

Rodney's urban design and how it WILL encourage walking

Real world

Masdar – Abu Dhabi

Big picture and the public realm

RDC making a positive difference

THIRD DRAFT



building on opportunity

URBAN DESIGN, THE RMA, AND WIN-WINS IN THE DEVELOPMENT PROCESS



RDC making a positive difference

THIRD DRAFT

RESPONDING TO THE COAST, EDGES, WATERWAYS, AND LINKAGES

The connection between people and our coast, distinctive vegetation, landscapes and unique waterways is a defining characteristic of our identity. The retention and integration of these elements into a development is a key method of providing character and a sense of amenity for users. It is also one of the best ways of meaningfully improving ecological values and environmental protection. If done properly these will commonly combine to deliver higher, consistently stable property values over time.

It is now common for development to 'back' onto these valuable features where they are typically fenced off for the privacy and security of property owners; their value is reduced through poor interfaces along the edges; they become excluded out of the public eye, and their accessibility to the general public is reduced. Another critical reason for incorporating such features into development relates to safety. Development that provides good connections and 'frontage' to these features provides an opportunity for activity to result in the long-term benefits of natural surveillance. This has been demonstrated to be a successful crime deterrent.

LANDSCAPING CAN ENHANCE IDENTITY


Street trees should be provided on all roads with a species type reflecting local character and vegetation where appropriate. They contribute to micro-climate, pedestrian amenity and shade identity, and are negatively looked on in the context of climate change and potential carbon credits (such as for the mitigation of the effects of vehicle emissions). Careful species selection is important to ensure adequate positive surveillance and clean air quality. Contact the Council for more assistance with species choice.

ENVIRONMENTAL IMPACTS TO WATCH OUT FOR INCLUDE:

- Retained trees contribute to habitat, improving biodiversity and amenity for residents and users.
- Careful species selection is important to ensure adequate positive surveillance and clean air quality.
- As trees intensify and 'soak' over time, the loss of vegetation can place significant pressure on street trees and vegetation in reserves to serve as the only remaining biodiversity corridors for many birds and other fauna.
- The species selection of street trees should accordingly reflect an appropriate consideration of this function.
- Properly integrated features will be less used. This loss of potential activity represents an inefficiency that is an effect on the community's social and economic well-being.
- Effective pedestrian-friendly environments help reduce vehicle use, emissions, and congestion on roads.

MORE INFORMATION / RELEVANT TO:

- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- The Value of Public Space: New High Quality Public and Open Spaces (Green Communities, Social, and Environmental) Values, CABS UK.
- Urban Form & Land Use Plan, Rodney District Council (Urbanity, Identity, and Sense of Place).



THIRD DRAFT

SITE ANALYSIS AND RESPONSE

LIFE AND CONTEXT ANALYSIS

The most critical element of successfully designing to avoid, remedy, or mitigate adverse effects lies in understanding how a proposal will react and interact with its environment. A quality site and context analysis is a fundamental tool in this.

The reality of many quality designs is that most of the "concept" is in fact nothing more than a logical response to what is already going around that design. The most inspiring, successful, livable built environments across history as well as today are the ones that allow intuitive, easy use. They are compatible with the surrounding built form while still incorporating enough identity and originality to make a clear statement about who, where, and what the users are all about.

An important part of a quality context analysis relates to the 'intended' outcomes of the District Plan and other strategic policies (the Auckland Regional Growth Strategy for example). Early discussions with the Council to obtain a common view of what the combined package of policies mean for a development will help inform the best use of a site.

ENVIRONMENTAL IMPACTS TO WATCH OUT FOR INCLUDE:

- Site and context analysis will identify where adverse aesthetic and operational impacts will occur.
- Identified adverse effects will be much more than been site-related uses of the coverage and landscaping.
- Analysis will identify 'look-out' and 'look-in' effects on the environment around it.
- Analysis will identify 'look-out' and 'look-in' effects on the environment around it.
- Analysis will identify 'look-out' and 'look-in' effects on the environment around it.
- Analysis will identify 'look-out' and 'look-in' effects on the environment around it.
- Opportunities to deliver positive effects will also be made through a quality analysis.

MORE INFORMATION / RELEVANT TO:

- Section 88 and the First Schedule of the RMA - An Assessment of Effect on the Environment.
- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- Good Solutions Guide for Medium Density Housing, North Shore City Council.

