RIVER SIDE

MYALL LAKES,
AUSTRALIA

THE PROCESS & TECHNIQUES FOR DESIGNING & DELIVERING TRADITIONAL NEIGHBOURHOODS

PURPOSE OF THE RIVERSIDE DESIGN REPORT

The Riverside Design Report presents the vision for Riverside and Myall River Downs prepared at a three day Design Forum held late February 2006. The Forum was led by Roberts Day on behalf of Crighton Properties.

The Design Report is organised into five sections: Vision; Approach; Existing Conditions; Master Plan and Architecture. Each section provides a thorough understanding of the evolution of the Master Plan for Riverside and Myall River Downs.

The Vision for Riverside and Myall River Downs gives an overall overview of the future provided by the Master Plan.

The Approach provides a summary of the Forum and principles of Traditional Neighbourhood Design (TND). It establishes the framework within which the vision was prepared.

The Existing Conditions presents the technical constaints of the site. It also provides an overview of the planning policy context. In particular, it reinforces the validity of the principles proposed by Great Lake's Council draft Housing Strategy. However, it clearly identifies the issues and inappropriateness of the proposed density targets.

The Master Plan provides a detailed explanation on the physical components of the Plan. It demonstrates the realisation of the community ideas and principles of TND for the project.

Architecture presents a critique of conventional suburban housing proliferating throughout Hawke's Nest and Tea Gardens. Architectural principles for reconnecting to the local coastal tradition are then provided.

PURPOSE OF THE RIVERSIDE DESIGN MANUAL

The master plan for Riverside identifies the location of the neighbhourhoods, thoroughfare network, open space system, civic reservations and private block structure. It is illustrative.

The Riverside Design Manual provides the technical data neccessary to enable the implementation of the vision for Riverside and Myall River Downs.

It is a transect-based code which approaches control over development in a manner that is fundamentally different in both its goal and functioning from conventional zoning. The transect focuses on the conditions that maintain character and diversity within a series of typologically distinct places.

The Manual is organised into four main sections: Transects Plan; Character Zones; Thoroughfare Standards and Architectural Standards.

The Regulating Plan is mandatory and must be followed by developers, architects, builders and others involved in the delivery of Riverside and Myall River Downs. It comprises a map that (a) assigns the types of open space and thoroughfares; (b) shows the private land; and allocates the assignment of this land into transect zones.

The Character Zones summarize the "immersive" quality for each transect zone.

The Thoroughfare Standards identifies the vehicular and pedestrian ways into types based on capacity and character. It specifies travel and parking lanes, footpaths, curb radii, planters and street trees.

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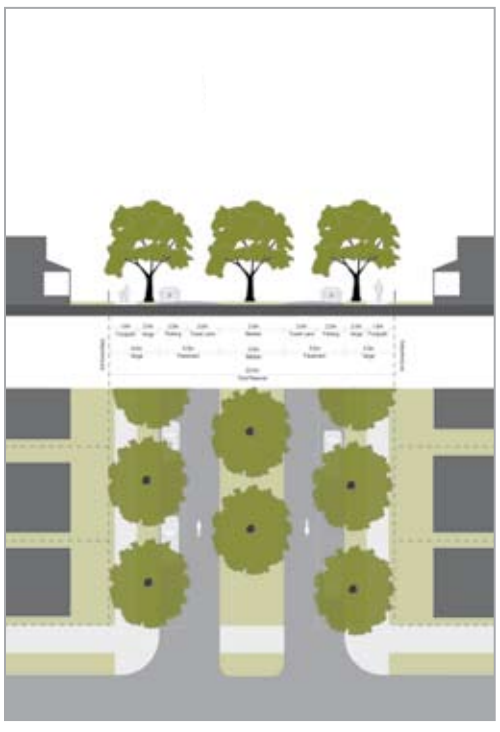

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RIVERSIDE

DESIGNING TRADITIONAL NEIGHBOURHOODS

VISION: A NEW COASTAL COMMUNITY

This drawing illustrates the transformation of the sand quarry into a major lake and public parklands.

On 3 February 2006, the proposed Master Plan for Riverside and Myall River Downs was presented to a large gathering of local residents and officers of Great Lakes Council at the Tea Gardens Community Hall. The presentation represented the culmination of an intense three day Design Forum led by Roberts Day for Crighton Properties. It was met with resounding community support.

The vision proposes a new coastal community based upon the most advanced principles and techniques of traditional neighbourhood design. It proposes three compact, walkable mixed- use neighbourhoods surrounded by a comprehensive open space system of parklands and water bodies- Villages freestanding in the countryside. It also includes two smaller hamlets.

Each is limited in size and scaled for the pedestrian, with a clearly defined centre and edge. The needs of community gathering are able to be provided for within each. Each centre provides a focus for daily life, providing an excellent location for a public bus stop, live / work building types, community events and leisure activities.

This pattern of development, which draws upon the best local precedent within Hawke's Nest and Tea Gardens, is markedly different to conventional suburban development distinguished by "residential estates" of a single housing type with an emphasis on the vehicle.

Instead, the proposed development reconnects to a pattern of growth based upon the increment of the Neighbourhood Unit. The pattern dominated prior to the Second World War and resulted in the creation of our most loved hamlets, villages and towns.

A key feature of the proposal is the integration and celebration of nature. The plan allocates legislated environmentally sensitive land into a permanent nature preserve. A network of carefully laid trails and boardwalks provides the entire community with the opportunity to engage meaningfully with nature.

The steep topography to the north of the site, overland water flows and high water table has resulted in the creation of extensive green corridors. A variety of swales, pools and small lakes will envionmentally manage water run-off. Functioning as "greenbelts" for each village and hamlet, it is ensured that neighbourhood edges are clearly defined and development cannot sprawl out into the countryside. Pedestrian and cycle trails weave throughout this system connecting each village and hamlet.

The key feature of environmental innovation for the project is the "Eco-Quarter", located at the north-western corner of the site. Accessed by a single, gently curving rural road which retains existing trees wherever possible, movement throughout the quarter occurs along green pedestrian pathways fronted by small footprint houses and cultivation of a xeriscape landscape.

The pathways terminate upon the existing sand quarry, which has been transformed into a major lake, public parklands and village centre which leverage off the environmental amenity. It includes conference and educuational facilities, studios, short term accommodation specialty shops and residential.

The architecture of this quarter, along with each village and hamlet, draws upon the local vernacular architecture of the region. It will create a character which reflects its coastal and bushland setting.

