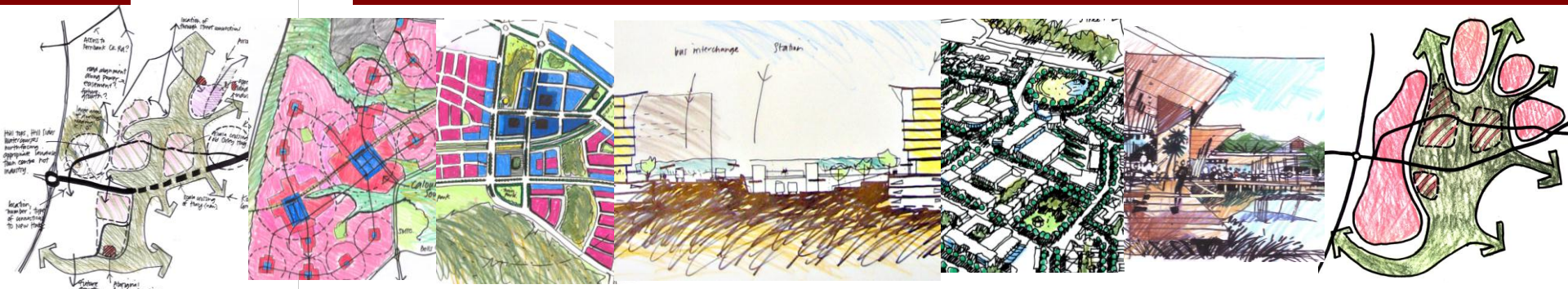




# DesignSkills

Enquiry-by-**design**



Drawing by Peter Edgeley, most of the rest by Peter R



Observations of **design processes** *what is designing*

**Working through** the design *drawings to reveal and test ideas*

Design **thinking** drawing *drawings that represent and communicate conclusions*

Understanding the DNA of **urbanism** *place and building types*

Examples of workshop **drawings** *plans at different scales sections, diagrams*



## **"When Urban Design Flim Flam Obstructs Good Urban Planning Outcomes."**

When Lewis Keeble first began the town planning courses at the University of Queensland, at the end of the sixties, he brought a rich diet of British post-war planning, which included prescriptive master plans for whole towns, wrought in elaborate detail. By 1974, the emphasis had changed radically. Significant texts by Friend and Jessup (1969) and Faludi (1973) **emphasised the futility of "blue print planning" and pointed to the uncertainties involved in planning complex large scale, urban situations**, which required a more dynamic, process-oriented approach. (Friend & Hickling [1987], Faludi [1987]) **People working in urban design and planning who come from a more architectural/design background sometimes seem not to have caught up with that sea change in planning theory**, that emerged thirty years ago (or so), and which provides the best explanation of how cities are developed and "planned". Sometimes, **urban designers get too focused on end states** in dealing with dynamic, large scale environments. In complex situations like rapidly growing urban centres, **there is typically little certainty about important factors, that may critically determine the ultimate shape of the centre**. When **charrettes and workshops throw up "design solutions" for complex situations**, which are only going to evolve over time, and where determining parameters will only be known in the future, they can **obstruct a more appropriate approach to the planning** of that area. **Coomera Charrette** is a classic case. Enormous resources were invested in producing a detailed "preferred design", for a future centre that would be developed over twenty years and more, by a large range of stakeholders, most of whom could not be involved in the charrette process, because we could not know who they would be. The water colour paints were barely dry on the beautiful Charrette schematics, before there had been a change of government and the potential town centre access system, fundamental to the town centre design, had been changed by the decision to build the Brisbane-Gold Coast Motorway. When the Motorway was finally designed, three previously planned highway exits had been replaced with one motorway exit route, which just happened to be the planned town centre main street. The Council had nevertheless **spent substantial political and financial resources** on the **Charrette**, engaging with the community about all of the issues, and now found themselves with a **fundamentally flawed concept**, some years before anything substantial was built or likely to be built. That is not to say that there shouldn't be urban design visioning, as part of the planning process for complex environments with a large number of players. However any **broad scale urban design work must take place in a context** where it is clearly understood that it **will need to be continuing and iterative, and that the designs are scenarios rather than prescriptions**. Master plan end states for large scale and/or long term subjects can distract decision-makers and the community, and when because of their brittleness they inevitably fall apart, leave a policy void and disillusionment; whereas an urban design approach that is better tailored to the uncertainties of the planning process will contribute to a more durable planning outcome. Sandman says... To be ... continued" Jeff Humphries UDF Dec 2000



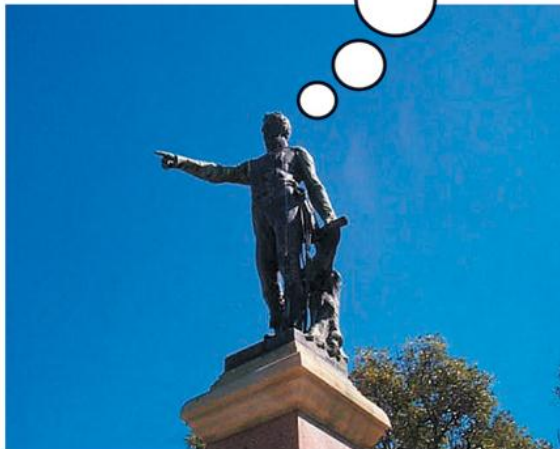
**All design problems are complex**

**How do you deal with complexity?**

....seek '*Perfect*' knowledge to make the best decisions?

...or do four options and commit to none

...or do nothing, (but do it well)



**Colonel Light contemplates imperfect knowledge**



## Some design concepts



*'Computer says no...'* (phrase)  
Through too much analysis, a design problem is found to be too hard to solve, usually demonstrated on a computer drawn constraints plan



*Stradivarius* (n)  
A design problem or solution that is perfect in every way ie it cannot be questioned or changed in any way, often found in road design



*Flog the dead horse* (phrase)  
A design investigation of an option that (apparently) has no merit. The purpose is to understand why the horse should be dead and see if any DNA can be extracted to reveal why alive horses should be alive, not to show that the dead horse can be resuscitated

## Some design concepts



*We need to know the hand we are dealt and play our cards well. We think we have aces when we actually have two's*



*It is hard to juggle (and think about) more than 7 things at a time. Even 3 is hard. In the design problem, choose the balls to juggle and those to leave until later*



*complex patterns can be made with simple strategies and tactics. Good design ideas weave together the threads of the problem (note these are traditional designs, each row has 2 colours with 5 row types)*



**The task of design is to make complexity, simpler and clearer**

*The hardest part of the drawing is knowing what to draw*

*The act of drawing helps you know what to draw*

**We *draw*** to....

*reveal ideas*

*test ideas*

*communicate ideas*

**Drawings have *meanings***

*Lines have meanings - relative weights, thin and thick, importance, shadows*

*Lines are straight, dashed.....*

*curved, vegetation,*

*shapes, circles, squares,*

*Colours red, yellow green, intensity*

**Draw a Diagram how do you greet women in various countries of the world?**



wordless diagrams - nigel holmes - bloomsbury 2005





## **design process observations**

The strategic informs the detail and vice versa

That is why you work at different scales and drawing types at the same time

Different scales suggest different foci of investigation

(heard in a workshop some time ago, I can't design at 1:10000, only 1:5000 but dealt with issues at 1:2000 or 1000 thinking)

Do not make long lists, if you have a long list make it **shorter, group, prioritise, remove or leave until later**

