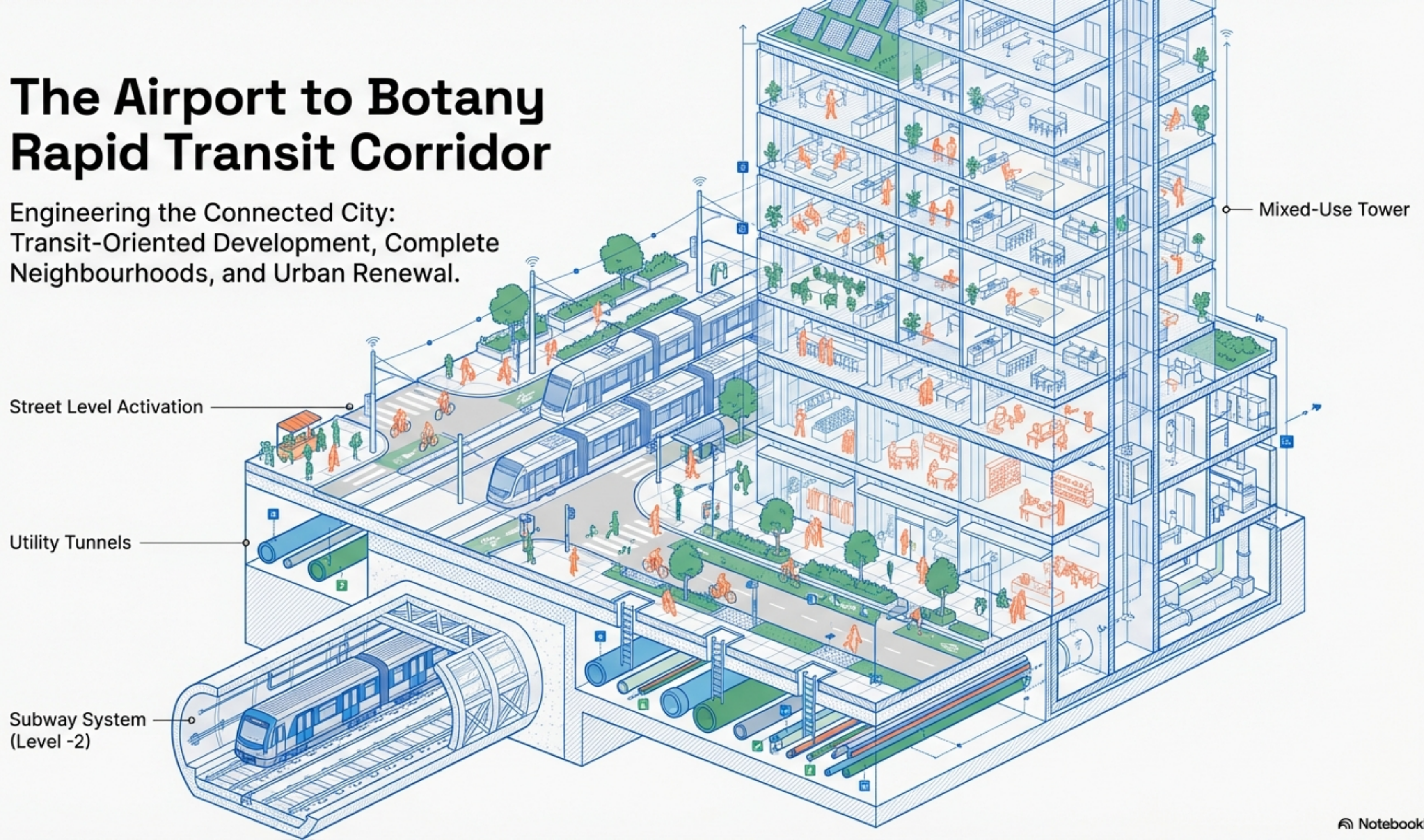


The Airport to Botany Rapid Transit Corridor

Engineering the Connected City:
Transit-Oriented Development, Complete
Neighbourhoods, and Urban Renewal.



FROM TRANSIT LINE TO URBAN SPINE

The A2B Urban Operating System



1. THE HARDWARE

18km dedicated, congestion-free busway.

Connecting Airport, Puhinui, Manukau, and Botany.



2. THE CODE

'Density Follows Frequency' Mandate.

6-Storey zoning within 200m of hubs.

3-Storey zoning within 400m of corridors.



