a range of commercial services as well as employment opportunities. Papakura is one of Auckland's 10 larger metropolitan centres and a key centre for the southern growth corridor.

### Key

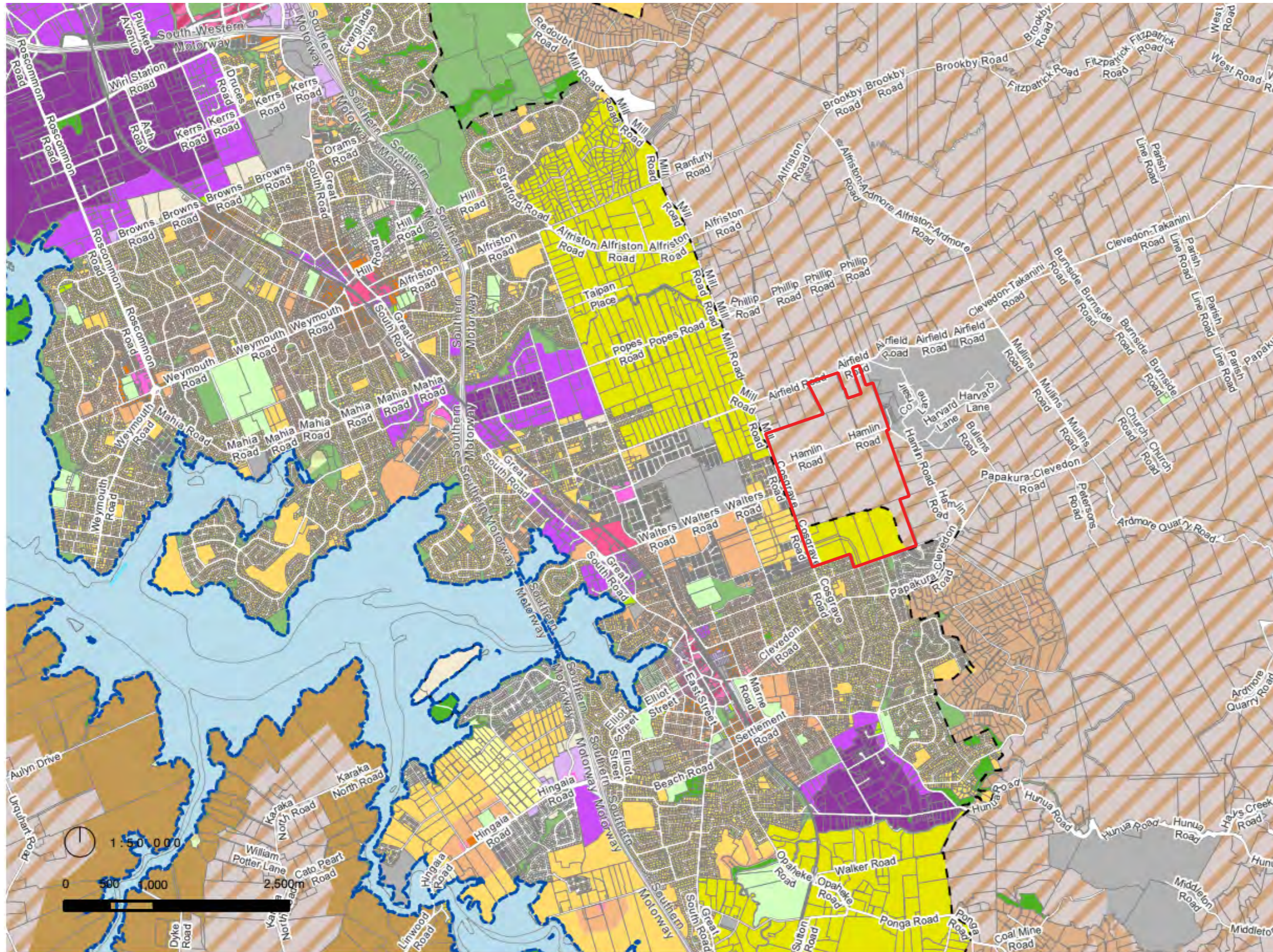
- Sunfield specified development project boundary
- SH1
- Train Line
- Mill Road: Road of National Significance





# site context

## existing zoning – Auckland unitary plan



The southern portion of the site is currently zoned Future Urban and is within the current rural urban boundary. The remainder of the site is currently zoned Mixed Rural.