Good ideas do more than one thing

Find ideas that connect different objectives **strategic** concepts

And begin to know the scale of the **DNA** of urbanism

## Understand

Get to know the scale of **urbanism** and what could be solution types

*Edinbarcortslomstertonby not a bad place to start*











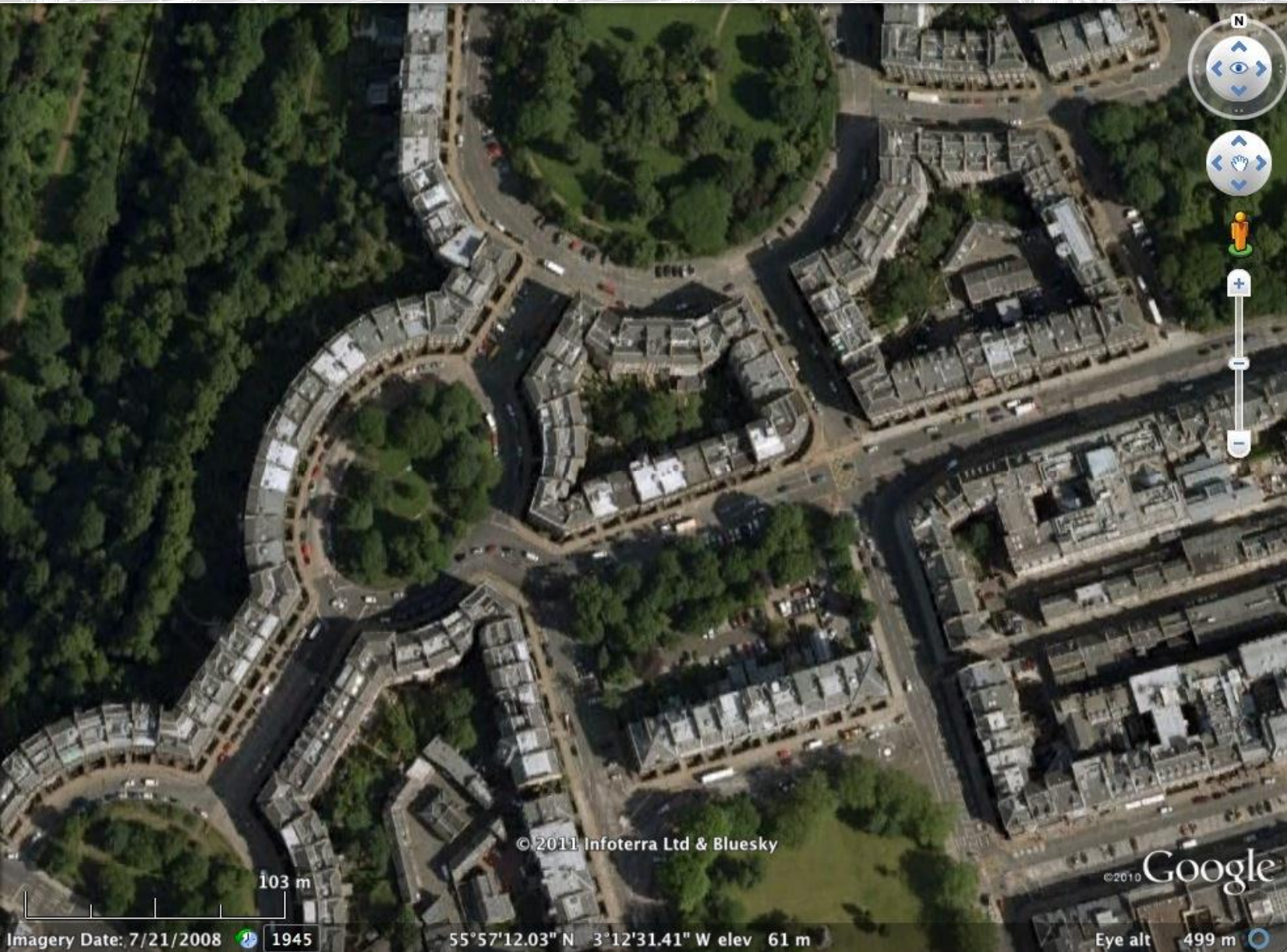




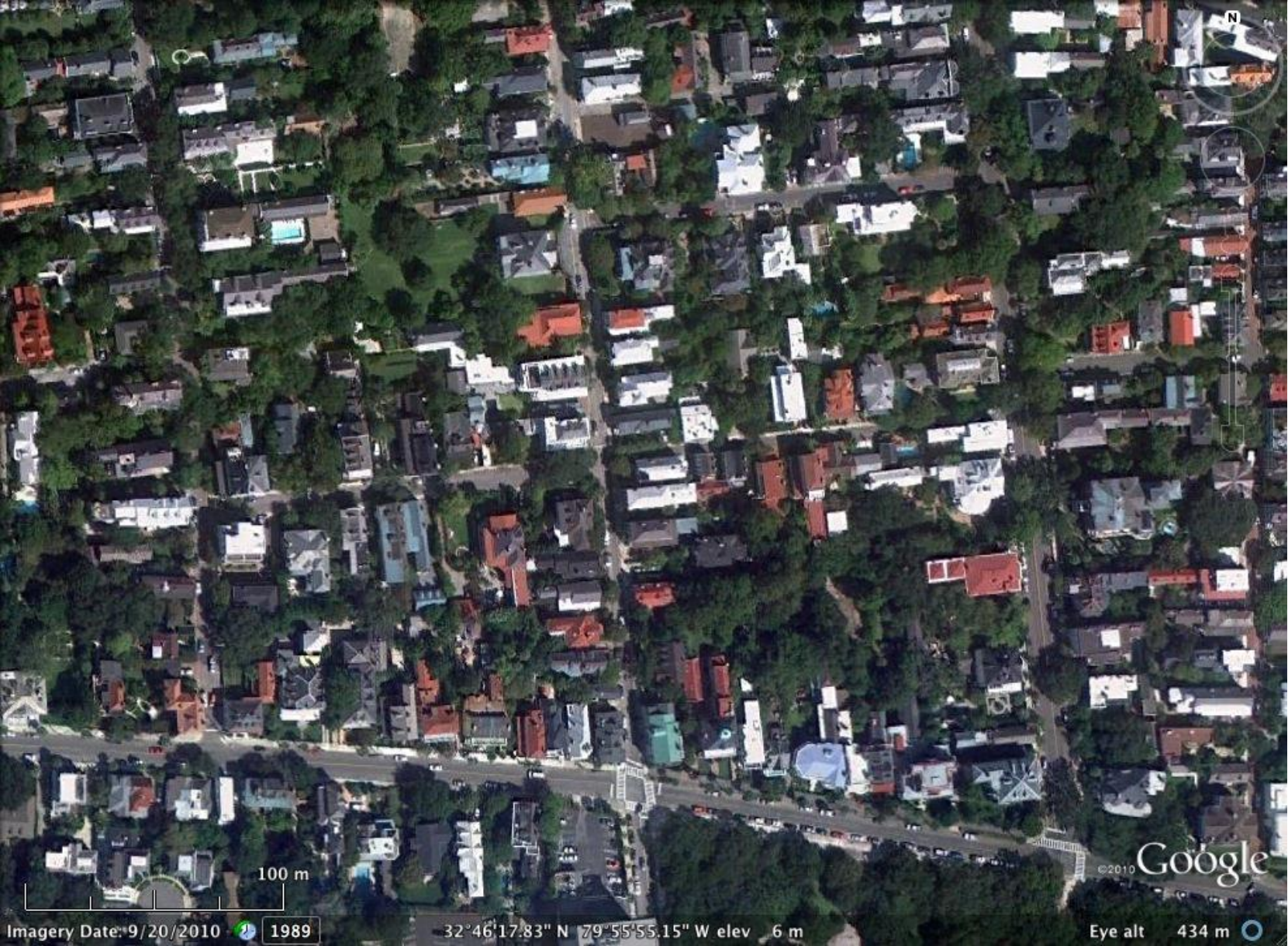








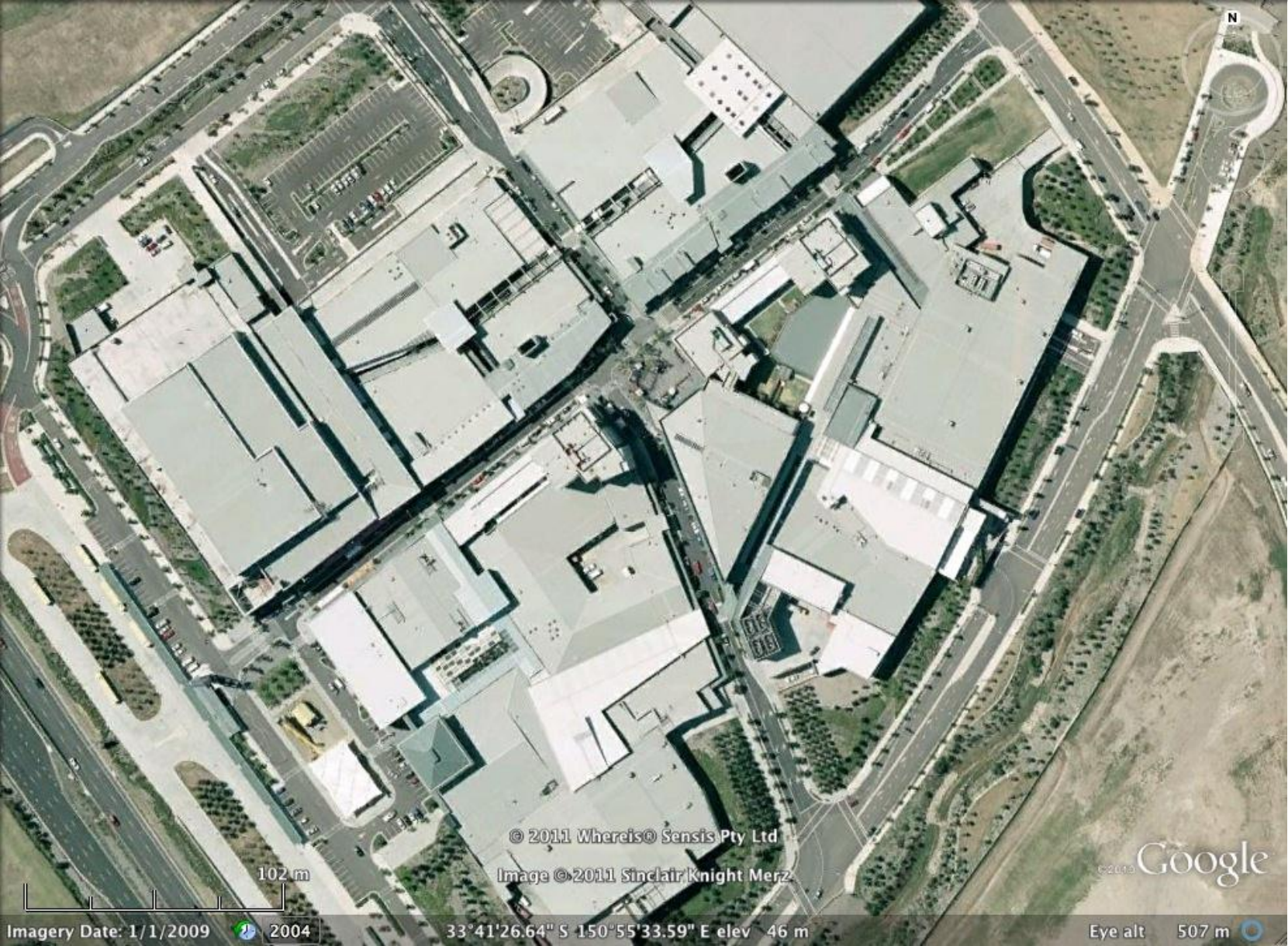




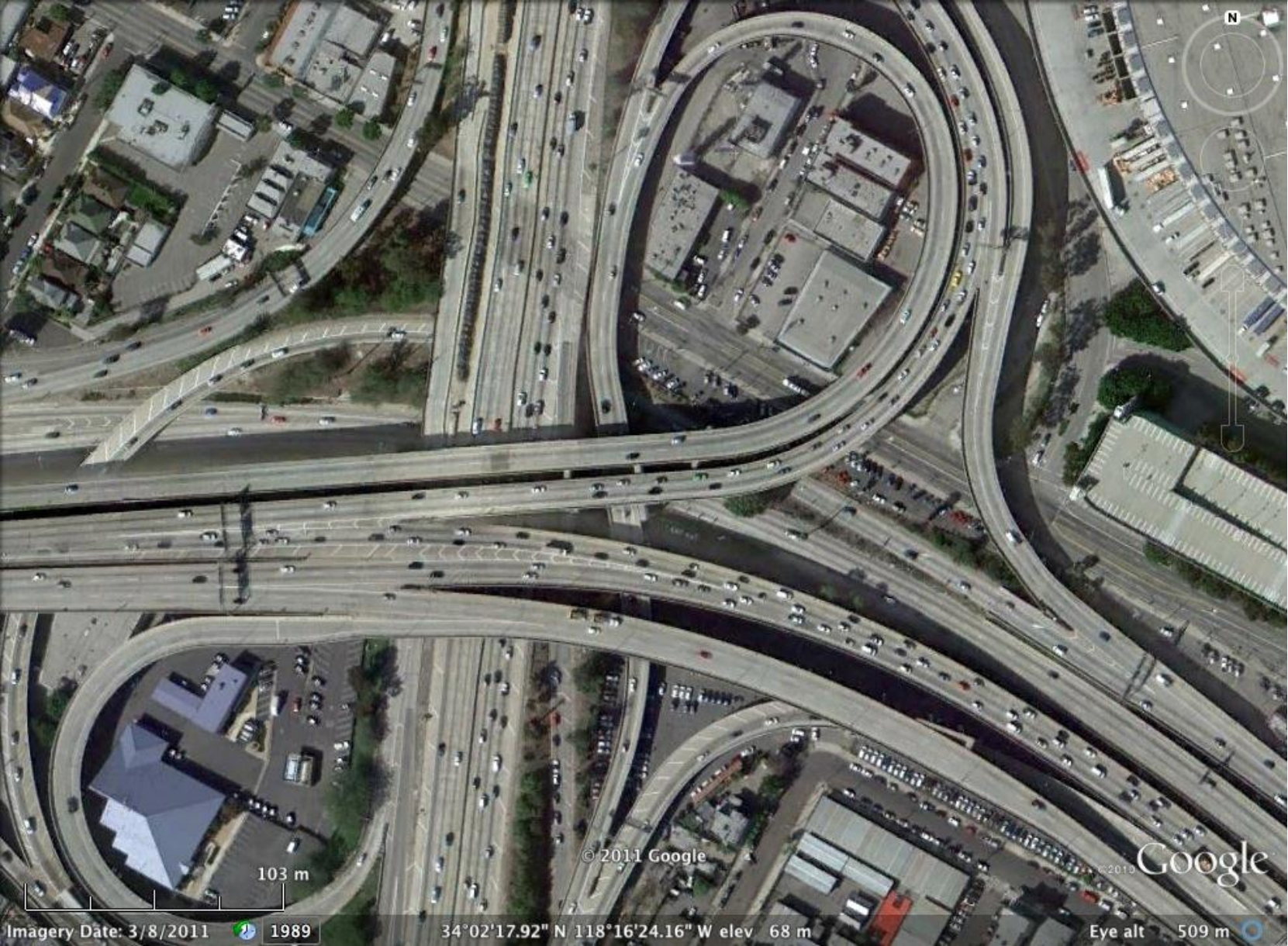












Imagery Date: 3/8/2011 1989

34°02'17.92" N 118°16'24.16" W elev 68 m

Eye alt 509 m



## **design workshops : be prepared**

### *Base Mapping*

Good base mapping and **recent** aerial photography to **scale**, oblique aerial photography

