



THE LAKES

PYES PA WEST, TAURANGA

LANDSCAPE MASTER PLAN REPORT

Issue E – 12th September 2005

This report has been prepared by EDAW JASMAX on behalf of Grasshopper Properties Ltd for The Lakes project in Tauranga.

The purpose of this report is to identify the preferred urban form and landscape master plan vision for implementation incrementally over time. In completing this report EDAW JASMAX acknowledge the approved Tauranga District Plan– Urban Growth Areas Structure Plan Pyes Pa – West which identifies the planned future landuse for the project.

The report is designed as a master plan document for guiding future works on the project. It is noted that future site planning will be impacted by as yet unresolved future road and land use planning adjoining the site. As these issues develop, it is understood that the master plan will need to be reviewed in order to respond appropriately.

This report has been completed concurrently with detailed land planning services by Harrison and Greason, and should be read in conjunction with submissions from these services. EDAW JASMAX have initiated architectural design guidelines for The Lakes which will facilitate distinctive and varied architectural housing forms. These guidelines will assist in delivering individually built homes to respond to a range of design issues including implementation of the project vision, response to local climatic conditions, safety, surveillance and privacy.

The report is structured to identify this through ever increasing detail. The proposed design outcomes for the project as follows:

Urban Form – Reviews site context, local conditions, key opportunities and constraints and overarching urban form preferences and objectives.

Landscape Vision – Identifies the overarching design philosophy by which to lead all project design.

Streetscape Hierarchy – Reviews the range of streetscape sizes and forms

Open Space and Community Facilities – Explores the design possibilities for for community use areas.

Landscape Character Elements – Explores the application of the overarching landscape vision on the human scale elements in the public domain.

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- PLANTING CHARACTER



urban form



TAURANGA, NEW ZEALAND

The Lakes project is situated within the Tauranga City Council authority area. Tauranga is located on the east coast of the North Island of New Zealand, approximately 3 hrs travel by road 200km south east of Auckland.

The Lakes project area is located north west of Tauranga approximately 5km from the city centre. The project is accessible by an extensive network of local roads, and a high speed toll way providing direct access to Tauranga from the north west.

The site area is approximately 200ha in area, with a planned total residential yield of approx 2100 sections, at an average density of 15 sections per hectare.

The site development is guided principally by the Tauranga District Plan – Urban Growth Areas Structure Plan Pyes Pa – West dated 9th June 2005.

The site sits on the edge of the south western urban development area of Tauranga. This area appears to be increasingly popular for residential subdivision on the elevated flat plateaus. Recently completed housing projects to the south display a range of generic housing styles on sections in the order of 650 to 950m². Residual rural housing sections are becoming isolated as the number of residential subdivisions increase. Land immediately joining the north western boundary has been approved for light industrial and commercial land uses. These landuse represent a significant employment prospects for the future residents of The Lakes, while also presenting challenges for transport and scenic amenity.

To the north east the site adjoins the southern entry to the K Route Tollroad and K Stream linear open space corridor. This proximity allows rapid transit access by road to Tauranga, or active pedestrian connectivity along the expanding K Stream trail network.



SITE DIMENSIONS

The site is an elongated form with a length of 4 km and a width ranging between 300 and 700 m

TOPOGRAPHY

The site topography is one of its strongest defining features, with a clearly visible structure of valley floor, valley wall, ridgeline and plateau. The height differential from valley floor to plateau reaches more than 45m

Refer Diagram 1 Topography

ORIENTATION

The site orientation presents a significant proportion of the valley wall to the North West, with the South Western site area in the upper valley presenting Western and Southerly slopes.

EDGE CONDITIONS

The sites edges are highly variable to the south, abutting a diverse set of existing and planned future uses including rural, open space, future residential and schools.

The northern site edge is defined presently by rural undulating landscape. In the immediate future the northern half of the valley will become changed as its light industrial zoning is implemented. Within 10 to 15 years the northern edge will also be defined by the extension of Route K. In this 10 to 15 year period this corridor for the route extension may present significant opportunity for informal linear open space and recreation.

Refer Diagram 02 Edge Conditions

PROMINENT PHYSICAL FEATURES

The site appearance when viewed from the valley floor is highly changeable depending upon position. Typically, the site presents as a long open rural valley, defined clearly at higher elevations by ridgelines both within and outside the site boundaries. In addition, the site is characterised by two isolated hills located in the valley floor, only one of which is located within the site. Both are highly visible from within the site and represent significant topographic interest and, at least one of which also contributes cultural character elements.

Refer Diagram 03 Prominent Physical Features

GEOTECH / SOIL CONDITIONS

The site is characterised by:

- Highly workable volcanic ash that is ideal for residential sections in the valley walls, ridgelines and plateau.
- Deep peats in the valley floor and waterways generally unsuitable for traditional slab on ground construction and typically impractical to modify where its depth exceeds 1.5m. Excavated material from the peat is revealing numerous preserved logs and fragments of old growth forests, suspected to have been felled by previous catastrophic events.

HYDROLOGY

The site hydrology is pronounced through the valley floor where the Kopurererua Stream meanders, revealing the typically high water table of the project. The Kopurererua Stream originates in the high valley areas of the Lower Kaimais and is a key element for linking the site to its natural environmental systems and conditions.

VIEWS AND VISUAL ISSUES

The valley topography of the site naturally lends prominence to the enclosing ridgeline when viewed from the valley floor. Conversely, the ridgelines offer panoramic views across the valley and to outer lying areas, including Mt Maunganui, a cultural landmark, from the south western high plateau.

CONNECTIONS AND CONNECTIVITY

As a long meandering site, the opportunity exists to link the project into its adjoining urban context on a number of occasions, while also allowing for planned future connection to future adjoining development areas. The site staging and infrastructure conditions provide an impediment to fully integrating the site into its context prior to the completion of the Route K extension.

The planned future light industrial and retail / commercial projects to the northern valley wall adjoining the site represent a key destination for employment and shopping, and will be integral to the Live / Work / Play initiative for the project.

ARCHAEOLOGICAL / CULTURAL CONSIDERATIONS

Grasshopper has identified a site of cultural significance that has been set aside as reserve. The site is an isolated hill that contains evidence of middens from prior occupation by local Iwi. The full story of its significance is not fully clear at this stage.

Tauranga Iwi includes Ngati Ranginui, Ngai Te Rangi and Ngati Pukenga. Further research needs to be undertaken to determine which Iwi needs to be consulted, if at all, so that appropriate design responses can be proposed.

Low impact land uses and contextually driven solutions will be adopted that are sympathetic to the aspirations of local Iwi for the site. Additionally, naming of sites and opportunities for interpretation will be considered.

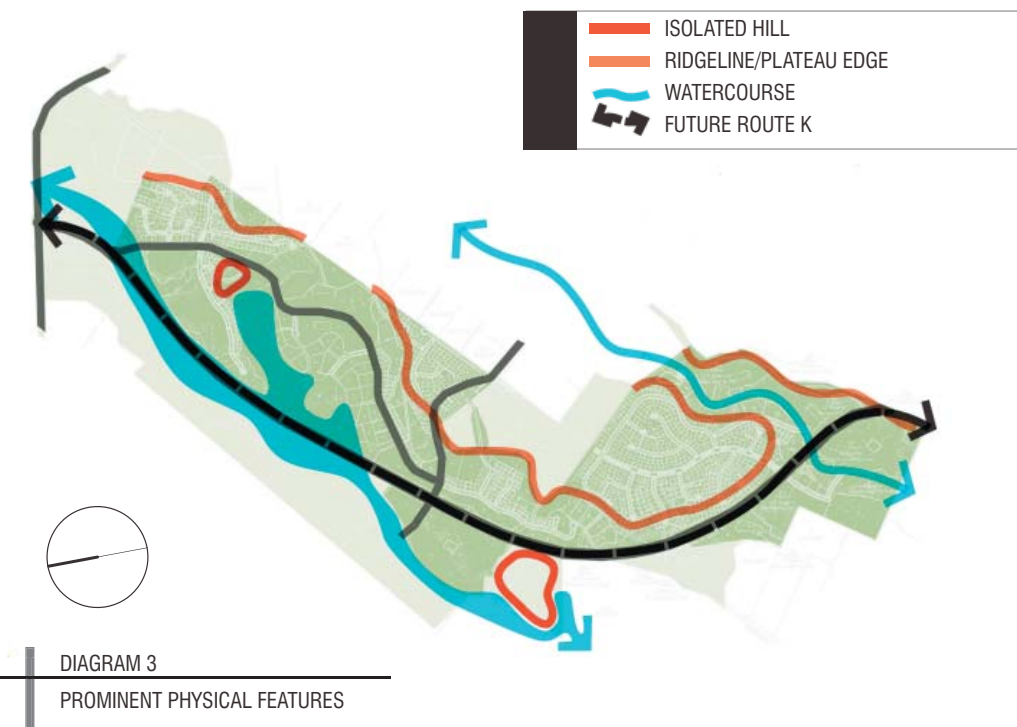
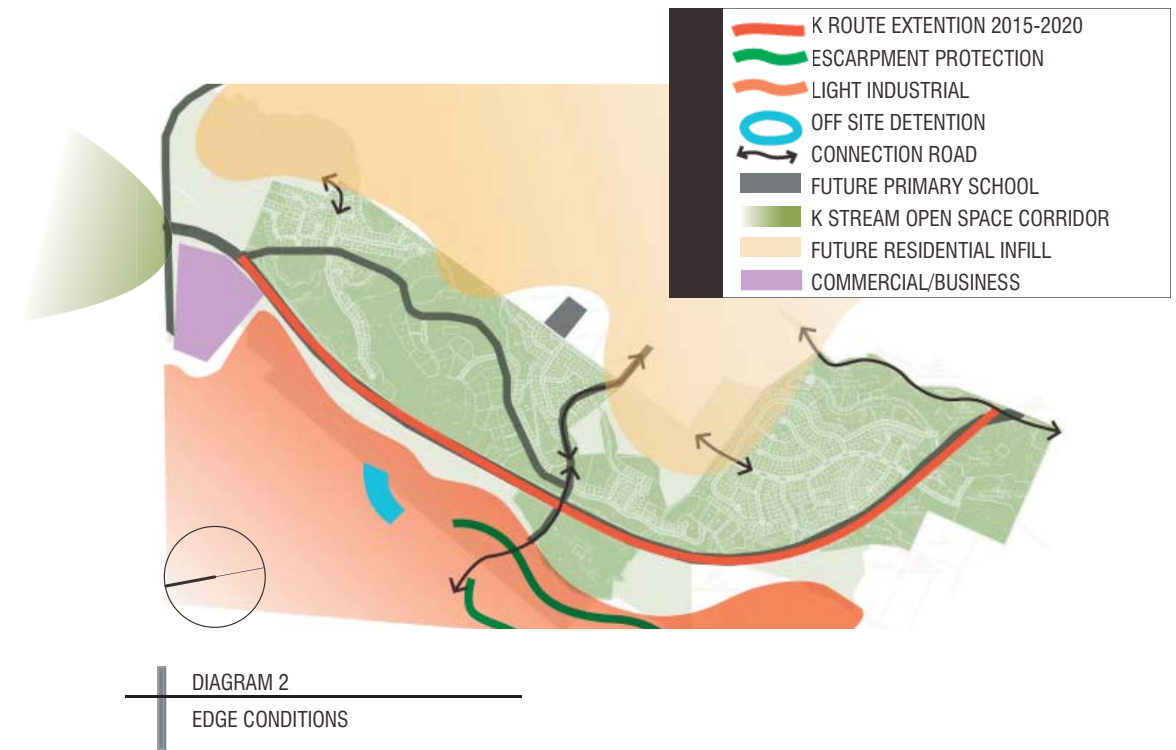
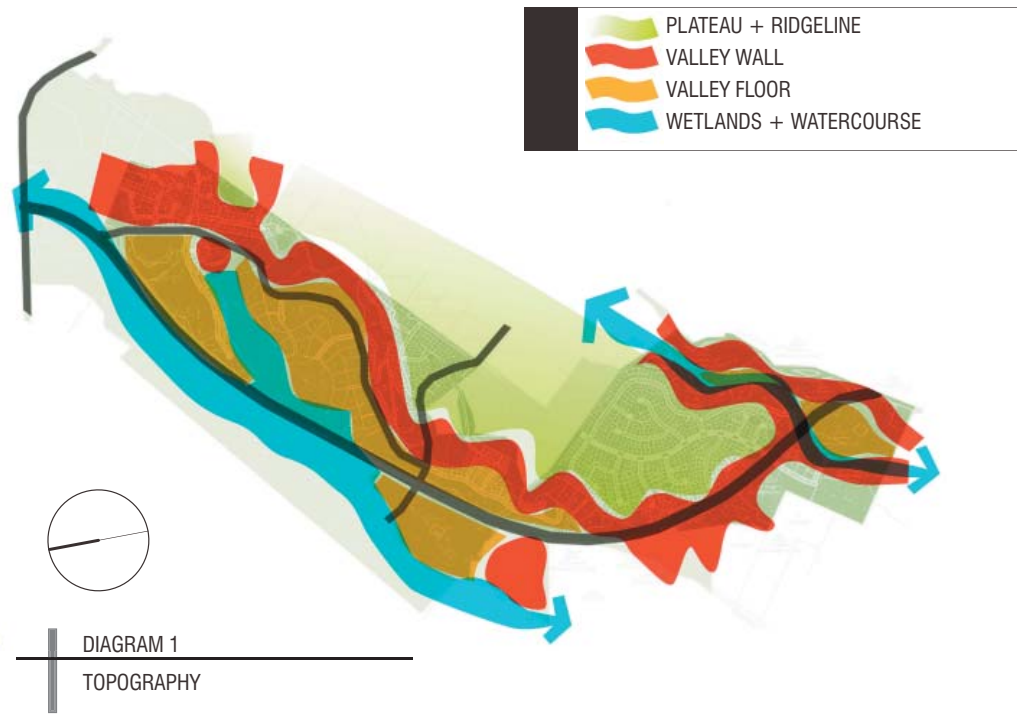
VEGETATION FRAMEWORK