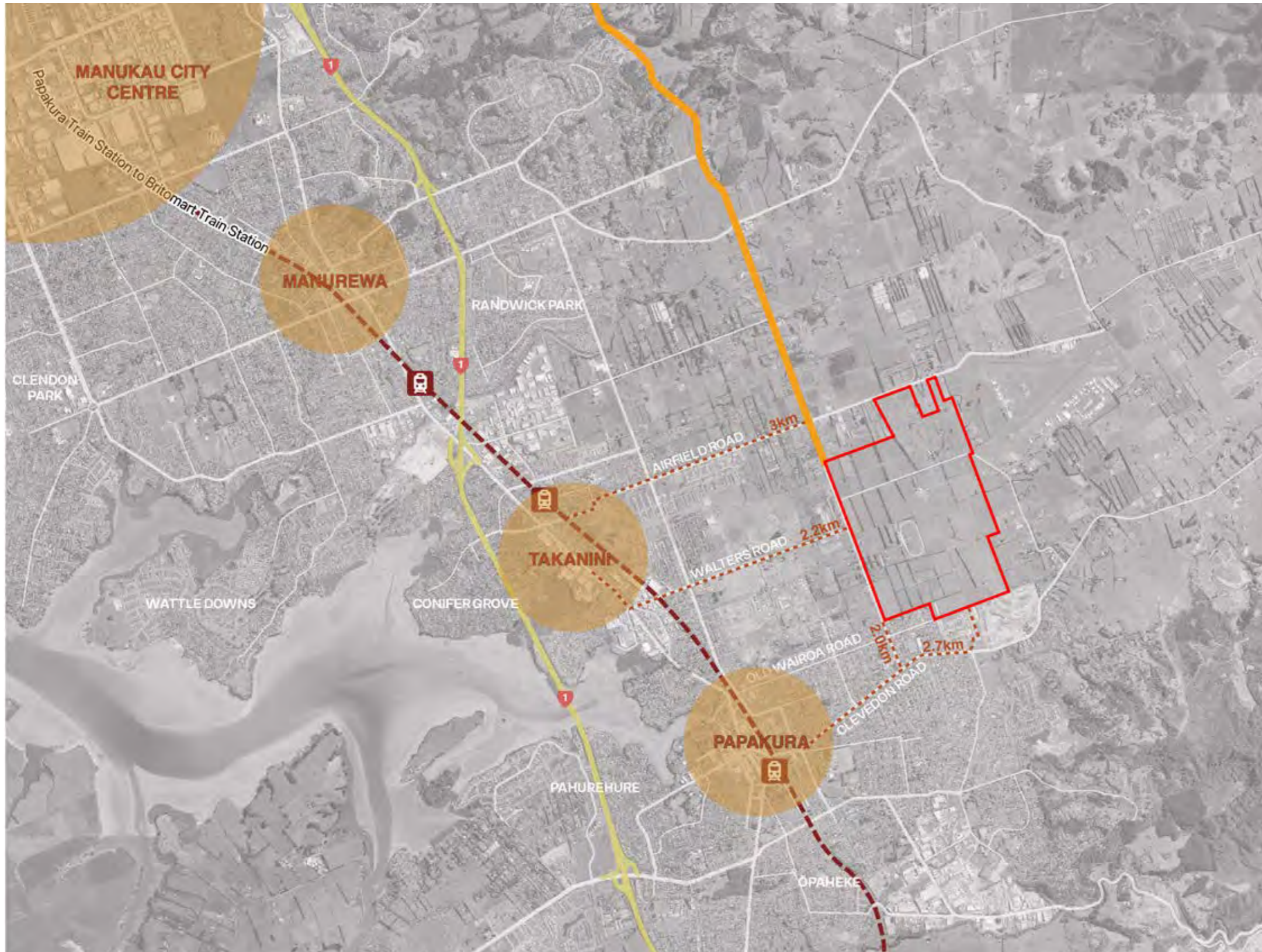
### Key

- Sunfield specified development project boundary
  - Future Urban Zone
  - Infrastructure - Special Purpose Zone
- Residential**
- Residential - Single House Zone
  - Residential - Mixed Housing Suburban Zone
  - Residential - Mixed Housing Urban Zone
- Business**
- Business - Metropolitan Centre Zone
  - Business - Town Centre Zone
  - Business - Neighbourhood Centre Zone
  - Residential - Mixed Housing Urban Zone
  - Business - General Business Zone
  - Business - Business Park Zone
  - Business - Heavy Industry Zone
  - Business - Light Industry Zone
- Open Space**
- Open Space - Conservation Zone
  - Open Space - Informal Recreation Zone
  - Open Space - Sport and Active Recreation Zone
- Rural**
- Rural - Mixed Rural Zone
  - Rural - Rural Coastal Zone
  - Rural - Countryside Living Zone



# site context

## local centres and connections



The eastern boundary of the site is approximately 3km from both Takanini and Papakura centres and railway stations on the southern line.