### *Background Reports*

Technical analysis to inform the design process, traffic, environment, economics, etc available well before the workshop. Draft constraints analysis (know about the hairy joint grass)

### *Workshop Logistics*

Venue, equipment, food, drink, transport, accommodation, equipment resources, etc etc





## Draw

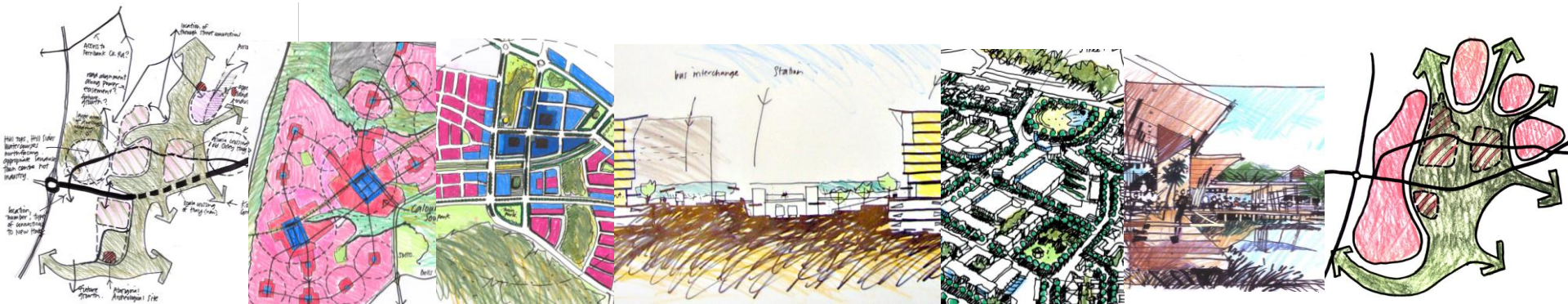
Get used to drawing with fat pens and crayons and writing **big**



## Be sure of the desired outputs

### Drawings:

Issues, structure and detailed concept plans, sections, sketches, design rationale diagrams



### Statements:

Vision Statements / Policy Objectives

Area 13 Issues URBAN STRUCTURE PLAN	Design Principles: Area 13 Issues URBAN STRUCTURE PLAN	Design Principles: Area 13 Issues URBAN STRUCTURE PLAN	Design Principles: Area 13 Issues URBAN STRUCTURE PLAN
<p><b>Vision:</b></p> <p>....rural lifestyle with the convenience of the town .... ....Integrated ...</p> <p>Thrumster is to become an integrated community living in harmony in its unique setting and with its diverse flora and fauna communities. It will be a model development for sustainable living in the mid north coast region, containing distinct neighbourhoods defined by the topographic, bushland and other natural features of the location.</p>	<p><b>All Creatures Great &amp; Small</b></p> <p>Development does not compromise the maintenance of a viable Koala Population in the Thrumster area.</p> <p>Actions</p> <ul style="list-style-type: none"> <li>- subdivision pattern based on tree retention and fauna movement not based on lot yield.</li> <li>- lot size reflects the role of the subject land in regard to its role for wildlife movement or habitat retention.</li> </ul>	<p><b>A Place to Call Home</b></p> <p>Creation of series of community focused centres that allows for the establishment of well designed, self contained neighbourhoods with their own sense of place, character &amp; identity.</p> <p>Actions</p> <ul style="list-style-type: none"> <li>- neighbourhoods based on walkable catchments</li> <li>- neighbourhoods have the ability to be serviced by public transport</li> <li>- neighbourhoods are defined by open space and other fauna movement corridors</li> <li>- neighbourhoods have a discernable centre not necessarily anchored by retail uses</li> </ul>	<p><b>Civilise the Car</b></p> <p>The movement network seeks the movement and connection of communities through a combination of public transport, bike and pedestrian networks.</p> <p>Actions</p> <ul style="list-style-type: none"> <li>- connections through the area are not all car based</li> <li>- road connections north of the site facilitate access to areas of employment</li> <li>- the internal street network is interconnected and avoids directing unnecessary traffic through residential neighbourhoods</li> </ul>



# Work at the best scale

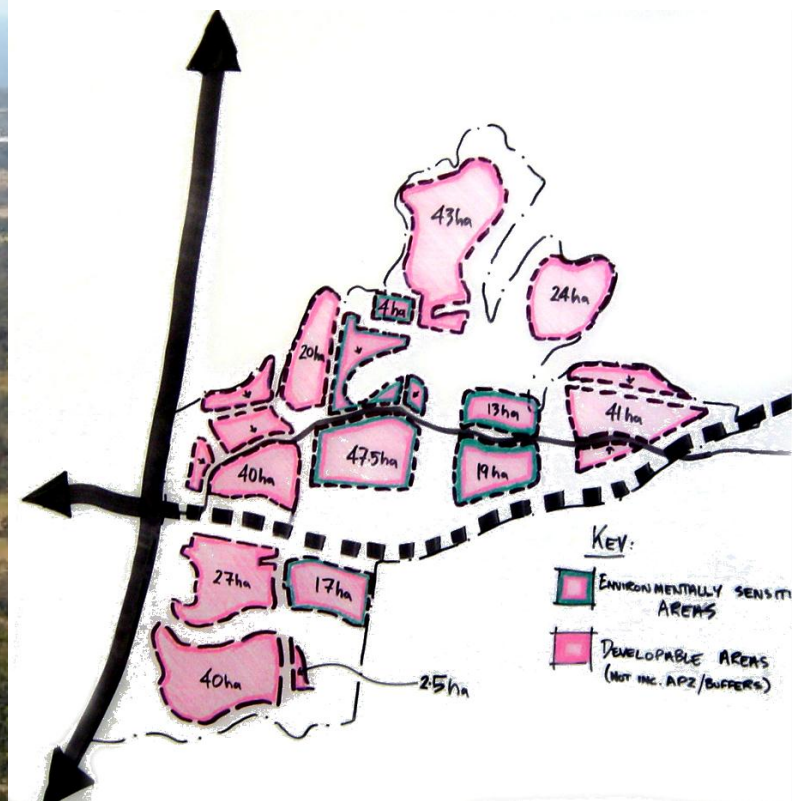
Different scales require different design consideration

1:10000, 1:5000, 1:2000, 1:1000 and 1:500 1:250, 1:100





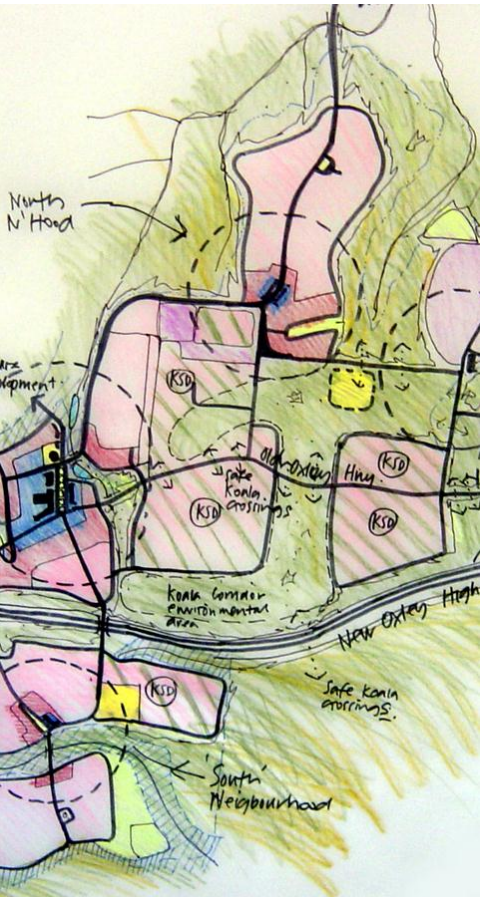
# Drawings for Area 13 new town, Hastings, NSW