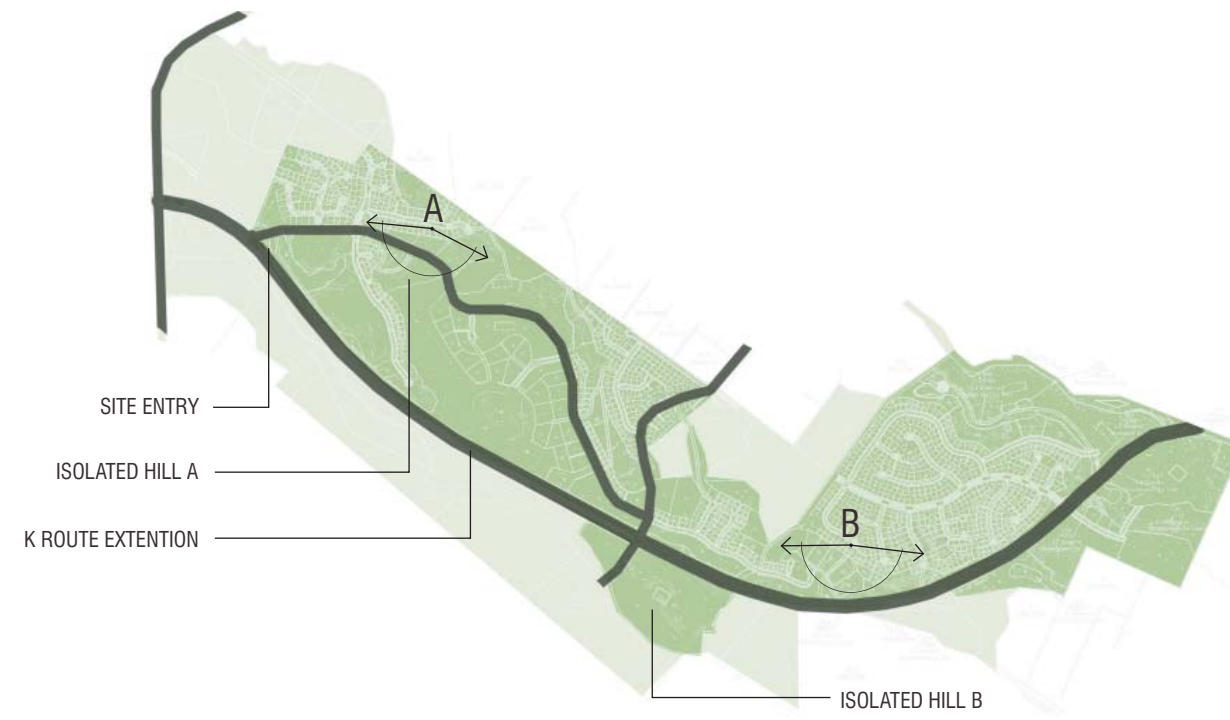
Grasshopper has indicated an interest in ensuring that landscape solutions are responsive to the character of the area and should provide a strong sense of place.

Several ecotypes have been identified that will form the basis for plant selection that is specific to the site. These are: elevated plateau, well drained ridgelines, slopes of varying aspect, valleys and gullies, low poorly drained peat-lands and wetlands.

Key charismatic plants from these lists will be identified and adopted to characterise the streetscapes and reserves.

Existing vegetation will be assessed for its value and possible contribution to the site.





The upper plateaus of the the site command panoramic views across the valley floor and beyond. Featuring prominently within the views are the dramatic topographic features of isolated grassed hills & wooded hillsides.



PANORAMA A - JUNE 2005



PANORAMA B - JUNE 2005



URBAN FORM DIAGRAM

URBAN FORM DIAGRAM

The purpose of the urban form diagram is to define those key elements of the Master Plan which are intended to be enduring. The key elements have been derived from the physical character of the site, together with selected urban design and town planning principles, so that together they provide a reliable basis for ongoing detailed land use planning and urban design. The key urban form elements include the interconnected transportation network, the land use pattern, the central community centre, the open space system and rehabilitated ridgeline.

The specific arrangement of these principles will be influenced over time by the detailed analysis of the site conditions and the influence of as yet unfinalised off site elements including major road network extensions and adjoining commercial and light industrial developments.

	RESIDENTIAL
	MULTIFUNCTIONAL VILLAGE CENTRE
	EDUCATIONAL FACILITY - PRIMARY SCHOOL
	RURAL RESIDENTIAL REHABILITATION
	VALLEY FLOOR PARKLAND
	NEIGHBOURHOOD PARK
	RESIDENTIAL USES ADJOINING SITE
	LIGHT INDUSTRIAL USES ADJOINING SITE
	COMMERCIAL USES ADJOINING SITE
	WATER COURSE - LAKE
	WATER COURSE - RIVER/CREEK
	ROUTE K ARTERIAL EXTENTION
	THE LAKES BOULEVARD MAJOR COLLECTOR
	MAJOR COLLECTOR
	RESIDENTIAL COLLECTOR
	EXISTING ROAD

Instrumental to the staged establishment of a quality urban environment for The Lakes is the consideration of the following key design objectives:

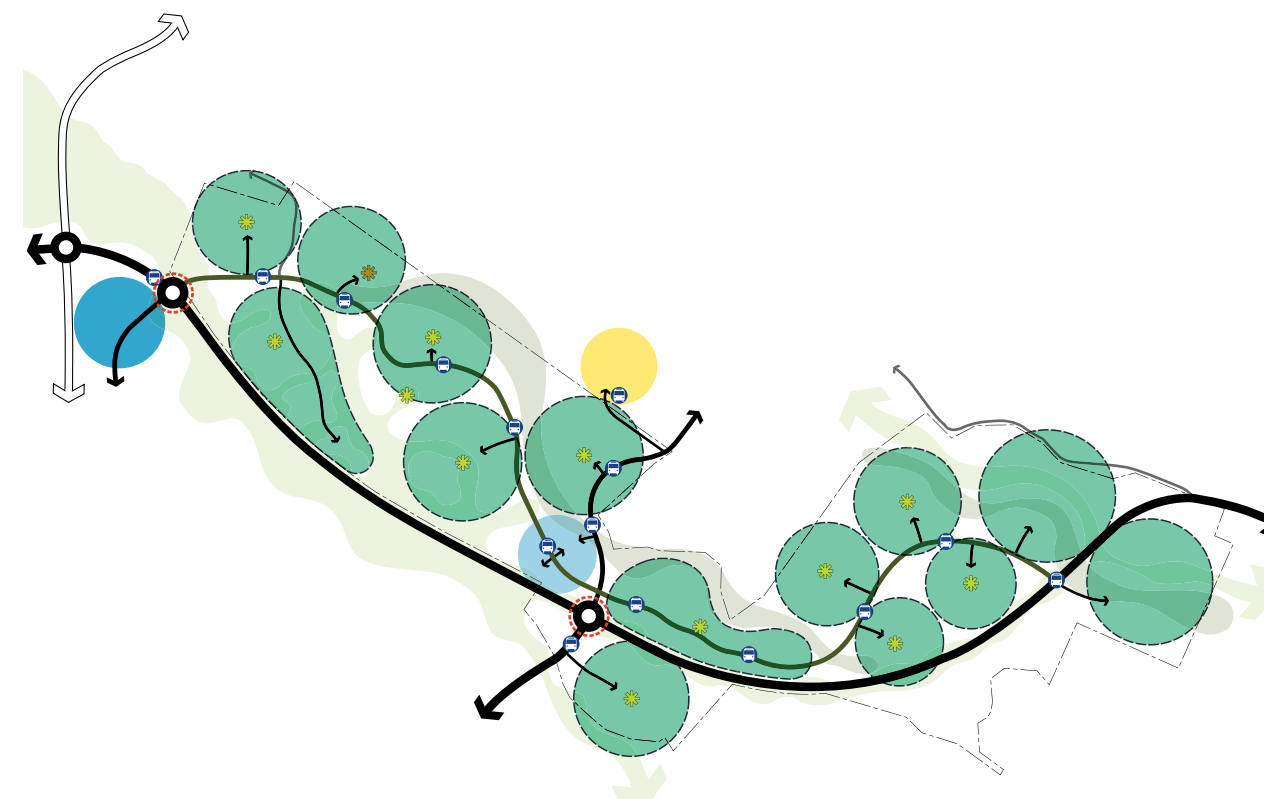
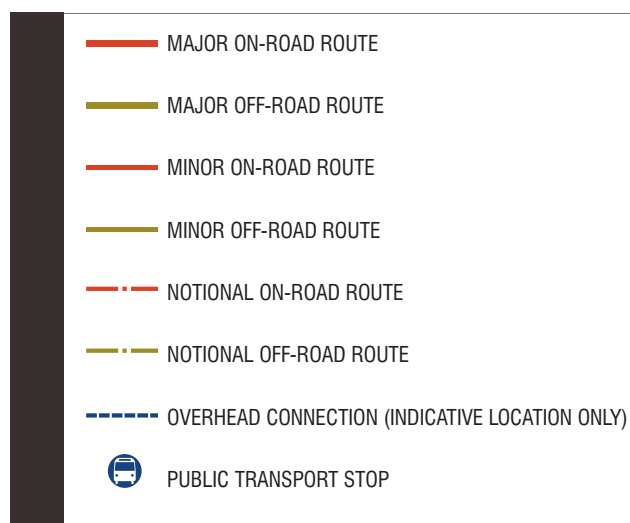


ESTABLISH A CLEAR SYSTEM OF ACCESSIBLE AND CONNECTED OPEN SPACES

- Provide an integrated pedestrian circulation network
- Positive and site specific open spaces linked by safe and easily accessible pedestrian networks
- Local neighbourhoods focused on community open space accessible to all
- Equitable access to public transport

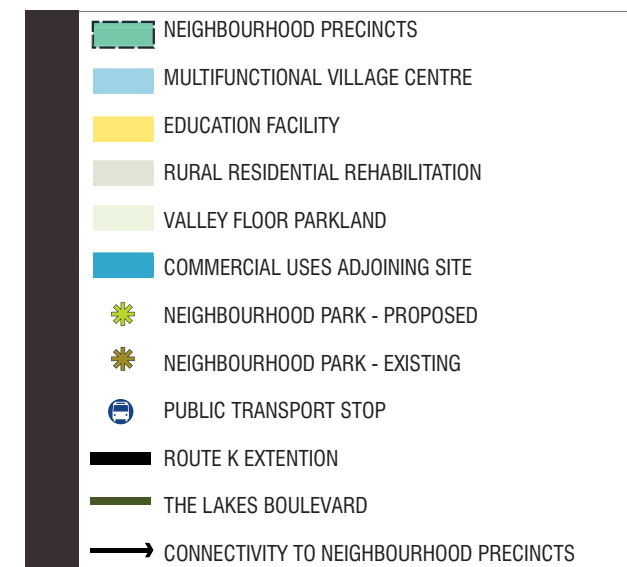
As a fundamental principle underpinning the public domain for The Lakes, CPTED guidelines will be used to in the design of the project in order to achieve:

- Natural surveillance of open space areas
- Well lit public pathways and use areas
- Well connected pedestrian circulation systems
- Clear systems of signage and wayfinding
- Clear sight lines for public open spaces and circulation systems
- Robust external works detailing and fabrication



LEGIBLE + WELL ORDERED URBAN FORM

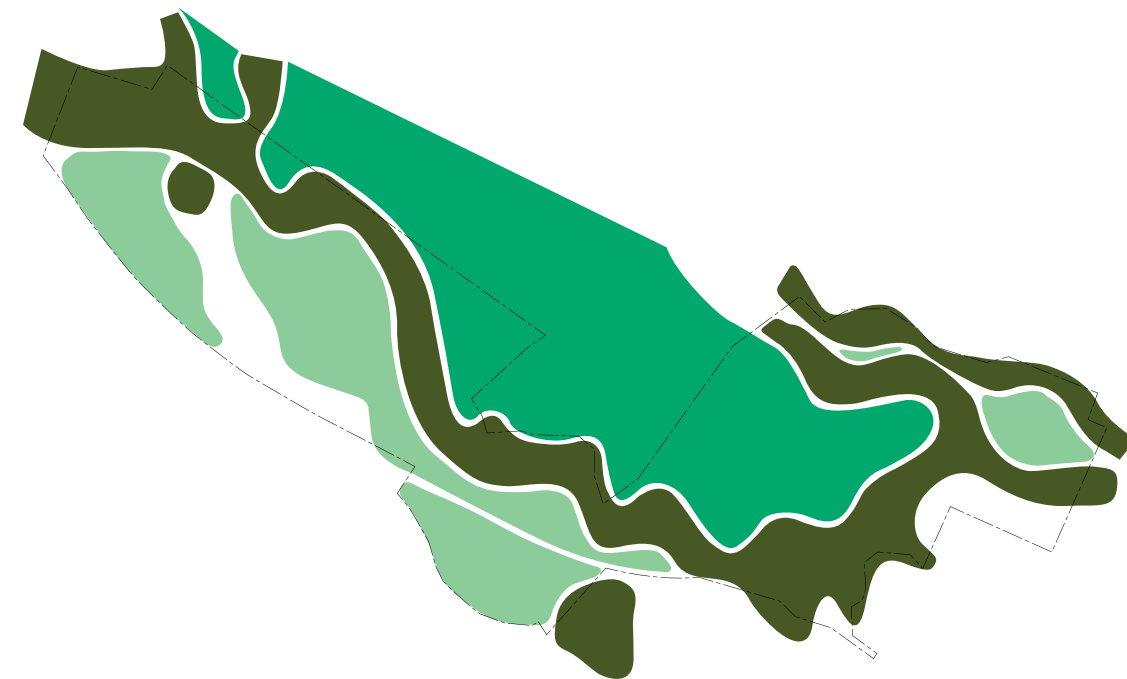
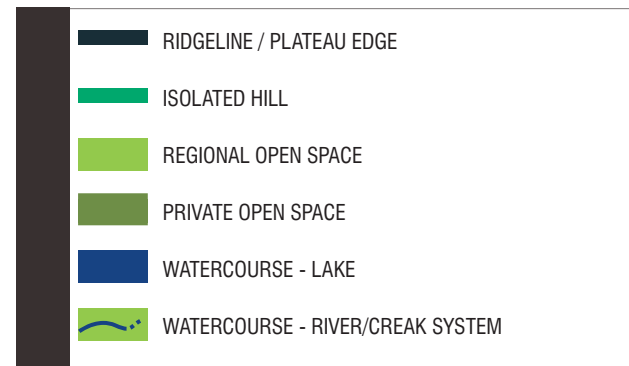
- Identifiable neighbourhood characters
- Clear entries and wayfinding devices
- Integrate the urban pattern into the site context
- Well defined edges / enclosure
- Equitable access to community facilities and public transport





RESPECT THE SITES INHERENT QUALITIES

- Respectful of historical site features and history
- Maintain characteristic elements of the existing site topography
- Protect the Ridgelines / Hills / Wetlands
- Reinforce and frame views



RE-ESTABLISH A CLEAR VEGETATION PATTERN

- Utilise pre site clearance endemic vegetation communities as a base for selecting urban vegetation
- Utilise diversity of vegetation types to characterise housing precincts



An initiative of The Lakes project is to prepare Design Guidelines which assist in directing the built and landscape forms for the community. A key component of the guidelines will be a focus upon the architectural form of the individual houses. The table below explores the range of housing issues and areas for consideration of housing forms as they relate to specific site locations.

