



Detached housing: Public and change: Innovation House 2.0

Improving peoples lives through better housing solutions

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Innovation House

26-28 March 2019



“I think I’m up to 9000” Darren Finlay

A journey to Sustainable change at household level
How do we impact on normal residential areas?

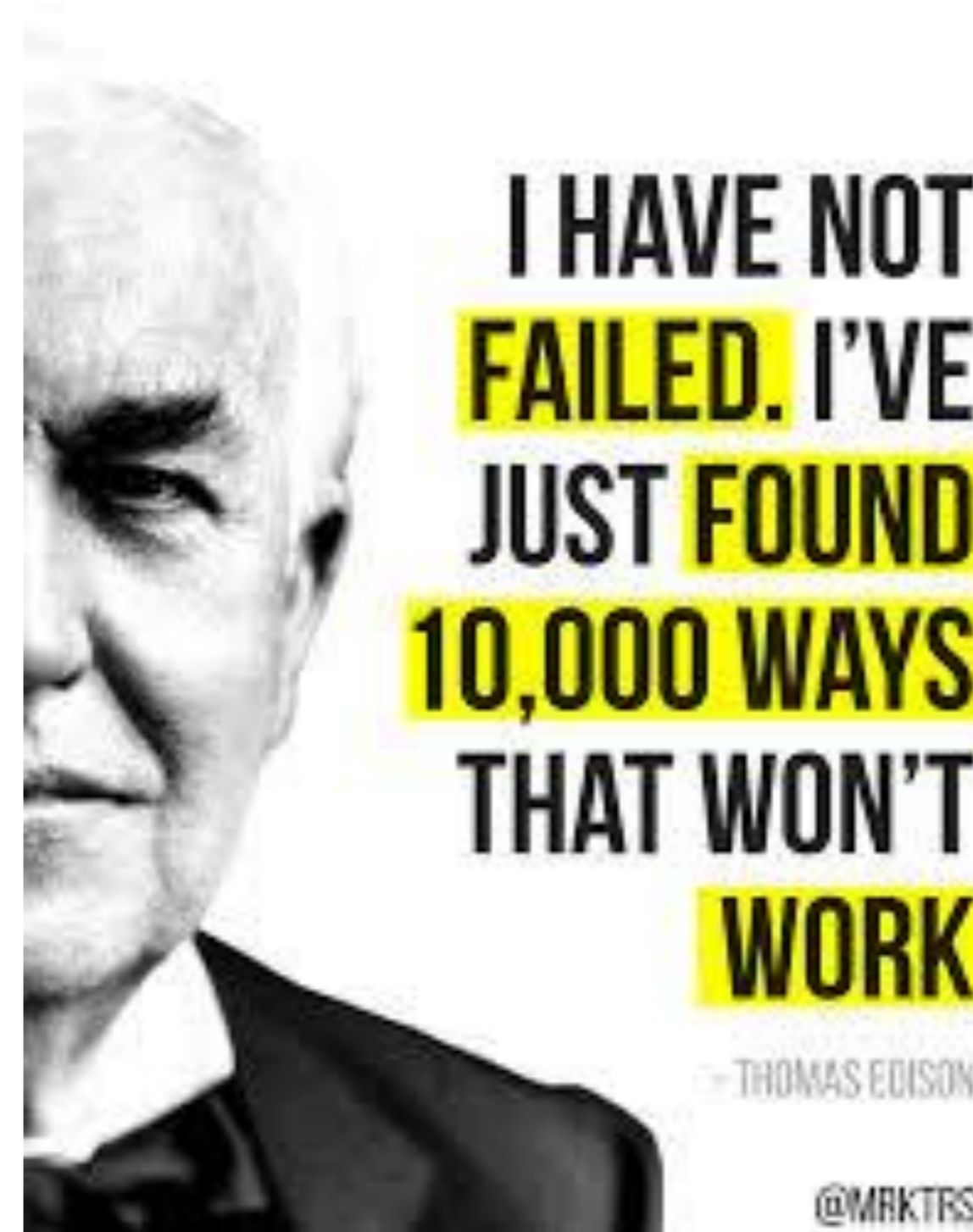
“No use having a 10 Star home with a 1 Star user”

Innovation House 1.0

We wanted to get the public to see an example of a better, higher performance house and land solution.