By balancing and integrating both the natural and human habitats, and establishing an urban-to-rural transect which distributes development appropriately across the site, Riverside and Myall River Downs will be a model for sustainable development.

The Design Forum was a participatory process which established a shared vision for the project.

THE RIVERSIDE DESIGN FORUM & TRADITIONAL NEIGHBOURHOOD DESIGN

Ellenbrook and Seaside - projects which have demonstrated the practical application of neighbourhood design principles with an average density approximating 16 dwellings / hectare.

A DIVIDED TOWN

Throughout the later half of 2005, debate waged in the Tea Gardens community about the form of future growth. It was triggeed by the release of Great Lake's Council Draft Housing Strategy.

Consensous existed between Council, community and developer that the neighbourhood orientated design principles articulated in the Draft Strategy provide a sustainable alternative to conventional suburban development.

Where the camps became divided, however, were the proposed net densities of 11 dwellings per hectare and 40 dwellings per hectare for Tea Gardens and Hawke's Nest to deliver the principles.

Council had proposed the densities to fulfil the principles of the draft Strategy. A noble objective.

The majority of locals felt that the proposed densities would establish a character inappropriate for the relaxed coastal setting of the area. The unmistakable evidence, they argued, are the recent developments towards Myall River.

In agreement with the local community was Crighton Properties. Beyond the issue of character, Crighton was certain that for a market dominated by the retiree lifestyle sector, the proposed densities would result in building product which was difficult to sell and worked against affordability. The occupancy and sales rates of denser developments within Tea Gardens supported this concern.

At the time Roberts Day was approached by Crighton Properties to facilitate a resolution, it had become clear that the "pro-density versus no-growth" dichotomy was a false choice, and nobody wins. Amongst other issues, relations between Council, developer and community were disintergrating rapidly.

A BETTER WAY: SMART GROWTH

Roberts Day immediately proposed a third alternative: growth which would achieve the principles of Council's draft Housing Strategy and ensure neighbourhood density was locally calibrated to establish an appropriate character that is market responsive.

THE DESIGN FORUM PROCESS

The debate about growth in Tea Gardens, focusing on Riverside and Myall River Downs, had moved at last to a solution-orientated stage with the Design Forum process.

A three day Design Forum was held at the Hawke's Nest Golf Club between 1st - 3rd February 2006.

The Forum involved an open and participatory planning process involving the community, stakeholders, Council officers, technical specialists and a team of design professionals led by Roberts Day.

The Forum commenced with an opening presentation from Roberts Day. It established the validity of an approach to community design known as Traditional Neighbourhood Development as the framework for progressing ideas throughout the Forum.

An important component of this opening address, for both Council and community, was the presentation of two seminal projects, Ellenbrook (AUS) and Seaside (US), which have demonstrated the practical application of Counci's principles on the ground with an average net density of 16 dw/ha.

With this established, participants boarded a number of buses to tour the site and surrounding development. It was made clear throughout the course of this tour that neither the ill conceived higher density development occurring throughout Tea Gardens nor conventional suburban "McMansions" were desirable housing types for Riverside or Tea Gardens.

Across the next two days a variety of facilitated sessions addressing the environment / landscape, water management engineering, housing diversity and recreation / open space were undertaken. The outcomes of these sessions have been documented under separate cover by Matthew Crozier.

THE COMMUNITY VISION

A special evening session was held for the community to express their ideas. There were many recurring themes that threaded throughout the particpants' comments. Using the words of the community, themes included:

[Verandahs]; [Walkability]; [People]; [Series of neighbourhoods - not amorphous housing estate]; [Security]; [Design Guidelines - reflect character of existing town]; [To encourage interaction and foster community]; [Focal points that encourage people to meet]; [Certainity for the town - long term plan]; [Quality of streets - people want to walk down]; [Model for growth areas in the future]; [Sense of informality]; [A town for all seasons].

As a result of these themes, several overarching principles emerged to serve as goals for the evolving Master Plan:

1. Preserve the character of this iconic town;
2. Reinforce the unique community spirit - town of self helpers;
3. Protect and enhance natural assets.

TND PRINCIPLES

The fundamental difference between Traditional Neighbourhood Development (TND) and Conventional Suburban Development (CSD) is the accommodation of the vehicle. How the vehicle is treated determines most of the physical attributes of the communities we live in.

The *traditional neighbourhood* was the fundamental form of settlement on Australia through to the Second World War. The traditional neighbourhood - represented by mixed-use, pedestrian friendly communities of varied population - has proven to be a sustainable form of growth.

Suburban sprawl, now the standard Australian pattern of growth, ignores historical precedent and human experience. Designed around the vehicle, its low density consumes land at an alarmaing rate, produces significant traffic problems and excerbates social inequality.

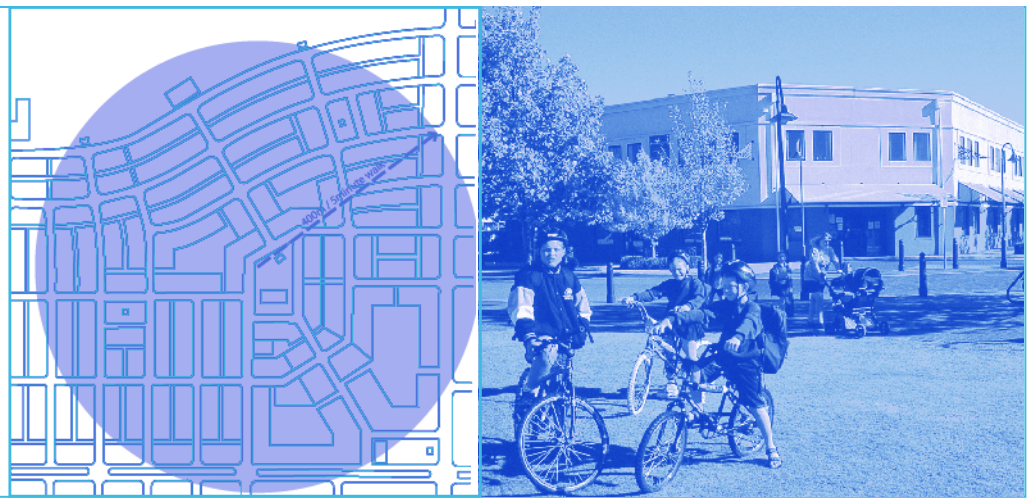
Councils, government agencies, developers and citizens are all faced with a choice: to continue to grow along the suburban sprawl model, or to reintroduce the principles and techniques of traditional neighbourhood development.