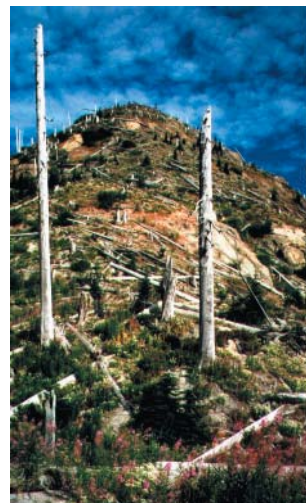
Location	Issues	Key Considerations for Design Guidelines
Plateau	<ul style="list-style-type: none"> Limited access to views. Dense housing forms in close proximity. Streets often dominated by driveways and garages. Limited private open space. 	<ul style="list-style-type: none"> Consider building heights and positioning of houses to create view corridors. Privacy/overlooking. Consider alternate garaging and private parking configurations. Design for courtyards and maximised private open space. Design for climatic comfort.
Ridgeline	<ul style="list-style-type: none"> Potential for panoramic views. Highly visible built form which defines the development edge when viewed from the valley floor. Highly exposed to climatic conditions. 	<ul style="list-style-type: none"> Ensure building forms, orientation and landscape respond to view opportunities. Ensure building forms nestle into ridgeline vegetation and do not exceed the mature tree canopy. Determine mechanism for revegetating the ridgeline with appropriate tree species planted with private allotments. Design to withstand climatic extremes.
Valley Wall	<ul style="list-style-type: none"> Slab on ground requires significant site bending. Potential for panoramic views. High side of street often highly exposed. Low side of street often difficult to access. Highly visible from elevated positions. 	<ul style="list-style-type: none"> Consider housing forms, which minimise site benching requirements. Ensure building forms, orientation and landscape respond to view opportunities. Ensure highly visible building forms are appropriately detailed. Consider varied housing forms which enable site benching to be accommodated. Variety of roof forms and colours needed.
Valley Floor	<ul style="list-style-type: none"> Dense housing forms in close proximity. Highly visible from elevated positions. Streets often dominated by driveways and garages. Limited private open space. Limited access to cooling breezes. 	<ul style="list-style-type: none"> Privacy/overlooking Variety of roof forms and colours needed. Consider alternate garaging and private parking configurations. Design for courtyards, and maximised private open space. Design for climatic comfort.



2

landscape vision

PATTERN



MATERIAL



PLANTING



The dominant vision for The Lakes is for the creation of a dynamic and diverse residential community set within a park like environment.

The community will be recognisable as part of a designed master plan approach, and will display distinctive variations in character throughout the development area through the application of:

- Residential Development Design Guidelines
- Landscape Master Plan design guidelines for all public domain areas

The aim of the landscape vision is to ensure that The Lakes is designed using a clear set of design principles, which establish the character of the development as a major contributor to community amenity and appeal.

PUBLIC DOMAIN DESIGN PRINCIPLES

The design of open spaces and character elements in the public domain will draw reference from the evocative ancient natural history of the site, including characteristic **'knocked down' patterns** of the old growth forests which have been revealed below the sites low lying peat areas.

The catastrophic events which lead to the decimation of the forests, and the patterns of laid down trees and fractured timbers presents a range of pattern opportunities which can be used to influence the landscape designs. Similarly, the rich history of timber growth and logging on the site and the characteristic use of stone in Tauranga presents a rich opportunity to return **timber and stone** materials to the site in the construction of features such as shelters, walls, bridges, signs and houses.

Similarly the sites pre clearance **endemic planting** communities are a clear and logical source of instruction to guide the vegetation of streets to inform the patterns on streetscapes and open space.

Together these three simple yet effective design pillars of the landscape vision provide a rich range of opportunities by which to characterise the site.

The following pages explore the application of the 3 design pillars to The Lakes project. Using different underlying 'drivers', the design pillars combine in a variety of ways to create innovative and memorable outcomes.

DRIVER - LAND USE



	ORDER	ASKEW	CHAOS
BOULEVARD COMMERCIAL ENTRY HIGH PLATEAU	RESIDENTIAL - VALLEY WALL	LAKE PARK NEIGHBOURHOOD PARKS RESIDENTIAL - VALLEY FLOOR LINEAR PARK	

PATTERN

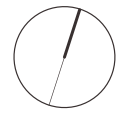
DRIVER - VALLEY JOURNEY



	CRISP	TEXTURED	RUGGED
UPPER VALLEY	MID VALLEY	LOWER VALLEY	

MATERIAL

DRIVER - TOPOGRAPHY



LOWLANDS			IRREGULAR
SLOPES			NATURALISTIC
PLATEAU			FORMAL

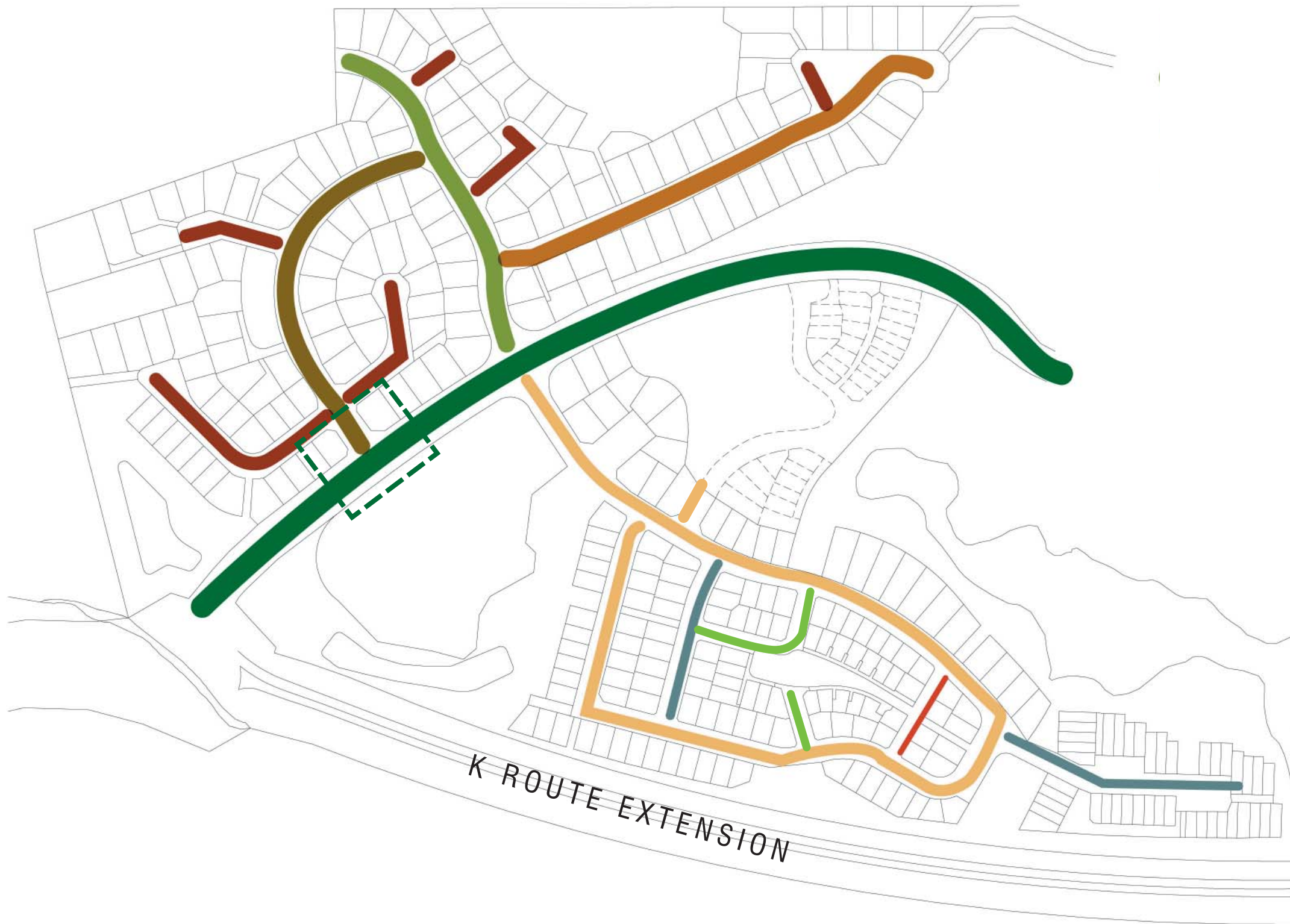
PLANTING

When applied to The Lakes, the 3 design pillars reveal a rich program of design opportunities. The following table identifies the design brief for the key development areas within the project











DESIGN PILLAR	PATTERN - LAND USE			MATERIAL - VALLEY JOURNEY			PLANTING - TOPOGRAPHY			DEVELOPMENT AREA
	CHAOS	ASKEW	ORDER	RUGGED	TEXTURED	CRISP	NATURALISTIC	IRREGULAR	FORMAL	
										LAKE PARK
										NEIGHBOURHOOD PARK
										RESIDENTIAL PRECINCT VALLEY FLOOR
										RESIDENTIAL PRECINCT VALLEY WALL
										RESIDENTIAL PRECINCT HIGH PLATEAU
										LAKE BOULVARD
										VILLAGE CENTRE
										COMMUNITY ENTRIES

3

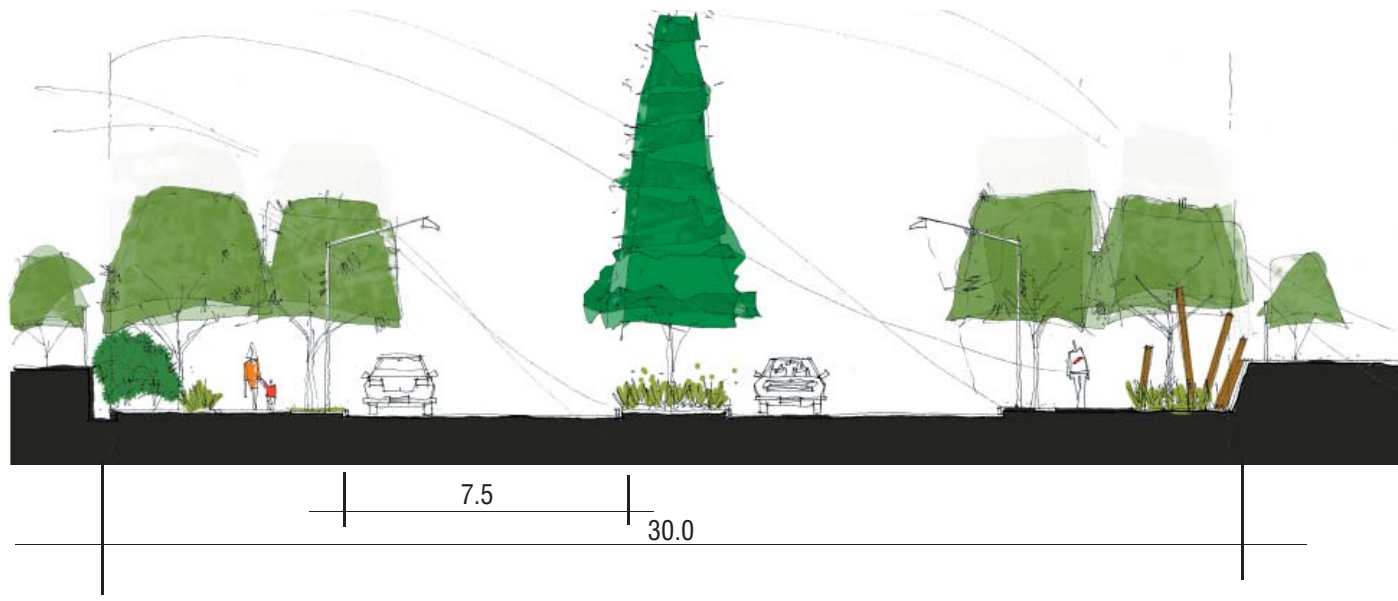
streetscape hierarchy



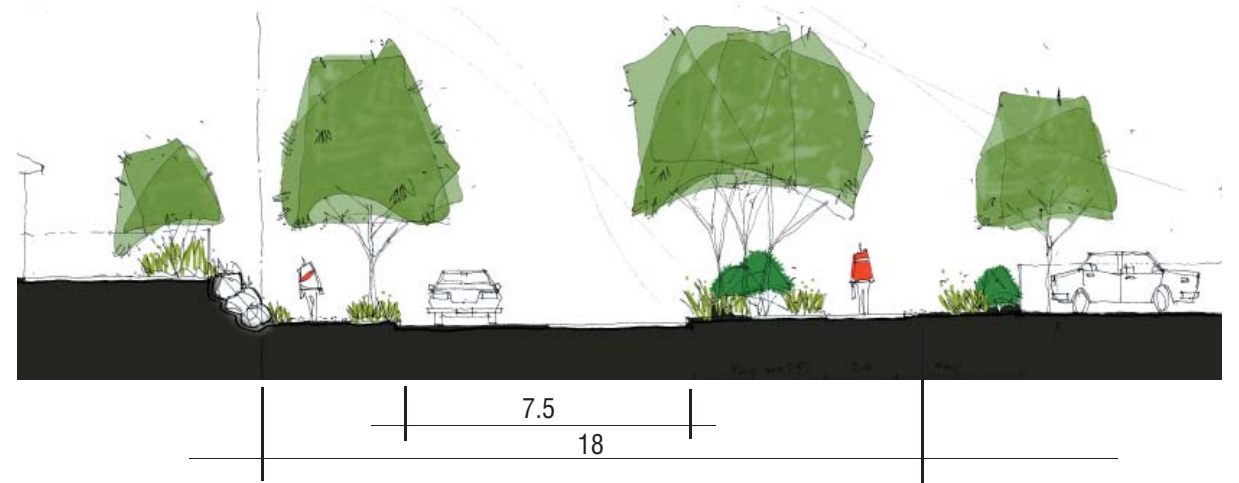
KEY

	THE LAKES BOULEVARD
	SUB-COLLECTOR
	SECONDARY ROAD
	LONG CUL DE SAC
	SHORT CUL DE SAC
	MEDIUM DENSITY SECONDARY ROAD
	MEDIUM DENSITY LOCAL LINK
	MEDIUM DENSITY GREEN LINK
	MEDIUM DENSITY MINOR LINK
	STAGE 1 - ENTRY PRECINCT