(read : sustainable, shhhh don’t tell them)

- Built in 2012/13
- First 10 Star display home in North Queensland
- 6 Sustainability concepts covered
- Low water use Permaculture total land solution
- Designed to be affordable
- Net Zero Energy Homes
- Living experiment, I moved in with my family!!!!



DESIGN



ENERGY



HEALTHY HOUSE



PRODUCTS



TECHNOLOGY



WATER



CRC for
Water Sensitive Cities



4th water sensitive cities conference

watersensitivecities.org.au

Innovation 1.0

What worked? What didn't?

“People love gardens and landscape, but, speak to your wife first”

The public were SUPER engaged

All the principles and concepts were well received. People stayed in the house for hours!! Woot Woot

- But.....
- For a low use garden we used heaps of water...for a while
- Permaculture principles don't suit everyone, need buy-in
- What do you do when you generate heaps of seasonal food?
- If you bring the whole ecosystem, know a good snake catcher

- Upsides
- Looks great from the street still
- Survived drought and floods well!



“I think I’m up to 9500” Darren Finlay



Developers taking a lead

“ Lets try communicating at a development level”

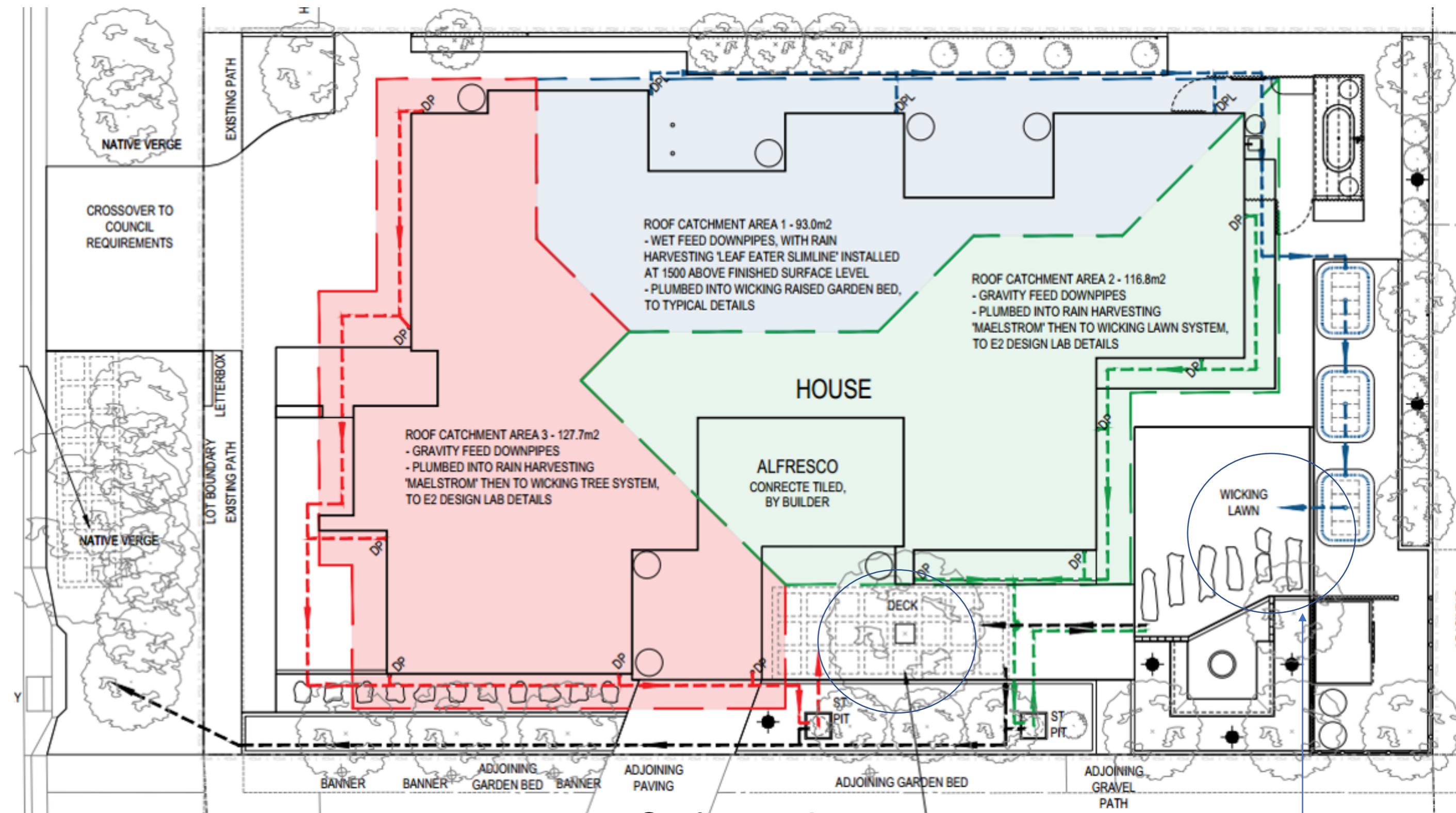
Innovation House 2.0 : Stockland 2018

Goal

- A. Help reduce storm water load for development by taking some load off on a lot basis.
- B. Storage water on the lot to increase drought resilience.

So let’s look at development solutions on a lot level:

- Josh Byrne designed landscape
- E2DesignLabs designed water management
- Storm water street tree trial thanks to City Green
- Lot Level wicking LAWN concept
- Local school wicking garden beds for the shipping container cafe



Self watering tree

Self watering lawn



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Innovation 2.0

What worked? What didn't?

“There is no better way to end a drought, then dig a huge hole”