With great foresight, both Great Lakes Council through the Draft Housing Strategy and Crighton Properties, proposed in the lead-up to the Forum that TND shall form the basis of the design approach for Riverside and Myall River Downs. This approach was endorsed by the community at the opening presentation.

These time tested principles of urban design are outlined opposite and establish an agreed approach for the design of the Master Plan for Riverside and Myall River Downs.

WALKABLE NEIGHBOURHOODS

The neighbourhood is limited in size so that the majority of the population is within a 5-minute walk of its centre (400m). The needs of daily life are theoretically available within this area. This centre provides an excellent location for a public transport stop and mix of uses. By bringing the activities of daily life into walking distance, all people gain independence of movement, particularly the young and elderly.



CONNECTED NETWORK

Thoroughfares are laid out in a network so there are alternate routes to most destinations. This permits most streets to be smaller with slower traffic, as well as having parking, trees, footpaths and buildings. They are designed for both pedestrians and vehicles. People feel comfortable walking and are able to get to know each other and to watch over their collective security.

MIX OF BUILDINGS & USES

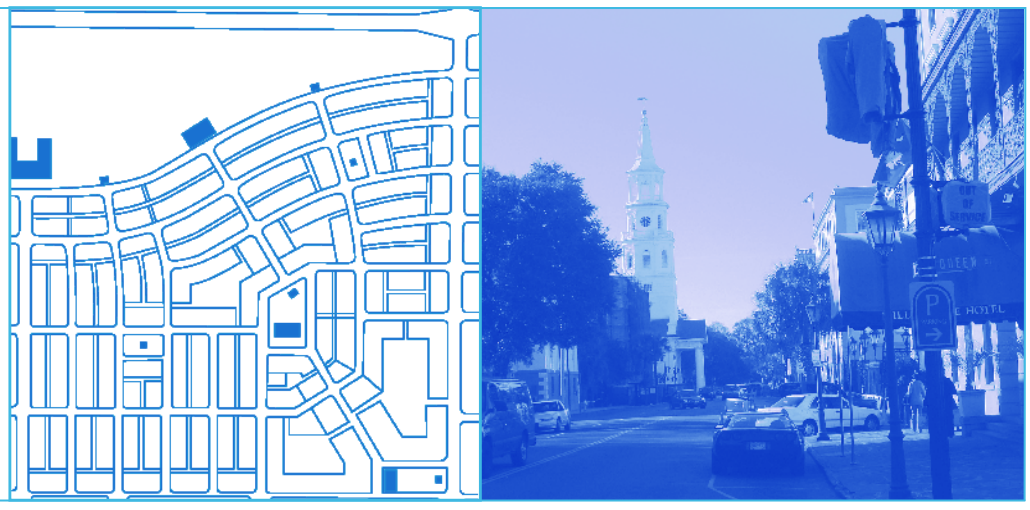
There is a mixture of houses (large and small), outbuildings, small apartment buildings, terraces, live/works, courtyard houses, mixed use buildings, offices and warehouses. These buildings are diverse in function but compatible in size and disposition on their lots. By providing a full range of housing types and work places, age and economic classes are integrated and the bonds of an authentic community are formed.

QUALITY OPEN SPACE

Open space is provided in the form of specialised plazas, squares, greens, playgrounds, parks and greenways. Each type is defined by its size; the landscaping used, if any; and the way the space is surrounded. Open space to be truly public should be overlooked by buildings and fronted by thoroughfares. To be fully functional, it should straddle pedestrian trajectories or be adjacent to meaningful destinations.

CIVIC BUILDINGS

Civic buildings, such as schools, meeting halls, theaters, churches, clubs, museums etc.) are located within open spaces or at the termination of important vistas. By being built at important locations these structures function as important landmarks. Such structures promote democratic inititives and the balanced evolution of society is facilitated.



TEA GARDENS

RIVERSIDE

THE RIVERSIDE AND MYALL RIVER DOWNS MASTER PLAN

INTRODUCTION

The 350 hectare Crighton owned property is split down the middle by Myall Street which is the major entry to the township of Tea Gardens. In its current state it does not provide a memorable arrival experience.

Within and adjacent to the property, there is spectacular frontage to Myall River, the adjacency of Kore Kore Creek, wetlands and natural habitat. The land is generally flat, but views towards coastal headlands, particularly Yacaaba Head, provide visual interest. The proximity of the shopping centre is an additional amenity. The existing quarry and adjoining lands, which could continue to be mined as-of-right, provide the opportunity to create something truly special.

THE CHALLENGE

The creation of a Master Plan which responds to the unique features and opportunities of the site, the principles of Council's Draft Housing Strategy and community's concerns for coastal character estabilised a bold challenge.

The practice of Roberts Day, Australia's leading town planners and urban designers in traditional neighourhood development, set out to respond to this challenge.

THE MASTER PLAN

The proposed Master Plan for Riverside and Myall River Downs represents the realisation of this challenge. The plan is structured on three main elements: Nature Preserve, Neighbourhoods and Corridors.

The Nature Preserve includes all areas which will remain as open space permanently, and includes legislated habitat and wetlands.

The Neighbourhood is the building block of the human habitat. The plan incorporates three complete neighbourhoods - villages freestanding in the countryside - and two smaller hamlets. All are limited in size for walkability with clearly defined centres and edges. Each is mixed-use and multifunctional, providing a range of building types which includes home business.

Each village and hamlet will have a minimum net density of 16dwellings per hectare. There will be a variety of dwelling types provided, ranging from terraces and duplexes to larger rural homes on stewardship lots. At this density, both the coastal character of Tea Gardens and principles of Counci's draft Housing Strategy will be realised.

The Corridors are the linear open space systems which weave between the villages and hamlets and interconnect the Nature Preserve.

Throughout Riverside and Myall River Downs these corridors have been sculptured into beautiful linear parks with open swales, ponds and water bodies to effectively manage water.

A comprehensive system of pedestrian, cycle paths and trails will weave throughout these three main elements.

MYALL BOULEVARD

In assessing how the Master Plan could contribute to the existing township of Tea Gardens, the design team immediately recognised the potential of the project to create a memorabe arrival experience to Tea Gardens.

In its current configuration Myall Street is dysfunctional. It is unpleasant and dangerous for pedestrians. Its failure as a unifying element of the township is perhaps best recognised by the fact that it is known locally under three different names.