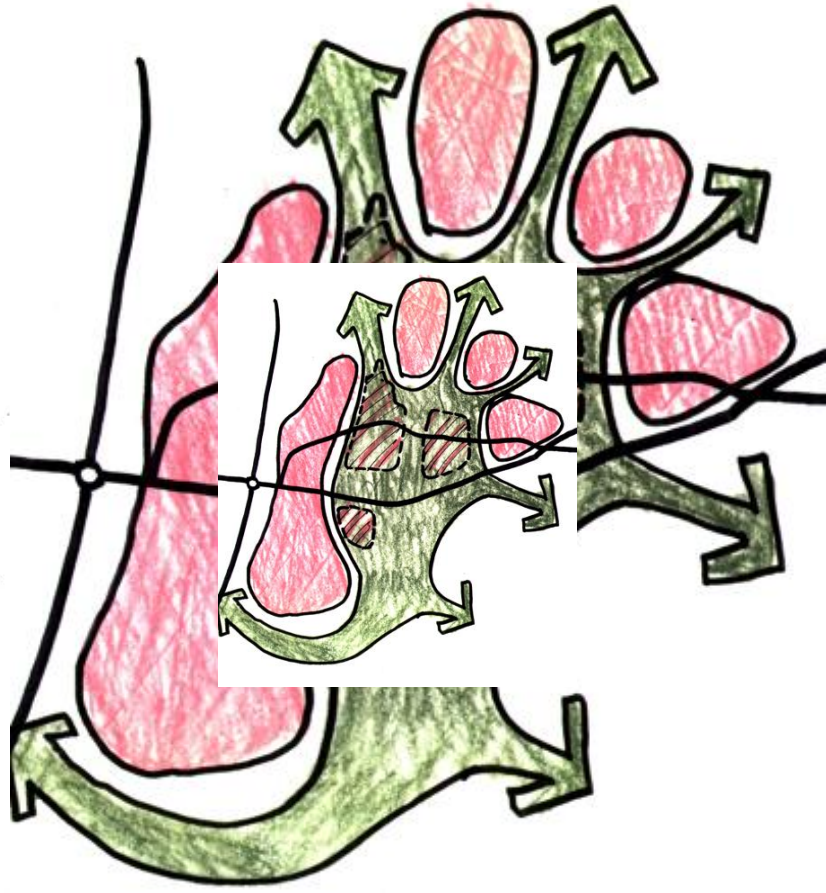
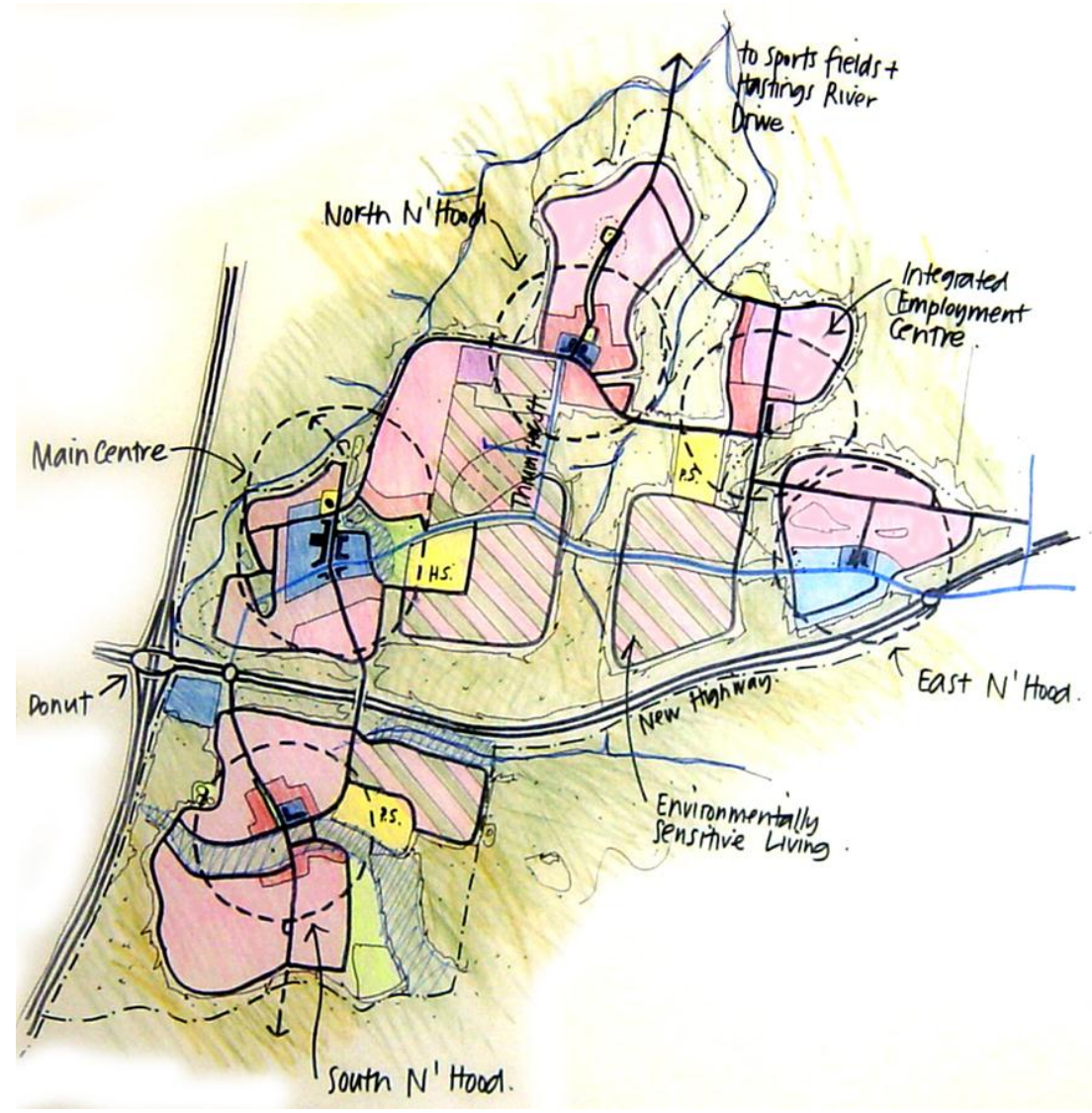


**The drawing needs to communicate the essential ideas**

Line types and thickness, line colour, fill colour vegetation

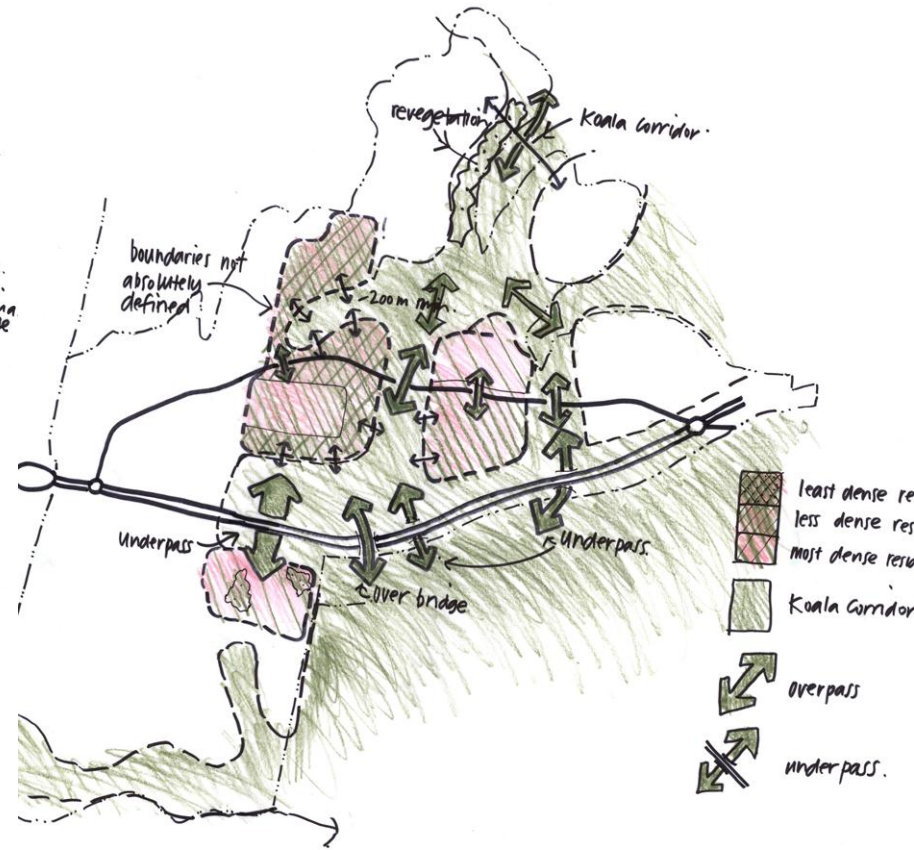
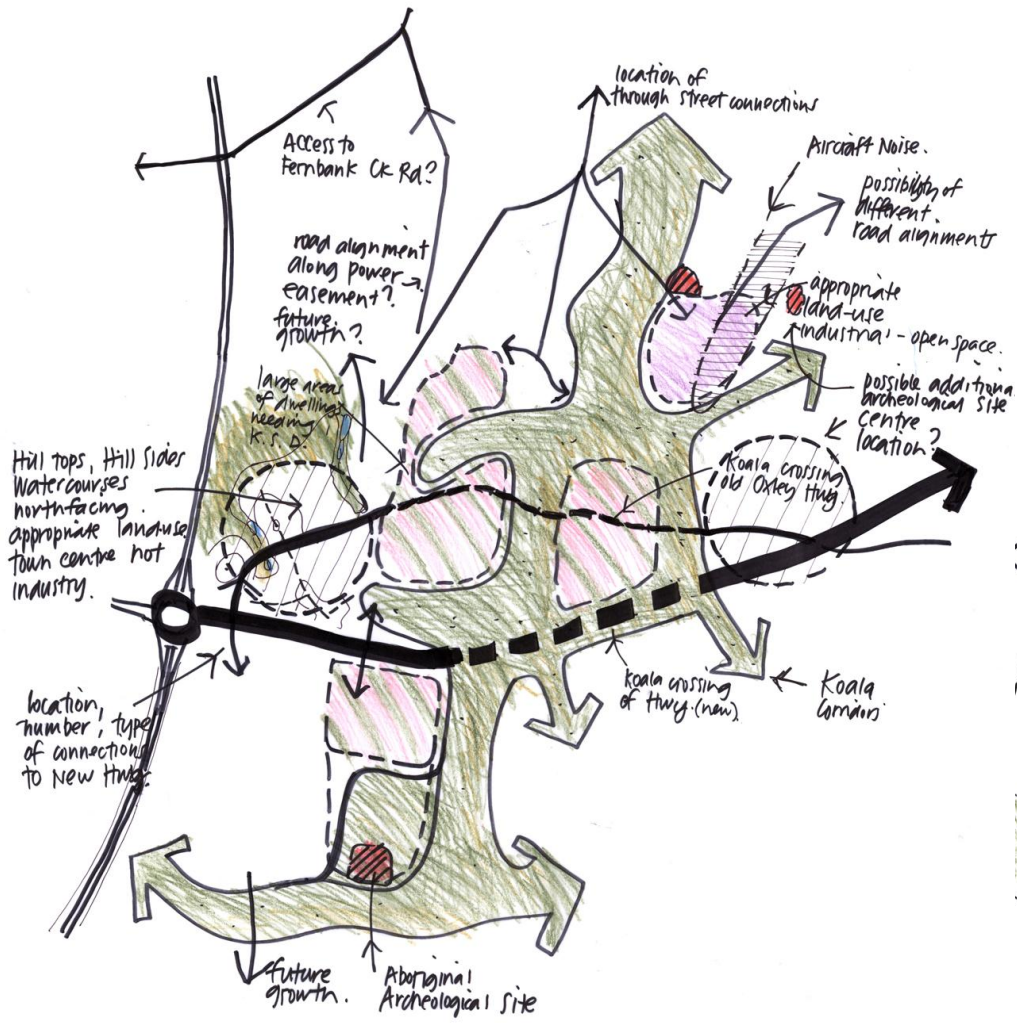