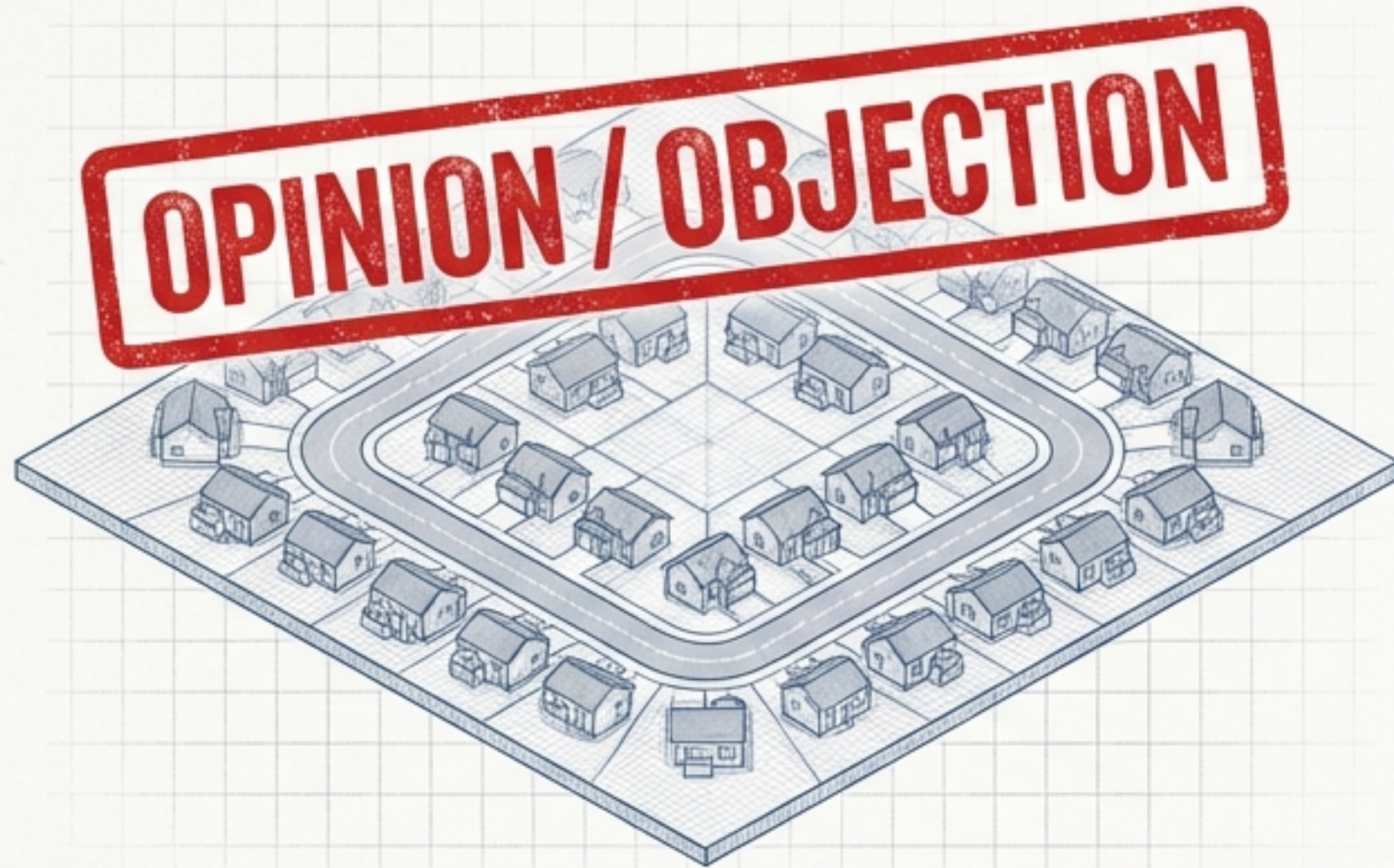
3. THE OUTPUT

Transforming 'dormitory suburbs' into 24/7 Complete Neighbourhoods.

Nature integrated as critical infrastructure.

From 'Subjective Opinion' to 'Culture of Adherence'

Legacy System (Subjective)



STORAGE FOR PEOPLE

- Based on Character Assessments.
- Mechanism: The 'Right to Complain'.
- Outcome: Traffic Sewers & Retail Wastelands.

Urban OS (Objective)





COMPLETE NEIGHBOURHOOD

- Based on Math & Capacity.
- Mechanism: The 'Right to Operate'.
- Outcome: Complete Neighbourhoods (24/7 Ecosystems).

