

Vince Radford

SUSTAINABLE COMMUNITIES IN GROWING CITIES

OVERVIEW

- ✖ Context: My Background
- ✖ Designing for community to happen
- ✖ THRIVE
- ✖ Co-Housing - HIVE
- ✖ Where to now?

CONTEXT

- ✖ Developer in Perth, WA
- ✖ Perth/WA
 - + Growing city with urban sprawl.
 - ✖ 2 million people 120km long and 70 km wide
 - ✖ Affordability ???
 - ✖ Ownership trap – The Australian Dream
 - ✖ Separation from community
 - ✖ Car dependant

SEPARATION / CAR DEPENDANT

- ✖ Urban sprawl generally results in the separation of a person from work, play etc.
 - + You get into your car, in the garage, drive to work, park and enter the office most likely without personal human contact .
 - + We put up fences around our own pieces of land and the majority of people do not know their neighbours.
 - + We drive everywhere.....
 - + Everything is separate. I own this piece of land....



THRIVE

SUSTAINABLE COMMUNITY LIVING

WHITE GUM VALLEY,
WESTERN AUSTRALIA



THRIVE - WHITE GUM VALLEY, WESTERN AUSTRALIA

OVERVIEW

- ✖ Medium density development within walking /cycle distance to Fremantle centre
- ✖ High quality finishes
 - + Sustainable needs to be quality
- ✖ High performance buildings
 - + Energy Efficient / low maintenance
- ✖ Community focus.

THRIVE - WGV

- ✖ Target demographic
 - + 60% 30-55
 - + 20% 55-75 (active oldies)
 - + 20% 25-30
- ✖ 14 dwellings
 - + 2 (3x2)
 - + 7 (2x2)
 - + 5 (1x1)

Townhouse Style – development lifecycle built for 70 years.

THRIVE - WGV

× Location

- + Walking distance to lifestyle hub (Fremantle)
- + Close to abundant community facilities
 - × Boo Park 100m
 - × Sullivan Hall 100m
 - × Community Garden (1km)
 - × Cafes, multiple within 500m
 - × Access to public transport and major roads

THRIVE - WGV

✖ Build Tech 9.2-9.5 STAR

- Reverse Brick Veneer
 - ✖ High insulation properties
 - ✖ Internal Thermal Mass
 - ✖ Brick is economical and trade friendly in WA
- Double Glazing
 - Low E glass argon filled, PVC (not WA)
- Quality Finishes
 - Long life, low maintenance

THRIVE - WGV

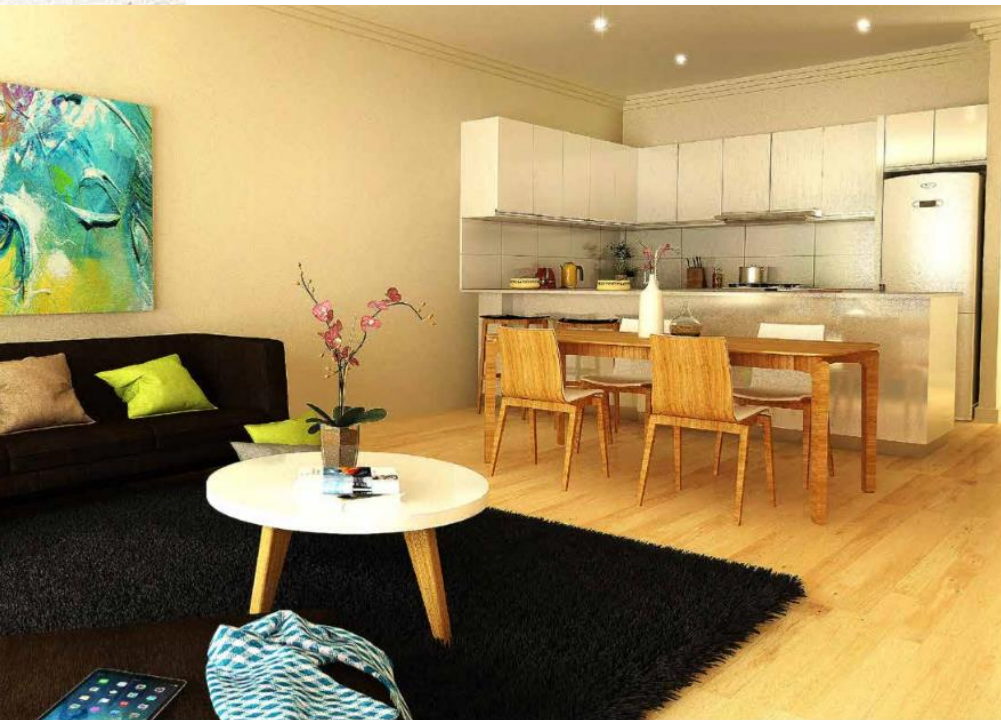
- ✖ Strata (community) owned infrastructure
- ✖ 100% Electric (no fossil fuels)
 - + Electric cooking, no AC, fans everywhere
- ✖ Grid connected with the ability to sell excess power to others within WGV (trial)
- ✖ Micro Grid (ARENA project with Jemma Green)
 - + Strata owned system that generates own electricity with internal metering
 - + 35KW of PV
 - + 80KWH of Battery Storage