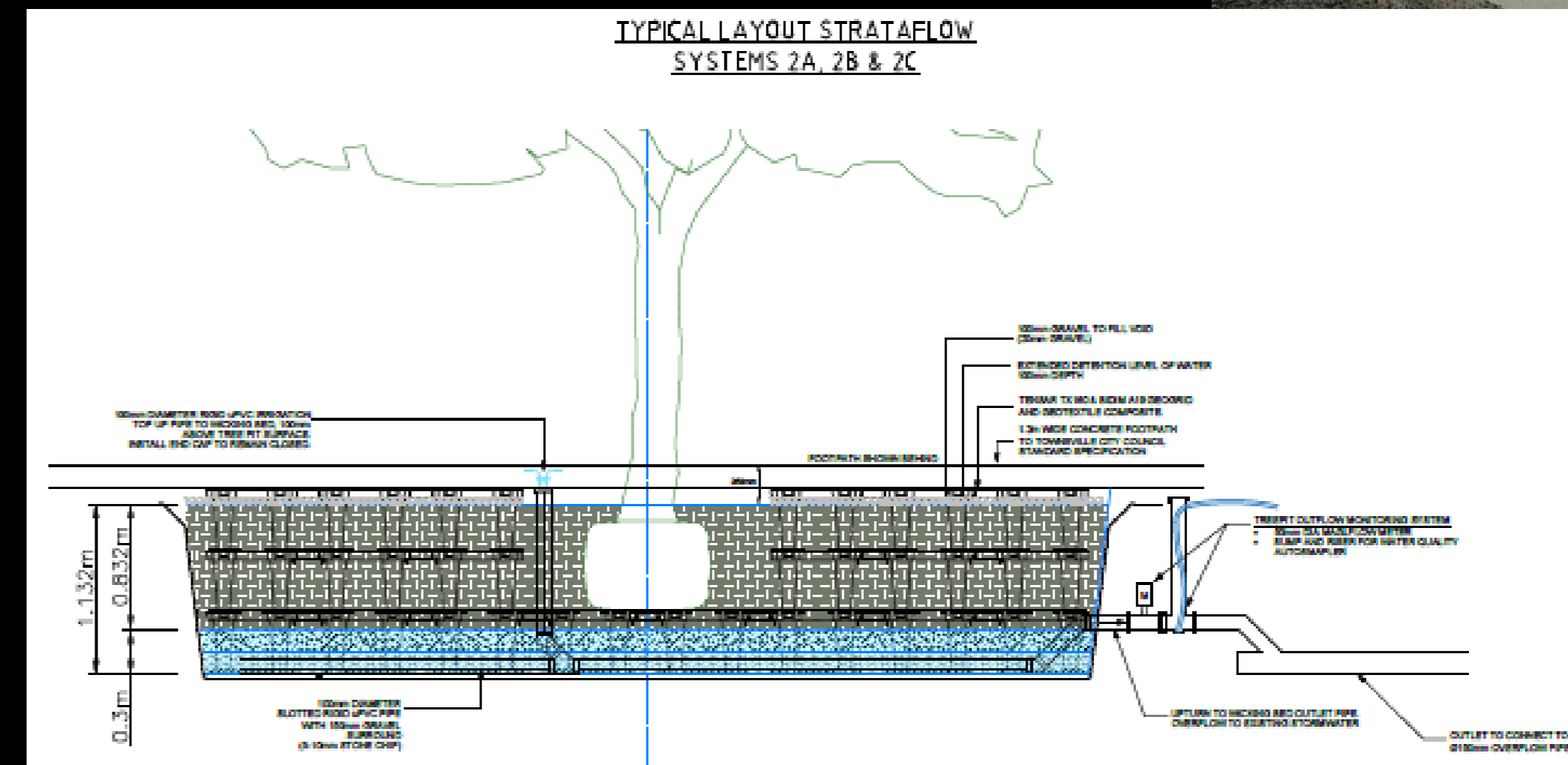
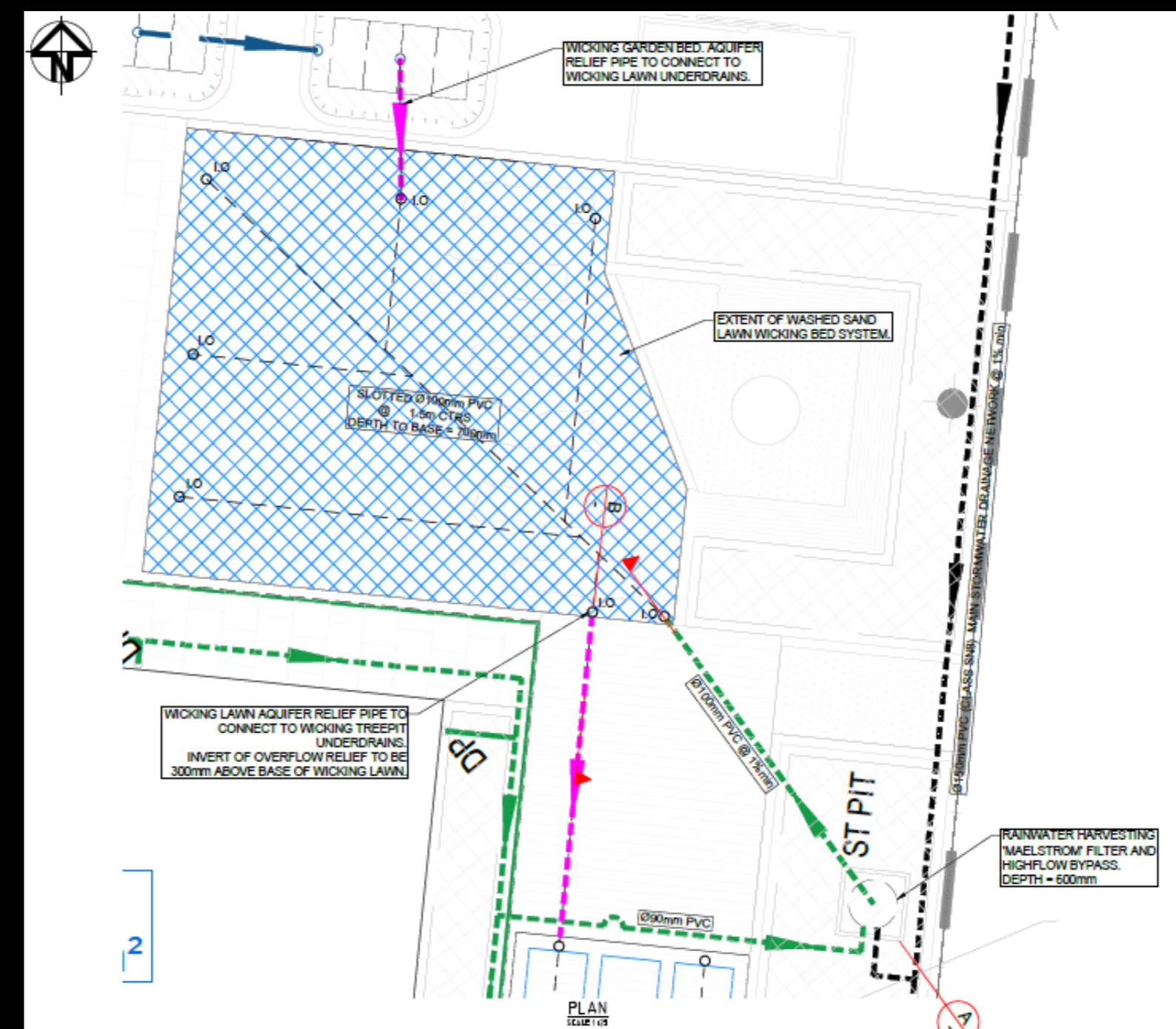
The principles show amazing potential for solutions at a development level