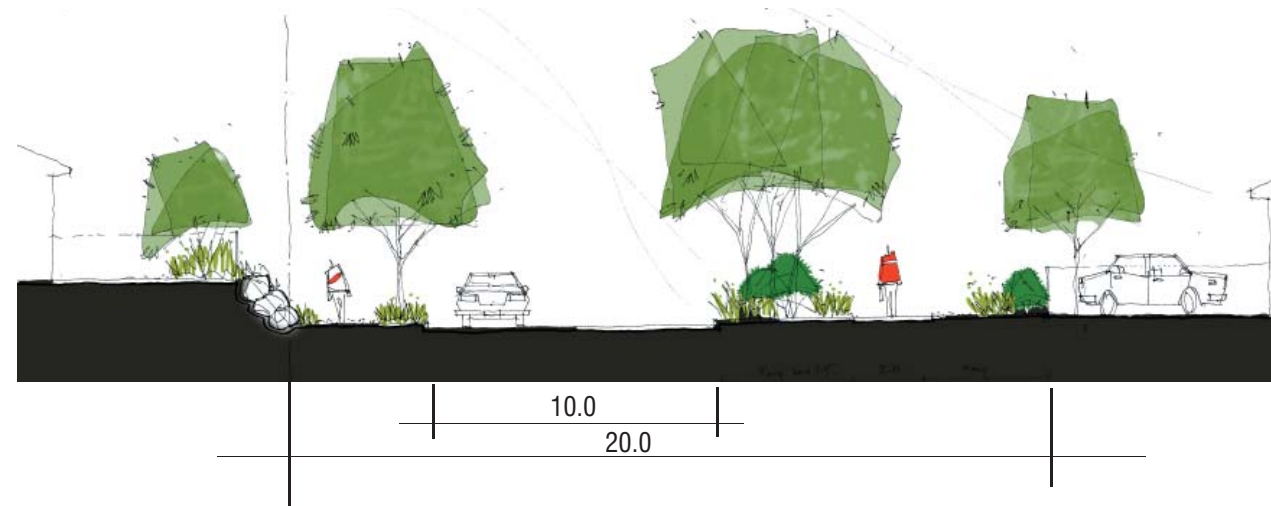
THE LAKES BOULEVARD



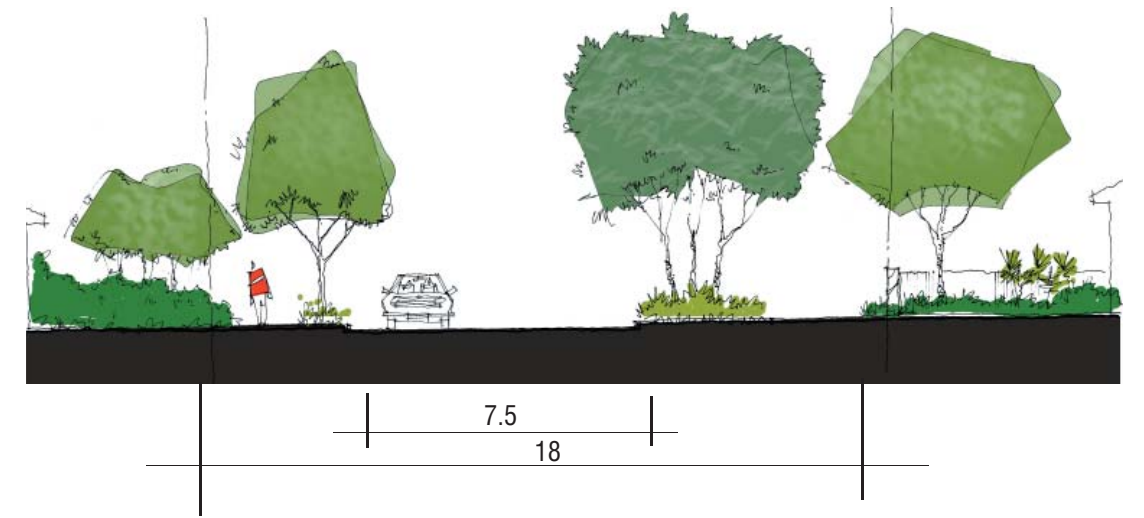
LONG CUL DE SAC



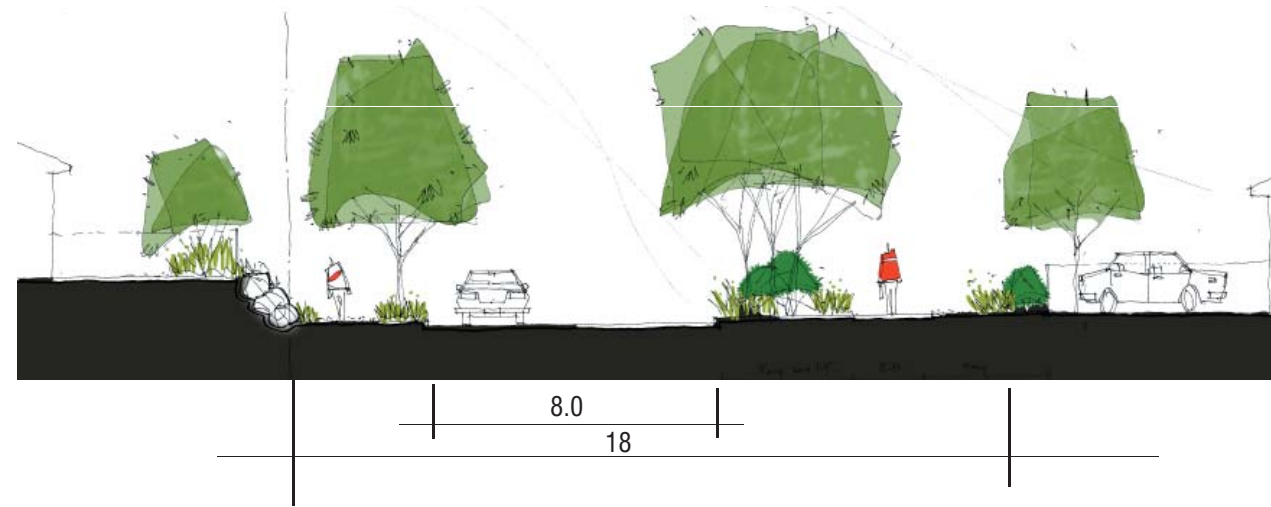
SUB-COLLECTOR



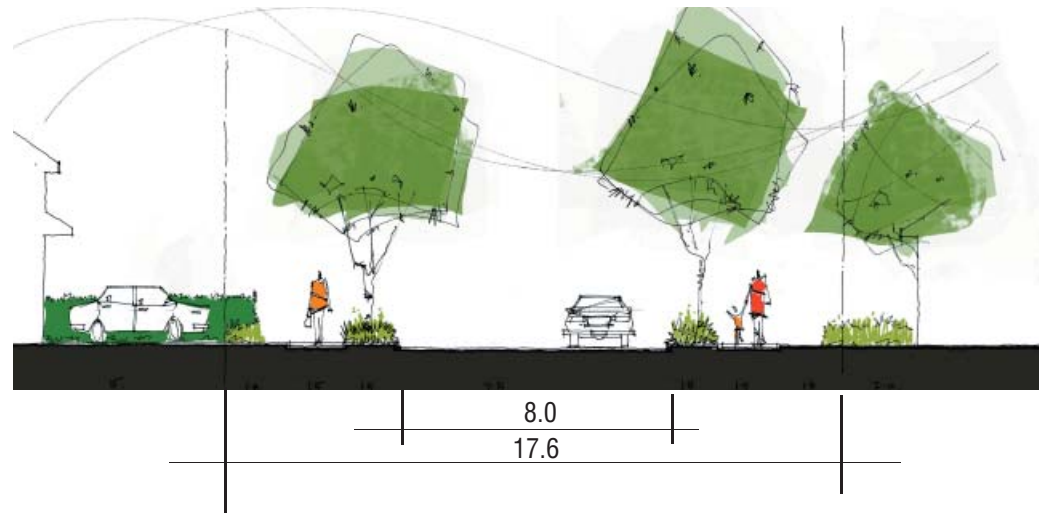
SHORT CUL DE SAC



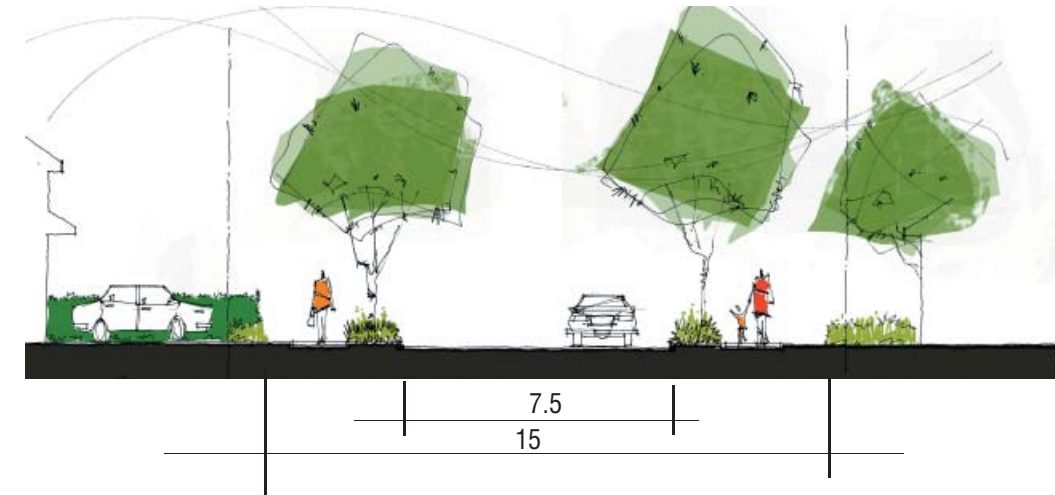
SECONDARY ROAD



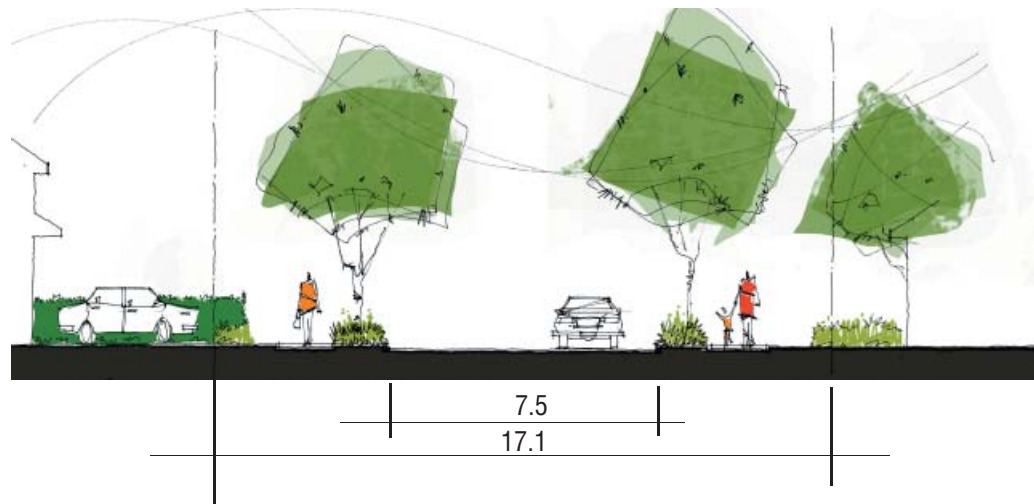
MEDIUM DENSITY SECONDARY ROAD



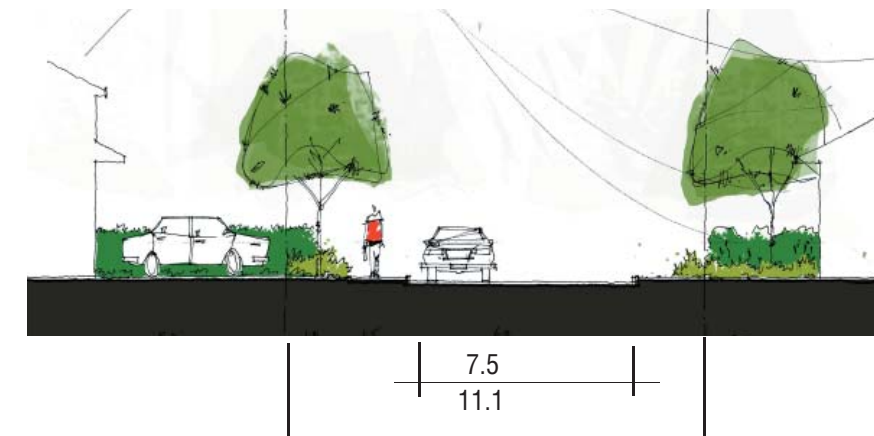
MEDIUM DENSITY GREEN LINK



MEDIUM DENSITY LOCAL LINK

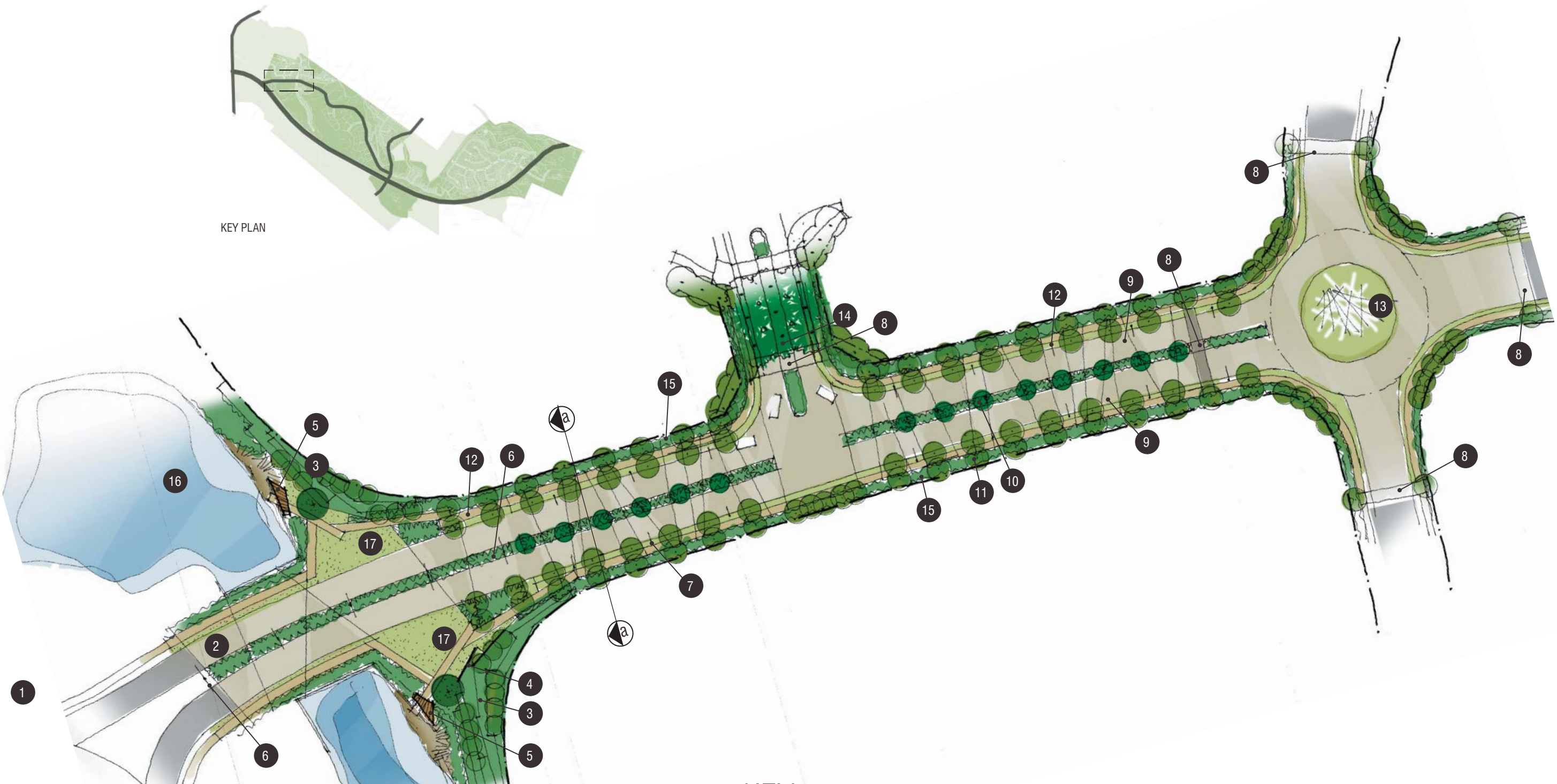


MEDIUM DENSITY MINOR LINK





KEY PLAN



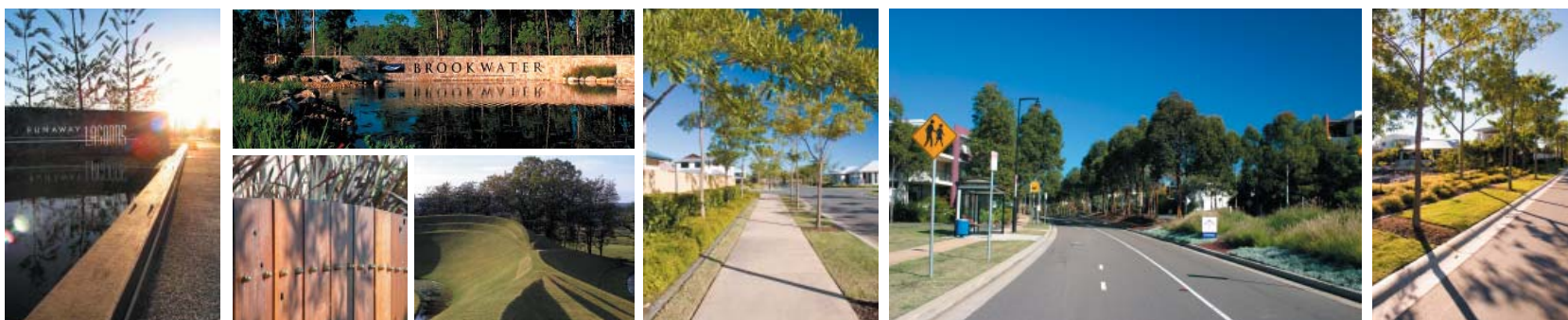
The entry Precinct and Road is envisaged as a dynamic tree lined boulevard with spacious pedestrian pathways, evocative signage and built elements. It is envisaged that this stately landscape treatment will extend the full length of the boulevard, punctuated by precinct entry points, intersections and connections to open space systems and dramatic view corridors.

KEY

1	The journey begins at the K Route Round-a-bout with long views over the low lake to projecting Shelters and terraced walls containing signage	5	Entry Shelters with panoramic views over the entry lakes.	13	Central Scattered Artwork to RAB.
2	The journey over the lake is defined by long views over the lake to the terraced signage walls and shelters, with the roadway transitioning into panels of concrete with distinctive jointing and patterned finish. By altering the road surface the sense of entry will be further reinforced, and driver speed will be reduced.	6	Central Lighting Columns	14	Entry to Stage 1 Residential Precinct refer detail plan.
