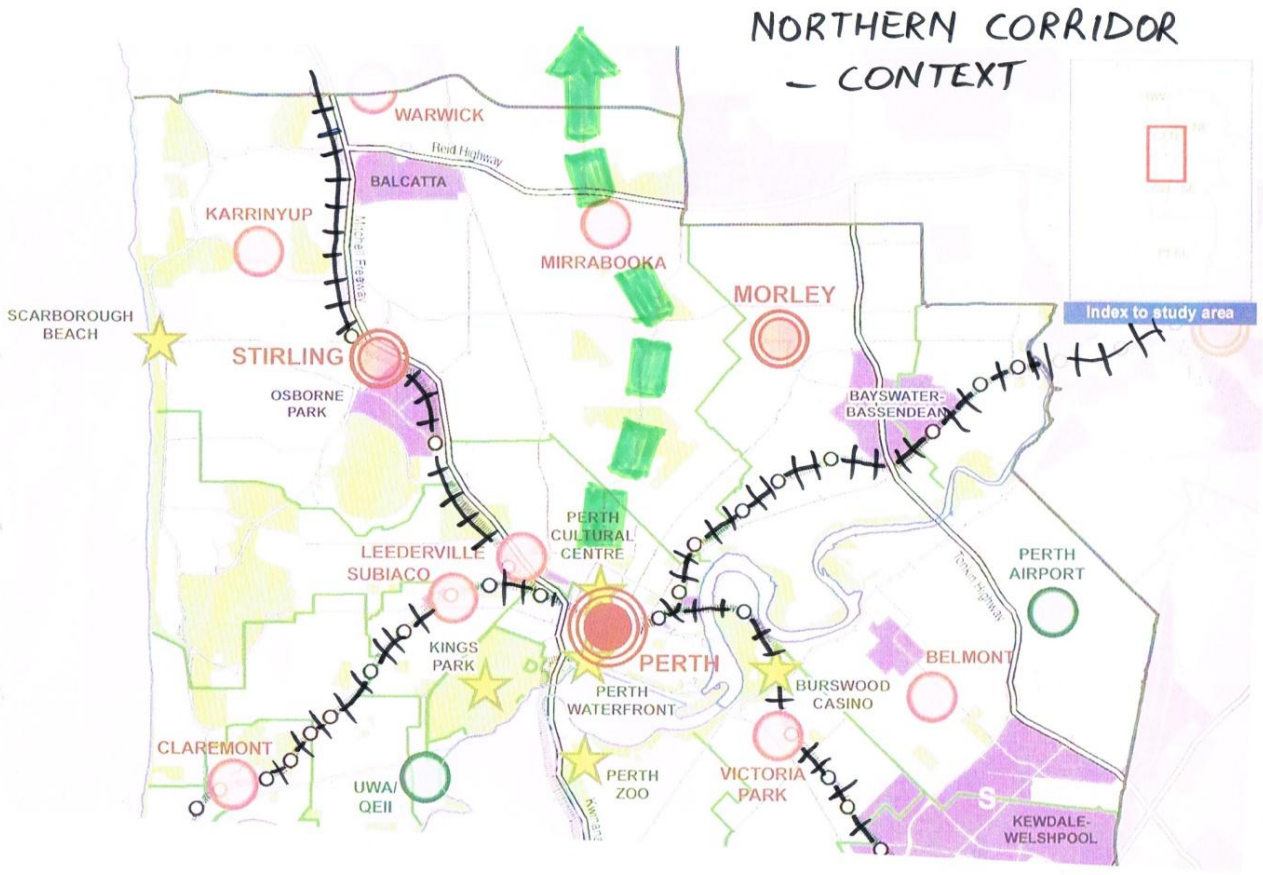


northern light rail

North Corridor Context



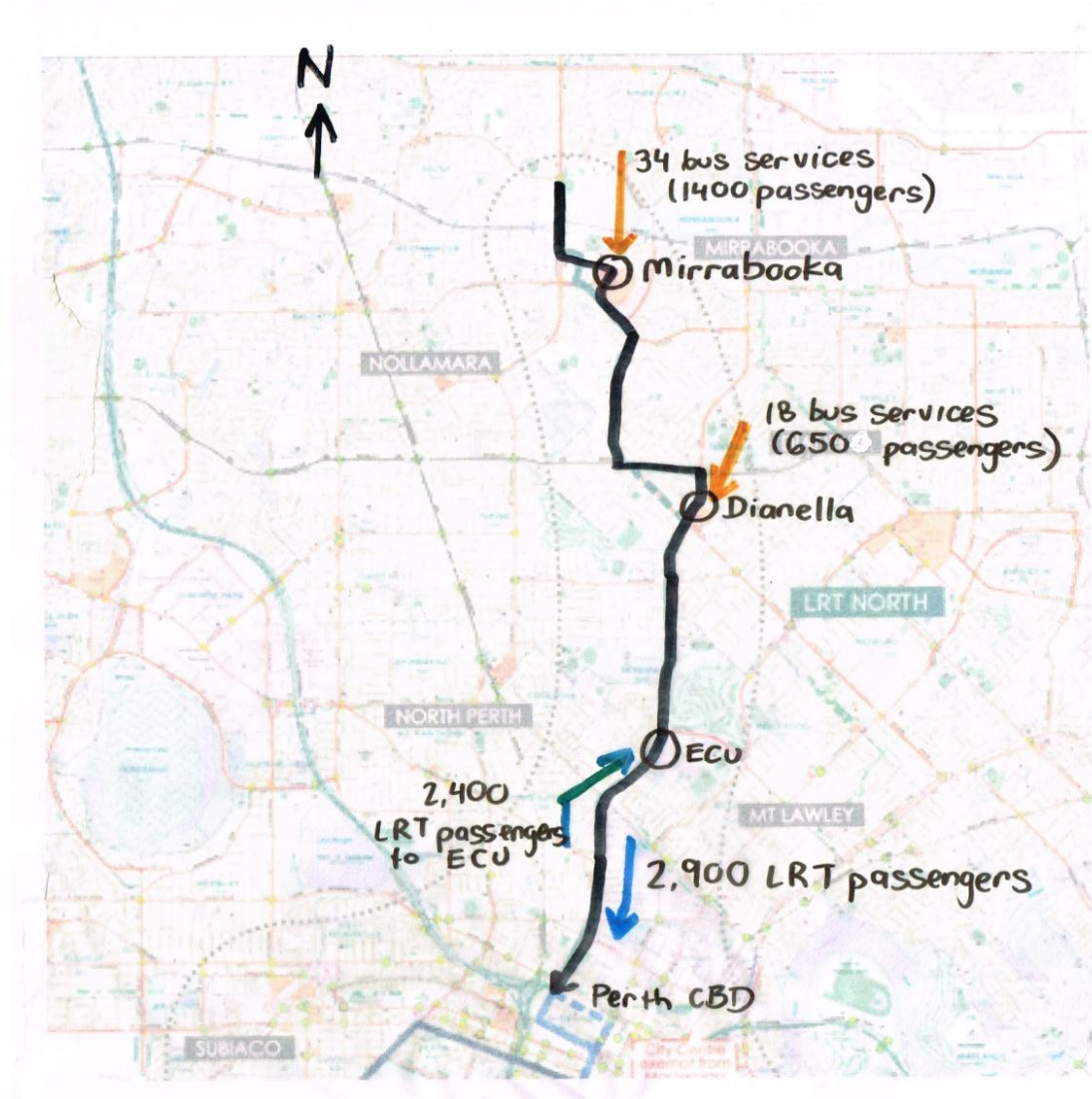
Why Light Rail?

- ✘ Projected patronage = Freo, Midland or Armadale
- ✘ Need to move large volumes efficiently
- ✘ Heavy rail too expensive and too disruptive to urban fabric to create reserve
- ✘ Buses overloading Perth City
- ✘ Busway with separation/passing = +25m res
- ✘ Current passenger No = 1,500-2,000 (in peak)