Southern line services operate with a 10 minute frequency in both directions (between Pukekohe in the south and Britomart in the north) from 7am – 7pm, and 20 minute frequency in early mornings and evenings.

### Local Centres and Connections

#### Key

- Sunfield specified development project boundary
- State highway
- Train line
- Mill Road
- Road of National Significance



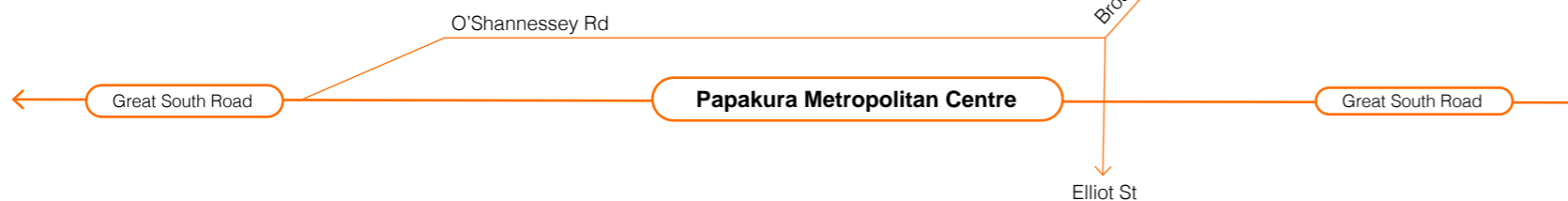
# site context

## profile of adjacent centres



### Takanini Town Centre

Takanini is a linear commercial centre on Great South Road, which is an arterial road for the area ranging between 3-4 lanes. Large format retail and service businesses are the dominant building tenures. They are typically well set back from the road with car parking out front. The predominate transport method is private vehicles, however pedestrians can utilise several connections to the walkways around the Pahurehere Inlet.



### Papakura Metropolitan Centre

Papakura has a range of commercial operations such as retail, service businesses and light industry. It is more pedestrian in nature than Takaniini with generous footpaths outside shop frontages. It has a town centre character with single story shops, frontage canopies, street furniture and trees in places. The commercial offerings reflect the culturally diverse community with restaurants providing Indian, Thai, Pasifika and Singaporean cuisine. Many places of worship are dotted through out the blocks reflecting different religions of the community.



# site context

## local employment opportunities



A number of nearby industrial precincts including Ardmore Airport, as well as the centres of Papakura and Takanini, provide for a range of employment opportunities in close proximity.

Manukau City Centre and Auckland Airport are significant employment destinations slightly further afield but also in relative proximity.

The significant growth area of Drury just to the south also contributes to the make-up of employment destinations in the area.



# site context

adjacent ardmore airport (est. 1943)



Ardmore Airport is New Zealand's leader in general aviation support services.

- 33km from Auckland CBD, 11km from Manukau City
- Operates 24 hours a day
- Established in 1943 at the request of the US Airforce as an operational base during WWII
- Over 90 tenants on the airfield from a range of industries

#### Essential services provided:

- Auckland rescue helicopter
- Air Ambulance service
- Patient and Organ Donation Transfer
- Police and Coast Guard Aircraft
- Aviation Fuel Supplies
- Aviation Engineering and Maintenance
- Aircraft engaged in primary industry support, fisheries, agriculture etc.
- Helicopter Fire Fighting support
- Delivery of urgent medical supplies and other essential items
- Civil Defence
- Domestic Water & Sewer Infrastructure to Ardmore Airport tenants and to homes surrounding the airport.