# Examples





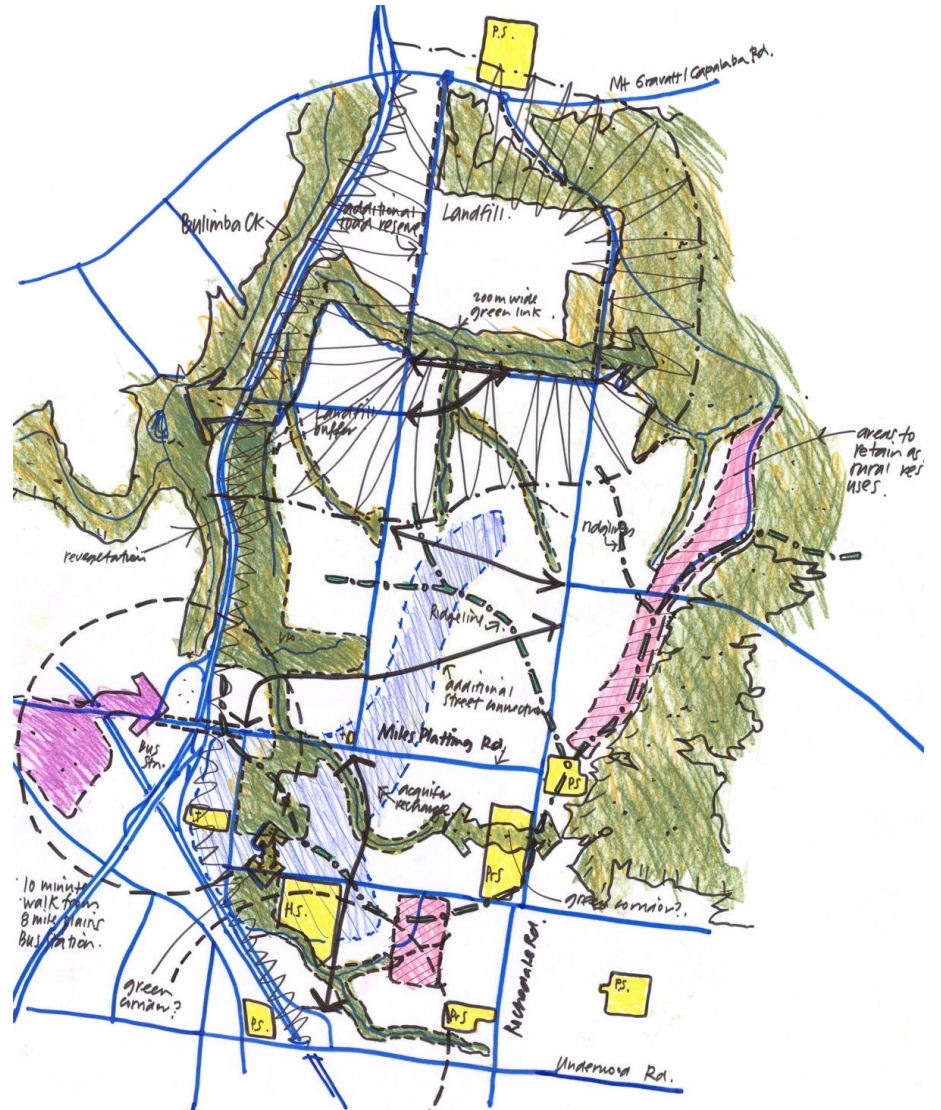
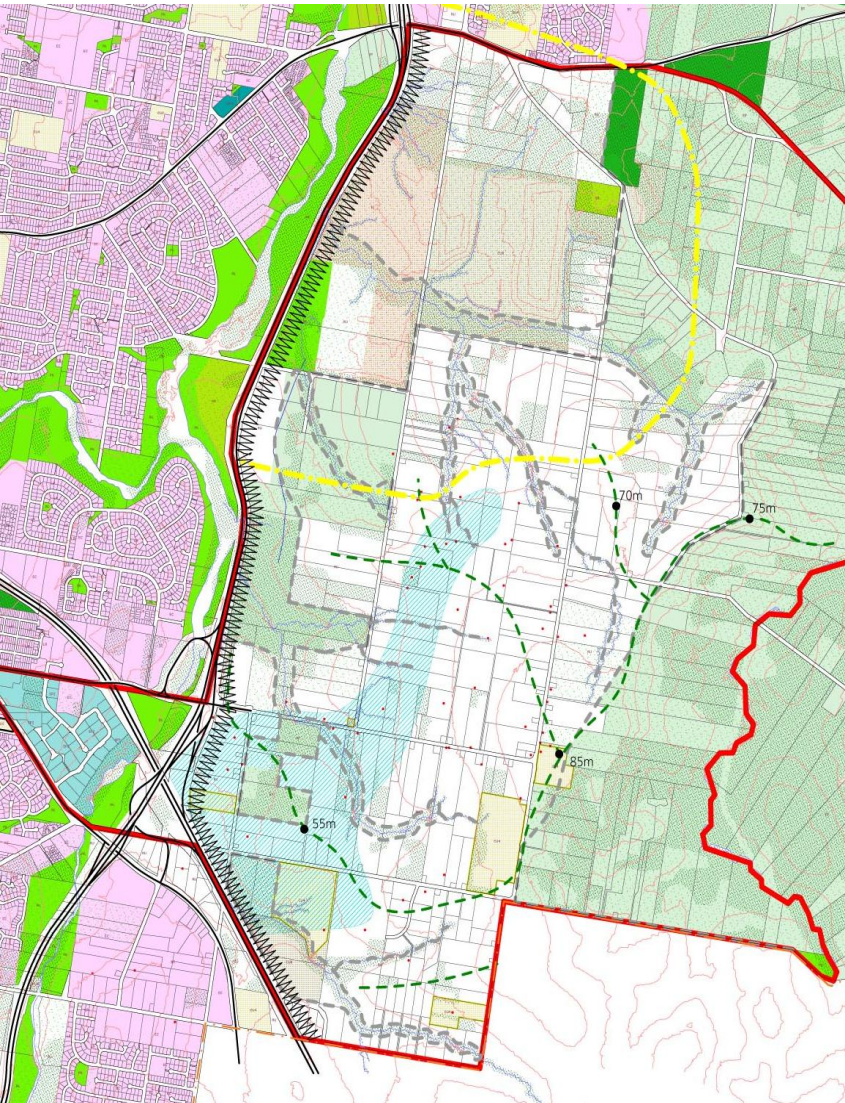
# Rochedale Urban Community





# Synthesise constraints – Structure the problem

By drawing it you understand the issues better





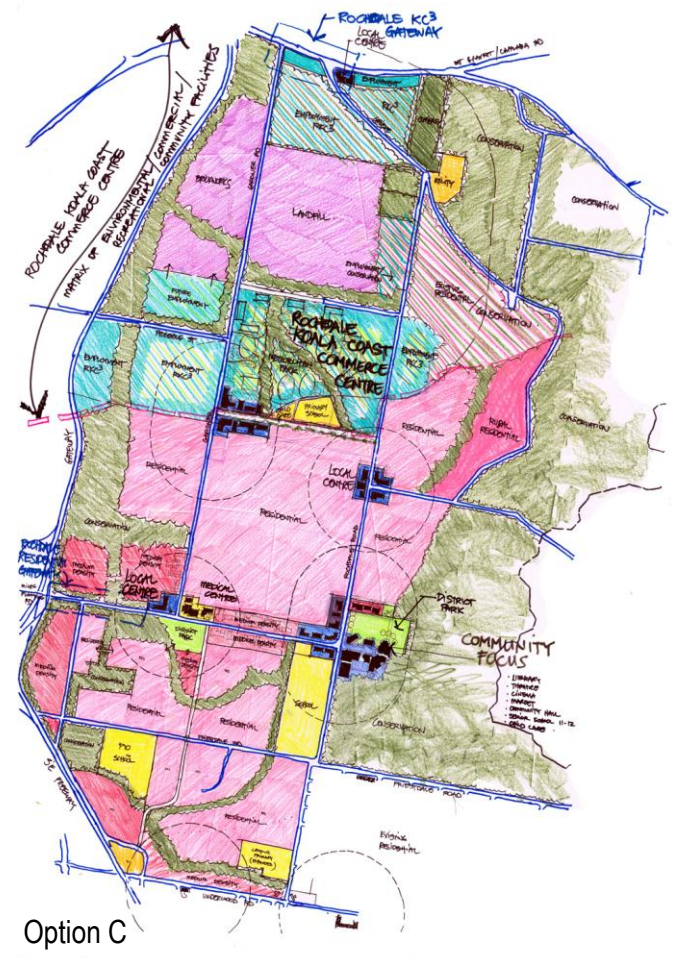
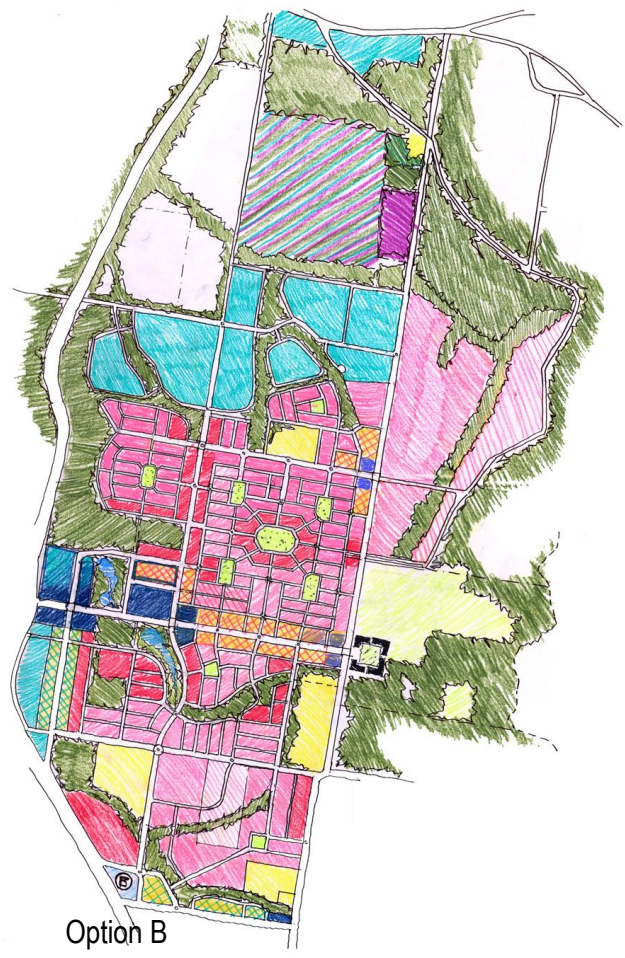
**Power of options , 3 (competing) teams with no scenarios**  
*(but draw your plan the right way around)*