Innovation is firstly about learning:

- So what did we learn?
- The wicking lawn works, went through a whole year without watering
- The design works, dealt with a 1 in 500 Year flood event
- Was resilient in a drought
- Garden is thriving

Issues

- Would be expensive to deliver on a small scale
- We got some of the wicking garden bed drainage wrong



“Hoops are for jumping through”

Councils and change

“ Its great to have community buy in”

Very lucky to have the an engaged council:

- Townsville household allowance 772,000L
- Retention basins are
- Designed to use 50 - 70% less than Townsville average
- 9.5 Star Gold Level Accessible house
- Would produce increased disaster resilience

BUT

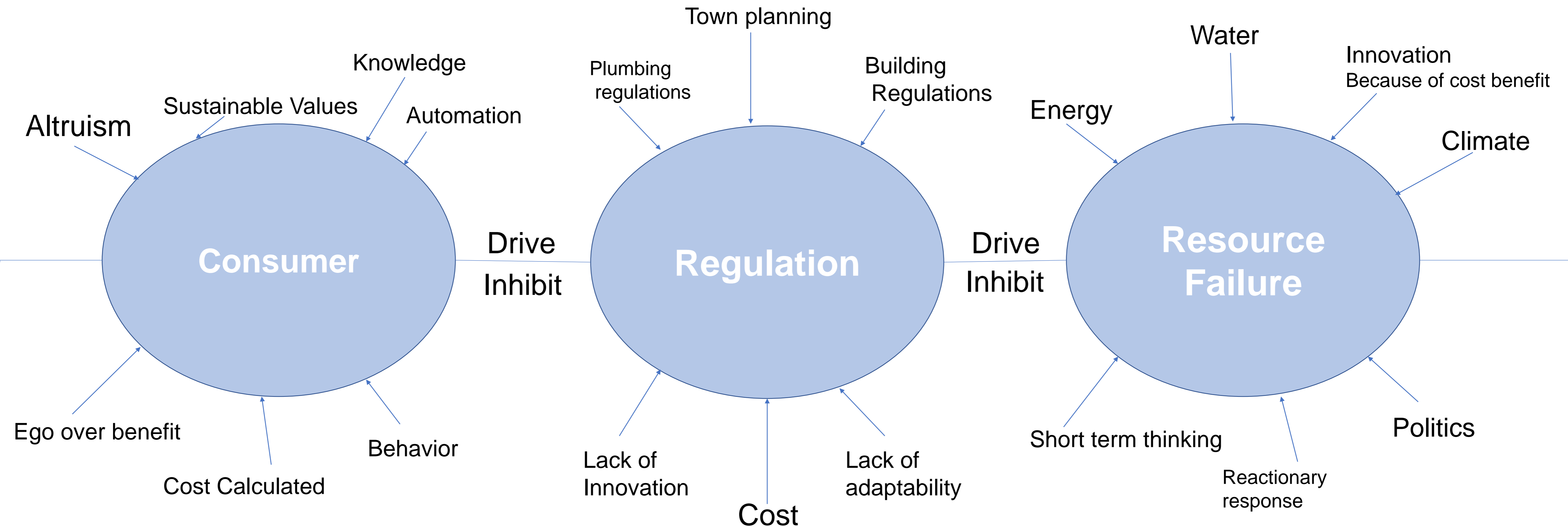
- You will still have some challenges
- The planning frameworks don't generally like Crazy
- Even if its cool
- But we got there



How do we drive sustainable change?

“Ok I’m up to 9600, I can tell you what doesn’t work”

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Australian Government
Department of Industry and Science

Business
Cooperative Research
Centres Programme

Thank you!

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HOUSE