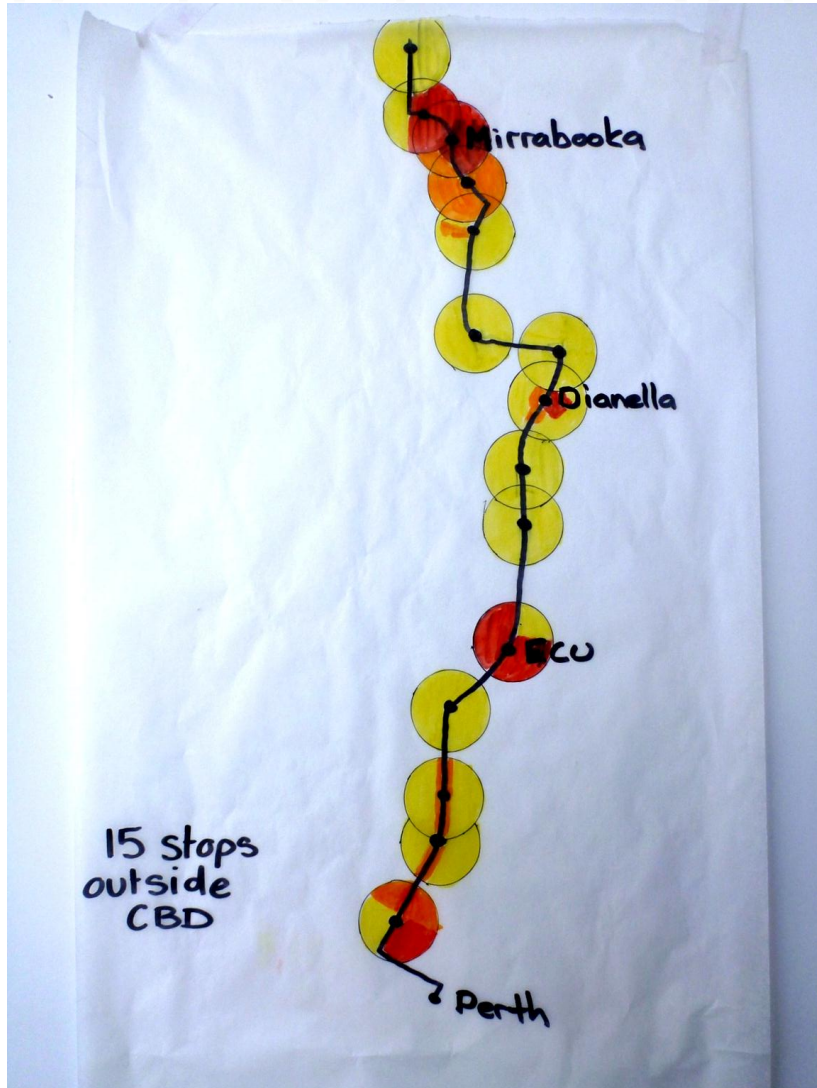
Travel Demand

TRAVEL TIME - Mirrabooka -Perth

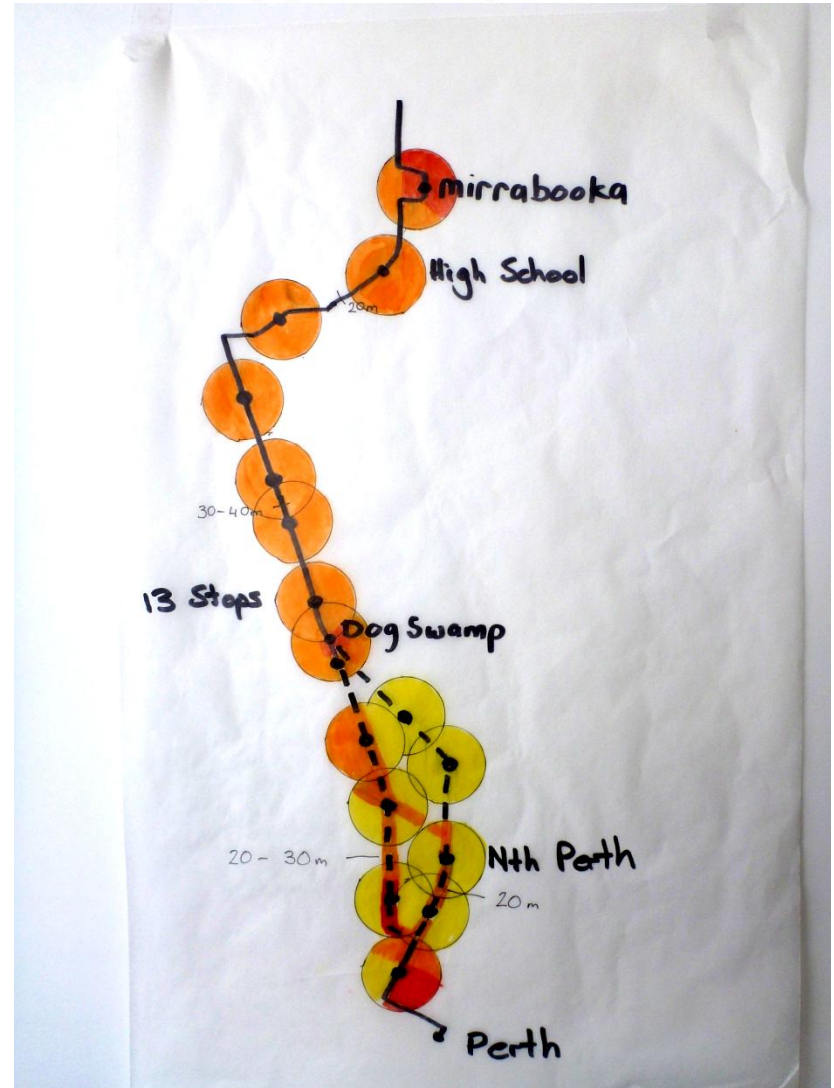
- ✘ Current
26 (30) min - av / (peak)
- ✘ PTA Proposed LRT
23 (26) min
- ✘ Team Proposed LRT 23+1+2=
26 (29) min



Route Options – Catchment Densities



Option A (DoT)



Option B & C (Wanneroo alternatives)

Alternative Routes

Route	Length	No. of Stops	Time (in comparison with Route A)	Catchment Area (in comparison with Route A)
A	7.4 km	10	-	-
B	7.6 km	11	+ 1 min	+ 20 ha
C	6.7 km	10	+ 2 min	+ 16ha

Analysis

- ✘ Destinations – City, ECU, Mirrabooka.
- ✘ Northern walkable catchments limited
- ✘ (POS, lack of interconnected road network, low density)
- ✘ Three distinct characters- North Perth & ECU, Dianella, Mirrabooka
- ✘ Development opportunity – North Perth, Dianella Plaza & Mirrabooka.

Analysis

	Existing Density	Worker Population	Additional Dwellings	Destination
Perth/ Northbridge	High		1600	D / D.O
North Perth	Medium		500	D/D.O
ECU		10,000	200	D
Dianella Plaza	Low		100	D.O
Mirrabooka	Low		1300	D / D.O
Additional Incremental Dwellings			500	
Total			4,200	