3	Terraced Entry Walls	7	Kerb Side Lighting	15	Dense planting to back of verge provides visual buffer to adjoining residential sections and future retirement development.
4	Signage	8	Pedestrian Crossing Point	16	Entry Lakes and perimeter access path.
		9	Bus Shelter and Set down.	17	Upper level lawn
		10	Central Feature Trees to median at 10m centres	18	Signature timber elements inspired by the sites pre European history
		11	Boulevard Trees in double avenues to verges to create a canopy over the pedestrian pathway		
		12	2.0m Pedestrian pathway in 6.5m verge		

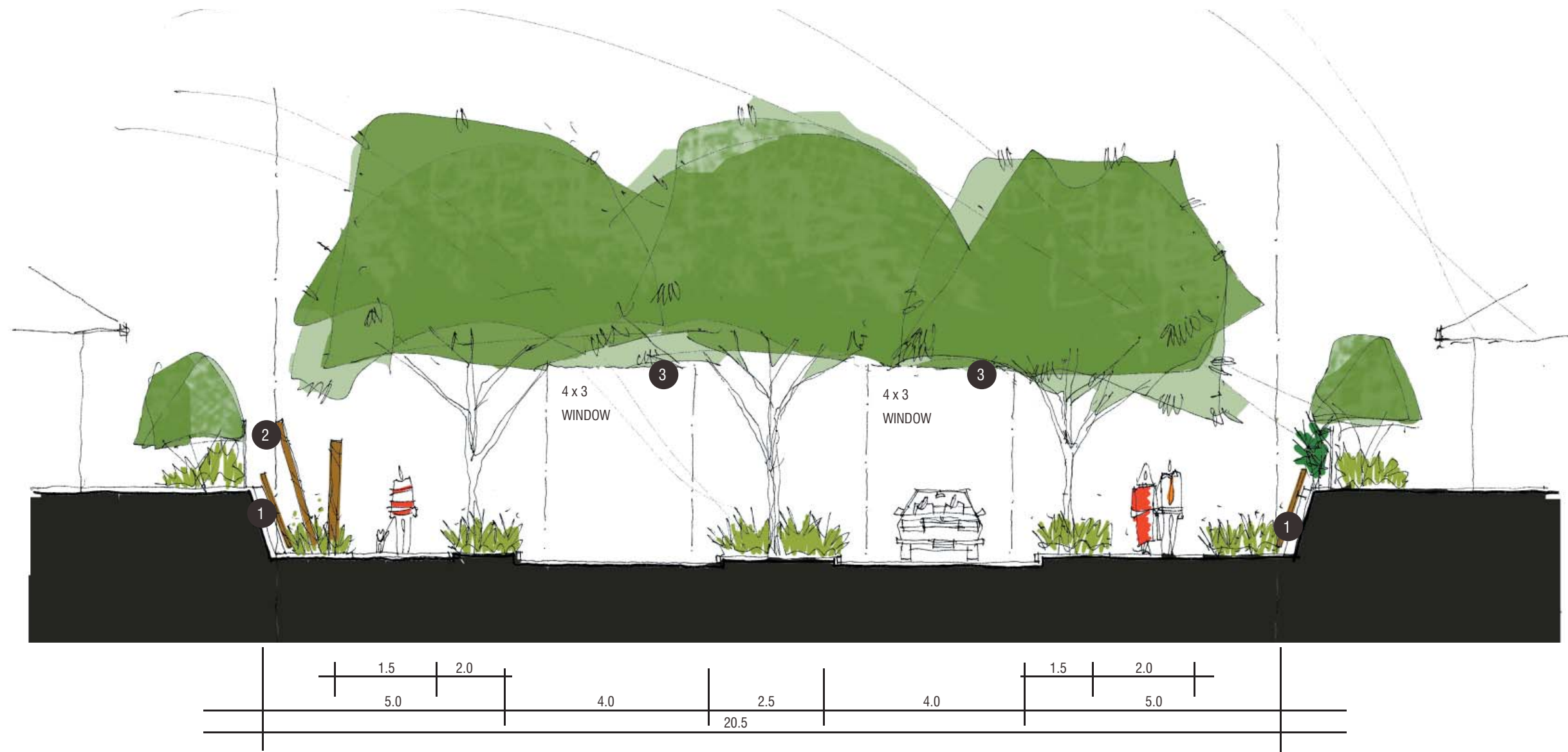


THE LAKES BOULEVARD CROSS SECTION A-A



KEY

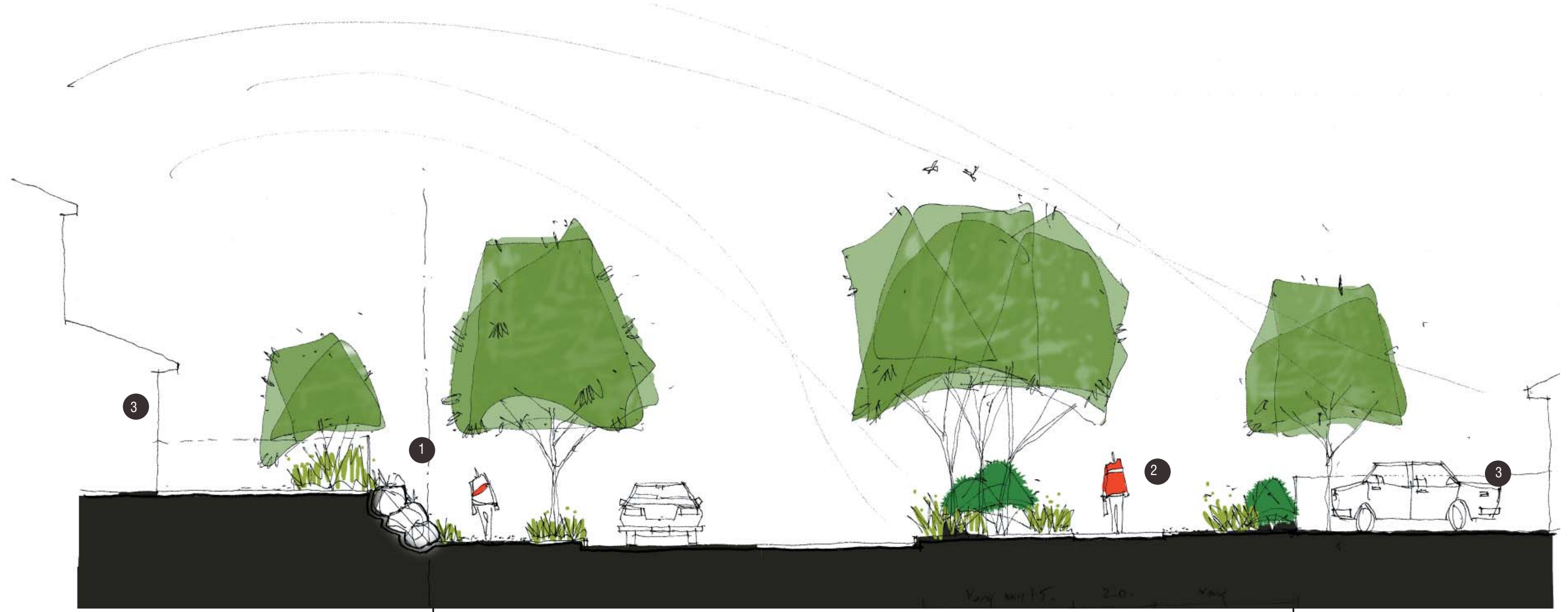
- | | | | |
|---|--|---|---|
| 1 | Kerb Side Lighting | 5 | Dense planting to back of verge provides visual buffer to adjoining residential sections and future retirement development. |
| 2 | Boulevard Trees in double avenues to verges to create a canopy over the pedestrian pathway | 6 | Signature timber elements inspired by the sites pre European history |
| 3 | 2.0m Pedestrian pathway in 6.5m verge | | |
| 4 | Central Feature Trees to median at 10m centres | | |



Envisaged as a semi formal transition into housing precincts, using signature trees which provide a dense enclosing canopy/gateway to the street. Low level precinct specific signage is placed within the verge.