# Refined Plans 1:5000

Key shared ideas and points of difference revealed





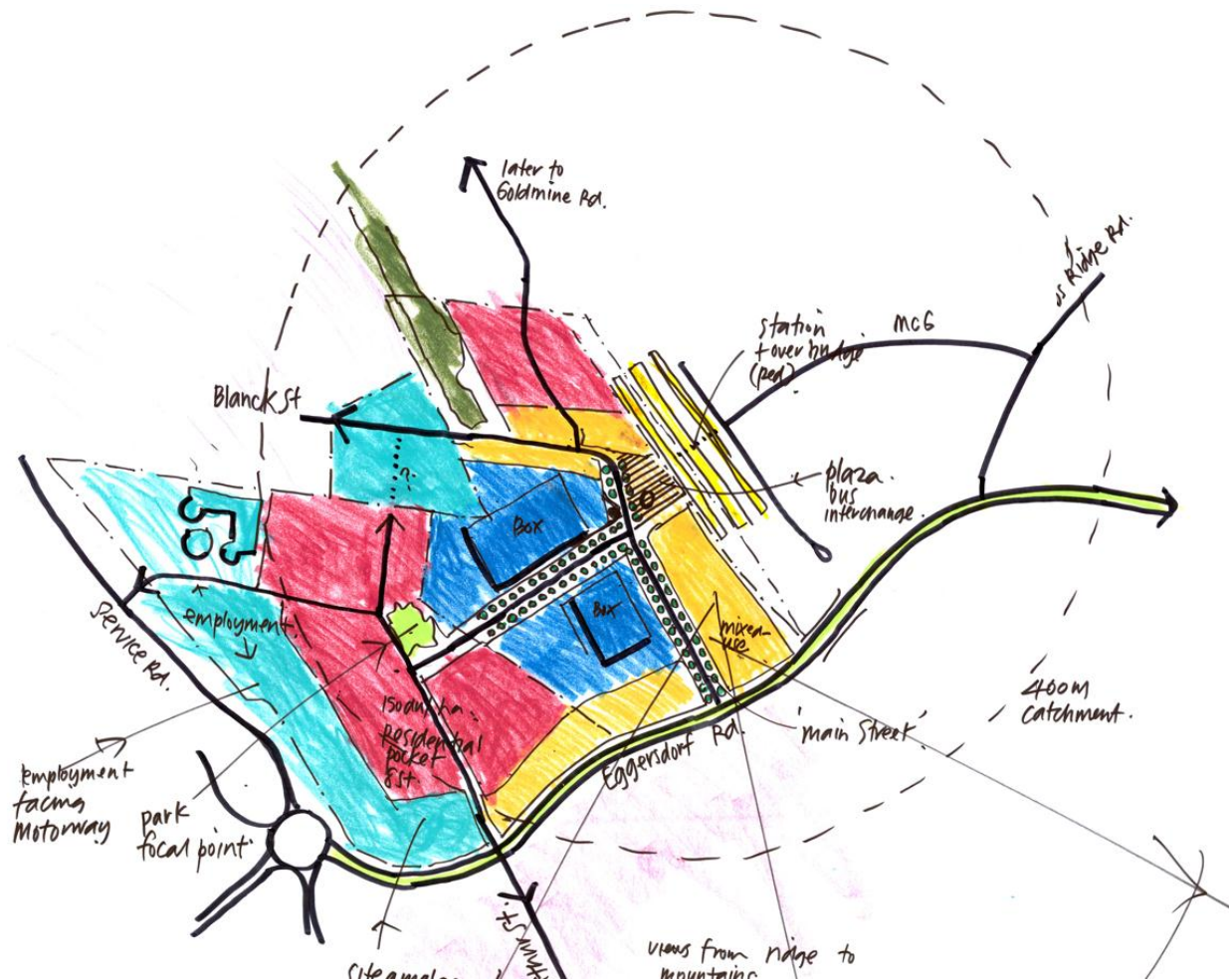
# Rochedale Urban Community





# Do a drawing not a scribble

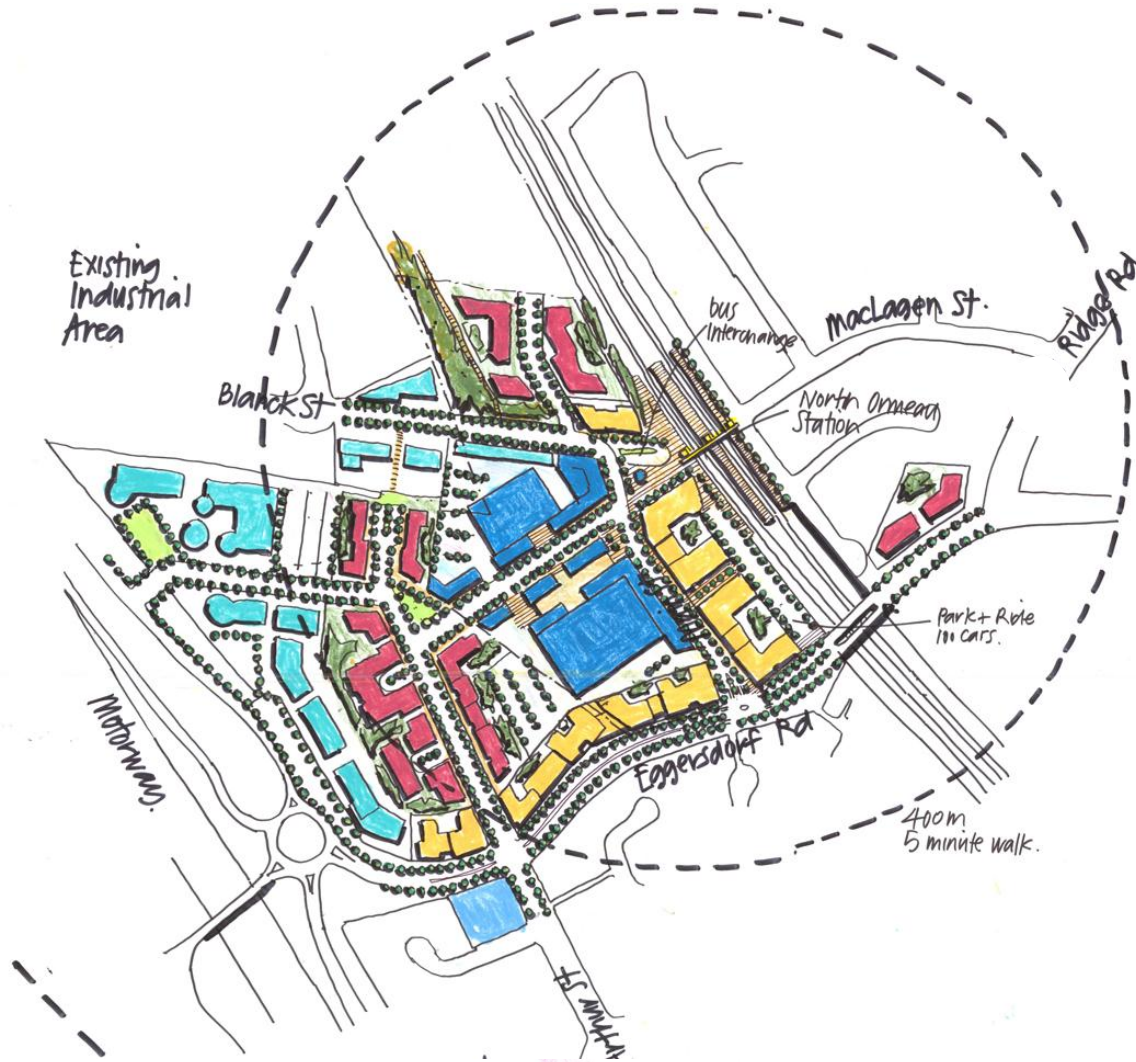
'Quick and dirty' has to become more refined, 1:5000





## Draw and Redraw

Do a draft to work it out and redraw as the final, 1:2000



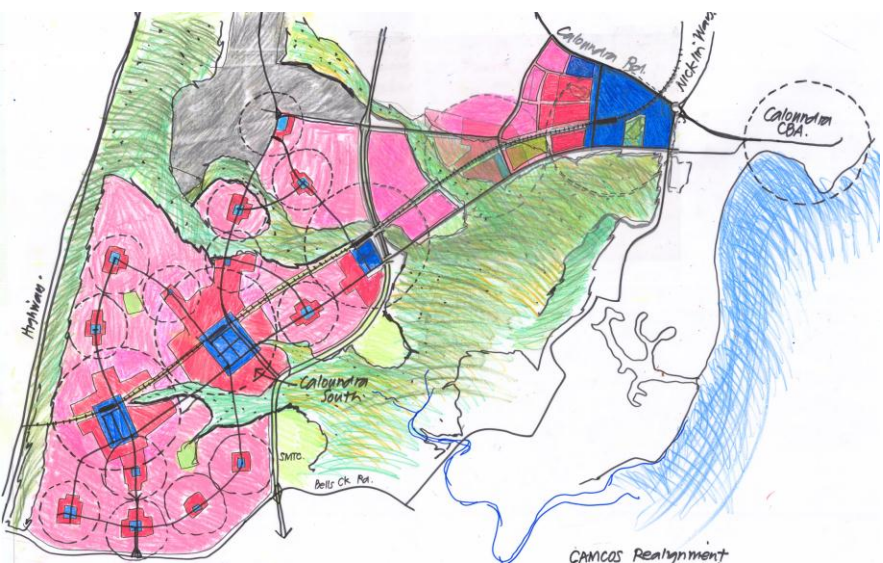
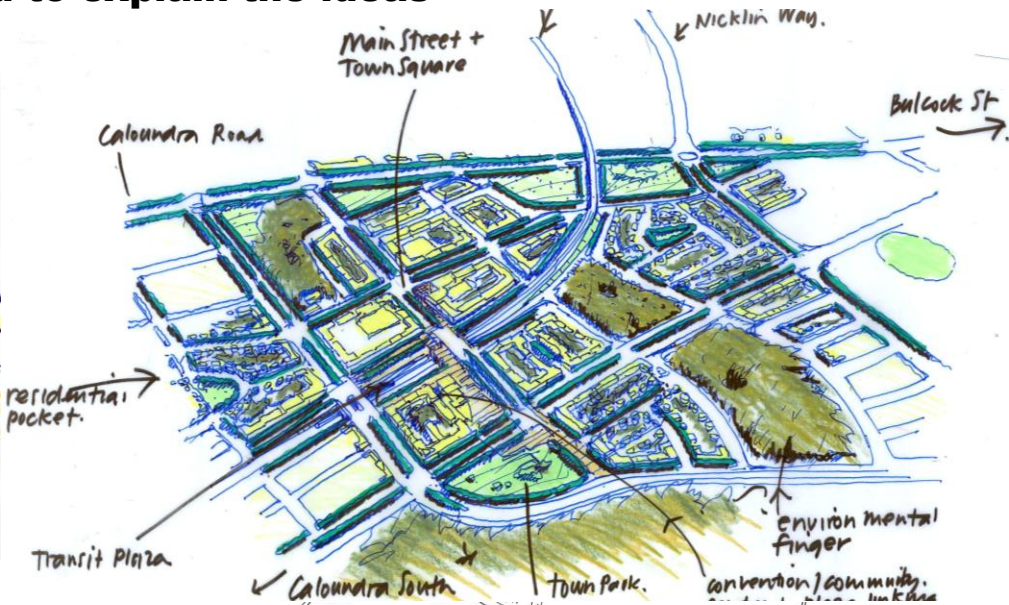
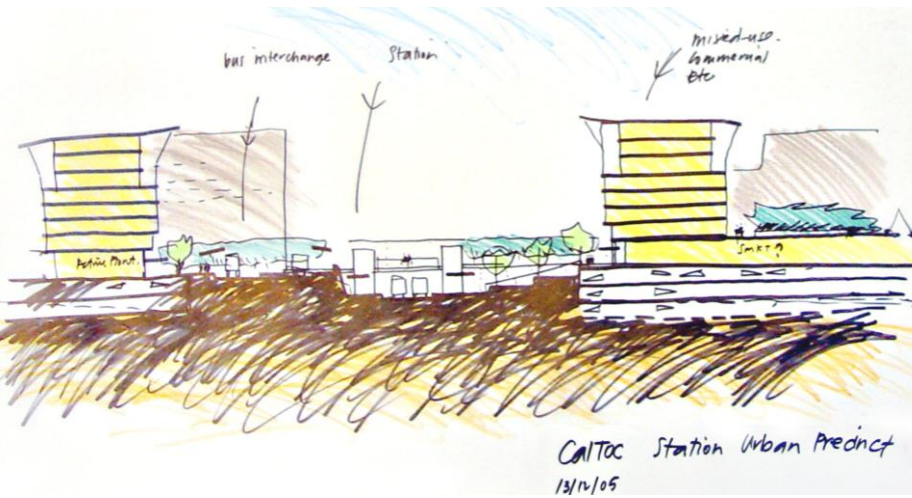