ISSUE	POSSIBLE RESPONSES INCLUDE
1. Topography and location	The advantage of height for some buildings from an elevated site is to enhance such as better views, elevated long views, and better road access. Consider height and site access. Design to respond to topography rather than dominate or conflict with it.
2. Natural features, vegetation and water resources	Consider retaining significant trees or natural water courses. Remove trees only where necessary. Use native plants and trees to enhance the site. Retain water courses in the design of the site. Design to enhance the site's natural features. Retain water courses in the design of the site. Design to enhance the site's natural features. Retain water courses in the design of the site.
3. Adjacent land use	Design buildings to respond positively to the intended outcomes of the District Plan and other strategic policies. Early discussions with the Council to obtain a common view of what the combined package of policies mean for a development will help inform the best use of a site.
4. Measurement	Ensure the relationship between land use through the current site and the surrounding area is not disrupted. Consider the impact of the site on the surrounding area. Consider the impact of the site on the surrounding area. Consider the impact of the site on the surrounding area.
5. Features of cultural significance	Consider retaining any features of cultural significance. Consider retaining any features of cultural significance. Consider retaining any features of cultural significance.
6. Key view points	Consider retaining any key view points. Consider retaining any key view points. Consider retaining any key view points.
7. Site usage	Consider how the site is used. Consider how the site is used. Consider how the site is used.

THIRD DRAFT

TRANSPORT AND MOVEMENT

CONNECTED ENVIRONMENTS

The best delivery of services relies on a combination of dead-end and carefully designed routes to limit visibility and actively discourage non-residents from entering. They remain popular today, usually supported by a perception that they deliver greater levels of privacy and safety from other roads. This can be self-reinforcing; the consequential channeling of all traffic onto the few connected routes, available can further a perceived sense of connectedness with heavy traffic nuisance and high vehicle speeds.

The number of vehicles using roads today has implications for the 'shortfall' network created by a cul-de-sac pattern on low streets and collectors. It can prematurely worsen congestion effects and can lower amenity for people living along these roads - an externally adverse effect of cul-de-sac layouts. Providing a network that allows multiple routes and real choice for all modes (with residential blocks of no greater than 120m length) remains the best approach to avoid adverse effects and provide for walking.

CASE STUDY EXAMPLE (nearby)

A single cul-de-sac that requires 40 cars on average just 100m of additional driving for every trip that could have been avoided with a more connected layout (assumed around 10 hrs per day on average) would result in:

- 40 x 100m = 4000 additional driving each day, 14,600km per year, or 292,000km in the first 20 years of use - not even half of the expected lifespan of the buildings when that subsides.
- That 292,000km would equate to around 857,600.00 of household expenditure on vehicle operating costs that could have been put to more beneficial use (or gross 2007 cost, excluding GST and 200% of inflation).
- It also equates to around 130 tonnes of CO₂ released into the environment.

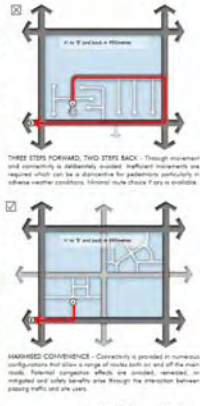
These adverse effects can typically not be avoided, remedied, or mitigated at all. Vehicle Alternatives (Travelled walking is a relatively cheap transport mode but is dependent on a range of factors. Alternatives should provide their own calculations to ensure the right balance of assumptions is made to the circumstances and all effects are taken into account).

ENVIRONMENTAL IMPACTS TO WATCH OUT FOR INCLUDE:

- Easier access to shops, services, and amenities will improve their patronage by customers and mean the suburban centre remains vibrant and economically healthy.
- Inefficient layouts cumulative environmental degradation occur.
- Increased accessibility to services and amenities will lead to the best housing (including economic multipliers) generally that would have occurred from increased local spending or saving / investment.
- Properly planned, all the right speed and volume decrease opportunities for crime to occur and increase safety. Good design and urban design can also deliver connected roads that reduce and feel less used and less busy.

MORE INFORMATION / RELEVANT TO:

- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- Urban Form & Land Use Plan, Rodney District Council.
- Good Solutions Guide for Medium Density Housing, North Shore City Council.



THIRD DRAFT

CONNECTING TO THE STREET

For residential environments to promote wellbeing they should deliver an adequate connection to streets and public spaces. This will ensure outcomes that convey a sense of safety, interest, activity, quality, and value. Engaging the front door to stand out from the dwelling (generally including a canopy or other cover) helps direct visitors and organise arrival planning. A direct path or connection between the front door and the street should be provided to help reinforce this and make it less plausible for strangers to wander around site (beginning confusion as for instance) they look for a point to force entry.

To support this connection or 'frontage', houses should be located as close to the street as possible, engaging other open space on the site behind a house available as private outdoor recreational space. Maximising the amount of glazing from an active living room (in kitchen, dining room, lounge, or family room) on the front elevation helps reinforce a sense of surveillance and security to and from the street / public space. The open helps ensure a sense of personal safety for all users. It also stimulates interest and activity in building facades for pedestrians. These outcomes are precluded when garaging dominates a frontage. Aside from visual blindness garages are solid and typically 'invisible' - if crime occurs outside there is less chance of a perpetrator being seen or even heard. They are also a de facto storage space, often cluttering the street and affording little privacy of property for residents every time the door opens. Garages should for these reasons be to the side or rear of houses, set back behind the building line.