Northern Spine

Mirrabooka
+1300 dwellings

Dianella
+1300 dwellings

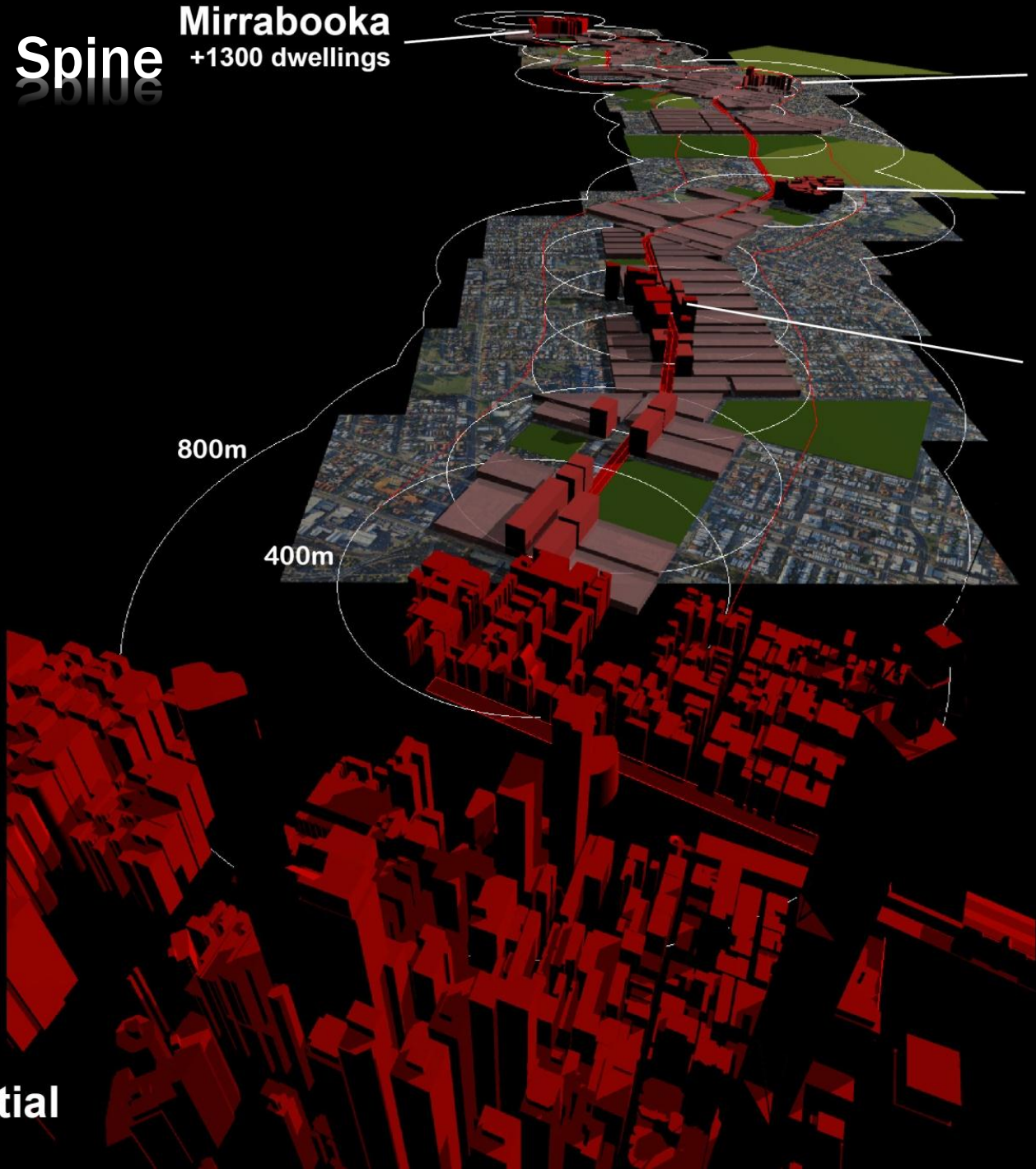
ECU
+200 dwellings

North Perth
+500 dwellings

800m

400m

Growth Potential



Northern Spine

ECU

+200 dwellings

Dianella
+1300 dwellings

CBD

North Perth
+500 dwellings

800m

Mirrabooka
+1300 dwellings

To depot

400m

Growth Potential



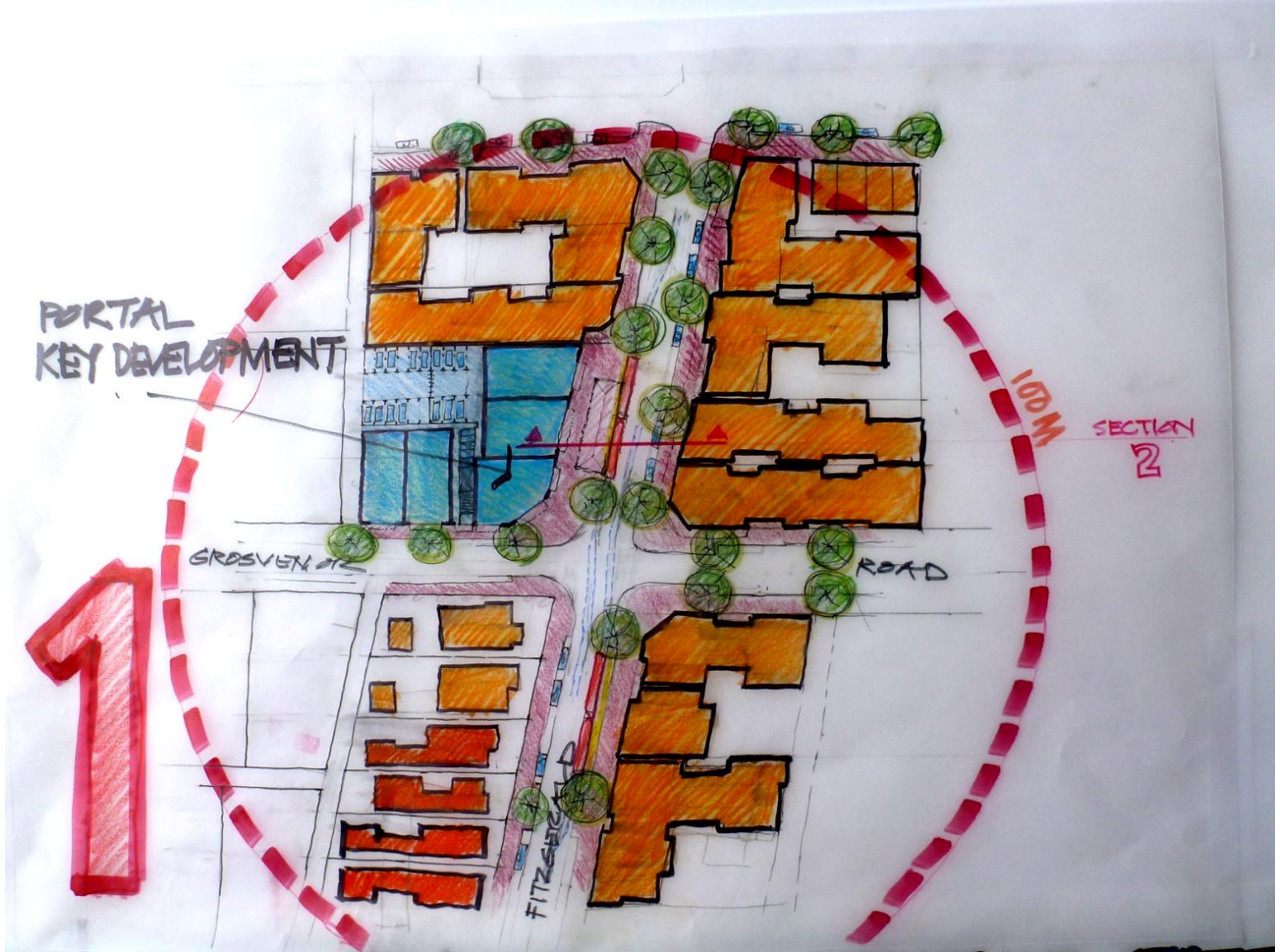
North Perth

- ✘ Development Opps (Low, Med, High)
- ✘ 2 Portal Sites
- ✘ 2 Anchoring Stations (bar-bell)
- ✘ Unifying landscape
- ✘ North Perth Plaza as the heart