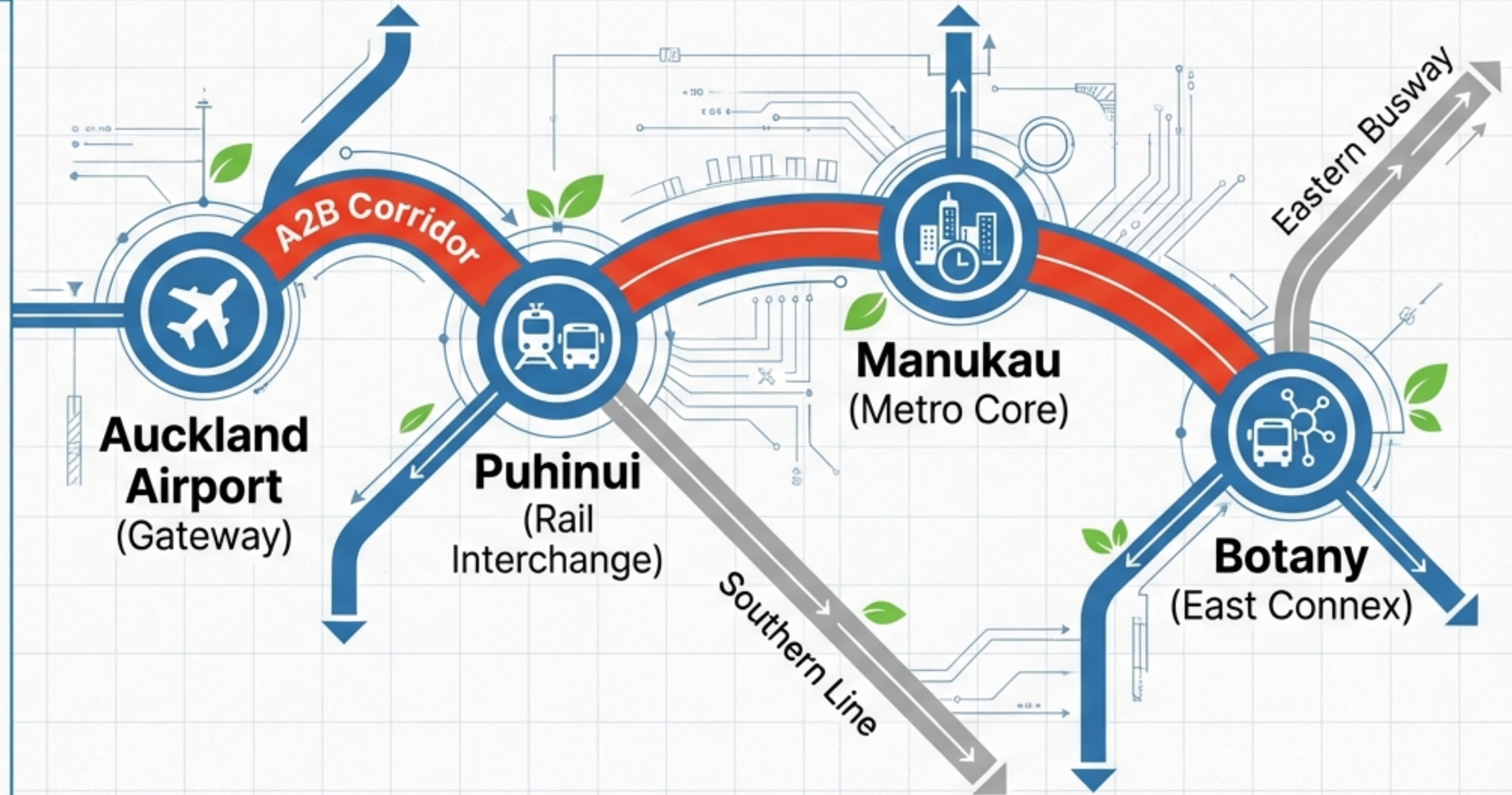
The Infrastructural Skeleton: A2B

Project Specs

 **Length:** 18km
Dedicated ROW

 **Time:** 34–38 min
Airport-to-Botany

 **Status:**
Design /
Designation
Phase



The Core Algorithm: Density Follows Frequency

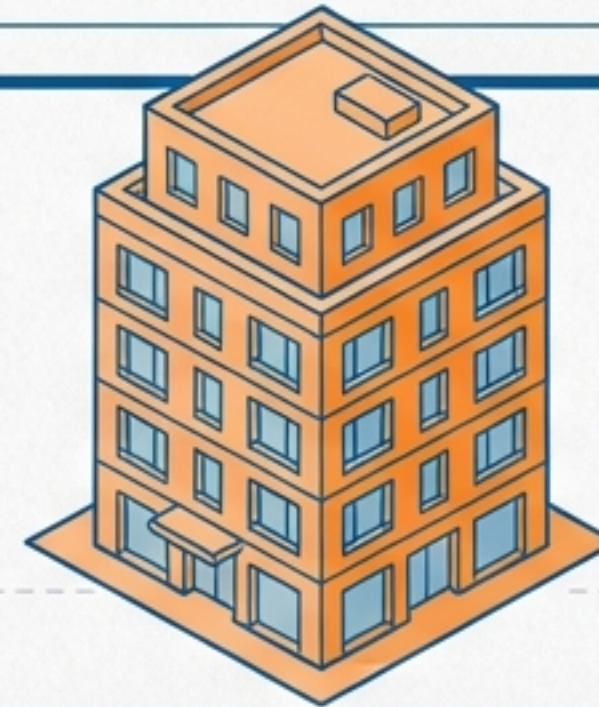
Zoning is Tethered to Capacity

ZONE A: THE TRANSIT SPINE



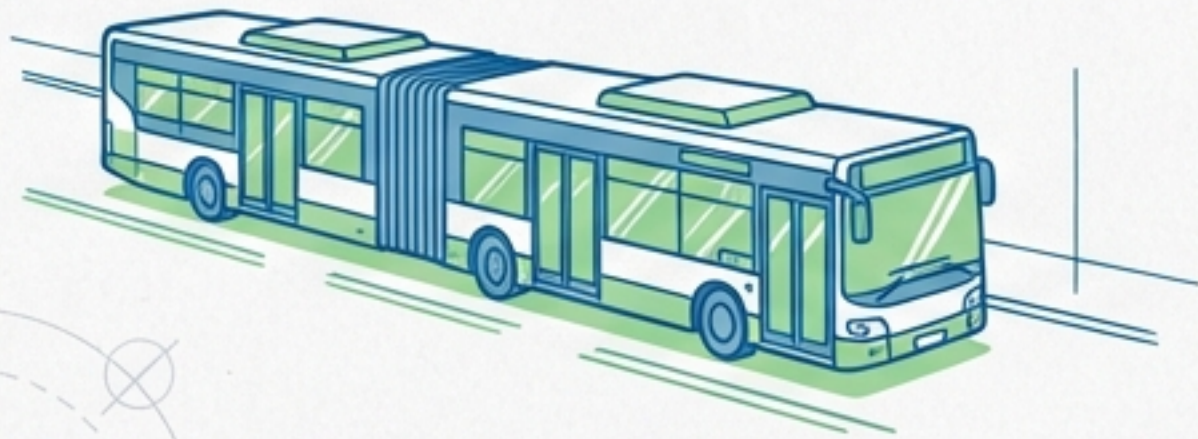
0–200m Radius

Mandate:
Minimum 6 Storeys



Maximize ROI on
rail infrastructure.

ZONE B: PRIMARY CORRIDOR



200–400m Radius

Mandate:
Minimum 3 Storeys



Transition to
neighbourhood
scale.