Lastly, maintaining a clear visual connection is important to deliver a sense of interest and quality. The use of solid fencing will be almost guaranteed if outdoor living spaces are in front of a house - they will be needed for basic on-site privacy. Accordingly outdoor spaces function best when to the side (set back from the front elevation) or rear of a house, with the building forming a visual barrier to the public realm. Solid fences around the sides and rear are appropriate. When a house minimises the front yard it is more visible for the to be used as a visual buffer space, allowing a shorter fence of 1.0m or less to be erected.

ENVIRONMENTAL IMPACTS TO WATCH OUT FOR INCLUDE:

- The provision of regular 'eyes on the street' will help discourage crime and improve perceptions of safety for road users.
- All buildings should clearly connect to the street which in turn helps to foster a sense of community and 'eyes on the street'.
- Site efficiency is improved when all users can clearly interpret how and where they should move.
- Security of private property (including cars parked on the street) is improved and enhanced effects are better managed when land use is at a proximity and orientation where the potential for criminals to be seen or apprehended increases the point that opportunistic crime is discouraged.

MORE INFORMATION / RELEVANT TO:

- Section 88 and the First Schedule of the RMA - An Assessment of Effect on the Environment.
- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- Best Practice Suburban Guidelines, Kapiti Coast District Council.
- Best Practice Suburban Guidelines, Kapiti Coast District Council.



THIRD DRAFT

CAR PARKING AND STRONG STREET FRONTAGE
 The provision of large at-grade car parking areas between the public realm and land uses will lower character and pedestrian amenity. They can often be processed along at a frontage, reflecting a perception that a vehicle-oriented customer catchment will not be engaged without a number of obvious, clearly located dedicated spaces for them. This connection between drivers on the street and parking spaces is often justified due to our overall low density settlement pattern. But providing this is only one dimension of well-being. It will not be enabled if development serves passing traffic but fails to contribute to 'local' and appeal to other modes (most obviously pedestrians). At grade parking is often preferred as it tends to be overwhelmingly cheaper per space than structured or underground parking.

Visually obvious and conveniently accessible parking spaces can be accommodated readily at the side or rear of uses. Often one side of parking along the frontage for very short-stay, counter drop off, and operation mobility carholder spaces will still allow an effective street connection to occur. Safety at parking areas is an overriding concern. Tools such as clear signage and sightlines, logically located actively anchored on generators, and the careful location of long and short term parking are valuable.

NON-EXCLUSIVE ON-STREET PARKING IS VALUABLE
 The role of on-street parking is important in centres. Aside from providing good pedestrian buffers from traffic and noise they help businesses connect with customers, and can be shared between multiple uses. A key issue for town centres is that often there are more than enough parking spaces available, but they can be mostly provided for the exclusive use of each business. When vehicles use available to find a parking space it is rare for every possible space to be actually occupied, or occupied by appropriate users. Providing obviously located pools of parking for general use can be highly beneficial in centres.

THINKING ABOUT THE LONG TERM
 Ideologically, large parking areas can have a role as land-banks for the future. As land values increase the eventually viable redevelopment of large at-grade car parks into smaller, multi-level structures with non-land uses can be envisaged as the essential and most reliable way of intensifying centres.

PROVIDING CHOICES TO REDUCE CAR DEPENDENCY
 The accessibility of all uses to as many potential users as conveniently possible is an important element of the efficient use of resources and wider wellbeing. But when the bus goes to any one important mode becomes non-empirical. If car, respectively provides other modes, however, speed and typically meeting the most vulnerable modes the least visible, people will not walk through a wide, vehicle right-of-way arrangement that is used by 100 cars on nearly all one of the same width, design, and ergonomics to road users that is created only used by 10 cars. Ideally each mode will have a dedicated connection to the street.

Parking areas should be considered against the context of how parking spaces will actually be used or, with, rather than a purely mechanical location. Areas where street parking spaces is expected to have equal utility.

MORE INFORMATION / RELEVANT TO:
 • Towns & Centres in South Cairns, Mackay City Council
 • Good Suburban Guide for Mixed Use Development, North Shore City Council
 • Street Frontage Guidelines, Northern City Council

MINIMIZE FOOTPATH OBSTRUCTION - Parking parking in the side of uses and along street corners, maintaining clear and wide footpaths for pedestrians. It is also the best way to maintain the architectural parking requirement in each job.

MINIMIZE SIDEWALK CONTINUITY - Parking parking behind uses accessed by narrow, single job treatment with low increase availability of important business uses. This also reduces pedestrian amenity.

COMPREHENSIVE EFFICIENCY - Large scale parking and other parked parking areas to be highly accessed by development within a block.

Streets please!!!!

RDC making a positive difference

Public realm

First 3m is CRITICAL

RDC making a positive difference

Public realm

Maintenance = high quality public realm = Yum

The BIG picture