**'Detailed Plan, 1:1000 on an A1 sheet**





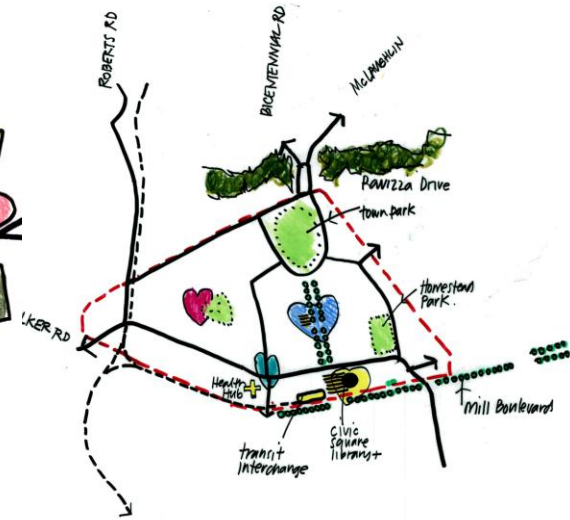
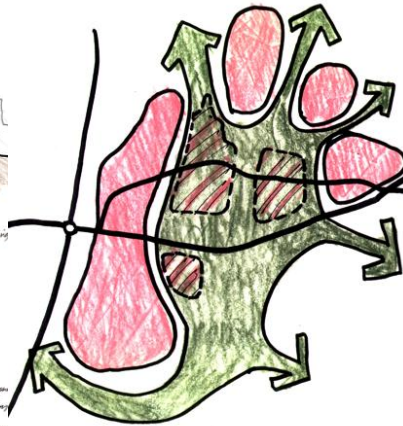
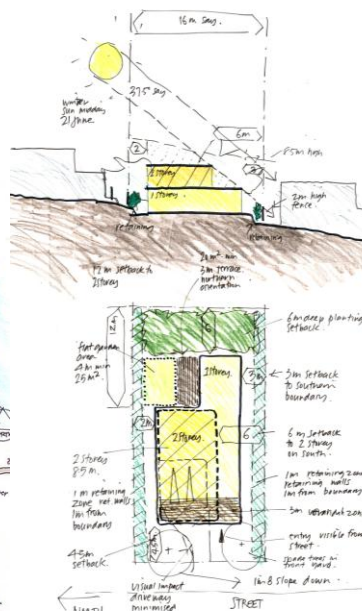
# Pick the range of drawings needed to explain the ideas





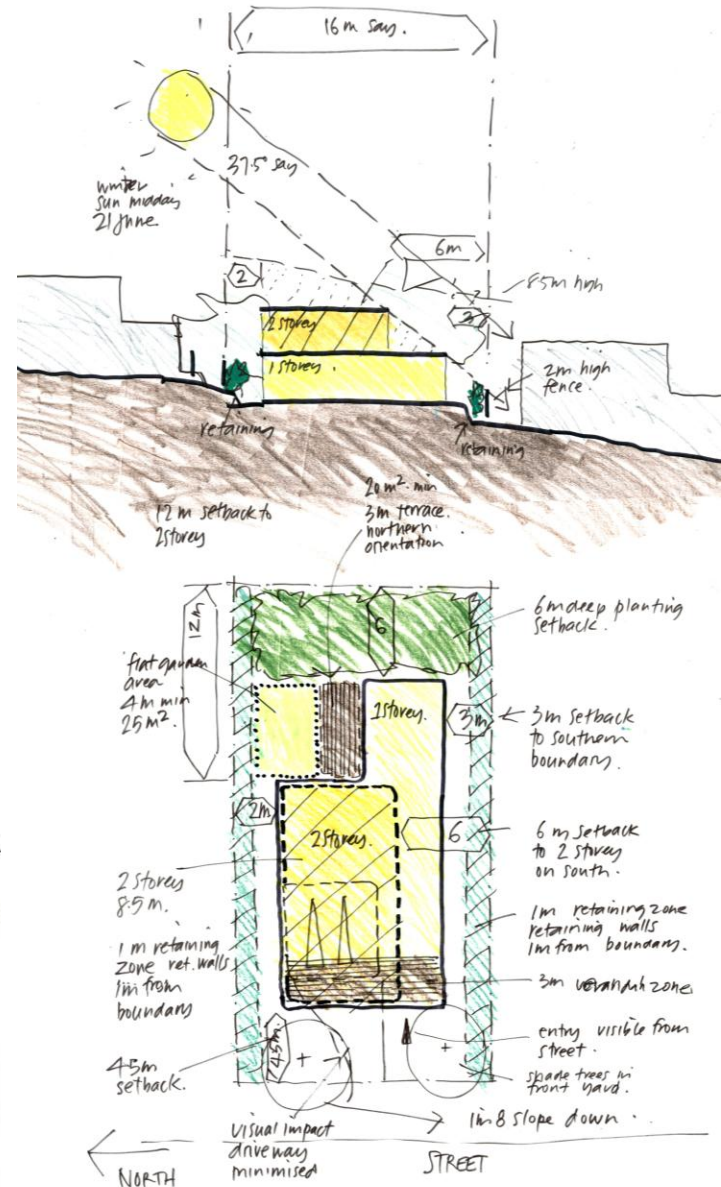
## Plans and Principles

*Drawings do not only need to represent a design solution:  
design rationale diagrams, draft guidelines, built form controls*