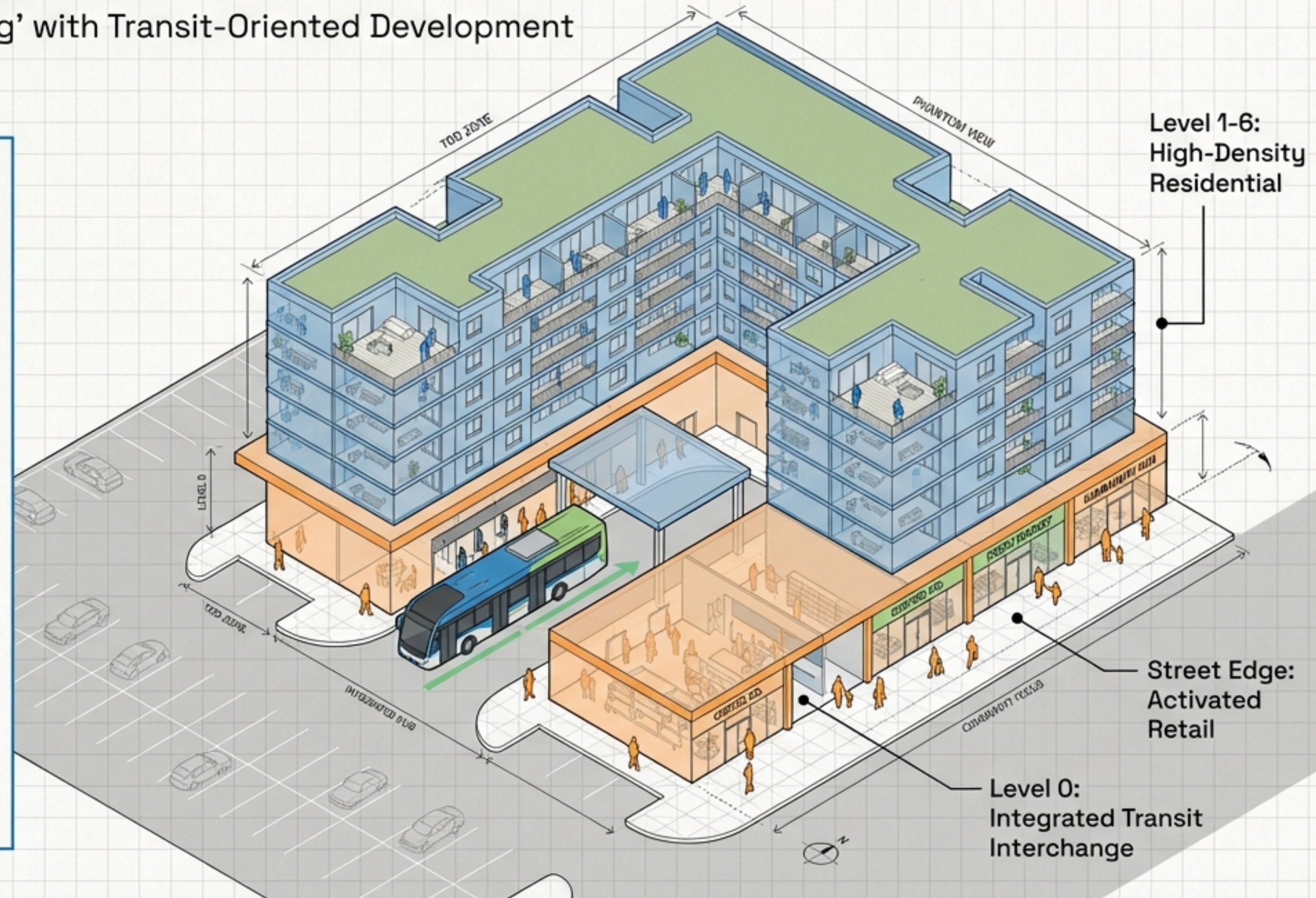
Manukau Metropolitan Core

Reclaiming the 'Sea of Parking' with Transit-Oriented Development

The Transformation

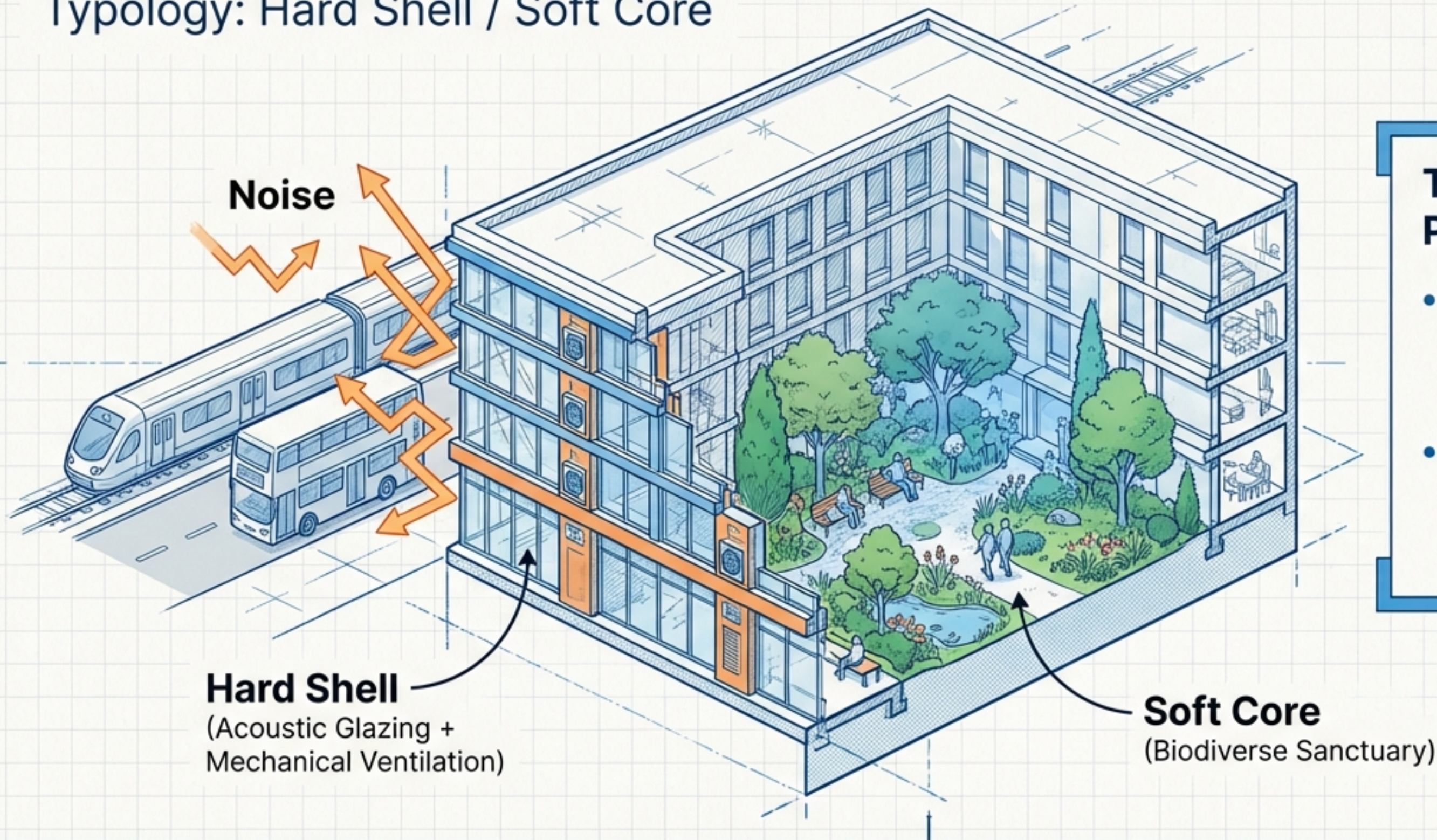
Converting surface parking (Davies Ave) into high-density TODs.

Turning seas of parking into oceans of communities.



The Architecture of Resilience

Typology: Hard Shell / Soft Core



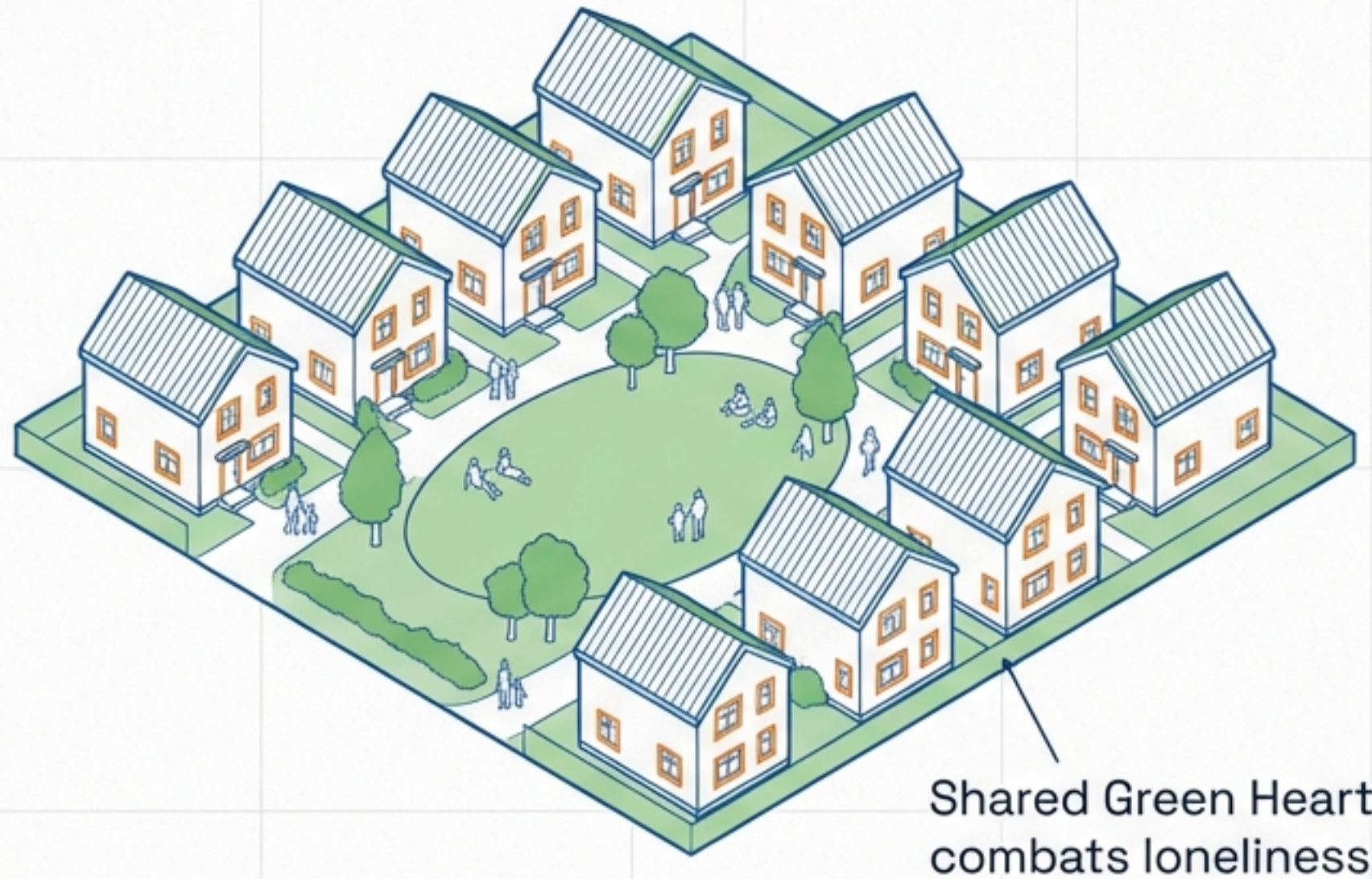
The Newcomer Principle

- The developer (agent of change) funds the acoustic mitigation.
- Protects the transit network's "Right to Operate" 24/7.