THRIVE - WGV

× Built Form Design

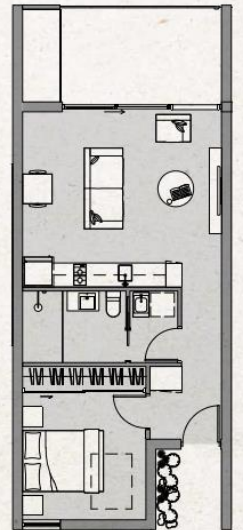
- + Passive Solar (because we can! Not always possible.)
- + Private Space, small but usable.
- + Efficient use of space
 - × As big as you need....but no more

THRIVE - WGV

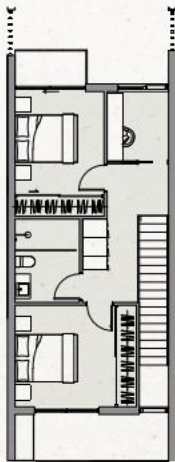
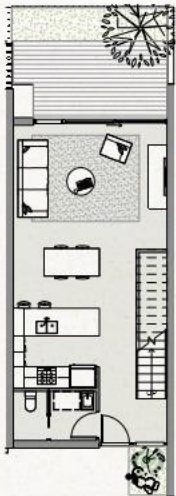


1 BED APARTMENTS

- Courtyard entry
- Built-in robes to bedroom
- Timber flooring throughout
- Balcony off open plan living & dining



THRIVE - WGV



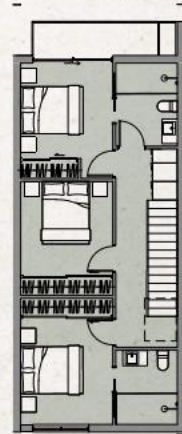
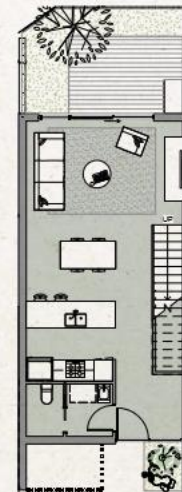
2 BED TOWNHOUSE

- Private balcony off both bedrooms
- Additional study
- Built-in robes to bedrooms
- Breakfast bar to kitchen
- Easily accessible storeroom



3 BED TOWNHOUSE

- Private balcony & semi ensuite to bedroom 1
- Ensuite to bedroom 3
- Built-in robes to bedrooms
- Breakfast bar
- Easily accessible storeroom



THRIVE - WGV

✕ Community focus

- + Majority of space is common
- + Edible gardens (need to spend time maintaining and planning)
- + Multiple outdoor areas with some privacy
- + Bike storage room
- + Outdoor entertaining area / BBQ
- + Workshop
- + General purpose room
- + Pathways and access creates opportunities for accidental encounter (can't hide)
 - ✕ ie: from car to home



THRIVE - WGV



DESIGNING FOR COMMUNITY

- ✖ Community is human connection and a sense of belonging to a 'group'.
- ✖ Built form cannot create community, it can only encourage or discourage it from occurring.

Therefore 'Designing for Community' is creating space for meaningful human interaction and connection to flourish.

DESIGNING FOR COMMUNITY

- ✖ Community requires diversity
 - + The level of diversity is proportional to the scale of the community
 - ✖ Small community, less diversity and need for stronger joint interests ie Co-House
 - ✖ Large community needs large diversity for health and interest.
 - + The strength of a community is relative to the level of Pride in belonging to the community.

DESIGNING FOR COMMUNITY

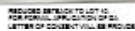
✕ Accidental encounters

+ Passing people daily

- ✕ From car to home
- ✕ In social areas
- ✕ Working in garden
- ✕ Workshop
- ✕ Bike store



ACCIDENTS AND EMERGENCIES



DESIGNING FOR COMMUNITY

✕ Intentional interaction

Signs of a healthy community.