KEY

- 1 Signage held at property line in concert with retention of adjoining allotments/fencing.
- 2 Signage - timber elements inspired by the sites pre European history and vision
- 3 4x3m Large window for oversized vehicles

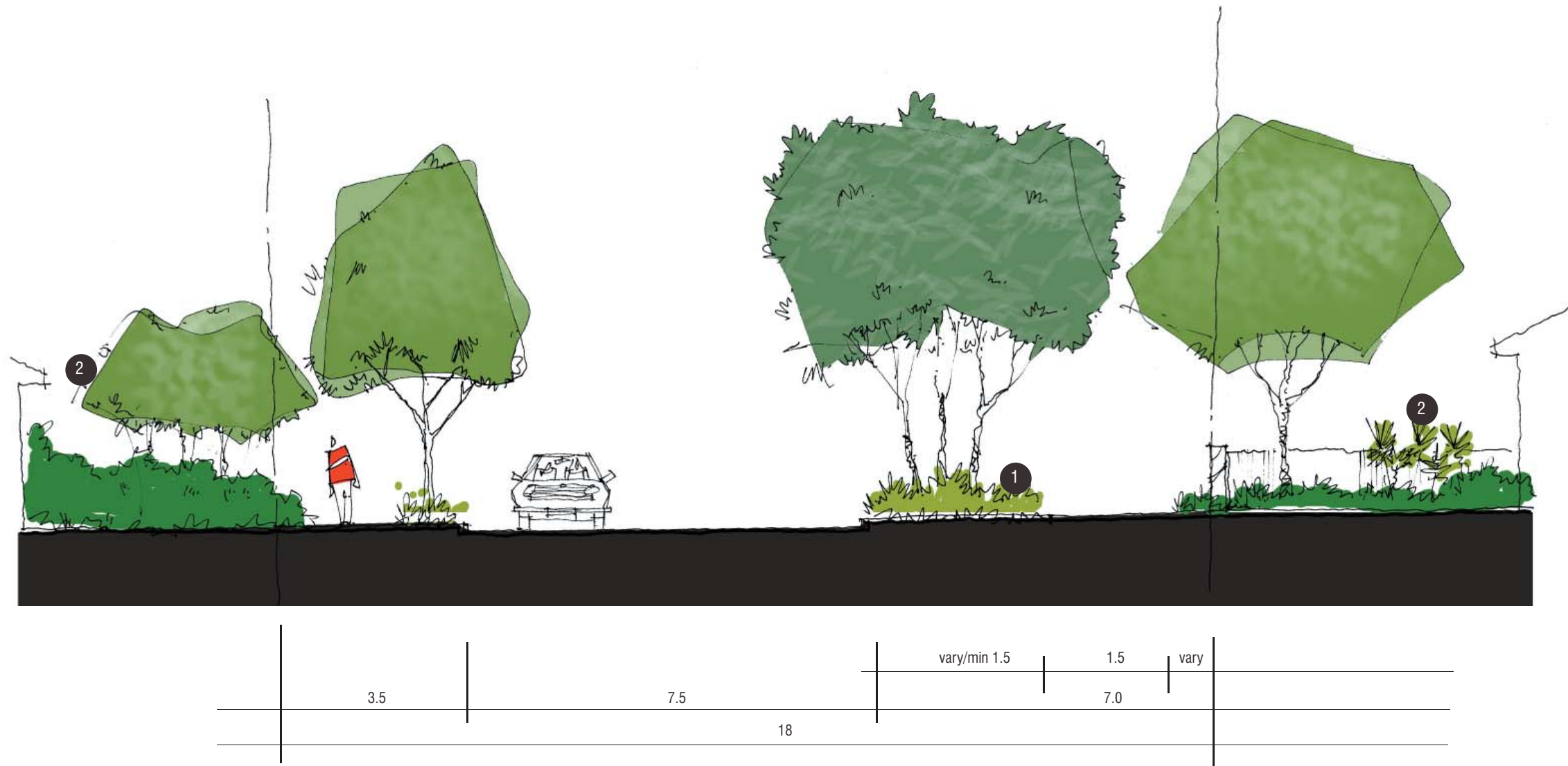


SUB COLLECTOR	3.5	10	20.0	vary/min 1.5	2.0	6.5	vary
SECONDARY ROAD	3.5	8.0	18.0		6.5		
LONG CUL DE SAC	3.5	7.5	18.0		7.0		

Envisaged as a low speed meandering street with a variable verge width, allowing for clustering of character trees in enlarged areas.

KEY

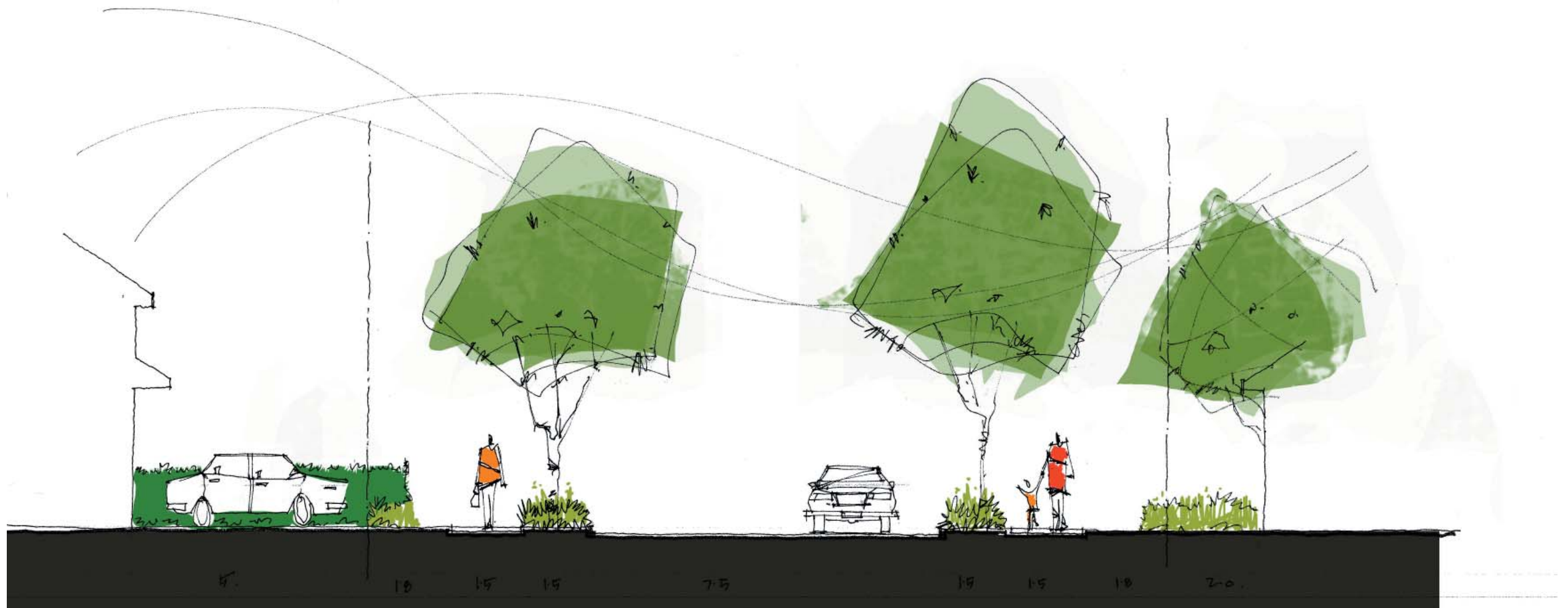
- 1 Localised section retaining wall using local stone.
- 2 Enlarged verge and cluster planting.
- 3 Standard building setbacks



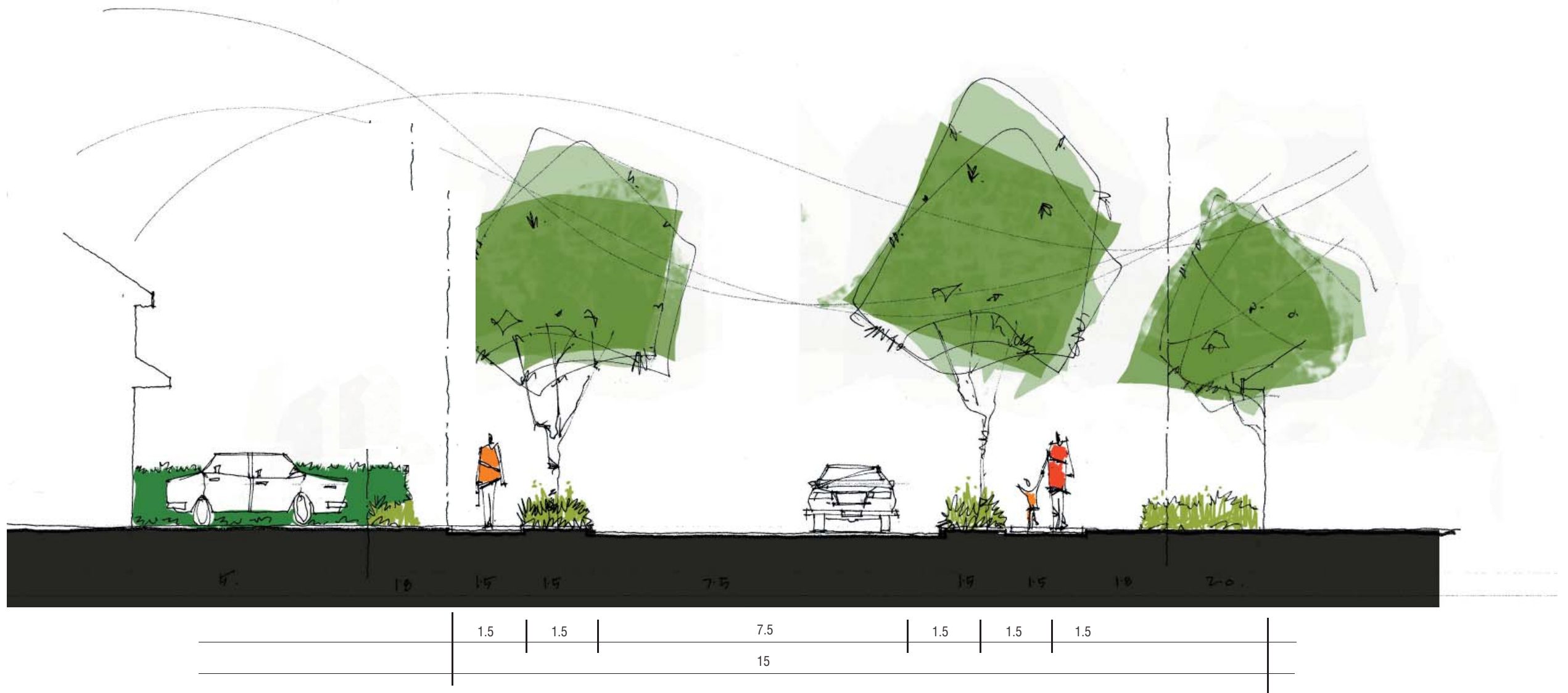
Envisaged as an informal extension of the Secondary Street theme, using reduced road corridor widths to portray a more intimate residential street character.