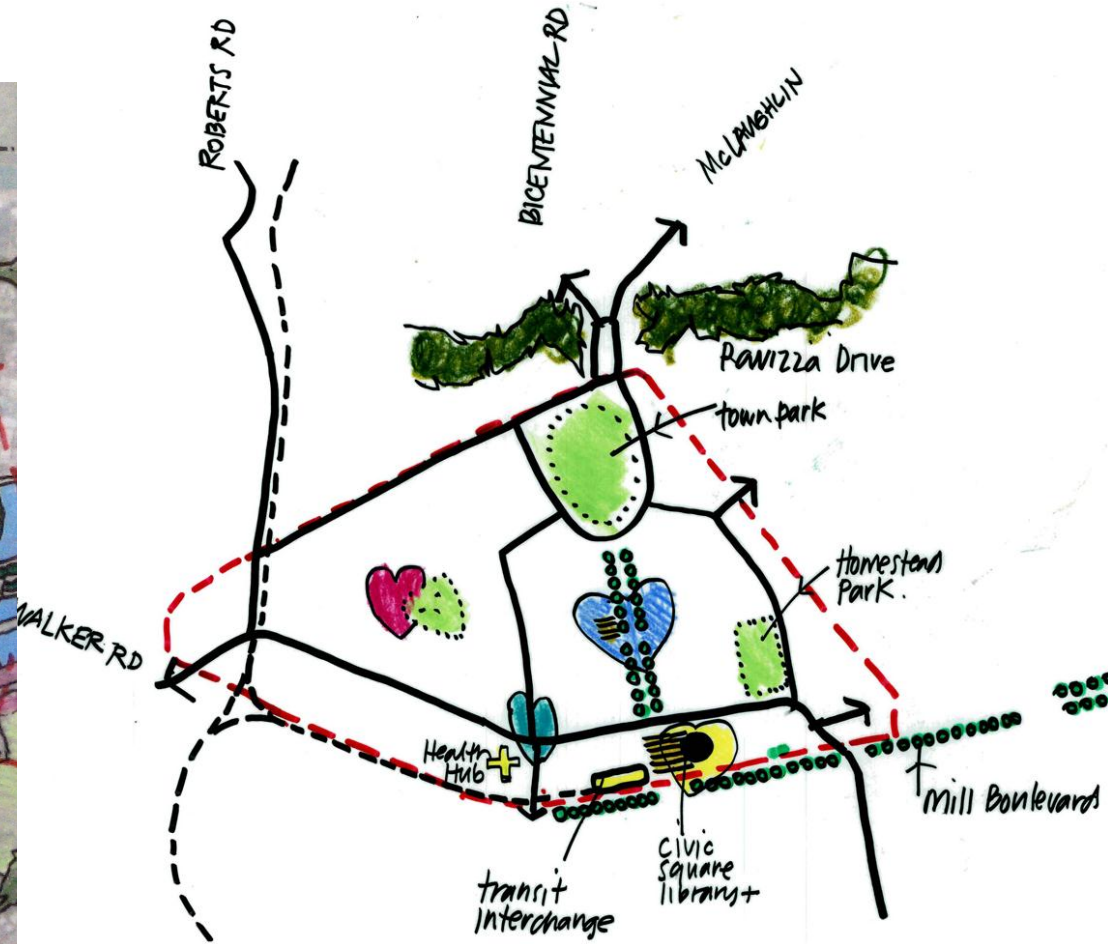


# Plans and Principles





# Plans and Principles





**We are designing places**

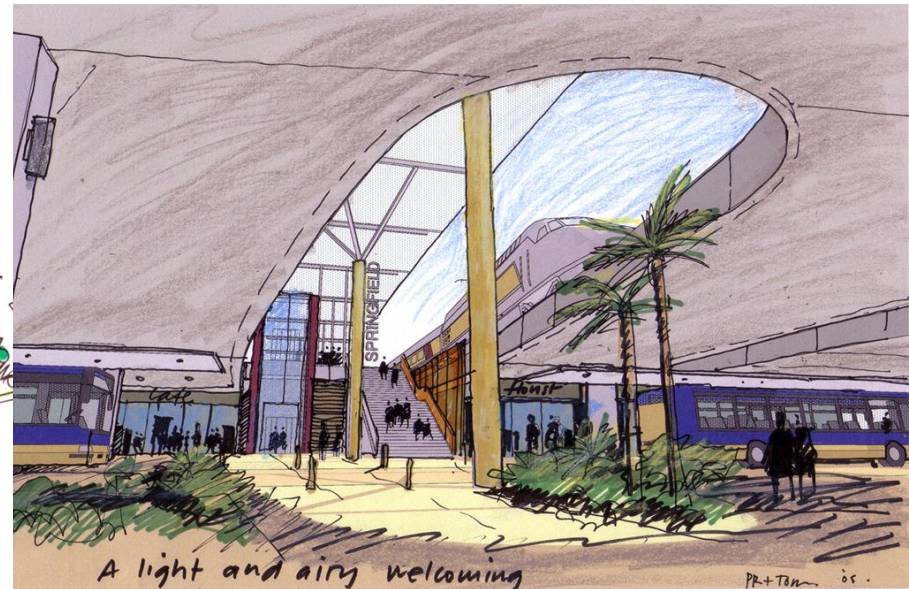
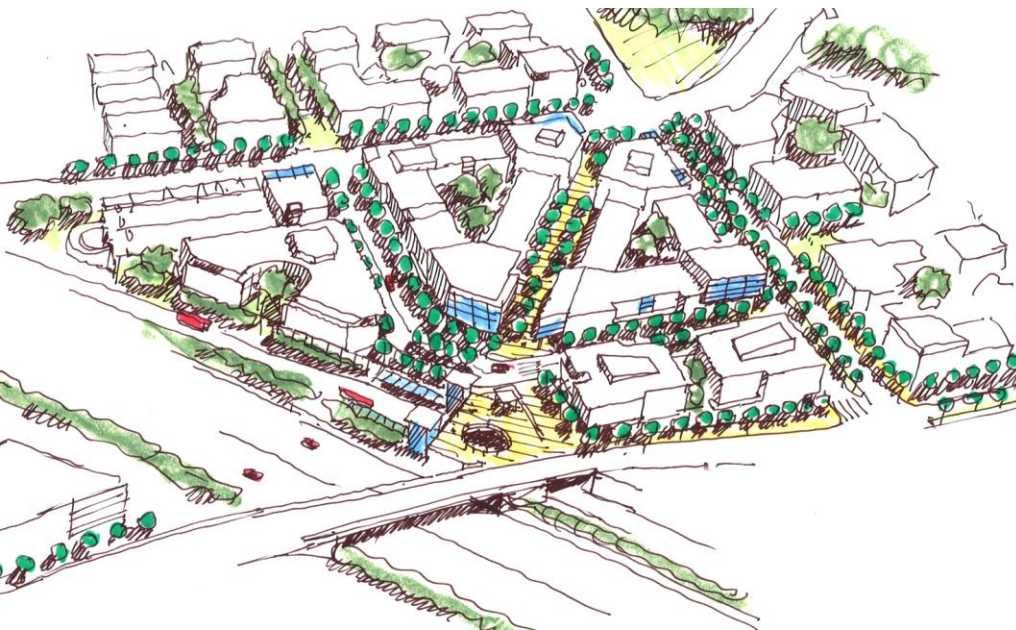




**We are designing places**

*CAD models, perspectives:*

*Model, print, trace, scan or photograph*

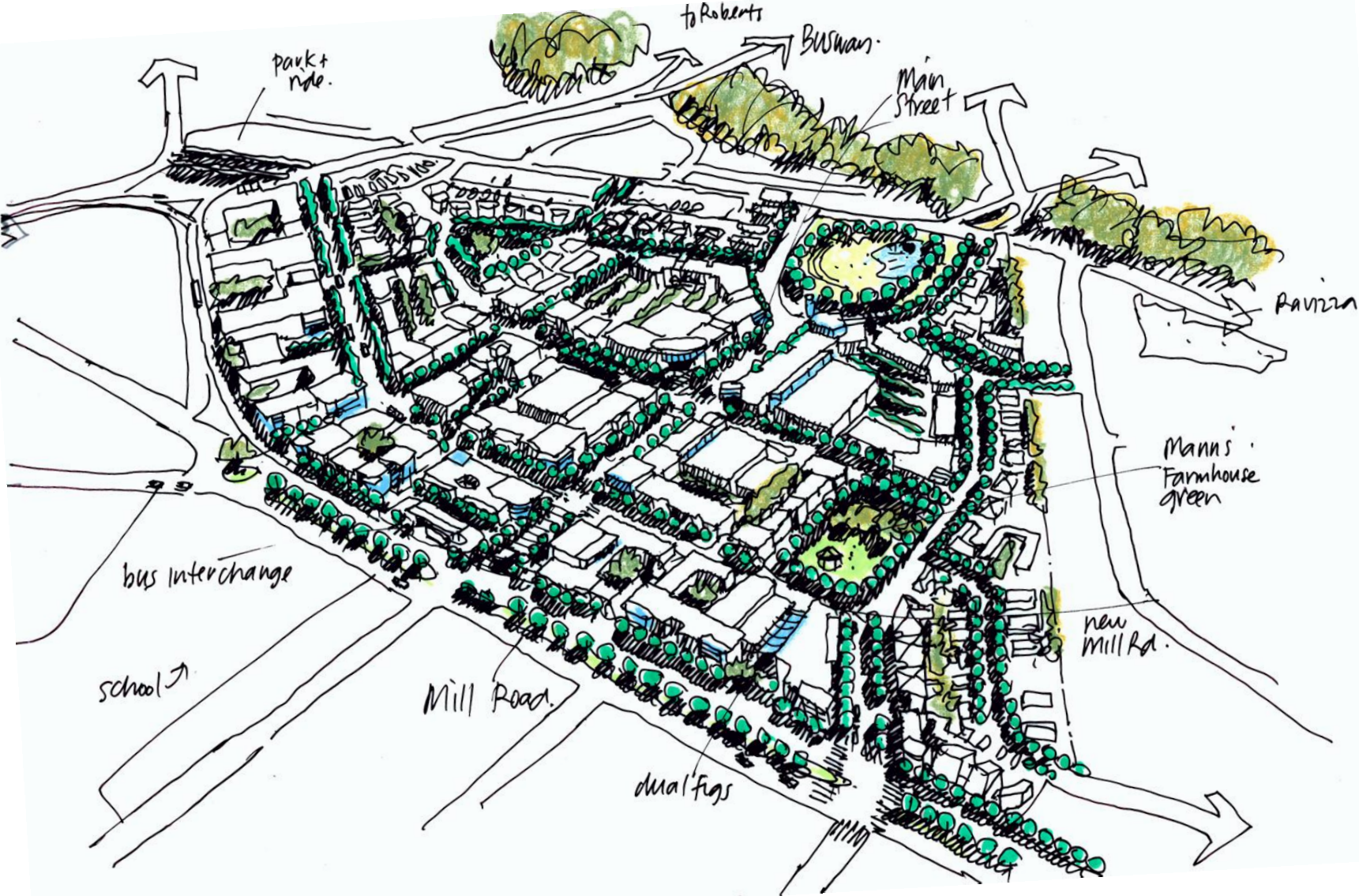


*A light and airy welcoming  
subtropical place.*

*PR+TSM 05*



**We are designing places**





**We are designing places** (Onslow WA for TPG)







5 Storey  
mixed-use  
on corner.

3 Storey  
apartments  
behind

mixed-use faces  
major road

Oxley Road (arterial)

entrs on side street

PR 1/11



## Finish well and document outcomes quickly

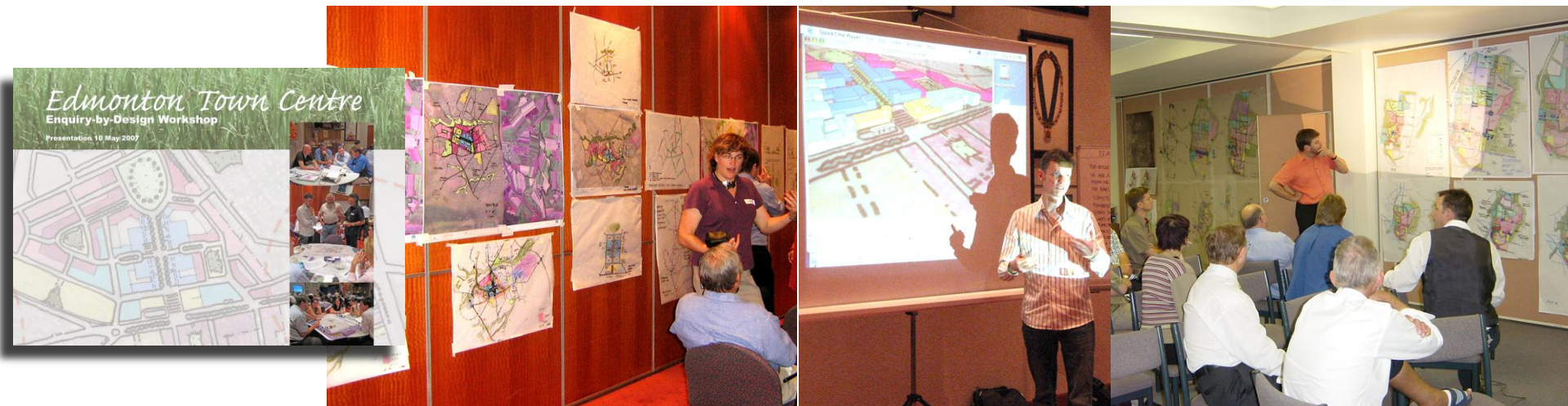
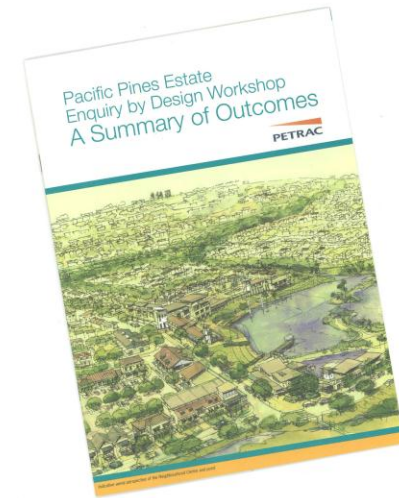
### *Workshops must finish with a formal final presentation*

*All participants attend and others (Decision makers)*

*Pinup of all the drawings, supporting presentations powerpoint,*

*InDesign Reports PDF full screen Movies!*

*This work becomes the Workshop Outcomes Report*







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