The Master Plan proposes the reconfiguration of Myall Street into a boulevard. It will allow pedestrians to cross safely, and traffic to move more slowly than it does today. The proposal offers a traffic calming solution that is beautiful, distinctive and effective. At the same time it preserves the thoroughfare's traffic capacity.

The reconfiguration proposes one-way parrallel service roads to be built on both sides allowing local traffic to access Riverside and Myall River Downs and minimise interference with through traffic. A central median will also be added. Closely spaced canopy trees will line the median, service roads and pedestrain /cycle paths. The trees combined with distinctive butteries at the northern edge of the township, will herald arrival and further calm traffic. The reconfiguration will dramatically improve the pedestian and cycle paths into the township, and provide a safe crossing environment. It will provide the impetus for future public works closer to the town itself.

Through the proposed treatment, form and function come together. The design balances community walkability goals and helps to create a dignified entry to Tea Gardens.

TWO SIDES, EAST AND WEST OF MYALL BOULEVARD

Sketch of Myall River Hamlet

Whilst structured on three elements, there are a variety of features on the east side of Myall Boulevard that do not exist on the west side, and vice versa. People will want to visit both sides.

Recognising this desire, the plan provides a natural arc - a series of beautiful tree lined avenues, park edge drives, waterside parklands and pedestrian trails - connecting Myall River in the east to Kore Kore Creek in the west.

The east side of Myall Boulevard hosts the shopping centre, which has the potential to evolve into a pedestrian friendly town centre. It is a significant attractor.

This side also has the only accessible river frontage - the Myall River. It is a rare and sought after amenity, particularly due to the fact that its shoreline is suitable for moorings. It provides one of the last major opportunities for people to be able to actively engage the River. Moorings focused around a small inlet and water square provide this opportunity.

The west side of Myall Boulevard provides for a more intense experience of nature. Beyond the existing dirt road which is the determined line identifying areas of greater environmental sensitivity further west, the plan responds to nature. A crushed gravel road and pedestrian paths weave between trees and open spaces providing links to boardwalks and trails. Tree houses sit lightly on the landscape. The quarry itself has become a feature of environmental design, shaped into a remediating wetland / lake which provides a focus for eco-orientated activities .

While the two side of Myall Boulevard celebrate different features, the fact that each is designed according to the principles of TND ensures a connected community.

Early concept design for the central greenway of the Eastern Neighbourhood The design has been refined to provide a wider median with drainage by open swales.

RIVERSIDE EAST OF MYALL BOULEVARD

EASTERN NEIGHBOURHOOD

The tree lined avenues of the eastern neighbourhood converge at one of the principle gathering places - the central greenway.

Commencing at the site's northern edge as a triangular park, it becomes an elegant linear greenway before terminating at a lakeside park. The axis of the park is aligned to two features.

At the scale of the neighbourhood it terminates upon a community hall which is piled directly into the water and provides a place for social events.

At the scale of the region it terminates upon the highpoint of Yacaaba Head, creating a physical and psychological connection to the the ocean.

The lakeside park, with its continuous public foreshore promenade, connects back to the existing shopping centre and community of Myall Lakes to ensure everybody is able to benefit from this wonderful amenity.

At the eastern most crossing of the proposed bridge connection to Myall Lakes, a group of live / work building types are clustered around a green. It also includes a neighbourhood work centre. The precinct will serve as a model for home business and its applicability to the retiree lifestyle sector.

MYALL RIVER HAMLET

Protected from south-easterly winds by the ridgeline to the west, the Myall River Hamlet includes large woodland lots able to retain existing trees amongst rustic lodges.

A focus for the lodges will be a small navigatable inlet providing boat moorings. As part of this assemblage, an informal "camp meeting place" will exist. Including a meeting hall, it can serve as a conference centre for corporate events, venue for private functions, such as weddings and be available for a range of other activities. The inlet will not simply be a parking space for boats. Rather it will be an aesthetic amenity designed as a space with "Mediterranean Moorings" promoting social interaction.

The Eastern Neighborhood and Myall River Hamlet.

RIVERSIDE WEST OF MYALL BOULEVARD

WESTERN NEIGHBOURHOOD

West of Myall boulevard, narrower building types front tree lined avenue converging on a central civic square, creating a civic outdoor room at the centre of a consolidated urban neighbourhood. Directly opposite the square the neighbourhood has capacity to support a corner store providing daily necessities within a five minute walk of all neighbourhood residents.

The neighbourhood is divided into four quadrants divided by tree lined avenues and streets providing gently curving vistas and views to civic structures and out into the linear open space network and nature.

In each quadrant there is a graduation of building types with larger residential form at the core encompassing a central green or playground.

NORTHERN HAMLET

The northern hamlet is linked to the western neighbourhood via a tree lined avenue with a linear central green.
The hamlet is bound to the south by a linear open space network and to the north by Kore Kore Creek and the sourouding bush land. The hamlet shares similar attributes to the central neigwwhbourhood with streets providing views out into nature.

Typical neighbourhood streetscape with gently curving road and single storey houses.

Typical neighbourhood streetscape with gently curving road and two storey houses.

The Western Neighbourhood, Northern Hamlet and Eco-Quarter.

Sketch of the conference centre overlooking the quarry which has been transformed into a large lake and wetland surrounded by public parklands.

THE ECO-QUARTER

Crighton Properties was faced with a choice for their land holdings west of the existing dirt road, which includes the quarry, for Myall River Downs.

Either continue sand mining activites as-of-right which permits the clearing of all trees and excavation of top soils, or seek an outcome that is better for the community and environment, but still makes financial sense. The proposed Eco-Quarter achieves the later.

Rather than clearing all trees, they are retained where ever possible and enhanced with additional plantings. A dense thicket will be planted along the eastern edge of the quarter to screen views and enhance its rural character.

A single, gently curving rural road provides the only vehicle access into the quarter. Since most residents of the quarter will use their cars rarely, the Plan introduces a series of informal parking courts that are not visible from the street or parklands. The presence of the rear courts permits every house to front a green connected by paths and boardwalks into the nature preserve.

The houses will have small footprints to minimse impact on the ground, and permit the common landscaping of a xeriscape and native species.

All pedestrian paths and the rural road converge upon the sand quarry. It has been sculptured into a large lake with informal parklands around its edges. It is a public amenity available to all in the community.

Engaging the southern edge of the lake is the village. Laid out creating picturesque streets, plazas and squares, the village will be able to capitalise upon the environmental amenities. Two to three storeies in height, it will include conference and educational facilities, short term accommodation, studios, space for small shops and a variety of other uses including residential.

The village and lake it engages will become a famous gathering place of unique beauty for the Great Lakes Region.