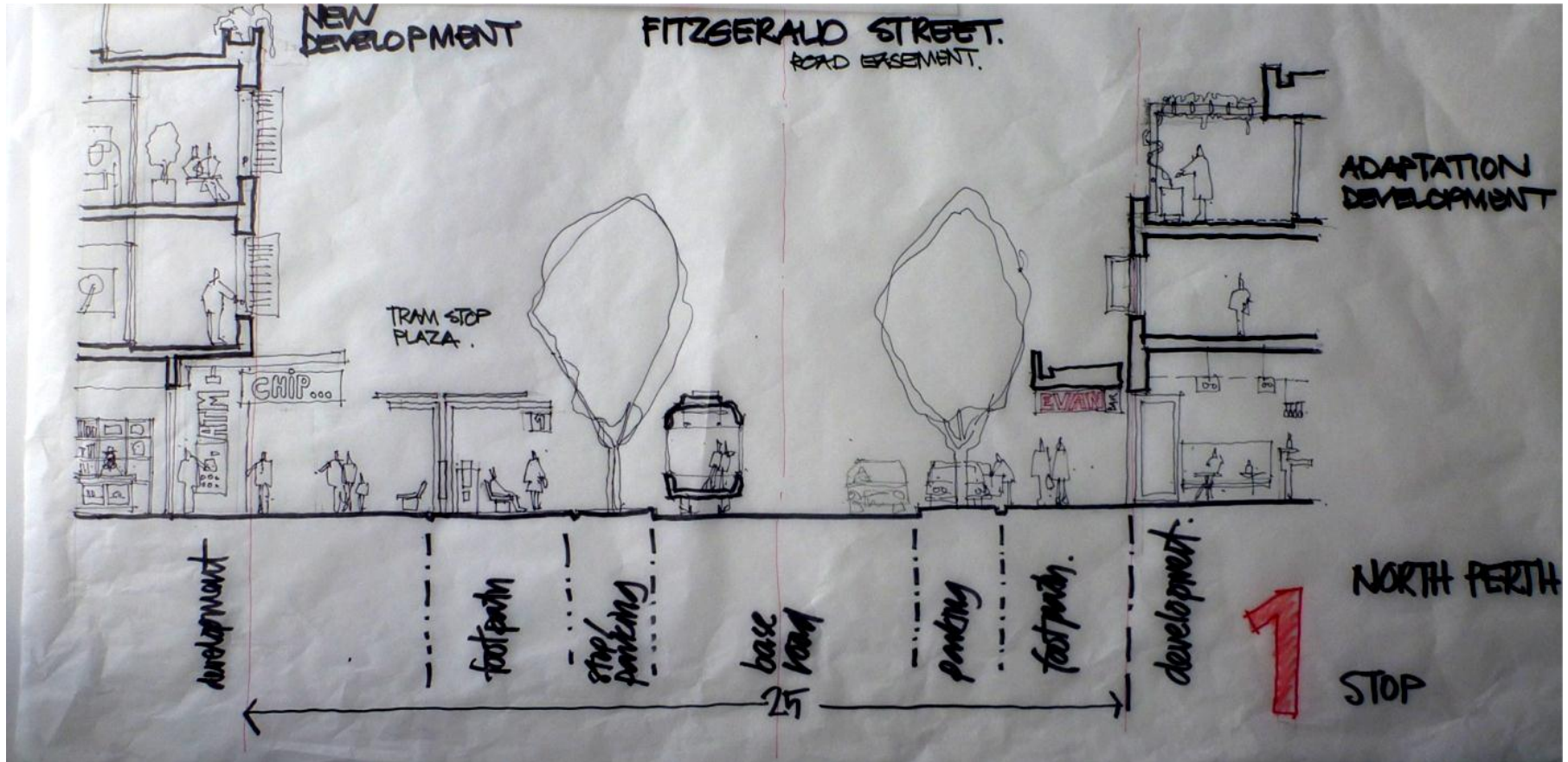


North Perth

Tram Stop One



North Perth

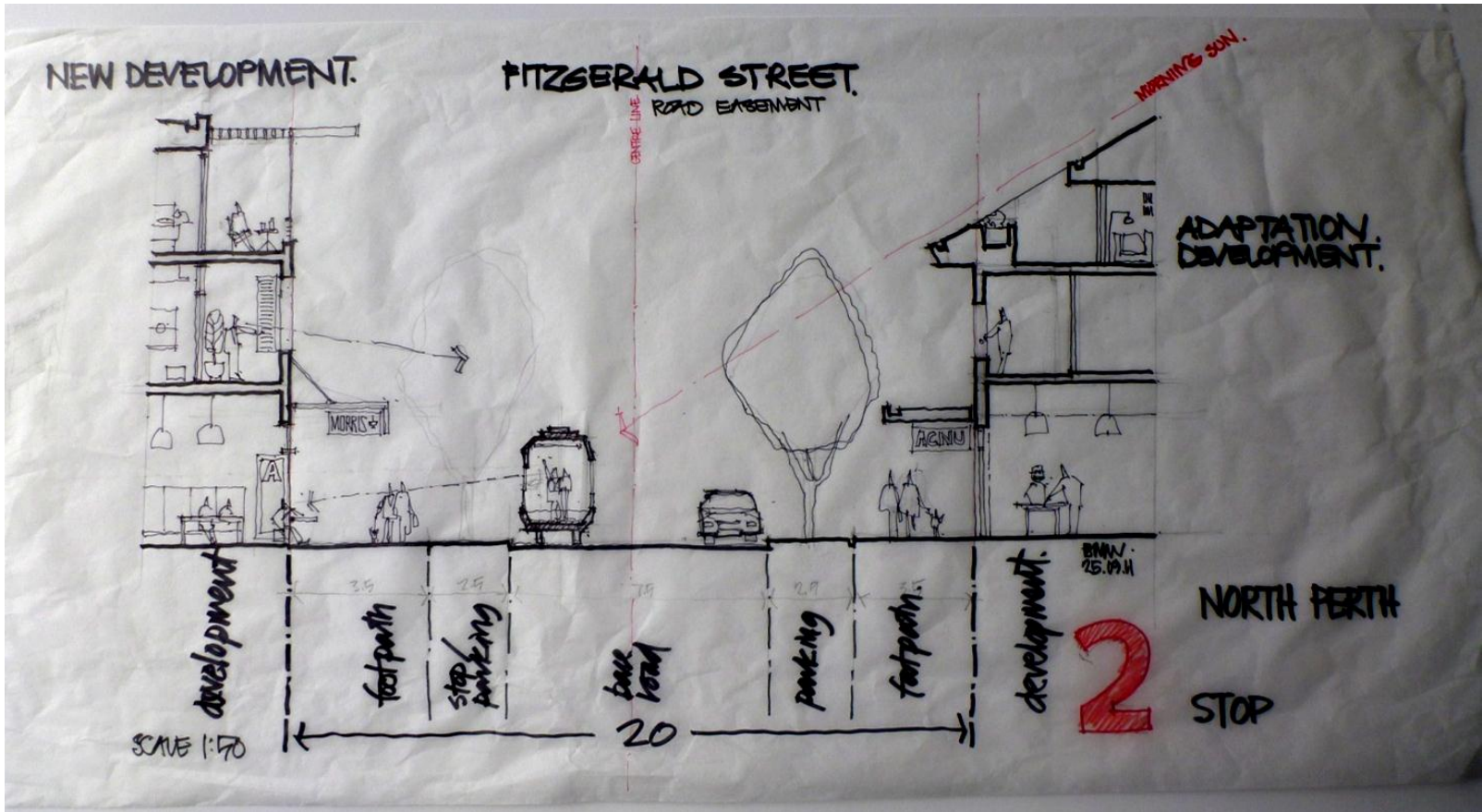


North Perth

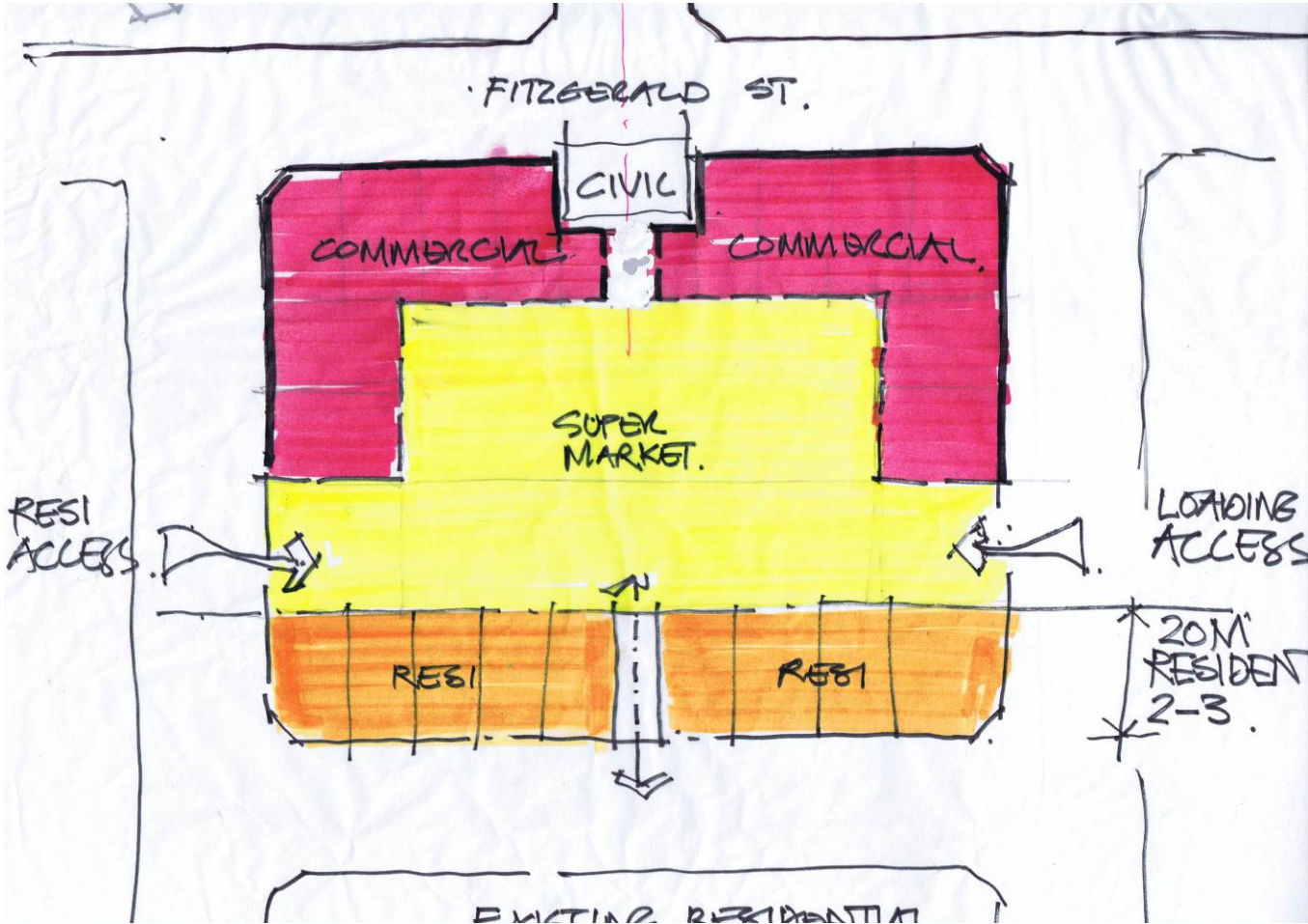
Tram Stop Two



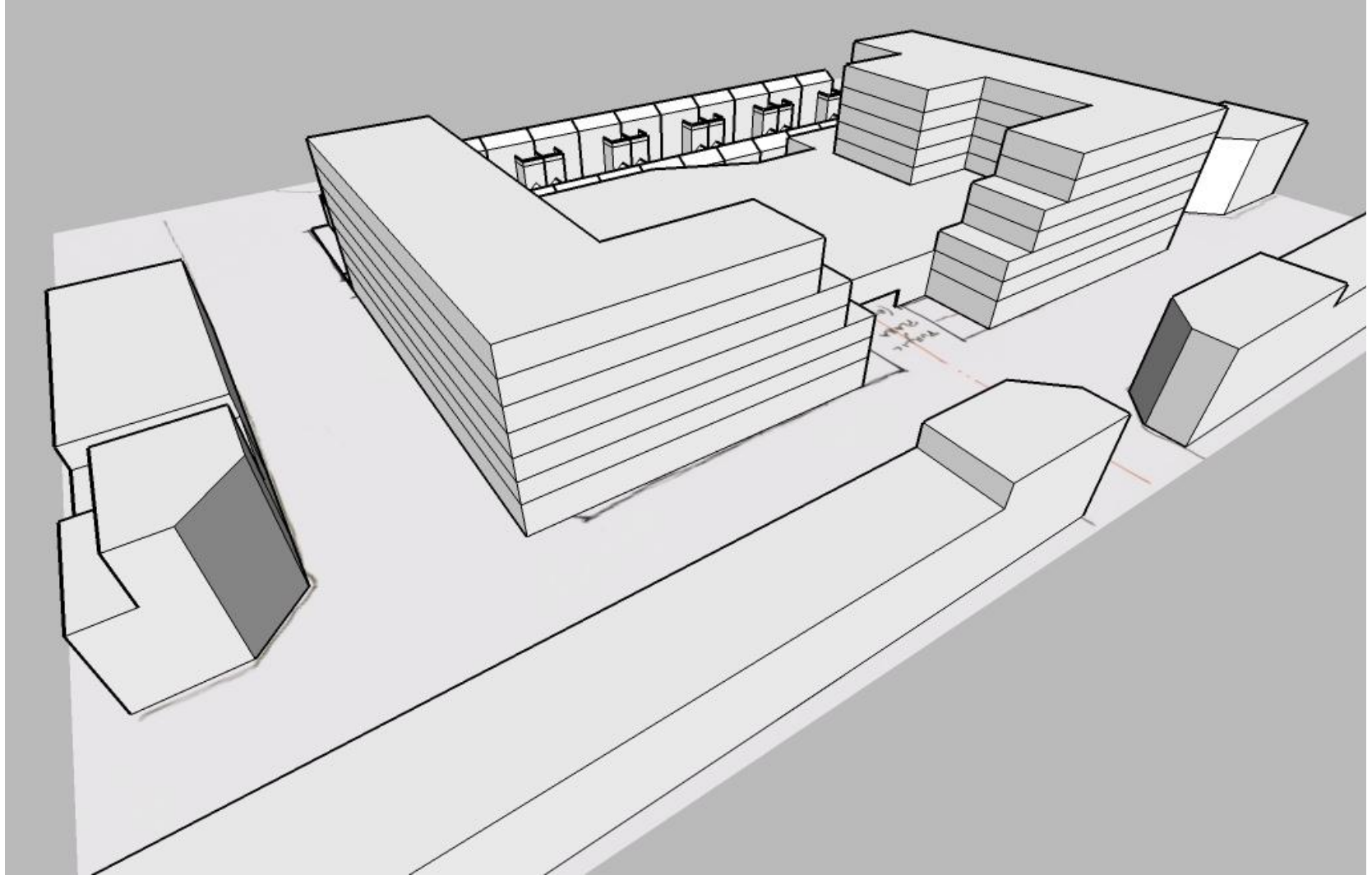
North Perth



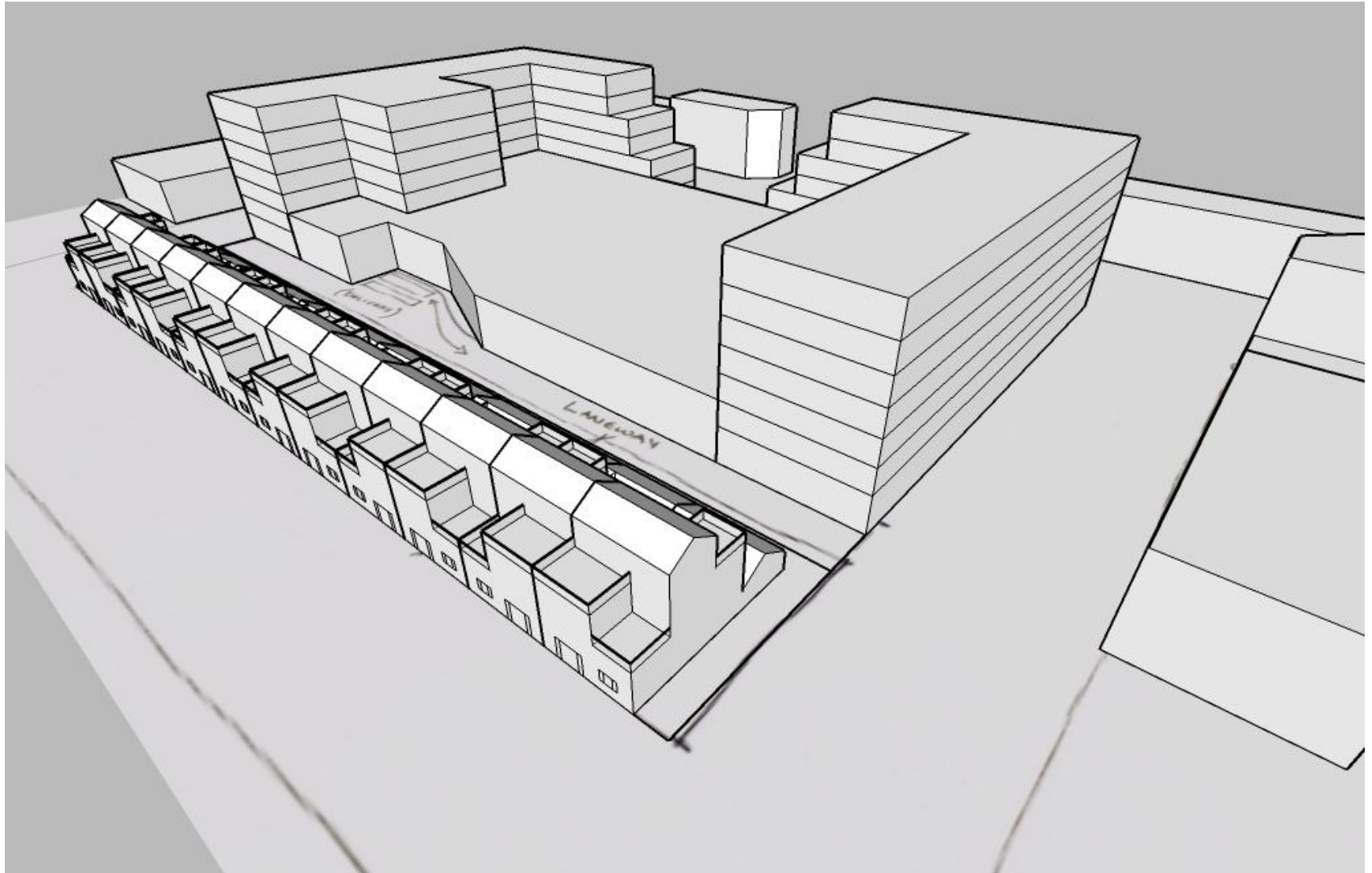
North Perth Plaza