#### Other services:

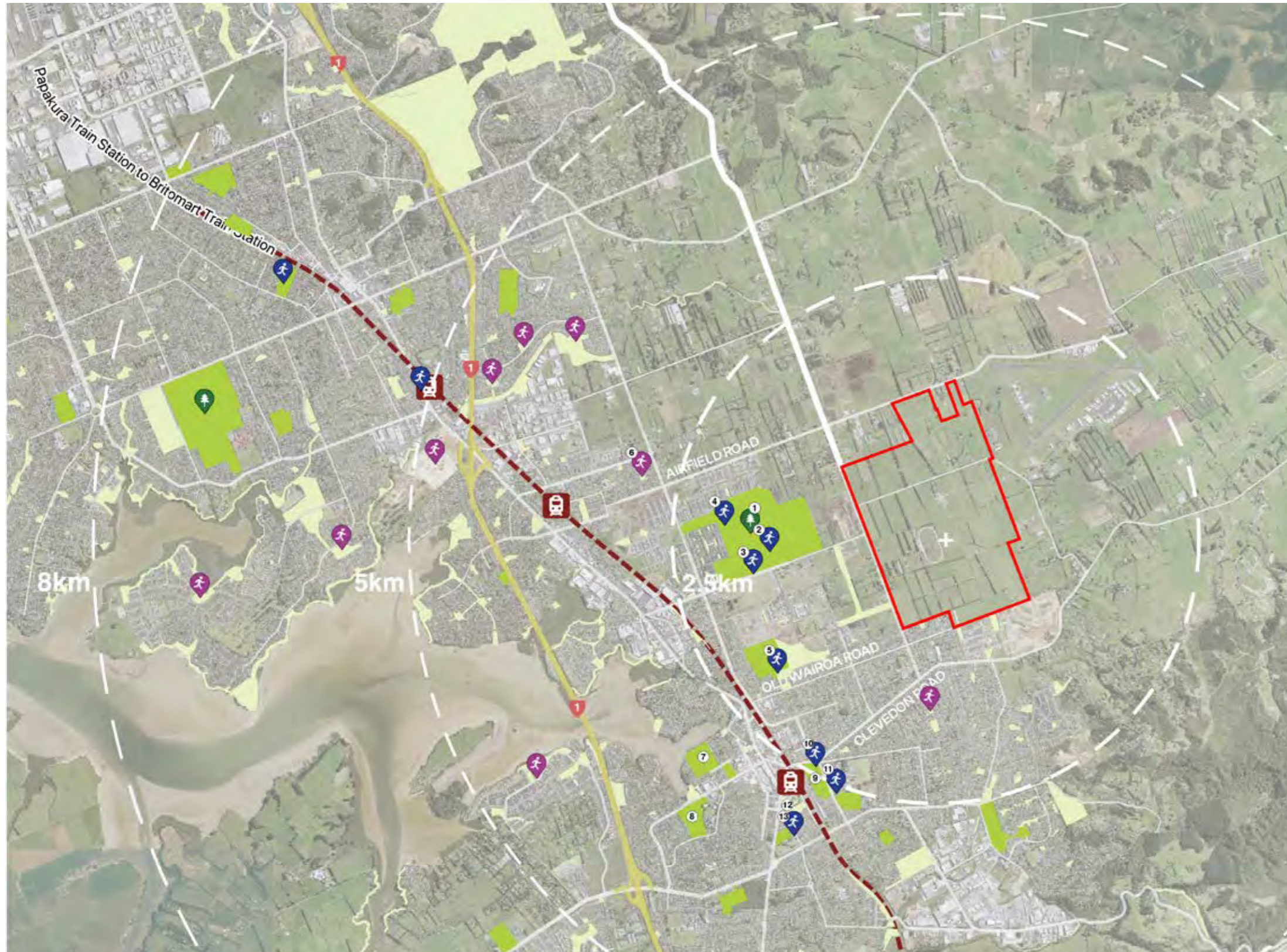
- Premier Facility for flight training
- 50% of all New Zealand's Pilots undergo training here
- 5 major fixed wing flying schools
- Two helicopter schools

Ardmore Airport and associated services contribute to the employment potential for the area with potential to expand over time.



# site context

## local recreation + open space



Bruce Pulman Park is the major destination open space in the area only a short distance from the site and with the potential for off road walking and cycling connections. It provides a range of both indoor and outdoor sports, recreation, and community facilities.

### Key

- Sunfield specified development project boundary
- Active Recreation Parks
- Informal Recreation Zones
- Playgrounds
- Recreation

### Within 2km

- Bruce Pulman Park
- Pulman Arena
- Pulman Indoor Courts Centre
- Pulman Recreation Centre
- Papakura City Football Club