Residents and visitors will be able to enjoy a model for sustainable development demonstrating the integration of the natural and human habitats.

Existing Conditions.

Future Character.

DESIGN PRINCIPLES

VIEW SHEDS

Responding to unique features, both internal and external to the site, establishes a Master Plan which celebrates its context and is inexplicity linked to the landscape.

Approaching the existing township of Tea Gardens from the north, as Myall Street drops over the ridge a spectacular view towards Yacaaba Head is established. It provides not only a physical view to the headland, but a psycological connection to the South Pacific Ocean.

For the pedestrian hiking along the trails at the edge of town, this view is also prevelant from the public lookout at Elourera Park.

The Master Plan responds to this viewshed. A wide linear green has been provided along the view axis from public lookout to headland. Tree planting and a network of water bodies along the green will enhance this view-shed.

Secondary north-south streets within this neighbourhood have also been aligned along this axis with smaller neighbourhood parks to create layered vistas comprising park, house and headland. It will be a constant prescence throughout the estern neighbourhood.

Throughout the remainder of this and the other neighbourhoods, thoroughfares have been orientated perpendicular to the open space corridors, creating gently curving views out to nature from within the neighbourhood quadrants.

View Sheds

PEDESTRIAN SHEDS

The measure of the "pedestrian shed" is the fundamental increment for the design of hamlets, villages, neighbourhoods and towns.

The standard pedestrian shed corresponds to a five-minute walk for the average person, which approximates a 400m radius from the neighbourhood centre. A larger pedestrian shed averages a radius of 800m, the distance of a ten-minute walk at a leisurely pace. It is typically the maximum threshold of walking to major destinations, such as a town centre, people will walk rather than drive. A smaller pedestrain shed which corresponds to a two-and-a-half minute walk (200m radius) provides a good measure for hamlets permenately constrained by nature.

The diagram opposite shows the pedestrian shed areas for Riverside and Myall River Downs. Each side of Myall Boulevard contains two five - minute pedestrian sheds and two two-and-a-half minute pedestrian sheds. The Eco-Quarter includes a longer, elongated pedestrian shed due to the variety of activities around the quarry which will attract people. Each pedestrian shed has a centre for community gathering.

The large, pedestrian shed demostrates the catchment of people within walking distance of the shopping centre and its facilities.

Pedestrian Sheds

THOROUGHFARE NETWORK

The reason conventional suburban development handles traffic so poorly is that so few streets actually provide multiple routes to destintations. The consequence is traffic congestion.

Conventional suburban development also typically results in a disorientating subdivision due to streets that dramatically curve in multiple directions.

As the diagram opposite illustrates, the proposed Master Plan rememedies both.

For each neighbourhood, streets are organised into a comprehensible network that manifests the structure of the neighbourhood. The largest streets pass through the centre, generally dividing the neighbourhoods into four quadrants. These quadrants generally contain smaller streets carrying less through traffic. The network structure of the neighbourhood, while emphasising the centre, provides multiple paths to and from any destination, so that traffic back-ups are limited.

The thoroughfare network designed integrates both capacity and character. It is designed as an environment equitable for the pedestrian, cyclist and driver. Accordingly, vehicle lanes, curb radii and assemblage of the public streetscape are designed to keep vehicle speeds low and encourage walking.

Also in contrast to conventional subdivision, note the placement of drives to create a public frontage along green corridors.

Thoroughfare Network

Public Transport

PUBLIC TRANSPORT

Regardless of the immediate viability of a public bus system, the Master Plan has been designed as "transport-ready".

As the diagram opposite illustrates, the neighbourhood structure naturally supports the provision of a public bus service across the project. It is a direct and logical route.

Stops are naturally located at the neighbourhood centres. Ideally, these stops will be located next to a corner store / cafe where it will be possible to wait for the bus in a dry and dignified setting. The potential to read the newspaper with coffee in hand is a markedly different proposition to conventional bus stops which are randomly located on the side of the road within a graffiti covered plastic bubble.

The diagram also clearly illustrates the built-in catchments for pedestrians to support public transport when design occurs according to the Neighbourhood Unit.

As the development is built-out and the local population reaches a critical mass, a public bus system will become viable.

Open Space & Civic Sites

OPEN SPACES AND CIVIC SITES

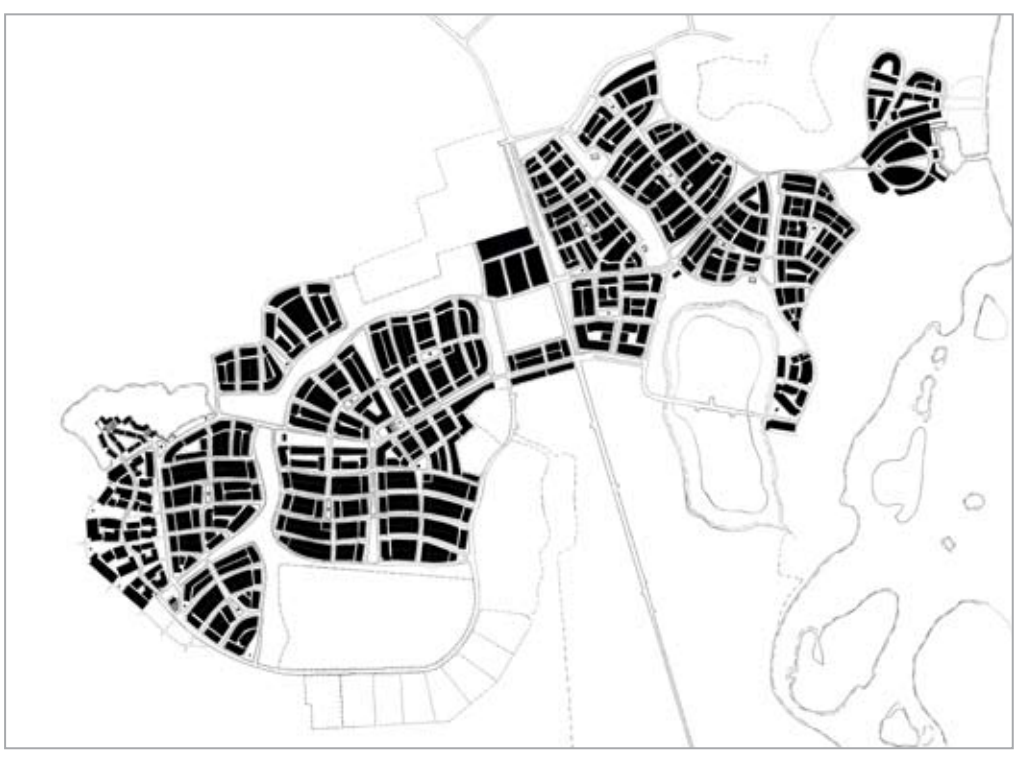
The diagram opposite illustrates the logic and continuity of the open space system. Green corridors between neighbourhoods create a connected system for humans and animals, and to manage water run-off. This system connects to the nature preserve around the perimeter of the site.