North Perth Plaza

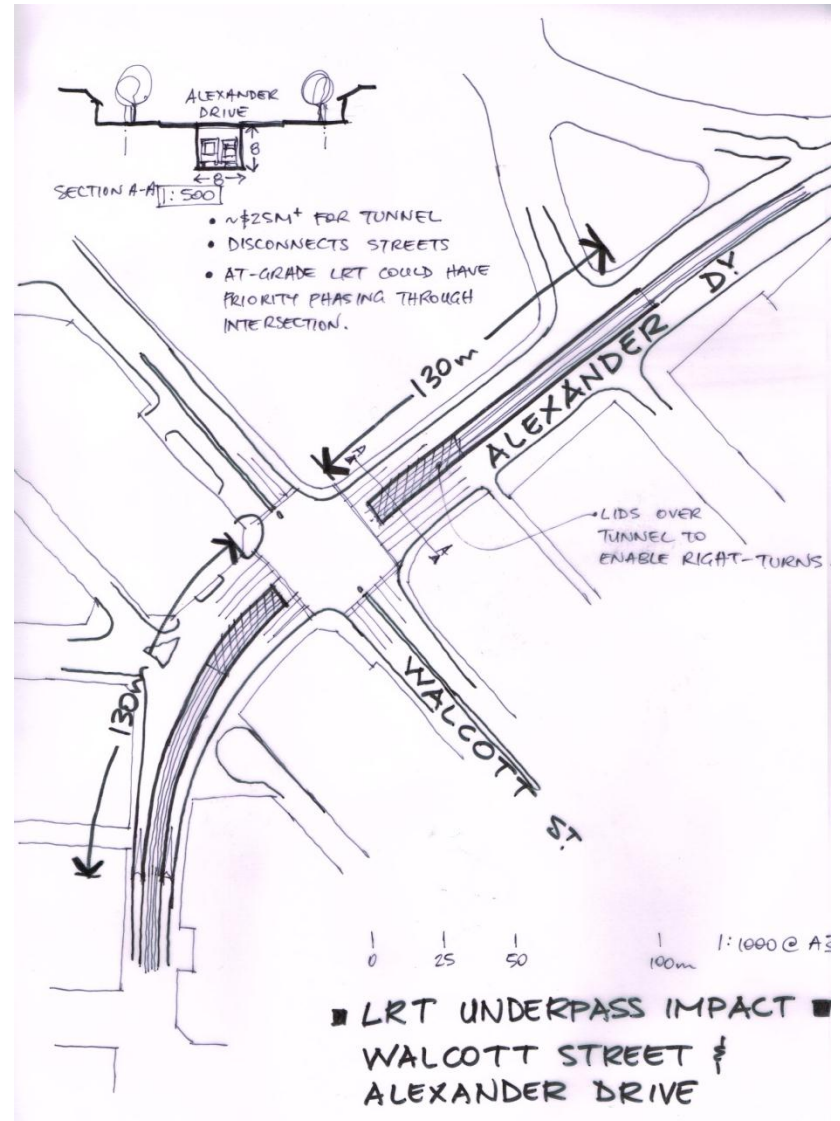


North Perth Plaza

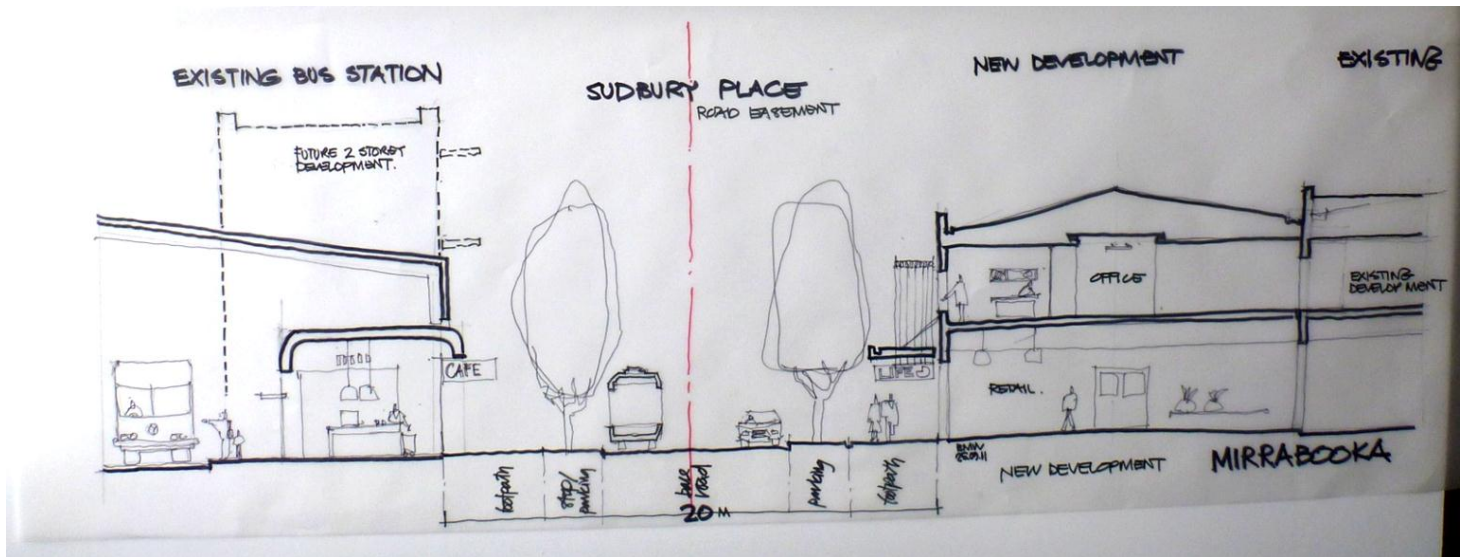
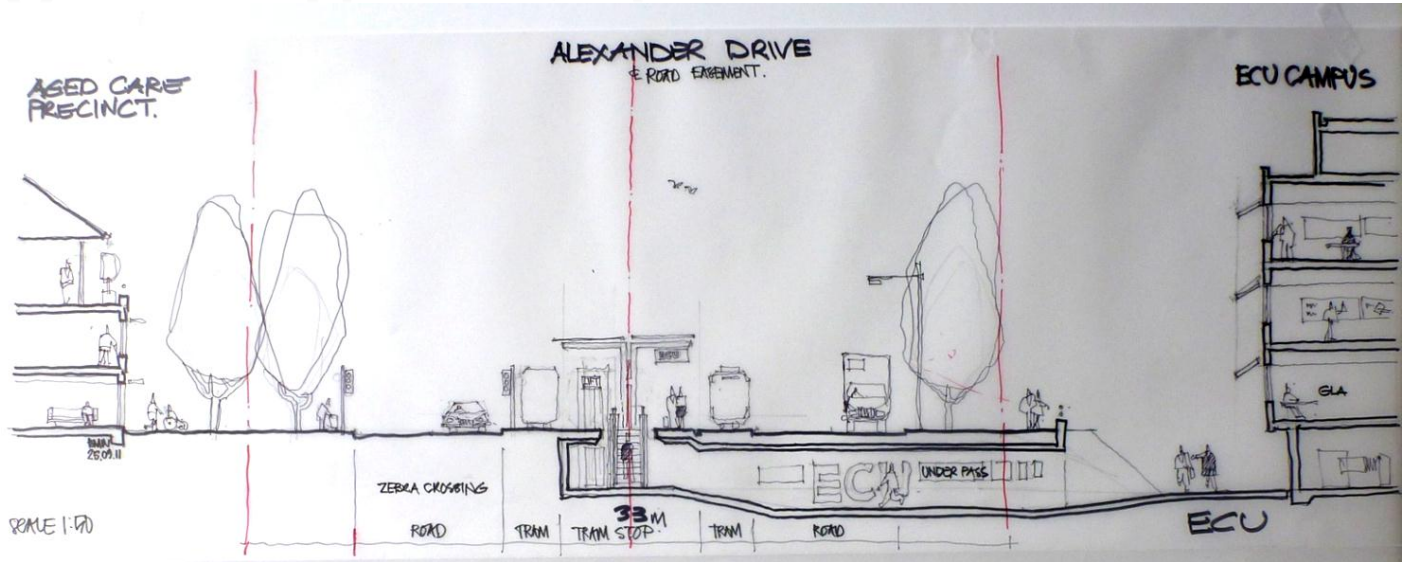


Walcott/Fitzgerald ST Tunnel

- ✘ Approx \$25 M for Tunnel
- ✘ Disconnects Streets
- ✘ At-grade LRT could have priority phasing through intersection



Edith Cowan University