+ Organised meetings and regular interaction

- ✕ Set date and time
- ✕ You go to the garden knowing people will be there
- ✕ Group projects
 - ✕ Garden or workshop

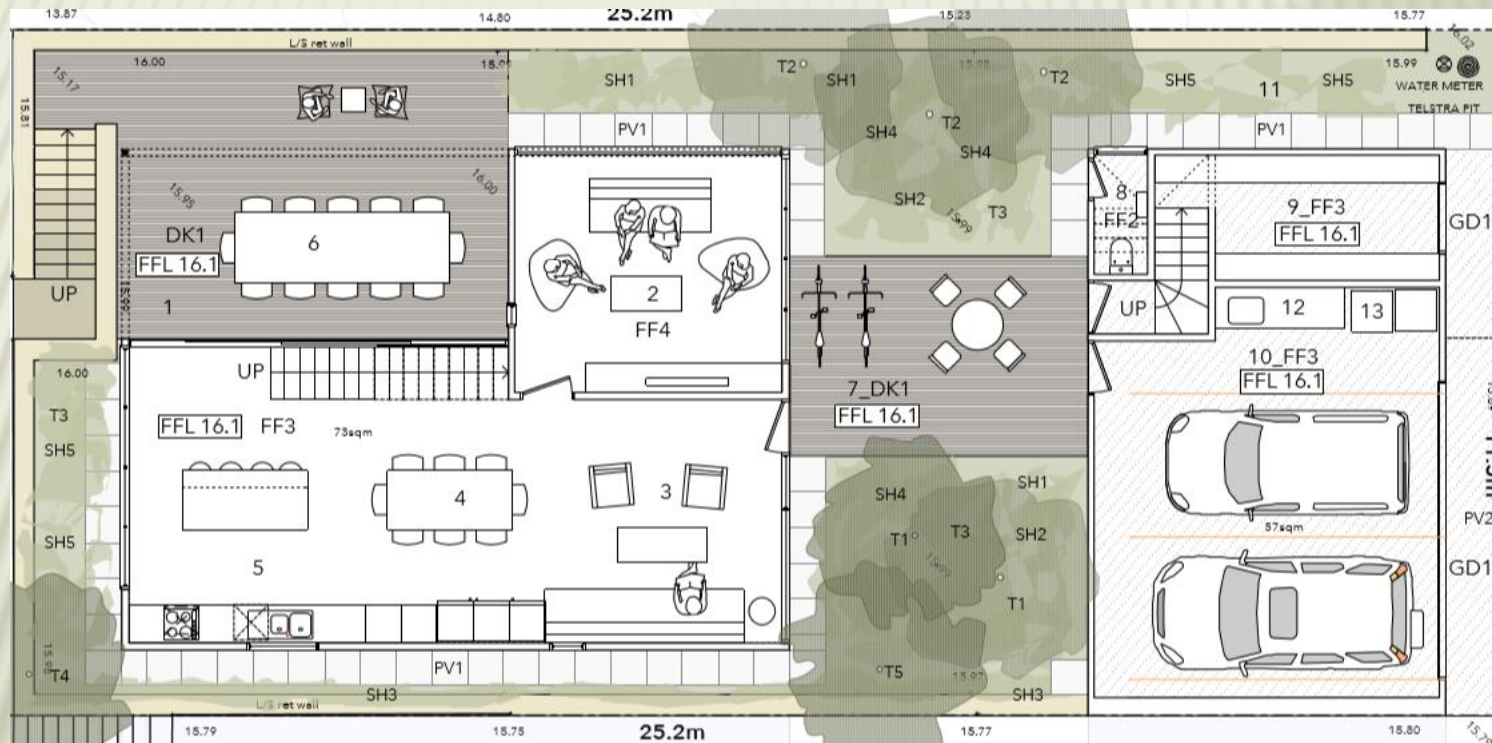
DESIGNING FOR COMMUNITY

- ✕ Community takes input and effort to grow
 - + BBQ's with future owners and tenants during construction
 - + Involving the existing neighbours and local community where you can
 - + Tours of site and construction
 - + Once built, monthly activities around group interests
 - ✕ Gardening
 - ✕ Cooking
 - ✕ Beer brewing