Within each neighbourhood, a variety of time tested open space typologies are provided including attached plazas, squares, greens and pocket parks. Each has been sized and located to function properly based on the needs of people and the urban-to-rural transect. For example, the central neighbourhood squares are bound by the enfronting buildings and then public frontage. It creates outdoor rooms which people feel comfortable to use.

Within this open space system, each village and hamlet is equipped with a variety of civic reservations to foster social interaction and community identity. Over time, and dependent upon the demands of the future community, a meeting hall should be provided in the central square of each neighbourhood.

Other civic reservations need not be as grand to instil a sense of "civic awareness" for the future community. For example, folly structures have been located in open spaces to terminate views.

The build-out of the project will take many years. It is important that these civic reservations are set aside at the inception of the project.



Private Blocks

PRIVATE BLOCKS

The block is the middle scale of design, affecting both the thoroughfare network and building type. As the diagram opposite illustrates, the master plan provides three basic block types.

Towards the centre of each neighbourhood, larger, square blocks capable of accommodating the additional parking which may be generated by a mix of uses over time are provided.

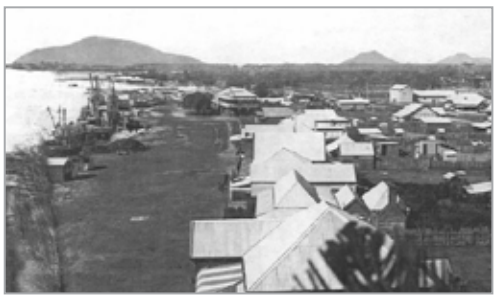
Beyond the square block, the majority of blocks within each neighbourhood are elongated and rectangular. It provides two distinct building frontage types. With the end grain or short side assigned to the major avenues and drives, the majority of buildings are able to front onto the quieter side of the long block. This block type is also able to gently curve, creating pleasant streetscapes.

The final block type provided is the irregular organic block. It is predominately located along the edge of the Eco-Quarter as a transition into nature creating a picturesque rural setting.

The overall orientation of blocks responds to the view sheds established by Yaacaba Head and the nature corridors. This pattern of two block lengths with nature at both ends has been modelled upon historic precedent within Tea Gardens and Hawke's Nest.

ESSENTIAL ELEMENTS OF TEA GARDENS COASTAL ARCHITECTURE:

1 Simple, straightforward volumes with front wings and verandahs added to make more complex shapes.
2 Deep, usable posted front verandahs with regular arrangement of columns and openings.
3. Simple eave lines accommodate gabled roof forms.
4. Single driveway to a garage set far back on the lot.
5. Buildings raised off ground on a plinth.
6. Limited use of materials with lighter materials above heavier and joined horizontally.



RECONNECTING TO A COASTAL ARCHITECTUREAL TRADITION

Prior to the Second World War there existed a vernacular architecture tradition in Tea Gardens and Hawke's Bay. A tradition which has left behind the most valued and cherised buildings of the two townships.

Simple cottages with deep verandahs and eaves, constructed from a mix of weatherboard and masonry, which address the street with windows and doors and locate the garage towards the rear of the block.

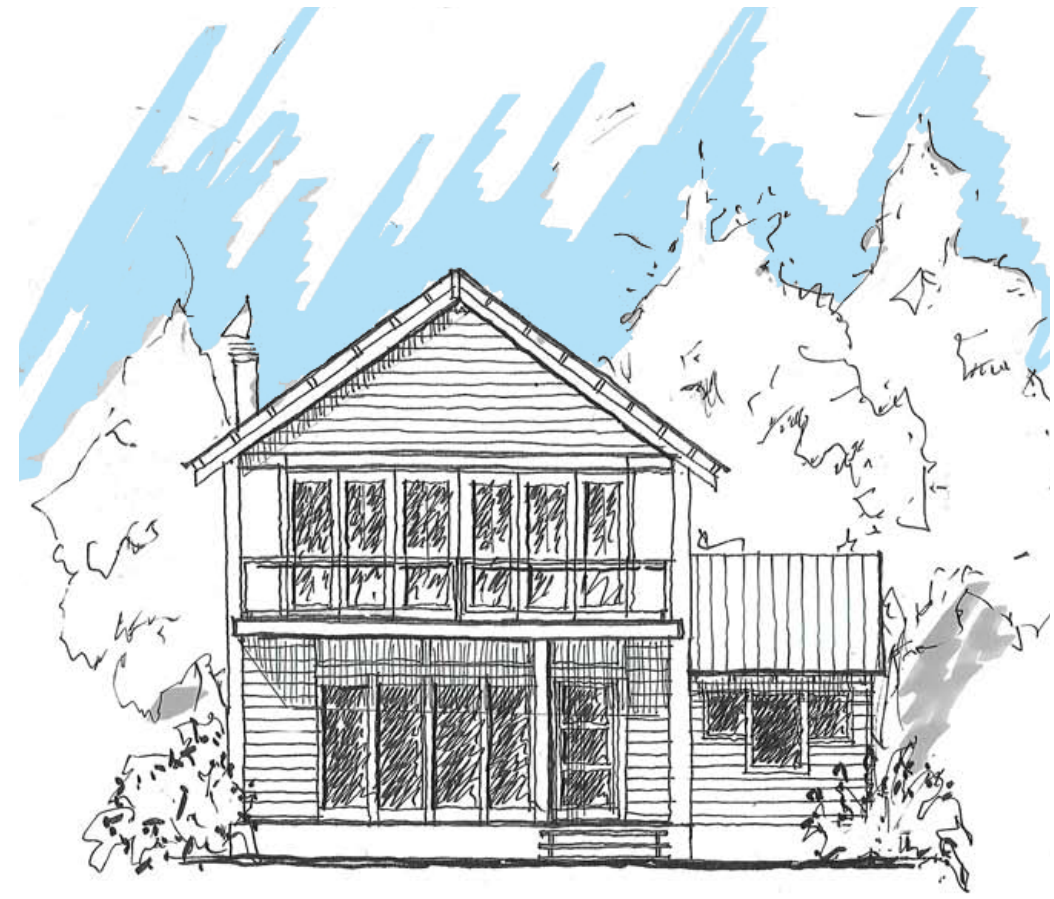
Buildings which when assembled side-by-side within a landscape setting create the relaxed streetscapes people associate with the coastal character of Tea Gardens and Hawke's Nest.

