

## Auditing, Dismantling, Rebuilding

### key interventions and strategies:

- Dismantle existing McMansion and rebuild two smaller houses with the recycled use material. Through dual occupancy the project's quantitative environmental bottom line will dramatically improve and the owner will potentially have a revenue income from the second dwelling.
- Reduce building footprints and internal volume by 40 - 70% per dwelling. The latter will increase the available usable land for outdoor living and garden space (and reduce the thermal heat cell effect of the site)
- Orientate new buildings to best engage local climatic conditions to enhance buildings and site's passive thermal performance:
- Introduce natural ventilation strategies
- Introduce passive winter solar gain
- Introduce solar hot water and solar power.
- Introduce rainwater storage and grey water bio filtration system in the form of external garden pools. Potentially create a deep-water thermal well – made from bricks salvaged from the building.
- Re - imagine the car relationship to the home - potentially remove car garages from program – to discourage car dependency. Street parking for visitors or drive way parking with minimal weather protection for owners.
- Since the 1960's, cement, rather than mortar has been used to lay bricks. The cement is stronger than the bricks - making reuse of the bricks almost impossible. We propose to crush the existing McMansions bricks (along with excess tiles and concrete) into a pise or ramed earth wall.