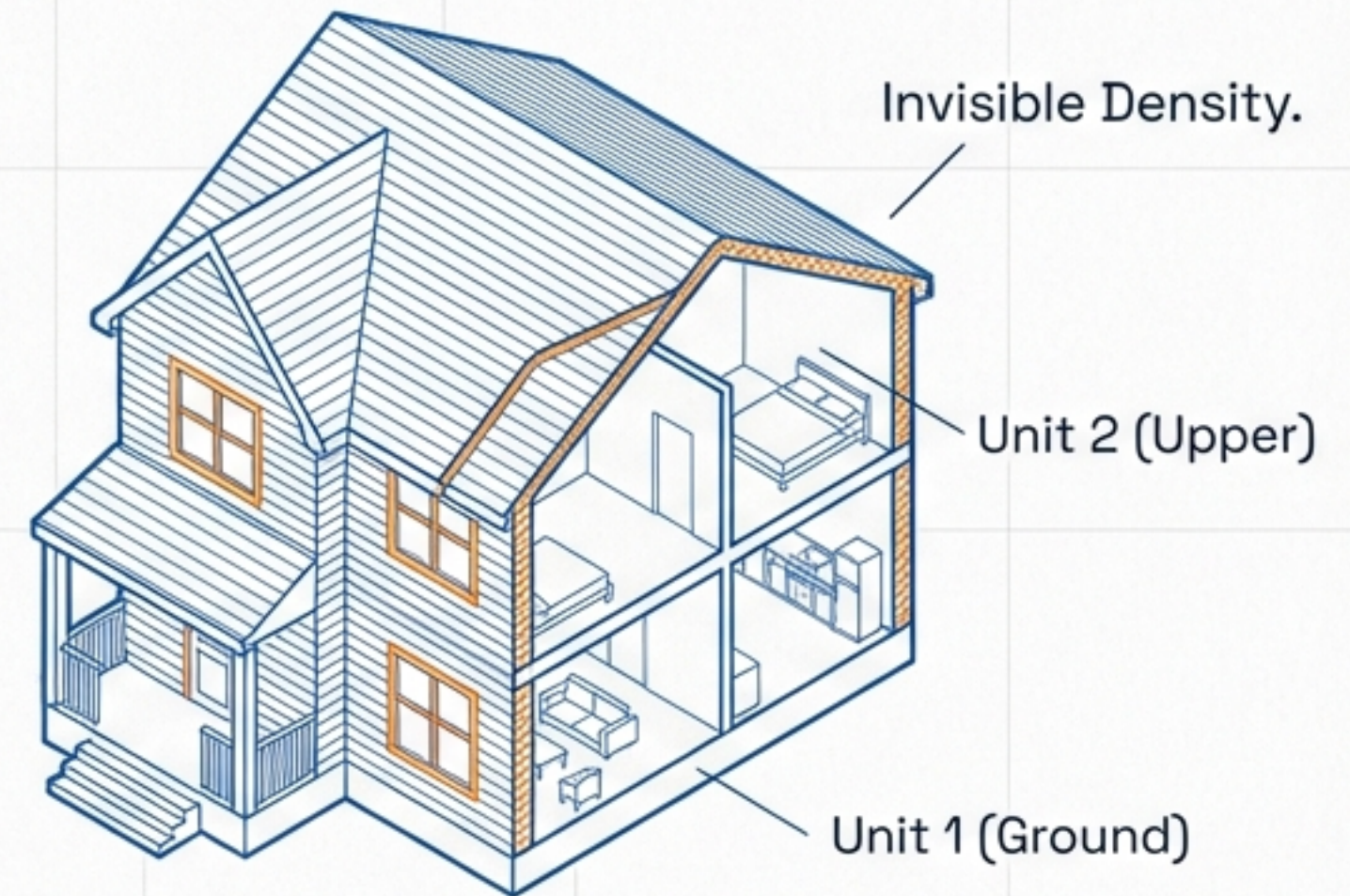
Botany & Te Irirangi: The ‘Missing Middle’

Target Density: 15 Dwelling Units Per Acre (DU/AC)

“Cottage Court”

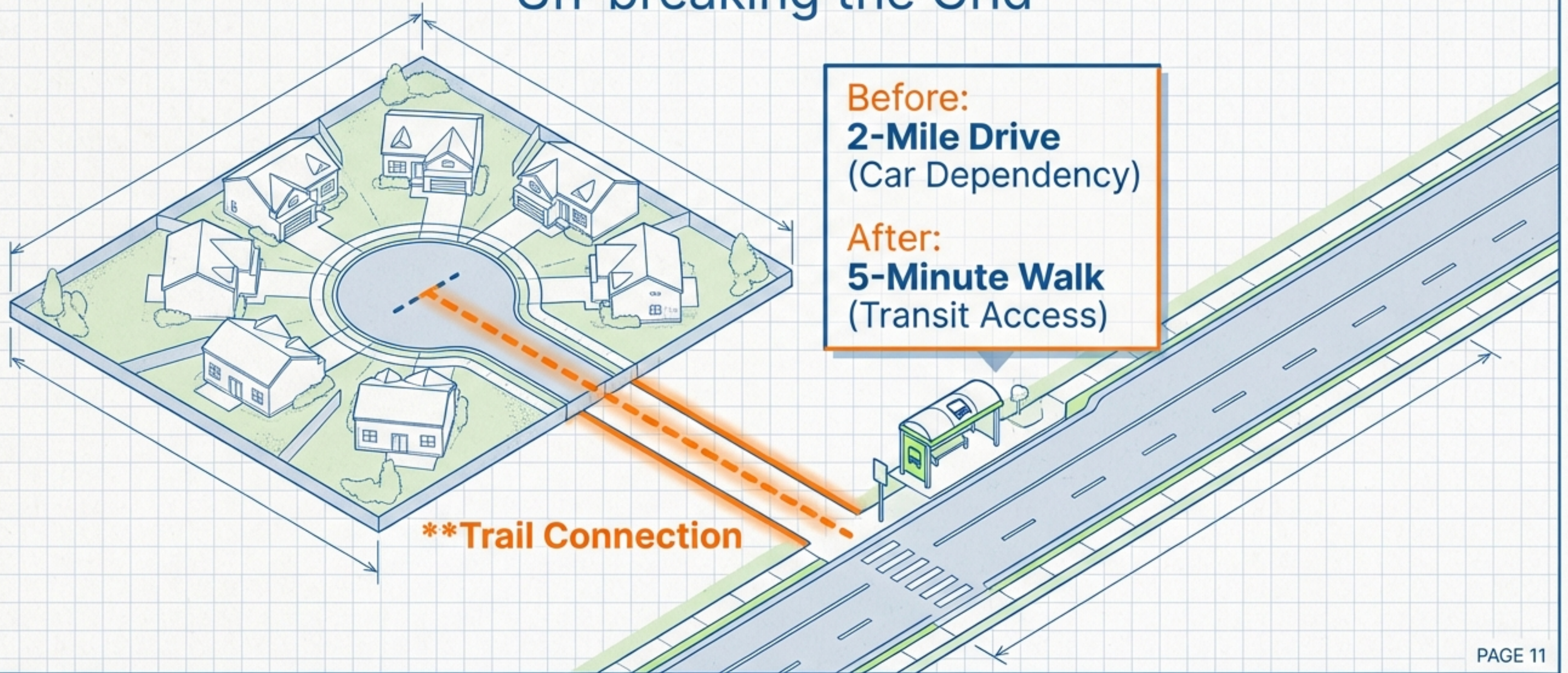


“Stacked Duplex”