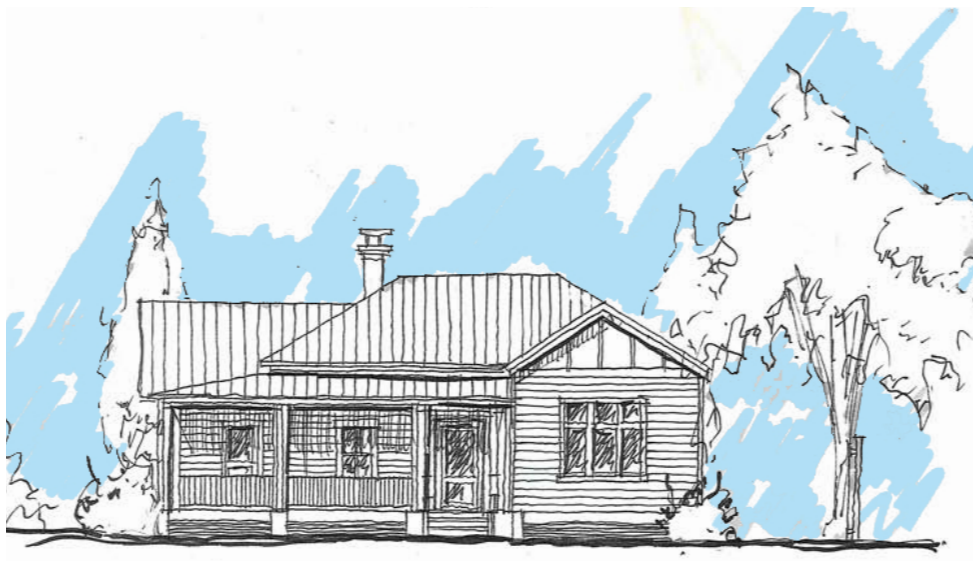
With the advent of prefabricated brick and tile suburban housing, and the uniform streetscapes brought with it, this tradition is at a risk of being lost. It does not have to be this way.

Locals referred the design team to the best examples of local architecture during the Forum. Collectively, these examples establish the genetic material for reconnecting to the coastal architecture of Tea Gardens and Hawke's Nest.

It will establish an evolving vernacular architecture for Tea Gardens and Hawke's Nest. It will not be rigid or historicist, but rather incoporate the practical knowledge of building innovation and climatic response. It will ensure buildings respond appropriately along the urban-to rural transect across the site.

Over the coming decade it will provide the many builders and architects who will participate in the delivery of the vision to evolve a tradition which ceased during the Second World War. Through this approach and the passing of time, a style known fondly by residents and visitors as "Tea Gardens" architeture will emerge.





Elevation sketches prepared during the Design Forum.

RIVERSIDE

DELIVERING TRADITIONAL NEIGHBOURHOODS

THE RIVERSIDE TRANSECT PLAN

The Transect Plan for Riverside and Myall River Downs is transect based. It precisley locates five T-Zone categories - Nature Preserve, Rural Reserve, Sub-Urban, Urban General, Urban Centre - and a District across the site. It also identifies Civic Reservations.

The T-Zone categories co-ordinate the assembleage of the public streetscape and thoroughfares, private frontage and building type, and land use to create "immersive environments" with internally consistent characters.

The T-Zones have been locally calibrated to build upon the best local precedent and the community vision for "neighbourhoods with quite inner quarters".

The resulting allocation of T-Zones across the neighbourhoods establishes a pattern unique to Tea Gardens. Rather than the transect zones occurring as a series of concentric circles as is often typical, it establishes urban avenues and drives of a more urban character defining the neighbourhood quadrants, with a more rural village character within the quadrants.

The T-Zones identified by the Regulating Plan for Riverside and Myall River Downs are:

The Transect Plan for Riverside and Myall River Downs will regulate development to achieve the vision

The first zone, designated Nature Preserve (T1), is the most pristine natural condition in which human intervention is orientated toward ecological stewardship rather than to accommodating human uses. It includes legislated wetlands and squirrel glider habitat. Human use is restricted, with access provided by strategic trails and paths to protect nature.

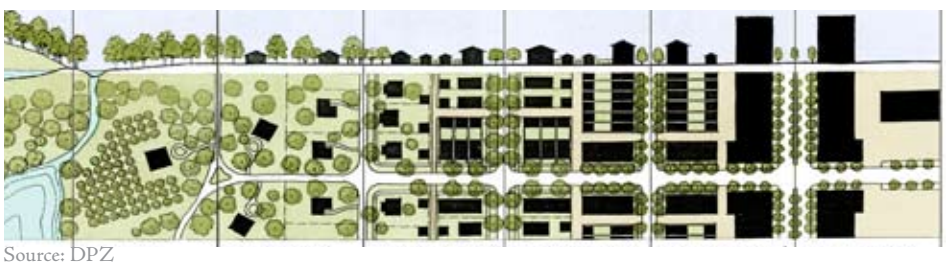
The second zone is designated Rural (T2) which allows human habitation, but the character is rural and requirements of nature dominate over humans. Trees are retained and replanted, xeriscape landscape established, and drainage by open percolation in swales.

The third zone is Sub-Urban (T3). It will be similar in character to many of the historic residential streetscapes within Tea Gardens and Hawke's Nest. Houses are set well back from the street with natuarilstic planting. Roads drain by swales.

The fourth zone, designated General Urban (T4) is more urban in character. Residential building types include duplexes and terraces. Streets drain by curb and footpaths exist. Trees are planted both formally and naturally.

The final zone, designated Urban Centre (T5) approximates "main street." and is mixed uses.

WHAT IS THE TRANSECT?



Source: DPZ

A transect is a cross-section across a geographic region which reveals a variety of habitats. In the natural environment for example, a transect includes beach to dune system, dune system to valley plain, valley plain to mountain. Environmentalists take samples along this transect, systematically analysing the characteristic of each zone to determine the elements necessary to create an authentic and viable habitat.