Dianella Plaza

- ✘ Deviated Bus Route through 'main street'
- ✘ Redevelopment of Alexander Drive frontage
- ✘ Residential and retail expansion



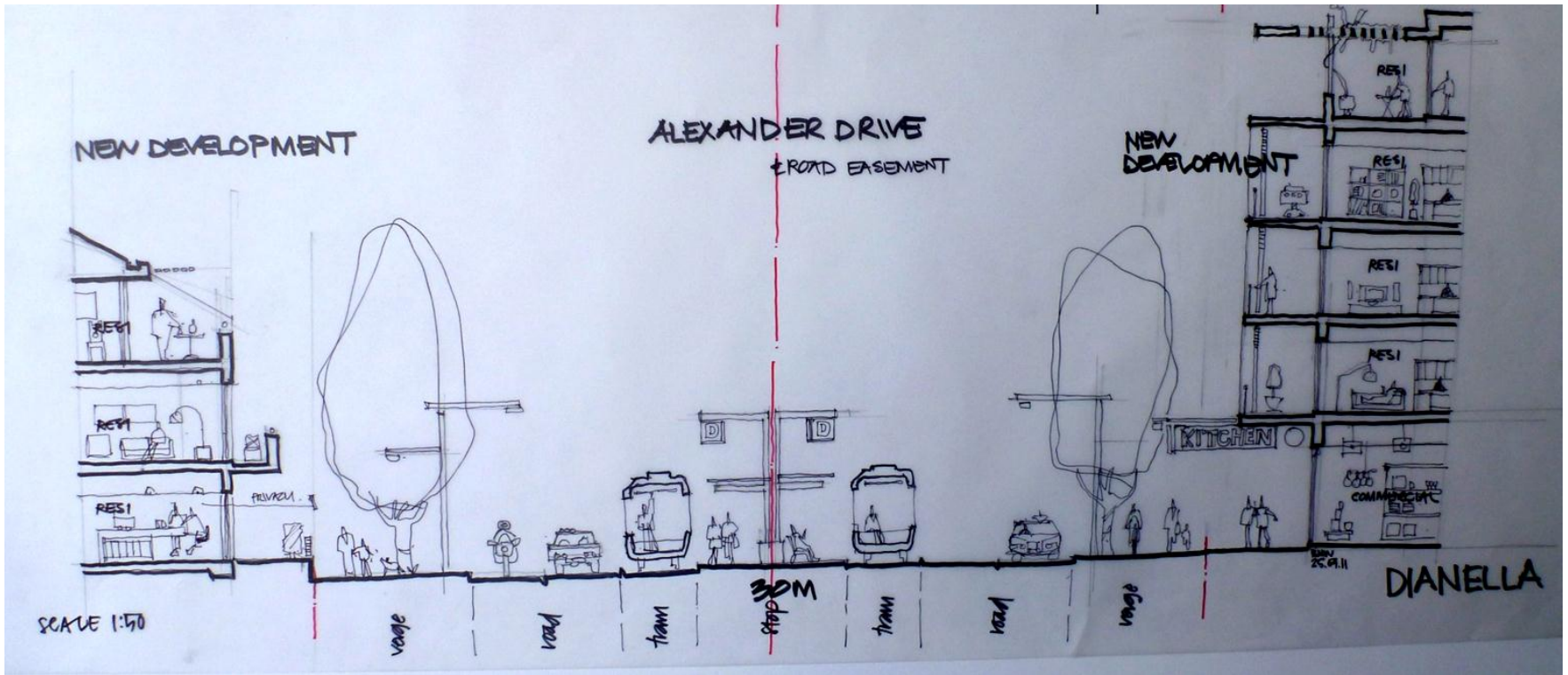
Dianella Plaza

- ✘ 6 Bus stops, 3 layover bays
- ✘ Tram stop
- ✘ New 'main street' links to Dianella Plaza
- ✘ Mixed use/Res