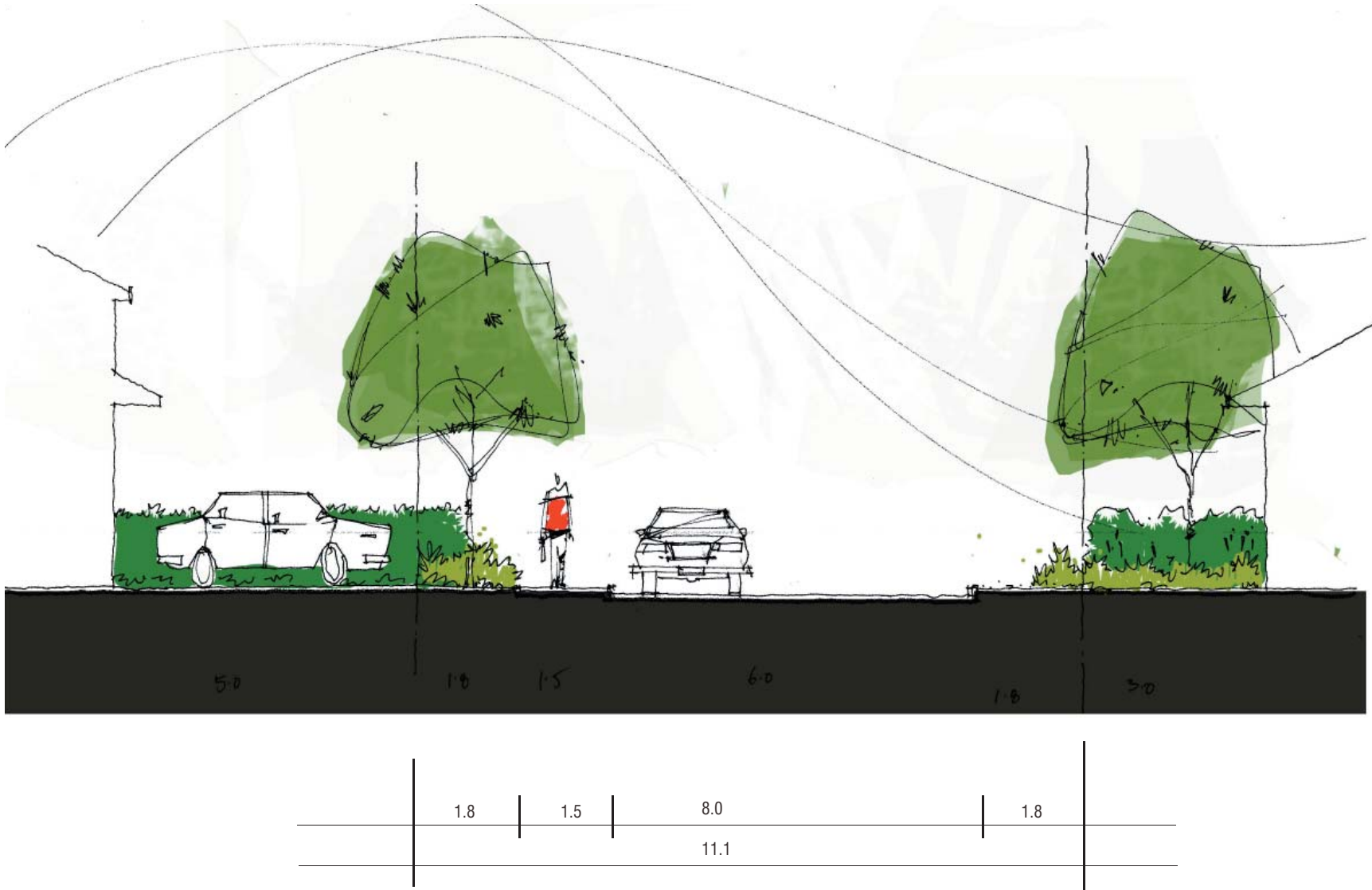
KEY

- 1 Enlarged verge and cluster planting.
- 2 Standard building setbacks



MEDIUM DENSITY SECONDARY ROAD	1.8	1.5	1.5	8.0	1.5	1.5	1.8
	17.6						
MEDIUM DENSITY LOCAL LINK	1.8	1.5	1.5	7.5	1.5	1.5	1.8
	17.1						





4

open space +
community facilities



SCALE 1:500 @ A1

KEY

The Lakes Gateway Parkland is designed as a signature expression of the quality open space character for the project. With panoramic views across the entry lakes to the development areas, the entry will showcase dramatic planting arrangements and built shelters. Located on the regional cycleway network, the entry parks embrace the cycleway, providing direct access from the residential areas to the parkland. Cycleway access under The Lakes Boulevard will be provided by the use of bridges carrying the road over. Natural lighting and generous proportions will ensure a safe and friendly environment for cycleway users.

1	Terraced entry walls with signage and low shrub planting	4	Road finish and planting as per drawing 2.2	8	Community shelter and decking with views over entry lake	12	Childrens play area and lawn
2	Future Residential	5	Streetscape hierarchy	9	Open space	13	Planted embankment
3	Stage 1 Residential	6	Signature timber elements	10	Cycle way	14	Views to shelter and lake - possible pedestrian access
		7	Low shrub feature planting	11	Lake	15	Cycle way access culvert with signature timber elements in median space
			Community shelter and open space				



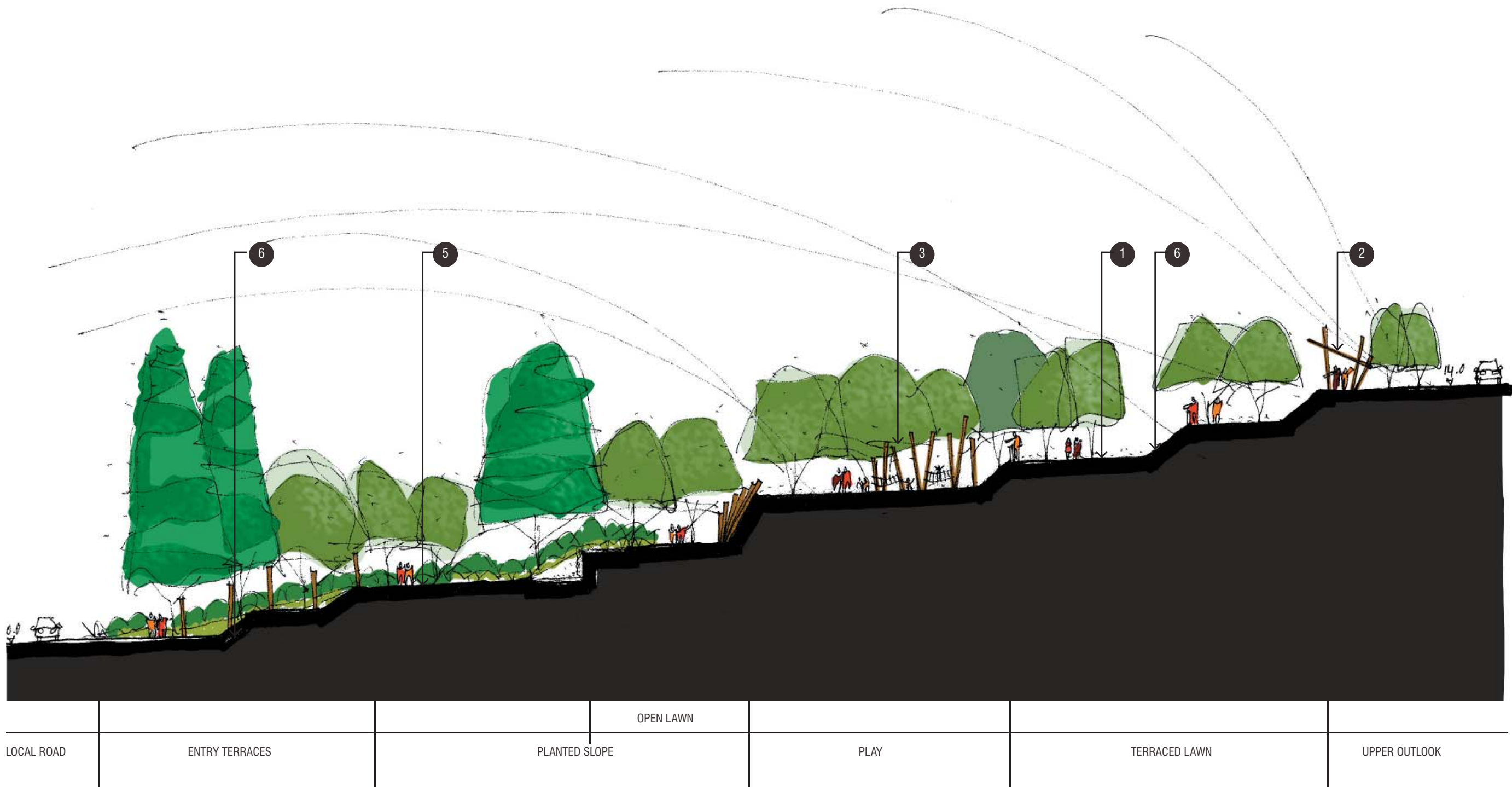
SCALE 1:250 @ A2

The neighbourhood parks are positioned to offer residents of The Lakes equitable access to recreational open space. These parks will respond to the specific site conditions of each neighbourhood and will endeavour to offer a range of amenities which may include:



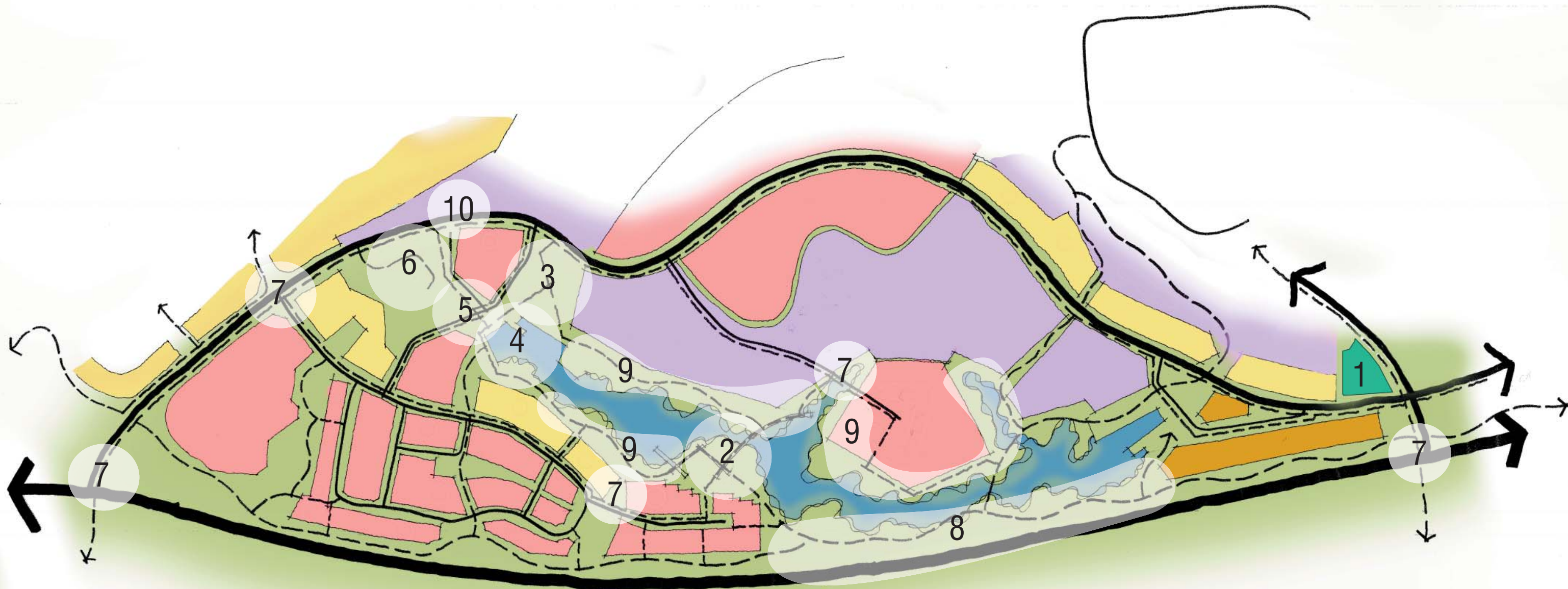
KEY

1	Pedestrian entrance	5	Open space
2	Pedestrian entrance with feature paving and signage wall	6	Community shelter
3	Feature shelter with district views, BBQ and seating	7	Childrens play area and lawn
4	Low shrub planting and seating	8	Planted embankment
		9	Screen planting to lot boundaries



KEY

1	Open lawn for active recreation	4	Informal open parkland
2	Community shelters for informal seating and gathering	5	Equitable circulation systems.
3	Localised childrens play elements	6	Terraced stairs



SCALE 1:5000

The lakes parkland is the central signature open space for the new community which is planned to offer a range of community based recreational activities including an extensive pedestrian and cycle network, community shelters, open space lawn and play equipment environmental interpretation and signage. The park land is framed by the isolated hill to the north east and the multi function community centre to the south west. The isolated hill will offer panoramic views across the project accessed by a discrete pathway. The multi function community village is designed to interactive community meeting place and information hub. The park is designed to be highly accessible to all residents of the lakes and will be serviced by pedestrian paths, cycle network, public transport and the road network. Using best practice ecological engineering the park will showcase the endemic vegetation community.

KEY

	LARGE LOTS		K ROUTE	1	COMMUNITY PLAZA	8	HIGH WAY BUFFER
	STANDARD RESIDENTIAL LOTS		THE LAKES BOULEVARD	2	RETAINED HEATH LAND / INTERPRETATION ZONE	9	RESIDENTIAL INTERFACE
	MEDIUM DENSITY LOTS		LOCAL ROAD NETWORK	3	ACTIVE PARKLAND	10	PROMINENT ARRIVAL POINT
	LARGE LAKE		PEDESTRIAN / CYCLE NETWORK	4	ACTIVE LAKE BASIN		
	COMMERCIAL / CONVENIENCE RETAIL			5	SHARED ZONE - PEDESTRIAN / VEHICLE		
	OPENSOURCE PARKLAND			6	ELEVATED OUTLOOK		
	COMMUNITY PLAZA			7	THRESHOLD ENTRY		



The Lake Park offers a regional recreation opportunity due to its strategic proximity to the pedestrian and cycle network adjoining the stream.

Linking the Isolated Hill to the Community Commercial Precinct, this parkland can provide an active trail network which circumnavigates the lake.

Recreational zones adjoining the lake will be designed to maximise exposure too and views of the lake, while rehabilitated lake edges and margins will recreate the areas pre clearance endemic vegetation types.

Key issues for consideration include:

- / Maintaining residential views to the lake;
- / Confirmation of flood impacts and extents;
- / Rehabilitation strategies;
- / Community Safety, Access and Maintenance; and
- / Connectivity to local and regional pedestrian and cycle networks.