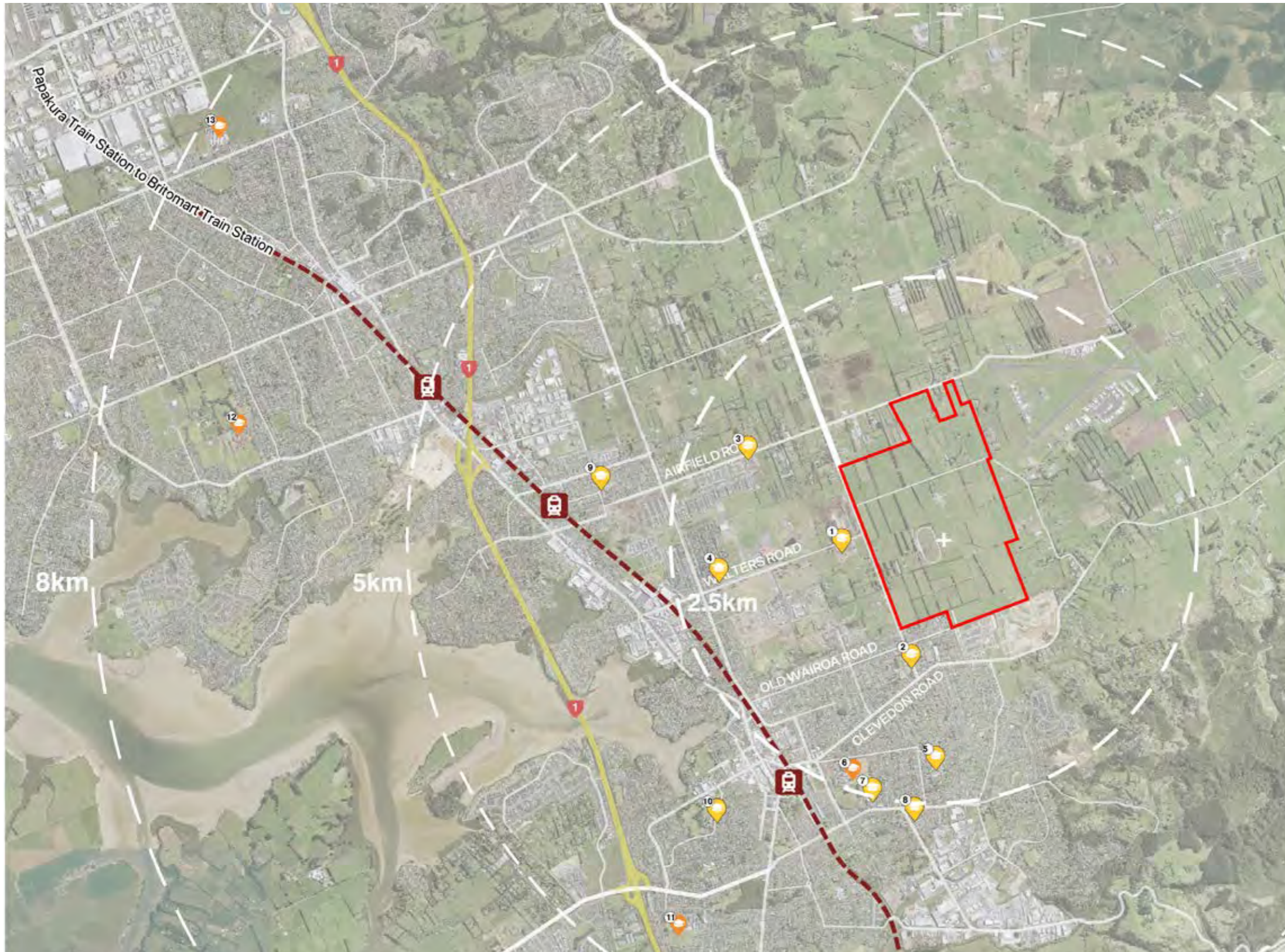
### Within 5km

- Clarice Place Playground
- Prince Edward Park
- Ray Small Park
- Massey Park
- Massey Park Pool
- Papakura Bowling Club
- Central Park
- Papakura Leisure Centre



# site context

## local schools



- Key**
- Sunfield specified development project boundary
- Within 2.5km**
- 1 Kauri Flats School Yrs 1-8
  - 2 Cosgrove Primary School
  - 3 Holy Trinity Catholic Primary School
  - 4 Papakura Normal Primary School
  - 5 Kelvin Road School Yrs 0-8
  - 6 Papakura High School
  - 7 Papakura Intermediate
- Within 5km**
- 8 Edmund Hilary School Yrs 1-8
  - 9 Takanini School Yrs 1-8
  - 10 Papakura Central School
  - 11 Rosehill College
- Within 8km**
- 12 James Cook High School
  - 13 Manuwera High School



# site context

## existing public transport