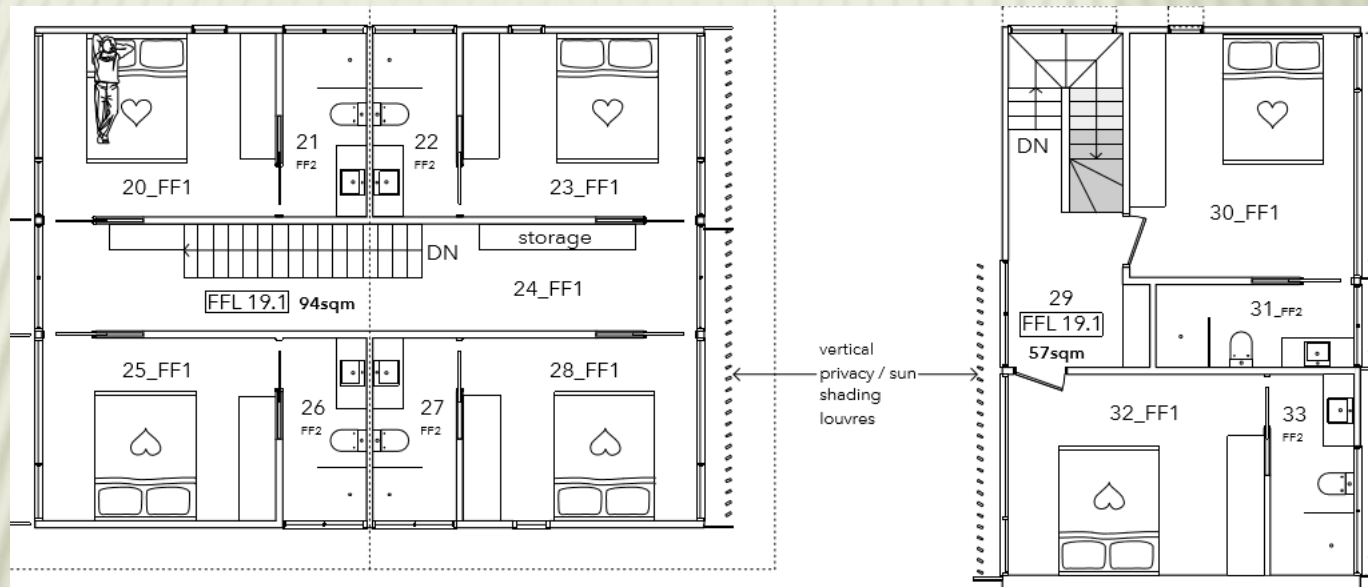
CO-HOUSING HIVE

- ✖ A home designed for multiple non-related parties to live and INTERACT with each other.
- ✖ Small private areas with majority of areas and facilities common.
- ✖ A micro community
 - 4 – 9 people
 - Share space and facilities
 - Strong connection or joint interest within the house
 - ie: Sustainable living
 - Outdoor enthusiasts

CO-HOUSING HIVE



CO-HOUSING HIVE



CO-HOUSING HIVE

- ✖ The ideal of Co-Housing is to create high quality accommodation in desirable areas to live, with affordable pricing
- ✖ Gain access to higher quality accessories by leveraging the 'share economy'
- ✖ Co-Housing can be tailored to meet a variety of needs or social segments.
 - + Single mothers, affordable housing,

CO-HOUSING HIVE

- ✖ Large private rooms with ensuites (if desirable)
- ✖ Common areas designed for group interaction while allowing for separation of small groups.
- ✖ The focus is on co-habitation and sharing of facilities

CO-HOUSING HIVE

✕ Key Features of HIVE

+ Desirable Area

+ Is focused on sustainable living

+ Quality finishes

✕ Timber ceilings

✕ Hemp wall

✕ Cork flooring upstairs

✕ Burnished concrete slab

✕ EV Share Car

✕ Gardens/chooks/bees

• Double glazing

• 8.5 Star energy rating

• Evac solar hot water

• 6.5 kW PV

• 15 kWh of batteries

CO-HOUSING HIVE - GOALS

- ✖ A network (community) of HIVE housing around Perth to increase the leverage of the share economy.
 - + Transport
 - + Sports equipment
 - + Holiday accommodation
 - + Food production
 - + Flexibility in accommodation location (short and long term)

CO-HOUSING HIVE - GOALS

- ✖ The share economy will grow exponentially and allow greater access to higher quality items for a fraction of the current pricing
- ✖ People will invest in housing networks rather than an individual house that will allow them to be more transient and flexible in where they live.
 - + Car ownership and UBER etc.
- ✖ HIVE networks across Australia / International

THANK YOU