Surgical Connectivity

Un-breaking the Grid



The Economic Engine: Zero 'Junk Miles' "As-of-Right Commerce" in Inter



**THE LINGER
FACTOR:**
Pedestrians
spend **66%** more at
local businesses
than drivers.

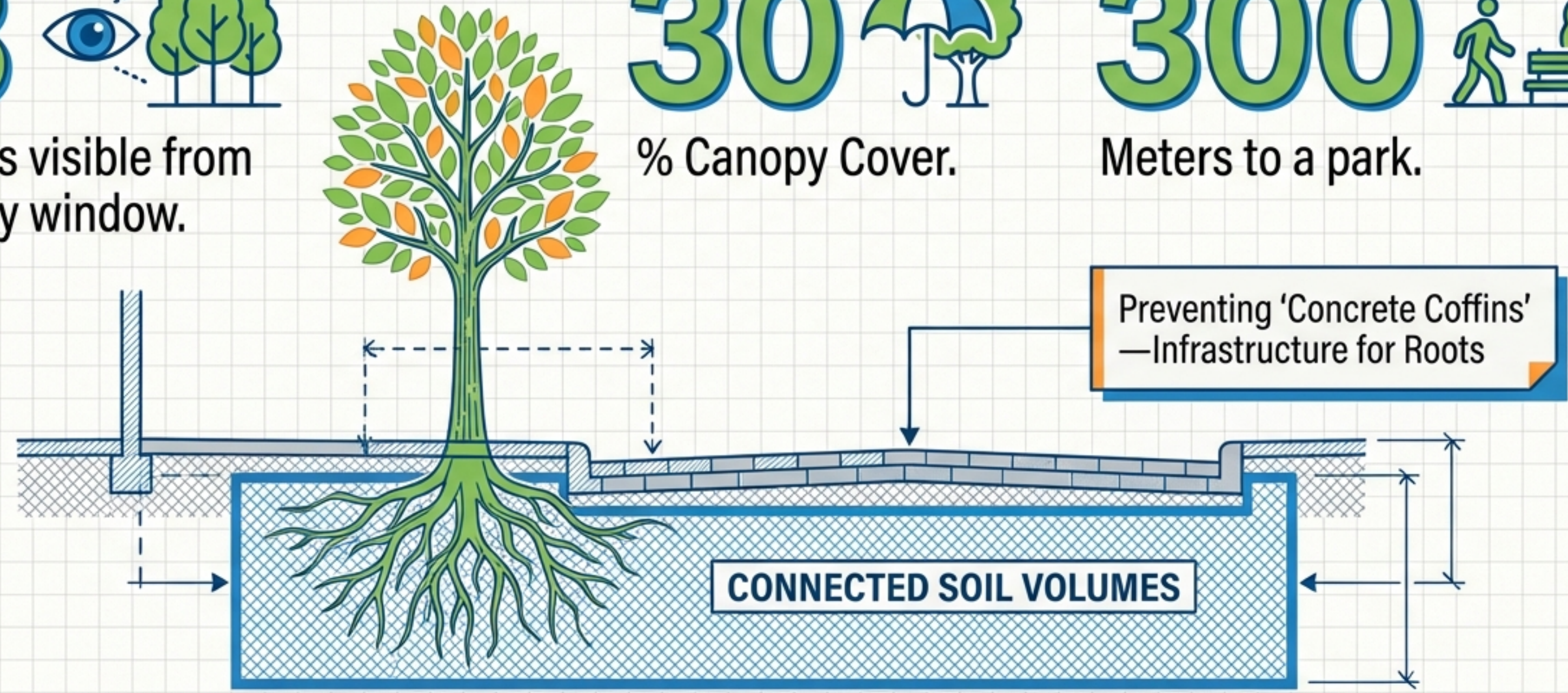
As-of-Right Permission:
Corner sites <150sqm
permitted by default.

The Green Utility: Nature as Infrastructure

3 
Trees visible from every window.

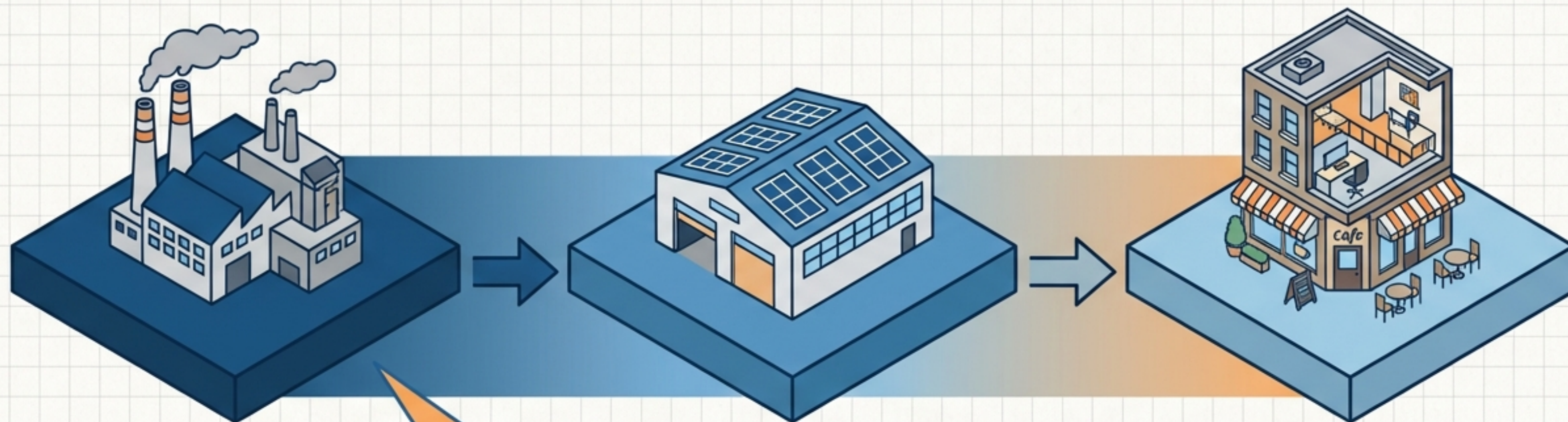
30 
% Canopy Cover.

300 
Meters to a park.



The Industrial Gradient: Puhinui Ecosystem

Integration over Segregation



Tier 1: Core
Heavy Industry
Zero Housing
"Right to Operate"

RIGHT TO OPERATE:
Housing strictly
prohibited to
protect industry
from gentrification.