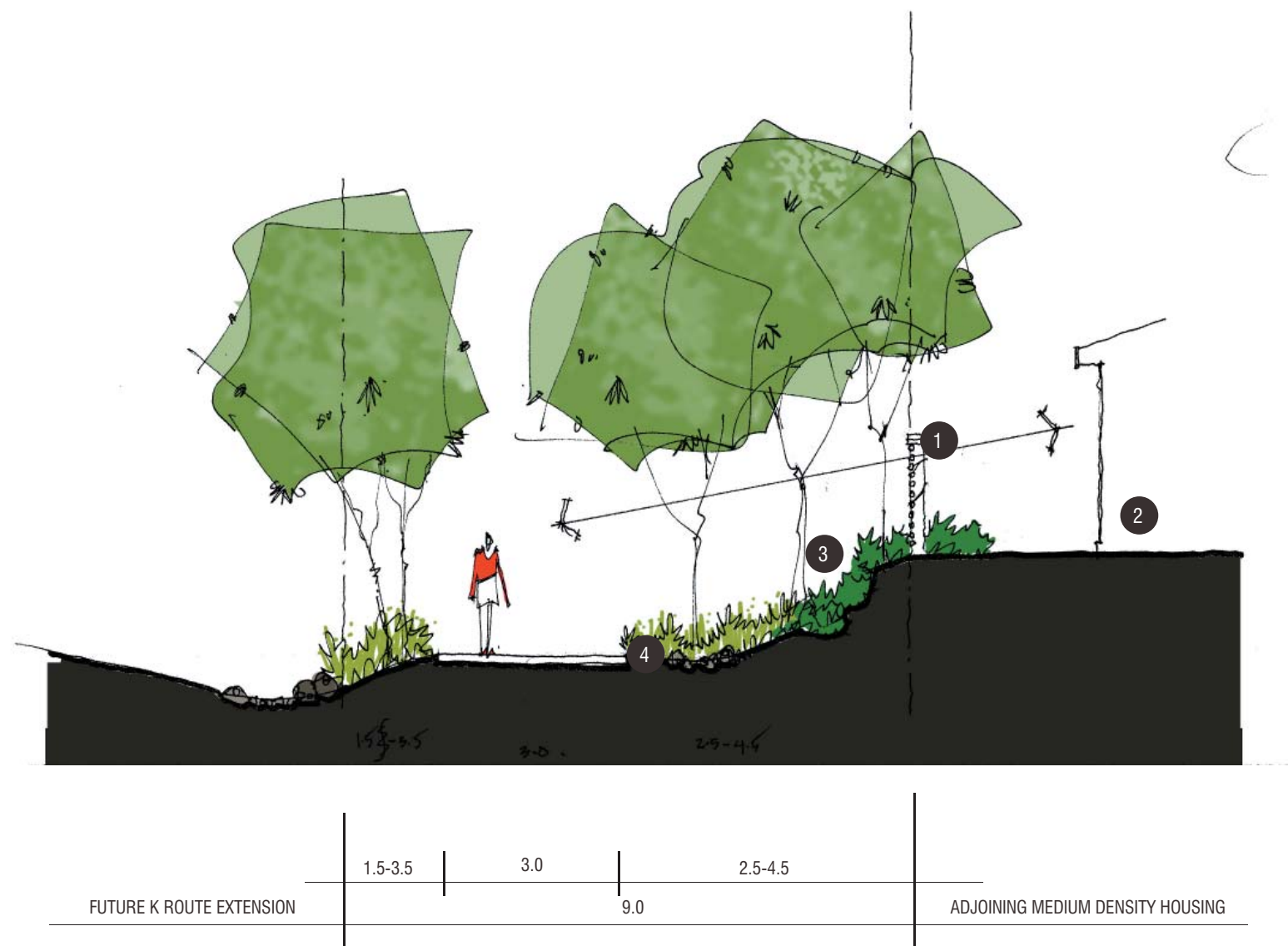
ACCESS AND ACTIVITIES



LAKE EDGE CHARACTER



SHELTERS AND OPEN SPACES



REGIONAL CYCLEWAY - TYPICAL CROSS SECTION A-A

Running the entire length of The Lakes is a planned cycleway and pedestrian path network in the corridor adjoining the future K Route extension. The path will be extended into adjoining open space parkland to ensure a high degree of connectivity to the greater open space amenity of The Lakes project.

Where the cycleway adjoins residential housing, the open space corridor will maintain a 9m width, providing significant opportunity for signature tree planting. Using tree clusters strategically positioned, residential views to the future K Route extension will be minimised, while low level views to the cycleway for passive surveillance will be maintained.



KEY

- | | | | |
|---|--|---|---|
| 1 | Surveillance of open space corridor maintained through open fencing and removal of mid storey planting | 3 | Level changes with native planting allows views and 3:1 batter |
| 2 | Medium density housing product | 4 | Localised drainage swales |
| | | 5 | Bund height variable along the length of cycle way/transit road interface |



The design of the central open space system seeks to reinforce the visual and cultural prominence of the isolated hill by undertaking designs which are deeply respectful.

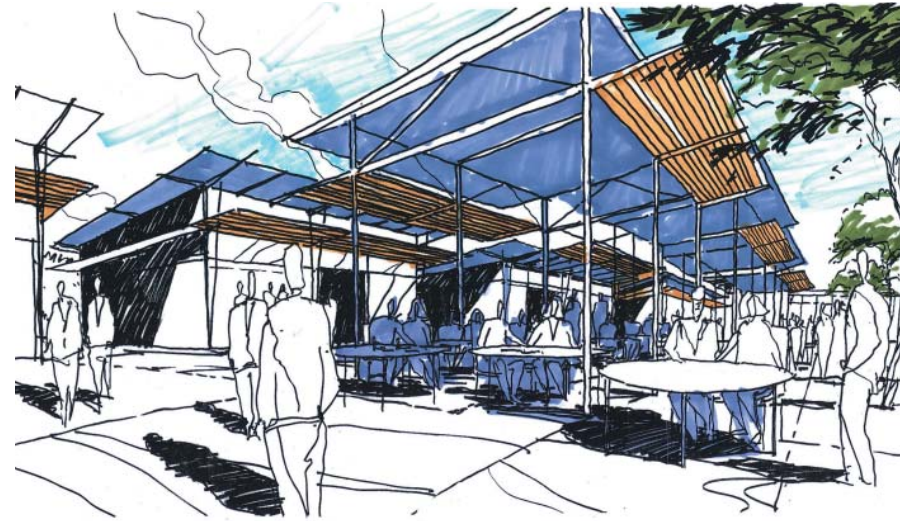
Cultural History

The site has been historically occupied by Ngai Tamarawaho as a seasonal food gathering area with temporary kainga (villages) and resulting middens. The hill reserve was used as a defensive outlook.

Proposed Design

It is proposed that the isolated hill be retained as part of the open space system and planted in a simple palette of flaxes and ferns to induce a distinctive appearance. A meandering walkway will provide limited access to an area below the summit overlooking the lake and parkland, and the Kaimai Ranges. Information panels to interpret the sites cultural and natural features / history will be provided in the location. Naming of the reserve will be undertaken in consultation with local Iwi.





The Community Centre can become a key destinational element with the open space trail network of The Lakes. It also can link the public image of the project inextricably to the new lake by positioning the public built form in close proximity to the water.

The following images demonstrate similar successful models.



COMMERCIAL FACILITIES



COMMUNITY CENTRE

landscape character elements

The landscape vision provides a clear brief for the generation of site specific detailing across the project area. The table below captures the process for applying the vision across the site.

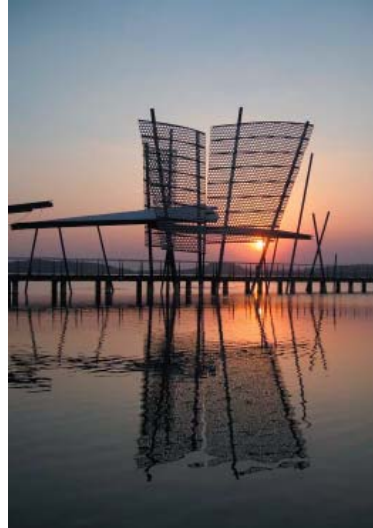
The following pages briefly identify a range of possible outcomes for built shelters and signage through the application of this vision.

ORDER	ASKEW	CHAOS	PATTERN	CRISP	TEXTURED	RUGGED	MATERIAL	IRREGULAR	NATURALISTIC	FORMAL	PLANTING
BOULEVARD COMMERCIAL ENTRY HIGH PLATEAU	RESIDENTIAL - VALLEY WALL	LAKE PARK NEIGHBOURHOOD PARKS RESIDENTIAL - VALLEY FLOOR		UPPER VALLEY	MID VALLEY	LOWER VALLEY		LOWLANDS	SLOPES	PLATEAU	

LOWER
VALLEY



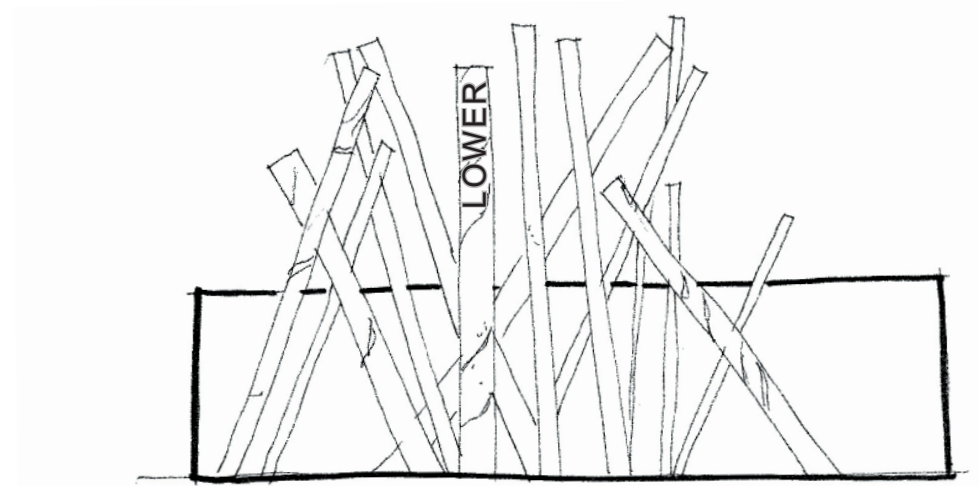
MIDDLE
VALLEY



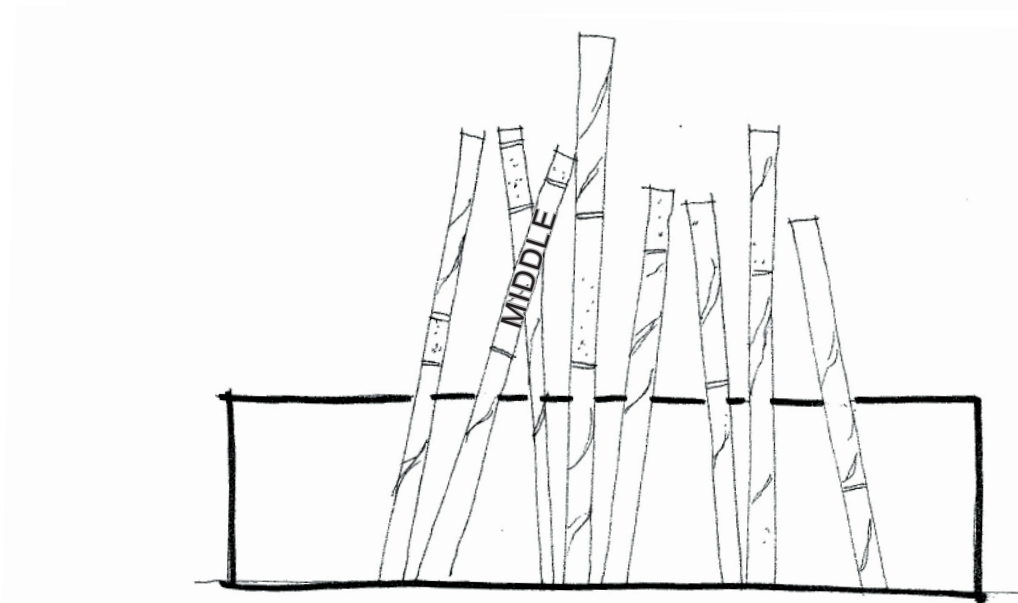
UPPER
VALLEY



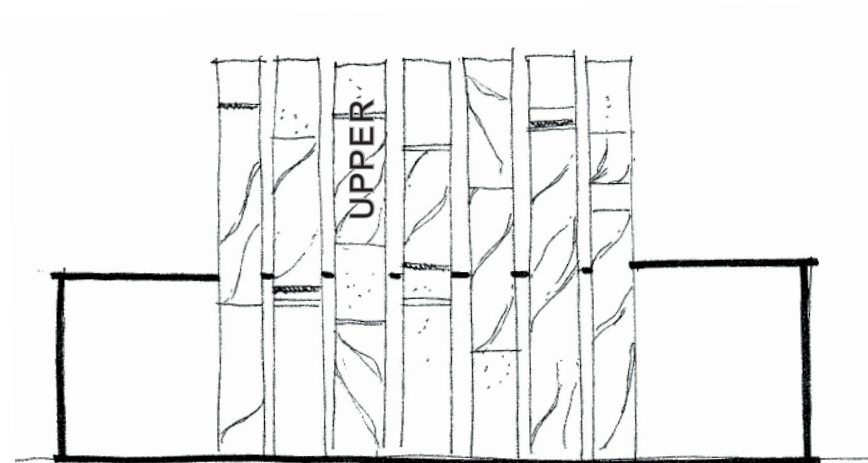
LOWER
VALLEY



MID
VALLEY



UPPER
VALLEY





The planting strategy is based upon the recognition of the sites natural history; being a lowland podocarp forest on mineralised peat swamp / alluvial fills and hardwood/podocarp forests on well drained volcanic ash slopes. The ecological district is described as northern volcanic plateau. This explains the nature of the soils. The environmental values of the planting will contribute towards bird life, slope stability and treatment of storm water. Additionally, screening, shade, view controls and shelter are other contributable attributes.

Four main ecotypes have been identified that characterise components of the site, these are; elevated plateaus, sloping valley walls, moderately drained lowlands and wetlands and riparian areas. Each area will feature trees and amenity plants that characterise the street-scapes, parks and reserves and amenity areas.