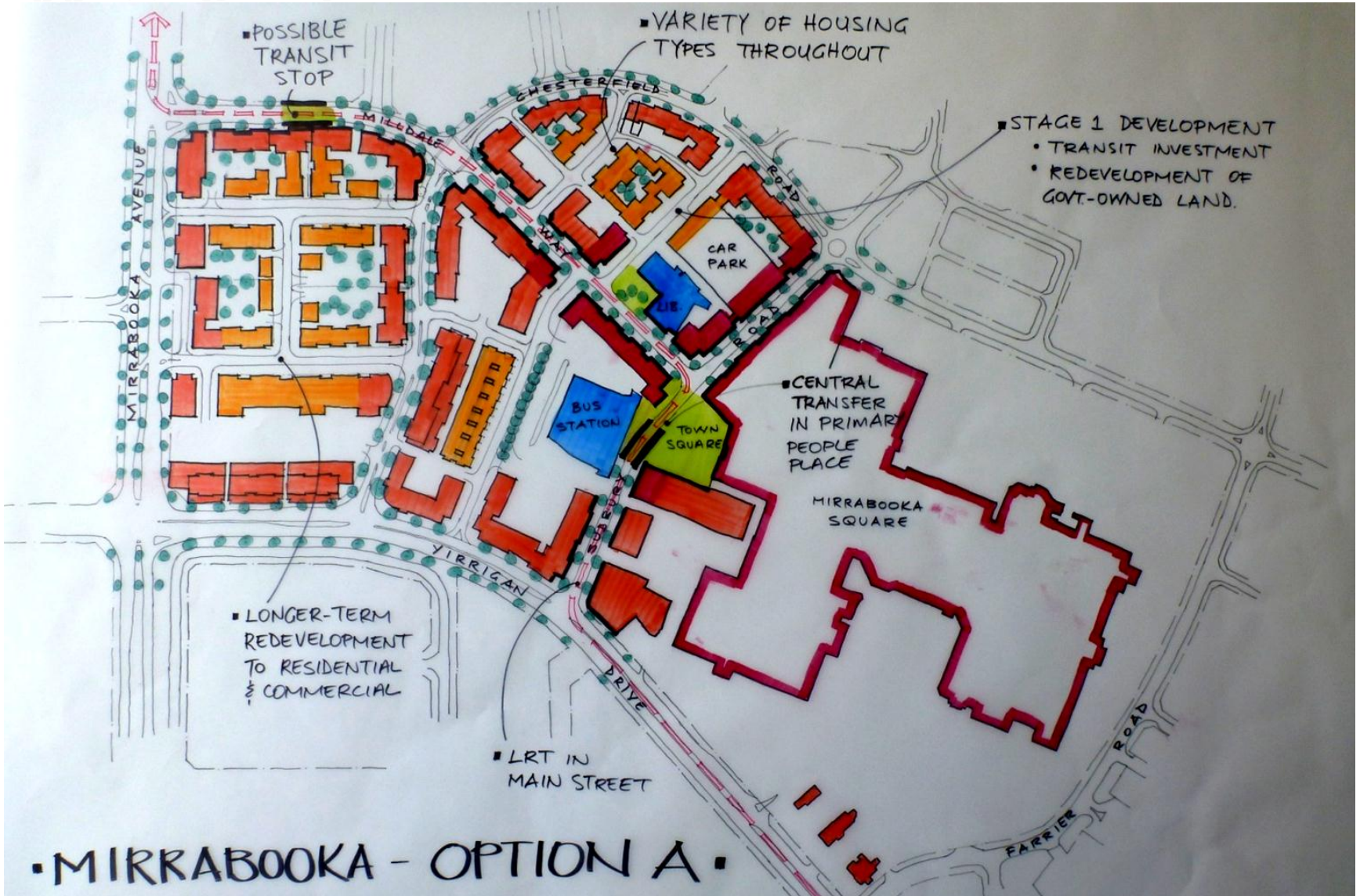


Dianella - Alexander Drive

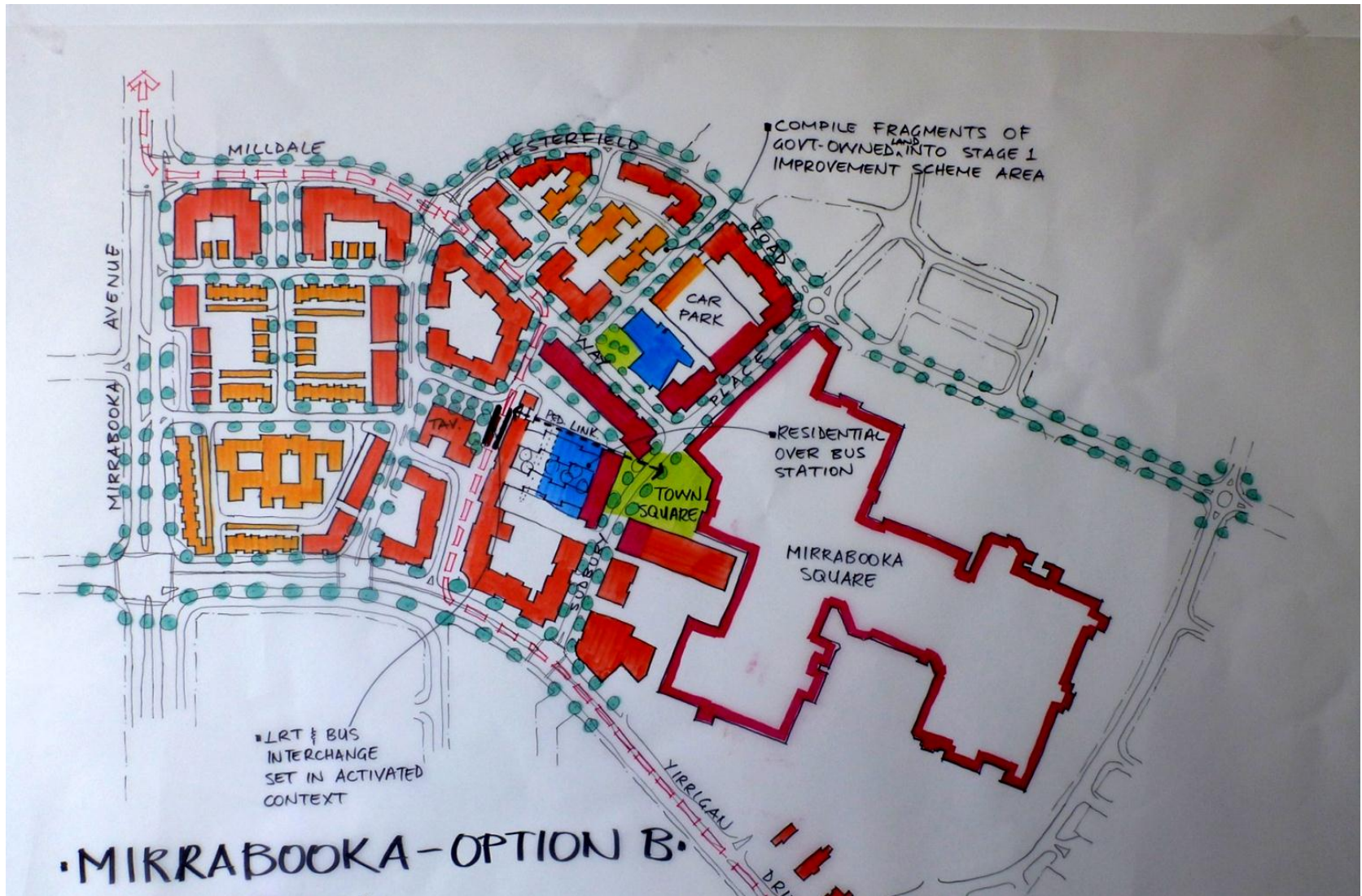
Dianella - Alexander Drive



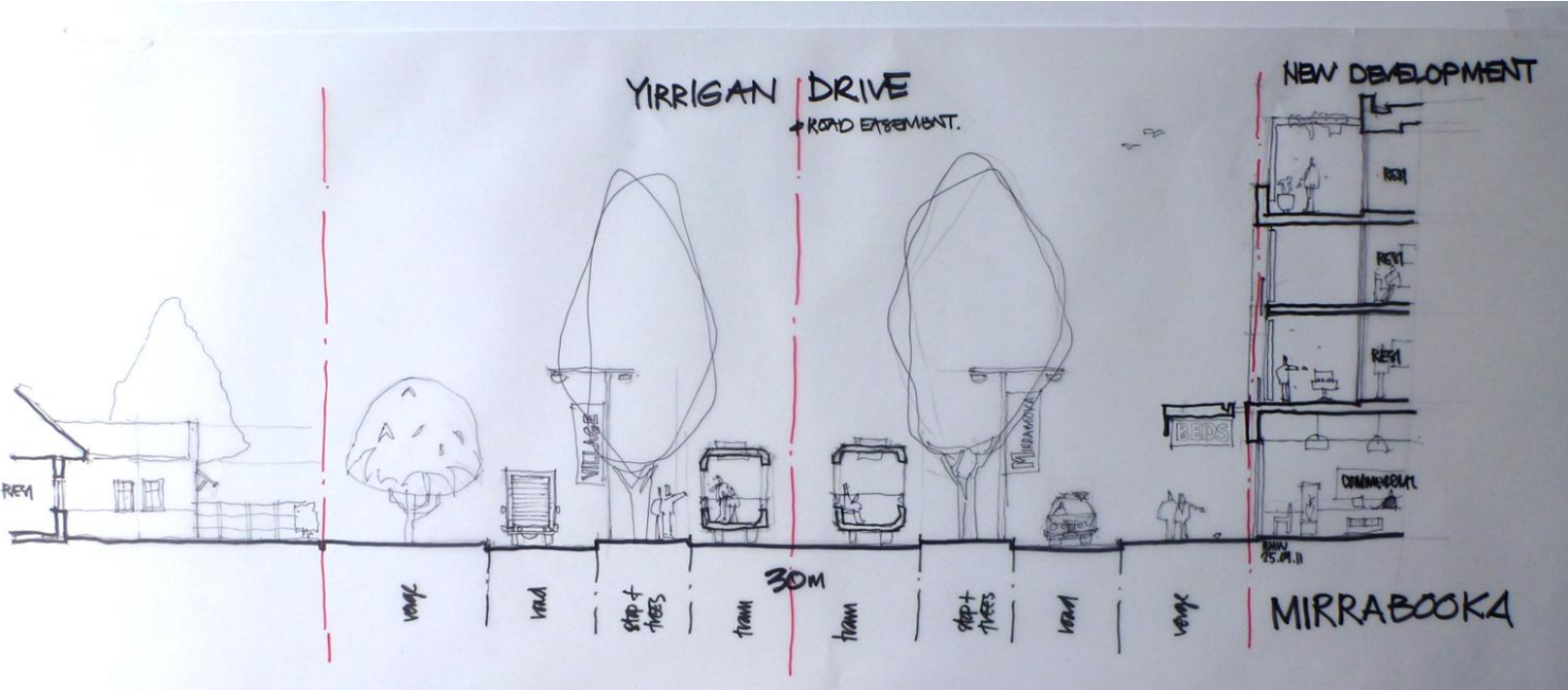
Mirrabooka



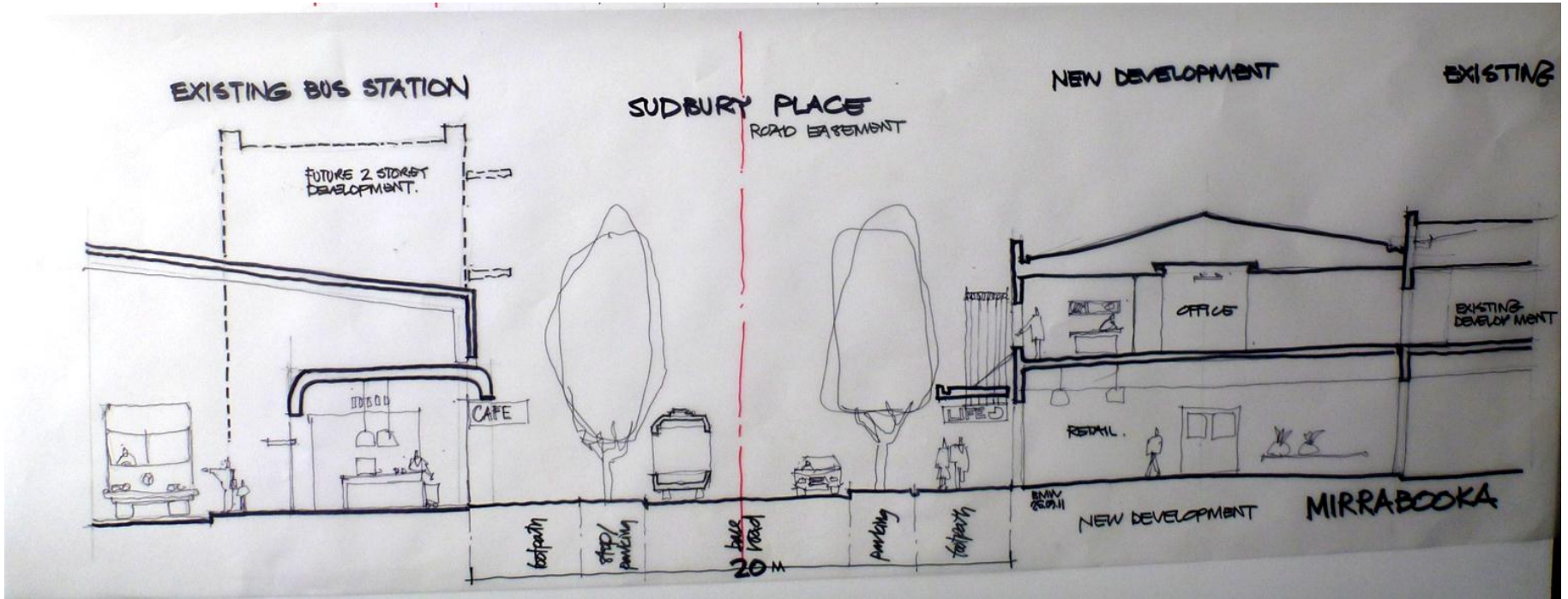
Mirrabooka



Mirrabooka - Yirrigan Drive



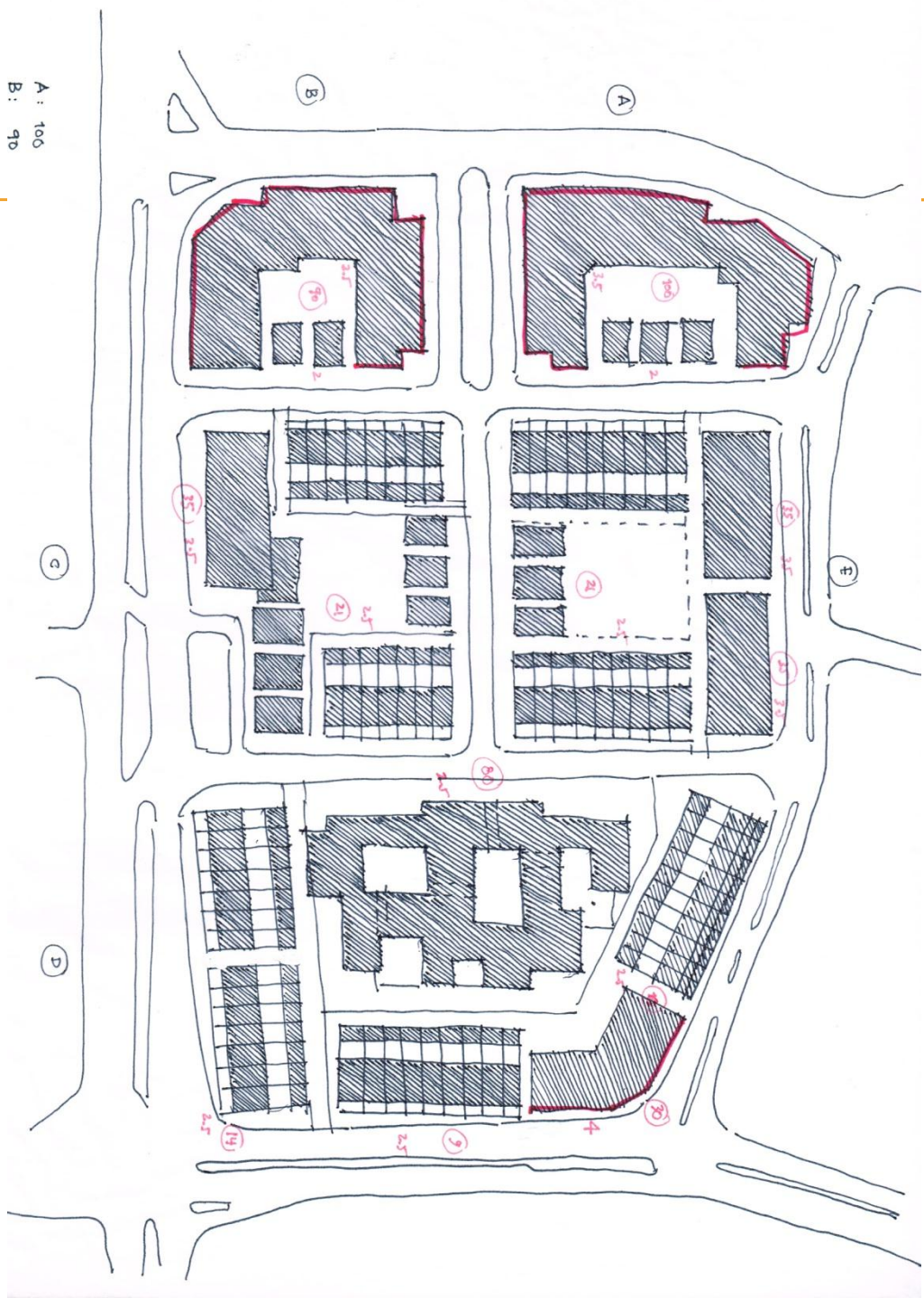
Mirrabooka – Sudbury Place



Mirrabooka

- ✘ Gradual redevelopment of car-based commercial into a variety of residential and mixed-use types.
- ✘ Approx 450 new dwellings

A: 100
B: 90



Mirrabooka



The Northern Spine

ECU

+200 dwellings

CBD

North Perth

+500 dwellings

Dianella

+1300 dwellings

800m

Mirrabooka

+1300 dwellings

To depot

400m

Growth Potential