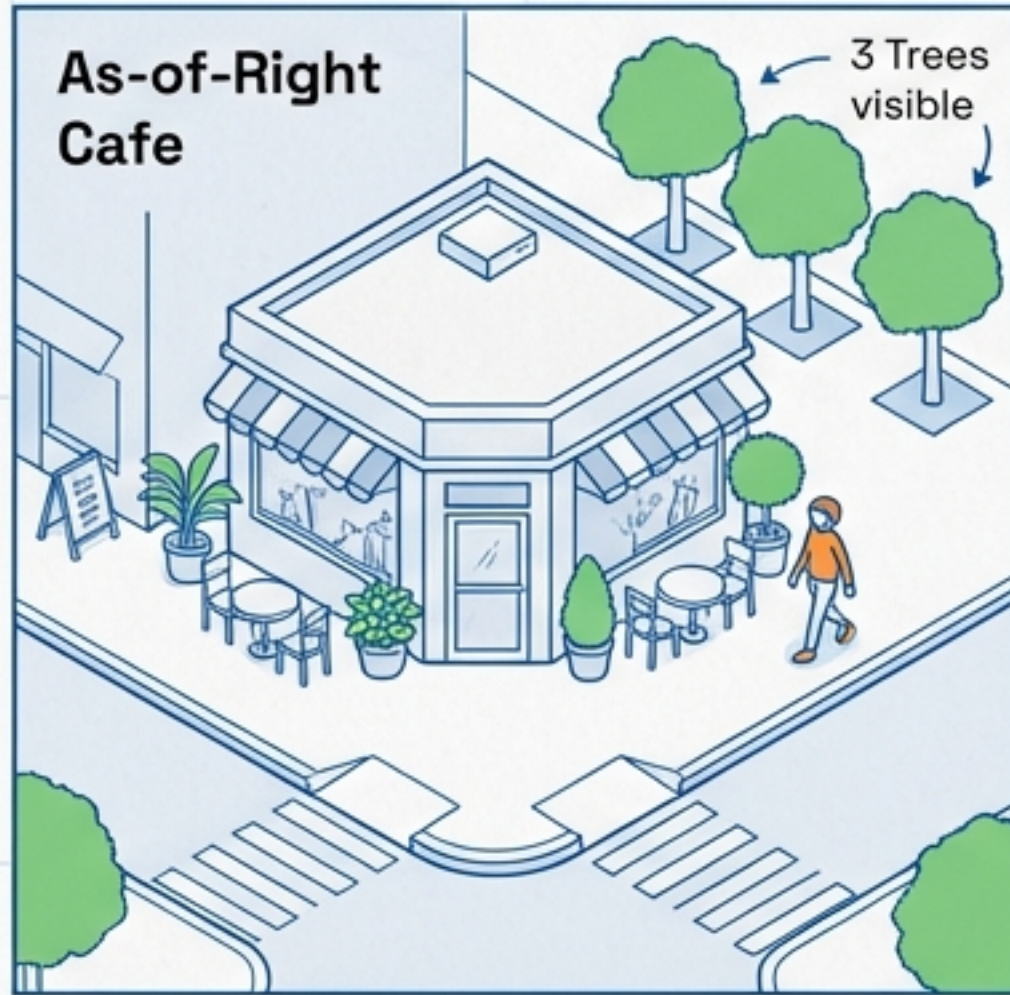
Tier 2: Production
Workforce Housing
Permitted.

Tier 3: Interface
Logistics &
Live-Work Lofts

The User Experience: A Day in the Operating System

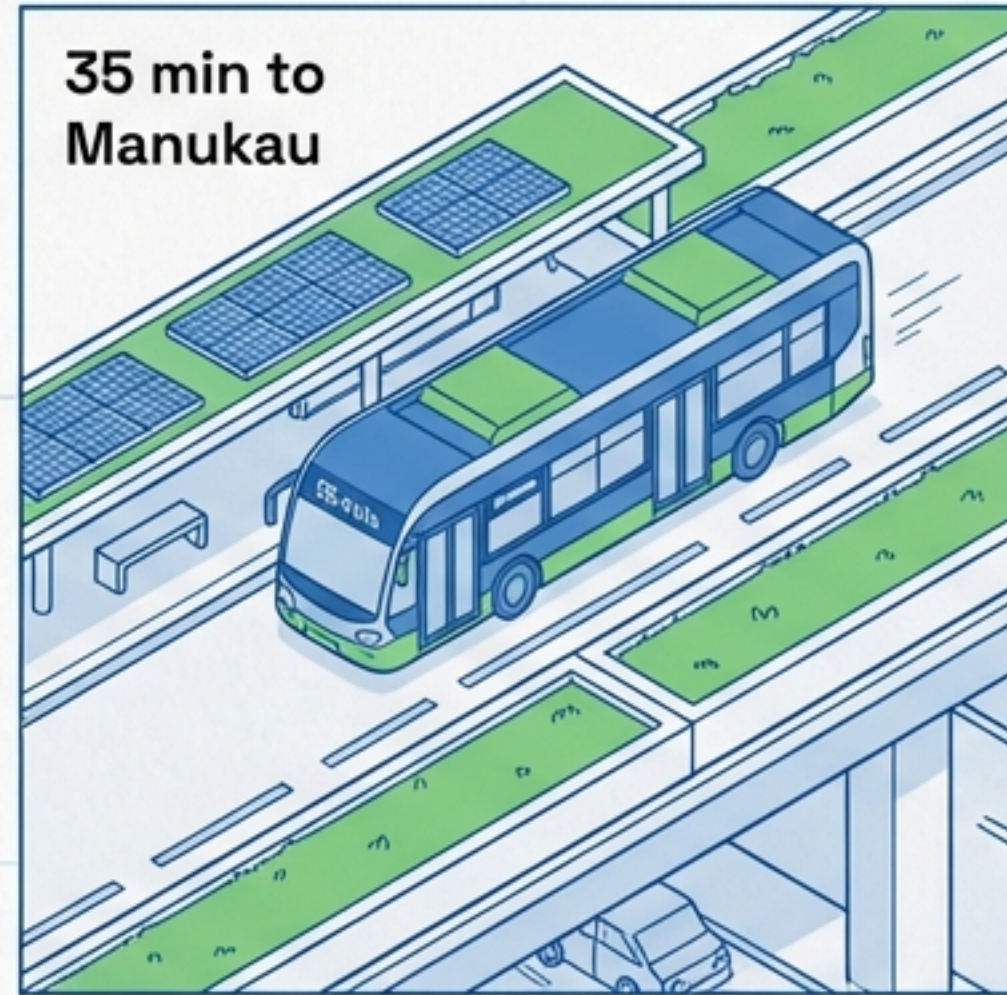
Persona: Aroha

Morning (Botany) -----> Commute -----> Evening (Manukau)