When this technique is extrapolated into the human environment, it provides a framework to identify a set of habitats that vary by their level and intensity of urban character along an urban-to-rural transect. In transect based design, this range of environments is the basis for organising the components of the built form: public streetscape, building type and private frontage and land use to create an "immersive environment". Environments which have a strong, internally consistent and authentic sense of place.

This approach, when applied with the principles of traditional neighbourhood design (TND), provides the opportunity for a variety of lifestyle choices within a neighbourhood. For people it provides for social inclusion and diversity - an interesting place to live. For developers the opportunity to access multiple market segments on the same infrastructure, resulting in faster product absorption.

Extended into the human environment, the transect can be divided into six locally-calibrated context zones distrubted from Nature to Rural, Sub-Urban, General Urban, Urban Centre and Urban Core. It is easily administered.

The key task is to find the main qualities of the context zones. Once discovered, urban and rural elements can be allocated correctly. It is the role of allocation rather than prohibition which establishes the proper balance between natural and human environments, resulting in higher quality places at every point along the spectrum.

TRANSECT ZONE CHARACTER SUMMARY

TRANSECT ZONE T5 URBAN CENTRE

CHARACTER

Consists of higher density mixed use building types that accommodate retail, offices, rowhouses and apartments. It has a tight network of streets, with wide footpaths, steady street tree planting and buildings set close to frontages. Its character emulates the traditional Australian "main street". The most intense allocation of T5 is around the existing shopping centre and quarry. Each neighbourhood is also equipped to support a corner store.

TRANSECT ZONE T4 GENERAL URBAN

CHARACTER

Consists of a mixed use but primarily residential urban fabric. It has a wide range of building types: single, sideyard and terraces Setbacks and landscaping are variable. Streets define medium-sized blocks. For River Side and Myall River Downs it is predominately located at the edge of the neighbourhood quadrants to establish a more urban character fronting the avenues and drives.

TRANSECT ZONE T3 SUB-URBAN

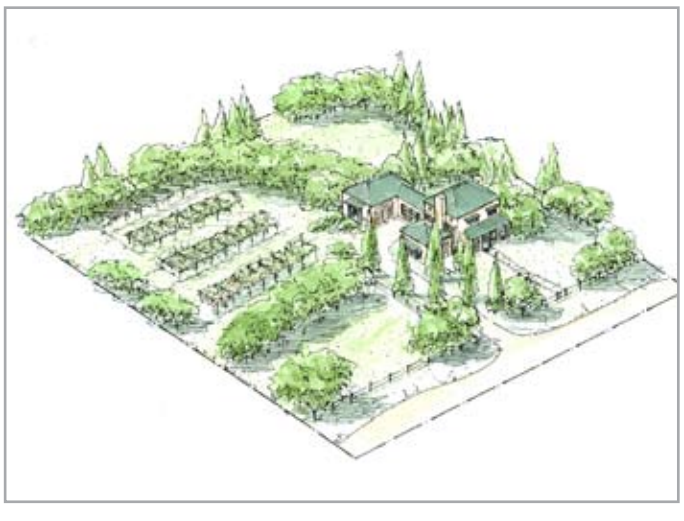
CHARACTER

Consists of low density suburban residential areas, differing by allowing home occupations. Planning is naturalistic and setbacks relatively deep. Blocks may be large and the roads irregular to accommodate natural features. It differs to conventional suburban development by its superior connectivity. For Riverside and Myall River Downs it is predominately locatedwith the neighbourhood quadrants to create a "village" like residential fabric.

TRANSECT ZONE T2 RURAL LIVING

CHARACTER

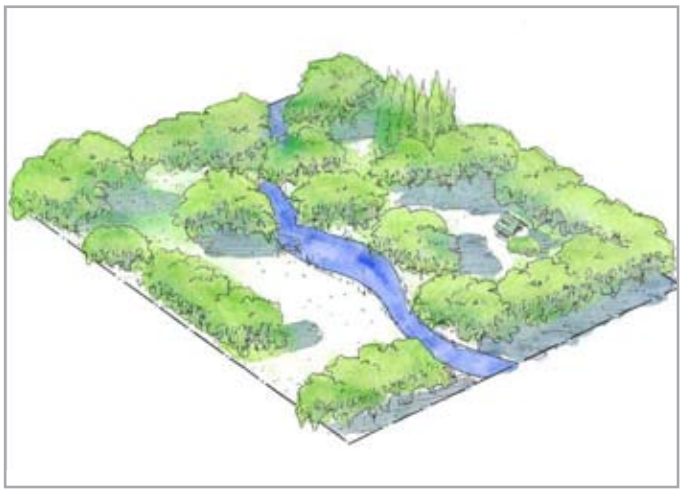
Consists of large manor homes, eco-houses and stewardship lots set within a lnaturalistic landscape setting. Preservation efforts are married with human habitation. For Riverside and Myall River Downs it is located to provide an appropriate transition to the nature preserve.



TRANSECT ZONE T1 NATURE PRESERVE

CHARACTER

Consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation or habitant values.



Thoroughfare Plan identifying the thoroughfare types for Riverside and Myall River Downs

RIVERSIDE THOROUGHFARE STANDARDS

Thoroughfares form a major part of the open space system for Riverside and Myall River Downs. A thoroughfare is endowed with two attributes: Character and Capacity.

Character is the suitability of a thoroughfare as a setting for pedestrian activities and as a location for a variety of building types. Character is physically manifested by the associated frontage types as determined by the location within the Transect. As a shared setting for most buildings, thoroughfares provide the opportunity for community interaction. As such, they must be carefully designed for pedestrian use. The streetscape is the publicly held layer between the lot line and the edge of the vehicle lanes and consists of the curb, the footpath, planters, street trees, and streetlights and furniture.

Capacity is the number of vehicles that can move safely through a segment of a thoroughfare within a given time period. It is physically manifested by the number of lanes and their width, by the centreline radius, the curb radius, and the superelevation of the pavement. The capacity of vehicular circulation of a system is determined by the combination of moving and parking lanes within thoroughfares. Because Riverside and Myall River Downs is designed to encourage pedestrian use, the velocity of traffic movement is carefully controlled through the use of narrower lane widths, shorter intersection spacing, smaller curb radii, and on-street parking. This is the only true way to calm traffic, as posted speed limits and/or retrofits such as speed bumps and chicanes signify a failure to correctly dewsign the thoroughfare in the first place.

The design studied local models to assist in determining the thoroughfare types.

The plan above identifies the proposed thoroughfare types. Specific standards for each type will be resolved at detail design.

Rear lanes and alleys (red) for Riverside and Myall River Downs.