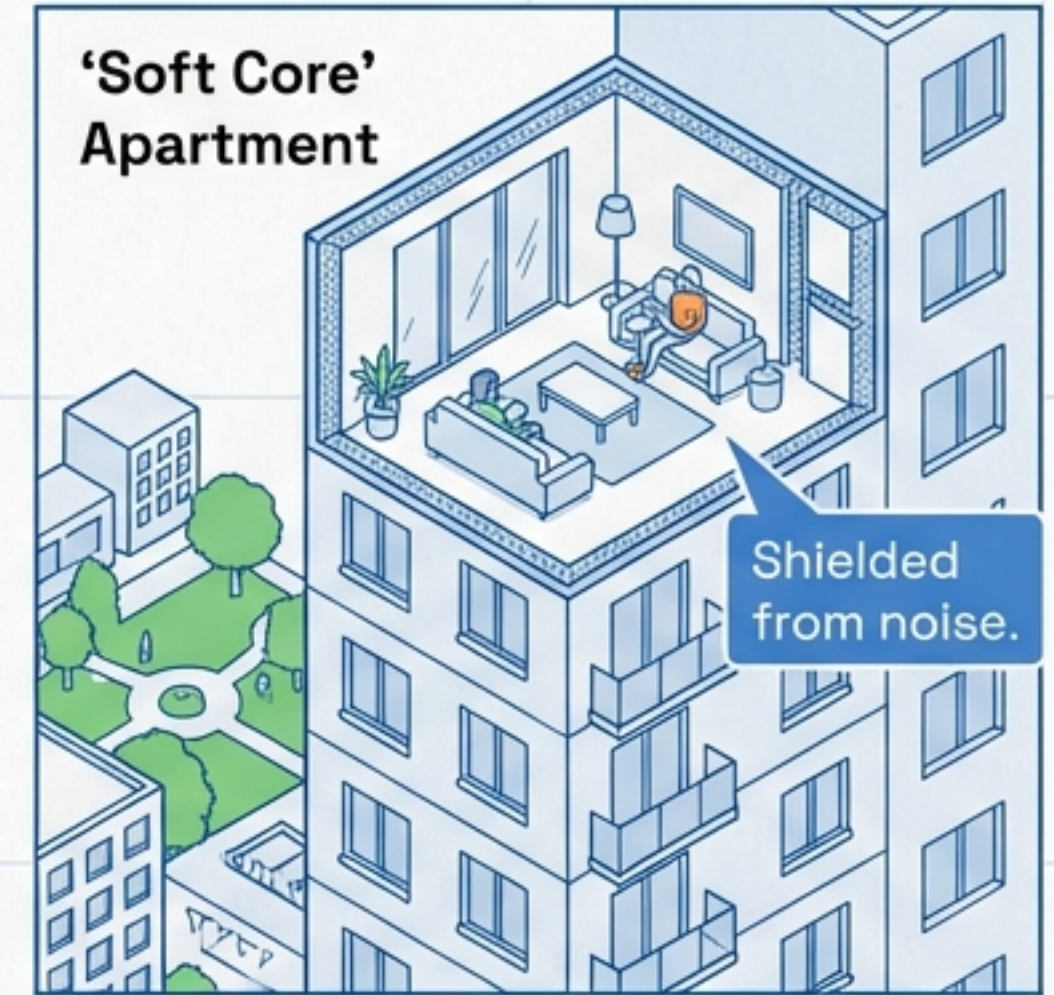
Morning (Botany)

Walks to "As-of-Right" cafe.
Sees 3 trees.



Commute

35 min congestion-free ride to
Manukau.

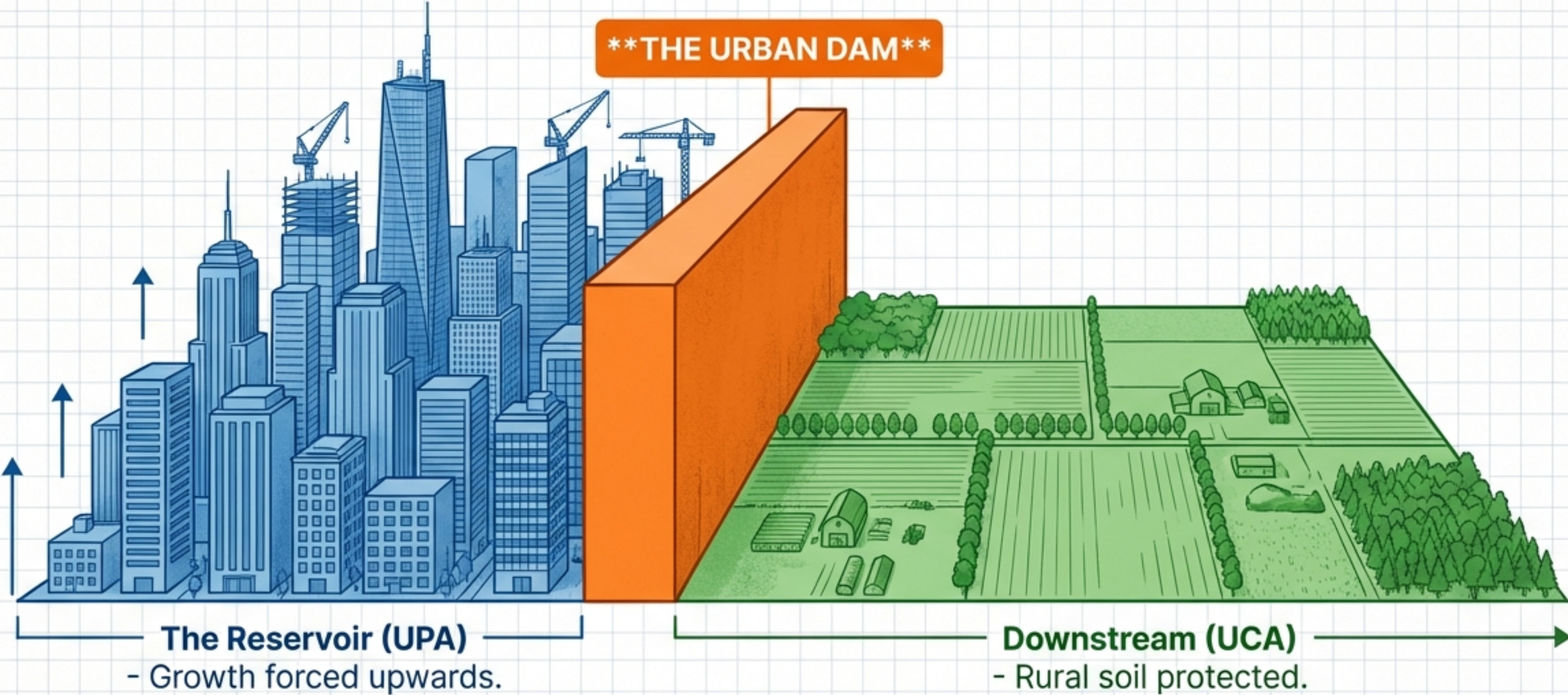


Evening (Manukau)

Returns to "Soft Core" apartment.
Shielded from noise.

Macro-Strategy: The Urban Dam

Stopping the Sprawl



CONCLUSION: THE TRIPLE ROI

A Legacy of Stewardship

Financial ROI

Density tethered to transit maximizes efficiency.

Environmental ROI

50% CAPEX savings on stormwater (Sponge City).

Social ROI

1:18 health savings via active travel.



Humanized Blueprint